PISA 2018 Results

WHAT SCHOOL LIFE MEANS FOR STUDENTS' LIVES

VOLUME III



Programme for International Student Assessment

OECD

PISA 2018 Results (Volume III)

WHAT SCHOOL LIFE MEANS FOR STUDENTS' LIVES



BETTER POLICIES FOR BETTER LIVES

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Preface

Among its many findings, our PISA 2018 assessment shows that 15-year-old students in the four provinces/municipalities of China that participated in the study – Beijing, Shanghai, Jiangsu and Zhejiang – outperformed by a large margin their peers from all of the other 78 participating education systems, in mathematics and science. Moreover, the 10% most disadvantaged students in these four jurisdictions also showed better reading skills than those of the average student in OECD countries, as well as skills similar to the 10% most advantaged students in some of these countries. True, these four provinces/municipalities in eastern China are far from representing China as a whole, but the size of each of them compares to that of a typical OECD country, and their combined populations amount to over 180 million. What makes their achievement even more remarkable is that the level of income of these four Chinese regions is well below the OECD average. The quality of their schools today will feed into the strength of their economies tomorrow.

In this context, and given the fact that expenditure per primary and secondary student rose by more than 15% across OECD countries over the past decade, it is disappointing that most OECD countries saw virtually no improvement in the performance of their students since PISA was first conducted in 2000. In fact, only seven of the 79 education systems analysed saw significant improvements in the reading, mathematics and science performance of their students throughout their participation in PISA, and only one of these, Portugal, is a member of the OECD.

During the same period, the demands placed on the reading skills of 15-year-olds have fundamentally changed. The smartphone has transformed the ways in which people read and exchange information; and digitalisation has resulted in the emergence of new forms of text, ranging from the concise, to the lengthy and unwieldy. In the past, students could find clear and singular answers to their questions in carefully curated and government-approved textbooks, and they could trust those answers to be true. Today, they will find hundreds of thousands of answers to their questions on line, and it is up to them to figure out what is true and what is false, what is right and what is wrong. Reading is no longer mainly about extracting information; it is about constructing knowledge, thinking critically and making well-founded judgements. Against this backdrop, the findings from this latest PISA round show that fewer than 1 in 10 students in OECD countries was able to distinguish between fact and opinion, based on implicit cues pertaining to the content or source of the information. In fact, only in the four provinces/municipalities of China, as well as in Canada, Estonia, Finland, Singapore and the United States, did more than one in seven students demonstrate this level of reading proficiency.

There is another side to this. The kinds of things that are easy to teach are nowadays also easy to digitise and automate. In the age of artificial intelligence (AI) we need to think harder about how to develop first-class humans, and how we can pair the AI of computers with the cognitive, social and emotional skills, and values of people. AI will amplify good ideas and good practice in the same way as it amplifies bad ideas and bad practice – it is ethically neutral. However, AI is always in the hands of people who are not neutral. That is why education in the future is not just about teaching people, but also about helping them develop a reliable compass to navigate an increasingly complex, ambiguous and volatile world. Whether AI will destroy or create more jobs will very much depend on whether our imagination, our awareness, and our sense of responsibility will help us harness technology to shape the world for the better. These are issues that the OECD is currently exploring with our Education 2030 project.

PISA is also broadening the range of outcomes that it measures, including global competency in 2018, creative thinking in 2021, and learning in the digital world in 2024. The 2018 assessment asked students to express how they relate to others, what they think of their lives and their future, and whether they believe they have the capacity to grow and improve.

Measuring the well-being of 15-year-old students, the target PISA population, is particularly important, as students at this age are in a key transition phase of physical and emotional development. When it comes to those social and emotional outcomes, the top-performing Chinese provinces/municipalities are among the education systems with most room for improvement.

Even across OECD countries, just about two in three students reported that they are satisfied with their lives, and that percentage shrank by five percentage points between 2015 and 2018. Some 6% of students reported always feeling sad. In almost every education system, girls expressed greater fear of failure than boys, even when they outperformed boys in reading by a large margin. Almost a quarter of students reported being bullied at least a few times a month. Perhaps most disturbingly, in one-third of countries and economies that participated in PISA 2018, including OECD countries such as Greece, Mexico and Poland, more than one in two students said that intelligence was something about them that they couldn't change very much. Those students are unlikely to make the investments in themselves that are necessary to succeed in school and in life. Importantly, having a growth mindset seems consistently associated with students' motivation to master tasks, general self-efficacy, setting learning goals and perceiving

the value of school, and negatively associated with their fear of failure. Even if the well-being indicators examined by PISA do not refer specifically to the school context, students who sat the 2018 PISA test cited three main aspects of their lives that influence how they feel: life at school, their relationships with their parents, and how satisfied they are with the way they look.

It may be tempting to conclude that performing better in school will necessarily increase anxiety about schoolwork and undermine students' well-being. But countries such as Belgium, Estonia, Finland and Germany show that high performance and a strong sense of well-being can be achieved simultaneously; they set important examples for others.

Other countries show that equity and excellence can also be jointly achieved. In Australia, Canada, Denmark, Estonia, Finland, Hong Kong (China), Japan, Korea, Macao (China), Norway and the United Kingdom, for example, average performance was higher than the OECD average while the relationship between socio-economic status and reading performance was weaker than the OECD average. Moreover, one in ten disadvantaged students was able to score in the top quarter of reading performance in their country/economy, indicating that poverty is not destiny. The data also show that the world is no longer divided between rich and well-educated nations and poor and badly educated ones. The level of economic development explains just 28% of the variation in learning outcomes across countries if a linear relationship is assumed between the two.

However, it remains necessary for many countries to promote equity with much greater urgency. While students from well-off families will often find a path to success in life, those from disadvantaged families have generally only one single chance in life, and that is a great teacher and a good school. If they miss that boat, subsequent education opportunities will tend to reinforce, rather than mitigate, initial differences in learning outcomes. Against this background, it is disappointing that in many countries a student's or school's post code remains the strongest predictor of their achievement. In Argentina, Bulgaria, the Czech Republic, Hungary, Peru, the Slovak Republic and the United Arab Emirates, a typical disadvantaged student has less than a one-in-eight chance of attending the same school as high achievers.

Furthermore, in over half of the PISA-participating countries and economies, principals of disadvantaged schools were significantly more likely than those of advantaged schools to report that their school's capacity to provide instruction is hindered by a lack or inadequacy of educational material; and in 31 countries and economies, principals of disadvantaged schools were more likely than those of advantaged ones to report that a lack of teaching staff hinders instruction. In these systems, students face a double disadvantage: one that comes from their home background and another that is created by the school system. There can be numerous reasons why some students perform better than others, but those performance differences should never be related to the social background of students and schools.

Clearly, all countries have excellent students, but too few countries have enabled all of their students to excel and fulfill their potential to do so. Achieving greater equity in education is not only a social justice imperative, it is also a way to use resources more effectively, increase the supply of skills that fuel economic growth, and promote social cohesion. For those with the right knowledge and skills, digitalisation and globalisation have been liberating and exciting; for those who are insufficiently prepared, these trends can mean vulnerable and insecure work, and a life with few prospects. Our economies are linked together by global chains of information and goods, but they are also increasingly concentrated in hubs where comparative advantage can be built and renewed. This makes the distribution of knowledge and wealth crucial, and it can only be possible through the distribution of education opportunities.

Equipping citizens with the knowledge and skills necessary to achieve their full potential, to contribute to an increasingly interconnected world, and to convert better skills into better lives needs to become a more central preoccupation of policy makers around the world. Fairness, integrity and inclusiveness in public policy thus all hinge on the skills of citizens. In working to achieve these goals, more and more countries are looking beyond their own borders for evidence of the most successful and efficient education policies and practices.

PISA is not only the world's most comprehensive and reliable indicator of students' capabilities, it is also a powerful tool that countries and economies can use to fine-tune their education policies. Volume V of PISA 2018 Results, which will be published in June 2020, will highlight some of the policies and practices that predict the success of students, schools and education systems. That is why the OECD produces this triennial report on the state of education around the globe: to share evidence of the best policies and practices, and to offer our timely and targeted support to help countries provide the best education possible for all of their students.



Angel Gurría
OECD Secretary-General

Foreword

Up to the end of the 1990s, OECD comparisons of education outcomes were mainly based on measures of years of schooling, which are not reliable indicators of what people are actually able to do. With the Programme for International Student Assessment, PISA, we tried to change this. The transformational idea behind PISA lay in testing the skills of students directly, through a metric that was internationally agreed upon; linking that with data from students, teachers, schools and systems to understand performance differences; and then harnessing the power of collaboration to act on the data, both by creating shared points of reference and by leveraging peer pressure.

The aim with PISA was not to create another layer of top-down accountability, but to help schools and policy makers shift from looking upwards within the bureaucracy towards looking outwards to the next teacher, the next school, the next country. In essence, PISA counts what counts, and makes that information available to educators and policy makers so they can make more informed decisions.

The OECD countries that initiated PISA tried to make PISA different from traditional assessments in other ways too. In a world that rewards individuals increasingly not just for what they know, but for what they can do with what they know, PISA goes beyond assessing whether students can reproduce what they have learned in school. To do well in PISA, students have to be able to extrapolate from what they know, think across the boundaries of subject-matter disciplines, apply their knowledge creatively in novel situations and demonstrate effective learning strategies. If all we do is teach our children what we know, they might remember enough to follow in our footsteps; but if we teach them how to learn, they can go anywhere they want.

Some people argued that the PISA tests are unfair, because they confront students with problems they have not encountered in school. But life is unfair, because the real test in life is not whether we can remember what we learned at school yesterday, but whether we will be able to solve problems that we can't possibly anticipate today.

But the greatest strength of PISA lies in its working methods. Most assessments are centrally planned and then contracted to engineers who build them. That's how tests are created that are owned by a company – but not by the people who are needed to change education. PISA turned that on its head. The idea of PISA attracted the world's best thinkers and mobilised hundreds of experts, educators and scientists from the participating countries to build a global assessment. Today, we would call that crowdsourcing; but whatever we call it, it created the ownership that was critical for success.

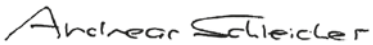
In a nutshell, PISA owes its success to a collaborative effort between the participating countries and economies, the national and international experts and institutions working within the framework of the PISA Consortium, and the OECD Secretariat. Countless subject-matter experts, practitioners and policy makers from the participating countries worked tirelessly to build agreement on which learning outcomes are important to measure and how to measure them best; to design and validate assessment tasks that can reflect those measures adequately and accurately across countries and cultures; and to find ways to compare the results meaningfully and reliably. The OECD Secretariat co-ordinated this effort and worked with countries to make sense of the results and compile this report.

Over the past two decades, PISA has become the world's premier yardstick for evaluating the quality, equity and efficiency of school systems, and an influential force for education reform. It has helped policy makers lower the cost of political action by backing difficult decisions with evidence – but it has also raised the political cost of inaction by exposing areas where policy and practice are unsatisfactory. Today, PISA brings together more than 90 countries, representing 80% of the world economy, in a global conversation about education.

While measurement is the means, the purpose of PISA is to help countries look outwards and incorporate the results of that learning into policy and practice. That outward-looking perspective also seems to be a common trait of many high-performing education systems: they are open to the world and ready to learn from and with the world's education leaders; they do not feel threatened by alternative ways of thinking.

In the end, the laws of physics apply. If we stop pedalling, not only will we not move forward, our bicycles will stop moving at all and will fall over – and we will fall with them. Against strong headwinds, we need to push ourselves even harder. But in the face of challenges and opportunities as great as any that have gone before, human beings need not be passive or inert.

We have agency, the ability to anticipate and the power to frame our actions with purpose. The best-performing PISA countries show us that high-quality and equitable education is an attainable goal, that it is within our means to deliver a future for millions of learners who currently do not have one, and that our task is not to make the impossible possible, but to make the possible attainable.



Andreas Schleicher
Director for Education and Skills
Special Advisor on Education Policy
to the Secretary-General

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This report is the product of a collaborative effort between the countries and economies participating in PISA, the national and international experts and institutions working within the framework of the PISA Consortium, and the OECD Secretariat.

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PISA

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Executive Summary

A positive school climate is one of those things that is difficult to define and measure, but everyone – including parents – recognises it when they see it. The state of the school's facilities, the tone of the conversations in corridors, the enthusiasm of the school staff and the way students interact during breaks are some of the signs that visitors can read to quickly and broadly assess a school's climate. PISA indicators of school climate – the disciplinary climate, students' sense of belonging at school and teacher support – can be analysed in relation to other PISA data on important student outcomes, such as academic achievement, student misbehaviour and students' well-being, and to key factors that shape students' learning, such as teachers' practices and parental involvement.

Measuring the well-being of 15-year-old students, the target PISA population, is particularly important, as students at this age are in a key transition phase of physical and emotional development. Asking students about themselves gives adolescents the opportunity to express how they feel, what they think of their lives and whether they believe they have the capacity to grow and improve. Even if the well-being indicators examined in this volume do not refer specifically to the school context – for instance, students are asked how satisfied they feel about their lives in general – adolescents spend a large part of their time at school and their peers play a pre-eminent role in their social lives. In fact, students who sat the 2018 PISA test cited three main aspects of their lives that influence how they feel: how satisfied they are with the way they look, with their relationships with their parents, and with life at school.

WHAT SCHOOL LIFE MEANS FOR STUDENTS' LIVES: MAIN FINDINGS

School climate

- Co-operation amongst students was more prevalent than competition, on average across OECD countries in 2018. Some 62% of students reported that students co-operate with each other while only 50% of students reported that their schoolmates compete with each other.
- On average across OECD countries and in three out of four education systems, students scored higher in reading when they reported greater co-operation amongst their peers. By contrast, there was no clear relationship between the competitiveness of a school environment and student performance.

Teachers' attitudes and practices

- On average across OECD countries and in 43 education systems, students who perceived greater support from teachers scored higher in reading, after accounting for the socio-economic profile of students and schools.
- Teacher enthusiasm and teachers' stimulation of reading engagement were the teaching practices most strongly (and positively) associated with students' enjoyment of reading.

Student misbehaviour

- According to students, disciplinary climate in language-of-instruction lessons improved between 2009 and 2018, especially in Albania, Korea and the United Arab Emirates.
- Some 23% of students reported being bullied at least a few times a month, on average across OECD countries.
- Some 88% of students across OECD countries agreed that it is a good thing to help students who cannot defend themselves and it is wrong to join in bullying. Girls and students who were not frequently bullied were more likely to report stronger anti-bullying attitudes than boys and frequently bullied students.
- On average across OECD countries, 21% of students had skipped a day of school and 48% of students had arrived late for school in the two weeks prior to the PISA test. In Georgia, Montenegro, Saudi Arabia and Turkey, at least one in five students had skipped school at least three times during that period.
- The countries and economies where fewer students had skipped a whole day of school were also the countries/economies with higher average reading performance, such as Beijing, Shanghai, Jiangsu and Zhejiang (China), Estonia, Finland, Hong Kong (China), Japan, Korea, Macao (China), Singapore, Sweden and Chinese Taipei.

Students' well-being

- On average across OECD countries, 67% of students reported being satisfied with their lives (students who reported between 7 and 10 on the 10-point life-satisfaction scale). Between 2015 and 2018, the share of satisfied students shrank by 5 percentage points.
- More than 80% of students reported sometimes or always feeling happy, cheerful, joyful or lively, and about 6% of students reported always feeling sad, on average across OECD countries.
- In almost every education system, girls expressed greater fear of failure than boys, and this gender gap was considerably wider amongst top-performing students.
- In a majority of school systems, students who expressed a greater fear of failure scored higher in reading, but reported less satisfaction with life, than students expressing less concern about failing, after accounting for the socio-economic profile of students and schools.

Students' belief that their ability and intelligence can develop over time (growth mindset)

- A majority of students disagreed or strongly disagreed with the statement "Your intelligence is something about you that you can't change very much", on average across OECD countries. However, at least 60% of students in the Dominican Republic, Indonesia, Kosovo, the Republic of North Macedonia, Panama and the Philippines agreed or strongly agreed with that statement.
- On average across OECD countries, having a growth mindset was positively associated with students' motivation to master tasks, general self-efficacy, setting learning goals and perceiving the value of school; it was negatively associated with their fear of failure.

Parents' involvement in school activities

- Parents overwhelmingly cited school safety, school climate and school reputation as the most important criteria when choosing a school for their child, followed closely by students' academic achievement and the offering of specific subjects or courses.
- According to school principals, about 41% of students' parents discussed their child's progress with a teacher on their own initiative and 57% did so on the initiative of teachers, on average across OECD countries. However, only 17% of parents participated in local school government and 12% volunteered for physical or extracurricular activities.
- On average across the nine OECD countries that distributed the parent questionnaire, the obstacles that parents most commonly cited as hindering their participation in school activities were time-related, and included the need to work (34%) and the inconvenience of meeting times (33%).

Table III.1 [1/4] **Snapshot of school climate**

Countries/economies with values **above** the OECD average
Countries/economies with values not statistically different from the OECD average
Countries/economies with values **below** the OECD average

		Percentage of students who reported being victims of any type of bullying act at least a few times a month	Difference between frequently[1] and not frequently bullied students who reported feeling sometimes or always sad, after accounting for student and school characteristics[2]	Percentage of students who agreed or strongly agreed that "It is a wrong thing to join in bullying"	Difference in the index of sense of belonging between advantaged and disadvantaged students[3]	Difference in the percentage of students' parents who discussed their child's progress with a teacher on their own initiative between advantaged and disadvantaged schools[4]
		%	% dif.	%	Dif.	% dif.
OECD	**OECD average**	23	**20**	88	**0.23**	**11**
	Australia	30	m	92	**0.27**	**13**
	Austria	23	**19**	87	**0.19**	m
	Belgium	19	m	94	0.06	**16**
	Canada	25	**22**	92	**0.31**	**13**
	Chile	24	**15**	86	**0.24**	4
	Colombia	32	**10**	68	**0.25**	**25**
	Czech Republic	30	**12**	88	**0.20**	4
	Denmark	21	**26**	94	**0.22**	7
	Estonia	25	**19**	89	**0.21**	4
	Finland	18	**30**	93	**0.23**	2
	France	20	**28**	93	**0.19**	**19**
	Germany	23	**22**	90	**0.23**	**14**
	Greece	27	**12**	85	**0.25**	**20**
	Hungary	23	**21**	75	**0.32**	**19**
	Iceland	17	**32**	88	**0.34**	**1**
	Ireland	23	**24**	94	**0.08**	7
	Israel	m	m	84	m	11
	Italy	24	**12**	85	**0.15**	**27**
	Japan	17	**17**	93	**0.12**	8
	Korea	9	m	93	**0.37**	**26**
	Latvia	35	**19**	83	**0.25**	**-10**
	Lithuania	23	**17**	81	**0.20**	5
	Luxembourg	21	**24**	89	**0.41**	**25**
	Mexico	23	**12**	82	**0.31**	3
	Netherlands	12	**21**	95	**0.14**	12
	New Zealand	32	m	92	**0.23**	9
	Norway	19	m	94	**0.33**	0
	Poland	26	**18**	80	**0.09**	**10**
	Portugal	14	**23**	86	**0.32**	**18**
	Slovak Republic	28	**11**	80	**0.30**	**11**
	Slovenia	21	**16**	84	**0.21**	**14**
	Spain	17	m	90	**0.25**	**13**
	Sweden	19	**26**	92	**0.27**	7
	Switzerland	22	**21**	86	**0.21**	-9
	Turkey	24	**16**	80	0.08	**18**
	United Kingdom	27	**23**	95	**0.18**	9
	United States	26	**23**	93	**0.27**	**24**

1. A student is frequently bullied if he or she is in the top 10% of the index of exposure to bullying across all countries/economies.
2. Student and school characteristics include the PISA index of economic, social and cultural status (ESCS) at the student and school levels, gender and reading performance.
3. A socio-economically disadvantaged (advantaged) student is a student in the bottom (top) quarter of the index of ESCS in his or her own country/economy.
4. A socio-economically disadvantaged (advantaged) school is a school in the bottom (top) quarter of the index of ESCS in the relevant country/economy.
5. The regression model accounts for students' and schools' socio-economic profile. The socio-economic profile is measured by the index of ESCS.

Note: Values that are statistically significant are indicated in bold (see Annex A3).

Source: OECD PISA 2018 Database, Tables III.B1.2.1, III.B1.2.13, III.B1.2.15, III.B1.3.8, III.B1.4.12, III.B1.6.10, III.B1.8.10, III.B1.8.14, III.B1.9.4 and III.B1.10.3.

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Table III.1 [2/4] Snapshot of school climate

Countries/economies with values **above** the OECD average
Countries/economies with values not statistically different from the OECD average
Countries/economies with values **below** the OECD average

		Percentage of students who reported being victims of any type of bullying act at least a few times a month	Difference between frequently[1] and not frequently bullied students who reported feeling sometimes or always sad, after accounting for student and school characteristics[2]	Percentage of students who agreed or strongly agreed that "It is a wrong thing to join in bullying"	Difference in the index of sense of belonging between advantaged and disadvantaged students[3]	Difference in the percentage of students' parents who discussed their child's progress with a teacher on their own initiative between advantaged and disadvantaged schools[4]
		%	% dif.	%	Dif.	% dif.
Partners	Albania	25	**7**	86	**0.36**	**13**
	Argentina	32	**18**	79	**0.41**	4
	Baku (Azerbaijan)	36	2	76	0.09	-2
	Belarus	19	**17**	76	**0.18**	**11**
	Bosnia and Herzegovina	25	**13**	86	**0.19**	5
	Brazil	29	**12**	83	**0.30**	**12**
	Brunei Darussalam	50	**8**	87	**0.10**	**14**
	B-S-J-Z (China)	18	**10**	96	**0.29**	**17**
	Bulgaria	34	**16**	77	**0.33**	**18**
	Costa Rica	24	**18**	86	**0.26**	**16**
	Croatia	18	**16**	89	**0.14**	2
	Cyprus	34	**12**	79	**0.15**	**9**
	Dominican Republic	44	**12**	74	**0.33**	**15**
	Georgia	24	**15**	80	**0.24**	4
	Hong Kong (China)	29	**10**	91	**0.13**	**19**
	Indonesia	41	**4**	57	0.07	**22**
	Jordan	38	**6**	70	**0.27**	**16**
	Kazakhstan	32	**10**	72	**0.17**	5
	Kosovo	32	**9**	76	**0.22**	**17**
	Lebanon	m	m	m	m	8
	Macao (China)	27	**18**	93	**0.19**	**6**
	Malaysia	36	**13**	84	**0.16**	7
	Malta	32	**14**	90	**0.10**	**-1**
	Moldova	24	**13**	74	**0.33**	5
	Montenegro	25	**16**	83	**0.11**	**7**
	Morocco	44	**9**	67	**0.27**	10
	North Macedonia	m	m	m	m	**4**
	Panama	33	**10**	74	**0.27**	3
	Peru	22	**13**	81	**0.24**	**12**
	Philippines	65	**6**	79	**0.21**	9
	Qatar	33	**13**	79	**0.24**	**26**
	Romania	34	**17**	75	**0.34**	12
	Russia	37	**17**	84	**0.16**	**11**
	Saudi Arabia	30	**12**	71	**0.32**	**14**
	Serbia	26	**20**	83	**0.22**	**15**
	Singapore	26	m	96	**0.23**	**21**
	Chinese Taipei	13	**20**	92	**0.23**	**17**
	Thailand	27	**8**	72	**0.20**	11
	Ukraine	22	**18**	78	**0.26**	**17**
	United Arab Emirates	31	**17**	77	**0.16**	**8**
	Uruguay	26	**14**	84	**0.52**	0
	Viet Nam	27	m	82	**0.07**	10

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3. A socio-economically disadvantaged (advantaged) student is a student in the bottom (top) quarter of the index of ESCS in his or her own country/economy.
4. A socio-economically disadvantaged (advantaged) school is a school in the bottom (top) quarter of the index of ESCS in the relevant country/economy.
5. The regression model accounts for students' and schools' socio-economic profile. The socio-economic profile is measured by the index of ESCS.

Note: Values that are statistically significant are indicated in bold (see Annex A3).

Source: OECD PISA 2018 Database, Tables III.B1.2.1, III.B1.2.13, III.B1.2.15, III.B1.3.8, III.B1.4.12, III.B1.6.10, III.B1.8.10, III.B1.8.14, III.B1.9.4 and III.B1.10.3.

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Table III.1 [3/4] **Snapshot of school climate**

Countries/economies with values **above** the OECD average
Countries/economies with values not statistically different from the OECD average
Countries/economies with values **below** the OECD average

		Change in reading performance when students reported that there is noise and disorder "in every lesson" in their language-of-instruction class (reference category: "never or hardly ever")[5]	Change in reading performance when students reported that they had arrived late for school "five or more times" in the two weeks prior to the PISA test (reference: "never")[5]	Change in reading performance associated with a one-unit increase in the index of student co-operation[5]	Change in reading performance associated with a one-unit increase in the index of attitudes towards competition[5]	Change in enjoyment of reading per one-unit increase in the index of teacher enthusiasm, after accounting for reading performance and other teaching practices
		Score dif.	Score dif.	Score dif.	Score dif.	Dif.
OECD	**OECD average**	**-35**	**-23**	**6**	**5**	**0.08**
	Australia	**-28**	**-40**	**4**	**4**	**0.07**
	Austria	**-37**	**-20**	**13**	**7**	0.01
	Belgium	**-17**	**-36**	2	1	**0.11**
	Canada	**-17**	**-31**	m	**3**	m
	Chile	**-29**	**-23**	**5**	2	0.03
	Colombia	**-30**	-16	**4**	**8**	**0.08**
	Czech Republic	**-39**	**-26**	**5**	**5**	**0.07**
	Denmark	**-29**	**-17**	**6**	**5**	0.04
	Estonia	**-37**	**-30**	**12**	**9**	0.03
	Finland	-15	**-46**	**6**	**6**	**0.17**
	France	**-14**	**-39**	2	2	**0.08**
	Germany	**-44**	**-31**	**6**	**6**	**0.07**
	Greece	**-42**	2	**6**	2	**0.15**
	Hungary	**-27**	**-17**	**6**	2	**0.06**
	Iceland	**-41**	**-28**	**14**	**11**	**0.11**
	Ireland	**-24**	**-34**	1	**5**	**0.10**
	Israel	**-35**	-6	2	**10**	**0.10**
	Italy	**-46**	**-21**	**5**	**6**	**0.11**
	Japan	**-56**	**-42**	**3**	**5**	**0.05**
	Korea	**-45**	**-26**	**-6**	0	0.03
	Latvia	**-33**	-2	**9**	**10**	0.03
	Lithuania	**-43**	**-12**	**12**	**8**	**0.07**
	Luxembourg	**-45**	**-15**	**7**	**4**	**0.11**
	Mexico	**-29**	0	**8**	**8**	**0.04**
	Netherlands	**-46**	**-37**	**4**	3	**0.09**
	New Zealand	**-31**	**-18**	**6**	2	**0.07**
	Norway	**-55**	**-21**	**14**	**6**	0.03
	Poland	**-28**	**-18**	**6**	**4**	**0.03**
	Portugal	**-28**	-5	**4**	**-3**	**0.11**
	Slovak Republic	**-56**	**-31**	**11**	1	**0.08**
	Slovenia	**-38**	-2	**10**	1	**0.13**
	Spain	m	m	m	m	m
	Sweden	**-33**	**-23**	0	**5**	**0.10**
	Switzerland	**-31**	**-20**	**9**	2	**0.10**
	Turkey	**-48**	**-23**	**5**	**6**	**0.08**
	United Kingdom	**-37**	**-37**	2	**5**	**0.13**
	United States	**-42**	**-37**	-1	**5**	**0.06**

1. A student is frequently bullied if he or she is in the top 10% of the index of exposure to bullying across all countries/economies.
2. Student and school characteristics include the PISA index of economic, social and cultural status (ESCS) at the student and school levels, gender and reading performance.
3. A socio-economically disadvantaged (advantaged) student is a student in the bottom (top) quarter of the index of ESCS in his or her own country/economy.
4. A socio-economically disadvantaged (advantaged) school is a school in the bottom (top) quarter of the index of ESCS in the relevant country/economy.
5. The regression model accounts for students' and schools' socio-economic profile. The socio-economic profile is measured by the index of ESCS.

Note: Values that are statistically significant are indicated in bold (see Annex A3).

Source: OECD PISA 2018 Database, Tables III.B1.2.1, III.B1.2.13, III.B1.2.15, III.B1.3.8, III.B1.4.12, III.B1.6.10, III.B1.8.10, III.B1.8.14, III.B1.9.4 and III.B1.10.3.

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Table III.1 [4/4] **Snapshot of school climate**

Countries/economies with values **above** the OECD average
Countries/economies with values not statistically different from the OECD average
Countries/economies with values **below** the OECD average

		Change in reading performance when students reported that there is noise and disorder "in every lesson" in their language-of-instruction class (reference category: "never or hardly ever")[5]	Change in reading performance when students reported that they had arrived late for school "five or more times" in the two weeks prior to the PISA test (reference: "never")[5]	Change in reading performance associated with a one-unit increase in the index of student co-operation[5]	Change in reading performance associated with a one-unit increase in the index of attitudes towards competition[5]	Change in enjoyment of reading per one-unit increase in the index of teacher enthusiasm, after accounting for reading performance and other teaching practices
		Score dif.	Score dif.	Score dif.	Score dif.	Dif.
Partners	Albania	**-35**	**-18**	**10**	**11**	**0.18**
	Argentina	**-17**	-4	1	-1	0.02
	Baku (Azerbaijan)	**-29**	-8	**5**	**9**	**0.07**
	Belarus	**-41**	-11	**9**	**6**	**0.13**
	Bosnia and Herzegovina	**-53**	**-29**	**4**	**3**	**0.11**
	Brazil	**-23**	**-22**	2	**5**	**0.10**
	Brunei Darussalam	**-42**	**-9**	**13**	**14**	**0.10**
	B-S-J-Z (China)	**-44**	-15	0	**7**	**0.13**
	Bulgaria	**-43**	-12	**10**	**9**	0.02
	Costa Rica	**-14**	0	1	**7**	0.03
	Croatia	**-48**	**-11**	**7**	**2**	**0.10**
	Cyprus	**-51**	**-12**	**8**	**6**	**0.07**
	Dominican Republic	**-20**	**-26**	2	**6**	**0.08**
	Georgia	**-45**	**-13**	**7**	**10**	**0.10**
	Hong Kong (China)	**-50**	**-47**	**10**	**9**	0.02
	Indonesia	**-16**	**14**	**10**	**16**	**0.15**
	Jordan	**-37**	**-11**	**7**	**22**	**0.10**
	Kazakhstan	**-47**	**-12**	**9**	**-8**	**0.15**
	Kosovo	**-41**	**-26**	**15**	**9**	**0.16**
	Lebanon	m	m	**25**	**25**	m
	Macao (China)	**-57**	**-44**	**8**	**12**	**0.13**
	Malaysia	**-47**	**-21**	**14**	**22**	**0.12**
	Malta	**-34**	**-58**	4	**12**	**0.08**
	Moldova	**-34**	2	**16**	**6**	**0.14**
	Montenegro	**-61**	**-19**	**6**	2	**0.10**
	Morocco	**-9**	**-33**	-1	**17**	**0.10**
	North Macedonia	m	m	**9**	**8**	m
	Panama	**-23**	-6	-2	**6**	**0.05**
	Peru	**-21**	-2	**8**	**12**	**0.08**
	Philippines	-7	**26**	**16**	**12**	**0.11**
	Qatar	**-43**	**-47**	**7**	**17**	**0.05**
	Romania	**-48**	**-25**	**8**	2	**0.11**
	Russia	**-46**	**-12**	**7**	**6**	**0.11**
	Saudi Arabia	**-24**	**-16**	**5**	**17**	0.02
	Serbia	**-49**	-6	**7**	**3**	**0.10**
	Singapore	**-34**	**-44**	**9**	-2	**0.05**
	Chinese Taipei	**-49**	**-13**	**6**	**9**	**0.11**
	Thailand	**-33**	**-10**	**10**	**7**	**0.11**
	Ukraine	**-52**	-7	**8**	**6**	m
	United Arab Emirates	**-49**	**-46**	**10**	**17**	**0.06**
	Uruguay	**-33**	6	1	**4**	0.04
	Viet Nam	m	m	m	m	m

1. A student is frequently bullied if he or she is in the top 10% of the index of exposure to bullying across all countries/economies.
2. Student and school characteristics include the PISA index of economic, social and cultural status (ESCS) at the student and school levels, gender and reading performance.
3. A socio-economically disadvantaged (advantaged) student is a student in the bottom (top) quarter of the index of ESCS in his or her own country/economy.
4. A socio-economically disadvantaged (advantaged) school is a school in the bottom (top) quarter of the index of ESCS in the relevant country/economy.
5. The regression model accounts for students' and schools' socio-economic profile. The socio-economic profile is measured by the index of ESCS.

Note: Values that are statistically significant are indicated in bold (see Annex A3).

Source: OECD PISA 2018 Database, Tables III.B1.2.1, III.B1.2.13, III.B1.2.15, III.B1.3.8, III.B1.4.12, III.B1.6.10, III.B1.8.10, III.B1.8.14, III.B1.9.4 and III.B1.10.3.

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Table III.2 [1/4] **Snapshot of student well-being**

Countries/economies with values **above** the OECD average
Countries/economies with values not statistically different from the OECD average
Countries/economies with values **below** the OECD average

		Percentage of students who are satisfied with life[1]	Gender difference in the percentage of students who are satisfied with life (G-B)	Percentage of students who reported sometimes or always feeling happy	Percentage of students who reported always feeling sad	Difference between heavy and low Internet users[2] in the percentage of students who reported sometimes or always feeling sad
		%	% dif.	%	%	% dif.
OECD	**OECD average**	67	**-11**	91	6	**10**
	Australia	m	m	m	m	m
	Austria	70	**-12**	91	5	**14**
	Belgium[5]	m	m	m	m	m
	Canada	m	m	93	9	m
	Chile	64	**-11**	94	8	**9**
	Colombia	73	**-6**	93	6	m
	Czech Republic	65	**-12**	86	7	**7**
	Denmark	m	m	91	3	4
	Estonia	70	**-11**	89	9	**18**
	Finland	78	**-12**	91	4	**16**
	France	70	**-9**	94	5	**6**
	Germany	67	**-12**	92	4	m
	Greece	65	**-10**	89	6	**11**
	Hungary	68	**-12**	92	5	**9**
	Iceland	72	**-14**	91	6	**22**
	Ireland	61	**-12**	96	5	**12**
	Israel	m	m	m	m	m
	Italy	67	**-14**	91	6	**11**
	Japan	50	-1	91	11	1
	Korea	57	**-18**	87	10	**11**
	Latvia	69	**-7**	87	8	**13**
	Lithuania	75	**-8**	90	6	**12**
	Luxembourg	68	**-10**	91	6	4
	Mexico	83	**-4**	96	6	4
	Netherlands	79	**-12**	97	3	m
	New Zealand	m	m	m	m	m
	Norway	m	m	m	m	m
	Poland	62	**-16**	87	8	**11**
	Portugal	69	**-9**	96	3	m
	Slovak Republic	70	**-13**	87	10	**5**
	Slovenia	64	**-18**	83	5	**12**
	Spain	74	**-7**	96	4	**8**
	Sweden	67	**-15**	88	5	7
	Switzerland	73	**-11**	95	3	3
	Turkey	44	**-4**	81	13	**11**
	United Kingdom	53	**-17**	93	9	**10**
	United States	61	**-11**	93	11	**8**

1. A student is classified as "satisfied" with life if he or she reported between 7 and 10 on the life-satisfaction scale. The life-satisfaction scale ranges from 0 to 10.

2. Based on the cumulated time spent on the Internet on weekdays and weekend days. Low Internet users: 0-9 hours(h)/week(w); and Heavy Internet users: More than 40 h/w.

3. A socio-economically disadvantaged (advantaged) student is a student in the bottom (top) quarter of the PISA index of economic, social and cultural status (ESCS) in his or her own country/economy.

4. The linear regression model accounts for the students' and schools' socio-economic profile. The socio-economic profile is measured by the index of ESCS.

5. Data related to the index of self-efficacy, the index of fear of failure and growth mindset only include the Flemish Community of Belgium.

Note: Values that are statistically significant are indicated in bold (see Annex A3).

Source: OECD PISA 2018 Database, Tables III.B1.11.1, III.B1.11.4, III.B1.12.1, III.B1.12.2, III.B1.12.16, III.B1.13.5, III.B1.13.14, III.B1.14.1 and III.B1.14.7.

StatLink https://doi.org/10.1787/888934029166

Table III.2 [2/4] Snapshot of student well-being

Countries/economies with values **above** the OECD average
Countries/economies with values not statistically different from the OECD average
Countries/economies with values **below** the OECD average

		Percentage of students who are satisfied with life[1]	Gender difference in the percentage of students who are satisfied with life (G-B)	Percentage of students who reported sometimes or always feeling happy	Percentage of students who reported always feeling sad	Difference between heavy and low Internet users[2] in the percentage of students who reported sometimes or always feeling sad
		%	% dif.	%	%	% dif.
Partners	Albania	86	-1	95	4	-2
	Argentina	70	**-9**	92	11	m
	Baku (Azerbaijan)	67	**-5**	85	11	m
	Belarus	83	**-5**	92	6	m
	Bosnia and Herzegovina	76	**-7**	92	5	m
	Brazil	65	**-11**	90	13	**8**
	Brunei Darussalam	42	**-3**	93	19	**6**
	B-S-J-Z (China)	59	**-3**	98	11	m
	Bulgaria	65	**-6**	87	8	**7**
	Costa Rica	79	**-8**	95	6	**9**
	Croatia	76	**-13**	94	5	**13**
	Cyprus	63	**-7**	88	7	m
	Dominican Republic	79	**-6**	92	10	3
	Georgia	74	-2	74	9	4
	Hong Kong (China)	52	-2	96	13	2
	Indonesia	70	**-3**	91	8	m
	Jordan	62	**7**	81	10	m
	Kazakhstan	87	**-2**	93	5	**20**
	Kosovo	82	**-3**	94	4	m
	Lebanon	59	3	82	8	m
	Macao (China)	50	**-7**	89	16	**8**
	Malaysia	63	-3	94	16	m
	Malta	60	**-14**	94	9	**13**
	Moldova	77	**3**	92	5	m
	Montenegro	75	**-8**	93	6	m
	Morocco	62	**-3**	88	10	**5**
	North Macedonia	81	**-3**	94	4	m
	Panama	77	**-4**	95	7	4
	Peru	68	**-5**	96	6	m
	Philippines	66	**7**	95	8	m
	Qatar	61	**-3**	88	12	m
	Romania	80	-2	93	4	m
	Russia	69	**-9**	85	10	**20**
	Saudi Arabia	71	**4**	85	8	m
	Serbia	74	**-7**	90	7	5
	Singapore	m	m	m	m	m
	Chinese Taipei	56	**-8**	94	7	**7**
	Thailand	73	-1	92	12	**6**
	Ukraine	82	0	91	6	m
	United Arab Emirates	61	**-7**	90	10	m
	Uruguay	73	**-11**	94	7	**11**
	Viet Nam	73	-2	85	13	m

1. A student is classified as "satisfied" with life if he or she reported between 7 and 10 on the life-satisfaction scale. The life-satisfaction scale ranges from 0 to 10.

2. Based on the cumulated time spent on the Internet on weekdays and weekend days. Low Internet users: 0-9 hours(h)/week(w); and Heavy Internet users: More than 40 h/w.

3. A socio-economically disadvantaged (advantaged) student is a student in the bottom (top) quarter of the PISA index of economic, social and cultural status (ESCS) in his or her own country/economy.

4. The linear regression model accounts for the students' and schools' socio-economic profile. The socio-economic profile is measured by the index of ESCS.

5. Data related to the index of self-efficacy, the index of fear of failure and growth mindset only include the Flemish Community of Belgium.

Note: Values that are statistically significant are indicated in bold (see Annex A3).

Source: OECD PISA 2018 Database, Tables III.B1.11.1, III.B1.11.4, III.B1.12.1, III.B1.12.2, III.B1.12.16, III.B1.13.5, III.B1.13.14, III.B1.14.1 and III.B1.14.7.

StatLink https://doi.org/10.1787/888934029166

Table III.2 [3/4] **Snapshot of student well-being**

Countries/economies with values **above** the OECD average
Countries/economies with values not statistically different from the OECD average
Countries/economies with values **below** the OECD average

		Difference in the index of self-efficacy between advantaged and disadvantaged students[3]	Difference in the index of fear of failure between girls and boys who scored at Level 5 or above in reading (top performers, G-B)	Percentage of students who disagreed or strongly disagreed that "your intelligence is something about you that you can't change very much"	Change in the index of fear of failure when students disagreed or strongly disagreed that "your intelligence is something about you that you can't change very much"[4]
		Dif.	Dif.	%	Dif.
OECD	**OECD average**	**0.29**	**0.51**	63	**-0.04**
	Australia	**0.39**	**0.55**	68	**-0.03**
	Austria	**0.22**	**0.32**	72	**-0.04**
	Belgium[5]	**0.12**	**0.40**	56	-0.01
	Canada	**0.38**	**0.59**	68	**-0.03**
	Chile	**0.22**	**0.45**	60	**-0.05**
	Colombia	**0.24**	0.41	61	**-0.07**
	Czech Republic	**0.21**	**0.47**	52	**-0.05**
	Denmark	**0.36**	**0.57**	75	**-0.03**
	Estonia	**0.43**	**0.63**	77	**-0.03**
	Finland	**0.51**	**0.68**	67	**-0.02**
	France	**0.25**	**0.50**	54	**-0.03**
	Germany	**0.27**	**0.55**	74	-0.01
	Greece	**0.32**	**0.43**	48	**-0.03**
	Hungary	**0.36**	**0.56**	62	**-0.04**
	Iceland	**0.47**	**0.52**	73	**-0.04**
	Ireland	**0.21**	**0.52**	74	**-0.05**
	Israel	**0.29**	m	63	m
	Italy	0.06	**0.45**	59	**-0.07**
	Japan	**0.31**	**0.21**	67	**-0.10**
	Korea	**0.49**	**0.36**	53	**-0.13**
	Latvia	**0.36**	**0.61**	73	**-0.05**
	Lithuania	**0.32**	**0.55**	72	**-0.06**
	Luxembourg	**0.37**	**0.53**	62	**-0.04**
	Mexico	**0.31**	c	45	**-0.07**
	Netherlands	0.05	**0.56**	51	**-0.03**
	New Zealand	**0.36**	**0.63**	67	**-0.03**
	Norway	m	m	m	m
	Poland	**0.37**	**0.52**	41	**-0.02**
	Portugal	**0.19**	**0.50**	66	**-0.06**
	Slovak Republic	**0.22**	**0.43**	57	**-0.05**
	Slovenia	**0.23**	**0.59**	51	**-0.04**
	Spain	**0.32**	m	62	**-0.06**
	Sweden	**0.38**	**0.64**	63	**-0.02**
	Switzerland	**0.20**	**0.42**	63	**-0.03**
	Turkey	**0.23**	**0.43**	60	**-0.04**
	United Kingdom	**0.25**	**0.64**	70	**-0.05**
	United States	**0.19**	**0.53**	68	**-0.03**

1. A student is classified as "satisfied" with life if he or she reported between 7 and 10 on the life-satisfaction scale. The life-satisfaction scale ranges from 0 to 10.

2. Based on the cumulated time spent on the Internet on weekdays and weekend days. Low Internet users: 0-9 hours(h)/week(w); and Heavy Internet users: More than 40 h/w.

3. A socio-economically disadvantaged (advantaged) student is a student in the bottom (top) quarter of the PISA index of economic, social and cultural status (ESCS) in his or her own country/economy.

4. The linear regression model accounts for the students' and schools' socio-economic profile. The socio-economic profile is measured by the index of ESCS.

5. Data related to the index of self-efficacy, the index of fear of failure and growth mindset only include the Flemish Community of Belgium.

Note: Values that are statistically significant are indicated in bold (see Annex A3).

Source: OECD PISA 2018 Database, Tables III.B1.11.1, III.B1.11.4, III.B1.12.1, III.B1.12.2, III.B1.12.16, III.B1.13.5, III.B1.13.14, III.B1.14.1 and III.B1.14.7.

StatLink https://doi.org/10.1787/888934029166

Table III.2 [4/4] **Snapshot of student well-being**

Countries/economies with values **above** the OECD average
Countries/economies with values not statistically different from the OECD average
Countries/economies with values **below** the OECD average

		Difference in the index of self-efficacy between advantaged and disadvantaged students[3]	Difference in the index of fear of failure between girls and boys who scored at Level 5 or above in reading (top performers, G-B)	Percentage of students who disagreed or strongly disagreed that "your intelligence is something about you that you can't change very much"	Change in the index of fear of failure when students disagreed or strongly disagreed that "your intelligence is something about you that you can't change very much"[4]
		Dif.	Dif.	%	Dif.
Partners	Albania	**0.37**	c	41	**-0.06**
	Argentina	**0.25**	0.46	49	**-0.05**
	Baku (Azerbaijan)	**0.29**	c	52	**-0.06**
	Belarus	**0.37**	**0.41**	55	**-0.06**
	Bosnia and Herzegovina	**0.29**	c	51	**-0.06**
	Brazil	**0.17**	0.43	63	**-0.04**
	Brunei Darussalam	**0.32**	**0.48**	47	**-0.08**
	B-S-J-Z (China)	**0.48**	**0.23**	56	**-0.13**
	Bulgaria	**0.43**	0.41	59	**-0.07**
	Costa Rica	**0.21**	c	54	**-0.07**
	Croatia	**0.24**	**0.47**	56	**-0.06**
	Cyprus	**0.42**	0.34	55	**-0.07**
	Dominican Republic	**0.28**	m	35	**-0.11**
	Georgia	**0.39**	c	50	**-0.10**
	Hong Kong (China)	**0.28**	**0.28**	43	**-0.13**
	Indonesia	**0.10**	c	29	**-0.06**
	Jordan	**0.34**	c	47	**-0.07**
	Kazakhstan	**0.26**	**0.65**	55	**-0.07**
	Kosovo	**0.28**	m	28	**-0.09**
	Lebanon	**0.48**	c	41	**-0.08**
	Macao (China)	**0.33**	**0.29**	49	**-0.09**
	Malaysia	**0.20**	c	41	**-0.06**
	Malta	**0.23**	**0.36**	54	**-0.05**
	Moldova	**0.29**	c	43	**-0.09**
	Montenegro	**0.30**	c	45	**-0.05**
	Morocco	**0.32**	m	42	**-0.07**
	North Macedonia	**0.45**	c	24	**-0.03**
	Panama	**0.34**	c	29	**-0.04**
	Peru	**0.23**	c	52	**-0.10**
	Philippines	**0.43**	m	31	**-0.08**
	Qatar	**0.37**	**0.51**	50	**-0.08**
	Romania	**0.38**	c	43	**-0.05**
	Russia	**0.28**	**0.54**	60	**-0.06**
	Saudi Arabia	**0.44**	m	43	**-0.08**
	Serbia	**0.32**	**0.43**	52	**-0.07**
	Singapore	**0.16**	**0.53**	60	**-0.06**
	Chinese Taipei	**0.31**	**0.28**	60	**-0.11**
	Thailand	**0.32**	c	43	**-0.07**
	Ukraine	**0.43**	**0.45**	66	**-0.06**
	United Arab Emirates	**0.18**	**0.44**	46	**-0.07**
	Uruguay	**0.31**	0.37	54	**-0.08**
	Viet Nam	m	m	53	**-0.09**

1. A student is classified as "satisfied" with life if he or she reported between 7 and 10 on the life-satisfaction scale. The life-satisfaction scale ranges from 0 to 10.

2. Based on the cumulated time spent on the Internet on weekdays and weekend days. Low Internet users: 0-9 hours(h)/week(w); and Heavy Internet users: More than 40 h/w.

3. A socio-economically disadvantaged (advantaged) student is a student in the bottom (top) quarter of the PISA index of economic, social and cultural status (ESCS) in his or her own country/economy.

4. The linear regression model accounts for the students' and schools' socio-economic profile. The socio-economic profile is measured by the index of ESCS.

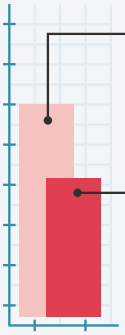
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Note: Values that are statistically significant are indicated in bold (see Annex A3).

Source: OECD PISA 2018 Database, Tables III.B1.11.1, III.B1.11.4, III.B1.12.1, III.B1.12.2, III.B1.12.16, III.B1.13.5, III.B1.13.14, III.B1.14.1 and III.B1.14.7.

StatLink https://doi.org/10.1787/888934029166

Well-being at school and at home



23% of students reported being **victims of an act of bullying** at least a few times a month

Less than **15%** of students in Korea, the Netherlands, Portugal and Chinese Taipei reported this



8 in 10 students expressed anti-bullying attitudes, such as

- ☑ It is a wrong thing to join in bullying

or

- ☑ It is a good thing to help students who can't defend themselves

Around **6%** of students reported ***always feeling sad***



Around **90%** of students reported ***sometimes or always feeling happy***



Students whose peers co-operate the most scored about **50 points higher** in reading than students whose peers co-operate the least



Most students believe that **ability and intelligence can be developed over time**





But at least **60% of students**

in the Dominican Republic, Indonesia, Kosovo, the Republic of North Macedonia, Panama and the Philippines agreed or strongly agreed **that intelligence is something that cannot change very much**

1 in 3 parents

reported that their participation in school activities was hindered because of **inconvenient meeting times**



All data refer to OECD average unless otherwise indicated.

PISA

Reader's Guide

Data underlying the figures

The data referred to in this volume are presented in Annex B and, in greater detail, including additional tables, on the PISA website (www.oecd.org/pisa).

Five symbols are used to denote missing data:

a The category does not apply in the country or economy concerned; data are therefore missing.

c There were too few observations to provide reliable estimates (i.e. there were fewer than 30 students or fewer than 5 schools with valid data).

m Data are not available. There was no observation in the sample; these data were not collected by the country or economy; or these data were collected but subsequently removed from the publication for technical reasons.

w Results were withdrawn at the request of the country or economy concerned.

Coverage

This publication features data on 79 countries and economies, including all OECD Member countries and more than 40 non-OECD Member countries and economies (see map of PISA countries and economies in "What is PISA?").

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Notes on Cyprus:

- **Note by Turkey:** The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".
- **Note by all the European Union Member States of the OECD and the European Union:** The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

B-S-J-Z (China) refers to the four PISA-participating provinces/municipalities of the People's Republic of China (hereafter "China"): Beijing, Shanghai, Jiangsu and Zhejiang.

Data for Viet Nam are included in most tables in Annex B, but not included in tables, figures and texts that report comparisons of performance with other countries and economies because full international comparability of results could not be assured at the time this report was published (see Annexes A4 and A6 in *PISA 2018 Results [Volume I]: What Students Know and Can Do* [OECD, 2019[1]]).

International averages

The OECD average corresponds to the arithmetic mean of the respective country estimates. It was calculated for most indicators presented in this report.

On 25 May 2018, the OECD Council invited Colombia to become a Member. While Colombia is included in the OECD averages reported in this publication, at the time of its preparation, Colombia was in the process of completing its domestic procedures for ratification and the deposit of Colombia's instrument of accession to the OECD Convention was pending.

In this publication, the OECD average is generally used when the focus is on comparing performance across education systems. In the case of some countries, data may not be available for specific indicators, or specific categories may not apply. Readers should, therefore, keep in mind that the term "OECD average" refers to the OECD Member countries included in the respective comparisons. In cases where data are not available or do not apply for all sub-categories of a given population or indicator, the "OECD average" is not necessarily computed on a consistent set of countries across all columns of a table.

In analyses involving exclusively data from the optional well-being questionnaire, «Average-9» refers to the average accross all countries and economies that distributed the questionnaire.

Rounding figures

Because of rounding, some figures in tables may not add up exactly to the totals. Totals, differences and averages are always calculated on the basis of exact numbers and are rounded only after calculation.

All standard errors in this publication have been rounded to one or two decimal places. Where the value 0.0 or 0.00 is shown, this does not imply that the standard error is zero, but that it is smaller than 0.05 or 0.005, respectively.

Reporting student data

The report uses "15-year-olds" as shorthand for the PISA target population. PISA covers students who are aged between 15 years 3 months and 16 years 2 months at the time of assessment and who are enrolled in school and have completed at least 6 years of formal schooling, regardless of the type of institution in which they are enrolled, and whether they are in full-time or part-time education, whether they attend academic or vocational programmes, and whether they attend public or private schools or foreign schools within the country.

Reporting school data

The principals of the schools in which students were assessed provided information on their schools' characteristics by completing a school questionnaire. Where responses from school principals are presented in this publication, they are weighted so that they are proportionate to the number of 15-year-olds enrolled in the school.

Focusing on statistically significant differences

This volume discusses only statistically significant differences or changes. These are denoted in darker colours in figures and in bold font in tables. Unless otherwise specified, the significance level is set to 5%. See Annex A3 for further information.

Abbreviations used in this report

Corr.	Correlation coefficient
Dif.	Difference
ESCS	PISA index of economic, social and cultural status
GDP	Gross domestic product
ICT	Information and communications technology
ISCED	International Standard Classification of Education
Score dif.	Score-point difference
S.D.	Standard deviation
S.E.	Standard error
% dif.	Percentage-point difference

Further documentation

For further information on the PISA assessment instruments and the methods used in PISA, see the *PISA 2018 Technical Report* (OECD, forthcoming[2]).

StatLink

This report has *StatLinks* at the bottom of tables and graphs. To download the matching Excel® spreadsheet, just type the link into your Internet browser, starting with the *https://doi.org* prefix, or click on the link from the e-book version.

Reference

OECD (2019), *PISA 2018 Results (Volume I): What Students Know and Can Do*, PISA, OECD Publishing, Paris, https://doi.org/10.1787/5f07c754-en. [1]

OECD (forthcoming), *PISA 2018 Technical Report,* OECD Publishing, Paris. [2]



What is PISA?

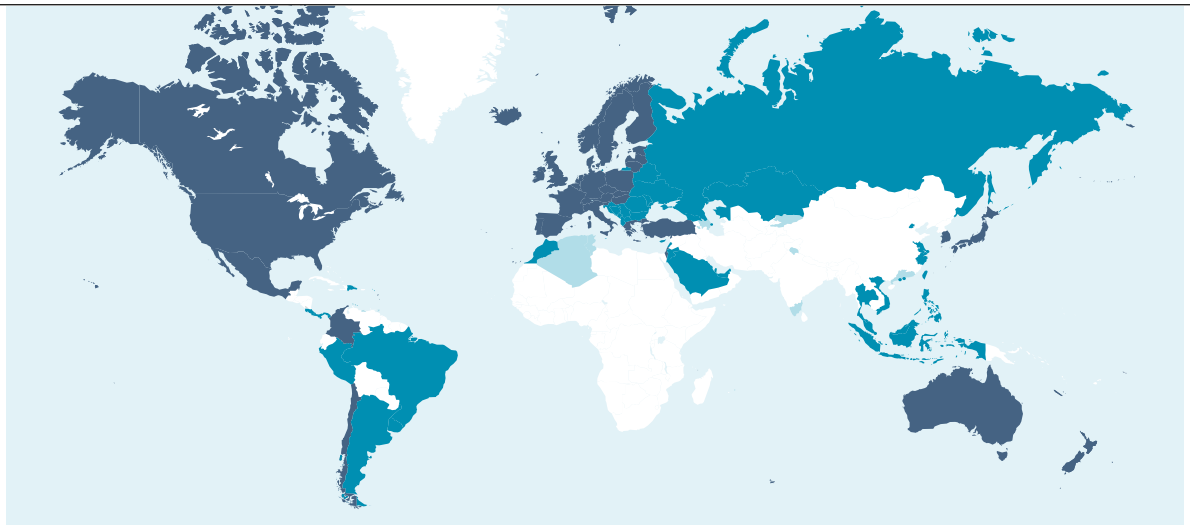
PISA is a triennial survey of 15-year-old students around the world that assesses the extent to which they have acquired key knowledge and skills essential for full participation in social and economic life. PISA assessments do not just ascertain whether students near the end of their compulsory education can reproduce what they have learned; they also examine how well students can extrapolate from what they have learned and apply their knowledge in unfamiliar settings, both in and outside of school.

WHAT IS UNIQUE ABOUT PISA?

PISA is unique because of its:

- **policy orientation**, which links data on student learning outcomes with data on students' backgrounds and attitudes towards learning, and with key factors that shape their learning, in and outside of school; by doing so, PISA can highlight differences in performance and identify the characteristics of students, schools and education systems that perform well
- **innovative concept of "literacy"**, which refers to students' capacity to apply their knowledge and skills in key areas, and to analyse, reason and communicate effectively as they identify, interpret and solve problems in a variety of situations
- **relevance to lifelong learning**, as PISA asks students to report on their motivation to learn, their beliefs about themselves, and their learning strategies
- **regularity**, which enables countries to monitor their progress in meeting key learning objectives
- **breadth of coverage**, which, in PISA 2018, encompassed all 37 OECD countries and 42 partner countries and economies.

Map of PISA countries and economies



OECD member countries

Australia
Austria
Belgium
Canada
Chile
Colombia
Czech Republic
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Japan
Korea
Latvia
Lithuania
Luxembourg
Mexico
Netherlands
New Zealand
Norway
Poland
Portugal
Slovak Republic
Slovenia
Spain
Sweden
Switzerland
Turkey
United Kingdom
United States*

Partner countries and economies in PISA 2018

Albania
Argentina
Baku (Azerbaijan)
Belarus
Bosnia and Herzegovina
Brazil
Brunei Darussalam
B-S-J-Z (China)**
Bulgaria
Costa Rica
Croatia
Cyprus
Dominican Republic
Georgia
Hong Kong (China)
Indonesia
Jordan
Kazakhstan
Kosovo
Lebanon
Macao (China)
Malaysia
Malta
Republic of Moldova
Montenegro
Morocco
Republic of North Macedonia
Panama
Peru
Philippines
Qatar
Romania
Russian Federation
Saudi Arabia
Serbia
Singapore
Chinese Taipei
Thailand
Ukraine
United Arab Emirates
Uruguay
Viet Nam

Partner countries and economies in previous cycles

Algeria
Azerbaijan
Guangdong (China)
Himachal Pradesh (India)
Kyrgyzstan
Liechtenstein
Mauritius
Miranda (Venezuela)
Tamil Nadu (India)
Trinidad and Tobago
Tunisia

* Puerto Rico participated in the PISA 2015 assessment (as an unincorporated territory of the United States).

** B-S-J-Z (China) refers to four PISA 2018 participating Chinese provinces/municipalities: Beijing, Shanghai, Jiangsu and Zhejiang. In PISA 2015, the four PISA participating Chinese provinces/municipalities were: Beijing, Shanghai, Jiangsu and Guangdong.

WHICH COUNTRIES AND ECONOMIES PARTICIPATE IN PISA?

PISA is used as an assessment tool in many regions around the world. It was implemented in 43 countries and economies in the first assessment (32 in 2000 and 11 in 2002), 41 in the second assessment (2003), 57 in the third assessment (2006), 75 in the fourth assessment (65 in 2009 and 10 in 2010), 65 in the fifth assessment (2012) and 72 in the sixth assessment (2015). In 2018, 79 countries and economies participated in PISA.

WHAT DOES THE TEST MEASURE?

In each round of PISA, one subject is tested in detail, taking up nearly half of the total testing time. The main subject in 2018 was reading, as it was in 2000 and 2009. Mathematics was the main subject in 2003 and 2012, while science was the main subject in 2006 and 2015. With this alternating schedule, a thorough analysis of achievement in each of the three core subjects is presented every nine years; an analysis of trends is offered every three years.

The *PISA 2018 Assessment and Analytical Framework* (OECD, 2019[1]) presents definitions and more detailed descriptions of the subjects assessed in PISA 2018:

- Reading literacy is defined as students' capacity to understand, use, evaluate, reflect on and engage with texts in order to achieve one's goals, develop one's knowledge and potential, and participate in society.
- Mathematics literacy is defined as students' capacity to formulate, employ and interpret mathematics in a variety of contexts. It includes reasoning mathematically and using mathematical concepts, procedures, facts and tools to describe, explain and predict phenomena.
- Science literacy is defined as the ability to engage with science-related issues, and with the ideas of science, as a reflective citizen. A scientifically literate person is willing to engage in reasoned discourse about science and technology, which requires the competencies to explain phenomena scientifically, evaluate and design scientific enquiry, and interpret data and evidence scientifically.

Box A **Key features of PISA 2018**

The content

- The PISA 2018 survey focused on reading, with mathematics, science and global competence as minor areas of assessment. PISA 2018 also included an assessment of young people's financial literacy, which was optional for countries and economies.

The students

- Some 600 000 students completed the assessment in 2018, representing about 32 million 15-year-olds in the schools of the 79 participating countries and economies.

The assessment

- Computer-based tests were used in most countries, with assessments lasting a total of two hours. In reading, a multi-stage adaptive approach was applied in computer-based tests whereby students were assigned a block of test items based on their performance in preceding blocks.
- Test items were a mixture of multiple-choice questions and questions requiring students to construct their own responses. The items were organised into groups based on a passage of text describing a real-life situation. More than 15 hours of test items for reading, mathematics, science and global competence were covered, with different students taking different combinations of test items.
- Students also answered a background questionnaire, which took about 35 minutes to complete. The questionnaire sought information about the students themselves, their attitudes, dispositions and beliefs, their homes, and their school and learning experiences. School principals completed a questionnaire that covered school management and organisation, and the learning environment.
- Some countries/economies also distributed additional questionnaires to elicit more information. These included: in 19 countries/economies, a questionnaire for teachers asking about themselves and their teaching practices; and in 17 countries/economies, a questionnaire for parents asking them to provide information about their perceptions of and involvement in their child's school and learning.
- Countries/economies could also choose to distribute three other optional questionnaires for students: 52 countries/economies distributed a questionnaire about students' familiarity with computers; 32 countries/economies distributed a questionnaire about students' expectations for further education; and 9 countries/economies distributed a questionnaire, developed for PISA 2018, about students' well-being.

HOW IS THE ASSESSMENT CONDUCTED?

As was done in 2015, PISA 2018 delivered the assessment of all subjects via computer. Paper-based assessments were provided for countries that were not able to test their students by computer, but the paper-based assessment was limited to reading, mathematics and science trend items, which were originally developed for previous PISA assessments.[1] Since 2015, new items were developed for the computer-based assessment only.

The 2018 computer-based assessment was designed as a two-hour test. Each test form allocated to students comprised four 30-minute clusters of test material. For the main subject of reading, material equivalent to 15 30-minute clusters was developed. This material was organised into blocks instead of clusters, as the PISA 2018 reading assessment took a multi-stage adaptive approach. The reading assessment was composed of a core stage followed by stage 1 and stage 2. In stages 1 and 2, students were assigned blocks of items of either greater or lesser difficulty, depending on their performance in earlier stages (see Chapter 1 in *PISA 2018 Results [Volume I]: What Students Know and Can do* [OECD, 2019[2]] for more detailed information on the multi-stage adaptive approach). To measure trends in the subjects of mathematics and science, six clusters were included in each subject. In addition, four clusters of global competence items were developed.[2] There were 72 different test forms.[3] Students spent one hour on the reading assessment plus one hour on one or two other subjects – mathematics, science or global competence.

Countries that used paper-based delivery for the main survey measured student performance with 30 pencil-and-paper forms containing trend items in the three core PISA subjects. The reading items in these paper-based forms were based on the 2009 reading literacy framework and did not include any items based on the new 2018 reading literacy framework.

The assessment of financial literacy was offered as an option in PISA 2018. It was based on the same framework as that developed for PISA 2012, which was also used in PISA 2015.[4] The financial literacy assessment lasted one hour (in addition to the regular PISA assessment) and comprised two clusters distributed to a subsample of students in combination with the reading and mathematics assessments.

To gather contextual information, PISA 2018 asked students and the principal of their school to respond to questionnaires. The student questionnaire took about 35 minutes to complete; the questionnaire for principals took about 45 minutes to complete. The responses to the questionnaires were analysed with the assessment results to provide both a broader and more nuanced picture of student, school and system performance. The *PISA 2018 Assessment and Analytical Framework* (OECD, 2019[1]) describes the genesis of the questionnaires in detail. The questionnaires from all assessments since PISA's inception are available on the PISA website: www.oecd.org/pisa.

The questionnaires seek information about:

- students and their family backgrounds, including their economic, social and cultural capital
- aspects of students' lives, such as their attitudes towards learning, their habits and life in and outside of school, and their family environment
- aspects of schools, such as the quality of the schools' human and material resources, public and private management and funding, decision-making processes, staffing practices, the school's curricular emphasis and the extracurricular activities it offers
- the context of instruction, including institutional structures and types, class size, classroom and school climate, and reading activities in class
- aspects of learning, including students' interest, motivation and engagement.

In PISA 2018, five additional questionnaires were offered as options:

- **computer familiarity questionnaire**, focusing on the availability and use of information and communications technologies (ICT), and on students' ability to carry out tasks on computers and their attitudes towards using computers
- **well-being questionnaire**, (new to PISA 2018) on students' perceptions of their health, life satisfaction, social connections and activities in and outside of school
- **educational career questionnaire**, which collects additional information on interruptions in schooling, preparation for students' future career, and support with language learning
- **parent questionnaire**, focusing on parents' perceptions of and involvement in their child's school, their support for learning at home, school choice, their child's career expectations, and their background (immigrant/non-immigrant)
- **teacher questionnaire**, which asks about teachers' initial training and professional development, their beliefs and attitudes, and their teaching practices. Separate questionnaires were developed for teachers of the test language and for other teachers in the school.

The contextual information collected through the student, school and optional questionnaires is complemented by system-level data. Indicators describing the general structure of each education system, such as expenditure on education, stratification,

assessments and examinations, appraisals of teachers and school leaders, instruction time, teachers' salaries, actual teaching time and teacher training are routinely developed and analysed by the OECD. These data are extracted from the annual OECD publication, *Education at a Glance: OECD Indicators*, for the countries that participate in the annual OECD data collection administered through the OECD Indicators of Education Systems (INES) Network. For other countries and economies, a special system-level data collection was conducted in collaboration with PISA Governing Board members and National Project Managers.

WHO ARE THE PISA STUDENTS?

Differences between countries in the nature and extent of pre-primary education and care, the age at entry into formal schooling, the structure of the education system, and the prevalence of grade repetition mean that school grade levels are often not good indicators of where students are in their cognitive development. To better compare student performance internationally, PISA targets students of a specific age. PISA students are aged between 15 years 3 months and 16 years 2 months at the time of the assessment, and they have completed at least 6 years of formal schooling. They can be enrolled in any type of institution, participate in full-time or part-time education, in academic or vocational programmes, and attend public or private schools or foreign schools within the country (for an operational definition of this target population, see Annex A2). Using this age across countries and over time allows PISA to consistently compare the knowledge and skills of individuals born in the same year who are still in school at age 15, despite the diversity of their education histories in and outside of school.

The population of PISA-participating students is defined by strict technical standards, as are the students who are excluded from participating (see Annex A2). The overall exclusion rate within a country is required to be below 5% to ensure that, under reasonable assumptions, any distortions in national mean scores would remain within plus or minus 5 score points, i.e. typically within the order of magnitude of 2 standard errors of sampling. Exclusion could take place either through the schools that participated or the students who participated within schools (see Annex A2).

There are several reasons why a school or a student could be excluded from PISA. Schools might be excluded because they are situated in remote regions and are inaccessible, because they are very small, or because of organisational or operational factors that precluded participation. Students might be excluded because of intellectual disability or limited proficiency in the language of the assessment. In 31 of the 79 countries and economies that participated in PISA 2018, the percentage of school-level exclusions amounted to less than 1%; it was 4% or less in all except five countries. When the exclusion of students who met the internationally established exclusion criteria is also taken into account, the exclusion rates increase slightly. However, in 2018, the overall exclusion rate remained below 2% in 28 participating countries and economies, below 5% in 63 participating countries and economies, and below 7% in all countries except Sweden (11.1%), Israel (10.2%), Luxembourg and Norway (both 7.9%). For more detailed information about school and student exclusion from PISA 2018, see Annex A2.

WHERE CAN YOU FIND THE RESULTS?

The initial PISA 2018 results are released in six volumes:

- ***Volume I: What Students Know and Can Do*** (OECD, 2019[2]) provides a detailed examination of student performance in reading, mathematics and science, and describes how performance has changed over time.
- ***Volume II: Where All Students Can Succeed*** (OECD, 2019[3]) examines gender differences in student performance, the link between students' socio-economic status and immigrant background, on the one hand, and their performance and other outcomes, on the other, and the relationship between all of these variables and students' well-being. Trends in these indicators over time are examined when comparable data are available.
- ***Volume III: What School Life Means for Students' Lives*** (OECD, 2019[4]) focuses on the physical and emotional health of students, the role of teachers and parents in shaping the school climate, and the social life at school. The volume also examines indicators of student well-being, and how these are related to school climate.
- ***Volume IV: Are Students Smart about Money?*** (OECD, forthcoming[5]) examines 15-year-old students' understanding about money matters in the 21 countries and economies that participated in this optional assessment. The volume explores how the financial literacy of 15-year-old students is associated with their competencies in reading and mathematics, with their socio-economic status, and with their previous experiences with money. It also offers an overview of financial education in schools in the participating countries and economies, and provides case studies.
- ***Volume V: Effective Policies, Successful Schools*** (OECD, forthcoming[6]) analyses schools and school systems and their relationship with education outcomes more generally. The volume covers school governance, selecting and grouping students, and the human, financial, educational and time resources allocated to teaching and learning. Trends in these indicators are examined when comparable data are available.
- ***Volume VI: Are Students Ready to Thrive in Global Societies?*** (OECD, forthcoming[7]) examines students' ability to consider local, global and intercultural issues, understand and appreciate different perspectives and world views, interact respectfully with others, and take responsible action towards sustainability and collective well-being. It does so through both an assessment completed by students and questionnaires completed by students and school principals.[5]

Volumes I and II are published at the same time as Volume III, in December 2019; Volumes IV, V and VI are published in 2020.

The frameworks for assessing reading, mathematics, science, financial literacy and global competence in 2018 are described in the *PISA 2018 Assessment and Analytical Framework* (OECD, 2019[1]). The framework for reading is also summarised in Volume I.

Technical annexes at the end of this volume describe how questionnaire indices were constructed and discuss sampling issues, quality-assurance procedures and the process followed for developing the assessment instruments. Many of the issues covered in the technical annexes are elaborated in greater detail in the *PISA 2018 Technical Report* (OECD, forthcoming[8]).

A selection of key tables referred to in the analyses are included at the end of the respective volume in Annex B1, and a set of additional data tables is available on line (www.oecd.org/pisa). A Reader's Guide is also provided in each volume to aid in interpreting the tables and figures that accompany the report. Data from regions within the participating countries are included in Annex B2.

Notes

1. The paper-based form was used in nine countries: Argentina, Jordan, Lebanon, the Republic of Moldova, the Republic of North Macedonia, Romania, Saudi Arabia, Ukraine and Viet Nam.
2. The global competence assessment was not available in the countries/economies that conducted the PISA 2018 assessment on paper. It was conducted in Albania, Brunei Darussalam, Canada, Chile, Colombia, Costa Rica, Croatia, Greece, Hong Kong (China), Indonesia, Israel, Kazakhstan, Korea, Latvia, Lithuania, Malta, Morocco, Panama, the Philippines, the Russian Federation, Serbia, Singapore, the Slovak Republic, Spain, Chinese Taipei, Thailand and Scotland (United Kingdom). However, the global competence module was included in the student questionnaire, which was distributed in 56 of the countries/economies that took part in PISA 2018.
3. Thirty-six test forms were prepared for countries that did not participate in the global competence assessment. The number of distinct test forms is much higher when the many possible combinations of reading questions are also considered.
4. The financial literacy assessment was conducted in Australia, Brazil, Bulgaria, Canada, Chile, Estonia, Finland, Georgia, Indonesia, Italy, Latvia, Lithuania, the Netherlands, Peru, Poland, Portugal, the Russian Federation, Serbia, the Slovak Republic, Spain and the United States.
5. The global competence assessment was conducted in 27 countries and economies, while the global competence module was included in questionnaires distributed in 56 countries and economies.

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1

A framework for the analysis of school climate and student well-being

This chapter defines the concepts of school climate and student well-being as used by PISA, presents a framework for their analysis and lists the indicators analysed in the report.

HOW PISA 2018 MEASURES SCHOOL CLIMATE

A positive school climate is one of those things that is difficult to define and measure, but everyone recognises it when they see it. Visitors to a school, including parents and education inspectors, can identify a positive school atmosphere "within minutes" (DeWitt, 2016[1]). The state of the school's facilities, the tone of the conversations in corridors, the enthusiasm of the school staff and the way students interact during breaks are some of the signs that visitors can read to quickly and broadly assess a school's climate. The 15-year-old students who sit the PISA assessment may not evaluate their school climate as consciously as adults do, but they certainly feel it. All students appreciate a school environment where bullying is unusual, making friends is relatively simple, and establishing genuine and respectful relationships with teachers is the norm – even if students cannot always put their feelings into words.

While the recipe for an ideal school has many ingredients, parents overwhelmingly cite school safety, a good reputation and a pleasant environment as the most important criteria they consider when choosing a school for their child (OECD, 2015[2]) – and for good reason. A safe, supportive and healthy school climate can make a great difference in students' lives. A positive school climate, for instance, can promote students' academic achievement, well-being and self-esteem (Hoge, Smit and Hanson, 1990[3]; MacNeil, Prater and Busch, 2009[4]; Way, Reddy and Rhodes, 2007[5]), and some of these effects persist for years (Hoy, Hannum and Tschannen-Moran, 1998[6]). A positive climate can even mitigate the pervasive and strong link between socio-economic status and academic achievement (Berkowitz et al., 2017[7]). Schools with safe, respectful and caring learning environments also protect students from engaging in maladaptive behaviours, such as truancy, smoking, drinking, using drugs, and other deviant and risky behaviours (Catalano et al., 2004[8]; Gase et al., 2017[9]; LaRusso, Romer and Selman, 2008[10]). Teachers too can benefit from a positive school climate. For instance, teachers in disciplined and supportive schools report higher job satisfaction and less burnout (Aldridge and Fraser, 2016[11]; Berg and Cornell, 2016[12]; Mostafa and Pál, 2018[13]). In other words, children are more likely to reach their social, emotional and academic potential in a safe, supportive and collaborative school environment.

Box III.1.1. **Interpretation of the findings**

Some caution is advised when interpreting the PISA indicators on school climate and well-being. While PISA aims to maximise the cross-national and cross-cultural comparability of complex constructs, it must do so while keeping the questionnaires relatively short and minimising the perceived intrusiveness of the questions. Despite the extensive investments PISA makes in monitoring the process of translation, standardising the administration of the assessment, selecting questions and analysing the quality of the data, full comparability across countries and subpopulations cannot always be guaranteed.

The indicators of school climate and well-being analysed in this report are based on students' and principals' reports, which are susceptible to several possible measurement errors: memory decay; social desirability (the tendency to respond in a manner that is more acceptable in one's own social and cultural context, (Edwards, 1953[22]); reference-group bias (what the comparison group is); and response-style bias (e.g. straight-lining, over-reporting, modesty, heaping, acquiescence). These biases can operate differently in different cultural contexts, thus limiting the cross-country comparability of responses (Benítez, van de Vijver and Padilla, 2019[23]; van de Vijver et al., 2019[24]; van Hemert, Poortinga and van de Vijver, 2007[25]). Above all, readers should be particularly cautious when interpreting indicators with a strong subjective component, such as life satisfaction and student feelings, which are more likely to be influenced by cultural norms and the personality of the respondent.

In order to minimise the risk of misleading interpretations, a number of reliability and invariance analyses of the PISA indices used in this report have been carried out (see Annex A1 for more details), providing readers with an indication of how reliable cross-country comparisons are.

Further caution is advised when comparing the results across countries since 15-year-old students in some countries have already transitioned into upper secondary education, while in others they are still in lower secondary education. Some of the questions may be influenced by the education level in which students are enrolled, especially in those countries where transitioning into upper secondary education means transferring into a new school. For instance, parents may have fewer opportunities to interact with the school staff in upper secondary education, particularly when their child has been attending the new school for just a few months. Students may have also spent too little time in the new school to develop a strong attachment to the school, and the learning environment may be more competitive in upper secondary than in lower secondary education.

Everyone can play a part to improve school climate (OECD, 2016[14]). Students can attend school regularly, avoid engaging in risky behaviours, treat other students respectfully and not disrupt the flow of instruction. Teachers can co-operate by exchanging ideas and sharing best practices. They can support students by showing an interest in every student, providing extra help or giving students opportunities to express their ideas. School leaders can design consistent disciplinary policies, react swiftly when problems arise, build trusting relationships with teachers, and ensure that a range of enriching extracurricular activities are offered at school. Parents can engage in school activities, interact with the school staff and provide emotional support to their children. Governments can ensure that all schools are well-equipped and -staffed (with, for example, sound buildings, safe and adequate facilities, educational resources and school psychologists) and provide special assistance to schools struggling with disruptive behaviour.

PISA can contribute to the already large body of research on school climate. While PISA 2018 cannot cover all the dimensions of school climate, the student and school questionnaires distributed with the assessment include more than 20 questions directly related to school climate. The parent questionnaire, which was distributed in 17 PISA-participating countries and economies, includes additional questions related to the school climate, a few of which are also examined in this report. The responses to these questions can be compared across and within the OECD countries, and partner countries and economies that participated in PISA 2018. Some of these indicators, such as disciplinary climate, sense of belonging at school and student truancy, can also be compared over time. Moreover, PISA measures of school climate can be analysed in relation to other PISA data on important student outcomes, such as academic achievement, expectations of further education and well-being, and to key factors that shape students' learning, such as teachers' practices.

Definition of school climate

School climate has been described as the "quality and character of school life" (Cohen et al., 2009[15]), the "the heart and soul of the school" (Freiberg and Stein, 1999[16]) and "the quality of relationships among students, teachers and school staff" (Hoy and Sweetland, 2001[17]). School climate can be safe or unsafe, cohesive or divisive, collaborative or competitive. Above all, it is typically perceived as either positive or negative. In a positive school climate students feel physically and emotionally safe; teachers are supportive, enthusiastic and responsive; parents participate in school activities voluntarily; the school community is built around healthy, respectful and co-operative relationships; and everyone looks after the school premises and works together to develop a constructive school spirit. Terms similar to school climate include school environment, learning environment and school culture. In this report, school climate, school environment and learning environment are used interchangeably; school culture is used only to refer to the social or community dimension of the school climate.

School climate is a multidimensional construct that represents "virtually every aspect of the school experience" (Wang and Degol, 2016[18]). While researchers have not reached a consensus on the indicators that make up school climate, four spheres of school climate emerge from previous research (Cohen et al., 2009[15]; Thapa et al., 2013[19]; Wang and Degol, 2016[18]):

- **Safety**: includes maladaptive behaviours, such as bullying, disciplinary problems in the classroom, substance abuse and truancy, and also the rules, attitudes and school strategies related to these maladaptive behaviours. This sphere is renamed as student disruptive behaviour in this volume as only maladaptive behaviours are examined.
- **Teaching and learning**: includes aspects of teaching, such as academic support, feedback and enthusiasm, aspects of the curriculum, such as civic learning and socio-emotional skills, and indicators of teacher professional development and school leadership, such as teacher co-operation, teacher appraisal, administrative support and the school vision.
- **School community**: includes aspects of the school community, such as student-teacher relationships, student co-operation and teamwork, respect for diversity, parental involvement, community partnerships, and outcomes of these indicators, like school attachment, sense of belonging and engagement.
- **Institutional environment**: includes the school resources, such as buildings, facilities, educational resources and technology, and indicators of the school organisation, such as class size, school size and ability grouping.

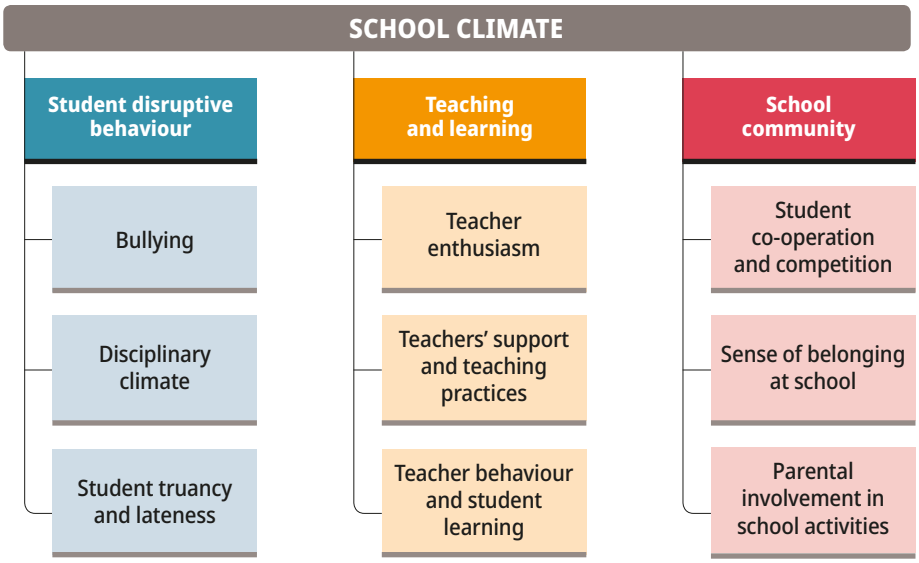
This report analyses in detail a great number of the indicators included in the first three spheres. Other aspects of school climate are examined in other volumes of PISA 2018 Results. For instance, the institutional environment is covered mostly in *PISA 2018 Results (Volume V): Effective Policies, Successful Schools* (OECD, forthcoming[20]), and respect for diversity and civic learning are covered in *PISA 2018 Results (Volume VI): Are Students Ready to Thrive in Global Societies?* (OECD, forthcoming[21]). Other indicators not covered in this report, such as student-teacher relationships, school leadership and teacher co-operation, were analysed in previous PISA and TALIS (Teaching and Learning International Survey) reports.

PISA 2018 indicators of school climate

PISA 2018 questionnaires cover several dimensions of school climate. This report focuses on nine aspects of school climate, grouped into three broad spheres, which are mentioned below (Figure III.1.1):

- The **student disruptive behaviour** sphere refers to the physical and socio-emotional security of the members of the school, the disciplinary climate and the frequency of student disruptive behaviours. The report includes aspects of bullying, disciplinary climate, and student truancy and lateness.
- The **teaching and learning** sphere refers to the classroom practices and teacher behaviours that shape the learning experience and promote the socio-emotional development of children. This report includes indicators of teacher enthusiasm, teachers' support and teaching practices in language-of-instruction lessons (see Box III.1.2), and teacher behaviours affecting student learning.
- The **school community** sphere refers to the nature of the relationships that students, teachers, the school principal, parents and the local community establish within the school setting. This report includes indicators of student competition and co-operation, sense of belonging at school and parental involvement.

Figure III.1.1 **School climate as measured in PISA 2018**



Each chapter focuses on one, or a few, questions from the student and school questionnaires (other questionnaires are used only occasionally), and is structured as follows: a brief introduction and literature review are followed by descriptive findings (e.g. frequencies, averages), cross-tabulations by students' and schools' characteristics (e.g. gender, socio-economic profile; see Box III.1.3), education level, immigrant background (see Box III.1.4), school location (see Box III.1.5), type of school (see Box III.1.6), and additional analyses looking at how the indices and items are related to reading performance and other student outcomes.

Box III.1.2. How PISA defines language of instruction

Language-of-instruction refers to the main language that teachers use in their lessons, which is usually the same as the language of the PISA assessment. For instance, in the Czech Republic, students were asked about "Czech-language lessons", in Mexico about "Spanish classes" and in Norway about "Norwegian lessons". However, in some countries and economies, the term <test language> was adapted differently, usually to include the term "literature". Some of these exceptions include the following:

- **Bulgaria**: Bulgarian language and literature
- **Belarus**: Belarusian language and literature
- **Chile**: Language and communication
- **Estonia**: Estonian language and literature

...

- **Greece**: modern Greek language and literature
- **Hungary**: Hungarian language and literature
- **Korea**: Korean language arts
- **Peru**: Communication
- **Romania**: Romanian language and literature
- **The Russian Federation**: Russian language and literature
- **The Slovak Republic**: Slovak language and literature
- **Ukraine**: Ukrainian language and literature, together with foreign literature
- **Uruguay**: Spanish language or literature
- **United States**: English/Language arts classes

Box III.1.3. How PISA 2018 defines socio-economically advantaged and disadvantaged students and schools

PISA asked students several questions related to the education level and occupation of their parents, and their home possessions. These questions were combined to create the PISA index of economic, social and cultural status whose average is 0 and standard deviation is 1 across OECD countries.

A socio-economically advantaged student is a student in the top quarter of the PISA index of economic, social and cultural status (ESCS) in his or her own country/economy. A socio-economically disadvantaged student is a student in the bottom quarter of that index in his or her own country/economy.

A socio-economically advantaged school is a school in the top quarter of the school index of ESCS in the relevant country/economy. A socio-economically disadvantaged school is a school in the bottom quarter of the school index of ESCS in the relevant country/economy. To calculate the school index of ESCS, the average ESCS of students in each school is calculated using student weights.

Box III.1.4. How PISA 2018 defines immigrant and non-immigrant students, and schools with a low or high concentration of immigrant students

PISA asked students in which country their parents were born. Based on their answers, students were classified as not having an immigrant background (non-immigrant students) when at least one parent was born in the country of assessment, and as having an immigrant background (immigrant students) when both parents were born in another country.

A school with a low concentration of immigrant students is a school where less than 10% of students have an immigrant background. A school with a high concentration of immigrant students is a school where at least 10% of students have an immigrant background.

Box III.1.5. How PISA defines rural and city schools

PISA asked school principals which of the following definitions best describes the community in which their school is located:

- A village, hamlet or rural area (fewer than 3 000 people)
- A small town (3 000 to about 15 000 people)
- A town (15 000 to about 100 000 people)
- A city (100 000 to about 1 000 000 people)
- A large city (with over 1 000 000 people)

Rural schools are those where the principal answered "a village, hamlet or rural area", whereas city schools are those where the principal answered either "a city" or "a large city".

Box III.1.6. **How PISA defines public and private schools**

Schools are classified as either public or private, according to whether a private entity or a public agency has the ultimate power to make decisions concerning its affairs (Question SC013). Public schools are managed directly or indirectly by a public education authority, government agency, or governing board appointed by government or elected by public franchise. Private schools are managed directly or indirectly by a non-government organisation, such as a church, trade union, business or other private institution.

HOW PISA 2018 MEASURES STUDENTS' WELL-BEING

When parents around the world are asked what they want for their children, some mention "achievement" or "success", but most reply "happiness", "confidence", "friends", "health", "satisfaction", "freedom from bullying" and the like (OECD, 2015[2]; Seligman et al., 2009[26]; The Children's Society, 2015[27]). Findings in this report (see Chapter 10), also show that parents overwhelmingly cite school safety, a good reputation and a pleasant environment as important criteria they consider when choosing a school for their child. In short, people value well-being. Many of the countries participating in PISA not only want to know how their students fare academically, but also how they get on with their lives.

Some of the differences in children's well-being outcomes appear very early in life (Rothbart et al., 2011[28]), and continue to develop throughout their school years (Rothbart and Jones, 1998[29]). What happens in school is key to understanding whether students enjoy good physical and mental health, how happy and satisfied they are with different aspects of their lives, how connected to others they feel, and the aspirations they hold for their future (Bradshaw, Hoelscher and Richardson, 2007[30]; Currie et al., 2012[31]; Rees and Main, 2015[32]). For instance, a positive class atmosphere where effort is encouraged and rewarded, and in which children are accepted and supported by their teachers, regardless of their intellect and temperament, can have a positive effect on students' well-being (Huebner et al., 2004[33]; Torsheim, Aaroe and Wold, 2001[34]).

Measuring the well-being of 15-year-old students, the target PISA population, is particularly important, as students at this age are in a key transition phase of physical and emotional development. Asking students about themselves gives adolescents the opportunity to express how they feel, what they think of their lives and what aspirations they have for their future.

One advantage that PISA holds is that these well-being indicators can be examined across a large number of economies and in relation to cognitive as well as social and emotional outcomes, such as academic achievement and expectations of further education, and to key factors that shape students' learning. This report also focuses on the relationship between school climate and students' well-being. Even if the well-being indicators examined in this section do not refer specifically to the school context – for instance, students are asked how satisfied they feel about their lives in general – adolescents spend a large part of their lives at school and school friends play a pre-eminent role in their social lives.

Definition of student well-being

Student well-being refers to the psychological, cognitive, material, social and physical functioning and capabilities that students need to live a happy and fulfilling life (OECD, 2017[35]). Well-being is a dynamic state: without sufficient investments in developing capabilities in the present, students may be less likely to enjoy well-being as adults.

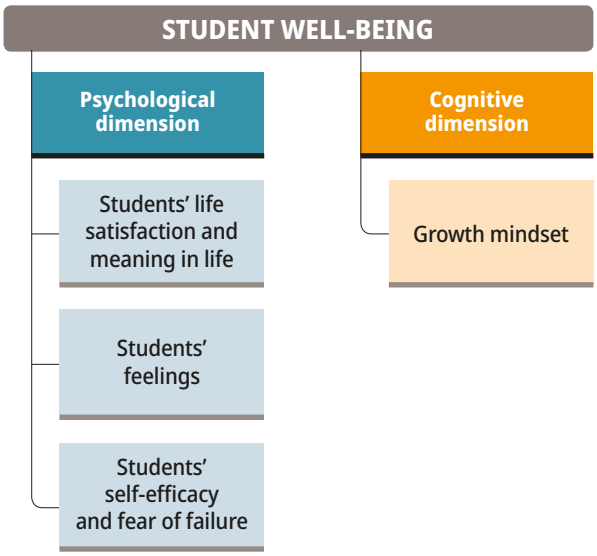
The five domains of student well-being identified in the *Framework for the Analysis of Student Well-Being in the PISA 2015 Study* (Borgonovi and Pál, 2016[36]) are:

- **cognitive well-being**, which refers to the knowledge, skills and foundations students have to participate effectively in today's society, as lifelong learners, effective workers and engaged citizens
- **psychological well-being**, which includes students' evaluations and views about their lives, their engagement with school, and the goals and ambitions they have for their future
- **physical well-being**, which refers to students' health status, engagement in physical exercise and the adoption of healthy eating habits (Statham and Chase, 2010[37])
- **social well-being**, which refers to the quality of their social lives (Rath and Harter, 2010[38]), including their relationships with their family, their peers and their teachers, and how they perceive their social life at school (Pollard and Lee, 2003[39])
- **material well-being**, which refers to the material resources that make it possible for families to provide for their children's needs and for schools to support students' learning and healthy development.

PISA 2018 indicators of student well-being

The indicators of student well-being examined in this volume are summarised in Figure III.1.2. They represent only a fraction of the well-being indicators covered in the PISA 2018 questionnaires. Other measures of well-being are covered in other parts and volumes of the *PISA 2018 Results* report. For example, the school-climate section in this volume analyses indicators on bullying, sense of belonging at school and co-operation; *PISA 2018 Results (Volume I): What Students Know and Can Do* (OECD, 2019[40]) presents results on students' knowledge and skills in reading, mathematics and science; *PISA 2018 Results (Volume II): Where All Students Can Succeed* (OECD, 2019[41]) describes the household resources available to students; and *PISA 2018 Results (Volume V): Effective Policies, Successful Schools* (OECD, forthcoming[20]) looks at the school resources provided to students. Many other indicators are covered in the well-being questionnaire, but only students' satisfaction with different aspects of their lives is analysed in this report (see Chapter 12) as only nine countries and economies distributed the questionnaire.

Figure III.1.2 **Well-being as measured in PISA 2018**



This volume covers the following indicators of well-being:

- **Life satisfaction**, which refers to students' overall evaluation of their lives. Life satisfaction is a useful summary indicator of well-being widely used by national statistical offices (OECD, 2019[42]). Students' meaning and purpose in life – also referred to as *eudaemonia* – is analysed together with life satisfaction.
- **Students' feelings**, referred to as student affect in academic research, is the extent to which students experience certain emotions and moods, usually at a particular point in time (Watson, Clark and Tellegen, 1988[43]). Together with life satisfaction and *eudaemonia*, student feelings is one of the three measures of subjective well-being included in the PISA 2018 student questionnaire. Subjective well-being can be defined as "good mental states, including all of the various evaluations, positive and negative, that people make of their lives and the affective reactions of people to their experiences" (OECD, 2013[44]).
- **Self-efficacy** refers to the extent to which individuals believe in their own ability to engage in certain activities and perform specific tasks, especially when facing challenging circumstances (Bandura, 1977[45]). PISA has traditionally asked about students' self-efficacy in specific subjects, such as mathematics and science. PISA 2018 focuses instead on students' perceptions about their general competence. Students' fear of failure, the flip side of the coin, is analysed together with self-efficacy.
- **Growth mindset** is the belief that someone's ability and intelligence can develop over time (Dweck, 2006[46]). Growth mindset is closely related to the notion of personal growth (i.e. feeling of continued self-improvement), a traditional dimension of well-being (Ryff and Keyes, 1995[47]; The Children's Society, 2015[27]).

The well-being part of the report is organised into four short chapters (Figure III.1.2), grouped into two of the dimensions described above: the psychological dimension and the cognitive dimension. Each chapter focuses on one, or a few, questions from the student questionnaire (other questionnaires are used occasionally), and is structured as follows: a brief introduction and literature review are followed by descriptive findings (e.g. frequencies, averages), cross-tabulations by students' and schools' characteristics, and additional analyses looking at how the indices and items are related to reading performance, other student outcomes and the school climate.

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PISA

2

Bullying

Bullying is a major problem worldwide with serious consequences for students' lives. This chapter examines differences between countries and economies in students' exposure to bullying at school, and how bullying is associated with student and school characteristics. It also examines how students' exposure to bullying is related to reading performance, to students' attitudes towards bullying, to students' well-being and to school climate.

Bullying at school can affect any schoolchild in any country (Nansel et al., 2004[1]). This violent behaviour can have severe physical and emotional long-term consequences for students, which is why teachers, parents, policy makers and the media are increasingly drawing attention to bullying and trying to find ways to tackle it (Phillips, 2007[2]).

What the data tell us

- On average across OECD countries, 23% of students reported being bullied at least a few times a month.
- Boys and low-achieving students in reading were more likely to report being bullied at least a few times a month than girls and high-achieving students.
- On average across OECD countries, students who reported being bullied at least a few times a month scored 21 points lower in reading than students who did not report so, after accounting for socio-economic status.
- Some 88% of students across OECD countries agreed that it is a good thing to help students who cannot defend themselves and it is wrong to join in bullying. Girls and students who were not frequently bullied were more likely to report stronger anti-bullying attitudes than boys and frequently bullied students.
- Students who reported being frequently exposed to bullying also reported feeling sad, scared and less satisfied with their lives than students who did not report so. Students in schools with a high prevalence of bullying were also more likely to report a weaker sense of belonging at school and a worse disciplinary climate than their counterparts in schools with a low prevalence of bullying.

Bullying is a specific type of aggressive behaviour that involves unwanted, negative actions in which someone intentionally and repeatedly harms and discomforts another person who has difficulty defending himself or herself (Olweus, 1993[3]). It is characterised by a systematic abuse of power and an unequal power relationship between the bully and the victim (Woods and Wolke, 2004[4]). Bullying can be physical (hitting, punching and kicking), verbal (name-calling and mocking) and relational (spreading gossip and engaging in other forms of public humiliation, shaming and social exclusion) (Woods and Wolke, 2004[4]). With widespread use of information and communication technologies (ICT), cyberbullying has become another type of harassment amongst students that takes place through digital devices and tools (Hinduja and Patchin, 2010[5]; Smith et al., 2008[6]).

Since 2015, PISA has asked students about their experiences with bullying-related behaviours at school and measures three distinct types of bullying: physical, relational and verbal. PISA 2018 asked students how often ("never or almost never", "a few times a year", "a few times a month", "once a week or more") during the 12 months prior to the PISA test they had had the following experiences in school (the question also indicated that "Some experiences can also happen in social media"): "Other students left me out of things on purpose" (relational bullying); "Other students made fun of me" (verbal bullying); "I was threatened by other students" (verbal/physical bullying); "Other students took away or destroyed things that belong to me" (physical bullying); "I got hit or pushed around by other students" (physical bullying); and "Other students spread nasty rumours about me" (relational bullying). These statements were combined into a single indicator, "any type of bullying act", when a student responded at least a few times a month to any of the bullying questions. The indicator "any type of bullying act" is referred to throughout this chapter as "being bullied".

Box III.2.1. How the index of exposure to bullying, frequently bullied students and schools with a high prevalence of bullying were classified in PISA 2018

An index of exposure to bullying was constructed using student responses ("never or almost never", "a few times a year", "a few times a month", "once a week or more") to three statements about students' experience with bullying: "Other students left me out of things on purpose"; "Other students made fun of me"; and "I was threatened by other students". The index average is 0 and the standard deviation is 1 across OECD countries. Positive values in this index indicate that the student is more exposed to bullying at school than the average student in OECD countries; negative values in this index indicate that the student is less exposed to bullying at school than the average student in OECD countries.

Students were classified as being "frequently bullied" if they were amongst the 10% of students with the highest values in the index of exposure to bullying across all countries and economies with available data (a value greater than 1.51 in the index of exposure to bullying). This cut-off was selected because most of the students at or above this level were frequently exposed (at least a few times a month) to the three forms of bullying measured by the index (Table III.B1.2.20). Across most PISA-participating countries and economies, more than two in three students who were classified as frequently bullied reported that other students left them out of things on purpose or made fun of them. On average across OECD countries, about three in five frequently bullied students reported that other students threatened them.

PISA 2018 also classified schools based on the concentration of frequently bullied students. PISA 2018 results show that, on average across OECD countries, about 3% of the variation in the index of exposure to bullying lay between schools, a proportion somewhat smaller than that of other indices examined in this report (Table III.B1.2.1). Schools with a high prevalence of bullying are those where more than 10% of students were frequently bullied. Schools with a low prevalence of bullying are those where 5% of students or less were frequently bullied.

THE MAGNITUDE OF THE BULLYING PROBLEM ACROSS COUNTRIES AND SCHOOLS

Figure III.2.1 shows that bullying occurs in all PISA-participating countries and economies. On average across OECD countries, 23% of students reported being bullied at least a few times a month; 8% of students were classified as being frequently bullied. However, PISA 2018 data reveal large between-country differences in students' reported exposure to bullying. In Brunei Darussalam, the Dominican Republic, Indonesia, Morocco and the Philippines, more than 40% of students reported being bullied at least a few times a month. In contrast, in Korea, the Netherlands, Portugal and Chinese Taipei, less than 15% of students reported so. In Brunei Darussalam, the Dominican Republic and the Philippines, more than 20% of students were frequently bullied, while in Beijing, Shanghai, Jiangsu and Zhejiang (China) (hereafter "B-S-J-Z [China]"), Iceland, Japan, the Netherlands and Chinese Taipei fewer than 5% of students were frequently bullied.

Certain types of bullying at school occur more often than others. While the prevalence of bullying varies substantially, depending on the student's age, the country and the culture he or she lives in, and the type of studies pursued (Chester et al., 2015[7]; Craig et al., 2009[8]), verbal and relational bullying are the most common types of bullying amongst secondary school-age students (Thomas et al., 2015[9]; Waasdorp and Bradshaw, 2015[10]; Wang, Iannotti and Nansel, 2009[11]; Williams and Guerra, 2007[12]). Like PISA 2015, PISA 2018 found that in many countries verbal and relational bullying occurred the most frequently (Figure III.2.1 and Table III.B1.2.1). On average across OECD countries, 14% of students reported that others made fun of them at least a few times a month; 10% reported that they were the object of nasty rumours at school; and 9% reported that they were left out of things on purpose. More than 10% of students in 67 out of 75 countries/economies with available data reported that their peers made fun of them at least a few times a month. The same proportion of students in 55 out of 75 countries and economies reported that they were the object of nasty rumours; and in 40 out of 75 countries and economies that their schoolmates frequently left them out of things.

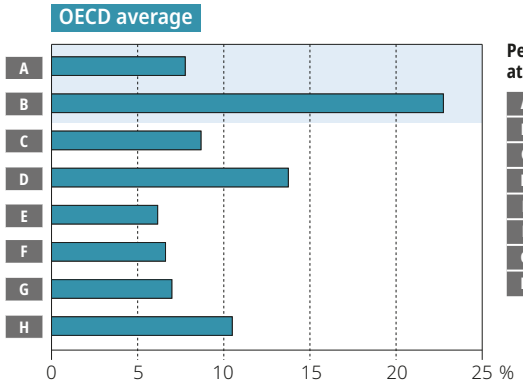
PISA 2018 data show that physical bullying was less prevalent than verbal and relational bullying. On average across OECD countries, around 7% of students reported that they got hit or pushed around by other students at least a few times a month. Similar proportions of students reported that other students took away or destroyed things that belong to them and that they were threatened by others. However, these percentages mask large differences across countries and economies. One possible explanation might be that different cultural and social norms may affect how students in different countries perceive various types of violence. For example, in Baku (Azerbaijan), the Dominican Republic, Indonesia, Jordan, Morocco and the Philippines, more than 20% of students reported that their belongings were taken away or destroyed, while in Japan, Korea and the Netherlands, less than 3% of students so reported.

Are students who are being bullied at least a few times a month concentrated in certain schools? As shown in Figure III.2.2, on average across OECD countries, 15% of students attended schools where 10% of their schoolmates or less reported being bullied at school at least a few times a month in the 12 months prior to the PISA test. Some 47% of students were in schools where between 10% and 25% of their schoolmates had been bullied at school at least a few times a month over this period. Some 34% of students were in schools where between 25% and 50% of their schoolmates reported being bullied at least a few times a month. Only 4% of students attended schools where at least 50% of their fellow students reported being bullied at least a few times a month.

In all education systems, 15-year-old students' exposure to bullying varied across schools (Figure III.2.2 and Table III.B1.2.3). However, in some systems, victims of bullying seemed to be concentrated in certain schools, while in other systems these students were distributed more evenly across all schools. For example, in Luxembourg and Slovenia, around 21% of students reported being bullied at least a few times a month. But these students were more evenly distributed across schools in Luxembourg than in Slovenia. In Luxembourg, 80% of students attended schools where between 10% and 25% of their schoolmates reported being bullied (the second lowest category of the concentration of bullying in schools), while in Slovenia, 49% of students attended such schools.

Figure III.2.1 **Students' exposure to bullying**

Based on students' reports



Percentage of students who reported that the following occurred at least a few times a month

- **A** Frequently bullied students
- **B** Any type of bullying act
- **C** Other students left me out of things on purpose
- **D** Other students made fun of me
- **E** I was threatened by other students
- **F** Other students took away or destroyed things that belong to me
- **G** I got hit or pushed around by other students
- **H** Other students spread nasty rumours about me

OECD	A (%)	Percentage of students who reported the following occurred at least a few times a month: B	C	D	E	F	G	H
Australia	13	30	14	21	9	7	9	13
Austria	7	23	7	14	6	8	7	11
Belgium	5	19	6	11	3	3	4	9
Canada	9	25	11	17	6	5	7	10
Chile	8	24	10	13	6	8	7	13
Colombia	12	32	16	18	11	12	11	18
Czech Republic	8	30	12	14	7	10	10	15
Denmark	5	21	6	13	3	5	6	7
Estonia	8	25	8	17	6	6	7	9
Finland	6	18	7	12	4	3	5	7
France	7	20	8	12	6	6	5	9
Germany	6	23	7	13	5	7	5	10
Greece	8	27	8	17	8	9	9	11
Hungary	7	23	11	11	7	7	7	13
Iceland	5	17	6	12	5	3	4	6
Ireland	9	23	9	16	6	5	6	8
Italy	8	24	10	11	9	11	9	12
Japan	4	17	4	14	2	3	6	5
Korea	m	9	1	8	1	1	1	2
Latvia	11	35	16	18	10	10	12	16
Lithuania	10	23	10	13	10	10	11	13
Luxembourg	7	21	8	12	6	6	6	11
Mexico	9	23	11	14	7	7	8	13
Netherlands	2	12	2	7	2	3	3	6
New Zealand	15	32	14	23	10	7	9	13
Norway	5	19	5	12	4	5	5	7
Poland	8	26	9	14	7	9	8	16
Portugal	5	14	6	9	4	5	4	7
Slovak Republic	9	28	12	13	10	11	11	16
Slovenia	7	21	8	11	6	7	9	11
Spain	5	17	6	9	5	6	5	9
Sweden	6	19	6	12	4	5	7	8
Switzerland	7	22	7	13	6	8	7	12
Turkey	9	24	11	13	9	9	8	13
United Kingdom	11	27	11	20	7	5	7	10
United States	10	26	13	17	7	5	5	10

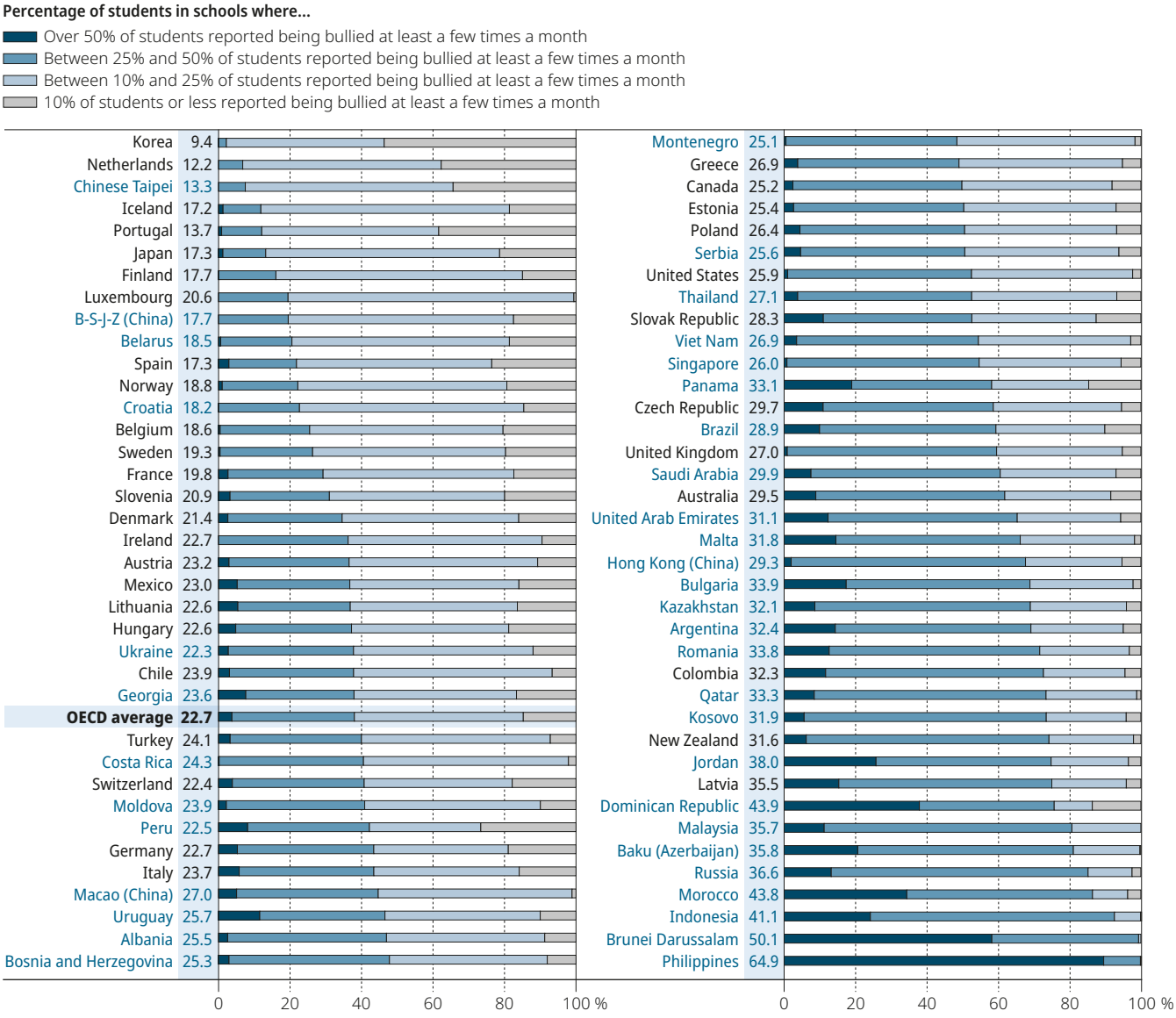
Partners	A (%)	Percentage of students who reported the following occurred at least a few times a month: B	C	D	E	F	G	H
Albania	7	25	17	9	7	9	8	11
Argentina	11	32	13	17	9	15	8	15
Baku (Azerbaijan)	18	36	21	21	20	21	22	23
Belarus	6	19	7	11	5	5	5	10
Bosnia and Herzegovina	9	25	10	12	12	11	10	15
Brazil	12	29	14	16	10	12	9	14
Brunei Darussalam	26	50	19	39	20	12	15	17
B-S-J-Z (China)	4	18	5	10	3	10	3	5
Bulgaria	14	34	14	17	16	17	19	20
Costa Rica	9	24	10	13	8	5	5	15
Croatia	6	18	6	9	6	6	7	11
Dominican Republic	22	44	24	26	23	25	21	30
Georgia	8	24	10	11	9	11	11	14
Hong Kong (China)	9	29	8	23	6	9	9	11
Indonesia	15	41	19	22	14	22	18	20
Jordan	13	38	16	16	18	21	19	21
Kazakhstan	13	32	22	14	14	14	14	16
Kosovo	8	32	18	11	10	11	11	14
Macao (China)	10	27	7	21	7	9	6	11
Malaysia	14	36	15	24	9	12	10	17
Malta	14	32	16	20	13	11	13	15
Moldova	6	24	7	12	7	6	7	13
Montenegro	9	25	10	11	12	10	10	15
Morocco	14	44	18	18	19	20	19	25
Panama	13	33	15	19	13	13	12	18
Peru	6	22	9	11	6	9	7	12
Philippines	40	65	33	50	35	31	32	32
Qatar	13	33	14	19	12	14	14	17
Romania	12	34	13	17	11	14	12	16
Russia	12	37	23	16	11	12	11	14
Saudi Arabia	7	30	8	13	12	13	11	15
Serbia	10	26	12	12	11	11	11	15
Singapore	10	26	10	20	5	5	6	9
Chinese Taipei	3	13	4	9	2	5	1	5
Thailand	13	27	12	19	12	13	11	14
Ukraine	8	22	9	11	7	8	7	11
United Arab Emirates	13	31	13	19	12	13	13	16
Uruguay	8	26	12	13	8	9	9	13
Viet Nam	7	27	9	14	6	14	7	9

Note: A student is frequently bullied if he or she is in the top 10% of the index of exposure to bullying across all countries/economies. The index of exposure to bullying includes the following statements: "Other students left me out of things on purpose"; "Other students made fun of me"; and "I was threatened by other students".

Source: OECD, PISA 2018 Database, Table III.B1.2.1.

StatLink http://dx.doi.org/10.1787/888934029185

Figure III.2.2 **Prevalence of exposure to bullying at school**



Note: The percentage of students who reported being bullied at least a few times a month is found next to the country/economy name.

Countries and economies are ranked in descending order of the percentage of students in schools where less than 25% of students were bullied at least a few times a month.

Source: OECD, PISA 2018 Database, Table III.B1.2.3.

StatLink https://doi.org/10.1787/888934029204

Educators are best placed to institute effective anti-bullying strategies, but only when they are able to recognise bullying can they take the appropriate action. PISA 2018 asked school principals to describe the extent to which learning is hindered by students intimidating or bullying other students. On average across OECD countries, 24% of students attended schools whose principals reported that learning is "not at all" hindered, 64% of students were in schools whose principals reported that learning is hindered "very little", and 12% of students were in schools whose principals reported that learning is hindered to "some extent" or "a lot" by students intimidating or bullying other students (Table III.B1.2.8). But there are significant differences across countries. In Albania, Belarus, Indonesia, the Republic of North Macedonia, Qatar and Saudi Arabia, more than 60% of students were in schools whose principal reported that learning is not at all hindered by students intimidating or bullying other students. In Australia, Canada, Finland, Germany, the Netherlands, New Zealand, Norway and the United States, less than 10% of students attended such schools. In addition, in Ireland, New Zealand, Norway and the United States, more than 75% of students were in schools whose principal reported that learning is hindered "very little" by students intimidating or bullying other students. In Belarus, B-S-J-Z (China), Kazakhstan, Qatar, the Russian Federation and Saudi Arabia, less than 25% of students attended such schools.

Bullying is a group activity that takes place in the larger peer and school context (Hong and Espelage, 2012[13]; Salmivalli et al., 1996[14]). Relational and environmental factors that can affect students' social development may have an impact on the prevalence of bullying (Saarento, Garandeau and Salmivalli, 2015[15]). The socio-economic, immigrant and gender composition of the school, to name just three elements, may explain substantial differences amongst schools in the prevalence of bullying.

PISA 2018 results show substantial differences across schools, in countries and economies with available data, in students' exposure to bullying (Table III.B1.2.5). On average across OECD countries and in a majority of education systems, fewer students in socio-economically advantaged schools than in disadvantaged schools were bullied at least a few times a month. The difference in favour of advantaged schools was at least 16 percentage points in Brunei Darussalam, the Dominican Republic, Hungary and Romania. PISA 2018 data show a smaller difference between rural and city schools. Still, in 16 education systems, students who were exposed to bullying at least a few times a month were significantly more likely to be found in rural schools; in only three school systems were students who reported being bullied at least a few times a month more likely to be found in city schools.

When considering the relationship between exposure to bullying and the concentration of immigrant students in a school, previous evidence suggests that bullying is just as prevalent amongst students who attend schools with little or no diversity in their student population as amongst students who attend schools with a highly diverse student body (Tippett, Wolke and Platt, 2013[16]; Tolsma et al., 2013[17]; Walsh et al., 2016[18]). Other studies, however, find that minority students are at greater risk of victimisation in an ethnically, culturally or linguistically heterogeneous context (Strohmeier, Kärnä and Salmivalli, 2011[19]; Vervoort, Scholte and Overbeek, 2010[20]; Vitoroulis, Brittain and Vaillancourt, 2016[21]). PISA 2018 data show that, on average across OECD countries, students were exposed to bullying slightly more frequently when they attended schools with a high concentration of students with an immigrant background than in schools with a low concentration of immigrant students (Table III.B1.2.5). But this difference was observed in only 14 countries and economies; it was relatively large in Bulgaria and Thailand. In addition, a further four education systems showed significant differences in the opposite direction.

Are students at greater risk of being bullied when they are in mixed schools or single-sex schools? Previous research finds no clear evidence between school-level gender composition and self-reported victimisation (Saarento et al., 2013[22]), although some studies suggest that the risk of being a victim of bullying is greater in schools with a larger proportion of boys (Saarento, Garandeau and Salmivalli, 2015[15]; Khoury-Kassabri et al., 2004[23]). There are only a limited number of PISA-participating countries and economies with a sufficiently large number of sampled students who attended single-sex schools; but a comparison of gender-balanced schools and those where either boys or girls were the clear majority provides valuable insights (see Box III.3.1 in Chapter 3 for more details about schools' gender composition in PISA 2018).

On average across OECD countries, and in more than half of the other PISA-participating education systems, the share of students being bullied at least a few times a month was larger in schools where more than 60% of students were boys than in schools where more than 60% of students were girls (Table III.B1.2.11). In 30 out of 71 countries and economies, the percentage of these students was lower in gender-balanced schools (those schools where boys and girls represented between 40% and 60% of students) than in schools where boys were the clear majority.

In addition, PISA 2018 data show that, in 11 out of 16 education systems with available data, the share of students being bullied at least a few times a month was significantly larger in all-boys' schools than in gender-balanced schools; in 15 out of 18 participating countries and economies, the share of students being bullied at least a few times a month was larger in gender-balanced schools than in all-girls schools. Moreover, in 13 out of the 14 countries with enough girls-only and boys-only schools in the sample, the percentage of students frequently exposed to bullying was lower in single-sex girls' schools than in single-sex boys' schools. The results suggest that bullying is the most prevalent in boys-only schools, followed by schools with a clear majority of boys, gender balanced-schools, schools with a clear majority of girls and girls-only schools.

TRENDS IN STUDENTS' EXPOSURE TO BULLYING AT SCHOOL

Since PISA 2015 asked similar questions about bullying as PISA 2018 did, education systems can monitor changes in the prevalence of students' exposure to bullying at school.[1] The responses provided by students in 2018 closely followed the pattern observed in 2015, with an upward trend in the responses to all six questions on bullying during the period (OECD, 2017[24]) (Table III.B1.2.2). On average across OECD countries with comparable data, the share of students who reported being bullied at least a few times a month increased by four percentage points between 2015 and 2018. This increase during this period was marked (more than 10 percentage points) in several schools systems, including Brazil, Colombia, the Dominican Republic and Greece. For example, in 2018, 44% of students in the Dominican Republic reported being bullied at least a few times a month compared to 30% of students who so reported three years earlier. By contrast, in Hong Kong (China), Japan and Korea, there was at least a two percentage-point decrease in the share of students who reported being bullied at least a few times a month.

The largest increase in bullying-related behaviours across OECD countries between 2015 and 2018 was in making fun of other students (which increased by three percentage points over the period), while the smallest increase was in leaving a student out of things on purpose (which increased by one percentage point). The largest change (between 8 and 16 percentage points) in the level of exposure to bullying, reflected in students' responses to all six questions, was observed in the Dominican Republic. The upward trend in most countries and economies should not necessarily be interpreted as evidence of an increase in students' exposure to bullying. This result might be partly related to students' greater ability to distinguish bullying from other forms of aggressive behaviour, or to PISA including social media as a potential platform for bullying in the 2018 questionnaire.

Box III.2.2. **Bullying, cyberbullying and time spent on the Internet**

Over the past decade, cyberbullying became increasingly common amongst teenagers (Smith et al., 2008[6]). Cyberbullying is defined as bullying via electronic devices and the Internet (Olweus, 2012[25]). It can take various forms, including sending nasty text messages, chats or comments, spreading rumours via online posts, or excluding someone from online groups (OECD, 2017[24]). Potential anonymity, impersonation, perpetrators' relative lack of fear of being caught, lack of supervision and victims' feeling that they can be bullied anywhere, at any time, are amongst some characteristics that differentiate cyberbullying from traditional bullying (Slonje and Smith, 2008[26]; Wang, Iannotti and Nansel, 2009[11]).

While a majority of cyberbullying victims are also victims of traditional forms of bullying (Schneider et al., 2012[27]), education systems may find it more difficult to tackle cyberbullying. A recent OECD publication, *Educating 21st-Century Children: Emotional Well-Being in the Digital Age*, concludes that the ubiquity of digital technology, the fact that cyberbullying often takes place outside of school, and anonymous online victimisation can be seen as potential obstacles to dealing with cyberbullying; see Chapter 12 in Burns and Gottschalk (2019[28]).

PISA 2018 does not directly measure cyberbullying. However, PISA can monitor how bullying is associated with the intensity of Internet use across countries and economies. Evidence suggests longer hours spent on social media may increase the risk of being bullied (Athanasiou et al., 2018[29]). Research also shows that greater levels of digital literacy and digital citizenship, such as online respect and civic engagement, were negatively associated with the perpetration of online bullying and positively related to helpful bystander behaviours (Cassidy, Faucher and Jackson, 2013[30]; Jones and Mitchell, 2016[31]).

In 51 of the 52 countries and economies that distributed the ICT questionnaire (of which 43 also have data on students' exposure to bullying), PISA 2018 asked students how much time they spend using the Internet during the typical weekday and weekend day outside of school. These two questions were combined to calculate the amount of time students spend connected to the Internet during a typical week. Five categories of Internet users were then created based on this indicator: "low Internet user" (0-9 hours per week); "moderate Internet user" (10-19 hours per week); "average Internet user" (20-29 hours per week); "high Internet user" (30-39 hours per week); and "heavy Internet user" (more than 40 hours per week).

In 2018, the analysis shows that for all the categories of Internet use, frequent exposure to bullying increased between 2015 and 2018 (Table III.B1.2.12). The largest increase was observed amongst "low Internet users". On average across OECD countries, 23% of "low Internet users" reported being bullied at least a few times a month – a 6 percentage-point increase since 2015. Some 28% of "heavy Internet users" reported being bullied at least a few times a month, a 2 percentage-point increase since 2015.

The results also show that, on average across OECD countries in 2018, the shares of "moderate Internet users" and "average Internet users" who reported being bullied at least a few times a month were smaller than amongst the other groups of Internet users (Table III.B1.2.12). By contrast, students categorised as "heavy Internet users" tended to be the most frequently bullied, both in 2015 and 2018.

These findings imply that students categorised as "heavy Internet users" tended to be more frequently exposed to bullying, both in 2015 and 2018. The analysis also shows that for all the categories of Internet use, frequent exposure to bullying increased between 2015 and 2018. However, these upward changes might be related to PISA including social media as a potential platform for bullying in the 2018 questionnaire.

WHAT IS THE PROFILE OF STUDENTS WHO WERE BULLIED AT LEAST A FEW TIMES A MONTH?

Individual characteristics can shape how students approach bullying. Boys tend to be more often involved in bullying than girls (Camodeca et al., 2002[32]; Haynie et al., 2001[33]; Veenstra et al., 2005[34]) and more physically violent (Rivers and Smith, 1994[35]), while girls tend to engage in more relational aggression (Crick and Grotpeter, 1995[36]).

Figure III.2.3 shows that, on average across OECD countries, boys were more likely than girls to report being bullied – in all forms (Table III.B1.2.9) – at least a few times a month. However, when it came to being left out of things on purpose and being the object of nasty rumours, the difference between boys and girls was relatively small. In Belgium, Costa Rica, the Republic of Moldova, the Netherlands, the United Kingdom and the United States, girls were significantly more likely than boys to be the object of nasty rumours.

Being bullied is associated with students' socio-economic status (Knaappila et al., 2018[37]; Tippett and Wolke, 2014[38]). In 41 countries and economies, a larger share of disadvantaged than advantaged students reported being bullied at least a few times a month (Figure III.2.3). PISA 2018 data show that, across OECD countries, there was a difference of between one and three percentage points between advantaged and disadvantaged students in the proportion of frequently bullied students (considering all types of bullying) (Table III.B1.2.10). However, in a few countries the reverse pattern was observed. For example, in Indonesia, Japan and Malta, advantaged students were more likely than disadvantaged students to report that "other students left me out of things on purpose" and "other students made fun of me". In addition, in Indonesia, advantaged students were more likely than disadvantaged students to report that "other students took away or destroyed things that belong to me" and "other students spread nasty rumours about me".

Previous studies have shown that the prevalence of bullying peaks in lower secondary school years, and declines over upper secondary school years (Nansel et al., 2001[39]; Nylund et al., 2007[40]). This was also observed in PISA 2018 (Figure III.2.3). In 39 out of 57 education systems with comparable data, the share of students who had been bullied at least a few times a month was smaller amongst upper secondary students than lower secondary students. In Hungary, Malaysia, Morocco and Viet Nam, there was at least a 15 percentage-point difference between the two groups (Table III.B1.2.4).

Bullying between immigrant and non-immigrant students raises concern amongst policy makers as bullying may have a strong impact on relations between immigrant and non-immigrant groups later on, in adult life. The difference between the shares of immigrant and non-immigrant students who reported being bullied at least a few times a month was not large (a three percentage-point difference between the two groups), on average across OECD countries (Figure III.2.3 and Table III.B1.2.4). But there was a sizeable difference in some countries. For example, in Albania, 48% of immigrant students reported being frequently bullied, compared to 25% of non-immigrant students who so reported. The opposite was observed in Brunei Darussalam, where 51% of non-immigrant students reported being bullied at least a few times a month, while 42% of immigrant students so reported. These results are in line with previous research, which is ambiguous about the predictive power of having an immigrant background on the incidence of bullying (Vitoroulis and Vaillancourt, 2018[41]).

HOW EXPOSURE TO BULLYING IS RELATED TO READING PERFORMANCE

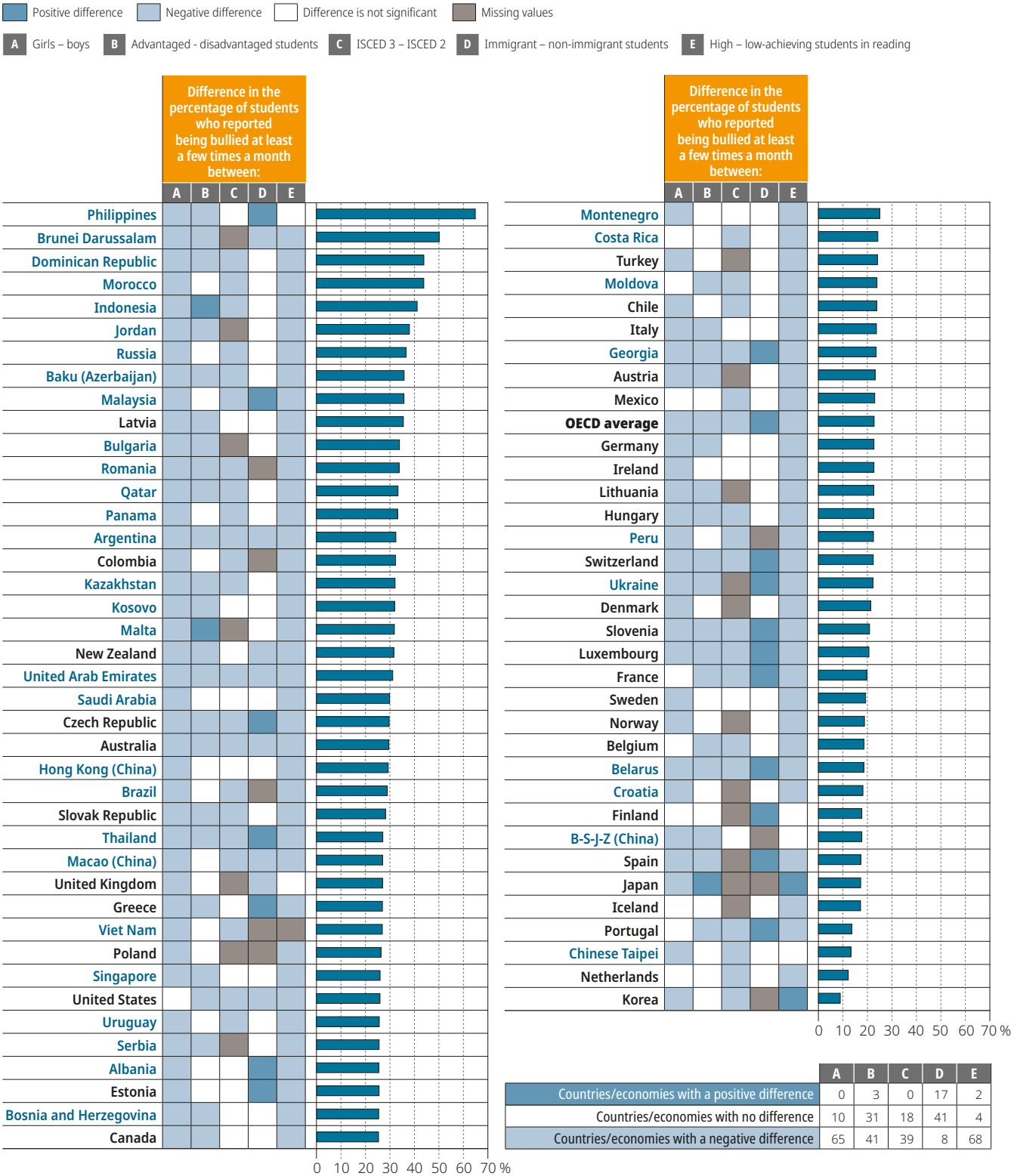
Bullying schoolmates can be associated with poorer academic performance. Research finds that both aggressors and victims tend to skip classes and drop out of school more often, and perform worse academically, than peers not involved in bullying (Juvonen, Yueyan Wang and Espinoza, 2011[42]; Konishi et al., 2010[43]; Townsend et al., 2008[44]). Academic tracking may also stigmatise students by tacitly labelling low-achieving students as academic failures. As the evidence suggests, low-achieving students are more likely to be victimised when there is a greater academic difference between high- and low-achieving students (Akiba et al., 2002[45]).

As in PISA 2015, in PISA 2018 a larger share of low-achieving than high-achieving students reported having been bullied at least a few times a month (Figure III.2.3). On average across OECD countries, 18% of high-achieving students (those who scored amongst the top 25% of students in their country/economy on the PISA reading test) reported being bullied, while 31% of low-achieving students (those who scored amongst the bottom 25% of students in their country/economy on the PISA reading test) reported so (Table III.B1.2.4). This difference was observed in most participating countries and economies, and the gap was larger in partner countries/economies than in OECD countries.

PISA 2018 data also reveal that a greater exposure to bullying was associated with lower performance in reading (Figure III.2.4 and Table III.B1.2.6). On average across OECD countries, every one-unit increase in the index of exposure to bullying (equivalent to one standard deviation across OECD countries) was associated with a drop of nine score points in reading, after accounting for students' and schools' socio-economic profile (as measured by the PISA index of economic, social and cultural status). The analysis of the relationship between reading performance and any type of bullying act revealed that across OECD countries, 15-year-old students who reported being bullied at least a few times a month scored 21 points lower in reading than students who were less-frequently bullied, after accounting for students' and schools' socio-economic profile. In Georgia, Lithuania, Malta and Portugal, this gap was 40 score points; only in Japan and Korea did frequently bullied students score higher in reading.

Figure III.2.3 **Being bullied, by student characteristics**

Based on students' reports



	A	B	C	D	E
Countries/economies with a positive difference	0	3	0	17	2
Countries/economies with no difference	10	31	18	41	4
Countries/economies with a negative difference	65	41	39	8	68

Note: Low-achieving (high-achieving) students are students who score amongst the bottom 25% (the top 25%) of students within their country or economy on the PISA test.

Countries and economies are ranked in descending order of the percentage of students being bullied at least a few times a month.

Source: OECD, PISA 2018 Database, Tables III.B1.2.1 and III.B1.2.4.

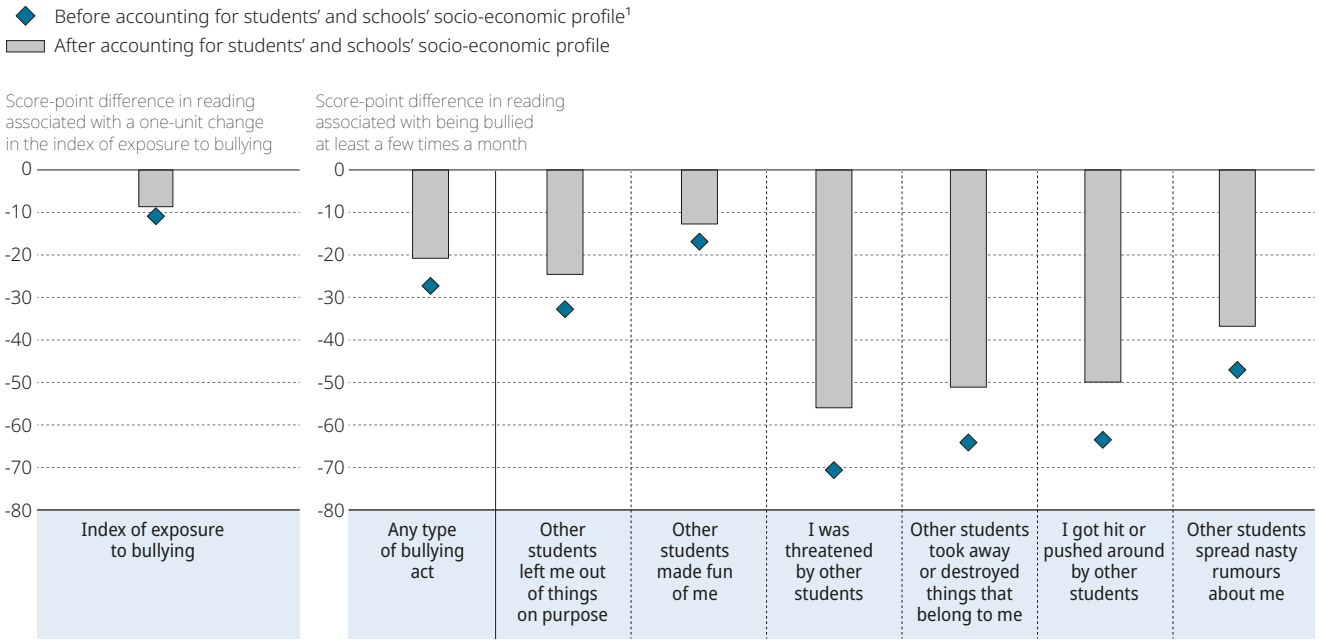
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The relationship with reading performance also varied depending on the type of bullying considered (Table III.B1.2.6). On average across OECD countries, students who reported that other students threatened them at least a few times a month scored 56 points lower in reading than students who reported that they were threatened by other students a few times a year or less frequently, after accounting for students' and schools' socio-economic profile. By contrast, students whose peers made fun of them at least a few times a month scored only 13 points lower in reading than students who reported that this occurred a few times a year or less frequently. This result suggests that physical bullying is more strongly associated with lower academic performance than verbal bullying.

Students attending schools where bullying is widespread, for instance because the school lacks the resources to address behavioural problems, may perform worse, even if they themselves have not been bullied (Table III.B1.2.7). When considering the relationship between reading performance and types of bullying at the school level, students performed better in reading in schools where bullying was less prevalent. For instance, in schools with the lowest percentage of students who reported that they were the object of nasty rumours (that is, schools in the bottom quarter of this indicator in their country/economy), the average reading score was 507 points. In schools with the highest percentage of these students (that is, schools in the top quarter of this indicator in their country/economy), the average reading score was 455 points.

Figure III.2.4 **Students' exposure to bullying and reading performance**

Based on students' reports; OECD average



1. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Notes: The index of exposure to bullying includes the following statements: "Other students left me out of things on purpose"; "Other students made fun of me"; and "I was threatened by other students".

All values are statistically significant (see Annex A3).

Source: OECD, PISA 2018 Database, Table III.B1.2.6.

StatLink http://dx.doi.org/10.1787/888934029242

WHAT DO STUDENTS THINK ABOUT BULLYING?

Examining students' attitudes towards bullying – and towards defending the victims of bullying – may help educators and policy makers in their efforts to develop effective bullying prevention and intervention programmes (Baldry, 2004[46]; Baldry and Farrington, 1999[47]). Such information can also be used to describe the atmosphere in schools where bullying thrives – with the ultimate goal of changing that climate.

Given the growing interest in the topic, PISA 2018 asked students about their general attitudes towards bullying. These attitudes are regarded as moral judgements on bullying behaviour in general; as such, they may differ from the attitudes students hold in relation to bullying in their own school (Salmivalli and Voeten, 2004[48]). PISA monitored five forms of bullying-related attitudes. PISA asked students whether they agree ("strongly disagree", "disagree", "agree", "strongly agree") with the following

statements: "It irritates me when nobody defends bullied students"; "It is a good thing to help students who can't defend themselves"; "It is a wrong thing to join in bullying"; "I feel bad seeing other students bullied"; and "I like it when someone stands up for other students who are being bullied".

Figure III.2.5 shows the percentage of students who reported that they agree or disagree with the statements related to attitudes towards bullying. Most students across OECD countries expressed negative attitudes towards bullying and positive attitudes towards defending the victims of bullying. On average across OECD countries, 90% of students agreed or strongly agreed that they like it when someone stands up for other students who are being bullied; 88% of students agreed or strongly agreed that it is a good thing to help students who can't defend themselves; 87% of students agreed or strongly agreed that they feel bad seeing other students bullied; and 81% of students reported that it irritates them when nobody defends bullied students. These results are in line with previous evidence, which indicates that most students express anti-bullying attitudes (Boulton, Bucci and Hawker, 1999[49]).

While 88% of students reported that they think it is wrong to join in bullying, in some PISA-participating countries and economies, sizable minorities of students disagreed or strongly disagreed with this statement. For instance, at least three out of ten students in Colombia, Indonesia, Jordan and Morocco disagreed or strongly disagreed that it is wrong to join in bullying (Figure III.2.5 and Table III.B1.2.15).

Research shows that girls tend to report stronger anti-bullying attitudes than boys do (Rigby and Slee, 1991[50]; Salmivalli and Voeten, 2004[48]). In PISA 2018, the responses to the five statements show that, on average across OECD countries, girls had more negative attitudes towards bullying than boys (Figure III.2.5 and Table III.B1.2.16). The largest gap between girls and boys was observed for the statement "It irritates me when nobody defends bullied students", followed by "I feel bad seeing other students bullied", "It is a good thing to help students who can't defend themselves", "I like it when someone stands up for other students who are being bullied" and "It is a wrong thing to join in bullying".

On average across OECD countries, about 84% of boys and 91% of girls reported that they think it is wrong to join in bullying (Figure III.2.5). In particular, in Austria, Belarus, Bulgaria, Lithuania, Poland, Saudi Arabia, the Slovak Republic, Switzerland and Ukraine the proportion of girls who so reported was at least 10 percentage points larger than the share of boys who did (Table III. B1.2.16).

Some 74% of boys and 88% of girls agreed or strongly agreed that it irritates them when nobody defends bullied students. In Lithuania and Saudi Arabia, girls were at least 20 percentage points more likely than boys to describe themselves as irritated when nobody defends bullied students, while in Baku (Azerbaijan), B-S-J-Z (China) and Macao (China), the gender difference amounted to around 3 percentage points. These disparities may be related to differences in group values, with girls putting a priority on sociability and intimacy, and boys on toughness, self-confidence and physical prowess (Tulloch, 1995[51]).

Advantaged students were also more likely than disadvantaged students to report anti-bullying attitudes (Table III.B1.2.17). On average across OECD countries, advantaged students were at least five percentage points more likely than their disadvantaged peers to report that they agree or strongly agree with any of the five statements about their attitudes towards bullying.

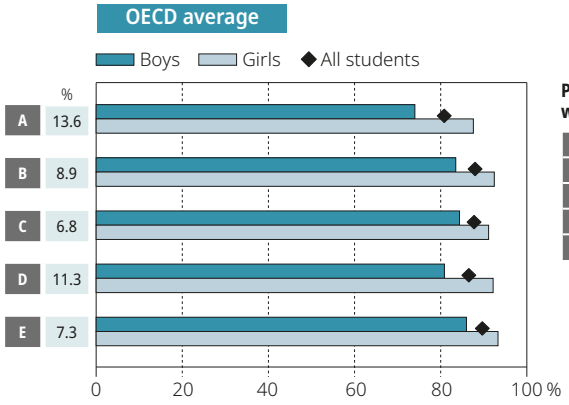
HOW EXPOSURE TO BULLYING IS RELATED TO STUDENTS' ATTITUDES TOWARDS BULLYING

Promoting intervention by bystanders is seen as a promising way to prevent bullying. Research suggests that moral disapproval of bullying is often associated with staying outside of a bullying situation, showing empathy with the victims (Baldry, 2004[46]; Poyhonen, Juvonen and Salmivalli, 2010[52]; Tulloch, 1995[51]) and expressing the intent to intervene (Rigby and Johnson, 2006[53]). In addition to personal values, group norms can explain why some students in certain classrooms are more likely to bully or to defend the victims (Ojala and Nesdale, 2004[54]; Salmivalli, 2010[55]).

On average across OECD countries, frequently bullied students tended to show greater tolerance towards bullying than not frequently bullied students (Table III.B1.2.18). For example, the share of frequently bullied students who agreed or strongly agreed with the statements "I like it when someone stands up for other students who are being bullied" or "It is a good thing to help students who can't defend themselves" was at least four percentage points lower than the share of less-frequently bullied students who so reported. But there were variations across countries. In 24 of 75 countries and economies, the share of frequently bullied students who agreed or strongly agreed that "It is a wrong thing to join in bullying" was smaller than the share of less-frequently bullied students who agreed with that statement. The finding that frequently bullied students were more likely to express more favourable views towards bullying should be interpreted with some caution as there could be many possible explanations. For example, some frequently bullied students may also be bullies themselves, who tend to form less favourable anti-bullying views than students who are classified only as victims.

Figure III.2.5 **Students' attitudes towards bullying, by gender**

Based on students' reports



Percentage of students who agreed or strongly agreed with the following statements

- **A** It irritates me when nobody defends bullied students
- **B** It is a good thing to help students who can't defend themselves
- **C** It is a wrong thing to join in bullying
- **D** I feel bad seeing other students bullied
- **E** I like it when someone stands up for other students who are being bullied

	Percentage of students who agreed or strongly agreed with the following statements:				
OECD	**A**	**B**	**C**	**D**	**E**
Australia	86	93	92	92	94
Austria	76	84	87	80	86
Belgium	80	93	94	87	94
Canada	85	92	92	91	93
Chile	84	88	86	87	89
Colombia	75	84	68	82	86
Czech Republic	84	89	88	86	89
Denmark	88	92	94	92	94
Estonia	81	89	89	86	89
Finland	82	91	93	89	92
France	84	90	93	89	93
Germany	77	86	90	80	90
Greece	84	85	85	88	89
Hungary	76	83	75	80	85
Iceland	79	88	88	86	86
Ireland	90	94	94	95	96
Israel	82	86	84	87	89
Italy	84	87	85	83	89
Japan	71	80	93	90	84
Korea	86	94	93	94	94
Latvia	74	82	83	77	84
Lithuania	72	79	81	77	82
Luxembourg	78	87	89	82	88
Mexico	78	86	82	84	87
Netherlands	70	91	95	91	96
New Zealand	88	93	92	92	94
Norway	89	93	94	91	92
Poland	76	83	80	79	84
Portugal	81	94	86	93	93
Slovak Republic	73	79	80	80	84
Slovenia	80	86	84	87	86
Spain	87	92	90	91	93
Sweden	84	90	92	83	92
Switzerland	73	82	86	79	87
Turkey	80	84	80	85	82
United Kingdom	88	94	95	93	96
United States	88	93	93	93	95

	Percentage of students who agreed or strongly agreed with the following statements:				
Partners	**A**	**B**	**C**	**D**	**E**
Albania	86	89	86	90	91
Argentina	81	87	79	85	88
Baku (Azerbaijan)	71	77	76	79	79
Belarus	68	81	76	72	82
Bosnia and Herzegovina	80	86	86	87	89
Brazil	71	85	83	86	87
Brunei Darussalam	81	89	87	90	88
B-S-J-Z (China)	88	83	96	89	91
Bulgaria	68	73	77	75	76
Costa Rica	84	90	86	88	90
Croatia	83	89	89	88	90
Dominican Republic	72	77	74	79	80
Georgia	81	85	80	86	80
Hong Kong (China)	75	81	91	83	89
Indonesia	74	80	57	80	73
Jordan	60	74	70	80	79
Kazakhstan	65	74	72	70	74
Kosovo	77	83	76	84	83
Macao (China)	75	84	93	86	91
Malaysia	82	87	84	87	87
Malta	87	90	90	91	92
Moldova	74	91	74	83	85
Montenegro	79	84	83	84	87
Morocco	67	73	67	74	74
Panama	73	83	74	81	84
Peru	77	88	81	86	87
Philippines	77	84	79	82	78
Qatar	78	83	79	84	85
Romania	77	85	75	82	87
Russia	74	81	84	77	84
Saudi Arabia	69	75	71	79	79
Serbia	78	84	83	83	86
Singapore	90	94	96	94	96
Chinese Taipei	75	84	92	83	84
Thailand	68	77	72	80	81
Ukraine	76	83	78	79	86
United Arab Emirates	77	83	77	85	86
Uruguay	83	86	84	87	89
Viet Nam	71	85	82	86	89

Note: Differences between girls and boys on average across OECD countries are shown next to the item on attitudes towards bullying. All differences are statistically significant (see Annex A3).

Source: OECD, PISA 2018 Database, Tables III.B1.2.15 and III.B1.2.16.

StatLink http://dx.doi.org/10.1787/888934029261

At the school level, PISA 2018 shows that a prevalence of anti-bullying attitudes in schools is related to less exposure to bullying amongst students (Table III.B1.2.19). For instance, on average across OECD countries, in schools with the highest percentage of students who agreed or strongly agreed with the statement "I feel bad seeing other students bullied" (that is, schools in the top quarter of this indicator on bullying-related attitudes in their country/economy), the index of exposure to bullying was -0.18 of a unit lower than in schools with the lowest percentage of students who agreed with this statement (that is, schools in the bottom quarter of this indicator on bullying-related attitudes in their country/economy).

Figure III.2.6 shows the relationship between the index of exposure to bullying and students' agreement with the statement "It is a good thing to help students who can't defend themselves" at the school level. The results show that, in 54 out of 74 countries and economies with available data, students were less exposed to bullying when they attended schools where their schoolmates were more likely to agree than disagree with this statement, after accounting for students' and schools' socio-economic profile. This difference was particularly large in Macao (China) and Malta. Moreover, in 45 out of 75 PISA-participating countries and economies with available data, the school-level index of exposure to bullying was negatively associated with the share of students in schools who disapproved of joining in bullying, after accounting for students' and schools' socio-economic profile (Table III.B1.2.19). The only country where less-favourable views on joining in bullying was positively associated with the school-level exposure to bullying was the Dominican Republic.

DO FREQUENTLY BULLIED STUDENTS REPORT LESS WELL-BEING?

Bullying is a major risk factor for adolescents' mental and physical health, in both the short and long term (Wolke and Lereya, 2015[56]). Being bullied increases the risk of depression, anxiety, low self-esteem, loneliness and sadness amongst adolescents (Kochel, Ladd and Rudolph, 2012[57]; Livingston et al., 2019[58]; Rigby and Cox, 1996[59]).

PISA 2018 data show that in the majority of participating countries and economies frequently bullied students were more likely to feel sad, scared and not satisfied with their lives than students who were characterised as not frequently bullied (Table III.B1.2.13). Frequently bullied students were also less likely to feel happy and have the self-belief to get through hard times. As shown in Figure III.2.7, on average across OECD countries, 30% of students who were frequently bullied – but 42% of students who were characterised as not frequently bullied – reported that they "always" feel happy. The difference between the two groups of students was of at least 20 percentage points in B-S-J-Z (China), Canada, Costa Rica, Ireland and the United States, after accounting for student and school characteristics (including students' gender and performance in reading, and the socio-economic profile of both students and schools). In addition, on average across OECD countries, 49% of students who were not frequently bullied reported that they "sometimes" or "always" feel sad, compared to 64% of frequently bullied students who so reported. This difference holds for virtually all participating countries/economies with available data, after accounting for student and school characteristics.

HOW BULLYING IS ASSOCIATED WITH SCHOOL CLIMATE

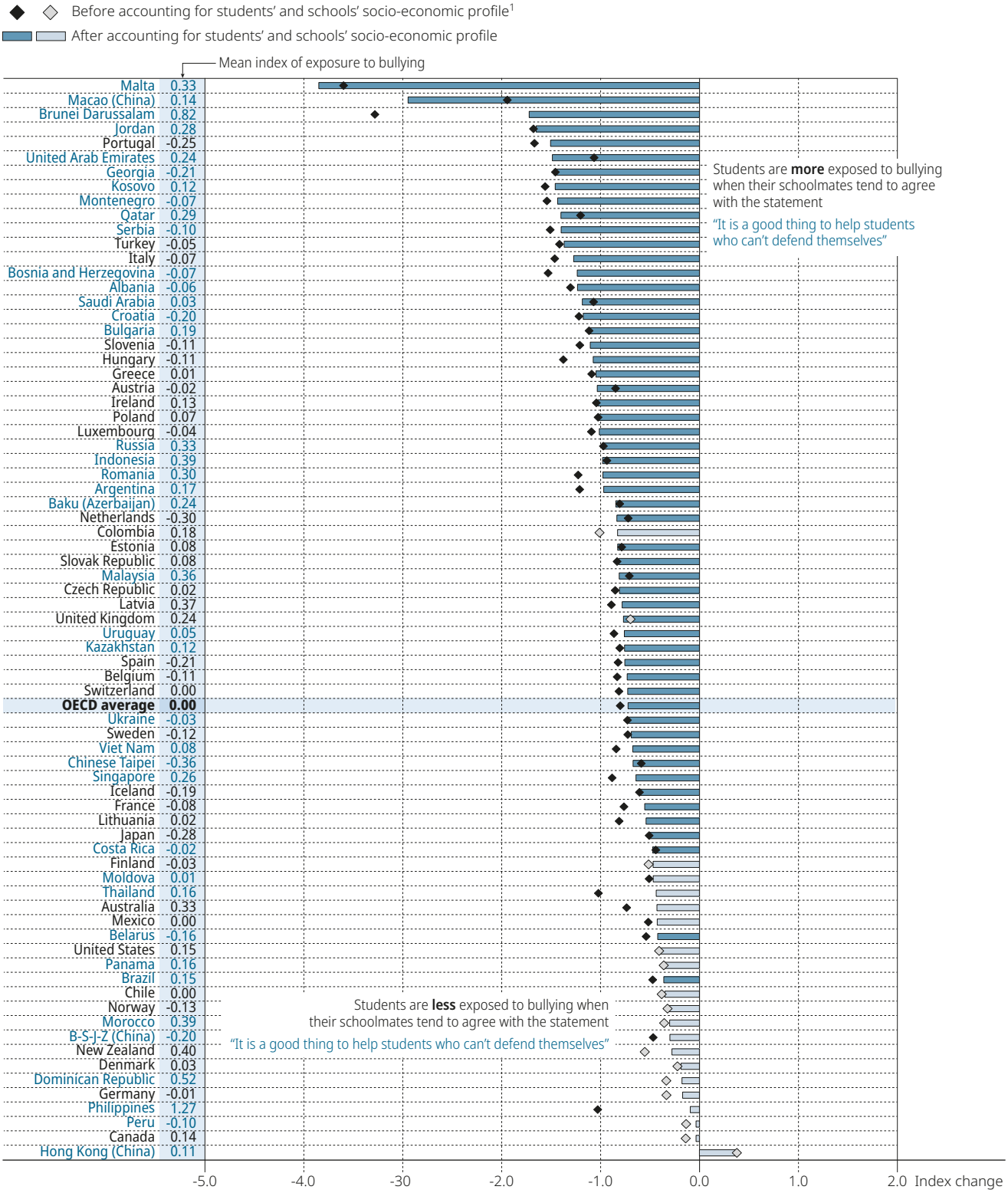
Teachers and principals not only need to be able to recognise bullying when it happens, but they may also need to create an atmosphere where bullying is less likely to occur. Research suggests that a supportive and caring school environment is linked to a lower prevalence of bullying and to students' willingness to seek help (Låftman, Östberg and Modin, 2017[60]; Ma, 2002[61]; Olweus, 1993[3]). In schools where students perceive greater fairness, feel they belong at school, work in a more disciplined, structured and co-operative environment, and have less punitive teachers, students are less inclined to engage in risky and violent behaviours (Gottfredson et al., 2005[62]; Kuperminc, Leadbeater and Blatt, 2001[63]).

Figure III.2.8 shows that students in schools with a high prevalence of bullying were more likely to report a weaker sense of belonging at school, a poorer disciplinary climate and less co-operation amongst their schoolmates than students in schools with a low prevalence of bullying. On average across OECD countries, 23% of students in schools with a high prevalence of bullying reported that they feel like an outsider at school compared with 17% of students in schools with a low prevalence of bullying who reported so. Around 73% of students in schools with a low prevalence of bullying reported that they feel like they belong at school, while 67% of students in schools with a high prevalence of bullying reported so. On average across OECD countries, 61% of students in schools with a low prevalence of bullying, and 57% of students in schools with a high prevalence of bullying reported that they are encouraged to co-operate with others.

The share of students who reported that there is noise and disorder in every or most language-of-instruction lessons was six percentage points larger amongst students in schools with a high prevalence of bullying than amongst students in schools with a low prevalence of bullying, after accounting for students' and schools' socio-economic profile (Figure III.2.8). The difference between these two groups of students was more than 10 percentage points in Iceland, Macao (China), Malta, Singapore, Slovenia, Turkey and the United Arab Emirates (Table III.B1.2.14). When considering the association between the prevalence of bullying and both competition between students and teachers' interest in student learning, as perceived by students, the difference between these two groups of students was less pronounced than for the other school-climate measures.

Figure III.2.6 **Exposure to bullying and students' attitudes towards bullying at school**

Based on students' reports



1. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Note: Statistically significant changes are shown in darker tones (see Annex A3).

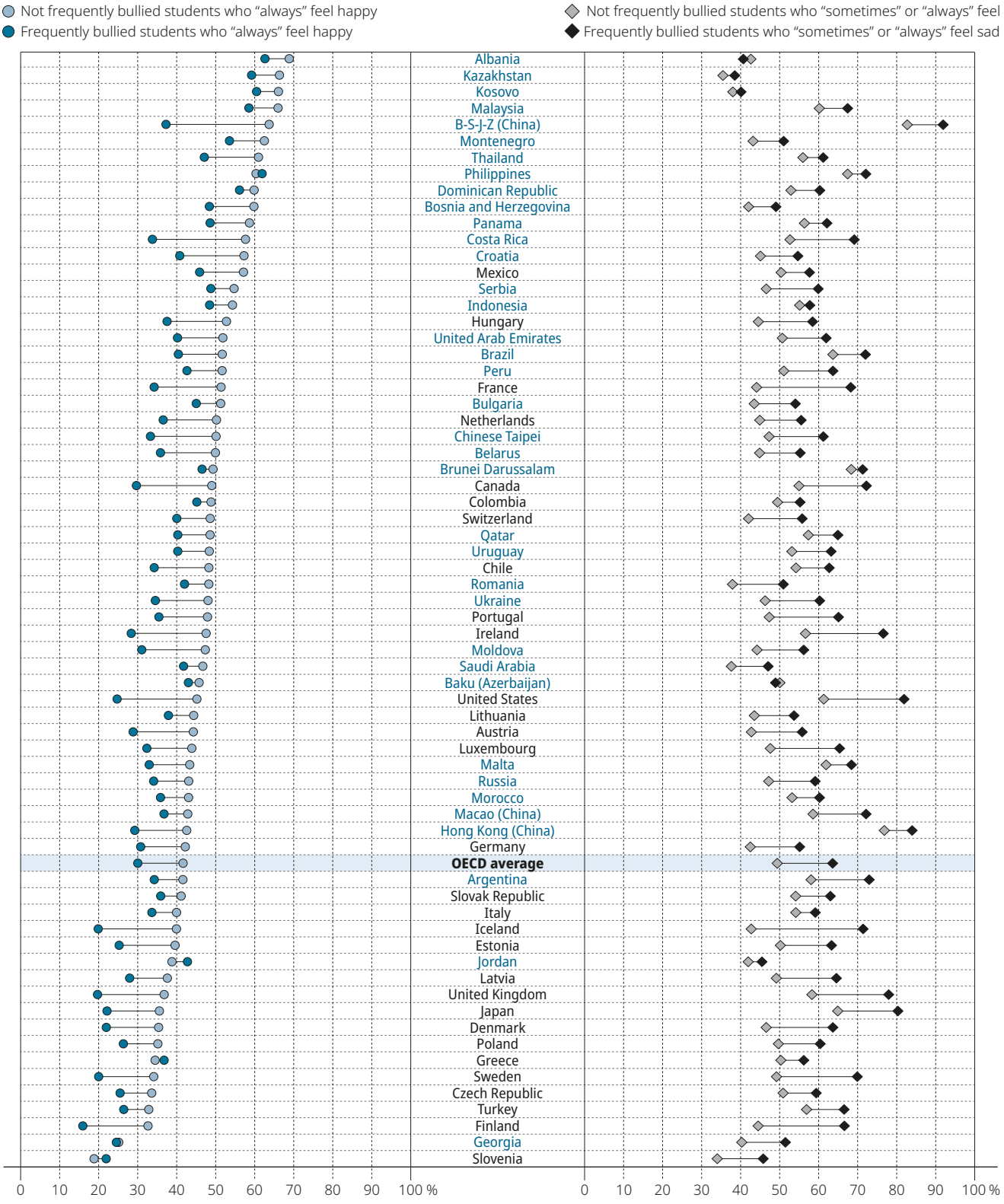
Countries and economies are ranked in ascending order of the change in the index of exposure to bullying when students' schoolmates tend to agree with the statement "It is a good thing to help students who can't defend themselves", after accounting for students' and schools' socio-economic profile.

Source: OECD, PISA 2018 Database, Tables III.B1.2.1 and III.B1.2.19.

StatLink http://dx.doi.org/10.1787/888934029280

Figure III.2.7 **Being frequently bullied and students' feelings**

Based on students' reports



Note: A student is frequently bullied if he or she is in the top 10% of the index of exposure to bullying across all countries/economies.

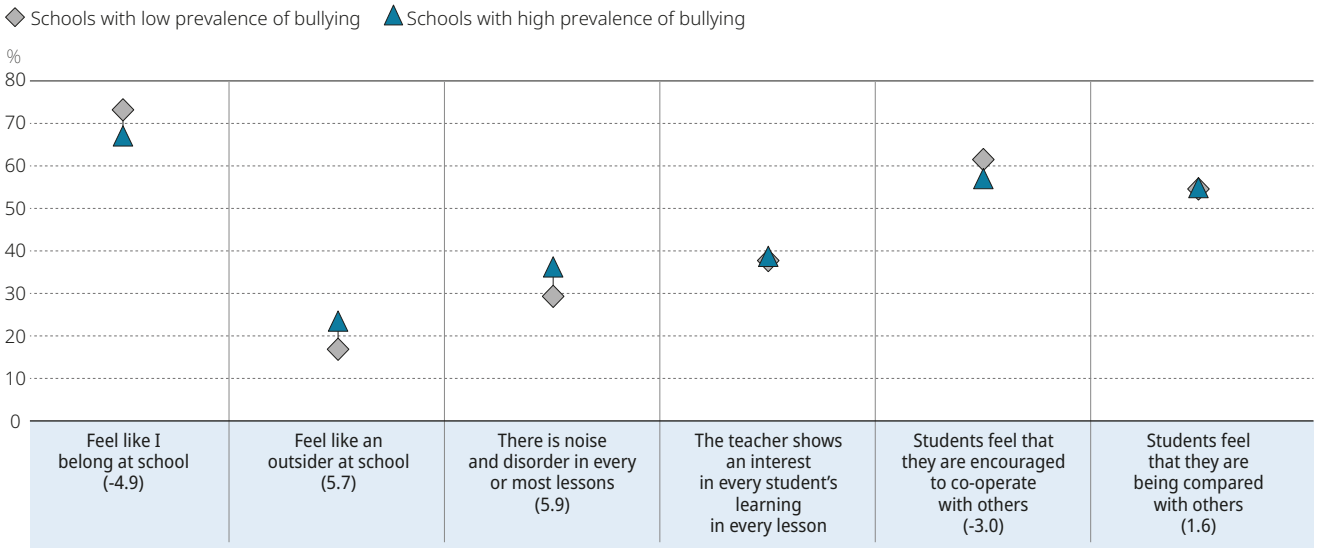
Countries and economies are ranked in descending order of the percentage of not frequently bullied students who "always" feel happy.

Source: OECD, PISA 2018 Database, Table III.B1.2.13.

StatLink http://dx.doi.org/10.1787/888934029299

Figure III.2.8 **School climate, by prevalence of bullying in school**

OECD average



Notes: Schools with a high prevalence of bullying are those where more than 10% of students are frequently bullied. Schools with a low prevalence of bullying are those where 5% of students or less are frequently bullied. A student is frequently bullied if he or she is in the top 10% of the index of exposure to bullying across all countries/economies.

Statistically significant differences between schools with high and low prevalence of bullying after accounting for students' and schools' socio-economic profile are shown next to the item label (see Annex A3).

The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Source: OECD, PISA 2018 Database, Table III.B1.2.14.

StatLink http://dx.doi.org/10.1787/888934029318

Box III.2.3. **Anti-bullying programmes in countries and economies that participated in PISA 2018**

Anti-bullying programmes at the national and school levels may be seen as important components of bullying-prevention strategies. A recent UNESCO publication on ending violence and school bullying identifies the following actions that may be effective in tackling bullying at school (UNESCO, 2019, pp. 48-54[64]):

- summoning the political will to develop a policy framework to address violence against children, including school violence
- enhancing collaboration between the education sector and a wide range of partners
- focusing on safe and positive school and classroom environments
- implementing school-based programmes and interventions that are based on evidence of effectiveness
- collecting data on school violence and bullying, monitoring responses systematically
- providing training for teachers on school violence, bullying and positive classroom management
- renewing the commitment to children's rights and empowerment, and student participation
- involving all stakeholders in the school community
- supporting students affected by school violence and bullying.

For the first time since its inception, in 2018 PISA collected data on anti-bullying programmes in participating countries and economies. PISA 2018 asked PISA Governing Board members, through a questionnaire, whether there is a national action plan to prevent bullying; whether there are school-based intervention programmes in place; whether there are systemic monitoring responses; and whether participating countries/economies collect information to monitor and evaluate bullying cases. See Annex B3 for more information about the system-level data collection. PISA also asked countries to group these strategies by different levels of education (primary, lower secondary and upper secondary). Participating countries/economies were given the options to report that a certain strategy exists, does not exist, or that country-level information is not available.

• • •

PISA 2018 data show that in around two out of three PISA-participating countries and economies with available data, national- and school-level anti-bullying programmes are in place at each level of education (Table B3.5.1). Some 50% of PISA-participating countries and economies reported that programmes to monitor and evaluate bullying cases were in place. By contrast, around 17% of the participating countries and economies had no national anti-bullying policy at the secondary level, and about 1 in 5 participating countries and economies did not provide information about such programmes.

Table III.2.1 shows the share of countries where the percentage of students who reported being bullied at least a few times a month was above or below the OECD average, by the existence of anti-bullying programmes. With a few exceptions, the share of countries where the prevalence of bullying was above the OECD average was smallest amongst the countries where anti-bullying programmes are in place, followed by the countries where no anti-bullying programmes exist, and the countries where information about anti-bullying programmes is not available. For example, the prevalence of bullying was above the OECD average in around 61% of the countries where national anti-bullying programmes are in place in upper secondary education, compared to around 73% of the countries where such programmes do not exist.

The existence of anti-bullying programmes may be crucial for tackling bullying, but it is important to bear in mind that the effectiveness of these programmes lies in their implementation and content.

Table III.2.1 **System-level anti-bullying policies and students' exposure to bullying**

Based on system-level information and students' self-reports, 2018

	National anti-bullying policy			School-based anti-bullying strategy (bullying prevention)			Response to bullying strategy			Data collection to monitor and evaluate bullying cases		
	Primary	Lower secondary	Upper secondary	Primary	Lower secondary	Upper secondary	Primary	Lower secondary	Upper secondary	Primary	Lower secondary	Upper secondary
	N %	N %	N %	N %	N %	N %	N %	N %	N %	N %	N %	N %
The relevant policy exists	**44 59**	**45 61**	**44 59**	**47 64**	**47 64**	**46 62**	**43 58**	**43 58**	**42 57**	**36 49**	**37 50**	**37 50**
The relevant policy exists: The prevalence of students who reported being bullied at least a few times a month was above the OECD average	27 61	28 62	27 61	30 64	30 64	30 65	27 63	27 63	26 62	23 64	24 65	24 65
The relevant policy exists: The prevalence of students who reported being bullied at least a few times a month was below the OECD average	17 39	17 38	17 39	17 36	17 36	16 35	16 37	16 37	16 38	13 36	13 35	13 35
The relevant policy does not exist	**12 16**	**11 15**	**11 15**	**7 9**	**7 9**	**8 11**	**12 16**	**12 16**	**12 16**	**18 24**	**17 23**	**16 22**
The relevant policy does not exist: The prevalence of students who reported being bullied at least a few times a month was above the OECD average	9 75	8 73	8 73	4 57	4 57	4 50	8 67	8 67	8 67	12 67	11 65	10 63
The relevant policy does not exist: The prevalence of students who reported being bullied at least a few times a month was below the OECD average	3 25	3 27	3 27	3 43	3 43	4 50	4 33	4 33	4 33	6 33	6 35	6 38
No information available about the relevant policy	**18 24**	**18 24**	**19 26**	**20 27**	**20 27**	**20 27**	**19 26**	**19 26**	**20 27**	**20 27**	**20 27**	**21 28**
No information available about the relevant policy: The prevalence of students who reported being bullied at least a few times a month was above the OECD average	14 78	14 78	15 79	16 80	16 80	16 80	15 79	15 79	16 80	15 75	15 75	16 76
No information available about the relevant policy: The prevalence of students who reported being bullied at least a few times a month was below the OECD average	4 22	4 22	4 21	4 20	4 20	4 20	4 21	4 21	4 20	5 25	5 25	5 24

Notes: Only countries and economies with available data for students' exposure to bullying in PISA 2018 and system-level information on anti-bullying policies or general programmes are shown.

The OECD average of students who reported being bullied at least a few times a month is 23%.

Source: OECD, PISA 2018 Database, Tables III.B1.2.1 and B3.5.1.

StatLink http://dx.doi.org/10.1787/888934029337

Note

1. Due to the slight modification, between 2015 and 2018, of the survey question about students' exposure to bullying, trend results should be interpreted with some caution. In 2015, PISA included two items that were dropped from the PISA 2018 questionnaire. In addition, the PISA 2018 questionnaire included an additional instruction indicating that bullying can also happen in social media. This instruction was missing from the PISA 2015 questionnaire.

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3

Disciplinary climate

This chapter examines differences between countries and economies in the disciplinary climate during language-of-instruction lessons, and how the disciplinary climate is associated with student and school characteristics, and reading performance. It also looks at the disciplinary climate in schools with different proportions of girls and boys, and examines who may benefit the most from a positive disciplinary climate.

People have different views on what constitutes a positive classroom environment, yet most people recognise an environment that is conducive to learning. One of the key components of such a learning environment is the disciplinary climate, or the degree to which noise and disorder are kept at bay, students listen to what their teachers (and other students) say, and students can concentrate on academic tasks (Moos, 1979[1]). Cheema and Kitsantas (2014[2]) conceptualise disciplinary climate as the perceptions that students hold on the consistency of classroom rules and how teachers address behavioural problems during class. PISA adopts a more pragmatic definition according to which the disciplinary climate is measured by the extent to which students miss learning opportunities due to disruptive behaviour in the classroom.

Teachers have the main responsibility of ensuring that the classroom environment is conducive to learning (Matsumura, Slater and Crosson, 2008[3]). Students may feel that the school climate is negative, and may double down on deviant exploits, if they perceive that their teachers are unfair or biased in their interpretations of students' behaviour (Pena-Shaff et al., 2019[4]). However, previous studies have shown that the disciplinary climate also varies according to school characteristics that are largely out of teachers' control. For instance, socio-economically advantaged schools typically have a more positive disciplinary climate than disadvantaged schools (Ma and Willms, 2004[5]; OECD, 2016[6]).

Classrooms with a better disciplinary climate offer greater teaching and learning opportunities for students. In a structured classroom environment with fewer disruptions, teachers have more time to cover the curriculum and use diverse teaching strategies, and students can concentrate on their work more easily (Mostafa, Echazarra and Guillou, 2018[7]). Previous PISA results have consistently shown that there is a positive association between students' perceptions of the classroom disciplinary climate and students' academic performance, even after accounting for socio-economic status (OECD, 2016[6]) and other student and school characteristics (Ning et al., 2015[8]). Blank and Shavit (2016[9]) further reveal that disruptive behaviours in the classroom – but not the disciplinary policies at the school – are negatively correlated with student achievement. Other studies indicate that some students, such as ethnic minorities and disadvantaged students, may benefit more than others from an orderly classroom environment (Cheema and Kitsantas, 2014[2]). A positive disciplinary climate may also have benefits for other student outcomes, such as students' sense of belonging at school (OECD, 2017[10]).

This chapter examines the disciplinary climate in language-of-instruction lessons. PISA asked students how frequently ("never or hardly ever", "some lessons", "most lessons", "every lesson") the following things happen in their language-of-instruction lessons: "Students don't listen to what the teacher says"; "There is noise and disorder"; "The teacher has to wait a long time for students to quiet down"; "Students cannot work well"; and "Students don't start working for a long time after the lesson begins". These statements were combined to create the index of disciplinary climate whose average is 0 and standard deviation is 1 across OECD countries. Positive values on this scale mean that the student enjoys a better disciplinary climate in language-of-instruction lessons than the average student in OECD countries.

What the data tell us

- On average across OECD countries, almost one in three students reported that, in every or most lessons, students do not listen to the teacher or there is noise and disorder.
- Student reports of disciplinary climate generally improved between 2009 and 2018, especially in Albania, Korea and the United Arab Emirates.
- In all countries and economies, students with higher reading scores tended to report a more positive disciplinary climate, after accounting for socio-economic status. Even occasional disciplinary problems were negatively associated with reading performance.
- Student reports of disciplinary climate were more positive in schools where more than 60% of students were girls and in gender-balanced schools than in schools where more than 60% of students were boys, on average across OECD countries.
- On average across OECD countries, the positive relationship between disciplinary climate and reading performance was relatively stable across students' gender, socio-economic status and immigrant background.

HOW THE DISCIPLINARY CLIMATE VARIES ACROSS COUNTRIES, SCHOOLS AND STUDENTS

On average across OECD countries, the most common disciplinary problems in language-of-instruction lessons (amongst those included in the student questionnaire) were that students do not listen to what the teacher says and that there is noise and disorder in the classroom (Table III.B1.3.1). For example, almost one in three students reported that, in every or most lessons, students do

not listen to the teacher or there is noise and disorder. About one in four students reported that, in every or most lessons, they start working a long time after the lesson begins or the teacher has to wait a long time for students to quiet down. Interestingly, fewer than one in five students reported that students cannot work well in every or most language-of-instruction lessons, which suggests that, at least from the students' perspective, these disciplinary problems do not always interfere with their learning.

There are wide variations across countries and economies in the disciplinary climate in language-of-instruction lessons. Albania, Beijing, Shanghai, Jiangsu and Zhejiang (China), Belarus, Japan, Kazakhstan, Korea and Viet Nam show the most positive disciplinary climate, while Argentina, Brazil, France, Greece and Spain show the least positive climate (Figure III.3.1). For instance, in Japan only 3% of students reported that there is noise and disorder in every lesson, compared to 23% of students in France who so reported (Table III.B1.3.1). Perhaps more important, in some countries a significant share of students could not work well during language-of-instruction lessons, according to students' reports. For instance, in Argentina, Brazil, France, Greece, Israel, Morocco and Turkey, at least 25% of students reported that they, and their peers, cannot work well in every or most language-of-instruction lessons.

In many of these countries the disciplinary problems are highly concentrated in some schools (Table III.B1.3.3). In Argentina, for instance, about 11% of students attend schools where at least 75% of their schoolmates reported that, in every or most lessons, there is noise and disorder in their language-of-instruction lessons. The typical student in Argentina is enrolled in a school where about 55% of their schoolmates reported so.

Differences across schools are also large. As much as 11% of the variation in the index of disciplinary climate lies between schools, on average across OECD countries, which is a larger proportion than for the other indices analysed in this report (Table III.B1.3.5). According to students' reports, in a majority of countries and economies the disciplinary climate in language-of-instruction lessons was more positive in socio-economically advantaged than in disadvantaged schools (Figure III.3.1). This was observed in 45 education systems, while in only 5 systems, namely Macao (China), the Republic of Moldova (hereafter "Moldova"), Morocco, Panama and Peru, the disciplinary climate was better in disadvantaged schools. On average across OECD countries, and in 18 other education systems, the disciplinary climate was better in private schools than in public schools, while the opposite was true only in Japan and Chinese Taipei. Moreover, the disciplinary climate was similar in rural and urban schools across OECD countries. However, in 14 school systems the disciplinary climate in rural schools was more positive than that in city schools, and especially so in Belarus, Jordan, Mexico, the Russian Federation and Ukraine.

As for student characteristics, girls reported a better disciplinary climate in language-of-instruction lessons than boys did, on average across OECD countries and in a majority of countries and economies (Table III.B1.3.4). Only in Denmark and Finland did boys report a better disciplinary climate than girls. Boys and girls may perceive the same learning environment differently, but this gender gap may also be explained by the fact that the typical boy and girl often attend schools and classes with very different proportions of boys and girls, particularly in countries with single-sex schools, a widespread use of ability grouping and with large proportions of 15-year-old students enrolled in vocational schools (see Box III.3.1). On average across OECD countries, and in almost a third of the school systems with available data, students without an immigrant background reported a more positive disciplinary climate than students with an immigrant background. The largest differences, in favour of students without an immigrant background, were observed in Colombia, Georgia, Indonesia and the Philippines. However, in 12 countries and economies, many of them English-speaking, immigrant students reported a more positive disciplinary climate than did students without an immigrant background.

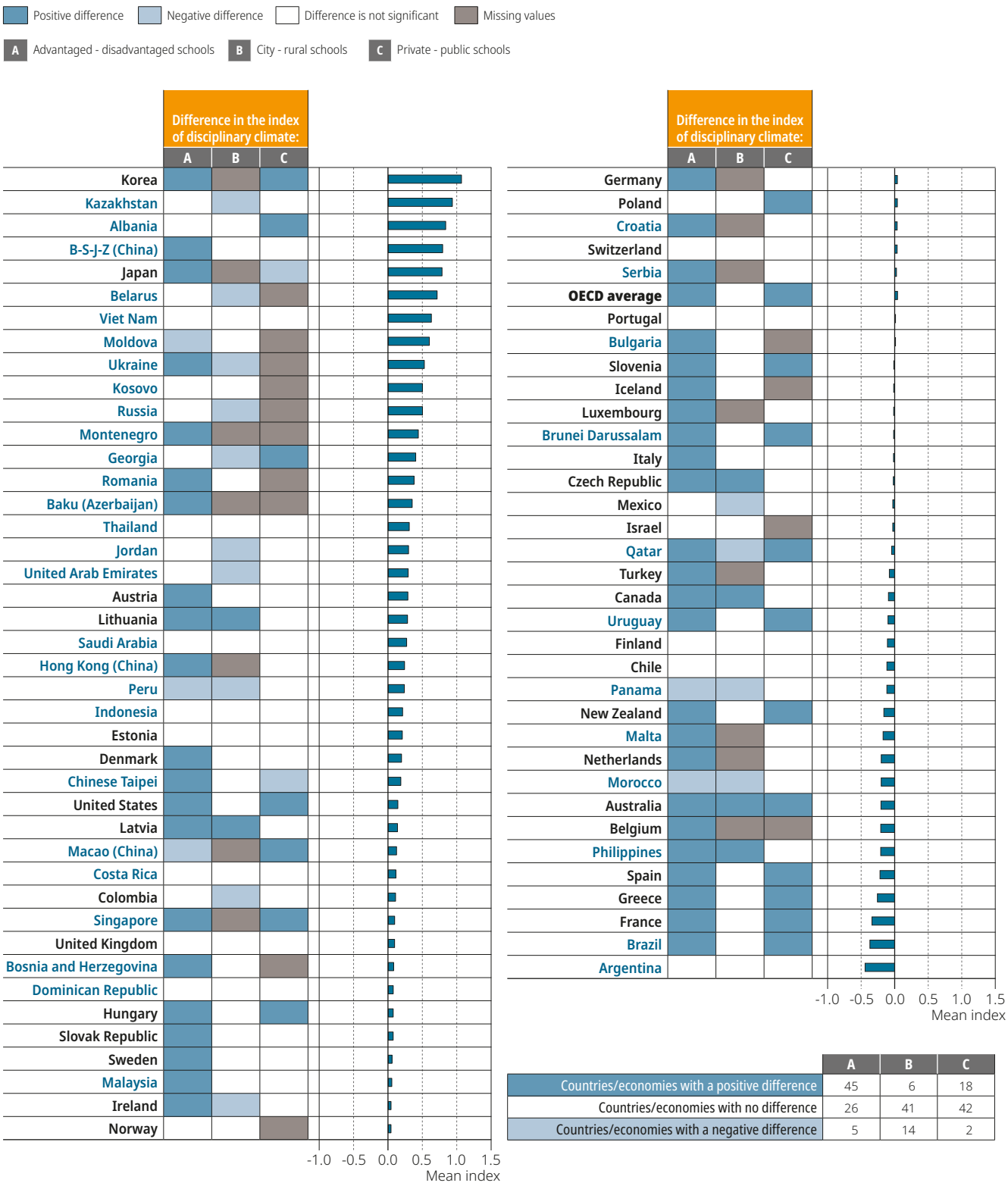
TRENDS IN DISCIPLINARY CLIMATE DURING LANGUAGE-OF-INSTRUCTION LESSONS

PISA 2009 and PISA 2018 asked students the same question about the disciplinary climate in language-of-instruction lessons, with only slight changes.[1] A comparison of both cycles reveals that the disciplinary climate generally improved during this period (Table III.B1.3.2), which mirrors the trend, reported in the OECD Teaching and Learning International Survey (TALIS), of teachers highlighting improvements in disciplinary climate over the preceding five years (OECD, 2019[11]). For instance, on average across OECD countries, the percentage of students who reported that their classmates in their language-of-instruction lessons always, or almost always, listen to what the teacher says or can work well increased by about four percentage points between 2009 and 2018.[2] The improvement in disciplinary climate was remarkable in several school systems, such as Albania, the Czech Republic, Denmark, Korea, Moldova, Montenegro, Norway, Serbia and the United Arab Emirates.

For instance, in 2018, 41% of students in Denmark reported that the teacher never, or hardly ever, has to wait a long time for students to quiet down (Table III.B1.3.1), compared to 30% of students who so reported nine years earlier (Table III.B1.3.2). In Montenegro, 52% of students in 2018 reported that there is never, or hardly ever, noise and disorder during language-of-instruction lessons, compared to 40% of students who so reported in 2009. In a few school systems, particularly Panama and Spain, the disciplinary climate deteriorated between 2009 and 2018. In these countries, 15-year-old students in 2018 were less likely than their counterparts in 2009 to report that the five types of disruption never happened during their lessons.

Figure III.3.1 **Index of disciplinary climate, by school characteristics**

Based on students' reports



	A	B	C
Countries/economies with a positive difference	45	6	18
Countries/economies with no difference	26	41	42
Countries/economies with a negative difference	5	14	2

Note: Higher values in the index indicate a more positive disciplinary climate.

Countries and economies are ranked in descending order of the index of disciplinary climate.

Source: OECD, PISA 2018 Database, Tables III.B1.3.1 and III.B1.3.5.

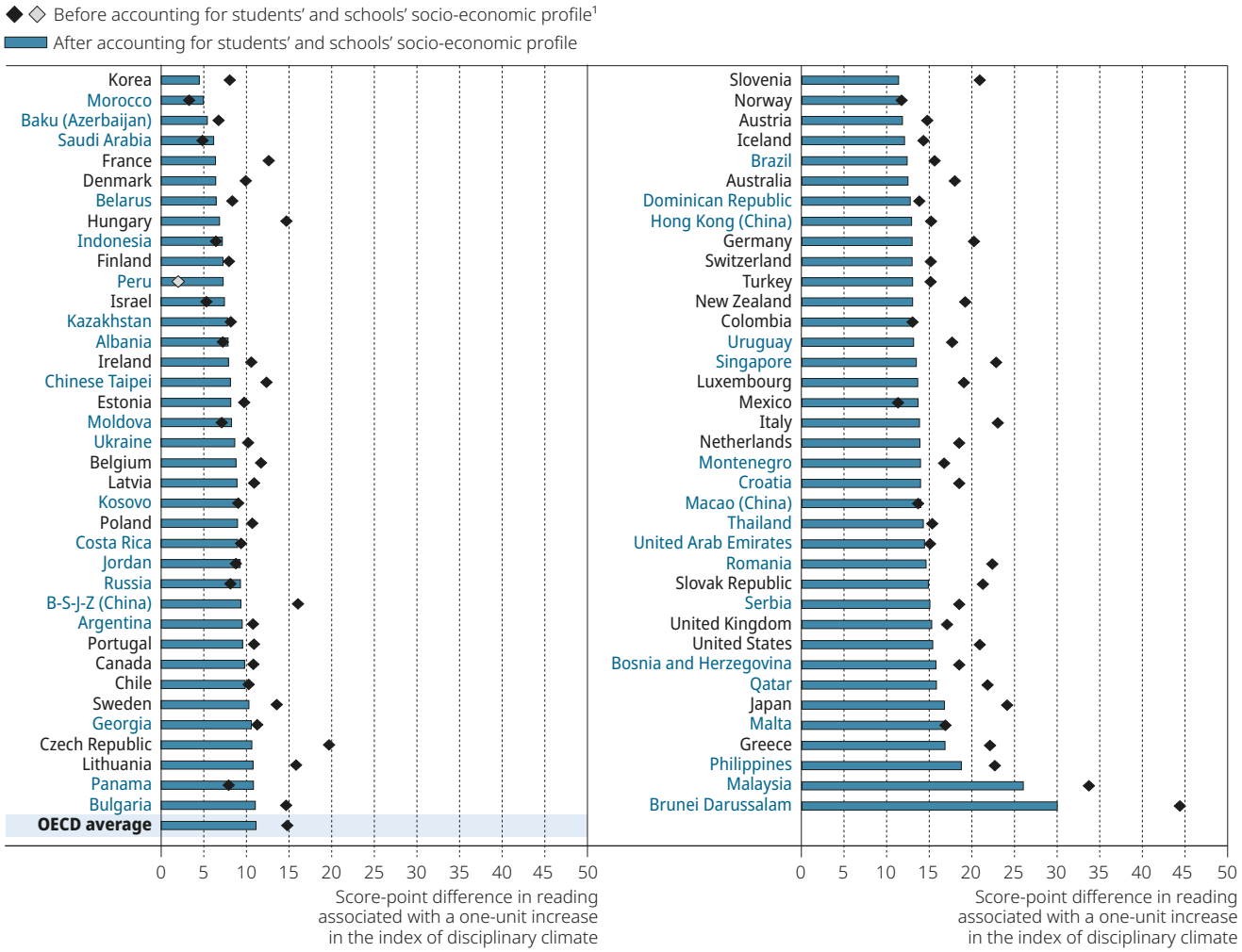
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HOW THE DISCIPLINARY CLIMATE IN LANGUAGE-OF-INSTRUCTION LESSONS IS RELATED TO READING PERFORMANCE

In all countries and economies, students who reported a better disciplinary climate in their language-of-instruction lessons performed better in reading, after accounting for the socio-economic profile of students and schools (measured by the PISA index of economic, social and cultural status) (Figure III.3.2). On average across OECD countries, every unit increase in the index of disciplinary climate (equivalent to one standard deviation across OECD countries) was associated with an increase of 11 score points in reading performance. In Brunei Darussalam and Malaysia, the increase amounted to more than 25 score points.

Amongst the five items that make up the index of disciplinary climate, the one that shows the strongest association with reading performance is the frequency of situations in which "students cannot work well" (Table III.B1.3.6). On average across OECD countries, students who reported that students cannot work well in every or most language-of-instruction lessons scored 25 points lower in reading than students who reported that this never happened or happened only in some lessons, after accounting for socio-economic status. At the school level, the analyses paint a similar picture (Table III.B1.3.7).

Figure III.3.2 **Disciplinary climate and reading performance**



1. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Notes: Higher values in the index indicate a more positive disciplinary climate.

Statistically significant values are shown in darker tones. All differences after accounting for students' and schools' socio-economic profile are statistically significant (see Annex A3).

Countries and economies are ranked in ascending order of the score-point difference associated with a one-unit increase in the index of disciplinary climate, after accounting for students' and schools' socio-economic profile.

Source: OECD, PISA 2018 Database, Table III.B1.3.6.

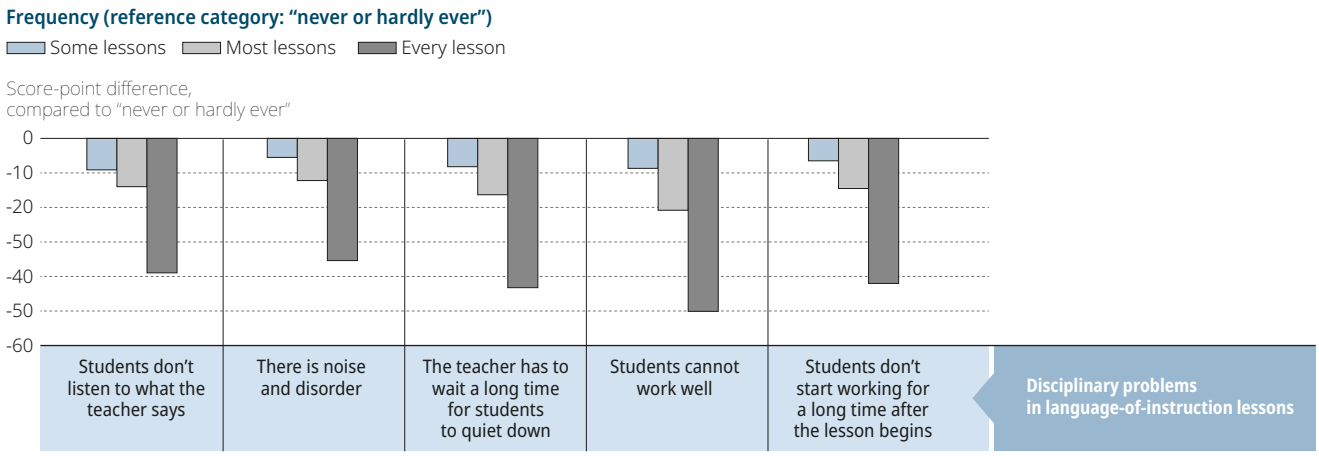
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In the schools where students were least likely to report that students cannot work well (that is, the schools in the bottom quarter of the indicator in their country/economy) the average reading score was 512 points; in the schools where students were most likely to report so (the schools in the top quarter of the indicator in their country/economy) the average reading score was 456 points, a significant difference of 56 points.

The analysis of the frequency of disciplinary problems in language-of-instruction lessons and students' reading performance shows that even occasional disciplinary problems are negatively associated with reading performance (Figure III.3.3). On average across OECD countries and after accounting for the socio-economic profile of students and schools, students who reported that disciplinary problems occur in some language-of-instruction lessons scored between 5 and 9 points lower in reading than students who reported that the problems never, or hardly ever, occur. Students scored between 12 and 21 points lower in reading when they reported that the disciplinary problems occur in most lessons. However, less frequent disciplinary problems were not always negatively associated with reading performance. For instance, in 8 countries and economies, students who reported that there is noise and disorder in some lessons scored higher than students who reported that these problems never happen; and in another 38 school systems there was no significant association between sporadic noise and disorder, and reading performance (Table III.B1.3.8).

Figure III.3.3 **Prevalence of disciplinary problems and reading performance**

OECD average



Notes: All values are statistically significant (see Annex A3).

All regression models account for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Source: OECD, PISA 2018 Database, Table III.B1.3.8.

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The relationship appeared to be much stronger when students reported that disciplinary problems occur repeatedly in their language-of-instruction lessons. For instance, compared to students who reported that disciplinary problems never or hardly ever occur, students scored 50 points lower in reading when they reported that students cannot work well in every lesson, and 43 points lower when they reported that, in every lesson, the teacher has to wait a long time for students to quiet down. In every school system, students who reported that any of five disciplinary problems happen in every lesson scored lower than students who reported that these problems never happen (the only exceptions were Finland and the Philippines, where the negative association between repeated noise and disorder and reading performance was not significant).

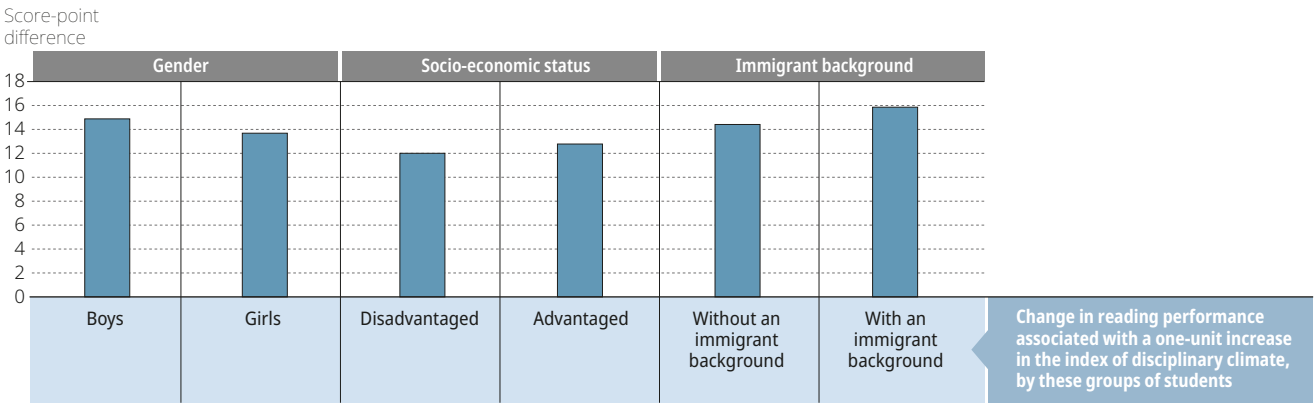
RELATIONSHIP BETWEEN DISCIPLINARY CLIMATE AND READING PERFORMANCE BY GENDER, SOCIO-ECONOMIC STATUS AND IMMIGRANT BACKGROUND

Researchers have widely documented the benefits of an orderly classroom environment, but only a handful of studies has addressed the question of who benefits more from a positive disciplinary climate. Using PISA 2003 data for the United States, Cheema and Kitsantas (2014[2]) showed that the achievement gap in mathematics between white and minority ethnic group students tended to be considerably narrower in schools with better disciplinary climate in mathematics lessons. Using PISA 2012 data for the Nordic countries, Sortkaer and Reimer (2018[12]) found that the association between disciplinary climate and mathematics achievement was significantly stronger for boys than for girls. Do PISA 2018 data show any differences in the association between the disciplinary climate in language-of-instruction lessons and reading performance across different groups of students?

On average across OECD countries, the relationship between disciplinary climate and reading performance was relatively stable across students' gender, socio-economic status and immigrant background (Figure III.3.4). If anything, the strength of the relationship seemed somewhat stronger for boys than for girls. The only countries where this was the case were Finland, Israel and Qatar, while the only school systems where the association was stronger for girls were Baku (Azerbaijan) and Peru (Table III. B1.3.9). Further, in a number of countries and economies, such as Brunei Darussalam, the Dominican Republic, Hungary, Mexico, the Philippines, Qatar and Thailand, the association between the disciplinary climate in language-of-instruction lessons and reading performance was stronger for socio-economically advantaged students than for disadvantaged students; only in Ireland and Moldova was the opposite true. In the Dominican Republic, Israel, Malaysia, Mexico, Qatar, the Slovak Republic, Sweden and Thailand, the association between disciplinary climate and reading performance was stronger amongst students with an immigrant background than amongst students without an immigrant background. In short, despite the results observed in a limited number of countries, the positive relationship between disciplinary climate and reading performance was relatively stable across students' gender, socio-economic status and immigrant background.

Figure III.3.4 **Disciplinary climate and reading performance, by student characteristics**

OECD average



Note: All values are statistically significant (see Annex A3).

Source: OECD, PISA 2018 Database, Table III.B1.3.9.

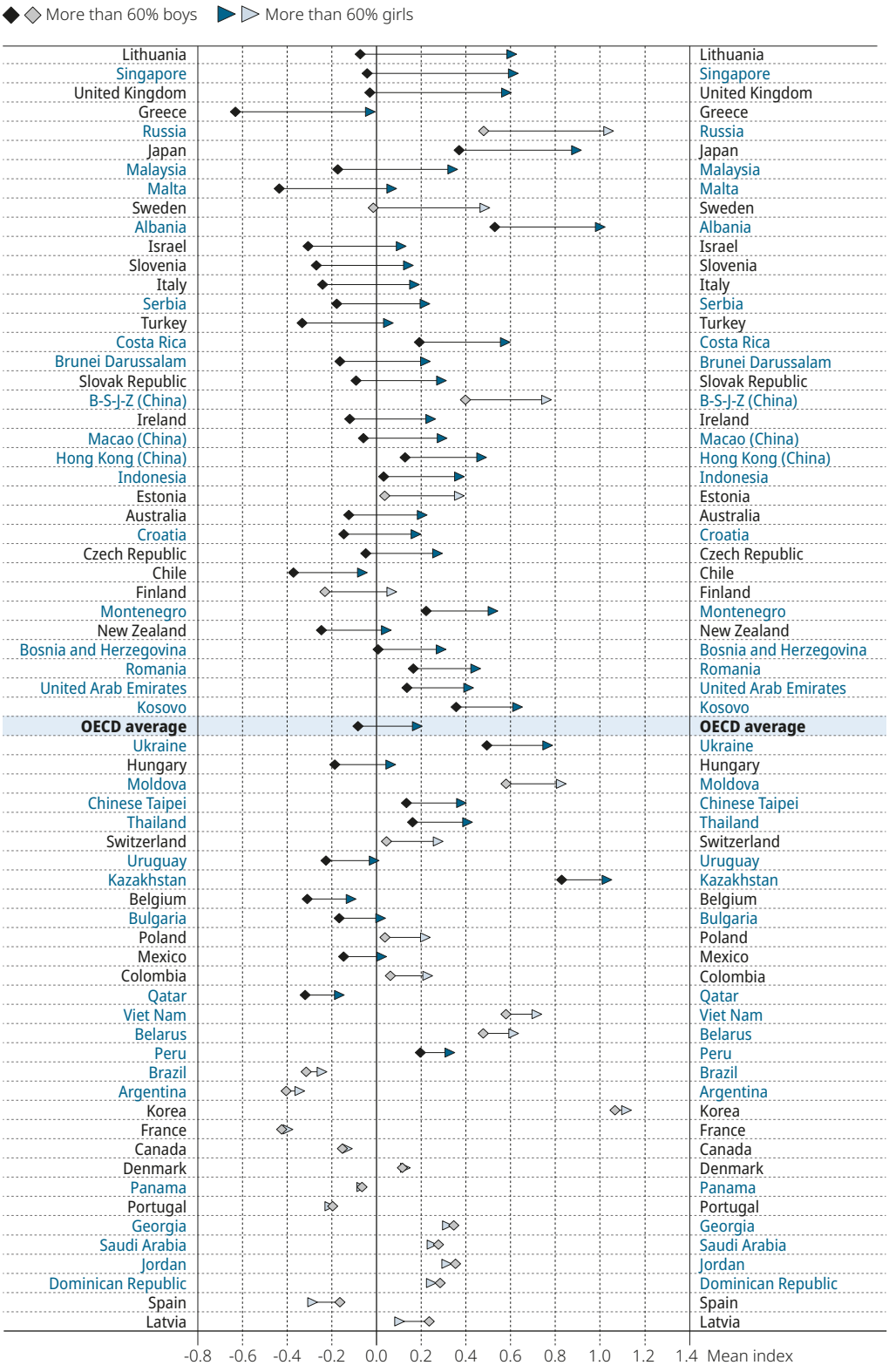
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COMPARING THE DISCIPLINARY CLIMATE IN GENDER-BALANCED AND SINGLE-SEX SCHOOLS

Co-educational schools are today the norm across OECD countries, but single-sex schools still exist in some PISA-participating countries and economies. In addition, in a large number of countries, mostly those where the share of 15-year-old students enrolled in pre-vocational or vocational schools is comparatively high, there is a significant number of schools where either boys or girls represent a clear majority (see Box III.3.1). Advocates of single-sex schools argue that those schools have, amongst other advantages, a better disciplinary climate where students can concentrate more on their learning tasks. This view implies that gender-balanced schools have a less-positive disciplinary climate, and that students enrolled in those schools should be at a disadvantage compared to students enrolled in gender-unbalanced schools, notably in single-sex schools. But others argue that it is the number of boys enrolled in a school that affects the disciplinary climate, rather than whether the school is mixed or single-sex. In this second scenario, all-boys schools should show the least positive disciplinary climate, and the students enrolled in this type of school should be at a disadvantage compared to every other student.

PISA asked school principals about the number of boys and girls in their schools. Based on their answers, there were only a limited number of PISA-participating countries with a sufficiently large number of sampled students who attended single-sex schools; but a comparison of gender-balanced schools and those where either boys or girls are a clear majority (more than 60% of the student body, including single-sex schools) provide valuable insights. On average across OECD countries and in more than half of the PISA-participating education systems, the disciplinary climate was more positive in schools where more than 60% of students were girls than in schools where more than 60% of students were boys (Figure III.3.5). Perhaps more important, in almost half of the school systems with available data, the disciplinary climate was also more positive in gender-balanced schools (those schools where boys and girls represented between 40% and 60% of students) than in schools where boys represented more than 60% of the student body (Table III.B1.3.10). The only two countries where the disciplinary climate was significantly worse in gender-balanced schools than in schools with a clear majority of boys were Australia and the Dominican Republic. A previous study in Australia comparing co-educational and single-sex schools also found that misbehaviour was somewhat more frequent in co-educational schools than in both types of single-sex schools (Cohen and Barrington Thomas, 1984[13]).

Figure III.3.5 **Disciplinary climate, by gender composition at school**



Notes: Higher values in the index indicate a more positive disciplinary climate.

Statistically significant differences between predominantly girls' and predominantly boys' schools are shown in darker tones (see Annex A3).

Countries and economies are ranked in descending order of the differences in the index of disciplinary climate between predominantly girls' and predominantly boys' schools.

Source: OECD, PISA 2018 Database, Table III.B1.3.10.

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Similar findings emerge from the comparison of single-sex and gender-balanced schools in the countries and economies with a sufficiently large number of students in these schools (Table III.B1.3.10). In about half of these school systems, the disciplinary climate was better in gender-balanced schools than in all-boys schools, and in a clear majority of these schools systems, students enjoyed a better disciplinary climate in all-girls schools than in all-boys schools; in no education system did all-boys schools show a better disciplinary climate than that in other types of schools. In Israel, Malta, Qatar and Singapore, in particular, boys enrolled in all-boys schools seemed to be at a great disadvantage regarding the disciplinary climate in language-of-instruction lessons compared to all other students, including boys in gender-balanced schools and girls in any type of school. These comparisons, however, should be interpreted with caution as they are based on comparisons of a maximum of 17 education systems.

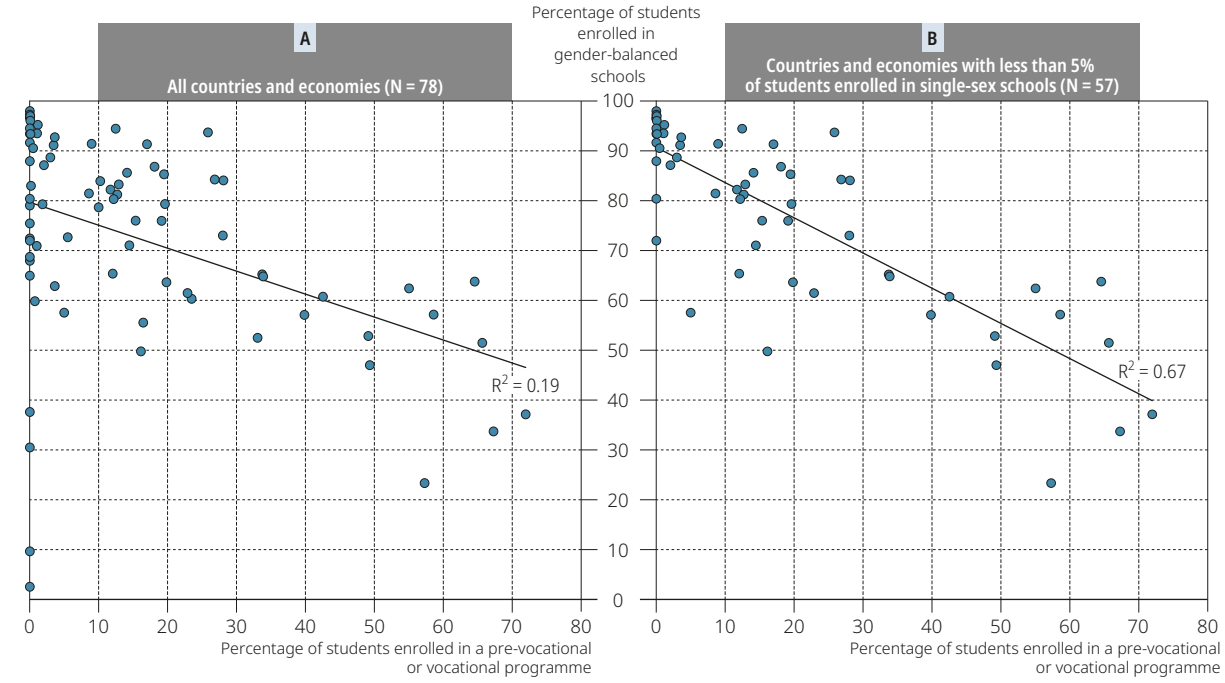
Box III.3.1. **Why are there schools with different proportions of boys and girls?**

On average across OECD countries in 2018, some 22% of students attended a school where more than 60% of students were either boys or girls, according to PISA data (Table III.B1.3.11). This may be partly explained by the larger number of boys born every year, or by a gender gap in school dropout rates. However, the main reasons are probably the presence of single-sex schools and educational tracking (sorting students into different programmes and schools).

On average across OECD countries in 2018, some 5% of students were enrolled in a single-sex school; in 15 PISA-participating countries and economies, at least 10% of students were enrolled in such schools (Table III.B1.3.11). In addition, across OECD countries and in many education systems, girls were more likely than boys to attend single-sex schools, which is likely to further contribute to an unbalanced gender composition amongst the co-educational schools in these education systems.

In countries and economies where there are few or no single-sex schools, the main reason why schools have an unbalanced gender composition is, most probably, the prevalence of tracking. Figure III.3.6 clearly shows that the share of students who attended gender-balanced schools was lower in education systems with larger proportions of students enrolled in a pre-vocational or vocational programme. In Croatia, Serbia and Slovenia, for instance, more than half of students were enrolled in a pre-vocational or vocational programme, which probably explains why less than 40% of students attended a gender-balanced school. By contrast, more than 95% of students attended gender-balanced schools in more comprehensive education systems, including Canada, Estonia, Finland, Iceland, Norway, the Philippines and Spain.

Figure III.3.6 **Programme orientation and gender composition at school**



Note: Gender-balanced schools are those with between 40% and 60% of girls or boys.

Source: OECD, PISA 2018 Database, Table III.B1.3.11.

StatLink http://dx.doi.org/10.1787/888934029451

Notes

1. The wording of the response options changed slightly across both cycles ("in all lessons", "in most lessons" and "in some lessons" changed to "every lesson", "most lessons" and "some lessons" in PISA 2018), and so did the order in which the response options appeared in the questionnaire.

2. For convenience, in the description of the results of negatively framed items, such as "students don't listen to what the teacher says", "never or hardly ever" has often been replaced by "always or almost always". For instance, "Never or hardly ever don't listen" has been replaced by "always or almost always listen".

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Student truancy and lateness

This chapter examines differences between countries and economies in student truancy and lateness, and how they vary by student and school characteristics. It also looks at the relationship between truancy and lateness, especially when they occur repeatedly, and reading performance. The chapter identifies some of the predictors of student truancy.

Every school day, many students miss learning opportunities because they skip school or arrive late for school. Doing so repeatedly may have adverse effects on the individual student and on the learning environment in school. Chronic truancy and, to a lesser extent, lateness have such adverse effects on learning that school systems around the globe are constantly devising strategies to tackle them. The European Commission, for instance, includes efforts to combat truancy as a key policy lever to reduce the share of early school leavers across Europe (European Commission, 2013[1]).

Students play truant for many reasons. Many students skip school or arrive late for school because they are academically disengaged, do not feel they belong at school, failed to wake up or are simply needed at home (Appleton et al., 2008[2]; Gottfried, 2017[3]; Lehr, Sinclair and Christenson, 2009[4]). Some victims of bullying avoid school because they are too afraid or embarrassed (Hutzell and Payne, 2012[5]; Townsend et al., 2008[6]). Good academic performance and positive relationships with peers and teachers seem critical for developing students' attachment to school and feeding a desire to attend school every day (Gehlbach, Brinkworth and Harris, 2012[7]; Juvonen, Espinoza and Knifsend, 2012[8]; Reid, 2005[9]).

What the data tell us

- On average across OECD countries, 21% of students had skipped a day of school and 48% of students had arrived late for school in the two weeks prior to the PISA test. In Georgia, Montenegro, Saudi Arabia and Turkey, at least one in five students had skipped school at least three times during that period.
- The countries and economies where fewer students had skipped a whole day of school were also the countries/economies with higher average reading performance, such as Beijing, Shanghai, Jiangsu and Zhejiang (China), Estonia, Finland, Hong Kong (China), Japan, Korea, Macao (China), Singapore, Sweden and Chinese Taipei.
- Frequently bullied students were more likely to have skipped school, whereas students who valued school, enjoyed better disciplinary climate, scored higher in the reading assessment, and received greater emotional support from parents were less likely to have done so.

Not all students are equally likely to skip school or lack punctuality. In many countries, especially middle-income countries, boys skip school and arrive late for school more frequently than girls do (OECD, 2015[10]). According to school principals, truancy problems are more likely to hinder learning in urban schools than in rural schools, on average across OECD countries (Echazarra and Radinger, 2019[11]), and urban students tend to arrive late more frequently than rural students do (OECD, 2016[12]). Previous studies have also documented the problems socio-economically disadvantaged students (OECD, 2016[12]; Ready, 2010[13]; Ready, 2010[13]) and those with disabilities (Gottfried et al., 2017[14]; Lane et al., 2006[15]) face in attending school.

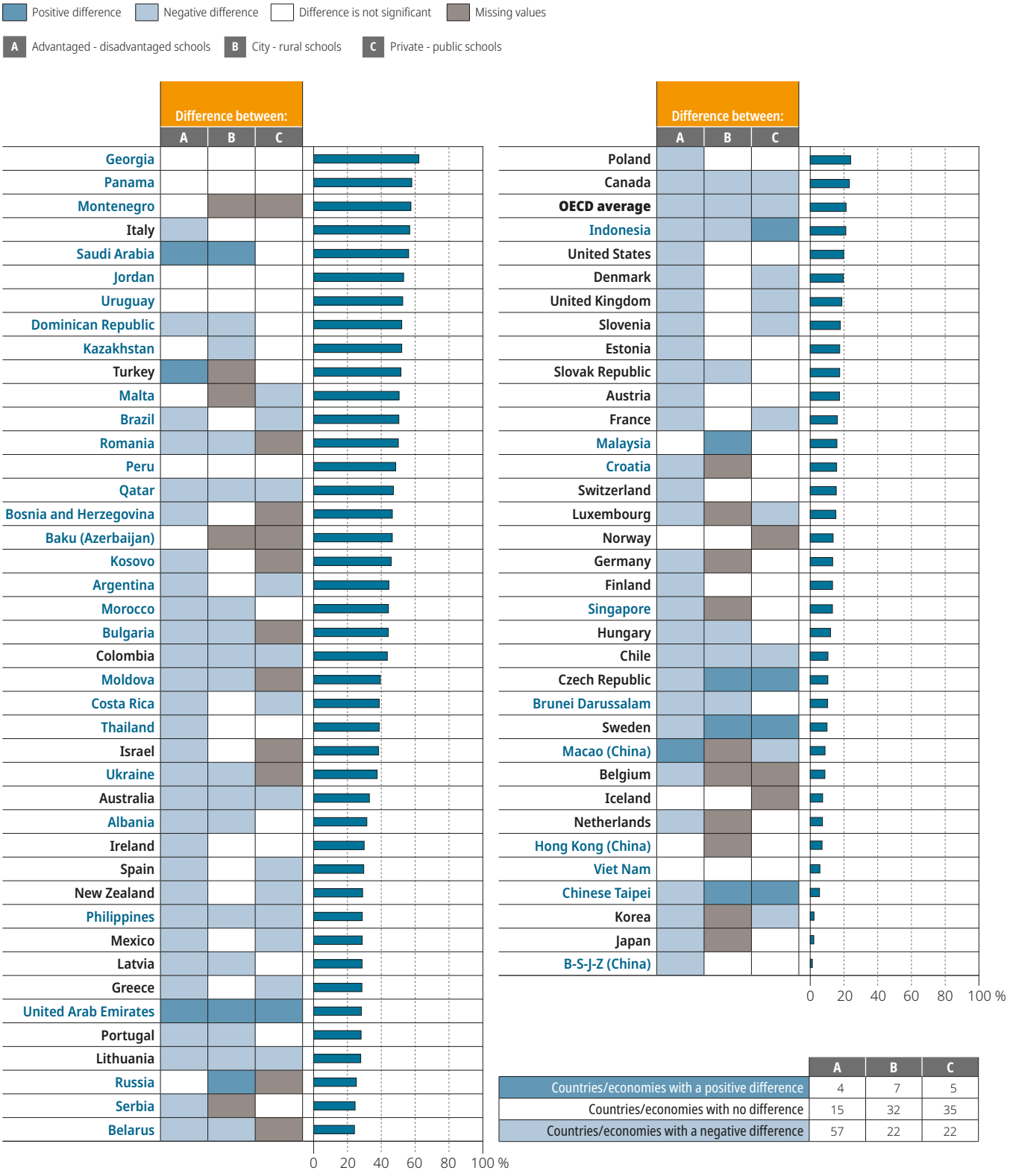
Regular truancy can have adverse consequences for students. Truants are more likely to fall behind in class, drop out of school, wind up in poorly paid jobs, have unwanted pregnancies, and even abuse drugs and alcohol (Aucejo and Romano, 2016[16]; Hallfors et al., 2002[17]; Henry and Huizinga, 2007[18]; Smerillo et al., 2018[19]). Some of these unwanted outcomes are more commonly seen amongst chronic absentees from disadvantaged backgrounds (Gershenson, Jacknowitz and Brannegan, 2017[20]; Ready, 2010[13]).

If pervasive, student truancy can also hurt other students in the class. If students who arrive late for school or skip classes fall far behind in their classwork and require extra assistance, the flow of instruction is disrupted, and classmates, particularly those who might be working closely with truants, may suffer (Wilson et al., 2008[21]). Truants may also generate resentment amongst students who attend class regularly – and sympathy amongst others who may realise that they too can skip classes (Wilson et al., 2008[21]).

This chapter examines student truancy and lateness. PISA asked students to report the number of times ("never", "one or two times", "three or four times", "five or more times") they had skipped a whole day of school, the number of times they had skipped some classes and the number of times they had arrived late for school during the two full weeks of school prior to the assessment. Skipping school/classes, student truancy and unexcused absenteeism are used interchangeably in this report since "skipping" implies dishonesty. As with other self-reported measures, students may over- or under-report the extent to which they play truant and arrive late for school, and this bias may operate differently across countries and groups of students. In addition, even when the question refers to the last two "full" weeks of school, this period may have been exceptional in some countries and economies, which could potentially affect students' answers.

Figure III.4.1 **Student truancy, by school characteristics**

Percentage of students who reported that they had skipped a whole day of school at least once in the two weeks prior to the PISA test



	A	B	C
Countries/economies with a positive difference	4	7	5
Countries/economies with no difference	15	32	35
Countries/economies with a negative difference	57	22	22

Countries and economies are ranked in descending order of the percentage of students who had skipped a whole day of school.

Source: OECD, PISA 2018 Database, Tables III.B1.4.1 and III.B1.4.7.

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HOW STUDENT TRUANCY AND LATENESS VARY ACROSS COUNTRIES, SCHOOLS AND STUDENTS

On average across OECD countries, 21% of students reported that they had skipped a whole day of school at least once, and 27% reported that they had skipped some classes at least once in the two weeks prior to the PISA test (Figure III.4.1 and Table III.B1.4.1). However, in some education systems a considerably larger share of students had skipped school. For instance, in Brazil, the Dominican Republic, Georgia, Italy, Jordan, Kazakhstan, Malta, Montenegro, Panama, Romania, Saudi Arabia, Turkey and Uruguay, more than half of students had skipped a day of school in the two weeks prior to the assessment. More worryingly, in Georgia, Montenegro, Saudi Arabia and Turkey, at least one in five students had skipped school at least three times during the same period. Large proportions of students in these countries regularly miss learning opportunities, with likely adverse consequences for both these students and their classmates. In the Dominican Republic, Panama and Peru, for instance, more than 5% of students were enrolled in schools where at least 90% of their schoolmates had skipped school in the two weeks prior to the PISA test (Table III.B1.4.3). By contrast, in Beijing, Shanghai, Jiangsu and Zhejiang (China) (hereafter "B-S-J-Z [China]"), Belgium, Hong Kong (China), Iceland, Japan, Korea, Macao (China), the Netherlands, Sweden, Chinese Taipei and Viet Nam, more than 90% of students had not skipped school in the two weeks prior to the assessment.

Arriving late for school may have less serious consequences for students, but it is generally a more common occurrence (Table III.B1.4.1). On average across OECD countries, almost half of students had arrived late for school at least once in the two weeks prior to the PISA test. In 22 countries and economies, especially in Argentina, Chile, France, Georgia, Greece, Israel, Poland, the Russian Federation, Serbia and Uruguay, more than 10% of students had arrived late for school at least five times during the same period. In Chile, the Dominican Republic, Panama, Peru and Uruguay, the problem is so widespread that, in 2018, more than 5% of students attended a school where at least 90% of students had arrived late for school in the two weeks prior to the assessment (Table III.B1.4.4). However, in Hong Kong (China), Japan, Korea and Macao (China), less than 30% of students had arrived late during the same period.

Student truancy and lateness varied widely across schools (Figures III.4.1 and III.4.2). Differences related to the socio-economic profile of the schools were generally the largest. In a clear majority of countries and economies, students in socio-economically disadvantaged schools were more likely than students in advantaged schools to have skipped a whole day of school in the two weeks prior to the PISA test. The only education systems where skipping school was more common amongst advantaged students were Macao (China), Saudi Arabia, Turkey and the United Arab Emirates. Moreover, on average across OECD countries, students in rural schools were more likely to have skipped school, but less likely to have arrived late for school, than were students in city schools. On average across OECD countries, both skipping school and arriving late for school were more common in public than in private schools, and in schools with higher concentrations of immigrant students (Tables III.B1.4.7 and III.B1.4.8).

In a majority of countries and economies, boys were more likely than girls to have skipped a whole day of school, particularly in Albania, Greece, Indonesia, the Republic of Moldova (hereafter "Moldova"), the Philippines and Slovenia (Table III.B1.4.5). The only countries where more girls than boys played truant were Argentina, Costa Rica, Ireland, Jordan, Qatar, Saudi Arabia and the United States. In about three out of four school systems, skipping school was more common amongst disadvantaged students than amongst advantaged students, particularly in Denmark, the Dominican Republic, France, Italy, Lithuania, Moldova, the Philippines, Qatar and Ukraine. On average across OECD countries, 25% of students with an immigrant background had skipped school in the two weeks prior to the PISA test, compared to 21% of students without an immigrant background – a significant difference.

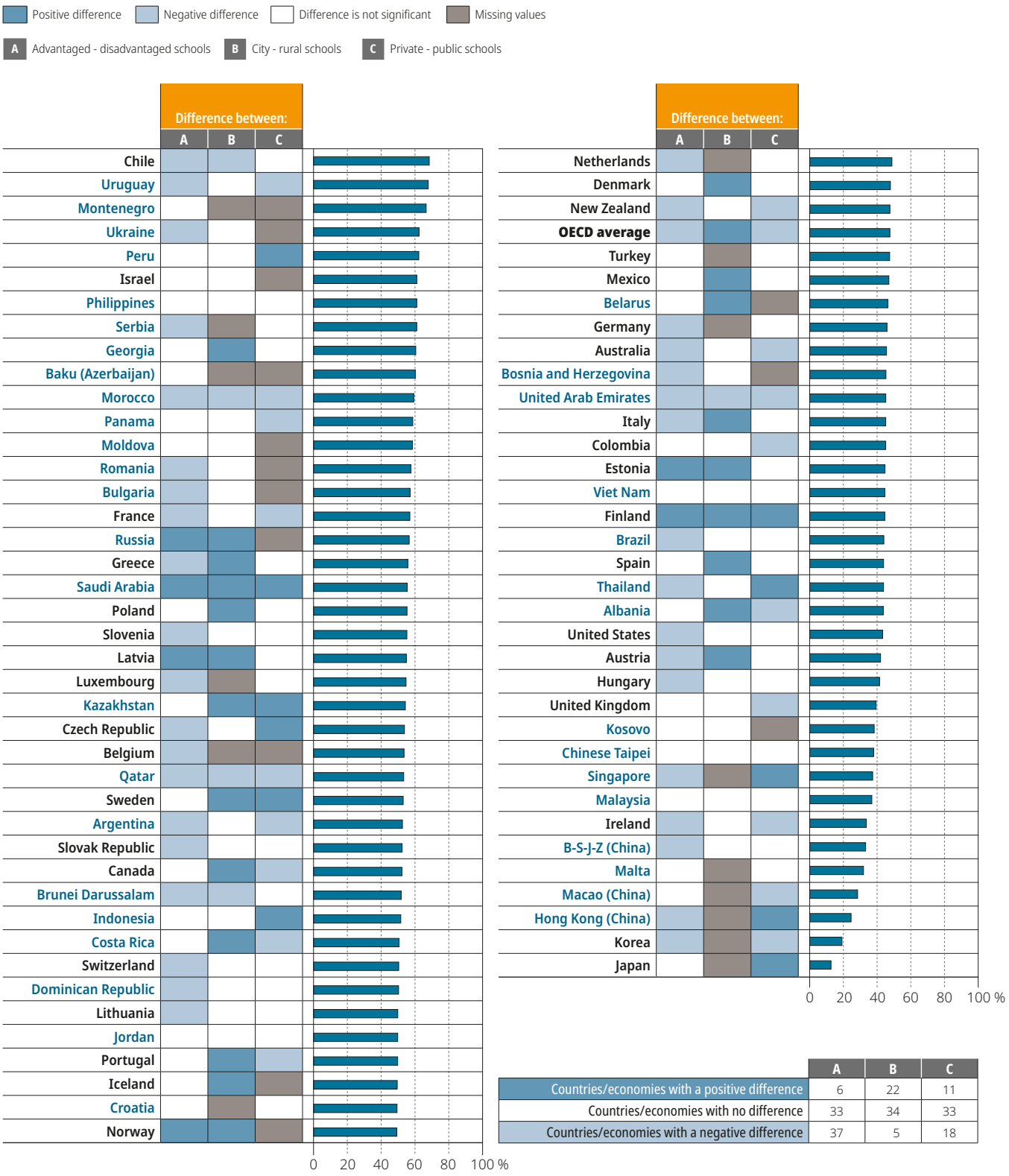
The differences between groups of students followed similar patterns in the case of lateness, though they were usually larger (Table III.B1.4.6). For example, 51% of boys reported that they had arrived late for school, compared to 44% of girls; 50% of disadvantaged students reported that they had arrived late, compared to 45% of advantaged students; and 58% of immigrant students reported that they had arrived late for school in the two weeks prior to the PISA test, compared to 47% of students without an immigrant background.

TRENDS IN STUDENT TRUANCY AND LATENESS

On average across OECD countries, the percentage of students who had skipped a whole day of school at least once in the two weeks prior to the PISA test increased by only one percentage point between 2015 and 2018 (Table III.B1.4.2). The share of students who had skipped some classes remained stable, and the percentage of students who had arrived late for school increased by three percentage points over that period. The largest increases in the share of students who had skipped school were observed in Austria, Greece, Peru, Portugal, Qatar, Thailand and the United Arab Emirates, while the only improvements (i.e. a reduction in the share of students who had skipped school) were observed in Estonia, Finland, Montenegro, the Slovak Republic, the United Kingdom and the United States. The share of students who had arrived late for school increased sharply in Singapore and the Slovak Republic; it shrank only in Costa Rica.

Figure III.4.2 **Student lateness, by school characteristics**

Percentage of students who reported that they had arrived late for school at least once in the two weeks prior to the PISA test



	A	B	C
Countries/economies with a positive difference	6	22	11
Countries/economies with no difference	33	34	33
Countries/economies with a negative difference	37	5	18

Countries and economies are ranked in descending order of the percentage of students who had arrived late for school.

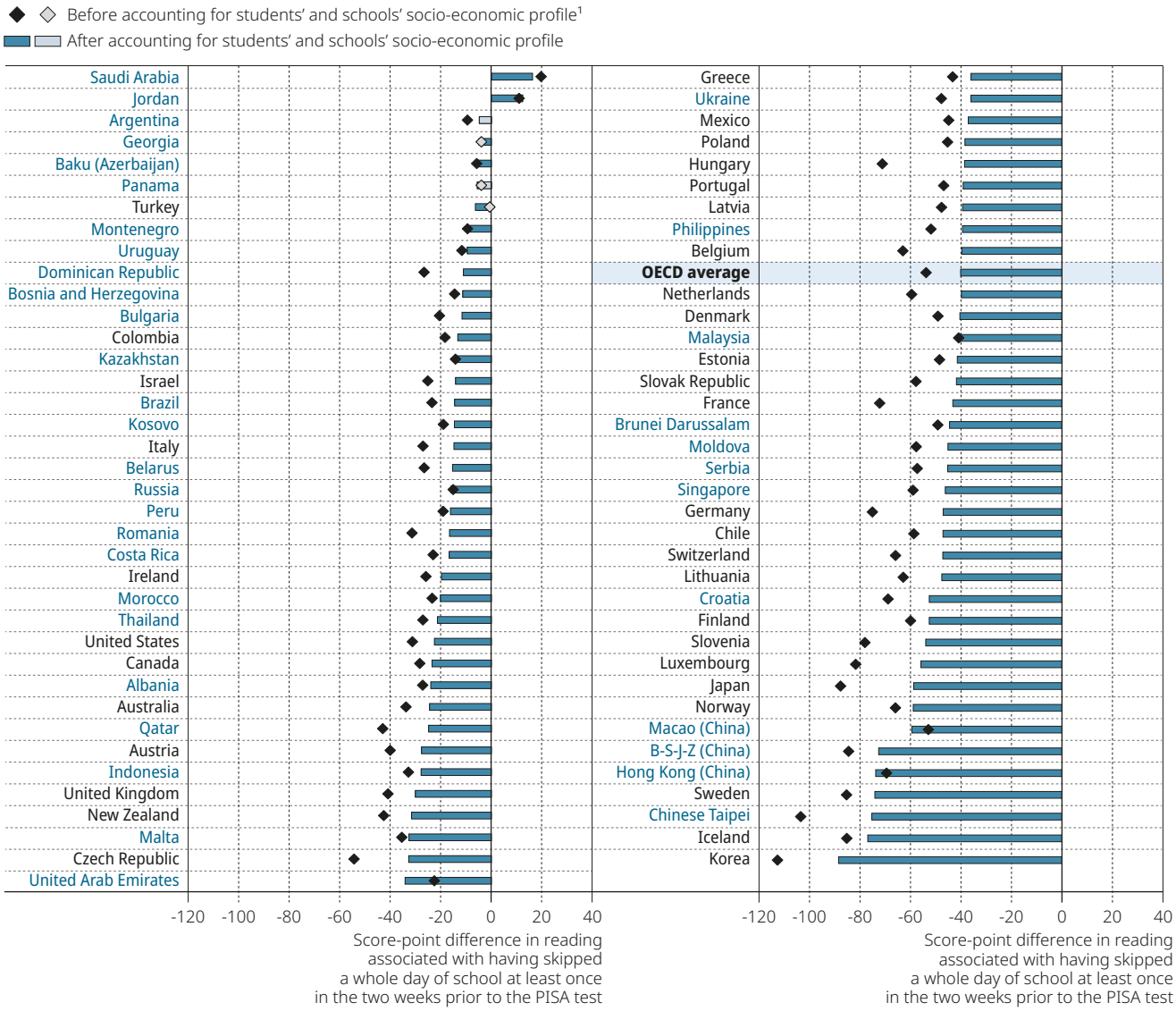
Source: OECD, PISA 2018 Database, Tables III.B1.4.1 and III.B1.4.8.

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HOW STUDENT TRUANCY AND LATENESS ARE RELATED TO READING PERFORMANCE

In virtually all education systems, in 2018, skipping school or classes and arriving late for school were negatively associated with reading performance, after accounting for the socio-economic profile of students and schools (measured by the PISA index of economic, social and cultural status) (Figure III.4.3 and Table III.B1.4.9). For instance, on average across OECD countries, students who had skipped a whole day of school in the two weeks prior to the PISA test scored 40 points lower than students who had not skipped school during the same period. This association was strongest in the countries and economies where the share of students who had skipped school was the smallest, such as B-S-J-Z (China), Hong Kong (China), Iceland, Japan, Korea, Macao (China), Norway, Sweden and Chinese Taipei (Table III.B1.4.1). On average across OECD countries, skipping some classes was associated with a decline of 37 score points in reading performance; arriving late for school was associated with a drop of 26 score points, after accounting for the socio-economic profile of students and schools. Relationships between truancy and underperformance could take a variety of forms. For instance, students who skip school miss learning opportunities, and students who struggle academically may be less willing to attend school regularly.

Figure III.4.3 **Student truancy and reading performance**



1. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Note: Statistically significant values are shown in darker tones (see Annex A3).

Countries and economies are ranked in descending order of the score-point difference associated with having skipped a whole day of school, after accounting for students' and schools' socio-economic profile.

Source: OECD, PISA 2018 Database, Table III.B1.4.9.

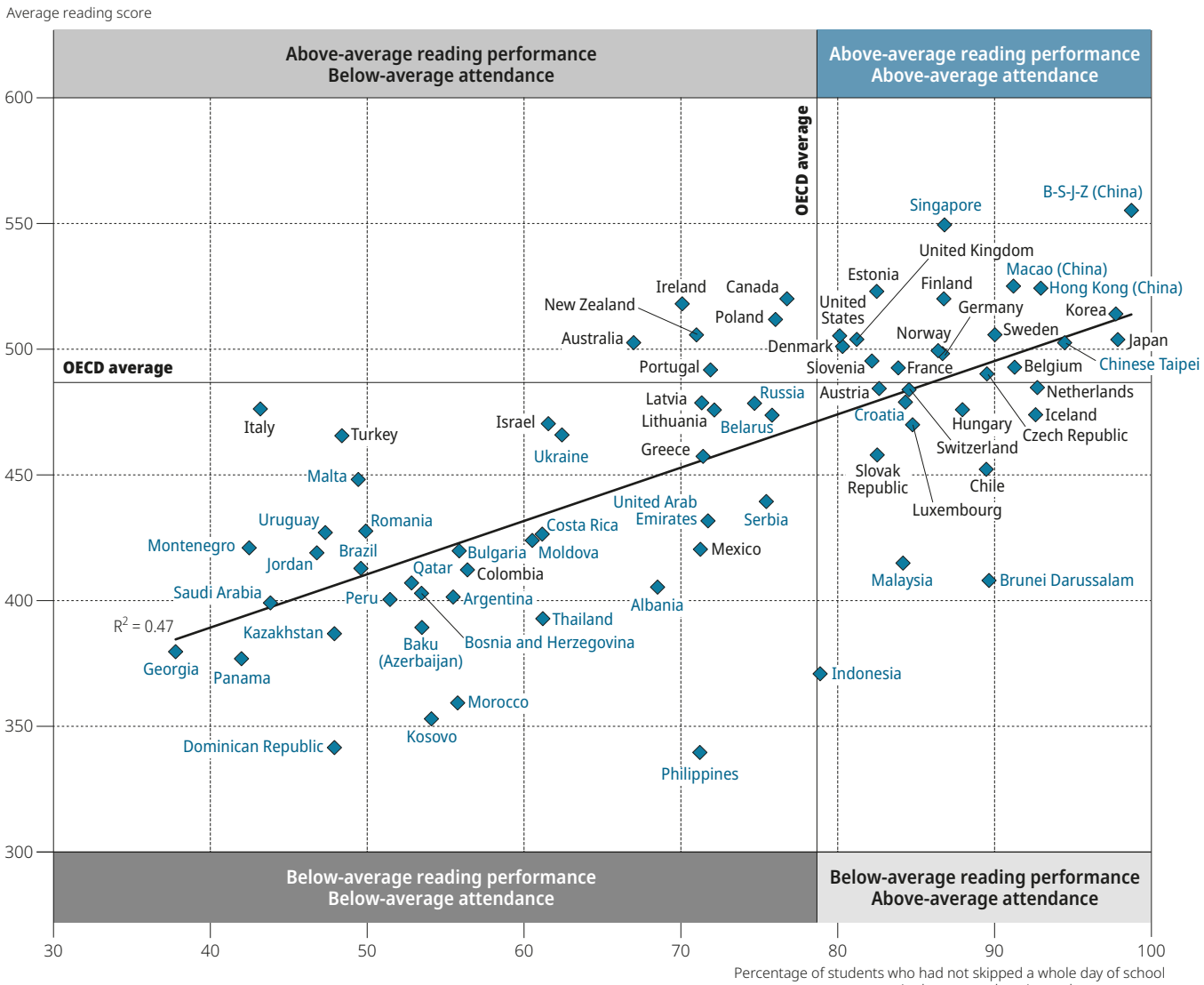
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Students may also see their performance deteriorate when their schoolmates skip school or arrive late for school, and not only when they themselves play truant. On average across OECD countries, students scored 8 points lower in reading for every 10 percentage-point increase in the number of schoolmates who had skipped school, and 5 points lower for every similar increase in the number of schoolmates who had arrived late for school in the two weeks prior to the PISA test, after accounting for students' and schools' socio-economic profile and students' own truancy or lateness (Tables III.B1.4.10 and III.B1.4.11).

Looking at it another way, students enrolled in schools with the lowest incidence of student truancy (i.e. schools in the bottom quarter of the distribution) scored 514 points in reading, whereas students attending schools with the highest incidence (i.e. schools in the top quarter of the distribution) scored 453 points – a significant difference of 62 score points. In Belgium, Croatia, France, Hungary, Luxembourg, Qatar, Romania, Serbia and Slovenia, the difference in reading performance between students in schools with the lowest incidence of student truancy and those in schools with the highest incidence was at least 100 score points.

At the system level too, student truancy and reading performance were significantly associated (Figure III.4.4). Average reading performance was lower in countries and economies with larger shares of students who had skipped a whole day of school in the two weeks prior to the PISA test than in countries/economies with smaller shares of these students.

Figure III.4.4 **Percentage of students who had not skipped school and reading performance**



Source: OECD, PISA 2018 Database, Tables III.B1.4.1 and I.B1.4.

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However, there were a few interesting exceptions. For instance, in Brunei Darussalam and Malaysia, average reading performance was clearly below the OECD average, but student attendance in these countries was also clearly above average. In these two countries, and also in other countries like Indonesia and the Philippines, comparatively high student attendance, relative to what would be expected given these countries' average reading performance, provides many opportunities to improve performance. By contrast, Italy and Turkey had a comparatively high rate of student truancy relative to what would be expected given these countries' average performance in reading.

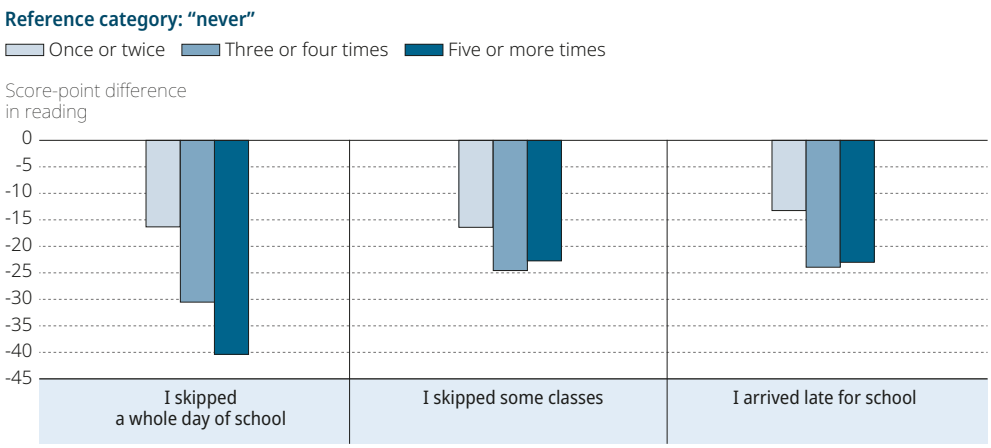
HOW REPEATED TRUANCY AND LATENESS ARE RELATED TO READING PERFORMANCE

PISA has consistently found that students who skip school and arrive late for school, even if sporadically, score lower in the assessment compared to students who never skip school and always arrive on time (OECD, 2016[12]; OECD, 2013[22]). PISA 2018 results confirm this finding (Table III.B1.4.9). However, there is much less evidence on the association between repeatedly skipping school and arriving late for school, on the one hand, and PISA scores, on the other, because the questions are usually reclassified into "never" and "at least once". To examine how chronic truancy and lateness are related to reading performance, one regression analysis was carried out for each education system where the three items ("skipped school", "skipped some classes", "arrived late for school"), with all the categories ("never", "one or two times", "three or four times", "five or more times") were analysed jointly, after accounting for the socio-economic profile of students and schools. In Japan and Korea, so few students had skipped school and classes that only the question about lateness could be examined (Table III.B1.4.1).

The findings in Figure III.4.5 clearly show that, on average across OECD countries, the number of times that students had skipped school or had arrived late for school in the two weeks prior to the PISA assessment was associated with reading performance. However, whereas the negative association with reading performance grew almost linearly with the number of times that students had skipped a whole day of school, it flattened after three or four times in the case of skipping classes and arriving late for school. The results also show that, of the three measures of truancy and lateness, skipping school was the most strongly associated with reading performance. For instance, skipping a whole day of school five or more times during the period was associated with a drop of 40 score points in reading (compared to a student who had not skipped a school day), while skipping some classes or arriving late for school the same number of times were associated with a decline of 23 score points.

Figure III.4.5 **Repeated truancy and lateness, and reading performance**

OECD average



Notes: All values are statistically significant (see Annex A3).

Results based on linear regression analysis, after accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

All predictors have been included in the same linear regression model.

Source: OECD, PISA 2018 Database, Table III.B1.4.12.

StatLink http://dx.doi.org/10.1787/888934029546

In Croatia, Malaysia, Mexico, Norway, Sweden, Chinese Taipei and the United Kingdom, skipping school more than four times during the two weeks prior to the PISA test was associated with a decline of more than 60 score points in the reading assessment (Table III.B1.4.12). In Brunei Darussalam, Germany, New Zealand and Singapore, skipping some classes at least five times was associated with a drop in reading scores of more than 50 points. In Australia, Finland, Hong Kong (China), Japan, Macao (China), Malta, Qatar, Singapore and the United Arab Emirates, arriving late for school at least five times in the two weeks prior to the assessment was associated with a drop of more than 40 score points in the reading assessment.

PREDICTING STUDENT TRUANCY

There are multiple reasons why students skip school, including fear of being bullied, weak school attachment, lack of friends, bad relationships with teachers and academic disengagement (Appleton et al., 2008[2]; Gehlbach, Brinkworth and Harris, 2012[7]; Gottfried, 2017[3]; Hutzell and Payne, 2012[5]). This section tries to identify relevant predictors of student truancy, focusing on five areas:

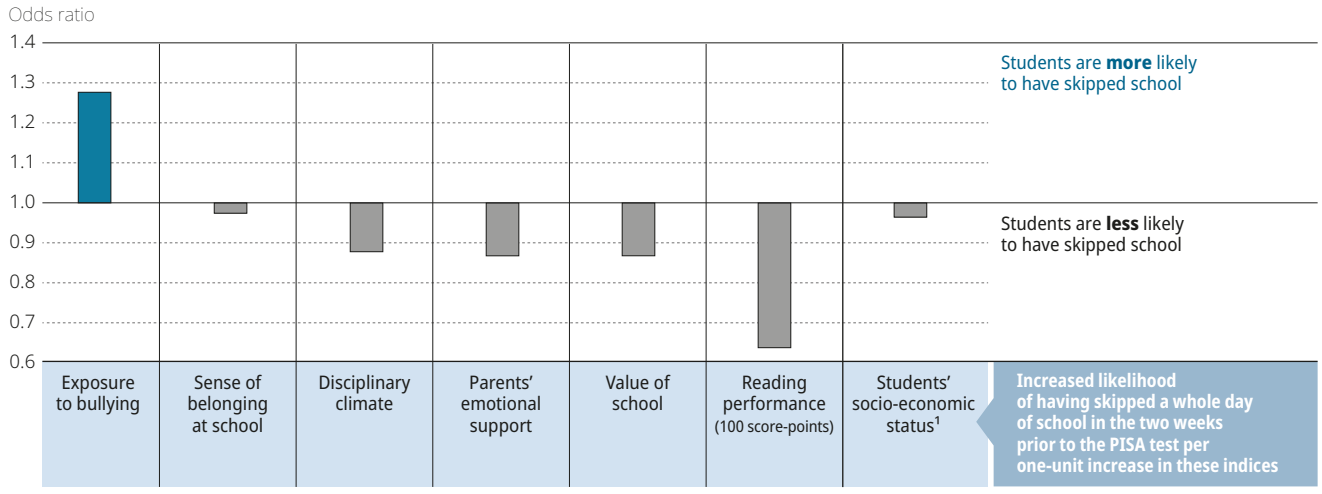
- Feeling safe at school: index of exposure to bullying
- Being academically engaged: index of value of school; and reading performance
- Exposure to peers' disruptive behaviour: index of disciplinary climate
- Receiving emotional support: index of parents' emotional support
- Feeling socially connected at school: index of sense of belonging at school

Other chapters in this volume describe the indices of exposure to bullying (Chapter 2), disciplinary climate (Chapter 3) and sense of belonging at school (Chapter 9). As for the other indices, PISA asked students whether they agree ("strongly disagree", "disagree", "agree", "strongly agree") with the following statements: "My parents support my educational efforts and achievements"; "My parents support me when I am facing difficulties at school"; and "My parents encourage me to be confident". These statements were combined to create the index of parents' emotional support whose average is 0 and standard deviation is 1 across OECD countries. Students who sat the PISA test were also asked the extent to which they agree with the following statements: "Trying hard at school will help me get a good job"; "Trying hard at school will help me get into a good college"; and "Trying hard at school is important". These statements were combined to create the index of value of school whose average is 0 and standard deviation is 1 across OECD countries.

The analysis in Figure III.4.6, which includes all predictors together in the same logit model and accounts for the socio-economic profile of students and schools, reveals that, on average across OECD countries, students were more likely to have skipped a whole day of school at least once in the two weeks prior to the PISA test the more frequently they had been bullied. By contrast, they were less likely to have skipped school the higher their reading performance, the stronger their belief that trying hard at school is important (index of value of school), the better the disciplinary climate in their language-of-instruction lessons, and the stronger the emotional support they received from their parents. Moreover, feeling socially connected at school was only modestly (and negatively) associated with student truancy. Interestingly, the socio-economic status of students (a control variable in the analysis), is only modestly (and negatively) associated with skipping school, even though socio-economically disadvantaged are considerably more likely to skip school than advantaged students (Table III.B1.4.5).

Figure III.4.6 **Predictors of student truancy**

OECD average



1. The socio-economic status is measured by the PISA index of economic, social and cultural status (ESCS).

Notes: All values are statistically significant (see Annex A3).

All predictors have been included in the same logit regression model.

Source: OECD, PISA 2018 Database, Table III.B1.4.13.

StatLink http://dx.doi.org/10.1787/888934029565

Similarly, the country results in Table III.B1.4.13 show that in almost every school system, students were more likely to skip school when they were bullied more frequently, and less likely to skip school when they scored higher in reading. Moreover, in a majority of countries and economies students were less likely to skip school the higher the value attached to schooling, the better the disciplinary climate and the stronger their parents' emotional support. However, in only 11 school systems were students less likely to skip school when they reported a stronger sense of belonging at school or when they had a higher socio-economic status.

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PISA

5

Teacher enthusiasm

This chapter examines differences between countries and economies in teacher enthusiasm, and how it varies according to student and school characteristics. It also looks at how teacher enthusiasm is related to student performance, disciplinary climate and student motivation.

Teacher enthusiasm has traditionally been defined as a lively and motivating teaching style that includes a range of behaviours, such as varied gestures, body movements, facial expressions and voice intonations, and the frequent use of humour, that reflects a strong interest in the subject (Collins, 1978[1]; Murray, 1983[2]). More recently, the emphasis has shifted to the pleasure that teachers take in a subject or in teaching more generally – a definition closer to the ideas of enjoyment, passion and experience (Kunter, 2013[3]). A broad definition should therefore cover both how teachers feel about teaching a subject (experienced enthusiasm) and how they express these feelings to students (displayed enthusiasm) (Frenzel et al., 2019[4]; Keller et al., 2016[5]).

Teacher enthusiasm has positive effects on student attitudes (Keller et al., 2016[5]; Lazarides, Gaspard and Dicke, 2019[6]). For example, several experiments have documented how enthusiastic teachers can instil greater intrinsic motivation, enjoyment and vitality amongst students (Moè, 2016[7]; Patrick, Hisley and Kempler, 2000[8]), and increase the time that students spend on learning tasks (Brigham, Scruggs and Mastropieri, 1992[9]). In qualitative interviews, teachers often describe how the emotional state of the entire classroom depends on the enthusiasm they bring to teaching (Frenzel et al., 2009[10]). University students see teachers who can "bring a subject to life for students" as one of three elements that makes an engaging lecture (Revell and Wainwright, 2009[11]). Teacher enthusiasm may even deter students from cheating on exams (Orosz et al., 2015[12]). Previous studies have also noted that teacher enthusiasm may be particularly beneficial for lecture-style lessons (Gilles and Buck, 2016[13]) and when the enthusiasm is genuine (Keller et al., 2018[14]; Taxer and Frenzel, 2018[15]; Wild et al., 1997[16]).

Teacher enthusiasm can also enhance student learning outcomes, though the observed effects are usually indirect, moderate in magnitude and probably non-linear (Keller et al., 2014[17]; Kunter, 2013[3]; Larkins and McKinney, 1982[18]). Keller, Neumann and Fischer (2012[19]) describe three indirect ways through which teacher enthusiasm may improve student learning: teacher enthusiasm can attract and retain students' attention in class; passionate teachers can serve as role models for students, instilling in them a passion for a subject; and enthusiastic teachers can transmit their positive feelings through emotional contagion (Hatfield, Cacioppo and Rapson, 1993[20]). However, over-enthusiastic teaching may mask meaningless or contradictory content, giving students the erroneous idea that they are learning something of value (Naftulin, Ware and Donnelly, 1973[21]).

This chapter examines teacher enthusiasm in language-of-instruction lessons, as perceived by students. For the first time, PISA asked 15-year-old students whether they agree ("strongly disagree", "disagree", "agree", "strongly agree") with the following statements about their two language-of-instruction lessons prior to sitting the PISA test: "It was clear to me that the teacher liked teaching us"; "The enthusiasm of the teacher inspired me"; "It was clear that the teacher likes to deal with the topic of the lesson"; and "The teacher showed enjoyment in teaching". These statements were combined to create the index of teacher enthusiasm whose average is 0 and standard deviation is 1 across OECD countries. Positive values in this index mean that students perceived their language-of-instruction teachers to be more enthusiastic than the average student across OECD countries did. Student reports of their teacher's level of enthusiasm may differ by subject area, so any findings presented in this chapter in the area of reading (language-of-instruction lessons) may not apply for other subjects, like mathematics and science.

What the data tell us

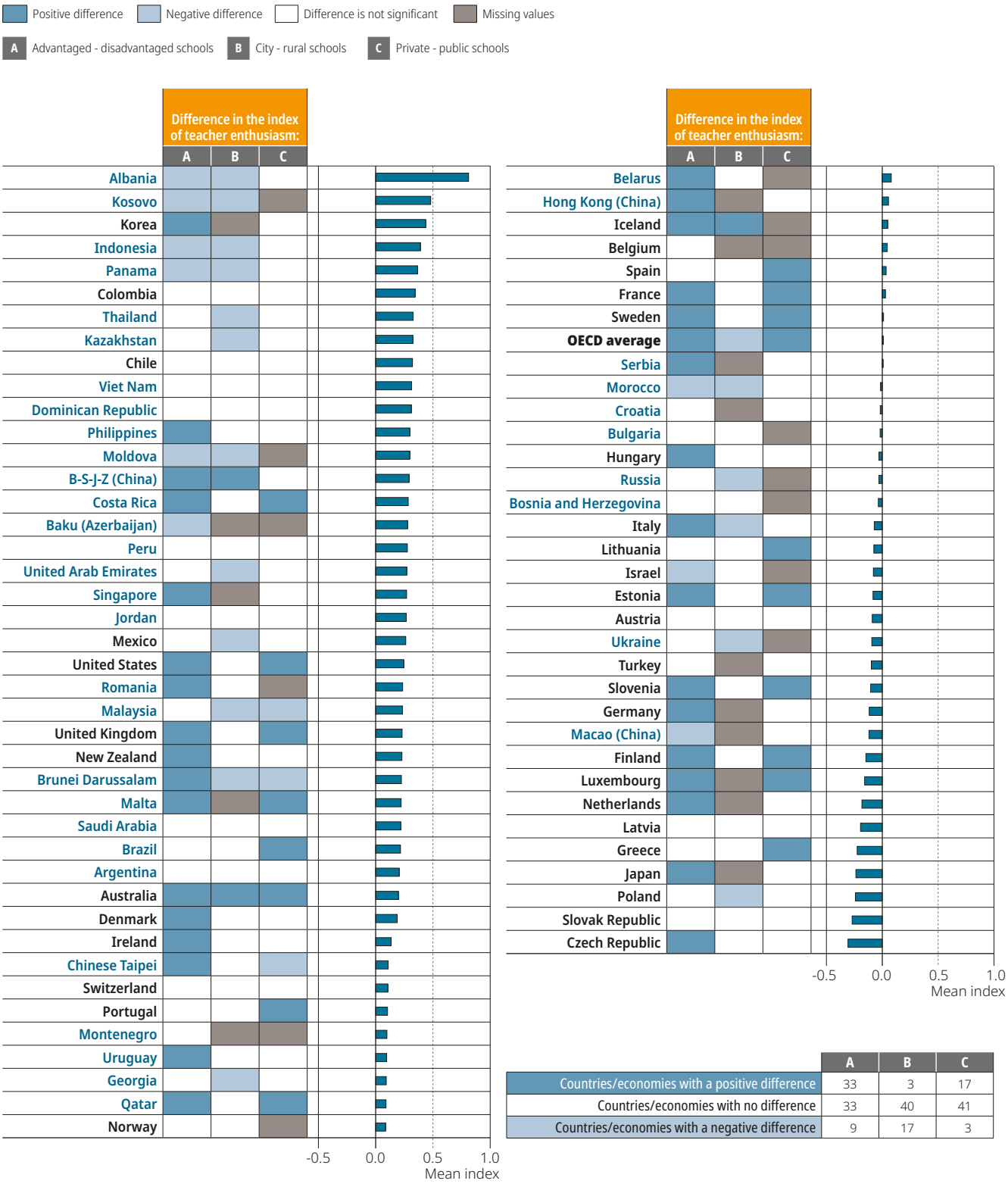
- Most 15-year-old students across OECD countries reported that their language-of-instruction teachers were enthusiastic and enjoyed teaching.
- In 33 countries and economies, teachers in advantaged schools were perceived as more passionate in their teaching, while in 9 countries/economies teachers in disadvantaged schools were perceived as more enthusiastic.
- In most countries and economies, students scored higher in reading when they perceived their teacher as more enthusiastic, especially when they said their teachers were interested in the subject.
- Disciplinary climate and students' motivation were positively associated with teacher enthusiasm, and mediated the relationship between teacher enthusiasm and students' reading performance.

HOW TEACHER ENTHUSIASM VARIES ACROSS COUNTRIES, SCHOOLS AND STUDENTS

Most 15-year-old students in OECD countries reported that, in the two lessons prior to sitting the PISA test, their language-of-instruction teachers were enthusiastic and enjoyed teaching (Table III.B1.5.1). For instance, 73% of students agreed or strongly agreed that the teacher likes teaching them; 79% agreed or strongly agreed that the teacher likes to deal with the topic of the lesson; and 74% of students agreed or strongly agreed that the teacher showed enjoyment in teaching. However, only 55% of students agreed or strongly agreed that the teacher's enthusiasm inspired them. Students in Albania, Colombia, Indonesia, Korea, Kosovo and Panama perceived their teachers to be amongst the most enthusiastic, while students in the Czech Republic, Greece, Japan, Latvia, Poland and the Slovak Republic perceived their teachers to be amongst the least enthusiastic.

Figure III.5.1 **Index of teacher enthusiasm, by school characteristics**

Based on students' reports



	A	B	C
Countries/economies with a positive difference	33	3	17
Countries/economies with no difference	33	40	41
Countries/economies with a negative difference	9	17	3

Countries and economies are ranked in descending order of the index of teacher enthusiasm.

Source: OECD, PISA 2018 Database, Tables III.B1.5.1 and III.B1.5.4.

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In Korea, for instance, almost 9 in 10 students agreed that the language-of-instruction teacher liked teaching them, while in Latvia only 6 in 10 students agreed with this statement. Only in some schools did a large majority of students perceive that their teachers lack passion for their work. For instance, in all countries and economies, except the Czech Republic, Iceland, Poland, Saudi Arabia, the Slovak Republic and Slovenia, less than 1% of students attended a school where more than 75% of students disagreed that the teacher showed enjoyment in teaching (Table III.B1.5.2).

Considering differences across schools, as much as 8% of the variation in the index of teacher enthusiasm lay between schools, on average across OECD countries, which is a larger proportion than for most of the other indices examined in this report (Table III.B1.5.4). Moreover, pupils in more socio-economically advantaged schools perceived their teachers as more enthusiastic than those in disadvantaged schools, on average across OECD countries and in 33 education systems (Figure III.5.1). However, according to students' reports, in Albania, Baku (Azerbaijan), Indonesia, Israel, Kosovo, Macao (China), the Republic of Moldova, Morocco and Panama, teachers in disadvantaged schools were perceived as more passionate in their teaching.

In addition, in 17 school systems, students in rural schools reported higher levels of teacher enthusiasm than students in city schools (Figure III.5.1). Only in Australia, Beijing, Shanghai, Jiangsu and Zhejiang (China) and Iceland did students in urban schools report higher levels of teacher enthusiasm than students in rural schools. Students in private schools reported that their teachers were more enthusiastic than students in public schools, on average across OECD countries and in 17 education systems. The largest differences (at least one-fifth of a standard deviation) in favour of private schools were found in Estonia, Finland, Greece, Portugal, Qatar, Slovenia and the United States (Table III.B1.5.4). Students who attended schools with lower concentrations of students with an immigrant background were more likely to perceive their teachers as enthusiastic than students in schools with higher concentrations of immigrant students, on average across OECD countries and in 16 countries and economies.

Some groups of students reported higher levels of enthusiasm from their language-of-instruction teachers than other groups (Table III.B1.5.3). In a majority of school systems, girls were more likely than boys to report higher levels of teacher enthusiasm, which could be related to differences in the way their teachers teach (girls and boys do not always share the same classrooms; for more details, see Box III.3.1), but also to differences in the way boys and girls appraise their teachers. Other groups of students who were more likely to report higher levels of teacher enthusiasm, on average across OECD countries, include socio-economically advantaged students (compared to disadvantaged students) and students without an immigrant background (compared to those with an immigrant background).

HOW TEACHER ENTHUSIASM IS RELATED TO READING PERFORMANCE

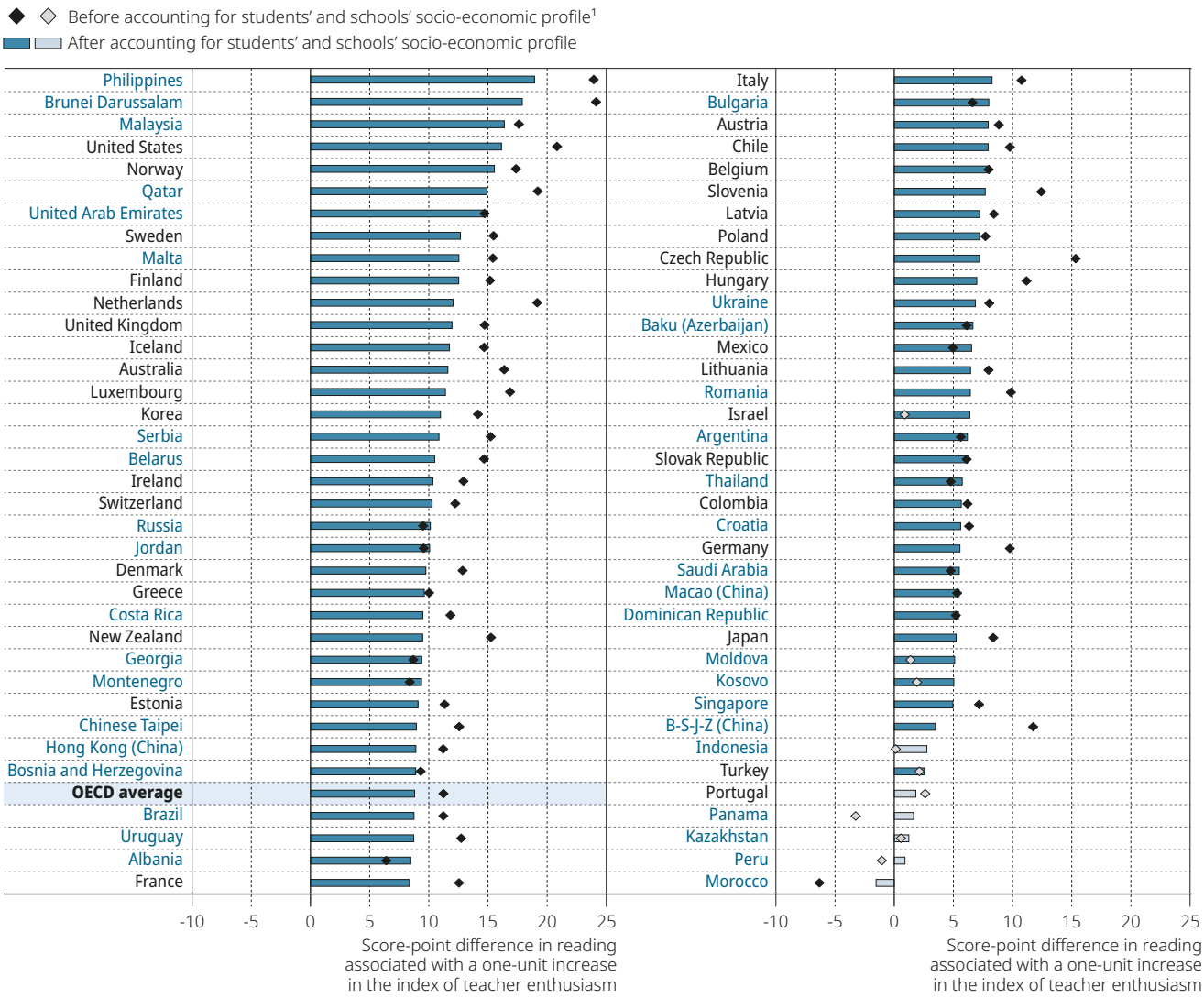
Teacher enthusiasm can improve student achievement, though researchers indicate that the effects are probably indirect in nature and moderate in magnitude (Keller et al., 2014[17]; Kunter, 2013[3]; Larkins and McKinney, 1982[18]). PISA findings reveal that, in a clear majority of countries and economies, the more enthusiastic 15-year-old students perceived their teachers to be, the higher they scored in the reading assessment, even after accounting for the socio-economic profile of students and schools (measured by the PISA index of economic, social and cultural status) (Figure III.5.2 and Table III.B1.5.5). The countries where teacher enthusiasm was the strongest predictor of reading performance – where it accounts for at least 3% of the variation in performance – are Brunei Darussalam, the Netherlands, the Philippines, Qatar and the United States. Amongst the individual components used to create the index of teacher enthusiasm, the one most strongly associated with reading performance across OECD countries was the intrinsic interest that the teacher showed in the subject ("It was clear that the teacher likes to deal with the topic of the lesson").

Students' reading performance is also related to how other students in the school evaluate the language-of-instruction teacher's enthusiasm (Table III.B1.5.6). For every additional unit increase in the school index of teacher enthusiasm (how enthusiastic the students in a school perceive their teachers to be, on average), student reading performance increased by about eight score points, on average across OECD countries and after accounting for the student-level index and the socio-economic profile of students and schools. In some school systems, such as Malaysia, the Netherlands, Qatar, Serbia and Chinese Taipei, the increase in reading scores was more than 30 points.

When specific items of the index of teacher enthusiasm were considered, in schools with the largest share of students who agreed that the language-of-instruction teacher likes to deal with the topic of the lesson (that is, schools in the top quarter of the indicator in their country/economy) the average reading score was 502 points. In schools with the lowest percentage (that is, schools in the bottom quarter of the indicator in their country/economy) the average reading score was 470 points.

According to a previous study, excessively enthusiastic teachers may make students believe they are learning even when the content delivered is meaningless and contradictory (Naftulin, Ware and Donnelly, 1973[21]). However, the correlational evidence presented in Figure III.5.3 does not appear to support the idea that overly enthusiastic teachers can be detrimental to student learning.

Figure III.5.2 **Teacher enthusiasm and reading performance**



1. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Note: Statistically significant values are shown in darker tones (see Annex A3).

Countries and economies are ranked in descending order of the score-point difference associated with a one-unit increase in the index of teacher enthusiasm, after accounting for students' and schools' socio-economic profile.

Source: OECD, PISA 2018 Database, Table III.B1.5.5.

StatLink http://dx.doi.org/10.1787/888934029603

Students generally scored higher in reading as they agreed more strongly with the statements about the enthusiasm of their language-of-instruction teachers. On average across OECD countries, students who strongly disagreed with the statements scored the lowest in reading, and those who strongly agreed with the statements scored the highest, after accounting for students' socio-economic status, gender and immigrant background. The relationship with reading performance was strongest when students were asked how much they agreed that their teacher liked the topic of the lesson. For instance, students who strongly agreed that their teacher likes to deal with the topic of the lesson scored 16 points higher than students who agreed, 24 points higher than students who disagreed, and 50 points higher than students who strongly disagreed with the statement.

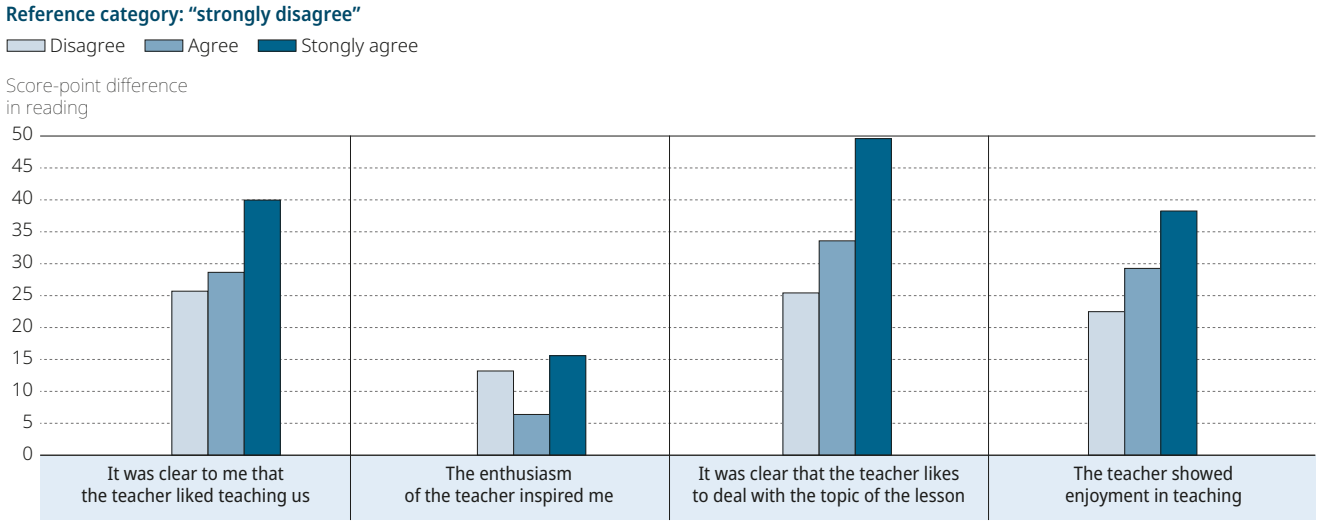
HOW TEACHER ENTHUSIASM IS RELATED TO STUDENT BEHAVIOUR AND MOTIVATION

There seems to be agreement that teacher enthusiasm can have positive effects on students' attitudes towards learning (Keller et al., 2016[5]). A passionate teacher can motivate and inspire students, and increase the productive time they spend on learning tasks (Keller et al., 2014[17]; Kunter et al., 2013[22]). One of the reasons why they may concentrate more on learning activities is that an enthusiastic teacher leaves few opportunities for students to get bored and misbehave. For instance, it is difficult for

students to chat with each other when the teacher is speaking firmly and clearly; and students have little time to disrupt the lesson if they are genuinely engaged in the activities organised by an energetic teacher. The relationship could go the other way round too: it is probably much harder for teachers to be enthusiastic in classrooms with disruptive, uninterested and underachieving students than in classrooms with respectful, motivated and high-performing students. For all these reasons, teacher enthusiasm is expected to be positively associated with the disciplinary climate in class and with students' motivation.

Figure III.5.3 **Prevalence of teacher enthusiasm and reading performance**

OECD average



Notes: All values are statistically significant (see Annex A3).

Results based on linear regression analysis, after accounting for students' socio-economic profile, gender and immigrant background. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Source: OECD, PISA 2018 Database, Table III.B1.5.7.

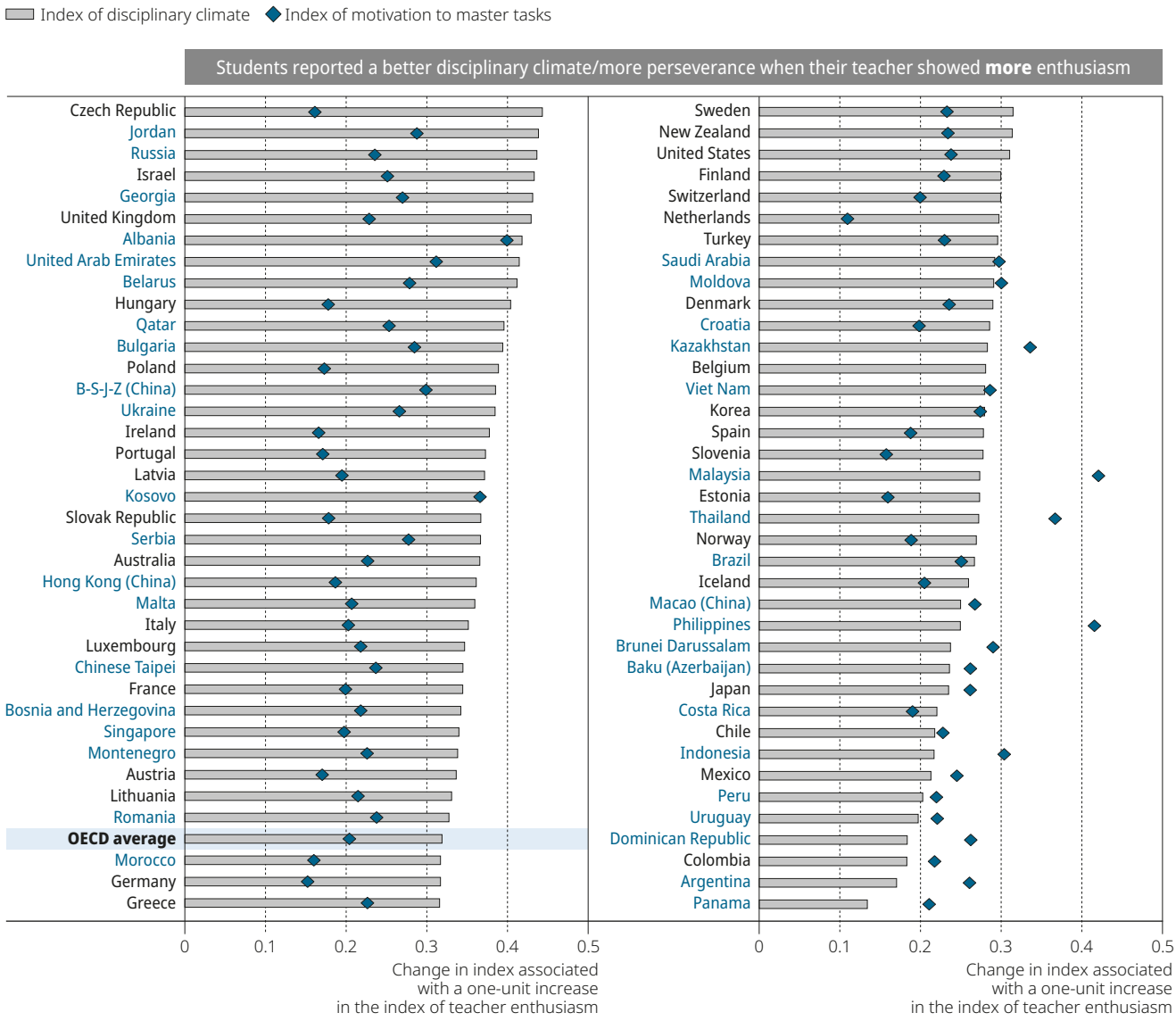
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In order to measure the disciplinary climate, PISA asked students how frequently a series of disruptive behaviours happen in their language-of-instruction lessons, such as students not listening to the teacher (for more details, see Chapter 3). These statements were combined to create the index of disciplinary climate, where higher values indicate a better disciplinary climate in language-of-instruction lessons. PISA 2018 found a positive association between this index and students' perceptions of teacher enthusiasm in every participating country and economy, after accounting for the socio-economic profile of students and schools (Figure III.5.4). The association was strongest in Albania, Belarus, the Czech Republic, Georgia, Hungary, Israel, Jordan, the Russian Federation, the United Arab Emirates and the United Kingdom, and weakest in Argentina, Colombia, the Dominican Republic, Panama and Uruguay.

PISA also asked students how much they agreed ("strongly disagree", "disagree", "agree", "strongly agree") with four statements about their motivation to master tasks in general, i.e. not only in language-of-instruction lessons. These statements include: "I find satisfaction in working as hard as I can"; "Once I start a task, I persist until it is finished"; "Part of the enjoyment I get from doing things is when I improve on my past performance"; and "If I am not good at something, I would rather keep struggling to master it than move on to something I may be good at". The first three statements were combined to create the index of motivation to master tasks, where higher values indicate a higher motivation to master tasks. In every school system, teacher enthusiasm was positively related to students' motivation to master tasks, after accounting for the socio-economic profile of students and schools, though the association was generally weaker than that with disciplinary climate, probably because the question about motivation to master tasks did not relate specifically to language-of-instruction lessons (Figure III.5.4). The countries and economies where this association was strongest were Albania, Kosovo, Malaysia, the Philippines and Thailand; the association was weakest in Germany, the Netherlands and Slovenia.

While the hypothesis that the enthusiasm of language-of-instruction teachers shapes both the disciplinary climate during their lessons and students' motivation is sensible, there are other plausible explanations for the results described above. For instance, teachers may be more motivated and show greater enthusiasm in classrooms with well-behaved students; motivated and perseverant students may be more likely than less engaged students to recognise teachers' enthusiasm; and teachers may be more passionate in their teaching when their students are motivated and use their learning time productively.

Figure III.5.4 **How teacher enthusiasm is related to disciplinary climate and students' motivation to master tasks**



Notes: All values are statistically significant (see Annex A3).

Results based on linear regression analysis, after accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Countries and economies are ranked in descending order of the change in the index of disciplinary climate associated with a one-unit increase in the index of teacher enthusiasm.

Source: OECD, PISA 2018 Database, Table III.B1.5.8.

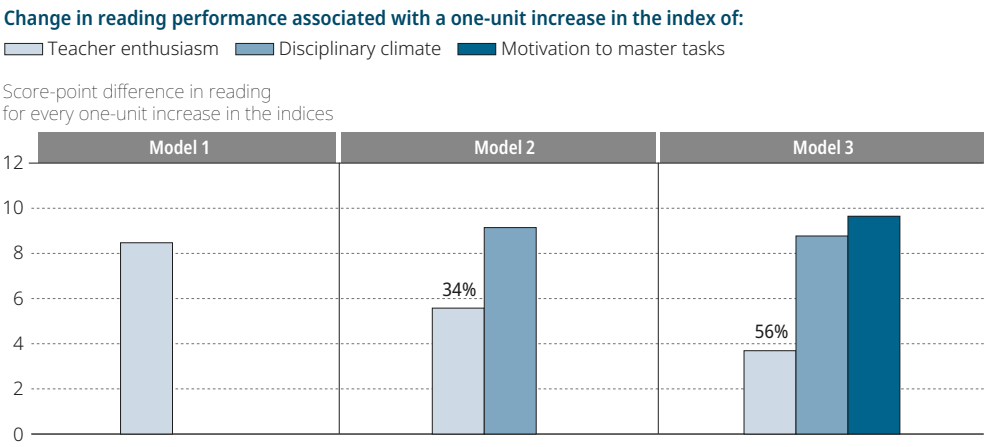
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Previous studies have indicated that teacher enthusiasm may improve student achievement, but that any potential effect is probably indirect (Keller et al., 2014[17]; Kunter, 2013[3]). In this regard, teacher enthusiasm may be positively associated with reading performance mostly because passionate teachers have an impact on student behaviour and attitudes, such as motivation and perseverance, and these positive behaviour and attitudes, in turn, enhance student performance. PISA cannot test the causal nature of these relationships, but it can provide an indication of how plausible the hypothesis is.

The findings shown in Figure III.5.5 reveal that, on average across OECD countries, the relationship between teacher enthusiasm and reading performance, after accounting for the socio-economic profile of students and schools, weakens by 34% after accounting for the index of disciplinary climate in language-of-instruction lessons, and by 56% after also accounting for the index of motivation to master tasks. Similar results are observed for a large number of countries and economies (Table III.B1.5.9). These findings are in line with the idea that teacher enthusiasm and reading performance are, to a great extent, indirectly related.

Figure III.5.5 **Explaining the positive relationship between teacher enthusiasm and reading performance**

OECD average



Notes: All values are statistically significant (see Annex A3).

Results based on linear regression analysis, after accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

The three linear regression models use the same sample.

The percentage of the association between teacher enthusiasm and reading performance, after accounting for socio-economic profile, that is mediated by the indices of disciplinary climate and student perseverance is shown inside the blue bars.

Source: OECD, PISA 2018 Database, Table III.B1.5.9.

StatLink http://dx.doi.org/10.1787/888934029660

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PISA

6

Teachers' support and teaching practices

This chapter examines differences between countries and economies in teachers' support and feedback, and how support from teachers is associated with school characteristics and students' reading performance. It also explores how teaching practices in language-of-instruction lessons are inter-related, and how these teaching practices are related to students' enjoyment of reading.

Interactions between students and their teachers play a crucial role in students' learning and their feelings towards school. Students need to feel that their teachers care about them and their achievement to fully engage in learning activities and perform at their best (Federici and Skaalvik, 2014[1]). Teachers support students by encouraging them and taking the time to help them, but also by setting goals and rules, treating them fairly and giving them the opportunity to make their own choices (Klem and Connell, 2004[2]; Wang and Holcombe, 2010[3]).

Students who feel supported by their teachers feel more motivated about school and perform at higher levels (Pitzer and Skinner, 2017[4]; Ricard and Pelletier, 2016[5]). Several studies find that teachers' emotional support is associated with better behavioural outcomes in students, such as engagement in learning, academic enjoyment and self-efficacy, all of which lead to greater effort and perseverance (Federici and Skaalvik, 2014[1]; Lee, 2012[6]; Ruzek et al., 2016[7]; Sakiz, Pape and Hoy, 2012[8]). Support from teachers is also related to higher levels of intrinsic motivation and lower levels of anxiety (Pitzer and Skinner, 2017[4]; Ricard and Pelletier, 2016[5]; Sakiz, Pape and Hoy, 2012[8]; Yu and Singh, 2018[9]). Federici and Skaalvik (2014[1]) find that support in the form of tangible and practical help is most strongly and directly related to these outcomes.

Through these positive effects on students' attitudes, support from teachers is also indirectly linked to academic achievement. Students who benefit from a supportive environment are more engaged in school activities, which, in turn, allows them to perform at higher levels (Hughes et al., 2008[10]; Klem and Connell, 2004[2]; Reyes et al., 2012[11]). Similarly, Lee (2012[6]) and Wang and Holcombe (2010[3]) find that supportive teacher-student relations positively affect student achievement, both directly and indirectly through a greater sense of belonging at school.

What the data tell us

- On average across OECD countries, about three in four students reported that, in most or every language-of-instruction lesson, the teacher gives extra help when students need it.
- Students in socio-economically disadvantaged schools reported greater teacher support than students in advantaged schools, on average across OECD countries and in 35 partner countries and economies.
- On average across OECD countries and in 43 education systems, students who perceived greater support from teachers scored higher in reading, after accounting for the socio-economic profile of students and schools.
- Teacher enthusiasm and teachers' stimulation of reading engagement are the teaching practices most strongly (and positively) associated with students' enjoyment of reading, after accounting for socio-economic status, reading performance and other teaching practices.

Support from teachers is also associated with better well-being outcomes for students, both in and outside of school. Suldo et al. (2009[12]) find that social support from teachers is associated with greater student well-being, accounting for 16% of the variation in their subjective well-being. They also show, along with Guess and McCane-Bowling (2016[13]), that more supportive teachers make for happier students, who report greater satisfaction with their lives. In addition to providing guidance and encouragement to students in performing a task, teachers can help improve student outcomes by giving them feedback on how well they did on that task (Hattie and Timperley, 2007[14]; Lipko-Speed, Dunlosky and Rawson, 2014[15]; Tunstall and Gsipps, 1996[16]).

This chapter focuses on teachers' support and feedback. In 2018, PISA asked students how often ("never or hardly ever", "some lessons", "most lessons", "every lesson") the following things happen in their language-of-instruction lessons: "The teacher shows an interest in every student's learning"; "The teacher gives extra help when students need it"; "The teacher helps students with their learning"; and "The teacher continues teaching until students understand". Students' responses were combined to create the index of teacher support whose average is 0 and standard deviation is 1 across OECD countries. Higher values in the index mean that students perceive their language-of-instruction teacher to provide support more frequently.

In addition, students were asked whether they agree ("strongly disagree", "disagree", "agree", "strongly agree") with the following statements regarding their past two language-of-instruction lessons: "The teacher made me feel confident in my ability to do well in the course"; "The teacher listened to my view on how to do things"; and "I felt that the teacher understood me".

Students were also asked how often ("never or almost never", "some lessons", "many lessons", "every lesson or almost every lesson") the following things happen in their language-of-instruction lessons: "The teacher gives me feedback on my strengths in this subject"; "The teacher tells me in which areas I can still improve"; and "The teacher tells me how I can improve my performance".

Students' answers were combined to create the index of teacher feedback whose average is 0 and standard deviation is 1 across OECD countries. Higher values in the index mean that students perceive their language-of-instruction teacher to provide feedback more frequently.

HOW TEACHER SUPPORT VARIES BETWEEN COUNTRIES, SCHOOLS AND STUDENTS

On average across OECD countries in 2018, the majority of students reported that the teacher supports students in most or all of their language-of-instruction lessons (Figure III.6.1). About three in four students reported that, in most or every lesson, the teacher gives extra help when students need it and that the teacher helps students with their learning; around 70% of students reported that, with similar frequency, the teacher shows an interest in every student's learning and that the teacher continues teaching until students understand. In Albania, 93% of students reported that the teacher helps students with their learning, and 92% of students reported that the teacher continues teaching until students understand.

Only in a few countries did less than 60% of students report frequent teacher support in their language-of-instruction lessons. For instance, in Slovenia, only 44% of students reported that the teacher helps students with their learning in most or every lesson; 52% reported that the teacher continues teaching until students understand; and 53% reported that the teacher shows an interest in every student's learning. In Ukraine, 78% of students reported that the teacher helps students with their learning in most or every lesson, but only 43% of students reported that the teacher shows an interest in every student's learning.

Students also reported that they receive a great deal of emotional support from their language-of-instruction teachers (Table III.B1.6.2). Across OECD countries, 71% of students agreed or strongly agreed that the teacher made them feel confident in their ability to do well in the course, and 70% agreed or strongly agreed that they felt the teacher understood them. Some 67% of students agreed or strongly agreed that the teacher listened to their view on how to do things. In Japan, fewer than one in two students agreed with this statement, and just over one in two students agreed that the teacher made them feel confident or that they felt the teacher understood them.

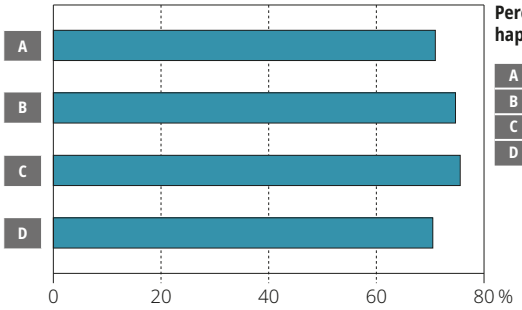
By contrast, only between 10% and 15% of students reported that they receive feedback, in any of the three forms they were asked about, in every or almost every lesson (Table III.B1.6.3). In 35 countries and economies, less than 10% of students reported getting feedback on their strengths in every or almost every lesson. More important, many students reported never, or almost never, receiving any feedback. For instance, more than half of students in Japan stated that their language-of-instruction teacher never, or almost never, gives them feedback on their strengths; at least 30% of students in Argentina, Costa Rica, Japan, Saudi Arabia and Slovenia said that their teacher never, or almost never, tells them in which areas they can still improve; and at least one in four students in Belgium, Costa Rica, Iceland, Israel, Slovenia and Spain reported that their teacher never, or almost never, tells them how they can improve their performance.

There are wide variations across schools in the extent to which teachers provide support (Figure III.6.2 and Table III.B1.6.6). PISA 2018 results show that, on average across OECD countries, about 6% of the variation in the index of teacher support lies between schools, a proportion somewhat higher than that in other indices examined in this report. In 35 countries and economies, and on average across OECD countries, students in socio-economically disadvantaged schools were more likely than students in advantaged schools to report that they have supportive teachers (Figure III.6.2). This is especially true in Austria, where the difference is about half a standard deviation in favour of students in disadvantaged schools (Table III.B1.6.6). Only in Australia, Beijing, Shanghai, Jiangsu and Zhejiang (China) (hereafter "B-S-J-Z [China]"), Brunei Darussalam, Finland and Iceland were students in advantaged schools more likely than those in disadvantaged schools to report that they have supportive teachers. In around half of the countries and economies with available data, students in rural schools were more likely than students in urban schools to report that their teachers are supportive; in the other half, there was no difference in the index related to school location. In 20 school systems, and on average across OECD countries, students in private schools were more likely than their counterparts in public schools to report frequent teacher support. The largest differences in favour of private schools were observed in Switzerland and the United States. In comparison, in Germany, Malaysia, Panama, Qatar, Chinese Taipei and the United Arab Emirates, students in public schools were more likely than students in private schools to report frequent teacher support.

Some groups of students received greater support from teachers than others. Disadvantaged students reported greater teacher support than advantaged students, on average across OECD countries and in 26 partner countries and economies, including Austria, Germany and Montenegro, where the difference was at least a quarter of a standard deviation (Table III.B1.6.5). However, in Australia, B-S-J-Z (China), Brunei Darussalam, Denmark, Finland, Kazakhstan, Korea, New Zealand, Sweden and the United States, advantaged students reported greater academic support from their teachers than disadvantaged students did. Given that disadvantaged students are generally in greater need of academic and emotional support, it is encouraging to observe that in only a few school systems are they receiving less support than their advantaged peers. Moreover, on average across OECD countries, boys reported receiving somewhat more frequent teacher support than girls did.

Figure III.6.1 **Teacher support in language-of-instruction lessons**

OECD average



Percentage of students who reported the following things happen in most or every lesson

- **A** The teacher shows an interest in every student's learning
- **B** The teacher gives extra help when students need it
- **C** The teacher helps students with their learning
- **D** The teacher continues teaching until students understand

	Percentage of students who reported the following things happen in most or every language-of-instruction lesson:			
	A	B	C	D
Albania	87	87	93	92
Viet Nam	89	86	89	85
Jordan	86	85	88	87
Dominican Republic	89	81	89	85
Portugal	84	86	89	83
Saudi Arabia	84	83	88	86
Chile	87	81	89	83
Moldova	84	80	89	86
Philippines	85	82	86	85
Costa Rica	89	81	88	80
Baku (Azerbaijan)	86	80	89	83
Mexico	89	83	87	79
Malaysia	79	84	89	84
Kazakhstan	80	82	88	86
Kosovo	76	83	89	87
Brazil	86	78	88	82
Peru	87	80	87	79
Belarus	86	82	89	76
B-S-J-Z (China)	83	86	86	76
Singapore	80	84	88	78
Colombia	88	76	87	78
Argentina	86	79	86	77
Malta	81	80	85	80
United Arab Emirates	81	81	85	80
Qatar	81	81	85	80
Indonesia	73	81	88	83
United Kingdom	79	81	88	76
Brunei Darussalam	71	81	88	82
Thailand	83	79	82	79
Uruguay	82	76	84	79
Denmark	77	78	87	79
Korea	79	80	87	75
Finland	74	85	87	75
Australia	79	81	85	76
New Zealand	78	82	86	75
Iceland	77	77	86	80
Panama	85	76	83	76

	Percentage of students who reported the following things happen in most or every language-of-instruction lesson:			
	A	B	C	D
Japan	75	81	83	77
Georgia	87	68	82	77
Russia	76	81	79	77
Sweden	76	76	84	76
Turkey	73	74	85	76
Ireland	76	75	81	74
United States	77	77	83	68
Romania	74	73	80	78
Montenegro	80	76	71	72
Latvia	61	79	82	75
Italy	76	72	78	70
Hong Kong (China)	73	74	78	70
Bulgaria	76	70	74	75
Spain	75	69	80	71
Serbia	76	78	66	70
Lithuania	61	77	81	71
Norway	70	71	80	69
Morocco	72	66	77	75
Chinese Taipei	57	79	82	70
Macao (China)	70	72	75	68
Bosnia and Herzegovina	75	76	63	69
Estonia	60	74	76	68
Hungary	73	73	68	64
Switzerland	66	74	67	69
Belgium	65	73	64	70
Israel	64	66	69	72
Slovak Republic	70	74	62	62
Czech Republic	70	78	61	56
Luxembourg	66	71	61	67
Germany	61	73	63	63
Greece	56	67	75	62
Ukraine	43	63	78	74
France	57	65	69	66
Poland	62	68	65	62
Netherlands	61	69	52	61
Croatia	64	67	56	52
Austria	63	65	52	58
Slovenia	53	59	44	52

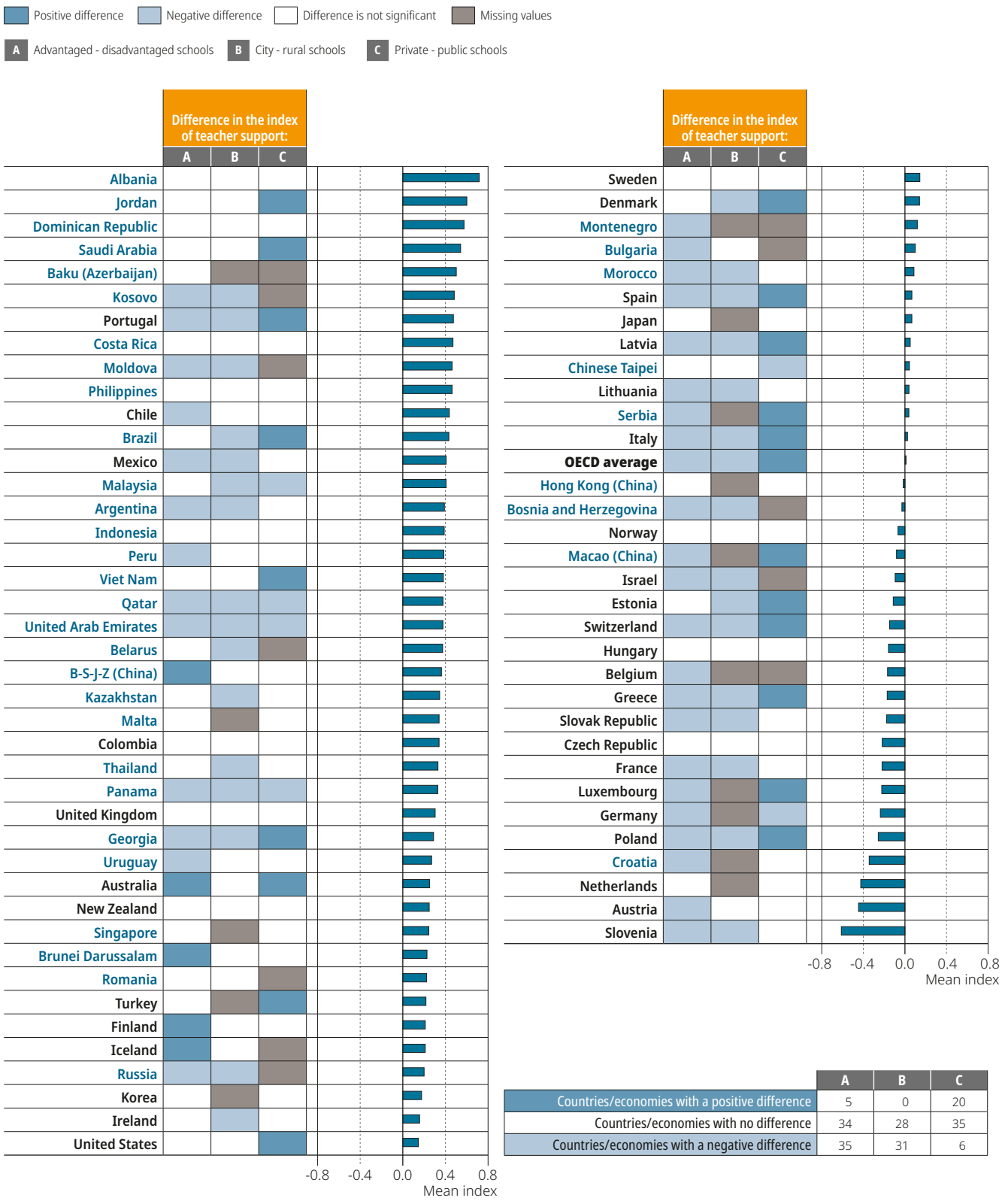
Countries and economies are ranked in descending order of the percentage of students who reported teacher support in most or every lesson (average of four items).

Source: OECD, PISA 2018 Database, Table III.B1.6.1.

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Figure III.6.2 **Index of teacher support, by school characteristics**

Based on students' reports



	A	B	C
Countries/economies with a positive difference	5	0	20
Countries/economies with no difference	34	28	35
Countries/economies with a negative difference	35	31	6

Countries and economies are ranked in descending order of the index of teacher support.

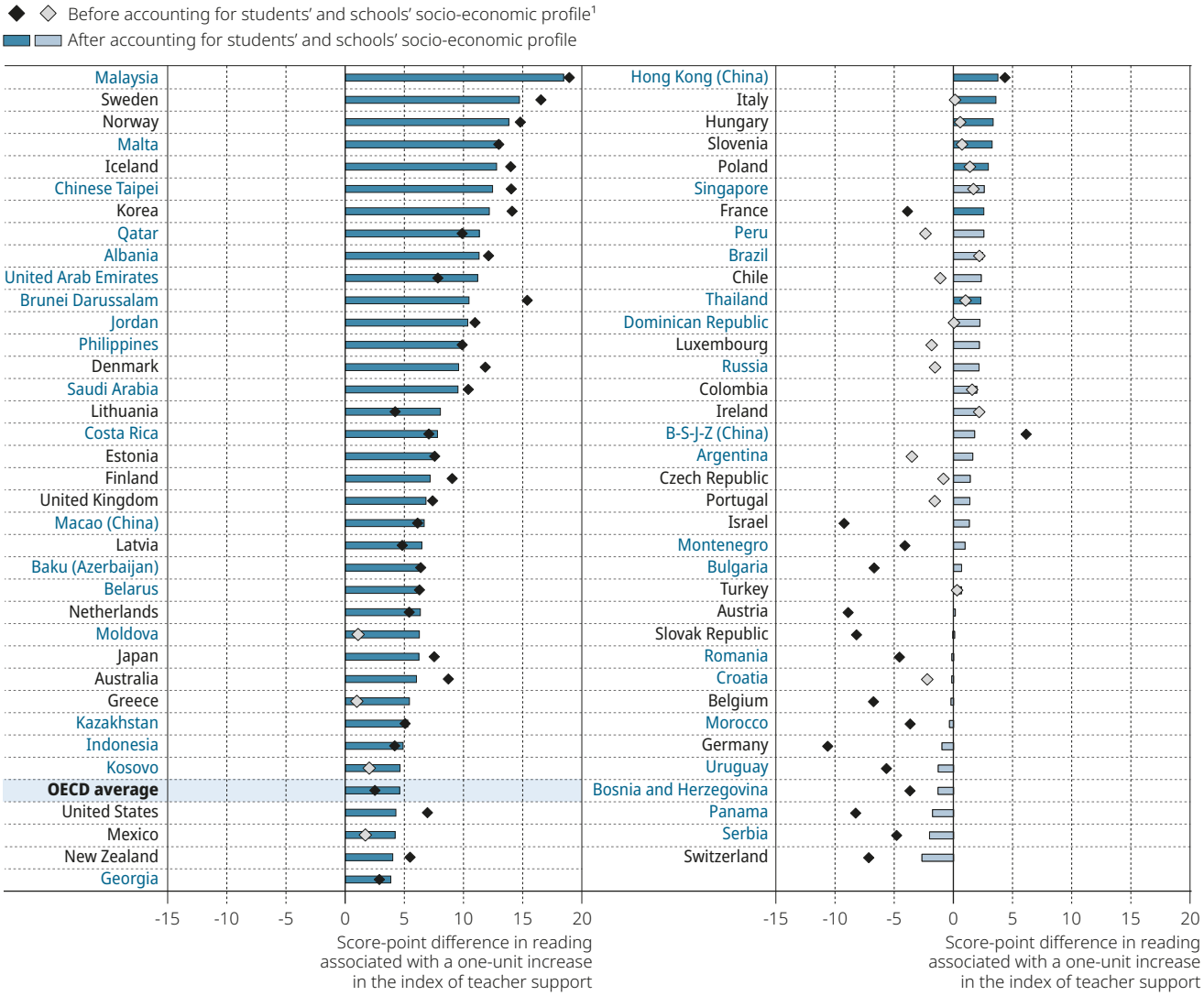
Source: OECD, PISA 2018 Database, Tables III.B1.6.1 and III.B1.6.6.

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HOW TEACHER SUPPORT IS RELATED TO READING PERFORMANCE

On average across OECD countries and in 43 education systems, students who perceived greater support from language-of-instruction teachers scored higher in reading, after accounting for the socio-economic profile of students and schools (measured by the PISA index of economic, social and cultural status) (Figure III.6.3). A one-unit increase in the index of teacher support was associated with an increase of 5 score points in reading performance across OECD countries and, in Malaysia, with an increase of 18 score points. Moreover, since in many countries and economies socio-economically disadvantaged students were more likely to receive teacher support, and also tended to score lower in the reading assessment, in all 15 countries and economies where the relationship between teacher support and reading performance was negative, it became non-significant or positive once students' and schools' socio-economic profile was accounted for.

Figure III.6.3 **Teacher support and reading performance**



1. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Note: Statistically significant values are shown in darker tones (see Annex A3).

Countries and economies are ranked in descending order of the score-point difference associated with a one-unit increase in the index of teacher support, after accounting for students' and schools' socio-economic profile.

Source: OECD, PISA 2018 Database, Table III.B1.6.7.

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In the vast majority of countries and economies, students who reported that their teacher is supportive in most or all of their language-of-instruction lessons scored significantly higher on the PISA reading assessment (Table III.B1.6.7). However, in some countries, the relationship varied considerably, depending on what, specifically, the teacher does. For instance, in Indonesia, New Zealand and Singapore, students scored the same whether or not they reported that their teacher frequently continues

teaching until students understand, while they scored at least 13 points higher when they reported that, in most or all lessons, the language-of-instruction teacher gives extra help when students need it. In Israel, teachers' practices of helping students with their learning and of continuing teaching until students understand were associated with an improvement in reading performance of 11 and 19 points, respectively; but students did not score any higher when they reported that their teacher shows an interest in every student's learning or gives extra help.

The results look somewhat different when considering the association at the school level. On average across OECD countries, students scored slightly lower in reading when their peers reported greater teacher support (Table III.B1.6.8). For instance, students enrolled in schools where students most frequently reported that teachers showed an interest in every student's learning (schools in the top quarter of that indicator in the country/economy) scored 479 points in the reading assessment, on average, whereas those attending schools where students least frequently reported that teachers showed an interest in every student's learning (schools in the bottom quarter of that indicator in the country/economy) scored 491 points.

HOW IS TEACHER SUPPORT RELATED TO OTHER TEACHING PRACTICES?

Even if there is no single "best" way of teaching, teachers need to decide which instructional practices they use in their lessons and how much time they allocate to each of them (OECD, 2016[17]). Teachers need to consider, for example, how much time they will devote to setting goals, explanations and questions; how much time they will spend supporting struggling students and providing feedback; how much emphasis will be given to stimulating students; and how flexible their lessons will be. Moreover, teachers need to decide how much and when to combine different teaching approaches: all teaching strategies can be combined over the course of a semester; some may even be combined during a single lesson. This section looks at how the different teaching practices cited in the student questionnaire (teacher support, teacher feedback, teacher-directed instruction, teachers' stimulation of reading engagement, adaptive instruction and teacher enthusiasm) are related to each other. Are there certain teaching strategies that are more likely to be used with teacher support and feedback?

PISA asked students several questions about the teaching practices used in their language-of-instruction lessons. The indices of teacher support and feedback were presented above, and the index of teacher enthusiasm was described in Chapter 5. Three other indices are analysed in this section. For each index, the average is 0 and standard deviation is 1 across OECD countries. Positive values in the index indicate that the teaching practices are used more frequently.

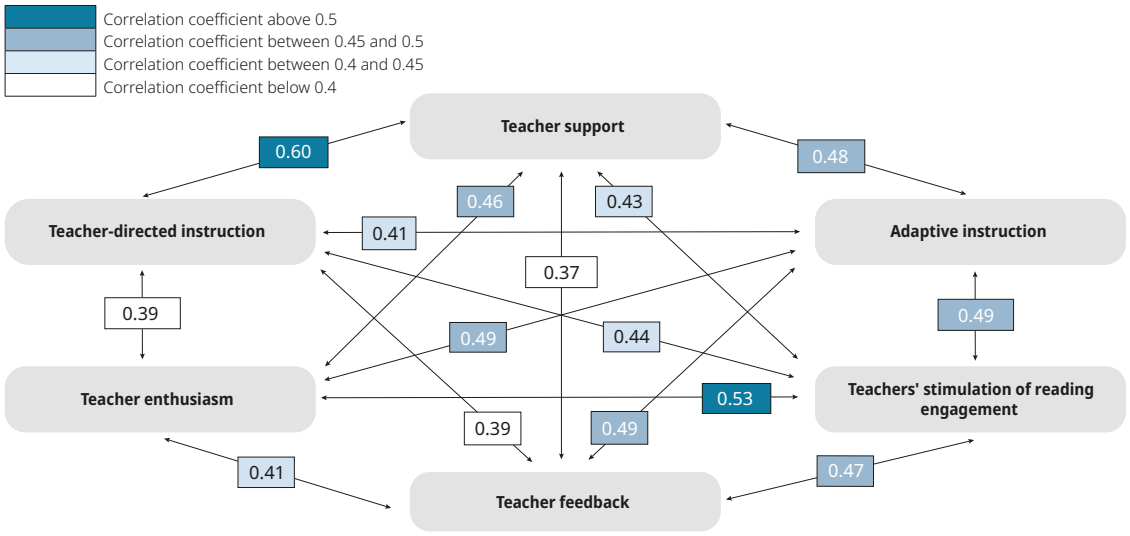
- **The index of teacher-directed instruction** was constructed using students' descriptions of how often ("never or hardly ever", "some lessons", "most lessons", "every lesson") the following things happen in their language-of-instruction lessons: "The teacher sets clear goals for our learning"; "The teacher asks questions to check whether we have understood what was taught"; "At the beginning of a lesson, the teacher presents a short summary of the previous lesson"; and "The teacher tells us what we have to learn".
- **The index of teachers' stimulation of reading engagement** was constructed using students' descriptions of how often ("never or hardly ever", "in some lessons", "in most lessons", "In all lessons") the following things happen in their language-of-instruction lessons: "The teacher encourages students to express their opinion about a text"; "The teacher helps students relate the stories they read to their lives"; "The teacher shows students how the information in texts builds on what they already know"; "The teacher poses questions that motivate students to participate actively".
- **The index of adaptive instruction** was constructed using students' descriptions of how often ("never or almost never", "some lessons", "many lessons", "every lesson or almost every lesson") the following things happen in their language-of-instruction lessons: "The teacher adapts the lesson to [my] class's needs and knowledge"; "The teacher provides individual help when a student has difficulties understanding a topic or task"; and "The teacher changes the structure of the lesson on a topic that most students find difficult to understand".

While all indices of teaching practices were positively associated (probably because of students' response styles), some teaching approaches are more strongly correlated than others (Figure III.6.4). On average across OECD countries, the teaching strategies indices that were most strongly associated were teacher support and teacher-directed instruction, and teacher enthusiasm and teachers' stimulation of reading engagement. By contrast, the least frequently combined teaching strategies, according to students' reports, were teacher-directed instruction and teacher enthusiasm, teacher-directed instruction and teacher feedback, and teacher support and teacher feedback.

There were wide variations across countries and economies in these relationships. For instance, teacher-directed instruction and teacher support are most strongly associated in Hong Kong (China) and Korea, and least so in Kosovo and the Republic of Moldova (hereafter "Moldova") (Table III.B1.6.9). Teacher support was most strongly associated with teachers' stimulation of reading engagement in Australia, B-S-J-Z (China), Hong Kong (China), Korea and New Zealand. Teacher feedback and adaptive instruction, two closely connected teaching approaches (Mostafa, Echazarra and Guillou, 2018[18]), co-existed most frequently, at least according to students' reports, in Hong Kong (China), Jordan, Korea, Serbia and Chinese Taipei.

Figure III.6.4 **Correlations between teaching practices in language-of-instruction lessons**

Based on students' reports, OECD average



Note: All values are statistically significant (see Annex A3).

Source: OECD, PISA 2018 Database, Table III.B1.6.9.

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HOW ARE TEACHING PRACTICES RELATED TO ENJOYMENT OF READING?

Instilling a joy of reading in students is as important, or even more important, as teaching them how to read (Cambria and Guthrie, 2010[19]). There are several ways in which adolescents can be encouraged to read for pleasure: by enhancing their intrinsic motivation, building their confidence and making them understand the importance of reading for their lives. Research finds that teachers are well-placed to help students develop good reading habits (Munita, 2016[20]; Ruddell, 1995[21]). PISA 2018 did not ask students to describe the teaching practices their language-of-instruction teachers use to help them develop reading habits, but it did ask several questions about teaching practices more generally. These can be examined in relation to students' enjoyment of reading. However, while the current teachers of 15-year-old students may play an important role in fostering their enjoyment of reading, how much students enjoy reading also depends on many other factors, such as their previous reading habits, academic achievement, previous classroom experiences and home environment.

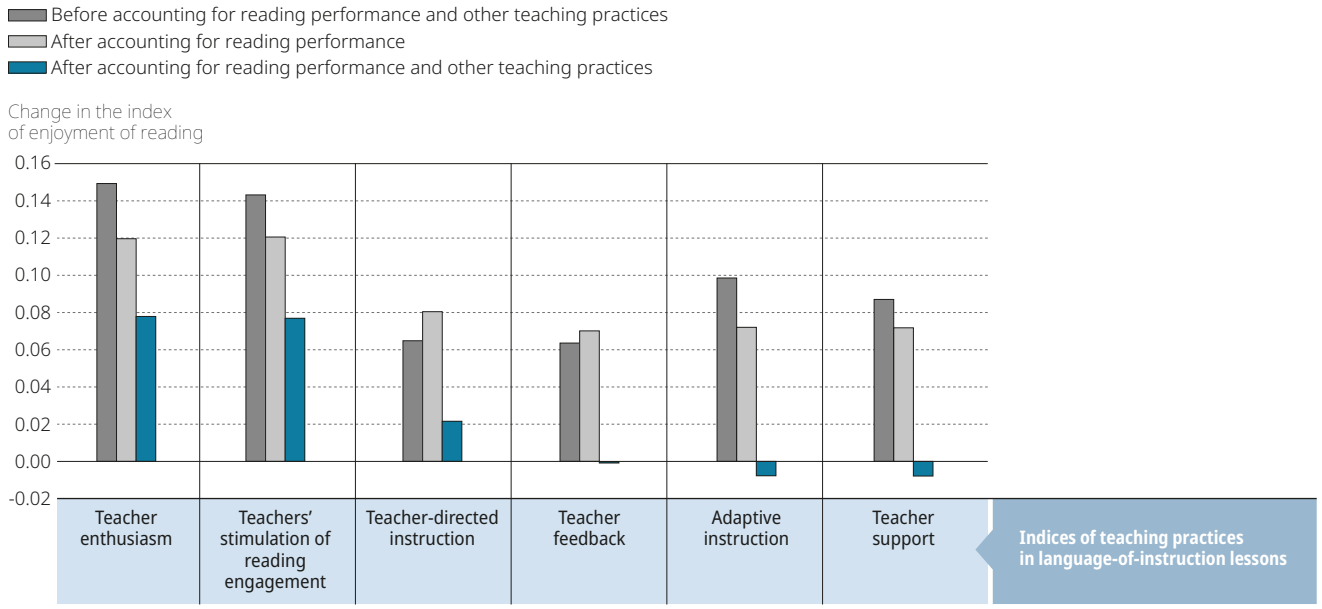
PISA asked students to report whether they agree ("strongly disagree", "disagree", "agree", "strongly agree") with the following statements about reading: "I read only if I have to"; "Reading is one of my favourite hobbies"; "I like talking about books with other people"; "For me, reading is a waste of time"; and "I read only to get information that I need". These items were combined to create the index of enjoyment of reading whose average is 0 and standard deviation is 1 across OECD countries. Positive values in the index mean that students enjoy reading more than the average student across OECD countries.

The analyses show that, on average across OECD countries, all six indices of teaching practices were positively related to students' self-reported enjoyment of reading, after accounting for the socio-economic profile of students and schools, and students' reading performance (Figure III.6.5). For instance, for every one-unit increase in the indices of teacher support and feedback, the index of enjoyment of reading increased by 0.07 of a unit (one unit is equivalent to a standard deviation across OECD countries). However, once other teaching strategies were accounted for, only teacher enthusiasm, teachers' stimulation of reading engagement and, to a lesser extent, teacher-directed instruction were still positively associated with reading enjoyment. The other three indices became either unrelated or weakly (and negatively) associated with reading enjoyment, after the other teaching strategies were accounted for.

In general, these results are consistent across PISA-participating countries and economies (Table III.B1.6.10). For instance, after accounting for socio-economic status, reading performance and other teaching practices, teacher enthusiasm remained positively associated with reading enjoyment in 60 of the 73 education systems with available data, and teachers' stimulation of reading engagement was positively associated with reading enjoyment in 68 school systems. The strongest positive associations between teacher enthusiasm and students' enjoyment of reading were observed in Albania, Finland, Indonesia and Kosovo; the strongest positive associations between teachers' stimulation of reading engagement and enjoyment of reading were found in B-S-J-Z (China), Brunei Darussalam, Denmark, Estonia, Moldova, New Zealand, Norway and the United States.

Figure III.6.5 **Enjoyment of reading and teaching practices in language-of-instruction lessons**

Based on students' reports, OECD average



Notes: All values are statistically significant, except for teacher feedback after accounting for reading performance and other teaching practices (see Annex A3). Results based on linear regression analysis, after accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Source: OECD, PISA 2018 Database, Table III.B1.6.10.

StatLink http://dx.doi.org/10.1787/888934029736

WHICH TEACHING PRACTICES ARE MORE FREQUENTLY USED IN THE SCHOOLS WHOSE PRINCIPALS ARE LEAST CONCERNED ABOUT THE QUALITY OF THEIR TEACHING STAFF?

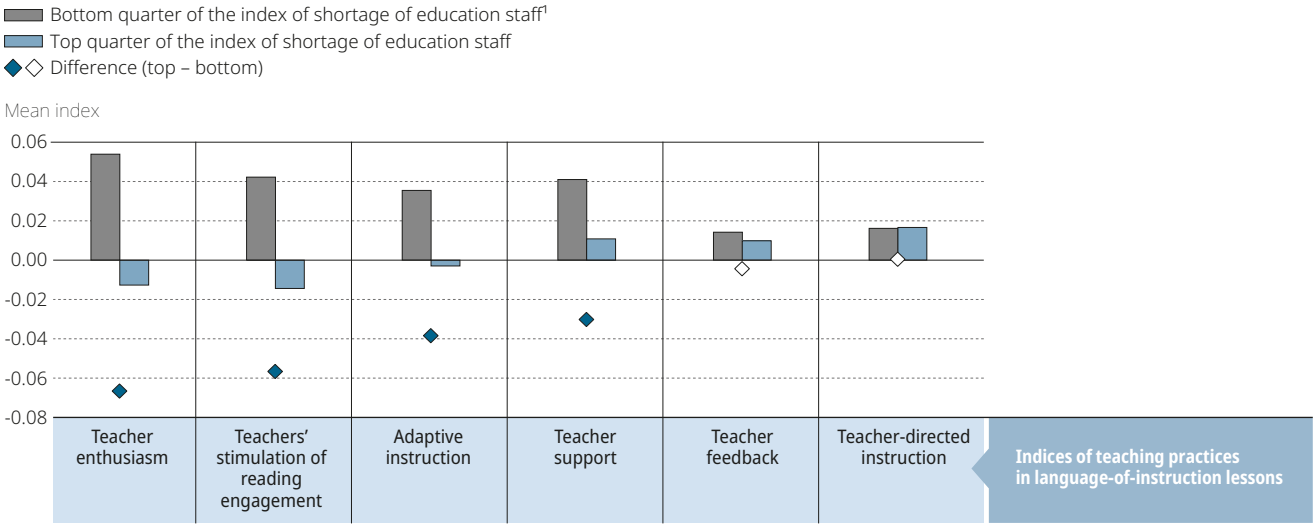
One way to ascertain the value of different teaching strategies is to determine which of them are more frequently used in the schools whose principals are most satisfied with the education staff, and compare these results with the schools whose principals are least satisfied. Unfortunately, PISA did not ask principals specifically about the language-of-instruction teachers in their school, but it did ask principals whether the school's capacity to provide instruction was hindered by the following issues: "A lack of teaching staff"; "Inadequate or poorly qualified teaching staff"; "A lack of assisting staff"; and "Inadequate or poorly qualified assisting staff". Their answers were combined to create the index of shortage of education staff whose average is 0 and standard deviation is 1 across OECD countries. Positive values reflect principals' concern that a shortage of education staff hinders the capacity to provide instruction to a greater extent than the OECD average.

On average across OECD countries, teacher support was more frequently observed in schools whose principals were least concerned about the education staff than in schools whose principals were most concerned (Figure III.6.6). The difference between these types of schools was even greater, in favour of the best-staffed schools, when considering the indices of teacher enthusiasm, teachers' stimulation of reading engagement and adaptive instruction. By contrast, according to students' reports, the frequency with which teachers used teacher-directed strategies and provided feedback to students was similar regardless of how concerned principals were about the education staff in their schools.

While the disparities in the indices of teaching practices between schools whose principals were most and least concerned about the education staff were generally modest, some countries/economies showed considerable gaps (Table III.B1.6.11). For instance, in 16 countries and economies, students in schools with the highest-quality staff (according to principals) were more likely than students in schools with the lowest-quality staff to report that their teachers were enthusiastic and passionate about teaching. In 16 education systems, language-of-instruction teachers more frequently encouraged students to think (index of teachers' stimulation for reading engagement) in schools whose principal was least concerned about the education staff than in schools whose principal was most concerned. In B-S-J-Z (China), Brazil, Brunei Darussalam, Georgia, Korea, Luxembourg, Malaysia, New Zealand, Qatar, Singapore and Slovenia, providing greater teacher support appeared to be a distinctive feature of the schools with the highest-quality staff. Only in Belgium, Bosnia and Herzegovina, Macao (China), Malta and the Slovak Republic was less teacher support observed in schools with the highest-quality staff.

Figure III.6.6 **Principals' concern about education staff and teaching practices in language-of-instruction lessons**

Based on students' and principals' reports, OECD average



1. Higher values in the index indicate a greater shortage of education staff.

Note: Statistically significant values are shown in darker tones (see Annex A3).

Source: OECD, PISA 2018 Database, Table III.B1.6.11.

StatLink http://dx.doi.org/10.1787/888934029774

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PISA

7

Teacher behaviour and student learning

This chapter examines differences between countries and economies in school principals' reports about the teacher behaviours that hinder student learning, and how they vary by school characteristics. The chapter also looks at how these teacher behaviours are related to students' reading performance and parental involvement in school-related activities.

Teachers play an integral role in boosting student learning. What matters is not so much where teachers come from or how many qualifications they have earned, but what they end up doing in their day-to-day interactions with students (Hanushek, 2011[1]; Kane, Rockoff and Staiger, 2008[2]). With this in mind, PISA 2018 asked school principals about some of the teacher behaviours that can create an unpleasant school climate and hinder student learning, such as teachers' resistance to change, unpreparedness and absenteeism.

When teachers miss work, the learning process is disrupted, particularly when the absences are unexpected and there is a lack of good substitute teachers (Miller, Murnane and Willett, 2008[3]; Rogers and Vegas, 2009[4]). Studies in the United States and Indonesia, for instance, show that excessive teacher absenteeism reduces student achievement considerably (Clotfelter, Ladd and Vigdor, 2007[5]; Suryadarma et al., 2007[6]) – up to 3% of a standard deviation for every 10 additional days of absence, according to one study (Miller, Murnane and Willett, 2008[3]). Moreover, excessive teacher absenteeism presents a sizeable financial cost to education systems, increases the administrative burden on school management and can tempt students to skip school too (Ehrenberg et al., 1989[7]; Rogers and Vegas, 2009[4]).

Teachers' resistance to change is another behaviour that could hinder student learning. Many promising school reforms are deferred or stall completely because teachers feel overstretched and short-changed, and because they fear the uncertainty that comes with the proposed changes (Evans, 1996[8]; Lunenburg, 2010[9]). However, staff resistance is not always problematic. Experienced, committed and creative teachers often resist top-down reforms because they believe they can bring valuable ideas to the process (Thomas and Hardy, 2011[10]).

The success of school reform depends, in part, on the ways in which school leaders address teachers' resistance to change. They can adopt collaborative strategies, such as communicating, negotiating and creating a professional learning community, or divisive ones, including coercion and "divide and conquer" tactics (Anderson, 2011[11]; Zimmerman, 2006[12]). Even when principals adopt the right strategies to address teacher resistance, traditional views from parents and other stakeholders, and narrow performance targets may discourage teachers from experimenting with and sustaining new teaching approaches in the classroom (Howard and Mozejko, 2015[13]).

What the data tell us

- On average across OECD countries, a majority of students attended schools whose principals reported that teacher behaviours do not hinder students' learning or hinder it very little.
- Principals of disadvantaged schools, schools located in cities and public schools were more likely to report that teacher behaviours hinder learning than those of advantaged schools, schools located in rural areas and private schools.
- Reading scores were lower in countries/economies with higher percentages of students enrolled in schools whose principal reported that teacher behaviours hinder learning a lot.
- Greater involvement from parents in school-related activities was associated with principals being less likely to report that teacher behaviours hinder learning.

Teacher quality is the single most important school factor for student learning (Coleman et al., 1966[14]; Rivkin, Hanushek and Kain, 2005[15]) and other student outcomes (Gershenson, Jacknowitz and Brannegan, 2017[16]; Ladd and Sorensen, 2015[17]). PISA 2018 did not measure teacher quality directly; instead, it asked school principals about two related teacher behaviours: teachers not meeting individual students' needs and being unprepared for classes. Another teacher behaviour – being too strict with students – could also be considered a dimension (or a lack) of teacher quality. However, previous studies have cautioned that some degree of strictness may have positive effects on student learning as students may interpret teachers' sternness as a sign that teachers care about them (Poplin et al., 2011[18]; Howard, 2002[19]). Wilson and Corbett (2001[20]), for instance, find that most students prefer teachers who adhere to a "no excuses" policy.

This chapter examines the degree to which teacher behaviour, as perceived by school principals, is related to student learning. PISA asked school principals to report the extent ("not at all", "very little", "to some extent", "a lot") to which they think that student learning in their schools is hindered by such factors as teachers not meeting individual students' needs; teacher absenteeism; school staff resisting change; teachers being too strict with students; and teachers not being well-prepared for classes. The responses were combined to create an index of teacher behaviour hindering learning that has a mean of zero and a standard deviation of one across OECD countries. Positive values reflect principals' perceptions that these teacher-related behaviours hinder learning to a greater extent; negative values indicate that school principals believe that these teacher-related behaviours hinder learning to a lesser extent, compared to the OECD average.

HOW TEACHER BEHAVIOUR HINDERING LEARNING VARIES ACROSS COUNTRIES AND SCHOOLS

According to school principals, instruction in their schools takes place in largely positive environments. On average across OECD countries, a majority of students attended schools whose principal reported that the above-mentioned teacher behaviours do not hinder student learning, or hinder it only very little (Figure III.7.1). Across OECD countries, the behaviours school principals cited most frequently as hindering learning were teachers not meeting individual students' needs and staff resisting change, whereas the behaviours least frequently mentioned were teachers being too strict with students and teachers not being well-prepared.

Only 2% of students across OECD countries attended schools whose principal reported that teacher absenteeism hinders learning a lot; but in several countries and economies, including Argentina, Baku (Azerbaijan), Beijing, Shanghai, Jiangsu and Zhejiang (China) (hereafter "B-S-J-Z [China]"), Chile, Jordan, Kazakhstan, Morocco, the Russian Federation (hereafter "Russia"), Ukraine, the United Arab Emirates and Uruguay, more than 10% of students attended such schools (Table III.B1.7.1). By contrast, in the Czech Republic, Finland, Japan, Luxembourg, Malta, Montenegro, New Zealand, Serbia and Switzerland, no school principal reported that teacher absenteeism hinders learning a lot. Obviously, this does not mean that teachers are never absent from work in these countries; these countries/economies may have implemented effective policies to replace absent teachers with substitute or emergency teachers. Principals in different countries may also have different views as to what level of absenteeism hinders learning.

Similarly, only 3% of students across OECD countries attended schools whose principal reported that teachers being unprepared for classes hinders learning a lot; but in several countries and economies, including B-S-J-Z (China), Croatia, Georgia, Jordan, Kazakhstan, Lebanon, Malaysia, Morocco, Russia, Ukraine and the United Arab Emirates, more than 10% of students attended such schools (Table III.B1.7.1). By contrast, in Finland, Germany, Latvia, Luxembourg, Norway, Sweden, Switzerland, the United Kingdom and the United States, less than 1% of students were enrolled in a school whose principal reported that teachers' lack of preparedness hinders learning a lot.

When considering differences across groups of schools, principals of socio-economically advantaged schools were less likely than principals of disadvantaged schools to report that teacher behaviours hinder student learning, on average across OECD countries and in 25 other education systems (Figure III.7.2 and Table III.B1.7.4). The countries and economies with the largest gaps related to the schools' socio-economic profile, all of which in favour of advantaged schools, were Brazil, Colombia, France, Hong Kong (China), Panama, Peru, Sweden, the United Arab Emirates and Uruguay. Across OECD countries, teacher-related behaviours hindering learning were more frequently cited by principals of city schools than of rural schools, and by principals of public schools than by those of private schools. Indeed, in 31 education systems the principals of public schools were more likely to report these types of behaviours as hindrances than the principals of private schools, and this difference was particularly large in Brazil, Brunei Darussalam, Colombia, Costa Rica, France, Italy, Mexico, Portugal, Turkey and Uruguay. Interestingly, teachers expressed similar concerns about the behaviour of teachers in schools with high and low concentrations of students with an immigrant background, on average across OECD countries.

TRENDS IN TEACHER BEHAVIOUR HINDERING LEARNING

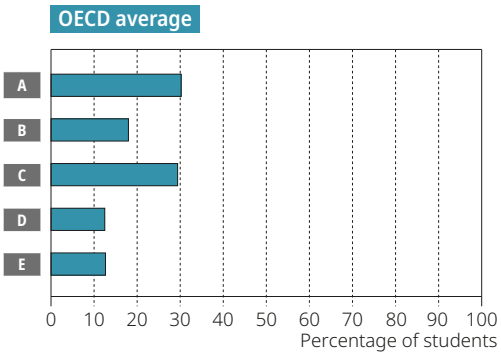
On average across OECD countries, the only behaviours that principals in 2018 mentioned more frequently as hindering learning than their counterparts in 2015 did were teachers not meeting individual students' needs and, to a lesser extent, teacher absenteeism (Table III.B1.7.2). This does not necessarily mean that teachers are paying less attention to individual students' needs or are more frequently absent; it could also be that school leaders have become increasingly demanding of their teachers and more concerned about providing individualised attention, or that the student body today is more diverse in many school systems and more principals are urging teachers to pay greater attention to students' individual needs. In 27 countries and economies, the percentage of students in schools whose principal reported that teachers not meeting individual students' needs hinders student learning to some extent or a lot increased between 2015 and 2018. In Hong Kong (China), Iceland, Israel, Japan, Kazakhstan, Korea, Lebanon, Portugal, Slovenia, and Uruguay, the share of students enrolled in such schools increased by at least 15 percentage points during the period.

Principals' concern about teacher absenteeism increased in 20 school systems between 2015 and 2018, and particularly so in Colombia, Iceland, Israel, Kazakhstan and Lebanon. By contrast, teacher absenteeism became less of a concern in Denmark, Luxembourg, Macao (China) and Montenegro during the same period.

Examining the evolution of teacher preparedness, as perceived by school principals, is also important as it can be considered a measure of teacher quality. In 17 education systems, school principals in 2018 were more concerned than their counterparts in 2015 about teachers not being well-prepared for classes. According to school principals, the concern about this behaviour increased the most in Georgia, Kazakhstan, the Republic of North Macedonia, Portugal and the United Arab Emirates during the period, whereas it decreased the most in Macao (China), Montenegro, Norway and the United Kingdom.

Figure III.7.1 **Teacher behaviour hindering learning**

Based on principals' reports



Percentage of students in schools whose principal reported that student learning is hindered to some extent or a lot by the following

- **A** Teachers not meeting individual students' needs
- **B** Teacher absenteeism
- **C** Staff resisting change
- **D** Teachers being too strict with students
- **E** Teachers not being well prepared for classes

	Percentage of students in schools whose principal reported that student learning is hindered to some extent or a lot by the following:				
	A	B	C	D	E
Kazakhstan	61	61	55	57	70
Netherlands	69	47	58	25	34
Uruguay	46	61	60	24	35
Chile	39	35	43	27	31
Belgium	36	42	52	19	21
Russia	51	37	45	38	44
Argentina	42	54	44	23	22
Portugal	45	14	59	13	20
Japan	42	6	29	24	28
Brunei Darussalam	52	16	33	23	26
Costa Rica	40	32	39	25	25
Morocco	47	35	44	32	35
Hong Kong (China)	56	13	43	12	22
Jordan	38	42	35	25	31
Germany	30	42	37	10	14
Israel	35	46	30	20	23
B-S-J-Z (China)	52	32	53	23	41
Croatia	40	15	41	24	33
Panama	27	27	37	34	21
Brazil	46	36	37	18	33
Peru	30	17	33	26	27
Norway	45	31	21	6	9
Colombia	36	32	43	26	20
Chinese Taipei	32	7	31	20	23
Canada	34	19	39	17	9
Australia	38	19	37	9	14
New Zealand	39	10	34	7	8
Ireland	32	20	30	9	13
France	36	17	46	24	19
Iceland	48	29	37	6	10
Bosnia and Herzegovina	28	19	38	22	25
United States	35	14	35	11	10
Slovenia	29	23	38	10	14
Italy	23	11	48	20	21
Malta	36	22	24	31	17
United Arab Emirates	28	26	28	22	24
Kosovo	25	20	27	24	18
Malaysia	25	24	15	16	23
Luxembourg	22	5	12	6	0

	Percentage of students in schools whose principal reported that student learning is hindered to some extent or a lot by the following:				
	A	B	C	D	E
Mexico	18	14	33	27	11
Sweden	40	21	18	4	8
Singapore	26	4	25	15	8
Estonia	35	20	27	19	6
Lebanon	29	23	26	21	19
United Kingdom	26	21	11	3	5
Finland	32	13	27	6	5
Dominican Republic	21	6	26	21	14
Viet Nam	18	6	3	14	11
Macao (China)	26	14	11	16	15
Moldova	22	19	29	16	21
Korea	31	5	17	17	20
Spain	20	7	37	11	14
Austria	24	18	25	11	4
Philippines	21	13	11	16	13
Ukraine	27	20	22	22	21
Switzerland	19	5	24	6	2
Baku (Azerbaijan)	27	24	22	38	20
Turkey	26	7	15	1	15
Romania	19	4	34	13	7
Denmark	15	17	17	3	7
Saudi Arabia	18	23	25	12	17
Montenegro	5	6	12	10	7
Greece	21	14	25	10	13
Serbia	16	5	23	12	17
Slovak Republic	19	7	15	19	9
Bulgaria	25	20	22	13	18
Indonesia	15	9	4	21	14
Latvia	20	8	10	8	6
Czech Republic	10	12	17	7	3
Hungary	24	5	10	10	8
Poland	12	9	20	8	9
Lithuania	13	1	10	2	5
Georgia	21	11	11	11	30
North Macedonia	19	11	23	17	14
Thailand	14	4	6	19	18
Qatar	15	11	11	5	9
Belarus	10	4	8	12	13
Albania	7	5	11	10	12

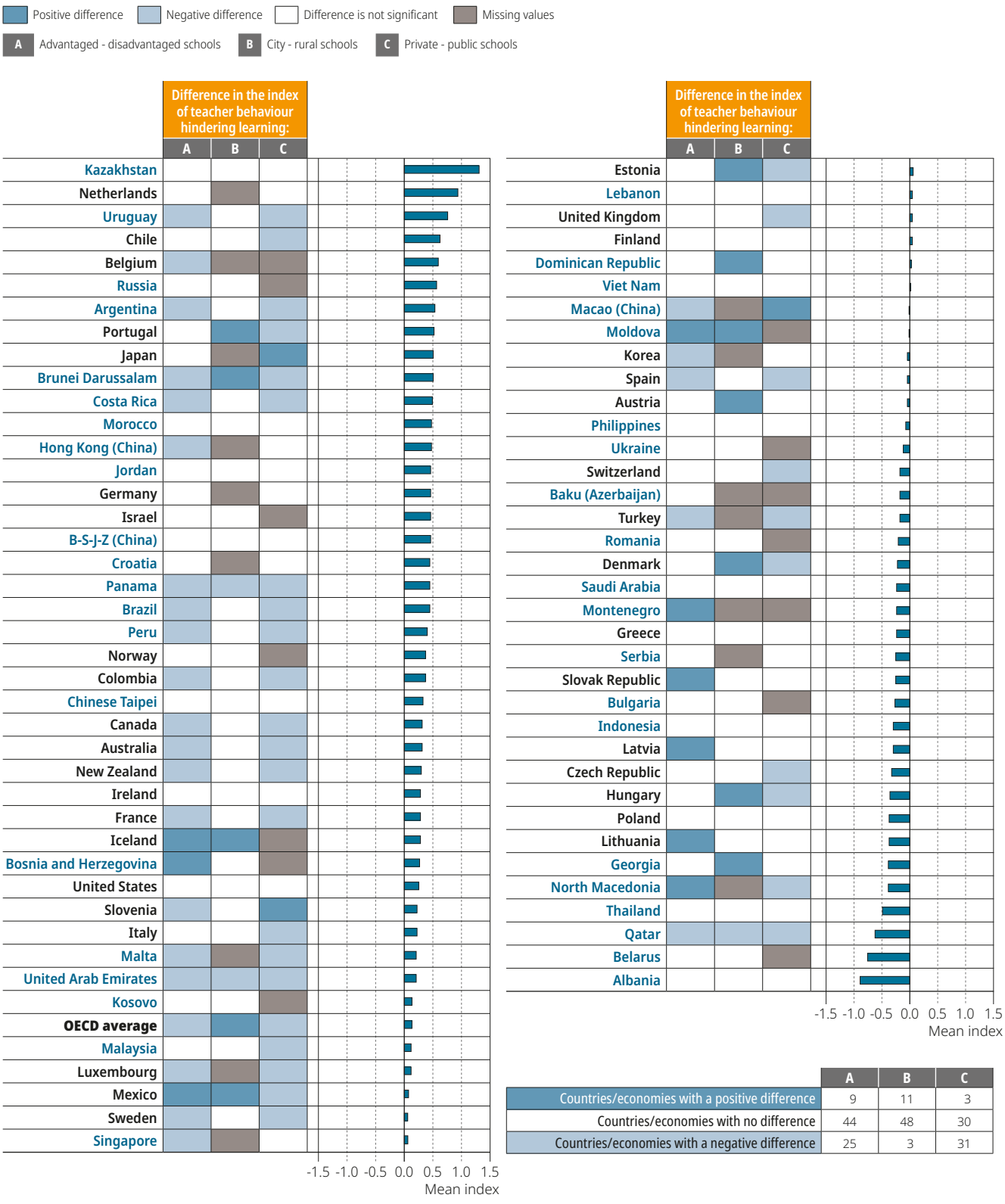
Countries and economies are ranked in descending order of the index of teacher behaviour hindering learning.

Source: OECD, PISA 2018 Database, Table III.B1.7.1.

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Figure III.7.2 **Teacher behaviour hindering learning, by school characteristics**

Based on principals' reports



	A	B	C
Countries/economies with a positive difference	9	11	3
Countries/economies with no difference	44	48	30
Countries/economies with a negative difference	25	3	31

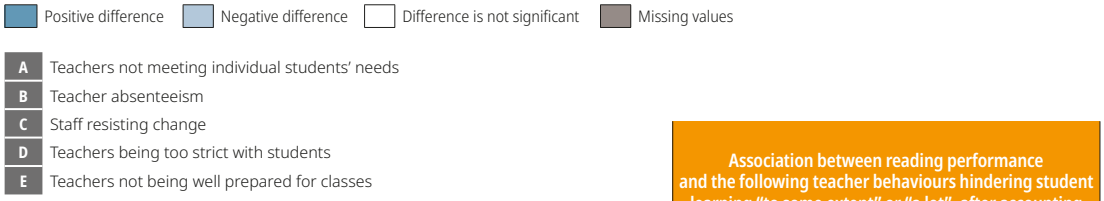
Note: Higher values in the index indicate that teacher behaviour hinders student learning to a greater extent.

Countries and economies are ranked in descending order of the index of teacher behaviour hindering learning.

Source: OECD, PISA 2018 Database, Tables III.B1.7.1 and III.B1.7.4.

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Figure III.7.3 **Teacher behaviour hindering learning and reading performance**



OECD	Association between reading performance and the following teacher behaviours hindering student learning "to some extent" or "a lot", after accounting for students' and schools' socio-economic profile:[1] A	B	C	D	E
OECD average					
Australia					
Austria					
Belgium					
Canada					
Chile					
Colombia					
Czech Republic					
Denmark					
Estonia					
Finland					
France					
Germany					
Greece					
Hungary					
Iceland					
Ireland					
Israel					
Italy					
Japan					
Korea					
Latvia					
Lithuania					
Luxembourg					
Mexico					
Netherlands					
New Zealand					
Norway					
Poland					
Portugal					
Slovak Republic					
Slovenia					
Sweden					
Switzerland					
Turkey					
United Kingdom					
United States					

Partners	Association between reading performance and the following teacher behaviours hindering student learning "to some extent" or "a lot", after accounting for students' and schools' socio-economic profile: A	B	C	D	E
Albania					
Argentina					
Baku (Azerbaijan)					
Belarus					
Bosnia and Herzegovina					
Brazil					
Brunei Darussalam					
B-S-J-Z (China)					
Bulgaria					
Costa Rica					
Croatia					
Dominican Republic					
Georgia					
Hong Kong (China)					
Indonesia					
Jordan					
Kazakhstan					
Kosovo					
Lebanon					
Macao (China)					
Malaysia					
Malta					
Moldova					
Montenegro					
Morocco					
North Macedonia					
Panama					
Peru					
Philippines					
Qatar					
Romania					
Russia					
Saudi Arabia					
Serbia					
Singapore					
Chinese Taipei					
Thailand					
Ukraine					
United Arab Emirates					
Uruguay					

A	B	C	D	E	
8	3	5	6	6	Countries/economies with a positive difference
58	58	66	61	57	Countries/economies with no difference
10	13	5	7	12	Countries/economies with a negative difference

1. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Source: OECD, PISA 2018 Database, Table III.B1.7.5.

StatLink http://dx.doi.org/10.1787/888934029831

HOW TEACHER BEHAVIOUR IS RELATED TO READING PERFORMANCE

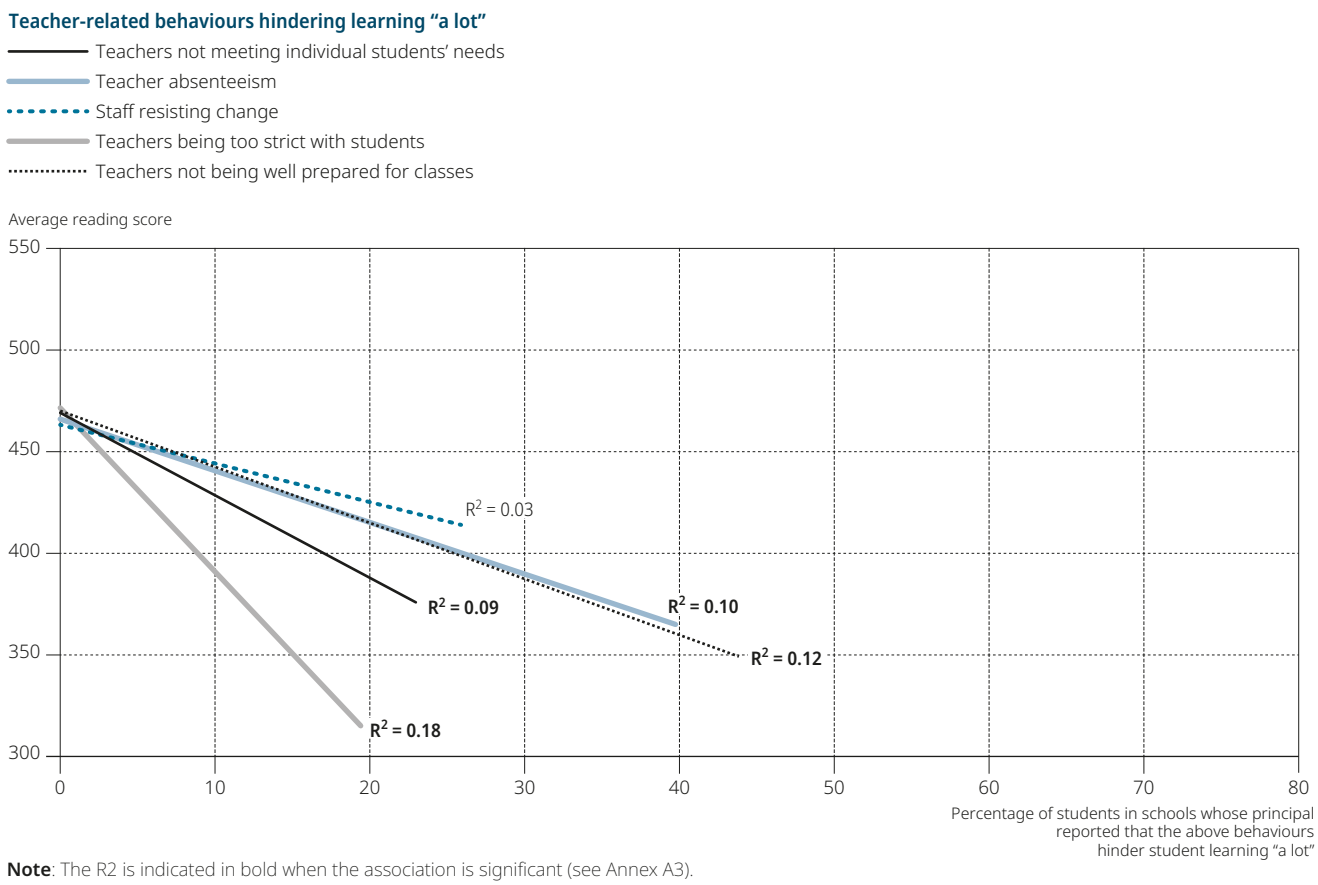
In almost every country, students in schools whose principals reported more teacher-related problems affecting student learning scored about the same as students in schools whose principals reported fewer of these problems, after accounting for the socio-economic profile of students and schools (measured by the PISA index of economic, social and cultural status) (Figure III.7.3 and Table III.B1.7.5). In fact, on average across OECD countries, the only association with reading performance that remained significant after accounting for socio-economic status was when principals reported that teacher absenteeism hinders learning to some extent or a lot. Students in schools whose principal reported that teacher absenteeism hinders learning to some extent or a lot scored four points lower in reading than students in schools whose principals reported that this problem does not hinder learning at all, or very little.

The relationship between teacher behaviour and reading performance was more revealing when analysed at the system level (Figure III.7.4). On average, reading scores were lower in countries with higher percentages of students enrolled in schools whose principal reported that the following behaviours hinder learning a lot (in ascending order of the proportion of the variance explained): teachers not meeting individual students' needs; teacher absenteeism; teachers not being well-prepared for classes; and teachers being too strict.

The findings suggest that countries'/economies' average reading performance was not associated with the share of principals who reported that student learning is negatively affected by teachers' resistance to change. This finding is consistent with previous studies indicating that teachers who resist change may signal an experienced, committed and creative workforce (Thomas and Hardy, 2011[10]), but the finding is also consistent with a transformational school leader who is trying to implement a promising school reform. After all, teachers can only resist change if a school reform is envisaged or taking place. What the results do not reveal is whether high-performing countries are successful in limiting the prevalence of some of these teacher-related behaviours or are successful in reducing the negative consequences associated with them.

Figure III.7.4 **Teacher behaviour hindering learning and average reading performance across countries and economies**

System-level analysis (77 countries and economies)



Note: The R2 is indicated in bold when the association is significant (see Annex A3).

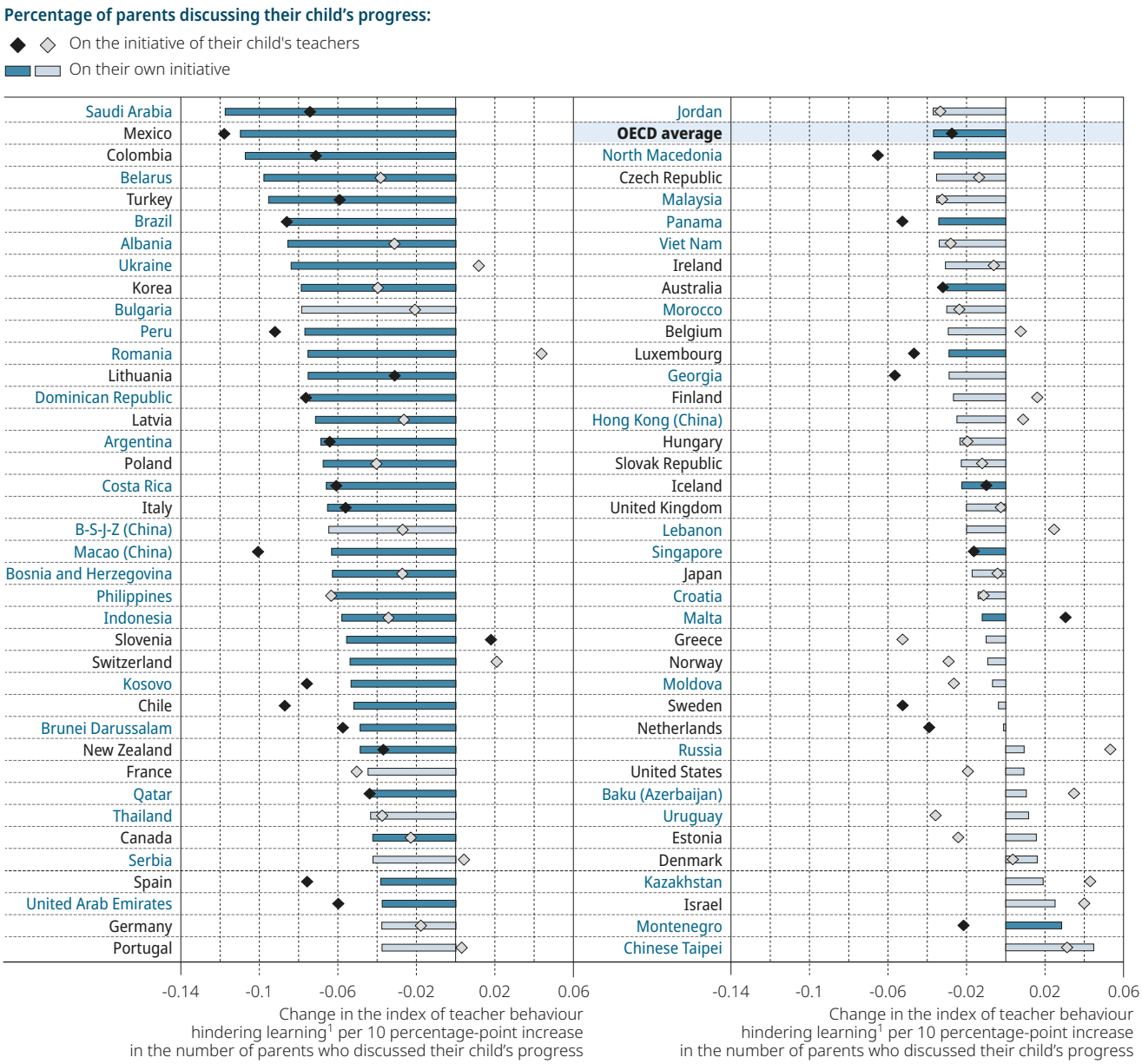
Source: OECD, PISA 2018 Database, Tables III.B1.7.1 and I.B1.4.

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RELATIONSHIPS BETWEEN TEACHER BEHAVIOUR HINDERING LEARNING AND PARENTAL INVOLVEMENT

There are many reasons why parents get involved in school matters: to obtain first-hand information on the learning environment, learn how to navigate the education system or influence their child's behaviour by establishing consistent norms, to cite just three (Cohen et al., 2009[21]; Grolnick and Slowiaczek, 1994[22]). Another important reason could be to ensure that their child's progress is not hindered by the way teachers perform at work. For instance, parents may decide to participate in school activities to encourage teachers to prepare their lessons adequately and meet their child's needs, and to ensure that substitute teachers are available to replace absent teachers.

Figure III.7.5 **Discussing child's progress with teachers and teacher behaviour hindering learning**



1. Higher values in the index indicate that teacher behaviour hinders student learning to a greater extent.

Notes: Statistically significant values are shown in darker tones (see Annex A3).

The results are based on linear regression analysis, after accounting for schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Countries and economies are ranked in ascending order of the change in the index associated with the percentage of parents discussing their child's progress with a teacher on their own initiative.

Source: OECD, PISA 2018 Database, Table III.B1.7.6.

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PISA 2018 asked principals about the percentage of parents who participated, during the previous academic year, in the following school activities: "discussed their child's progress with a teacher on their own initiative"; "discussed their child's progress on the initiative of one of their child's teachers"; "participated in local school government"; and "volunteered in physical or extracurricular activities" (see Chapter 10). This section examines how principals' answers to this question are related to their views on the teacher behaviours that hinder student learning.

The findings presented in Table III.B1.7.6 show that, on average across OECD countries, principals were less likely to report that teacher behaviour hinders student learning when, according to their estimates, more parents participated in school-related activities. For instance, the index of teacher behaviour hindering learning decreased by about 0.05 of a standard deviation, both before and after accounting for the socio-economic profile of the school, for every 10 percentage-point increase in the number of parents who participated in local school government or volunteered in physical or extracurricular activities at the school.

According to school principals, student learning was hindered by the behaviour of teachers to a lesser extent when more parents discussed their child's progress with teachers, and especially when parents initiated those discussions (Figure III.7.5). After accounting for the socio-economic profile of schools, this relationship was observed in 39 school systems when the initiative came from parents, and in 29 school systems when the initiative came from teachers.

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8

Student co-operation and competition

This chapter examines differences between countries and economies in student co-operation and competition, and how they vary by student and school characteristics. It also looks at how student co-operation and competition are related to student outcomes, and how these relationships vary by students' attitudes towards competition and gender.

The benefits of co-operative behaviours have been broadly documented in various social contexts, including neighbourhoods, hospitals, companies (Coleman, 1988[1]; Gittell et al., 2000[2]; Sampson and Groves, 1989[3]) and in education. When students, teachers, parents and the school principal know and trust each other, work together, and share information, ideas and goals, students – particularly disadvantaged students – benefit (Crosnoe, Johnson and Elder, 2004[4]; Hughes and Kwok, 2007[5]; Jennings and Greenberg, 2009[6]). Several studies indicate that students perform better academically, report more positive relationships with classmates and a stronger attachment to school in co-operative academic settings than in competitive ones (Johnson et al., 1981[7]; Roseth, Johnson and Johnson, 2008[8]).

However, co-operation and teamwork come with potential challenges too. Tasks might not be divided fairly and efficiently; team members sometimes work on tasks for which they are unsuited or that they dislike; some group members may freeride on their teammates' efforts; and co-ordinating tasks may be too complex and time-consuming. Researchers have revealed some of the conditions necessary for the success of teamwork and co-operative learning (Gillies, 2016[9]): making the goals of team members interdependent; helping others achieve their goals; establishing some kind of individual accountability; making decisions collectively; and ensuring that team members acquire co-operative skills, like leadership, communication and respect.

Similarly, competition can improve academic performance and speed in learning (Dennis Madrid, Canas and Ortega-Medina, 2007[10]; Johnson and Johnson, 1974[11]). Competition can also be thrilling and enjoyable, provided the goals are clearly specified (Clifford, 1971[12]; Johnson and Johnson, 1974[11]). Kistruck et al. (2016[13]) also suggest that in a resource-scarce environment a competitive goal structure can lead to greater motivation. Some researchers argue that when co-operative and competitive behaviours are brought together, as in inter-team competitions, the performance and enjoyment of participants are even higher than in a purely co-operative or competitive environment (Morschheuser, Hamari and Maedche, 2019[14]; Tauer and Harackiewicz, 2004[15]).

What the data tell us

- Co-operation amongst students was more prevalent than competition. On average across OECD countries, 62% of students reported that their schoolmates are co-operating with each other while only 50% of students reported that their peers are competing with each other.
- Student co-operation was most prevalent, relative to competition, in Denmark, Germany, Japan and the Netherlands, whereas student competition was most prevalent, relative to co-operation, in Brazil, Malta, the United Kingdom and the United States.
- On average across OECD countries and in about 78% of education systems, students scored higher in reading when they reported greater peer co-operation.
- Students who see themselves as more competitive scored higher in reading than those who do not, after accounting for socio-economic status.
- Peer competition was more strongly associated with favourable non-academic outcomes amongst boys and students with more favourable attitudes towards competition, than amongst girls and students with less favourable attitudes.

This chapter examines student co-operation and competition. PISA asked students how true ("not at all true", "slightly true", "very true", "extremely true") the following statements about their school are: "Students seem to value co-operation"; "It seems that students are co-operating with each other"; "Students seem to share the feeling that co-operating with each other is important"; "Students feel that they are encouraged to co-operate with others". The first three statements were combined to create the index of student co-operation whose average is 0 and standard deviation is 1 across OECD countries. Positive values in this index mean that students perceive that other students at the school co-operate with each other to a greater extent than the average student in OECD countries.

PISA also asked students how true ("not at all true", "slightly true", "very true", "extremely true") the following statements about their school are: "Students seem to value competition"; "It seems that students are competing with each other"; "Students seem to share the feeling that competing with each other is important"; and "Students feel that they are being compared with others". The first three statements were combined to create the index of student competition whose average is 0 and standard deviation is 1 across OECD countries. Positive values in this index mean that students perceive that other students at the school compete with each other to a greater extent than the average student in OECD countries.

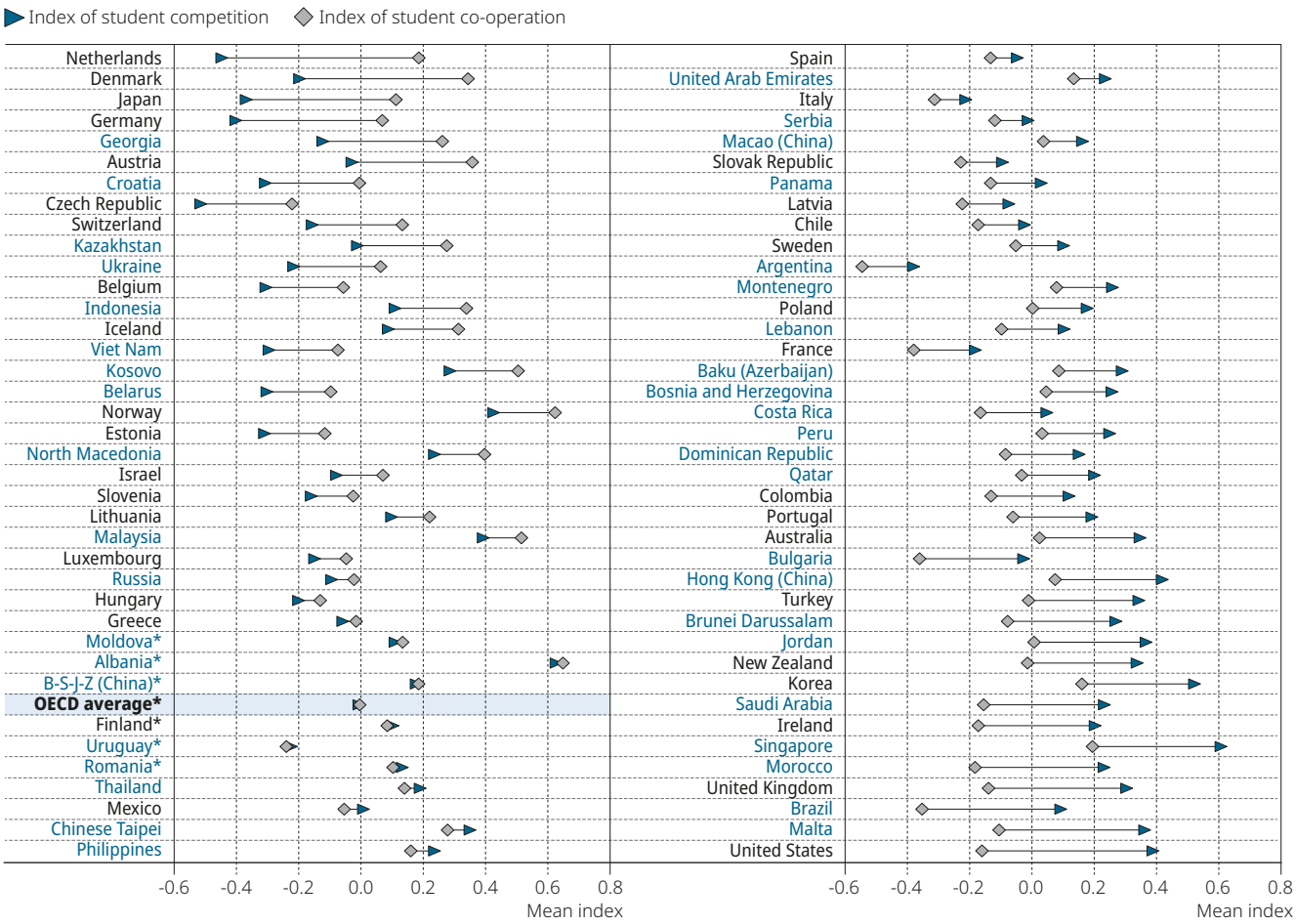
HOW STUDENT CO-OPERATION AND COMPETITION VARY ACROSS COUNTRIES, SCHOOLS AND STUDENTS

According to 15-year-old students in 2018, co-operation amongst students in school was somewhat more prevalent than student competition (Tables III.B1.8.1 and III.B1.8.2). For instance, on average across OECD countries, some 62% of students reported that it is very or extremely true that their schoolmates co-operate with each other, while about 50% of students reported the same about competing with each other. The largest difference was related to the importance students give to co-operation and competition: about 60% of students reported that students consider co-operation important (i.e. "very true" or "extremely true"), whereas only 44% of students reported that their schoolmates consider competition important. In almost every education system, a majority of students was enrolled in a school where between 25% and 75% of students reported that it is very or extremely true that students co-operate or compete with each other (Tables III.B1.8.4 and III.B1.8.5). However, in nine countries and economies, a majority of students attended a school where at least three out of four students reported that is very or extremely true that students co-operate with each other, while in only two countries, Albania and Singapore, the same was true for students who reported competition amongst their peers.

There are wide variations across school systems in the indices of student co-operation and competition (Figure III.8.1). In Albania, Austria, Denmark, Iceland, Indonesia, Kosovo, Malaysia, the Republic of North Macedonia (hereafter "North Macedonia") and Norway, students were most likely to report co-operation amongst their peers, while students in Argentina, Brazil, Bulgaria, the Czech Republic, France, Italy, Latvia, the Slovak Republic and Uruguay were least likely to report co-operation. Moreover, student competition was most prevalent in Albania, Hong Kong (China), Jordan, Korea, Malaysia, Malta, Norway, Singapore, and the United States, and least prevalent in Argentina, the Czech Republic, Estonia, Germany, Japan and the Netherlands, according to students' reports.

Figure III.8.1 **Student co-operation and competition**

Based on students' reports



Note: Countries and economies where the difference between the index of student co-operation and the index of student competition is not statistically significant are marked with an asterisk (see Annex A3).

Countries and economies are ranked in descending order of the difference between the indices of student co-operation and student competition.

Source: OECD, PISA 2018 Database, Table III.B1.8.3.

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Perhaps more interesting is identifying the education systems where the differences between the values of the indices of student co-operation and competition were the greatest (Figure III.8.1).[1] According to this analysis, the countries where student co-operation was most prevalent, relative to competition, were Austria, Croatia, Denmark, Georgia, Germany, Japan and the Netherlands, whereas the countries where student competition was most prevalent, relative to co-operation, were Brazil, Brunei Darussalam, Ireland, Jordan, Korea, Malta, Morocco, New Zealand, Saudi Arabia, Singapore, the United Kingdom, and the United States.

Considering differences across schools, about 5% and 3% of the variation in the indices of student co-operation and competition, respectively, lay between schools, on average across OECD countries (Tables III.B1.8.8 and III.B1.8.9). Students in socio-economically advantaged schools were more likely than students in disadvantaged schools to report both co-operation and competition amongst their peers, on average across OECD countries (Figure III.8.2). The socio-economic gap in student co-operation, in favour of advantaged schools, was observed in 58 education systems and was particularly large in Australia, Belgium, the Czech Republic, Germany, Israel, Hungary, Romania and Slovenia. The difference between public and private schools in student co-operation was also comparatively large, while it was negligible in the case of competition. On average across OECD countries and in 27 education systems, students in private schools reported greater co-operation amongst their peers than students in public schools did.

The association between the concentration of immigrant students in school and student co-operation was considerably weaker than that observed when considering schools' socio-economic profile. Still, in 21 school systems, a higher concentration of immigrants was related to less student co-operation; in only 5 countries (Australia, Brunei Darussalam, Latvia, New Zealand and the United Kingdom) was the association positive (Table III.B1.8.8).

On average across OECD countries, socio-economically advantaged students tended to perceive greater competition and co-operation amongst their schoolmates than disadvantaged students did (Tables III.B1.8.6 and III.B1.8.7). Moreover, boys and girls were equally likely to report that their peers co-operate, but boys reported more student competition than girls. In only six countries – Albania, Jordan, Malaysia, Morocco, North Macedonia and Turkey – did girls perceive greater student competition than boys. There are several plausible explanations for this gender gap. For instance, competition amongst students could differ, depending on whether the student body is composed mostly of boys or of girls (22% of students attended a school where more than 60% of students were either boys or girls; see Box III.3.1 in Chapter 3). Moreover, since adolescents are more likely to socialise with peers of their own gender, their reports may largely refer to the attitudes and behaviour of their own gender. It is also possible that boys and girls simply perceive the same phenomena differently.

HOW STUDENT CO-OPERATION AND COMPETITION ARE RELATED TO READING PERFORMANCE

In about 78% of school systems, and on average across OECD countries, students scored higher in reading when they reported greater co-operation amongst their peers, after accounting for the socio-economic profile of students and schools (as measured by the PISA index of economic, social and cultural status) (Table III.B1.8.10). In around 41% of the countries and economies that participated in PISA 2018, students performed better in the reading assessment when they reported a more competitive school environment, after accounting for socio-economic status (Table III.B1.8.11). However, on average across OECD countries, there was no association between student competition and reading performance.

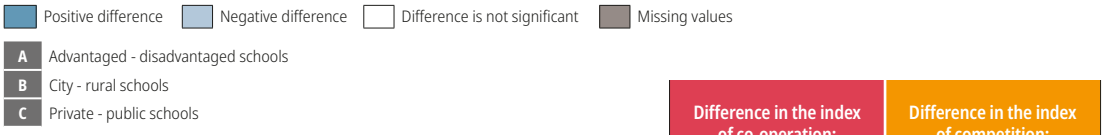
Amongst the four items that make up each of the indices, the strongest positive associations with reading performance were observed when students responded "very" or "extremely" true to the statements: "It seems that students are co-operating with each other" and "Students seem to value co-operation" (Figure III.8.3). In both cases, these students outperformed – by 12 score points – the students who considered these statements to be not at all true or slightly true, after accounting for socio-economic status. In Austria, Iceland, Lebanon, Malaysia, the Republic of Moldova and Norway, students who reported that it is very or extremely true that students co-operate with each other scored at least 25 points higher in reading than students who reported that the statement was not at all true or slightly true (Table III.B1.8.10). A negative association with reading performance was observed only when students reported that it is very or extremely true that "students seem to share the feeling that competing with each other is important" (Table III.B1.8.11).

DO MORE-COMPETITIVE STUDENTS OUTPERFORM LESS-COMPETITIVE STUDENTS?

The previous section has shown that, on average across OECD countries, students scored similarly in reading regardless of how much other students at the school compete with each other (Tables III.B1.8.11 and III.B1.8.13). However, it is one thing to determine how much students perceive their peers to compete with each other at school, and another to measure how competitive students see themselves as being. PISA asked 15-year-old students whether they agree ("strongly disagree", "disagree", "agree", "strongly agree") with the following statements about themselves: "I enjoy working in situations involving competition with others"; "It is important for me to perform better than other people on a task"; and "I try harder when I'm in competition with other people". These statements were combined to create the index of attitudes towards competition whose average is 0 and standard deviation is 1 across OECD countries. Positive values in this index mean that students are more competitive than the average student across OECD countries.

Figure III.8.2 **Student co-operation and competition, by school characteristics**

Based on students' reports



OECD	Difference in the index of co-operation: A	B	C	Difference in the index of competition: A	B	C
OECD average						
Australia						
Austria						
Belgium						
Chile						
Colombia						
Czech Republic						
Denmark						
Estonia						
Finland						
France						
Germany						
Greece						
Hungary						
Iceland						
Ireland						
Israel						
Italy						
Japan						
Korea						
Latvia						
Lithuania						
Luxembourg						
Mexico						
Netherlands						
New Zealand						
Norway						
Poland						
Portugal						
Slovak Republic						
Slovenia						
Spain						
Sweden						
Switzerland						
Turkey						
United Kingdom						
United States						

Partners	Difference in the index of co-operation: A	B	C	Difference in the index of competition: A	B	C
Albania						
Argentina						
Baku (Azerbaijan)						
Belarus						
Bosnia and Herzegovina						
Brazil						
Brunei Darussalam						
B-S-J-Z (China)						
Bulgaria						
Costa Rica						
Croatia						
Dominican Republic						
Georgia						
Hong Kong (China)						
Indonesia						
Jordan						
Kazakhstan						
Kosovo						
Lebanon						
Macao (China)						
Malaysia						
Malta						
Moldova						
Montenegro						
Morocco						
North Macedonia						
Panama						
Peru						
Philippines						
Qatar						
Romania						
Russia						
Saudi Arabia						
Serbia						
Singapore						
Chinese Taipei						
Thailand						
Ukraine						
United Arab Emirates						
Uruguay						
Viet Nam						

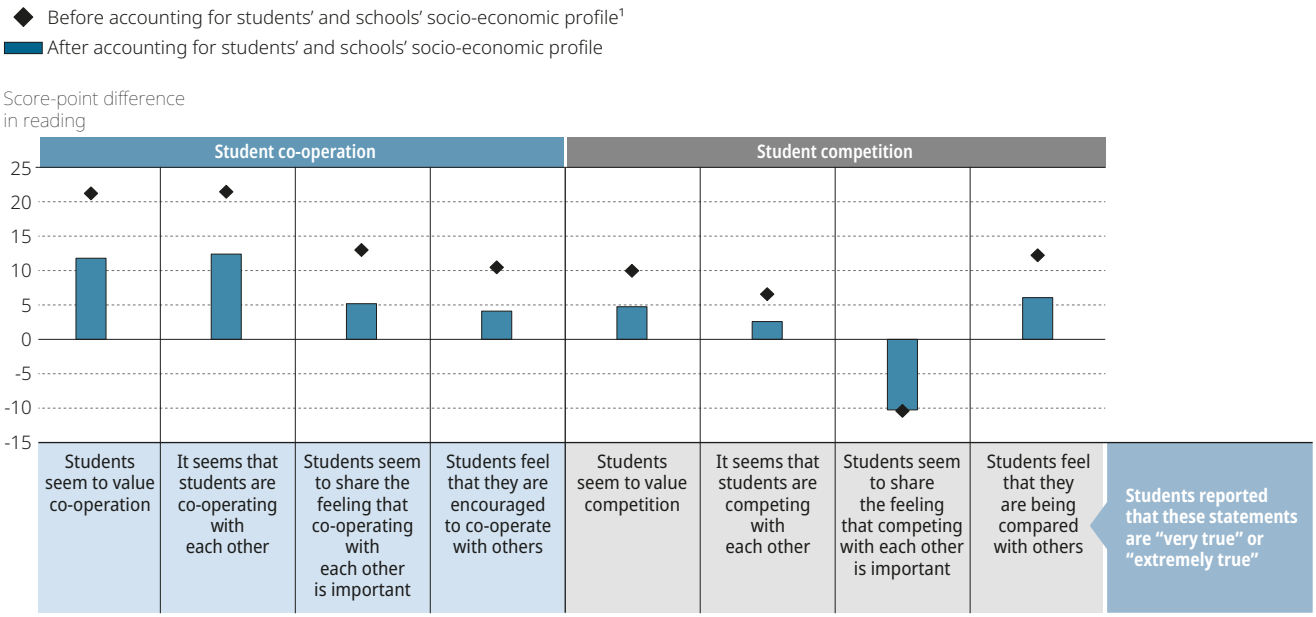
A	B	C	A	B	C	
58	8	27	37	10	17	Countries/economies with a positive difference
19	46	32	34	45	41	Countries/economies with no difference
0	7	4	6	6	5	Countries/economies with a negative difference

Source: OECD, PISA 2018 Database, Tables III.B1.8.8 and III.B1.8.9.

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Figure III.8.3 **Student co-operation and competition, and reading performance**

OECD average



1. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Note: All score-point differences are statistically significant (see Annex A3).

Source: OECD, PISA 2018 Database, Tables III.B1.8.10 and III.B1.8.11.

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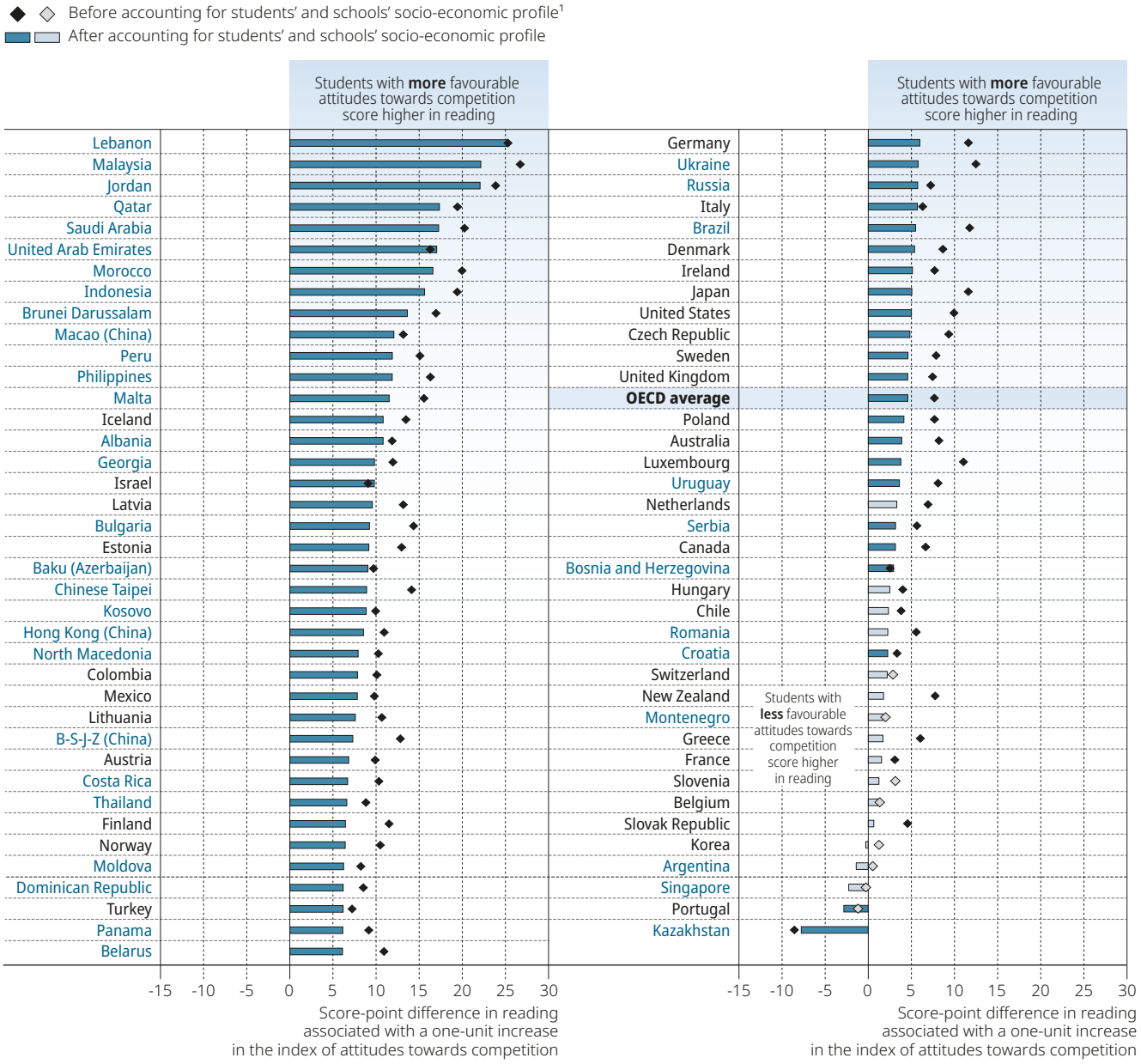
In about 88% of the countries and economies that participated in PISA 2018, students who see themselves as competitive scored higher in reading than students who perceive themselves as less competitive (Figure III.8.4). Even after accounting for the socio-economic profile of students and schools, there was still a positive relationship in about 78% of education systems. For instance, for every one-unit increase in the index of attitudes towards competition, students in Jordan, Lebanon and Malaysia scored at least 22 points higher in reading, after accounting for the socio-economic profile of students and schools. The only countries where less competitive students scored higher in reading were Kazakhstan and Portugal.

Even more interesting were the results for the individual items that make up the index of attitudes towards competition (Table III.B1.8.14). The results clearly show that students who agreed or strongly agreed that they try harder when they are in competition with other people scored considerably higher than students who disagreed with the statement (a difference of about 12 score points, on average across OECD countries, after accounting for the socio-economic profile of students and schools). However, the differences in reading scores were not as large when students were asked whether they enjoy working in situations involving competition with others (a difference of 3 score points) or whether it is important for them to perform better than other people in a task (a difference of 5 score points). While these results should not be interpreted causally, they suggest that competition may produce the greatest benefits when it drives students to invest greater effort.

PEER COMPETITION AND STUDENT OUTCOMES: THE ROLE PLAYED BY STUDENTS' ATTITUDES TOWARDS COMPETITION AND GENDER

Not everyone enjoys competition in the same way. For instance, some research suggests that women tend to avoid competition more often than men do (Datta Gupta, Poulsen and Villeval, 2005[16]; Lee, Niederle and Kang, 2014[17]), though these gender differences in competitiveness may reflect social learning rather than an innate trait (Booth and Nolen, 2012[18]). More important, not everyone responds in the same way in a competitive environment. Niederle and Verstelund (2010[19]), for instance, show how boys and girls react differently in a competitive test-taking environment. This section examines how the relationships between students' perceptions of student competition in their school and various academic, attitudinal and well-being outcomes vary, depending on how competitive students themselves are, after accounting for the socio-economic profile of students and schools. Since boys and girls usually differ in the degree of their feelings of competitiveness (Figure II.8.3), the section also looks at how these relationships vary by gender. The expectation is that peer competition is more strongly associated with favourable student outcomes amongst boys and students with more favourable attitudes towards competition, than amongst girls and students with less favourable attitudes.

Figure III.8.4 **Students' attitudes towards competition and reading performance**



1. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Note: Statistically significant values are shown in darker tones (see Annex A3).

Countries and economies are ranked in descending order of the score-point difference associated with the index of attitudes towards competition, after accounting for students' and schools' socio-economic profile.

Source: OECD, PISA 2018 Database, Table III.B1.8.14.

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The findings in Table III.B1.8.15 show that, on average across OECD countries, the relationship between student competition and reading performance was slightly more positive amongst students who reported less competitive attitudes (negative values in the index of attitudes towards competition) than amongst students who reported more competitive attitudes (positive values in the index of attitudes towards competition). While this result defies expectations, the findings in the attitudinal and well-being indicators do not. For instance, on average across OECD countries, students were more likely to feel they belong at school when they perceived greater competition amongst their schoolmates, but this was observed only amongst students who saw themselves as competitive (Figure III.8.5). In this regard, in a majority of countries and economies, student competition and sense of belonging at school were more positively associated amongst more competitive than amongst less competitive students.

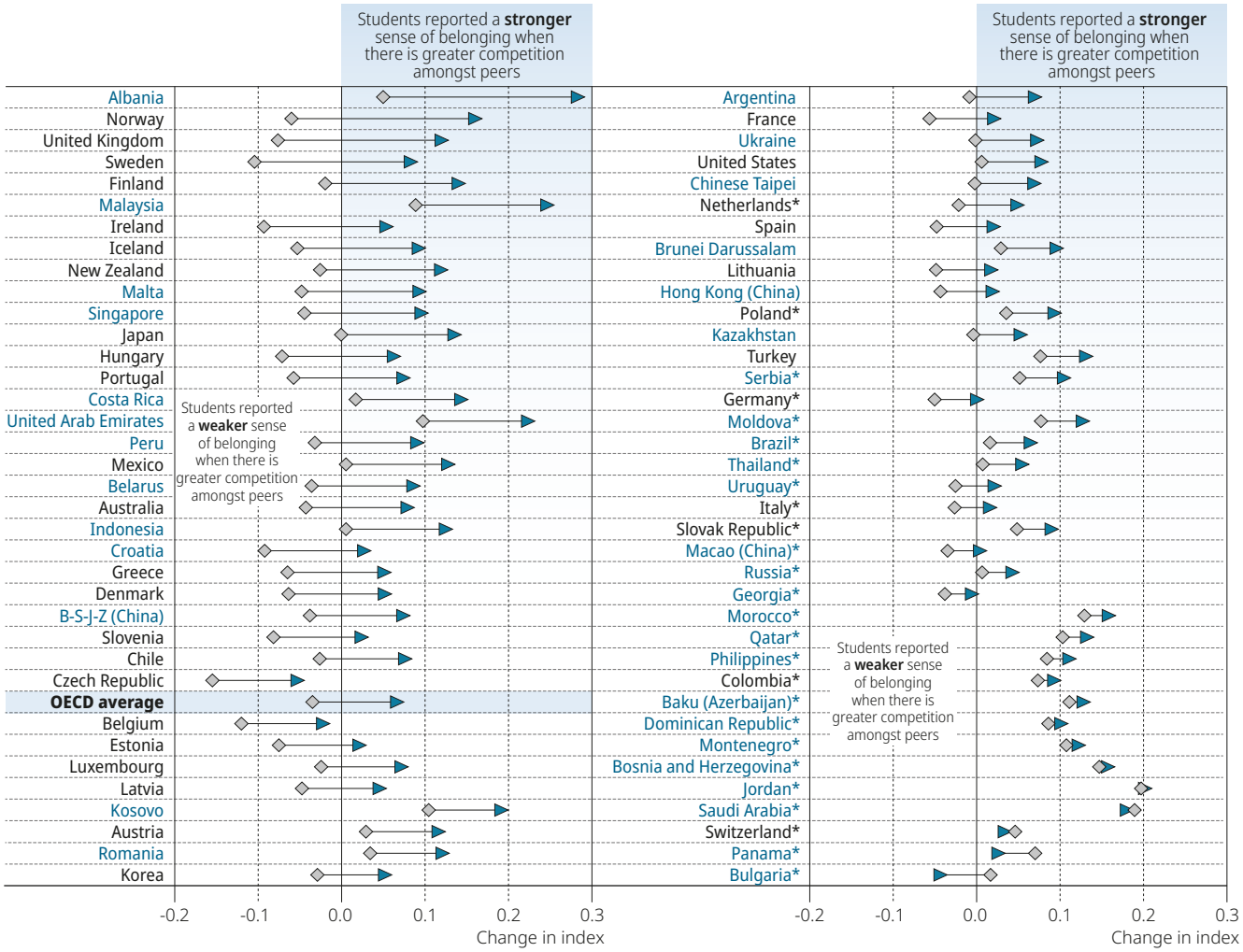
Figure III.8.5 **Student competition and sense of belonging at school, by students' attitudes towards competition**

Based on students' reports

Change in the index of sense of belonging associated with a one-unit increase in the index of student competition amongst students whose attitudes towards competition are:

▶ More favourable than those of the average OECD student

◇ Less favourable than those of the average OECD student



Notes: Countries and economies where the difference in the association between students with more and less favourable attitudes towards competition is not statistically significant are marked with an asterisk (see Annex A3).

Results based on linear regression analysis, after accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Countries and economies are ranked in descending order of the difference in the association between students with more and less favourable attitudes towards competition.

Source: OECD, PISA 2018 Database, Table III.B1.8.15.

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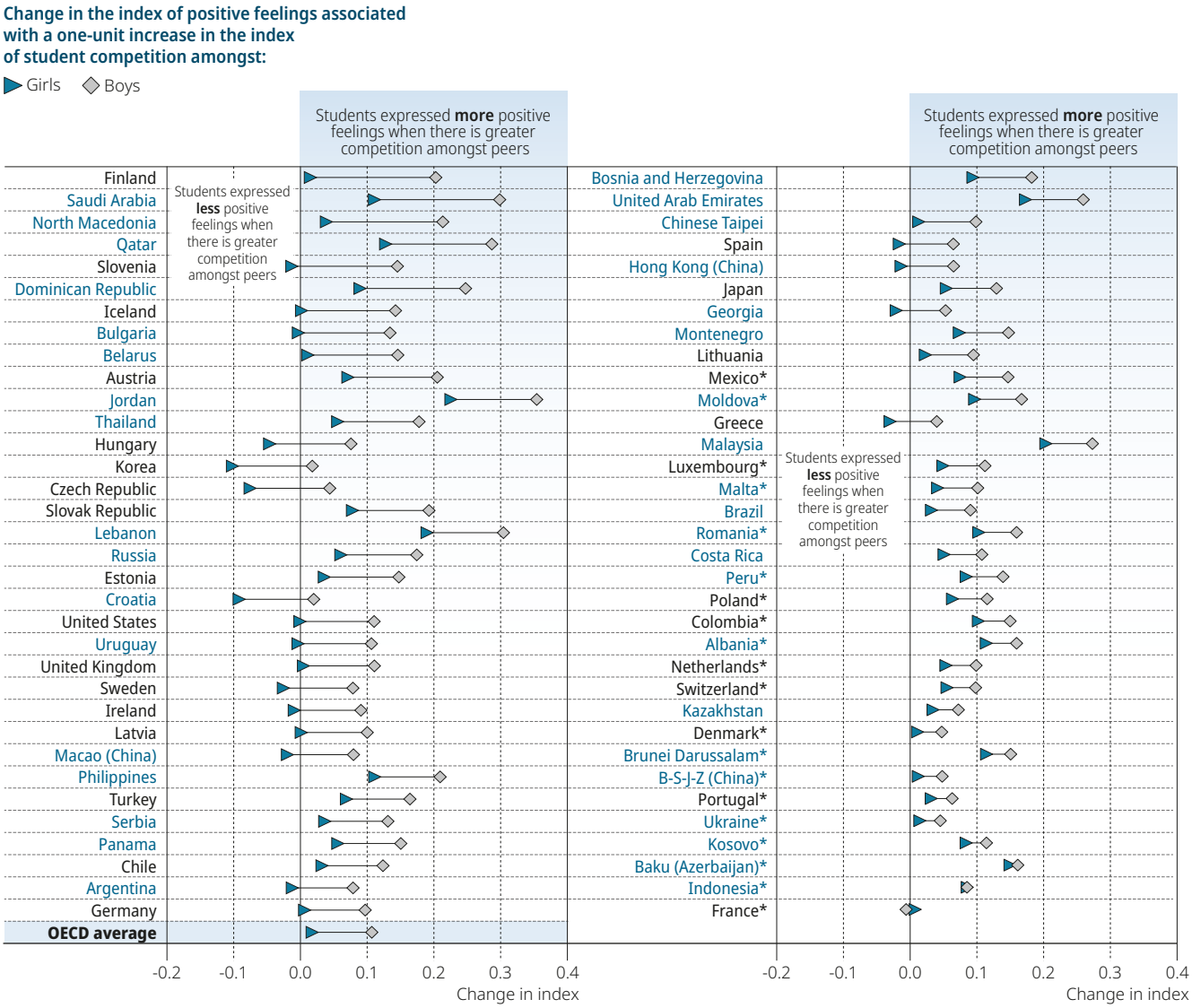
Similar results were observed for the indices of fear of failure and positive feelings. On average across OECD countries, students expressed greater fear of failure when they reported greater competition amongst their peers, but this was particularly observed amongst students who reported less favourable attitudes towards competition. Students were more likely to express positive feelings when they perceived greater competition amongst their peers, but competitive students were markedly more likely to express those feelings.

The results in Table III.B1.8.16 show that boys appear to benefit more from a competitive school climate than girls do. For instance, on average across OECD countries, student competition and sense of belonging were positively associated amongst boys, but negatively so amongst girls. More intense student competition was related to greater fear of failure, but especially so amongst girls.

Students expressed more positive feelings when they reported greater competition amongst their schoolmates, but this positive relationship was mostly observed amongst boys (Figure III.8.6). While the indices of student competition and positive feelings were positively associated in 63 countries and economies when considering boys' attitudes, they were positively associated in only 31 countries and economies when considering girls' attitudes.

Figure III.8.6 **Student competition and students' positive feelings, by gender**

Based on students' reports



Notes: Countries and economies where the difference in the association between girls and boys is not statistically significant are marked with an asterisk (see Annex A3).

Results based on linear regression analysis, after accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Countries and economies are ranked in descending order of the difference in the association between boys and girls.

Source: OECD, PISA 2018 Database, Table III.B1.8.16.

StatLink http://dx.doi.org/10.1787/888934029983

Note

1. It bears mentioning that the indices of student co-operation and competition are positively associated, both across students (correlation coefficient of 0.15, on average across OECD countries) and across countries (correlation coefficient of 0.38 across PISA-participating countries and economies).

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9

Sense of belonging at school

This chapter examines differences between countries and economies in students' sense of belonging at school, and how the sense of belonging is associated with student and school characteristics, and reading performance. It also examines whether students feel a greater sense of belonging in co-operative or competitive schools, and how sense of belonging is related to expectations of further education and grade repetition.

9 Sense of belonging at school

Sense of belonging is the "need to form and maintain at least a minimum number of interpersonal relationships" based on trust, acceptance, love and support (Baumeister and Leary, 1995[1]; Maslow, 1943[2]). Individuals with a sense of belonging feel accepted, liked and connected to others, and feel they belong to a community. When students are young, the family is the centre of their social and emotional world. However, at the age students sit the PISA test, i.e. around 15, they seek to maintain genuine and lasting interpersonal relationships farther afield, often amongst their school peers (Baumeister and Leary, 1995[1]; Slaten et al., 2016[3]). In this regard, a sense of belonging at school reflects how accepted, respected and supported students feel in their social context at school (Goodenow and Grady, 1993[4]). Related concepts include school connectedness, school attachment, school engagement, school identification and school bonding (Slaten et al., 2016[3]).

Previous studies have made great strides in understanding why some students show greater sense of belonging at school than others. A positive disciplinary climate at school (Ma, 2003[5]; OECD, 2017[6]), participating in extracurricular activities (Dotterer, McHale and Crouter, 2007[7]), teacher and parent support (Allen et al., 2018[8]; Crouch, Keys and McMahon, 2014[9]; Shochet, Smyth and Homel, 2007[10]), and perceived neighbourhood safety (Garcia-Reid, 2007[11]) have all been positively associated with students' sense of belonging at school. Moreover, socio-economically advantaged students reported greater connectedness at school than disadvantaged students in almost every education system that participated in PISA 2015 (OECD, 2017[6]). Wang and Eccles (2012[12]) also observed that students identify less with school as they progress through secondary education.

A wide array of academic and social outcomes have been associated with sense of belonging. For instance, students reporting a greater sense of belonging at school tend to display higher academic motivation, self-esteem and achievement (Goodenow and Grady, 1993[4]; OECD, 2013[13]; Sirin and Rogers-Sirin, 2004[14]; Wang and Holcombe, 2010[15]), though these relationships depend on the social desirability attached to academic achievement across social groups (Bishop et al., 2004[16]; Fuller-Rowell and Doan, 2010[17]). Students who feel they belong at school are also less likely to engage in risky and antisocial behaviours (Catalano et al., 2004[18]), to play truant and drop out of school (Lee and Burkam, 2003[19]; McWhirter, Garcia and Bines, 2018[20]; Slaten et al., 2015[21]), and to be unsatisfied with their lives (OECD, 2017[6]).

What the data tell us

- Across OECD countries, the majority of students reported that they feel socially connected at school. For instance, three out of four students agreed or strongly agreed that they can make friends easily at school.
- Students in socio-economically disadvantaged, rural and public schools were more likely to report a weaker sense of belonging at school than students in advantaged, city and private schools, respectively.
- On average across OECD countries, students who reported a greater sense of belonging scored higher in the reading assessment, after accounting for socio-economic status.
- Students reported a greater sense of belonging when they also reported higher levels of co-operation amongst their peers, whereas students' perception of competition was not associated with their sense of belonging at school.
- Students who reported a greater sense of belonging were also more likely to expect to complete a university degree, even after accounting for socio-economic status, gender, immigrant background and overall reading performance.

This chapter examines students' sense of belonging at school. PISA asked students whether they agree ("strongly disagree", "disagree", "agree", "strongly agree") with the following statements about their school: "I feel like an outsider (or left out of things) at school"; "I make friends easily at school"; "I feel like I belong at school"; "I feel awkward and out of place in my school"; "Other students seem to like me"; and "I feel lonely at school". These statements were combined to create the index of sense of belonging whose average is 0 and standard deviation is 1 across OECD countries. Since the same questions were asked in previous PISA cycles, education systems can monitor changes in the quality of students' engagement with their school community. Positive values on this scale mean that the student has a stronger sense of belonging at school than the average student in OECD countries.

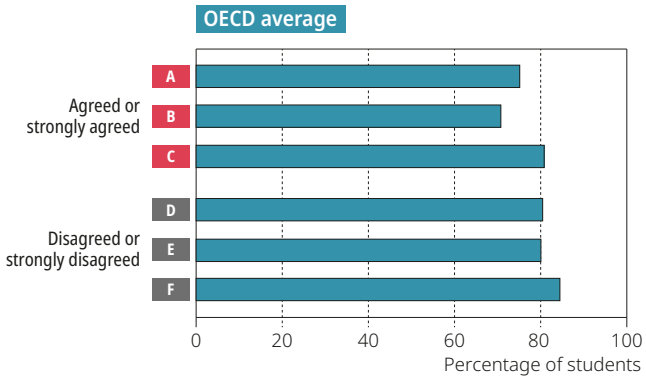
HOW STUDENTS' SENSE OF BELONGING VARIES ACROSS COUNTRIES, SCHOOLS AND STUDENTS

Figure III.9.1 shows the percentage of students who reported their agreement or disagreement with statements related to sense of belonging. Most students across OECD countries reported that they feel socially connected at school. For instance:

- 84% of students disagreed or strongly disagreed that they feel lonely at school
- 80% of students disagreed or strongly disagreed that they feel like an outsider or feel left out of things
- 75% of students agreed or strongly agreed that they can make friends easily at school
- 71% of students agreed or strongly agreed that they feel they belong at school.

Figure III.9.1 **Sense of belonging at school**

Based on students' reports



Percentage of students who agreed or strongly agreed with the following statements

- A I make friends easily at school
- B I feel like I belong at school
- C Other students seem to like me

Percentage of students who disagreed or strongly disagreed with the following statements

- D I feel like an outsider (or left out of things) at school
- E I feel awkward and out of place in my school
- F I feel lonely at school

	Percentage of students who agreed or strongly agreed with the following statements:			Percentage of students who disagreed or strongly disagreed with the following statements:		
OECD	A	B	C	D	E	F
Australia	76	68	85	73	75	81
Austria	77	74	85	85	82	86
Belgium	79	58	87	85	83	90
Canada	74	67	86	74	74	80
Chile	68	75	75	77	80	78
Colombia	74	81	75	77	78	80
Czech Republic	73	69	80	76	81	81
Denmark	79	72	84	89	87	89
Estonia	71	74	71	84	81	84
Finland	75	75	78	85	78	86
France	81	38	88	70	81	88
Germany	72	75	86	84	84	88
Greece	75	81	84	80	83	86
Hungary	79	73	83	80	83	85
Iceland	70	75	80	80	78	83
Ireland	76	67	89	78	78	86
Italy	79	66	76	86	85	88
Japan	69	80	74	87	80	88
Korea	77	78	81	89	87	90
Latvia	71	74	65	81	72	82
Lithuania	71	56	69	74	72	76
Luxembourg	75	64	81	82	80	85
Mexico	74	79	77	79	80	83
Netherlands	81	76	92	91	89	92
New Zealand	74	68	85	74	76	82
Norway	82	77	82	88	82	86
Poland	70	60	73	79	77	81
Portugal	76	80	89	87	79	90
Slovak Republic	72	69	74	72	76	79
Slovenia	79	74	78	79	82	87
Spain	81	87	87	88	86	90
Sweden	77	67	79	80	83	84
Switzerland	79	69	88	84	83	89
Turkey	72	71	73	76	75	76
United Kingdom	73	62	85	75	76	84
United States	72	67	85	69	72	76

	Percentage of students who agreed or strongly agreed with the following statements:			Percentage of students who disagreed or strongly disagreed with the following statements:		
Partners	A	B	C	D	E	F
Albania	83	87	80	89	82	90
Argentina	73	76	81	72	80	82
Baku (Azerbaijan)	72	73	76	69	72	72
Belarus	75	58	70	89	84	85
Bosnia and Herzegovina	82	80	77	79	81	84
Brazil	70	74	78	72	77	77
Brunei Darussalam	75	60	67	63	61	77
B-S-J-Z (China)	79	65	66	81	83	80
Bulgaria	74	65	68	68	70	73
Costa Rica	74	80	79	79	81	84
Croatia	82	80	81	85	84	87
Dominican Republic	74	77	74	65	67	72
Georgia	79	56	64	82	82	83
Hong Kong (China)	76	66	72	71	77	78
Indonesia	87	82	77	80	84	83
Jordan	78	75	80	66	69	78
Kazakhstan	76	69	71	79	78	80
Kosovo	80	84	77	83	74	87
Macao (China)	70	56	62	77	75	77
Malaysia	84	73	71	79	79	82
Malta	71	64	83	68	74	82
Moldova	81	78	80	85	83	78
Montenegro	81	54	77	80	78	84
Morocco	75	76	72	71	73	75
Panama	71	73	76	70	71	77
Peru	77	67	80	83	80	85
Philippines	83	85	75	73	69	74
Qatar	74	68	81	70	72	77
Romania	83	55	85	83	82	85
Russia	68	71	62	74	68	73
Saudi Arabia	74	74	85	77	80	82
Serbia	79	76	82	79	82	83
Singapore	78	73	82	77	76	83
Chinese Taipei	78	85	63	86	80	85
Thailand	80	76	61	73	63	76
Ukraine	75	78	71	81	79	78
United Arab Emirates	76	71	78	73	74	79
Uruguay	70	81	88	78	81	81
Viet Nam	80	74	37	72	77	87

Source: OECD, PISA 2018 Database, Table III.B1.9.1.

StatLink http://dx.doi.org/10.1787/888934030002

However, a considerable number of students do not feel socially connected at school. For instance, on average across OECD countries, about one in four disagreed that they make friends easily at school; about one in five students feels like an outsider at school; and about one in six feels lonely at school. Moreover, in some countries and economies sizable minorities of 15-year-old students reported a weak attachment to their schools and feel lonely or isolated. For instance, at least one in four students in Baku (Azerbaijan), Bulgaria, the Dominican Republic, Morocco, the Philippines, and the Russian Federation agreed or strongly agreed that they feel lonely at school.

The proportion of the variation in the index of sense of belonging that lay between schools is smaller than for other indices examined in this report (Table III.B1.9.5). On average across OECD countries, only about 2% of the variation in the index lay between schools, but in 11 countries and economies this percentage amounts to at least 5%. With regard to differences across different types of schools, on average across OECD countries and in a clear majority of education systems, students in socio-economically advantaged schools reported a greater sense of belonging at school than students in disadvantaged schools did (Figure III.9.2). The gap in favour of advantaged schools was largest in Argentina, Bulgaria, Hungary, Luxembourg and Uruguay. Less remarkable were the differences between rural schools and city schools. Still, there were 19 education systems where students' sense of belonging was stronger in city schools, and only 4 where the sense of belonging was greater in rural schools. In terms of sense of belonging, students in rural schools in Argentina, Brazil, Bulgaria, the Dominican Republic, Hungary and Panama seemed to be at a particular disadvantage. In addition, on average across OECD countries, sense of belonging was stronger in private than in public schools. Across OECD countries, students' sense of belonging was stronger in schools with a low concentration of students with an immigrant background than in schools with a high concentration of immigrant students, but this difference was observed in only 14 countries and economies.

In virtually all education systems, socio-economically advantaged students reported a greater sense of belonging than disadvantaged students (Table III.B1.9.4). Moreover, in 30 countries and economies, sense of belonging was stronger amongst boys than amongst girls, while the opposite was observed in 23 countries and economies. Differences in favour of boys were particularly noticeable (over one-fifth of a standard deviation) in Canada, Denmark, Norway and Sweden, while in Albania, Jordan, Saudi Arabia and Turkey, girls reported a much stronger sense of belonging at school than boys (over one-fifth of a standard deviation). In about a third of the participating education systems, and especially in Brazil, Bulgaria, Georgia, Indonesia, Luxembourg, the Philippines and Spain, students with an immigrant background reported a weaker sense of belonging than students without an immigrant background.

TRENDS IN STUDENTS' SENSE OF BELONGING

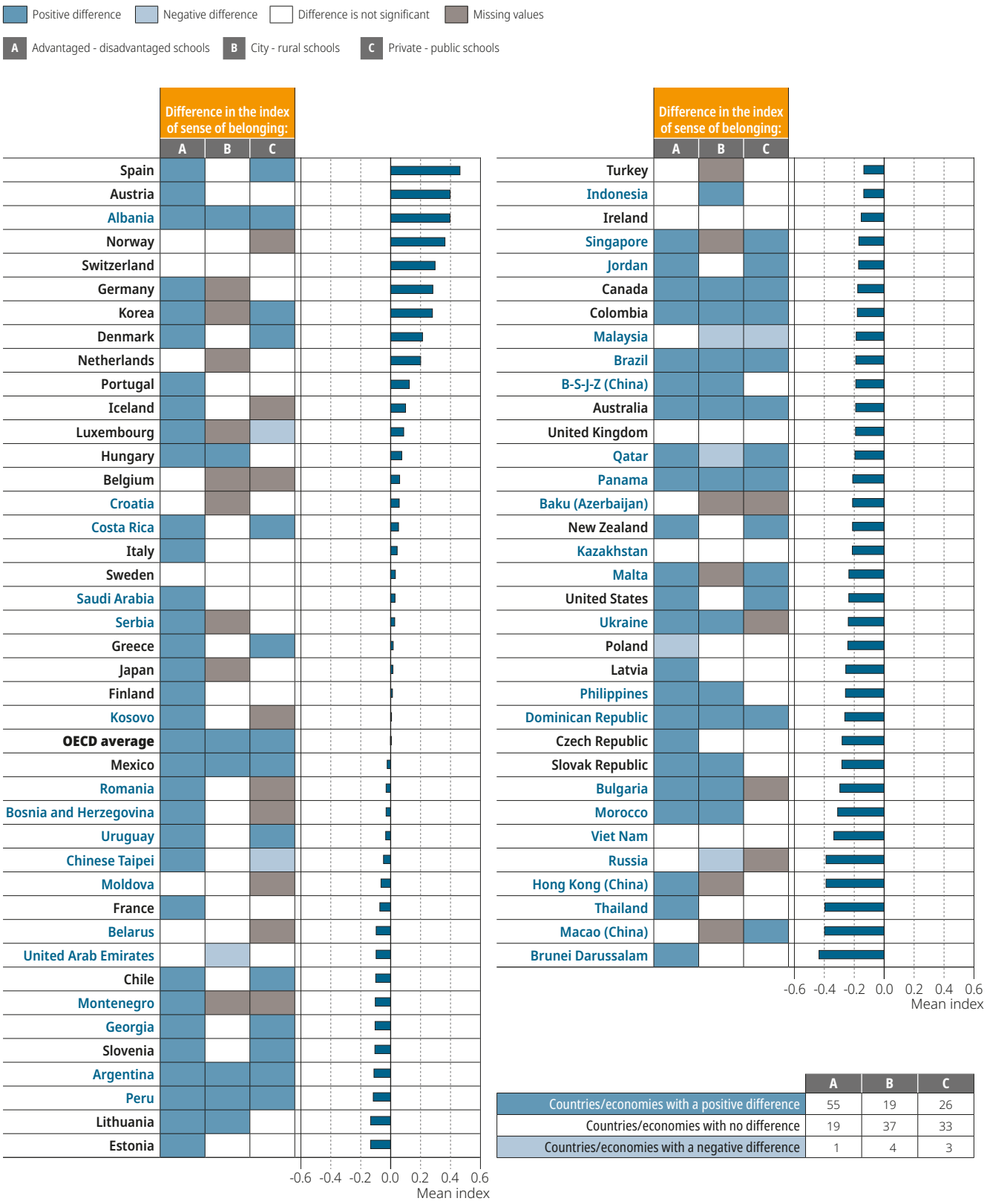
PISA 2015 and PISA 2018 asked students the same question about their sense of belonging at school. On average across OECD countries, students' sense of belonging generally deteriorated between 2015 and 2018 (Table III.B1.9.2). The share of students who agreed or strongly agreed with the positive statements "I make friends easily at school" and "I feel like I belong at school" decreased by around 2 percentage points over the period. This deterioration was more marked in several school systems. For instance, in Georgia, Jordan, Kazakhstan, Kosovo, Malta and Viet Nam, the share of students who agreed that they make friends easily at school shrank by more than 10 percentage points. The percentage of students who disagreed or strongly disagreed that they feel like an outsider at school also decreased by about 2 percentage points between 2015 and 2018, on average across OECD countries. However, the percentage of students who disagreed or strongly disagreed with the negative statements "I feel awkward and out of place in my school" and "I feel lonely at school" remained relatively stable during the same period. In 27 countries, and particularly in Georgia, Kazakhstan and Viet Nam, the proportion of students who disagreed with the 3 negative statements shrank significantly (i.e. the sense of belonging deteriorated) between 2015 and 2018. This trend seems to be part of a gradual decline in students' sense of belonging at school over the past 15 years (OECD, 2017[6]). However, in a few countries and economies, and especially in Colombia, Costa Rica, the Dominican Republic, Lithuania, Mexico and Turkey, students' sense of belonging at school generally improved between 2015 and 2018.

HOW STUDENTS' SENSE OF BELONGING IS RELATED TO READING PERFORMANCE

There are many reasons why policy makers, teachers and parents should care about students' sense of belonging at school. Probably the most important is that there is an association between a sense of belonging at school and academic achievement. Research examining this association generally posits a positive circular relationship: a sense of belonging at school leads to higher academic achievement, and high academic achievement leads to greater social acceptance and sense of belonging (Wentzel, 1998[22]). However, the link between social bonding with peers at school and achievement is likely to differ significantly across countries and across groups of students. In some countries, academic achievement is considered socially desirable amongst teenagers; in others, social acceptance is not contingent on academic achievement. Amongst some groups of students, academic achievement might even be disparaged (Ogbu, 2003[23]).

Figure III.9.2 **Index of sense of belonging, by school characteristics**

Based on students' reports



	A	B	C
Countries/economies with a positive difference	55	19	26
Countries/economies with no difference	19	37	33
Countries/economies with a negative difference	1	4	3

Countries and economies are ranked in descending order of the index of sense of belonging at school.

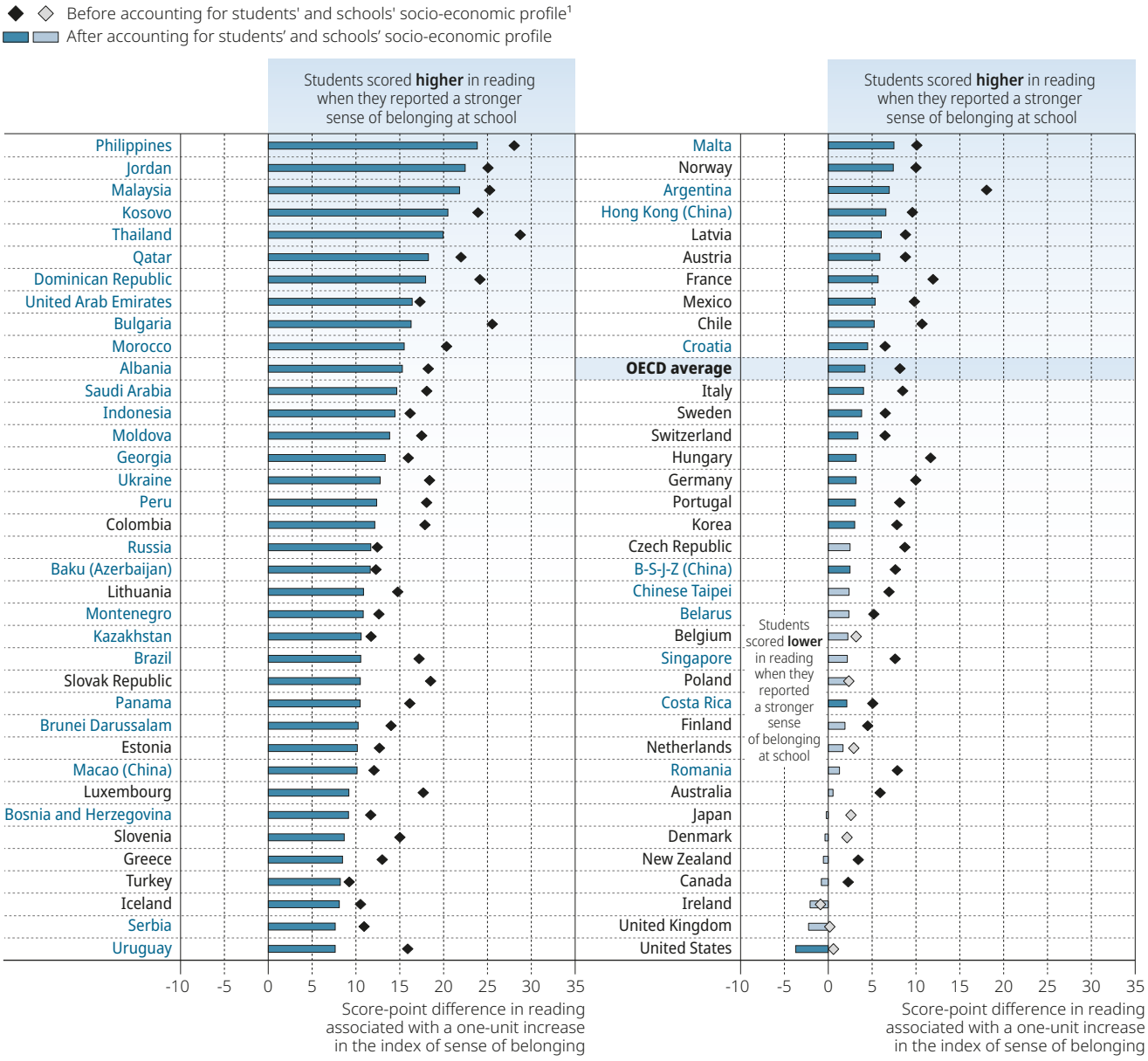
Source: OECD, PISA 2018 Database, Tables III.B1.9.1 and III.B1.9.5.

StatLink http://dx.doi.org/10.1787/888934030021

Sense of belonging at school

In a majority of countries and economies, 15-year-old students who reported a stronger sense of belonging at school scored higher in reading, even after accounting for the socio-economic profile of students and schools (as measured by the PISA index of economic, social and cultural status) (Figure III.9.3). Only in the United States did students with a stronger sense of belonging score lower than did students with a weaker sense of belonging. On average across OECD countries, a one-unit increase in the index of sense of belonging at school (equivalent to one standard deviation across OECD countries) was associated with an increase of four score points in reading, after accounting for the socio-economic profile of students and schools. In Jordan, Kosovo, Malaysia and the Philippines, this increase was greater than 20 score points. Amongst the individual components used to create the index of sense of belonging at school, those most strongly associated with reading performance were "I feel like an outsider" and "I feel awkward and out of place in my school" (Table III.B1.9.6). Students who disagreed with these statements scored 21 points higher in reading, after accounting for students' and schools' socio-economic profile.

Figure III.9.3 **Sense of belonging and reading performance**



1. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Note: Statistically significant values are shown in darker tones (see Annex A3).

Countries and economies are ranked in descending order of the score-point difference in reading associated with a one-unit increase in the index of sense of belonging at school, after accounting for students' and schools' socio-economic profile.

Source: OECD, PISA 2018 Database, Table III.B1.9.6.

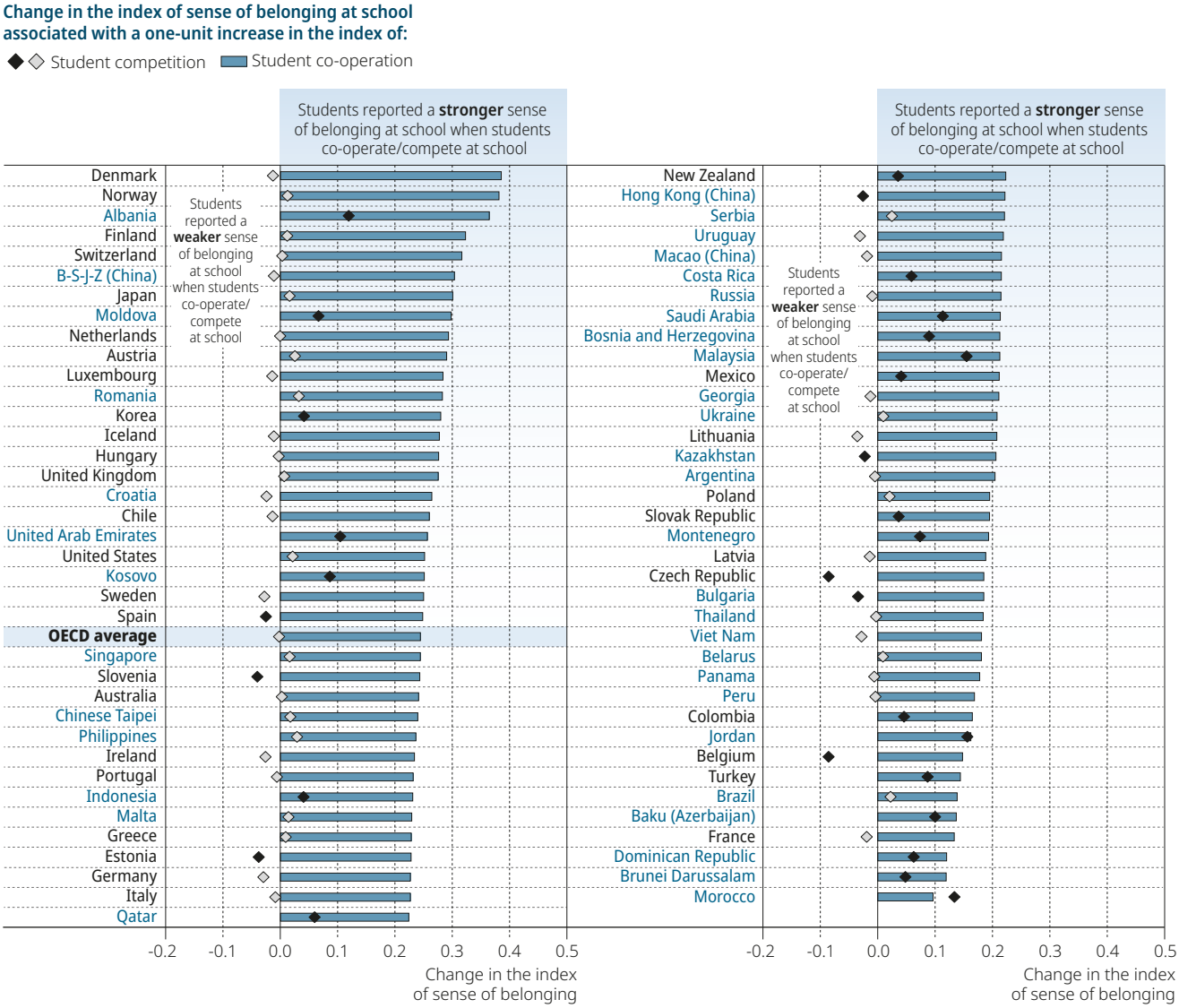
StatLink http://dx.doi.org/10.1787/888934030040

Students might not only perform better when they feel a stronger sense of connectedness to their school, they might also benefit when their peers feel the same way. When the sense of belonging at both the student and school levels were examined together in a regression analysis, both were positively associated with reading performance in a majority of school systems (Table III.B1.9.7). On average across OECD countries, a one-unit increase in the school-level index of sense of belonging at school (i.e. the school's average of students' sense of belonging) was associated with an increase of 25 score points in reading, after accounting for the student-level index and the socio-economic profile of students and schools.

DO 15-YEAR-OLDS IN CO-OPERATIVE OR COMPETITIVE SCHOOLS REPORT A GREATER SENSE OF BELONGING?

Previous research indicates that students tend to report better relationships with peers and stronger attachments to school in co-operative academic environments than in competitive ones (Johnson et al., 1981[24]; Roseth, Johnson and Johnson, 2008[25]).

Figure III.9.4 **Student co-operation and competition, and students' sense of belonging**



Notes: Statistically significant values are shown in darker tones. All values associated with the index of student co-operation are statistically significant (see Annex A3).

Results based on linear regression analysis, after accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

The indices of student co-operation and student competition are included in the same linear regression model.

Countries and economies are ranked in descending order of the change in the index of sense of belonging at school associated with a one-unit increase in the index of student co-operation.

Source: OECD, PISA 2018 Database, Table III.B1.9.8.

StatLink http://dx.doi.org/10.1787/888934030059

However, co-operation comes with its challenges too, including "free-riding" (when some students take advantage of, and benefit from, their peers' hard work) and the associated sense of unfairness amongst other team members. In addition, some degree of competition can improve students' motivation and school attachment by adding some thrill and excitement to the daily school routine. In this respect, Schneider et al. (2005[26]) show that only hyper-competitiveness – "a form of competition involving the need to prove one's own superiority" – lead to conflict and fewer friendships. What does PISA tell us about the relationship between co-operation and competition at school, and students' sense of belonging?

PISA asked 15-year-old students about the level of co-operation and competition amongst their fellow students. Two indices were created based on these questions: the index of student co-operation and the index of student competition (for more details about these indices, see Chapter 8). What emerges from the analysis of these indices and students' sense of belonging at school is that, in every education system, students reported a stronger sense of connectedness to their school when they perceived their relationships with peers as being co-operative, after accounting for the socio-economic profile of students and schools (Figure III.9.4 and Table III.B1.9.8). In a majority of countries and economies students reported a similar sense of belonging at school regardless of their perceptions of the degree of competitiveness amongst their peers. Co-operation amongst students and their sense of belonging at school were most strongly, and positively, associated in Albania, Beijing, Shanghai, Jiangsu and Zhejiang (China), Denmark, Finland, Japan, Norway and Switzerland. Competition amongst students and their sense of belonging at school were most strongly, and positively, associated in Albania, Jordan, Malaysia, Morocco, Saudi Arabia and the United Arab Emirates.

The analysis of some of the individual items that make up the index of sense of belonging at school produce similar results (Table III.B1.9.8). In all but two countries, the Dominican Republic and Morocco, students were both more likely to agree that they feel they belong at school and to disagree that they feel like an outsider or lonely at school, when they reported higher values in the index of student co-operation. However, in about half of countries and economies, more competition amongst peers was associated with a greater probability of feeling like an outsider at school.

HOW STUDENTS' SENSE OF BELONGING IS RELATED TO STUDENTS' EXPECTATIONS OF COMPLETING TERTIARY EDUCATION

Students who develop positive relationships with peers and teachers, and a strong attachment to the school, are less likely to play truant and drop out of school (Lee and Burkam, 2003[19]). Analyses of the National Education Longitudinal in the United States, for instance, show that amongst the four most-cited reasons for leaving school were disliking school and not getting along with teachers or peers (Catterall, 1998[27]) – all of them intrinsically related to students' sense of belonging at school. Students who feel awkward at school may also develop negative attitudes towards education, which could deter them from moving into higher education, even if they are academically capable. After all, why would proficient students who feel out-of-place at school decide to pursue higher education if they anticipate they will feel equally uneasy?

PISA asked students if they expect to complete a tertiary degree, which includes obtaining a bachelor's, master's or doctoral degree (ISCED 5A and 6) (see Chapter 6 in *PISA 2018 Results [Volume II]: Where All Students Can Succeed* [OECD, 2019[28]] for more details). In every education system except France, the Netherlands, Norway, Switzerland and Ukraine, students who reported a greater sense of belonging at school were more likely to expect to complete higher education, before accounting for relevant student characteristics (Figure III.9.5). Even after accounting for students' socio-economic status, gender, immigrant background and reading performance, in a majority of countries and economies students' sense of belonging was positively associated with the expectation of completing higher education. The school systems where students' sense of belonging at school was most positively related to their educational expectations were Belarus, Georgia, Jordan, Malaysia, Romania, Thailand and the United States, whereas the only country where this relationship was negative was Ukraine.

DO GRADE REPEATERS REPORT A WEAKER SENSE OF BELONGING?

While repeating a grade can give struggling students more time to "catch up" academically with their peers and may help calm rebellious behaviour (Gottfredson, Fink and Graham, 1994[29]), reviews of previous research found negative effects of grade repetition on academic achievement (Jimerson, 2001[30]) and school-related attitudes (Ikeda and García, 2014[31]). In addition, Allen et al. (2009[32]) find that any positive short-term effects of grade repetition appear to decline over time.

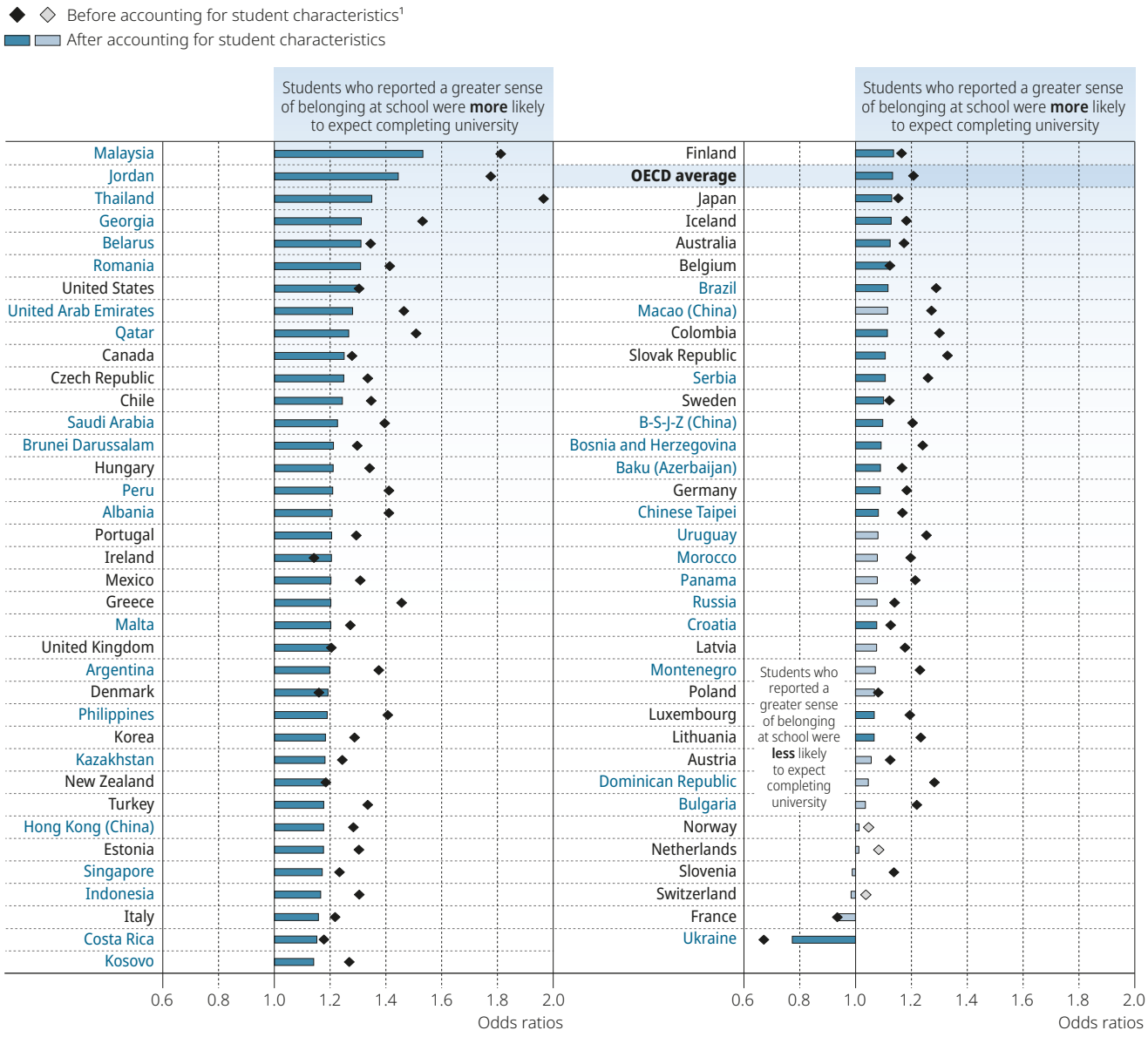
PISA asked students how many times (never, once, more than once) and at which education level (primary or secondary education) they had repeated a grade. Figure III.9.6 shows that in almost every education system, students who had repeated a grade reported a weaker sense of belonging at school. More important, even after accounting for relevant predictors of grade repetition, such as academic performance, socio-economic status, gender and immigrant background, grade repetition and students' sense of belonging at school were negatively associated in a majority of countries and economies. The countries

and economies with the strongest negative associations, after accounting for relevant predictors, were Belarus, Georgia, Greece, Montenegro and Chinese Taipei (at least 0.3 of a standard deviation), while grade repetition and sense of belonging were not associated in 23 countries and economies.

While the negative relationship between grade repetition and sense of belonging should not be interpreted as causal, these results suggest that policy makers may consider non-academic, as well as academic, outcomes when debating the best policies on grade repetition.

Figure III.9.5 **Students' sense of belonging and educational expectations**

Increased likelihood of expecting to complete university per one-unit increase in the index of sense of belonging at school



1. Student characteristics include socio-economic status (measured by the PISA index of economic, social and cultural status), gender, immigrant background and reading performance.

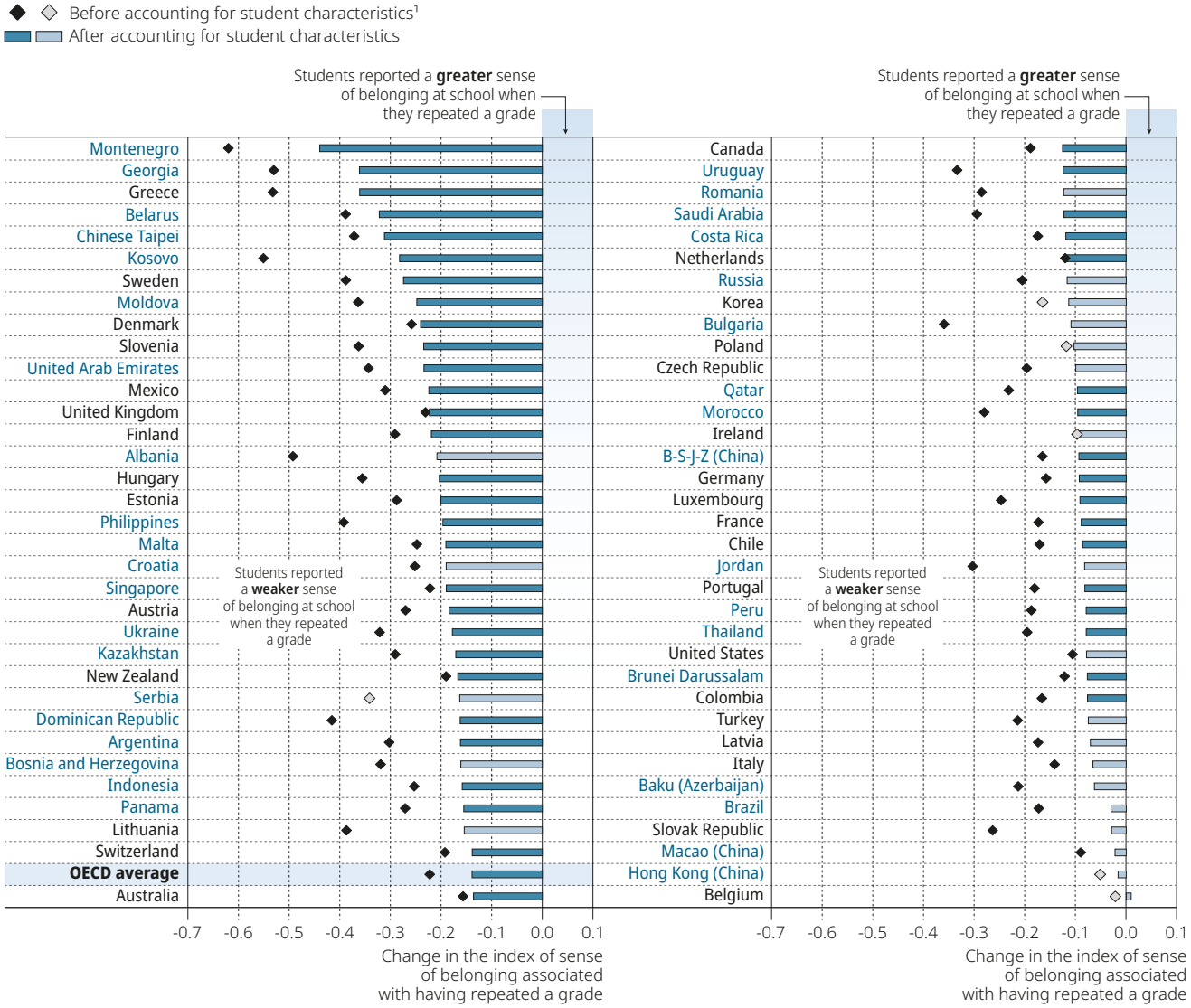
Note: Statistically significant values are shown in darker tones (see Annex A3).

Countries and economies are ranked in descending order of the increased likelihood of expecting to complete university per one-unit increase in the index of sense of belonging.

Source: OECD, PISA 2018 Database, Table III.B1.9.9.

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Figure III.9.6 **Grade repetition and students' sense of belonging**



1. Student characteristics include socio-economic status (measured by the PISA index of economic, social and cultural status), gender, immigrant background and reading performance.

Note: Statistically significant values are shown in darker tones (see Annex A3).

Countries and economies are ranked in ascending order of the change in the index of sense of belonging at school associated with having repeated a grade.

Source: OECD, PISA 2018 Database, Table III.B1.9.10.

StatLink http://dx.doi.org/10.1787/888934030097

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10

Parental involvement in school activities

This chapter examines differences between countries and economies in parents' involvement in school activities, and how these forms of engagement are associated with school characteristics and students' reading performance. It also discusses why some parents may not participate in school-related activities, what criteria parents use to choose a school for their child, and how the parents of low-achievers and top-performers view their child's school.

10

Parental involvement in school activities

Teachers and principals often count on parents to help them create a positive learning environment in their schools. The family-school partnership can take the form of parents discussing education matters with their child, helping with homework, supervising their child's progress through education, communicating with school personnel, participating in decision making, and being involved in school activities (LaRocque, Kleiman and Darling, 2011[1]). The first three forms of parental involvement entail interactions between parents and their child; they are referred to as home-based parental involvement. The latter three require interactions between parents and the school staff; these are collectively referred to as school-based parental involvement. This chapter examines primarily three forms of school-based parental involvement that are essential for creating a positive school climate: communicating with teachers, volunteering in school-related activities and participating in school governance (Cohen et al., 2009[2]).

Getting involved at school allows parents to obtain first-hand information on the learning environment, learn how to navigate the education system, demonstrate to their child that education is important, and influence their child's behaviour by establishing consistent norms (Cohen et al., 2009[2]; Grolnick and Slowiaczek, 1994[3]). Previous studies have found that parental involvement in their child's education has a positive effect on student outcomes (Castro et al., 2015[4]; Grolnick and Slowiaczek, 1994[3]), even if the effect is largely dependent on the quality of this involvement (Borgonovi and Montt, 2012[5]; Moroni et al., 2015[6]; Pomerantz, Moorman and Litwack, 2007[7]). The constructive involvement of parents in school activities has been positively associated with, among other things, student achievement (Haynes, Comer and Hamilton-Lee, 1989[8]; Hill and Taylor, 2004[9]; Jeynes, 2012[10]), social skills (Sheridan et al., 2012[11]), attendance (Avvisati et al., 2014[12]), good behaviour (Domina, 2005[13]; Sheridan et al., 2017[14]), positive relationships with schoolmates (Garbacz et al., 2018[15]) and mental health (Wang and Sheikh-Khalil, 2014[16]).

However, some studies indicate that school-based parental involvement is only modestly associated with student outcomes, at least when compared to "at-home good parenting" (Desforges and Abouchaar, 2003[17]). In this regard, a low level of parental involvement in school-based activities may simply reflect parents' trust in the school (Addi-Raccah and Arviv-Elyashiv, 2008[18]) or a model of school governance based on the understanding that teachers control the instructional process and parents provide home support or simply delegate their academic responsibilities (Bauch and Goldring, 1998[19]). On the other hand, a high level of parental involvement in some school activities, such as volunteering in physical and extracurricular activities, may reflect a lack of school resources.

What the data tell us

- According to school principals, about 41% of students' parents discussed their child's progress with a teacher on their own initiative and 57% did so on the initiative of teachers, on average across OECD countries. However, only 17% of parents participated in local school government and 12% volunteered for physical or extracurricular activities.
- On average across OECD countries, parents discussing their child's progress was more common in socio-economically advantaged schools when the initiative was taken by parents, and in disadvantaged schools when the initiative was taken by teachers.
- On average across the nine OECD countries that distributed the parent questionnaire, the issues that parents most commonly cited as hindering their participation in school activities were time-related, and included the need to work (34%) and the inconvenience of meeting times (33%).
- Parents overwhelmingly cited school safety, school climate and school reputation as the most important criteria when choosing a school for their child, followed closely by students' academic achievement and the offering of specific subjects or courses.

To examine parents' involvement in school activities, PISA 2018 asked principals about the proportion of parents who, during the previous academic year, participated in the following school activities: "discussed their child's progress with a teacher on their own initiative"; "discussed their child's progress on the initiative of one of their child's teachers"; "participated in local school government"; and "volunteered in physical or extracurricular activities".

PISA also asked parents in the 17 countries and economies that distributed the parent questionnaire (9 of which were OECD countries and economies) to report whether, during the previous academic year, they had participated in any of the following ten school-related activities ("yes", "no", "not supported by school"): "discussed my child's behaviour with a teacher on my own initiative"; "discussed my child's behaviour on the initiative of teachers"; "discussed my child's progress with a teacher on my own initiative"; "discussed my child's progress on the initiative of teachers"; "participated in local school government"; "volunteered in physical or extracurricular activities"; "volunteered to support school activities"; "attended a scheduled meeting or conference for parents"; "talked about how to support learning at home and homework with my child's teachers"; and "exchanged ideas on parenting, family support, or the child's development with my child's teachers".

The first part of this chapter focuses mainly on the information from the school questionnaire. While this has the advantages of including all PISA-participating countries and economies and providing a broader picture of parents' participation in school activities (the question does not refer specifically to the parents of 15-year-olds), the findings should also be interpreted with caution as they are based on principals' estimates of how many parents participated. For instance, school principals may not observe unprompted parent-teacher interactions, especially when the initiative comes from parents.

HOW PARENTAL INVOLVEMENT IN SCHOOL ACTIVITIES VARIES ACROSS COUNTRIES AND SCHOOLS

According to school principals, about 41% of students' parents discussed their child's progress with a teacher on their own initiative and 57% did so on the initiative of teachers, on average across OECD countries in 2018 (Figure III.10.1). However, 17% of parents participated in local school government and only 12% volunteered for physical or extracurricular activities, such as building maintenance, sports or field trips. Differences across countries and economies were pronounced. For instance, in Albania, Baku (Azerbaijan), Beijing, Shanghai, Jiangsu and Zhejiang (China), Belarus, Greece, Kazakhstan, Montenegro, the Philippines and Viet Nam, at least 6 in 10 parents discussed their child's progress on their own initiative, whereas in Argentina, Brazil, Japan, Morocco, Norway, Switzerland and Uruguay, fewer than 3 in 10 did. A majority of parents participated in school government in Albania, Baku (Azerbaijan), the Dominican Republic, Kazakhstan, Kosovo, the Philippines and Saudi Arabia, but in a majority of countries and economies, fewer than one in four parents did so. Parents volunteering in extracurricular activities was most widespread in Baku (Azerbaijan), Belarus, Kazakhstan, the Philippines, the Russian Federation and Thailand (more than 40% of parents did so), but least common in Belgium, France and Slovenia (less than 5% of parents volunteered).

An interesting indicator is to compare the share of parents who discussed their child's progress on their own initiative and those who did so on the initiative of teachers. In Denmark, Iceland, Japan, Macao (China), Norway and Sweden, such discussions were more prevalent when they were on the teachers' initiative (at least a 40 percentage-point difference), whereas discussions on the parents' initiative were relatively more common in Belarus, Bosnia and Herzegovina, Croatia, Greece, Montenegro, the Republic of North Macedonia (hereafter "North Macedonia") and Slovenia (at least a 10 percentage-point difference).

According to parents in the 17 countries and economies that distributed the parent questionnaire, attending a scheduled meeting or conference for parents was the activity in which they most frequently participated, followed by all the activities involving parent-teacher interactions (e.g. discussing their child's behaviour and progress) (Table III.B1.10.1). By contrast, volunteering to support school activities (e.g. in the school library, media centre or canteen, or as a guest speaker), volunteering in physical or extracurricular activities (e.g. building maintenance, carpentry, gardening, school play, sports, field trip) and participating in school government were the activities in which they participated the least. Any comparisons with the results from the school questionnaire should be interpreted with caution, given that school principals were asked about all the parents in the school, and the parent questionnaire was only distributed to the parents of 15-year-olds. In addition, the response rate was generally lower in the parent questionnaire than in the school questionnaire, and parents were given the option to answer "not supported by school" (which was coded as "not participated").

As regards school differences in parents' participation in school-related activities (as reported by principals), parents discussing their child's progress was more common in socio-economically advantaged schools than in disadvantaged schools when the initiative was taken by parents, whereas it was more common in disadvantaged schools than in advantaged schools when the initiative was taken by teachers, on average across OECD countries (Figure III.10.2). Similarly, more parents in city schools discussed their child's progress on their own initiative than parents in rural schools did, while the opposite was true when the initiative came from the teacher. Moreover, parent-teacher interactions were more prevalent in private than in public schools, regardless of who took the initiative. Across OECD countries, parents' participation in school government was similar across the different types of schools, except it was slightly more common in socio-economically advantaged schools (Table III.B1.10.5). But the proportion of parents who volunteered in physical or extracurricular activities was larger in rural than in city schools, and in private than in public schools (Table III.B1.10.6).

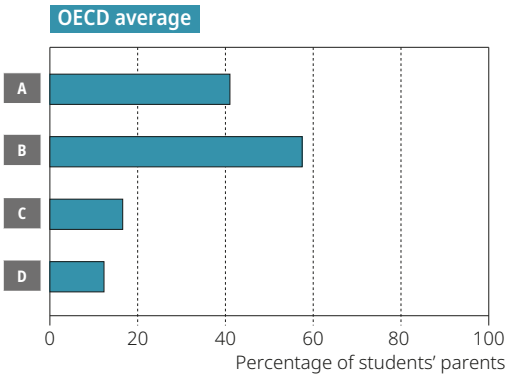
TRENDS IN PARENTAL INVOLVEMENT IN SCHOOL ACTIVITIES

According to school principals, the percentage of parents who participated in school-related activities did not change greatly between 2015 and 2018, on average across OECD countries (Table III.B1.10.2). If anything, the percentage of parents who participated in school government decreased by three percentage points, and the share of parents who volunteered in physical or extracurricular activities decreased by one percentage point during the period.

Increases of more than five percentage points in parents' participation between 2015 and 2018 were observed in the following countries and economies for the following activities: in Colombia, Luxembourg, Malta, the Republic of Moldova (hereafter "Moldova"), Montenegro, North Macedonia and Turkey, for discussing their child's progress on the parents' initiative; in Iceland and Macao (China), for discussing their child's progress on the teachers' initiative; in Moldova, for participating in local school government; and in Albania, Kosovo, Malta, Mexico and the United Arab Emirates, for volunteering in physical or extracurricular activities.

Figure III.10.1 Parental involvement in school-related activities

Based on principals' reports



Percentage of students' parents who participated in the following school-related activities

- A Discussed their child's progress with a teacher on their own initiative
- B Discussed their child's progress on the initiative of one of their child's teachers
- C Participated in local school government
- D Volunteered in physical or extracurricular activities

	Percentage of students' parents who participated in the following school-related activities:			
	A	B	C	D
Philippines	66	76	82	70
Kazakhstan	65	59	55	56
Albania	62	69	60	37
Baku (Azerbaijan)	62	55	52	44
B-S-J-Z (China)	69	67	41	32
Belarus	67	54	36	50
Thailand	48	64	49	43
Moldova	57	62	36	37
Russia	55	59	31	44
United Arab Emirates	55	60	38	34
Colombia	54	68	47	16
Peru	41	54	49	35
Viet Nam	69	64	25	19
Kosovo	46	52	52	26
Panama	50	50	43	32
Ukraine	57	55	24	32
Dominican Republic	34	51	61	21
Macao (China)	35	85	29	16
Chile	41	60	36	23
Mexico	32	47	50	28
Indonesia	40	43	44	24
Italy	59	49	34	8
Sweden	42	86	10	12
Turkey	48	47	37	18
Qatar	51	54	26	19
Poland	46	63	22	18
Saudi Arabia	42	36	53	17
Spain	50	68	20	10
Chinese Taipei	44	45	33	26
Georgia	52	49	23	24
Denmark	35	84	10	18
Israel	45	67	19	15
Hong Kong (China)	41	71	20	13
Norway	29	88	11	17
Greece	64	47	23	10
Singapore	43	75	12	12
Iceland	37	82	8	14
Portugal	54	61	11	15

	Percentage of students' parents who participated in the following school-related activities:			
	A	B	C	D
Bosnia and Herzegovina	54	44	28	13
Lebanon	48	46	28	14
Korea	42	46	33	12
Montenegro	61	42	19	10
United States	45	50	14	23
Japan	13	78	20	18
North Macedonia	57	44	22	5
Costa Rica	39	51	21	17
Bulgaria	38	51	20	17
Lithuania	44	56	14	13
Serbia	46	50	24	6
Finland	41	69	8	8
Estonia	39	50	17	19
Slovak Republic	39	39	34	11
Romania	36	42	28	16
Malaysia	34	38	27	21
United Kingdom	41	69	5	6
Latvia	43	48	13	13
Jordan	33	31	33	19
Brazil	30	43	27	15
Canada	44	52	7	11
New Zealand	40	55	5	14
Australia	42	54	7	10
Malta	47	42	8	16
Netherlands	43	59	4	6
Morocco	25	28	34	24
Croatia	50	34	21	5
France	39	56	11	4
Brunei Darussalam	35	44	16	11
Czech Republic	36	49	11	9
Germany	35	50	10	10
Switzerland	28	66	5	5
Slovenia	51	33	15	2
Luxembourg	38	48	6	6
Belgium	35	52	5	4
Ireland	32	44	8	8
Argentina	26	35	12	12
Hungary	31	26	9	13
Uruguay	23	34	8	9

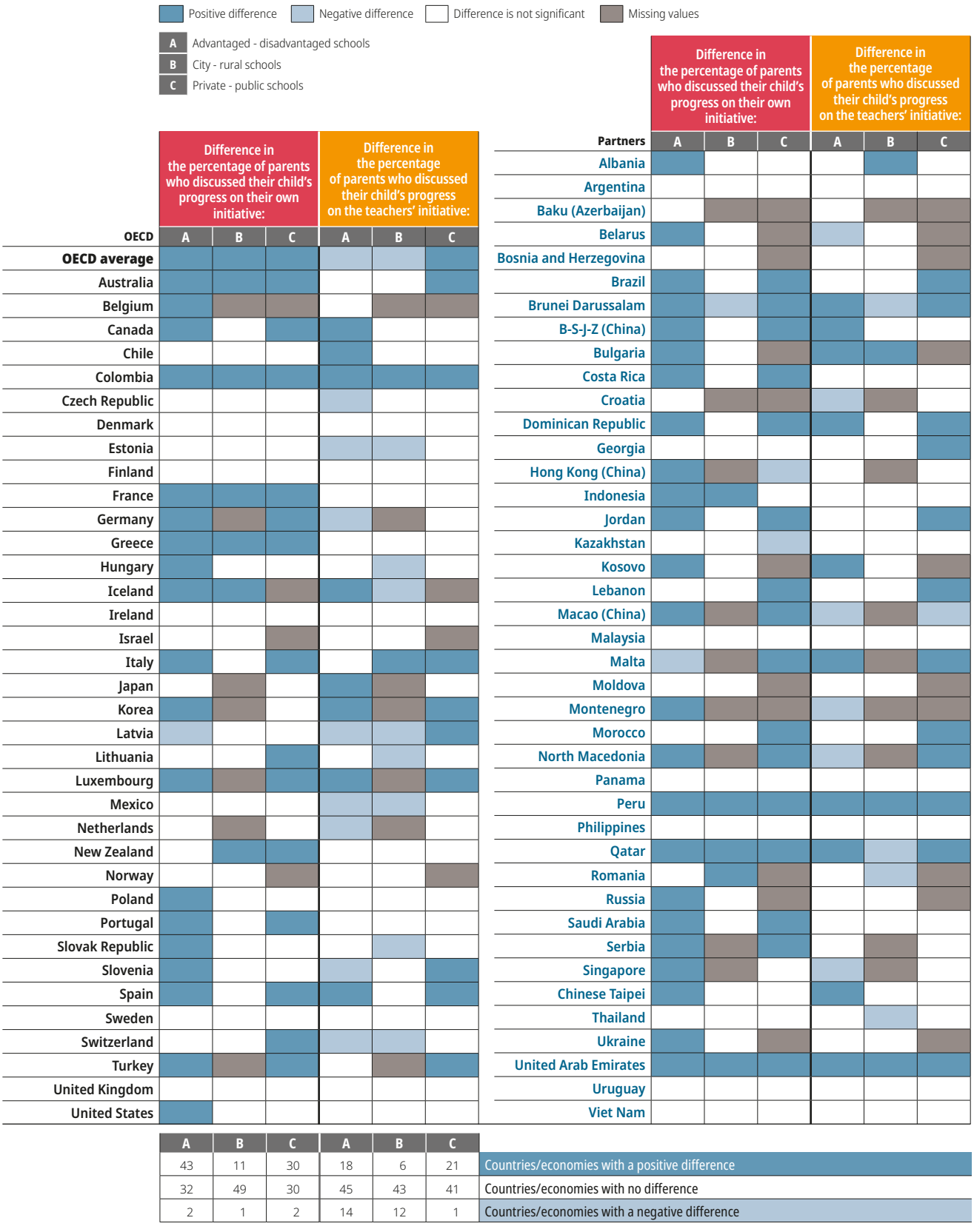
Countries and economies are ranked in descending order of the percentage of students' parents who participated in school-related activities (average of four activities).

Source: OECD, PISA 2018 Database, Table III.B1.10.1.

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Figure III.10.2 **Discussing child's progress, by school characteristics**

Based on principals' reports



A	B	C	A	B	C	
43	11	30	18	6	21	Countries/economies with a positive difference
32	49	30	45	43	41	Countries/economies with no difference
2	1	2	14	12	1	Countries/economies with a negative difference

Source: OECD, PISA 2018 Database, Tables III.B1.10.3 and III.B1.10.4.

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By contrast, declines of more than 10 percentage points over the period were observed in the Dominican Republic and Romania, for discussing their child's progress on parents' initiative; in Colombia, Croatia, Qatar, Romania and Slovenia, for participating in school government; and in the Dominican Republic and Qatar, for volunteering in extracurricular activities.

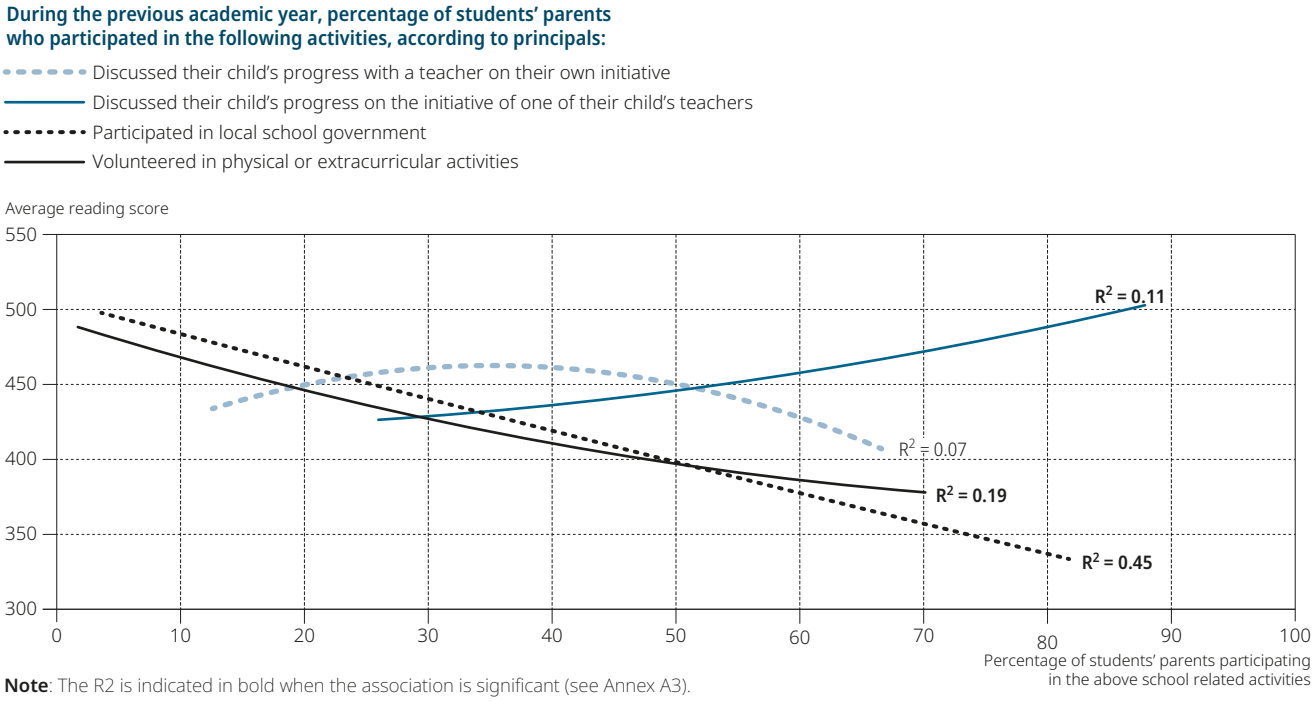
HOW PARENTAL INVOLVEMENT IN SCHOOL ACTIVITIES IS RELATED TO READING PERFORMANCE

Parental involvement in school-related activities, as perceived by school principals, is mostly unrelated to students' reading performance, at least after accounting for the socio-economic profile of students and schools (measured by the PISA index of economic, social and cultural status) (Table III.B1.10.7). The only form of parental involvement that was weakly related to reading performance, on average across OECD countries, was the percentage of parents who discussed their child's progress on the initiative of teachers. For every 10 percentage-point increase in the share of parents who discussed their child's progress on the teachers' initiative, according to principals' reports, reading scores slipped by 0.4 of a point after accounting for the socio-economic profile of students and schools.

Perhaps more interesting are the results at the system level (Figure III.10.3). The average score in reading was higher in those countries and economies where more parents discussed their child's progress on the initiative of teachers, and that positive association remained even after accounting for per capita GDP and for other forms of parental involvement in school-related activities (Figure III.10.4). For every 10 percentage-point increase in the share of parents who discussed their child's progress on the teachers' initiative, the average reading score increased by 10 points, on average across the 74 countries and economies with available data. While this analysis cannot prove cause and effect, the prevalence of parents discussing their child's progress on the initiative of teachers may be an indication of a school system's responsiveness.

Figure III.10.3 **Parental involvement in school-related activities and average reading performance**

System-level analysis (74 countries and economies)



Note: The R2 is indicated in bold when the association is significant (see Annex A3).

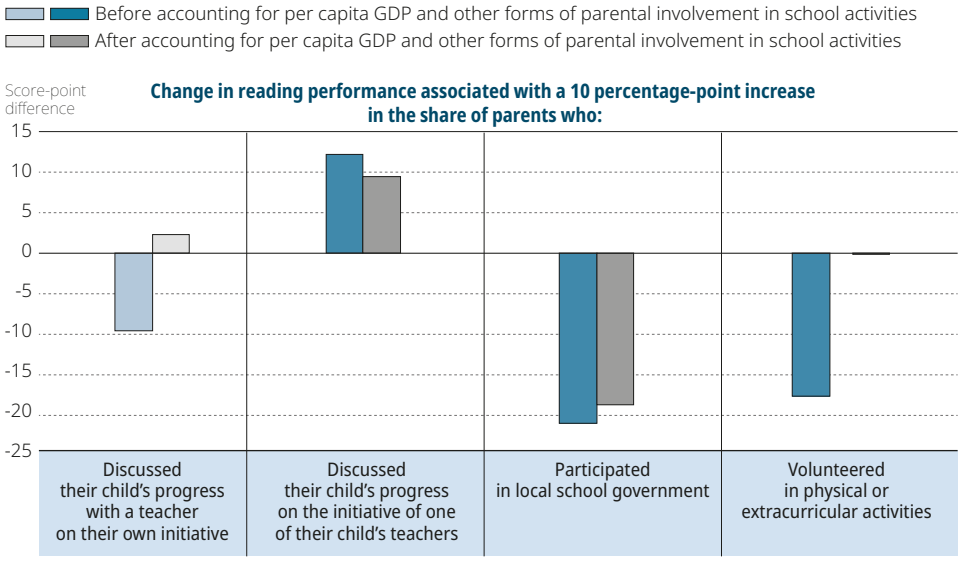
Source: OECD, PISA 2018 Database, Tables III.B1.10.1 and I.B1.4.

StatLink http://dx.doi.org/10.1787/888934030154

By contrast, the average reading score was lower in education systems where more parents participated in school government and volunteered in physical and extracurricular activities (Figure III.10.3). One potential reason for this negative association could be schools' need for increased parental involvement in low-income countries because of financial pressures, and that students in these countries tend to show poorer academic performance. Indeed, once per capita GDP and other forms of parental involvement are accounted for, the only significant negative association with reading performance that remains concerns parents' participation in school government (Figure III.10.4). For every 10 percentage-point increase in the share of parents who participated in school government, the average reading score dropped by 19 points.

Figure III.10.4 **Parental involvement in school-related activities, average reading performance and per capita GDP**

System-level analysis (74 countries and economies)



Note: Statistically significant values are shown in darker tones (see Annex A3).

Source: OECD, PISA 2018 Database, Tables III.B1.10.1, I.B1.4 and B3.1.4.

StatLink http://dx.doi.org/10.1787/888934030173

WHAT DO PARENTS CITE AS HINDERING THEIR PARTICIPATION IN SCHOOL-RELATED ACTIVITIES?

In PISA 2018, students in 17 countries and economies took home a questionnaire for their parents to complete. Amongst other things, parents were asked if, during the previous academic year, their participation in school activities was hindered by any of the following issues: "The meeting times were inconvenient"; "I was not able to get off from work"; "I had no one to take care of my child/children"; "The way to school is unsafe"; "I had problems with transportation"; "I felt unwelcome at my child's school"; "I feel generally awkward in a school"; "My language skills were not sufficient"; "I think participation is not relevant for my child's development"; "I do not know how I could participate in school activities"; and "My child does not want me to participate".

On average across the nine OECD countries and economies that distributed the parent questionnaire, the issues that parents most commonly cited as hindering their participation in school activities were time-related, and included the need to work (34%) and the inconvenience of meeting times (33%) (Figure III.10.5). The other four issues that were cited by more than 10% of parents were not knowing how to participate in school activities (14%), not considering their participation relevant for their child's development (13%), not having somebody to take care of their children (13%) and their child not wanting them to participate (12%). Other issues were less frequently mentioned, yet in some countries and economies, problems of safety, transportation and language skills were commonly cited.

In the Dominican Republic and Panama more than one in three parents mentioned safety as hindering their participation in school-related activities; in Brazil, Chile and Mexico about one in six parents so reported. Transportation problems were mentioned by more than 10% of parents in Brazil, Chile, the Dominican Republic, Italy, Mexico and Panama, and a lack of language skills was mentioned by more than one in ten parents in Brazil, the Dominican Republic, Hong Kong (China), Malta, Mexico and Panama. Perhaps more worryingly, 41% of parents in Panama and 17% of parents in Chile cited feeling unwelcome at the school as hindering their participation.

WHAT DO PARENTS LOOK FOR IN THEIR CHILD'S SCHOOL?

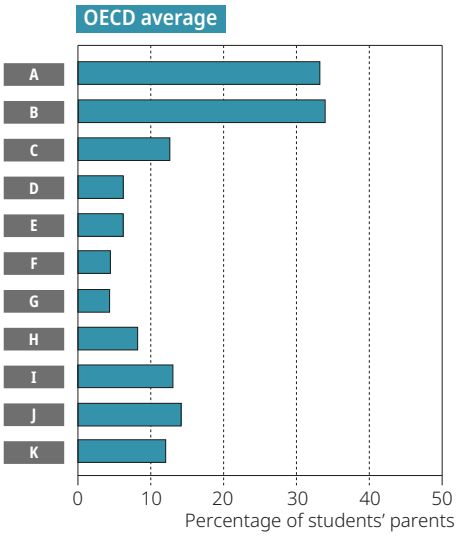
Many parents want to choose the school their child attends and are prepared to invest time and resources to do so. From talking to family, friends and neighbours, and surfing the Internet for reviews, rankings and school inspection reports, to visiting schools and even moving to another location, many parents are ready to go the extra mile to see their child placed in the best school possible. Some schools, too, want to know what parents are looking for so they can become more attractive options. Information on parents' preferences is also vital for education systems as a whole. It helps systems meet family expectations, get parents involved in school matters, and ensure that teachers, students and parents are all working towards the same goals.

Figure III.10.5 **Issues hindering parents' participation in school-related activities**

Based on parents' reports

A The meeting times were inconvenient
B I was not able to get off from work
C I had no one to take care of my children
D The way to school is unsafe
E I had problems with transportation
F I felt unwelcome at my child's school
G I feel generally awkward in a school
H My language skills were not sufficient
I I think participation is not relevant for my child's development
J I do not know how I could participate in school activities
K My child does not want me to participate

	Percentage of students' parents who reported that, during the previous academic year, their participation in school activities has been hindered by any of the following issues:										
	A	B	C	D	E	F	G	H	I	J	K
Belgium (Flemish)	21	19	5	2	3	1	2	4	12	4	5
Brazil	36	33	15	18	13	3	6	14	12	22	11
Chile	24	30	17	17	13	17	4	5	19	17	21
Croatia	21	27	7	2	7	2	2	1	5	17	5
Dominican Republic	34	45	30	37	10	4	3	25	32	38	42
Georgia	23	35	11	4	6	6	5	6	18	13	16
Germany	36	35	10	2	2	2	3	4	14	6	7
Hong Kong (China)	66	66	14	2	4	2	5	13	10	9	13
Ireland	21	24	11	1	3	1	3	4	8	17	11
Italy	29	31	8	6	10	5	5	6	9	16	9
Korea	66	58	13	2	3	3	12	5	17	14	13
Luxembourg	28	29	10	2	3	2	2	8	9	11	6
Macao (China)	34	39	11	3	5	2	2	8	7	15	9
Malta	39	42	m	m	m	m	m	11	8	13	7
Mexico	42	44	31	17	13	8	5	31	24	29	31
Panama	48	43	35	39	23	41	40	17	40	40	46
Portugal	30	34	9	8	6	1	3	6	6	13	6



More than 25% of students' parents
Between 10% and 25% of students' parents
Less than 10% of students' parents

Source: OECD, PISA 2018 Database, Table III.B1.10.8.
StatLink http://dx.doi.org/10.1787/888934030192

In the 17 countries and economies that distributed the parent questionnaire, PISA asked parents what criteria they considered important when choosing a school for their child. They were asked to report how much importance they ascribed, from "not important" to "very important", to 14 criteria mainly related to school quality, financial constraints, the school's philosophy or mission, global openness and geographical distance between their home and the school.

While parents cited several criteria as important when choosing a school, they overwhelmingly indicated that school safety, school climate and school reputation come first, followed closely by the students' academic achievement and the offering of specific subjects or courses (Figure III.10.6). For instance, on average across the OECD countries and economies that distributed the parent questionnaire, 92% of students' parents considered a safe school environment important or very important; 89% considered an active and pleasant school climate important or very important; and 81% attached the same importance to the academic achievement of the students in the school. Interestingly, these results were similar to those reported in PISA 2012 (OECD, 2015[20]), even though the countries that distributed the parent questionnaire were not exactly the same.

In every school system, parents ascribed more importance to school safety than they did to the academic achievement of the students in the school; and in every school system, except Brazil and Ireland, they also considered an active and pleasant school climate more important than student achievement. That many parents considered safety as their number one concern when choosing a school for their child may reflect parents' growing anxiety about bullying and violence in and around schools.

On average across the OECD countries and economies that distributed the parent questionnaire, the other two criteria that a majority of parents considered important or very important are the school's focus on foreign language instruction and the distance between the child's home and the school. The countries where parents paid more attention to foreign languages were Chile, Georgia and Portugal, whereas the countries where this criterion was least important were Germany, Ireland and Korea. At least 60% of parents in the Flemish Community of Belgium, Brazil, the Dominican Republic, Korea, Mexico, Panama and Portugal considered the distance to school important or very important. This might reflect, amongst other things, that parents in these education systems are more concerned about how to get to school (e.g. financial costs, safety, travel time) or that in these school systems a larger share of parents believe that their local school meets high quality standards.

Most parents would like their children to attend the best school, but not everyone can afford to prioritise only the quality of the school. On average across the OECD countries and economies that distributed the parent questionnaire, a somewhat larger share of socio-economically advantaged parents than of disadvantaged parents considered important or very important the school's reputation, the academic achievement of students, the school climate/safety, exchange programmes with schools in other countries and the focus on foreign-language instruction (Table III.B1.10.10). By contrast, compared to more advantaged parents, socio-economically disadvantaged parents assigned a much greater importance to financial considerations when choosing a school for their child. For example, while 55% of disadvantaged parents considered the availability of financial aid to be important or very important, only 26% of advantaged parents did so. They also assigned greater importance than advantaged parents to other aspects of the school, such as the geographical distance between their home and the school, the religious philosophy of the school, and whether other family members had attended the same school.

Figure III.10.6 **Criteria for choosing school**

Based on parents' reports



	Percentage of students' parents who reported that the following criteria are important or very important when choosing a school for their child:													
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
Belgium (Flemish)	61	94	94	26	15	22	21	19	89	71	90	18	20	57
Brazil	69	94	83	38	53	52	62	57	90	90	92	20	48	72
Chile	55	88	80	37	44	39	61	58	88	83	90	41	36	82
Croatia	45	76	84	30	m	11	29	25	78	74	88	12	28	64
Dominican Republic	74	89	79	54	53	62	66	52	88	87	88	45	48	71
Georgia	56	89	66	59	79	40	58	43	90	88	94	27	61	81
Germany	59	87	73	16	20	20	24	16	90	72	91	30	41	45
Hong Kong (China)	48	92	69	39	58	21	31	33	88	78	94	48	45	72
Ireland	46	96	83	28	76	40	44	32	90	92	98	49	28	50
Italy	31	80	72	22	31	22	32	m	80	67	88	34	56	76
Korea	75	90	77	21	64	14	45	45	93	88	95	19	34	47
Luxembourg	58	90	81	14	32	29	33	31	88	84	93	52	37	68
Macao (China)	49	82	75	27	70	32	30	38	89	76	95	45	60	77
Malta	39	97	90	61	m	21	48	m	94	92	98	32	32	61
Mexico	67	89	81	16	64	40	63	67	88	84	90	19	32	68
Panama	75	88	84	54	68	59	73	74	89	83	89	49	48	69
Portugal	72	92	91	20	28	37	59	56	93	88	97	48	51	80

Source: OECD, PISA 2018 Database, Table III.B1.10.9.

StatLink http://dx.doi.org/10.1787/888934030211

HOW DO THE PARENTS OF LOW-ACHIEVING AND TOP-PERFORMING STUDENTS VIEW THEIR CHILD'S SCHOOL?

PISA asked parents in the 17 countries and economies that distributed the parent questionnaire whether they agree ("strongly disagree", "disagree", "agree", "strongly agree") with a series of statements about their child's school: "Most of my child's school teachers seem competent and dedicated"; "Standards of achievement are high in my child's school"; "I am happy with the content taught and the instructional methods used in my child's school"; "I am satisfied with the disciplinary atmosphere in my child's school"; "My child's progress is carefully monitored by the school"; "My child's school provides regular and useful information on my child's progress"; and "My child's school does a good job in educating students". Their answers were combined to create the index of parents' perceived school quality whose average across OECD countries and economies is 0 and standard deviation is 1. Higher values in the index indicate that parents perceive their schools to be of better quality.

PISA also asked parents whether they agree ("strongly disagree", "disagree", "agree", "strongly agree") with a series of statements about their child's school: "My child's school provides an inviting atmosphere for parents to get involved"; "My child's school provides effective communication between the school and families"; "My child's school involves parents in the school's decision-making process"; "My child's school offers parent education or family-support programmes"; "My child's school informs families about how to help students with homework and other school-related activities"; and "My child's school co-operates with community services to strengthen school programmes and student development". Their answers were combined to create the index of school policies for parental involvement whose average across OECD countries and economies is 0 and standard deviation is 1. Higher values in the index indicate that parents perceive their schools to have more/better policies to get parents involved.

Perhaps unsurprisingly, PISA data reveal that, in a majority of education systems with available data, the parents of top-performing students in reading (those at proficiency Level 5 or above) appeared to be the most satisfied with the quality of their schools (Table III.B1.10.11). They were more likely than the parents of low-achieving students in reading (those below proficiency Level 2) to agree with statements like "Standards of achievement are high in my child's school", "Most of my child's school teachers seem competent and dedicated" and "My child's school does a good job in educating students". The largest gaps, in favour of the parents of top performers, were observed in Brazil and Malta, whereas Germany was the only country where the gap was in favour of the parents of low achievers.

By contrast, on average across OECD countries and in half of the education systems with available data, the parents of low-achieving students were more likely than the parents of top-performing students to report that their child's school makes an effort to get parents involved in school matters (Table III.B1.10.11). This disparity may be interpreted positively for some countries, given that some of these policies, such as providing education for parents, family-support programmes and information on how to help students with homework, may be targeted to struggling students. The countries with the largest gaps in the index of school policies for parental involvement, in favour of the parents of low achievers, were Croatia, Germany, Italy and Portugal.

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ASL



Students' life satisfaction and meaning in life

This chapter examines differences in students' overall life satisfaction and sense of meaning in life across countries and economies, schools and students. The chapter also discusses how students' satisfaction with their lives are linked to reading performance, school climate and students' sense of meaning in life.

Children may strive to do their best when they are joyful and have a strong sense of purpose in their lives. But no matter how supportive and encouraging schools and families are, students suffer when they are unhappy and cannot find meaning in their own lives. This is especially true for 15-year-olds, who are in the middle of adolescence – a period of rapid change when social, emotional, cultural and economic influences on health and well-being may be established for life (Patton et al., 2016[1]). It is also a time of emerging independence and self-discovery, when certain vulnerabilities may be revealed and challenges – to the adolescent and to his or her environment – may arise (Wigfield, Byrnes and Eccles, 2006[2]). While recognising and examining the potentially negative aspects of teenage life is vital, there is also a growing interest in identifying and monitoring the positive characteristics that develop during adolescence (Damon, 2004[3]; Park, 2004[4]).

What the data tell us

- On average across OECD countries, 67% of students reported being satisfied with their lives (students who reported between 7 and 10 on the life-satisfaction scale). Between 2015 and 2018, the share of satisfied students shrank by 5 percentage points.
- Girls and disadvantaged students were less likely to report being satisfied with their lives than boys and advantaged students, respectively.
- Reading scores were higher amongst students who reported they are "somehow satisfied" and "moderately satisfied" with their lives and lower amongst students who reported they are "not satisfied" or "very satisfied" with their lives.
- Students with the least exposure to bullying reported an average of 7.5 on the 10-point life-satisfaction scale; students with the greatest exposure to bullying averaged 6.3 on the scale.
- Some 68% of students across OECD countries agreed that their life has clear meaning or purpose. In 42 countries and economies, boys were more likely than girls to report a greater sense of meaning in life.

Asking students to report on their well-being is one way to measure the positive development of young people (Park, 2004[5]). Adolescents' subjective well-being is related to health and behaviour patterns that may persist into adulthood (Currie et al., 2012[6]; Patton et al., 2011[7]). PISA 2018 defines subjective well-being as a multidimensional construct that reflects the extent to which individuals believe (cognitive element) and feel (affective element) that their lives are desirable, fulfilling and rewarding (Diener, 1984[8]; Diener, Oishi and Lucas, 2003[9]). This chapter presents the cognitive element of subjective well-being, which refers to "life evaluation" – what a person thinks about his or her life satisfaction in global terms (life as a whole) – and "eudaemonia" – a sense of meaning and purpose in life. The affective element of 15-year-olds' subjective well-being is examined in Chapter 12.

STUDENTS' SATISFACTION WITH LIFE ACROSS COUNTRIES

PISA 2018 defines life satisfaction as an overall evaluation that an individual makes about his or her perceived quality of life, according to his or her chosen criteria (Shin and Johnson, 1978[10]). By providing insights into adolescents' self-perceptions about how satisfied they are with their lives, PISA can help educators, schools and parents promote positive development amongst youth, and identify and support students who experience emotional or behavioural distress (Gilman and Huebner, 2006[11]; Proctor, Linley and Maltby, 2009[12]). Life satisfaction is closely associated with happiness, and can enable the kinds of healthy habits and attitudes that lead to a successful, fulfilling life (Lyubomirsky, King and Diener, 2005[13]; Park, 2004[5]).

Box III.11.1. How PISA 2018 measured students' life satisfaction

PISA 2018 asked students to rate their life satisfaction on a scale from 0 (not at all satisfied) to 10 (completely satisfied). Based on students' responses, 15-year-olds were classified into four different groups and are referred to as the following throughout this chapter:

- a student is "not satisfied" if he or she reported between 0 and 4 on the life-satisfaction scale
- a student is "somewhat satisfied" if he or she reported 5 or 6 on the life-satisfaction scale
- a student is "moderately satisfied" if he or she reported 7 or 8 on the life-satisfaction scale
- a student is "very satisfied" if he or she reported 9 or 10 on the life-satisfaction scale

A fifth group "satisfied" combines the two groups of students that reported the highest levels of life satisfaction (between 7 and 10 on the life-satisfaction scale).

What makes students feel satisfied with their lives? Both subjective assets, such as personality traits and outlook, and objective components, such as life events and living environments, are critical for young people's satisfaction with life (Diener, 2001[14]; Proctor, Linley and Maltby, 2009[12]). Though objective aspects, for example good health and a stable financial situation, may be prerequisites for being satisfied with life in general, individuals might not value these components in the same way (Diener, 1984[8]). In addition to personal life experiences and individual traits, cultural differences may shape how adolescents evaluate their lives. For example, studies that compare adolescents' life satisfaction across cultures find that adolescents in Western countries report higher levels of life satisfaction than those in East-Asian states (Park and Huebner, 2005[15]). Hence, in PISA, the criteria for life satisfaction are based on students' self-evaluations, not upon predetermined factors (Borgonovi and Pál, 2016[16]).

As did PISA 2015, PISA 2018 finds that the average student in OECD countries is largely satisfied with life. Figure III.11.1 shows that, on average across OECD countries, students reported 7.04 on the life-satisfaction scale. Some 67% of students reported that they are satisfied with their lives (students who reported between 7 and 10 on the life-satisfaction scale).

However, PISA 2018 data reveal large between-country differences in students' life satisfaction. In Albania, Kazakhstan and the Netherlands, less than 6% of students reported that they are not satisfied with their lives (between 0 and 4 on the scale). In contrast, in Brunei Darussalam, Turkey and the United Kingdom, more than 25% of students reported so. In Albania, the Dominican Republic, Kazakhstan and Kosovo, more than 3 in 5 students reported that they are very satisfied with their lives (at least 9 on the scale), but fewer than 1 in 5 students in East-Asian countries, such as Brunei Darussalam, Hong Kong (China), Japan and Macao (China) reported similar levels of life satisfaction. In Italy, the Netherlands and Portugal, more than 40% of students reported that they are moderately satisfied with their lives (7 or 8 on the scale), while in Albania, Baku (Azerbaijan), the Dominican Republic, Kazakhstan, Kosovo and Saudi Arabia, less than 20% of students reported so.

PISA 2018 results show that students in countries from the same geographical areas tend to report similar levels for average life satisfaction. The lowest average life satisfaction values were observed mainly in East-Asian countries, while the highest were observed in Latin American and in many Eastern European countries. Countries with life-satisfaction values near the OECD average were mainly in northern and in western European countries. To some extent, these dissimilarities may reflect the cultural differences with which students respond to survey questions. However, PISA reveals not just large differences between countries and cultures but, as discussed below, also within them, when considering different social and demographic groups.

WHAT IS THE PROFILE OF STUDENTS WHO ARE SATISFIED WITH THEIR LIVES?

Research indicates that a wide range of individual characteristics, including gender, socio-economic status and immigrant background, has a modest role in students' self-reported life satisfaction (Chen et al., 2019[17]; Crede et al., 2015[18]; Huebner, Drane and Valois, 2000[19]). For example, several studies find that adolescent boys are more satisfied with their lives than girls (Levin, Dallago and Currie, 2012[20]; Soares, Pais-Ribeiro and Silva, 2019[21]). Other studies, however, have found no or little difference in life satisfaction between boys and girls (Huebner, Drane and Valois, 2000[19]; Neto, 1993[22]).

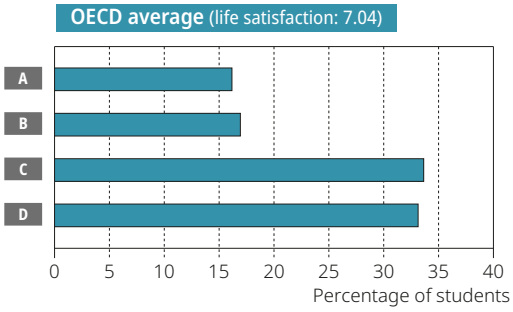
Figure III.11.2 shows that, on average across OECD countries, boys were more likely than girls to be classified as "satisfied" with their lives. Around 61% of girls and 72% of boys reported that they are satisfied with their lives – a significant difference of 11 percentage points (Table III.B1.11.4). This difference between boys and girls was observed in 56 PISA-participating countries/economies. In some countries, the gender gap in life satisfaction was particularly striking. For example, in Korea, Poland, Slovenia, Sweden and the United Kingdom, girls were at least 15 percentage points less likely than boys to report that they are satisfied with their lives. By contrast, in Jordan, the Republic of Moldova (hereafter "Moldova"), the Philippines and Saudi Arabia, girls were significantly more likely than boys to be satisfied with their lives. Girls were also more likely than boys to report a low level of life satisfaction – a gender gap of 5 percentage points in the share of "not satisfied" students (Table III.B1.11.5).

In the majority of PISA-participating countries and economies, there is a strong relationship between students' socio-economic status and students' level of life satisfaction (Figure III.11.2 and Table III.B1.11.4). On average across OECD countries, advantaged students were eight percentage points more likely than their disadvantaged peers to report that they are satisfied with life. Differences of more than 15 percentage points were observed in Jordan, Latvia, Lebanon and Moldova. Only in Panama did more disadvantaged than advantaged students report being satisfied with life. This result may imply that students from advantaged families have easier access to material and emotional support than their disadvantaged peers. But this finding should be interpreted with some caution, as greater wealth does not necessarily buy greater life satisfaction (Kahneman and Deaton, 2010[23]).

The increased diversity in schools has inspired researchers and policy makers to explore life satisfaction amongst students with an immigrant background. A large number of studies that looked at the relationship between life satisfaction and immigrant background found that immigrant students reported lower levels of life satisfaction than their non-immigrant peers (Liebkind and JasinskajaLahti, 2000[24]; Neto, 2001[25]; Vieno et al., 2009[26]). One study, however, found that the presence of certain factors, such as a positive experience in making friends, an absence of discrimination, strong ethnic identity or a positive academic experience can improve immigrant students' sense of satisfaction with their lives (Chow, 2007[27]).

Figure III.11.1 **Students' life satisfaction**

Based on students' self-reports



Percentage of students who reported the following levels of life satisfaction

- **A** Not satisfied (Students who reported 0 to 4 on the life-satisfaction scale)
- **B** Somewhat satisfied (Students who reported 5 or 6 on the life-satisfaction scale)
- **C** Moderately satisfied (Students who reported 7 or 8 on the life-satisfaction scale)
- **D** Very satisfied (Students who reported 9 or 10 on the life-satisfaction scale)

OECD	Average life satisfaction	Percentage of students, by level of life satisfaction: A	B	C	D
Austria	7.14	17	13	32	37
Chile	7.03	18	18	27	37
Colombia	7.62	14	14	25	48
Czech Republic	6.91	18	17	32	33
Estonia	7.19	14	16	35	35
Finland	7.61	10	12	35	43
France	7.19	12	19	39	31
Germany	7.02	17	17	33	34
Greece	6.99	15	19	35	31
Hungary	7.12	16	16	34	34
Iceland	7.34	13	14	36	37
Ireland	6.74	18	20	35	26
Italy	6.91	15	18	41	27
Japan	6.18	25	25	30	20
Korea	6.52	23	20	31	26
Latvia	7.16	13	18	35	33
Lithuania	7.61	12	13	30	46
Luxembourg	7.04	16	16	36	32
Mexico	8.11	8	9	27	56
Netherlands	7.50	6	15	53	27
Poland	6.74	19	19	32	29
Portugal	7.13	12	19	40	29
Slovak Republic	7.22	15	15	32	38
Slovenia	6.86	20	16	30	34
Spain	7.35	12	15	38	35
Sweden	7.01	17	17	34	33
Switzerland	7.38	12	15	37	37
Turkey	5.62	34	23	23	21
United Kingdom	6.16	26	21	32	20
United States	6.75	19	20	32	29

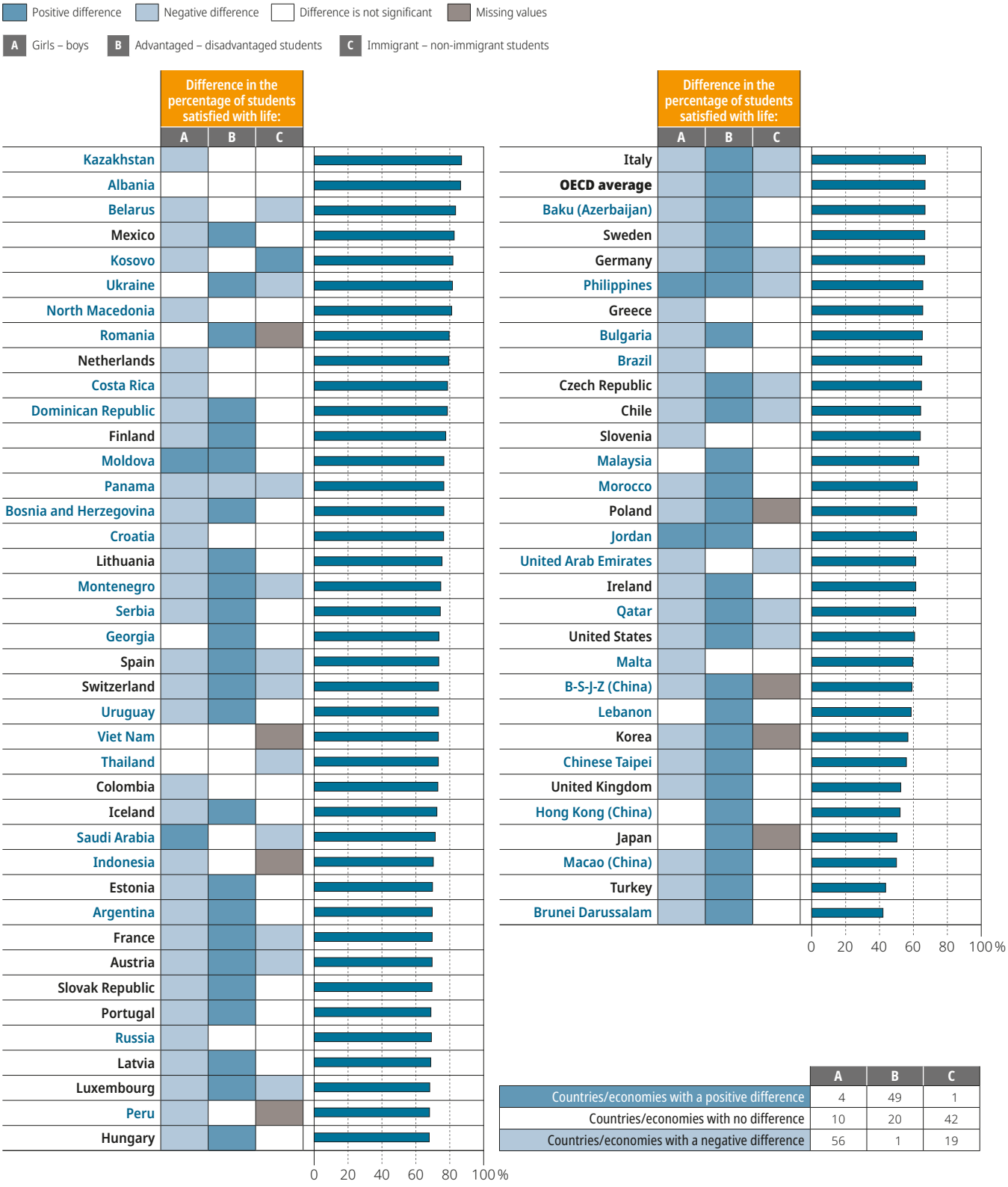
Partners	Average life satisfaction	Percentage of students, by level of life satisfaction: A	B	C	D
Albania	8.61	5	8	18	68
Argentina	7.26	15	15	29	40
Baku (Azerbaijan)	7.24	19	14	19	48
Belarus	8.10	6	10	32	52
Bosnia and Herzegovina	7.84	11	12	24	53
Brazil	7.05	18	17	25	40
Brunei Darussalam	5.80	26	32	29	13
B-S-J-Z (China)	6.64	19	22	34	25
Bulgaria	7.15	19	16	22	43
Costa Rica	7.96	9	12	26	53
Croatia	7.69	11	12	29	48
Dominican Republic	8.09	11	10	16	62
Georgia	7.60	13	14	25	49
Hong Kong (China)	6.27	20	28	38	14
Indonesia	7.47	13	17	28	42
Jordan	6.88	20	18	20	42
Kazakhstan	8.76	5	8	16	71
Kosovo	8.30	9	10	18	63
Lebanon	6.67	18	24	30	29
Macao (China)	6.07	23	27	37	13
Malaysia	7.04	14	23	30	33
Malta	6.56	20	20	35	25
Moldova	7.68	11	12	29	47
Montenegro	7.69	14	11	21	53
Morocco	6.95	20	18	20	42
North Macedonia	8.16	7	12	25	57
Panama	7.92	11	12	22	54
Peru	7.31	14	18	29	39
Philippines	7.21	14	20	27	39
Qatar	6.84	20	18	25	36
Romania	7.87	9	12	30	49
Russia	7.32	16	15	27	42
Saudi Arabia	7.95	15	14	13	59
Serbia	7.61	13	12	26	49
Chinese Taipei	6.52	19	26	35	21
Thailand	7.64	9	18	31	42
Ukraine	8.03	7	11	31	50
United Arab Emirates	6.88	20	19	26	35
Uruguay	7.54	13	14	29	44
Viet Nam	7.47	7	20	40	34

Source: OECD, PISA 2018 Database, Table III.B1.11.1.

StatLink http://dx.doi.org/10.1787/888934030230

Figure III.11.2 **Satisfied with life, by student characteristics**

Based on students' reports



	A	B	C
Countries/economies with a positive difference	4	49	1
Countries/economies with no difference	10	20	42
Countries/economies with a negative difference	56	1	19

Note: A student is classified as "satisfied" with life if he or she reported between 7 and 10 on the life-satisfaction scale. The life-satisfaction scale ranges from 0 to 10.
Countries and economies are ranked in descending order of the percentage of students who are classified as "satisfied" with life.

Source: OECD, PISA 2018 Database, Tables III.B1.11.1 and III.B1.11.4.

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PISA 2018 data show that 68% of non-immigrant students reported being satisfied with their lives while 64% of immigrants reported so, on average across OECD countries (Table III.B1.11.4). The difference in the share of satisfied students between non-immigrant and immigrant students was particularly large – more than 12 percentage points – in Italy, Montenegro, Panama, the Philippines, Spain, Thailand and Ukraine. Only in Kosovo were immigrant students significantly more likely than their native-born schoolmates to report that they are satisfied with their lives.

TRENDS IN STUDENTS' LEVEL OF LIFE SATISFACTION

Since PISA 2015 asked the same question about life satisfaction as PISA 2018 did, education systems can monitor changes in students' satisfaction with their lives. In most participating countries and economies with comparable data, students reported less satisfaction with their lives in 2018 than they did in 2015 (Figure III.11.3). On average across OECD countries, students' average life satisfaction declined by 0.30 of a point between 2015 and 2018. The decline over this period was larger than 0.50 of a point on the life-satisfaction scale in several schools systems, including Brazil, Ireland, Japan, Macao (China), Qatar, the United Kingdom and the United States. The only country where average life satisfaction amongst students increased significantly was Korea, though average life satisfaction in Korea in both PISA 2015 and PISA 2018 was below the OECD average.

As shown in Figure III.11.3, in most of the PISA-participating countries and economies where the share of students who reported that they are not satisfied with their lives increased there was a corresponding decrease in the proportion of students who reported that they are satisfied with their lives. The drop in the share of students who reported being satisfied with their lives was particularly large in the United Kingdom – a difference of at least 13 percentage points between 2015 and 2018.

This general downward trend was consistent between subgroups in most participating countries and economies (Table III.B1.11.9). On average across OECD countries, average life satisfaction declined by 0.29 of a point on the life-satisfaction scale amongst disadvantaged students, and by 0.33 of a point amongst advantaged students. The analysis found no wide gender gap and no major difference between immigrant and non-immigrant students on average across OECD countries. In some countries, however, the disparity in the change in students' average life satisfaction related to gender differed from the OECD average pattern. For example, in Turkey, average life satisfaction declined by 0.70 of a point amongst boys and by 0.30 of a point amongst girls. In Korea, average life satisfaction increased by 0.42 of a point amongst boys, while it declined by 0.14 of a point amongst girls.

DIFFERENCES IN STUDENTS' LIFE SATISFACTION ACROSS SCHOOLS

When considering differences across schools, in 15 education systems, students in rural schools were significantly more likely to report being satisfied with their lives than students in urban schools (Table III.B1.11.6). This difference was of more than eight percentage points in Brazil, Kazakhstan, Kosovo, the Russian Federation (hereafter "Russia") and Saudi Arabia. In Lebanon and Romania, the opposite was observed, with a difference of more than 10 percentage points in favour of city schools.

In 18 countries and economies, students in advantaged schools were more likely to report that they are satisfied with their lives than students in disadvantaged schools. This difference was particularly large – more than 20 percentage points – in Lebanon. The reverse pattern was observed in 17 education systems. In Panama, Russia, the United Arab Emirates and Viet Nam, students in disadvantaged schools were at least eight percentage points more likely than their peers in advantaged schools to report being satisfied with their lives.

PISA 2018 data also show that, on average across OECD countries, students in schools with a low concentration of immigrant students were more likely than students in schools with a high concentration of immigrant students to report that they are satisfied with their lives. This difference was of more than 10 percentage points in Lebanon, Panama and Thailand. In Hong Kong (China), Latvia and Slovenia, however, the opposite pattern was observed, with students in schools with a high concentration of immigrant students more likely to report greater life satisfaction than students in schools with a low concentration of immigrant students.

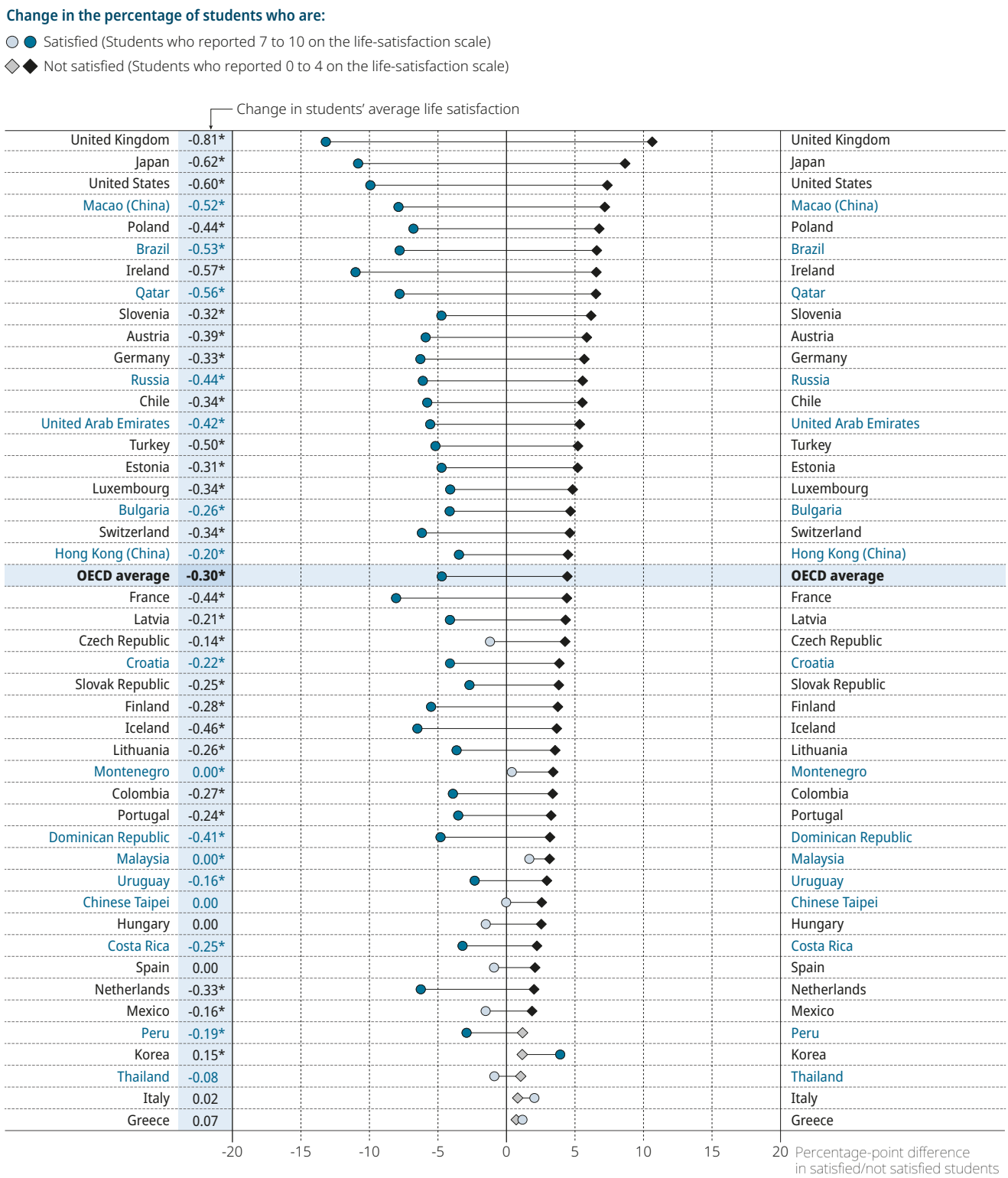
Are students who reported lower levels of life satisfaction concentrated in certain schools? As shown in Figure III.11.4, on average across OECD countries, 30% of students attended schools where one in ten students or fewer reported that they are not satisfied with their lives. Just over 50% of students were in schools where between 10% and 25% of students reported that they are not satisfied with their lives; 17% of students are in schools where between 25% and 50% of students reported that they are not satisfied with their lives; and around 1% of students are in schools where at least one in two students reported that they are not satisfied with their lives.

HOW STUDENTS' LIFE SATISFACTION IS RELATED TO READING PERFORMANCE

Do students perform better when they are more satisfied with their lives? Although schoolwork represents one of the main activities in 15-year-old students' lives, high academic achievement does not necessarily result in greater satisfaction with life, and low academic achievement does not automatically translate into lower life satisfaction (Bücker et al., 2018[28]).

Figure III.11.3 **Change between 2015 and 2018 in students' satisfaction with life**

Based on students' self-reports

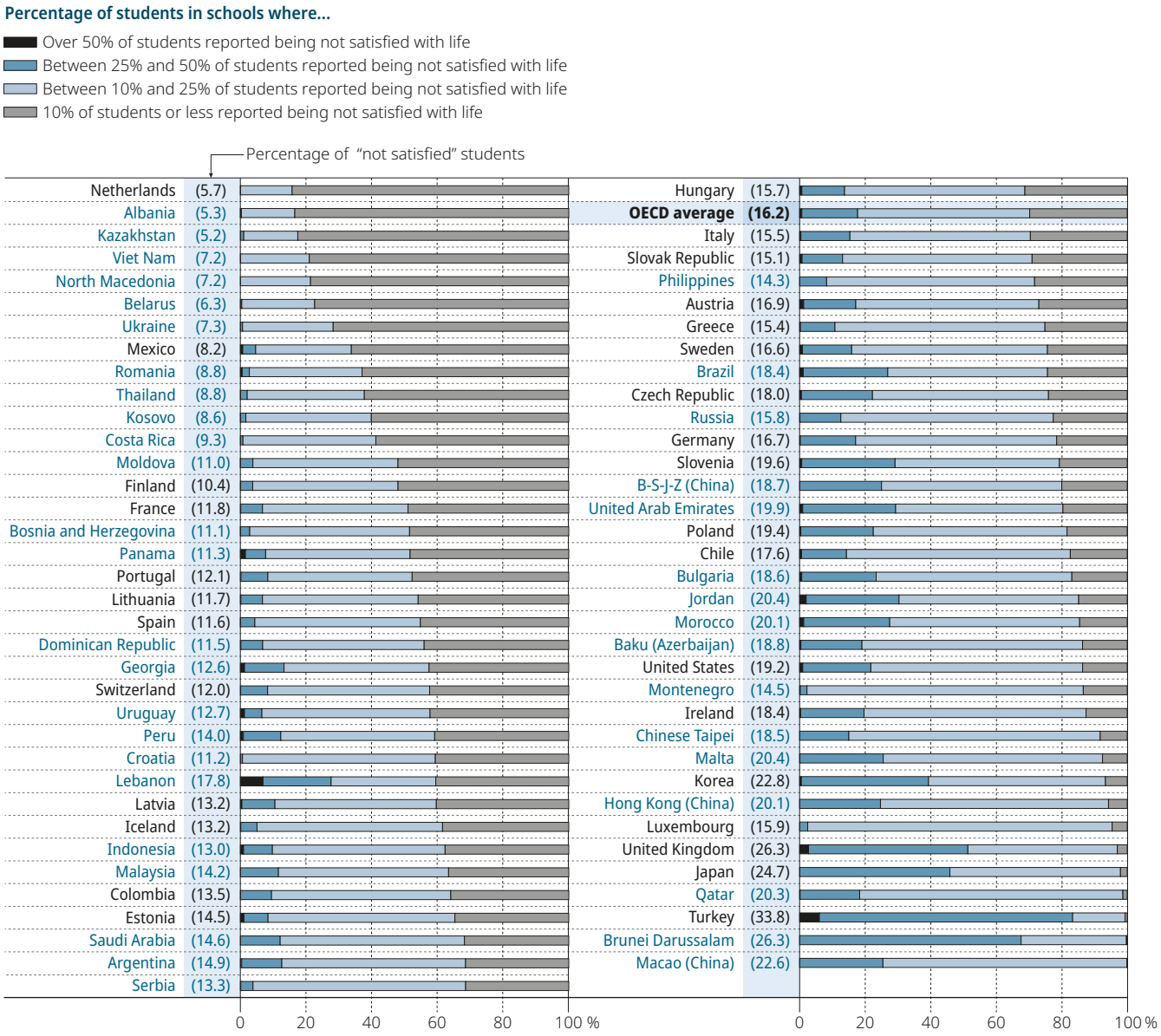


Notes: Statistically significant changes between 2015 and 2018 in students' satisfaction with life are shown in darker tones.
Changes in students' average life satisfaction that are statistically significant are marked with an asterisk next to the country/economy name (see Annex A3).
Countries and economies are ranked in descending order of the percentage-point difference between 2015 and 2018 (PISA 2018 - PISA 2015) in the share of students who reported they are "not satisfied" with their lives.

Source: OECD, PISA 2018 Database, Table III.B1.11.2.

StatLink http://dx.doi.org/10.1787/888934030268

Figure III.11.4 **Prevalence of students who are not satisfied with life**



Note: A student is classified as "not satisfied" with life if he or she reported between 0 and 4 on the life-satisfaction scale. The life-satisfaction scale ranges from 0 to 10.

Countries and economies are ranked in descending order of the percentage of students in schools where 10% of students or less reported being not satisfied with life.

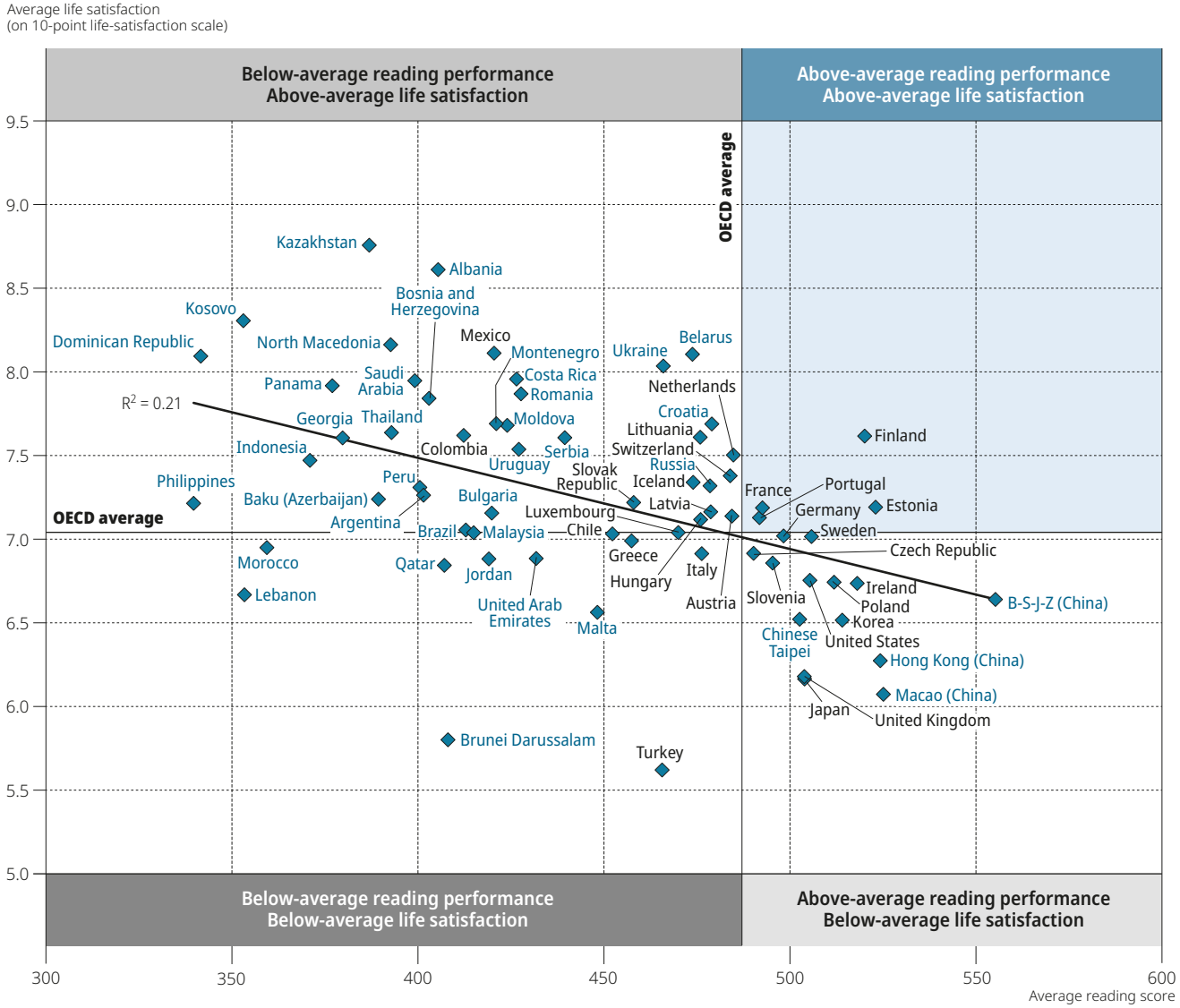
Source: OECD, PISA 2018 Database, Table III.B1.11.3.

StatLink http://dx.doi.org/10.1787/888934030287

For example, some studies that measure academic performance through students' reports find that adolescents with high or average levels of life satisfaction earn higher grades than those with low levels of life satisfaction (Gilman and Huebner, 2006[11]; Ng, Huebner and Hills, 2015[29]; Salmela-Aro, Aunola and Nurmi, 2007[30]). By contrast, a study that assesses academic performance through objective measures finds no relationship between adolescents' academic achievement and life satisfaction (Bradley and Corwyn, 2004[31]).

As shown in Figure III.11.5, students in low-achieving countries tended to report higher levels of life satisfaction than students in high-achieving countries. For example in Albania, the Dominican Republic, Kazakhstan and Kosovo, students reported an average life satisfaction above the OECD average, but performed below the OECD average in reading. Moreover, in most East Asian countries and economies, such as Beijing, Shanghai, Jiangsu and Zhejiang (China) (hereafter "B-S-J-Z [China]"), Hong Kong (China), Japan and Macao (China), students scored above the OECD average in reading, but reported lower levels of life satisfaction than the average 15-year-old student in OECD countries.

Figure III.11.5 **Life satisfaction and reading performance across education systems**



Source: OECD, PISA 2018 Database, Tables III.B1.11.1 and I.B1.4.

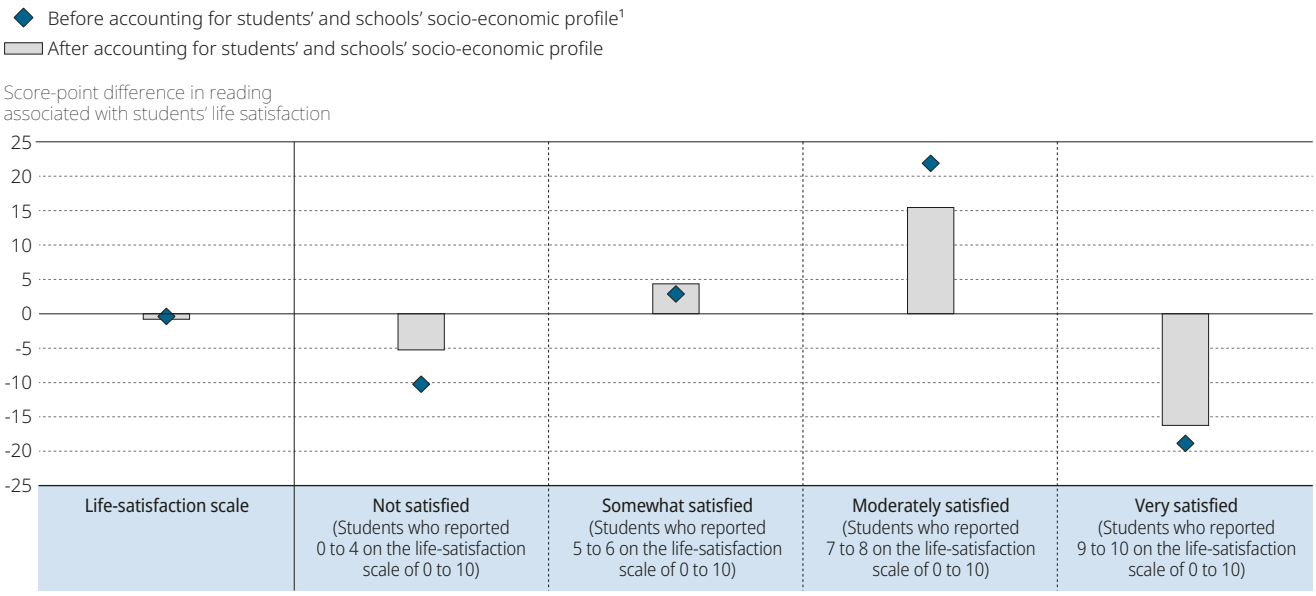
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However, some countries differ from this general pattern. In Estonia, Finland and France, students scored above average in reading and were more likely to report greater life satisfaction than the average student in OECD countries. Students in Brunei Darussalam, Lebanon, Malta, Qatar and Turkey scored below the average in reading and were less likely to report being satisfied with life. These findings are similar to the analysis that used PISA 2015 data to determine whether there was an association between average science score and life satisfaction, and should not be interpreted as a linear link between achievement in reading and levels of life satisfaction (OECD, 2017[32]).

PISA 2018 data provide a more nuanced picture about the relationship between students' life satisfaction and reading performance. They show a trend towards poorer reading performance amongst both students with very high and very low levels of life satisfaction. As shown in Figure III.11.6, reading scores were lower amongst students who reported between 0 and 4, and 9 or 10 on the life-satisfaction scale, while reading scores were higher amongst students who reported 5 through 8 on the scale. On average across OECD countries, students who reported being not satisfied with their lives scored five points lower in reading than students who were more satisfied with their lives, after accounting for students' and schools' socio-economic profile (as measured by the PISA index of economic, social and cultural status). In many of the PISA-participating countries and economies, a negative association of at least a similar magnitude was found between low satisfaction with life and reading performance, after accounting for students' and schools' socio-economic profile (Table III.B1.11.7).

Figure III.11.6 **Students' satisfaction with life and reading performance**

Based on students' reports; OECD average



1. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Note: All values are statistically significant (see Annex A3).

Source: OECD, PISA 2018 Database, Table III.B1.11.7.

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In addition, on average across OECD countries, students who were classified as "somewhat satisfied" with their lives scored 4 points higher in reading, and students who were identified as "moderately satisfied" scored 15 points higher, than all other students, after accounting for students' and schools' socio-economic profile (Figure III.11.6). In Indonesia, Kazakhstan, Kosovo, Lebanon and the United Arab Emirates, the latter gap between "moderately satisfied" and all other students was greater than 25 score points, while in Finland and Ireland the performance difference between the two groups was less than 10 score points (Table III.B1.11.7).

Interestingly, students who were classified as "very satisfied" with their lives scored 16 points lower in reading than more dissatisfied students, after accounting for students' and schools' socio-economic profile. In Hong Kong (China), Malta and the United States, "very satisfied" students scored at least 30 points lower in reading than other students. Lebanon was the only county where "very satisfied" students scored higher in reading than other students.

When examining the relationship between school-level life satisfaction and reading performance, PISA 2018 finds that the difference in average reading performance between schools with the lowest percentage of "moderately satisfied" students (that is, schools in the bottom quarter of the distribution of "moderately satisfied" students in their country/economy) and schools with the highest percentage of "moderately satisfied" students (that is, schools in the top quarter of the distribution of "moderately satisfied" students in their country/economy) was 57 score points, on average across OECD countries (Table III.B1.11.8). In schools with the lowest percentage of students who are "not satisfied" with their lives (that is, schools in the bottom quarter of the distribution of "not-satisfied" students in their country/economy), the average score in reading was 490 points. In schools with the highest percentage of "not-satisfied" students (that is, schools in the top quarter of the distribution of "not-satisfied" students in their country/economy), the average score in reading was 473 points.

HOW STUDENTS' LIFE SATISFACTION IS ASSOCIATED WITH SCHOOL CLIMATE

Getting support from the community is vital for promoting adolescents' life satisfaction. Given the amount of time adolescents spend in school, schools are the primary venue, outside of the family, where 15-year-olds can develop supportive ties. Evidence suggests that schools function as psychologically healthy environments if they meet children's developmental needs and appropriately challenge children (Baker et al., 2003[33]). Schools with engaging activities, a positive climate, order, discipline, respect, parental involvement and positive student-teacher relations can contribute to adolescents' life satisfaction (e.g. Suldo et al., 2013[34]; Zullig, Huebner and Patton, 2011[35]). By contrast, negative experiences at school, such as bullying and poor relations with teachers, can be associated with less satisfaction with life amongst teenagers (Flouri and Buchanan, 2002[36]; Navarro et al., 2015[37]).

Figure III.11.7 shows the relationship between seven school-climate indicators and students' satisfaction with their lives. These indicators measure three distinct characteristics of school climate: student misbehaviour at school; perceived student-teacher relations; and perceived school community. On average across OECD countries, a one-unit increase in the index of exposure to bullying was associated with a 0.50-point decrease on the life-satisfaction scale – after accounting for student and school characteristics (including gender, and the PISA index of socio economic, social and cultural status at the student and school levels). On average across OECD countries, students with the least exposure to bullying (that is, students in the bottom quarter of the index of exposure to bullying in their country/economy), reported an average of 7.47 on the life-satisfaction scale; students with the greatest exposure to bullying (that is, students in the top quarter of that index in their country/economy), reported an average of 6.35 on the life-satisfaction scale (Table III.B1.11.10).

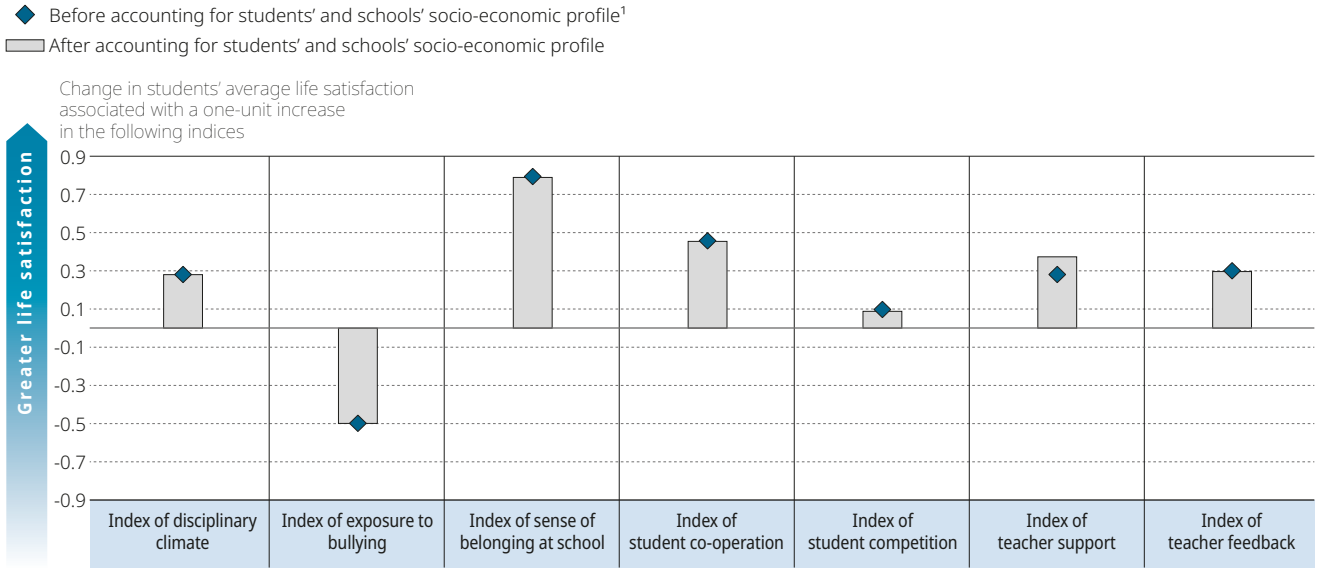
The results also suggest that, on average across OECD countries, school-community indicators, such as the index of disciplinary climate, the index of student competition, the index of student co-operation, and the index of students' sense of belonging at school, were positively associated with students' life satisfaction (Figure III.11.7). For example, a one-unit increase in the index of disciplinary climate was associated with a 0.28-point increase on the life-satisfaction scale, on average across OECD countries, after accounting for student and school characteristics. The results highlight that, on average across OECD countries, a one-unit increase in the index of student co-operation was associated with a 0.45-point increase on the life-satisfaction scale, after accounting for student and school characteristics. This association was significant in all PISA-participating countries and economies. The relationship between the index of student competition and life satisfaction is weaker, but positive on average across OECD countries.

PISA findings also show that students with the weakest sense of belonging at school (students in the bottom quarter of the index of sense of belonging in their country/economy), reported an average of 5.85 on the life-satisfaction scale; students with the strongest sense of belonging at school (those in the top quarter of the index in their country/economy), reported an average of 8.05 on the life-satisfaction scale (Table III.B1.11.10).

Students' perceptions of positive teacher behaviours were also related to higher life satisfaction. In all 68 countries and economies with available data, a one-unit increase in the index of teacher support was associated with a significant increase in students' satisfaction with life, after accounting for students' and schools' socio-economic profile (Table III.B1.11.10). The largest differences in life satisfaction related to teacher support were found in B-S-J-Z (China), Jordan and Malaysia. A one-unit increase in the index of teacher feedback was also linked to a 0.30-point increase on the life-satisfaction scale, on average across OECD countries, after accounting for students' and schools' socio-economic profile (Figure III.11.7).

Figure III.11.7 **Students' life satisfaction and school climate**

Based on students' reports; OECD average



1. Student and school characteristics include the PISA index of economic, social and cultural status (ESCS) at the student and school levels and gender.

Note: All values are statistically significant (see Annex A3).

Source: OECD, PISA 2018 Database, Table III.B1.11.10.

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These results suggest that school may play a central role not just in influencing students' academic performance, but their lives more generally. For example, students in schools where there are good teacher-student relations, or where students are less exposed to bullying, may be more likely to be more satisfied with their lives.

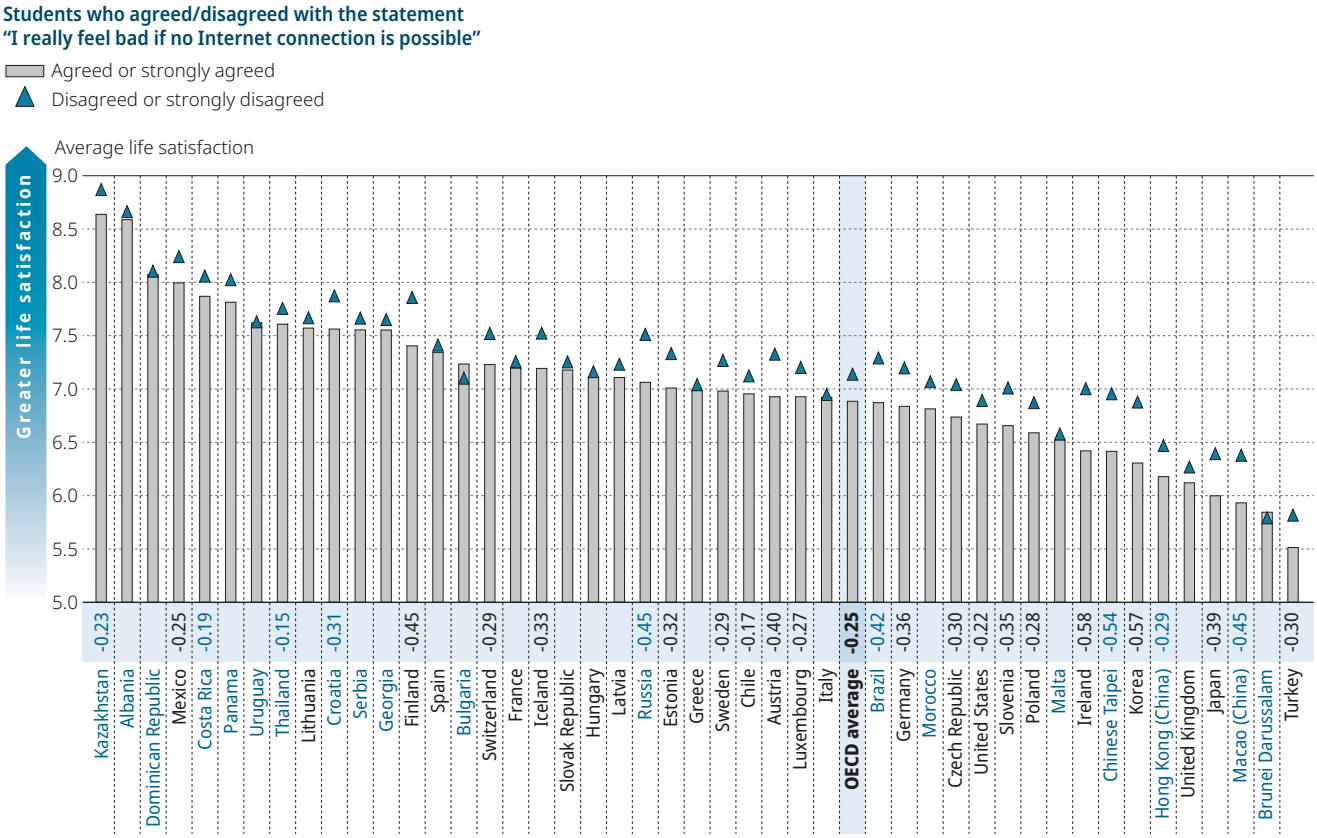
TIME SPENT ON THE INTERNET, ATTITUDES TOWARDS THE INTERNET AND RELATIONSHIP WITH STUDENTS' LIFE SATISFACTION

Fifteen-year-olds in PISA 2018 were born after 2000 and are members of a generation that grew up with the Internet and digital devices. Although most of these young people have used the Internet for years and are comfortable with digital technology, more frequent and intensive use of digital media does not necessarily make them happier. The *World Happiness Report 2019* found that US teenagers who spend long hours browsing through social media and using their smartphones are significantly less happy than previous generations (Helliwell, Layard and Sachs, 2019[38]). In addition, those who spend more time on the Internet were more likely to develop depressive syndromes than those who spend more time with their families and socialising with their peers instead (Twenge, 2019[39]; Twenge et al., 2018[40]).

PISA 2012, 2015 and 2018 asked students how much time they spend using the Internet during the typical weekday and weekend day outside of school. These two questions were combined to calculate the amount of time students spend connected to the Internet during a typical week.

PISA data show that, on average across OECD countries, the time students spend on the Internet outside of school has steadily increased over the past few years – from 18 hours per week, including weekend days, in 2012, to 23 hours in 2015 to 27 hours in 2018 (Table III.B1.11.11). The average upward trend in time spent on the Internet outside of school amounted to around 9 hours between PISA 2012 and PISA 2018 across OECD countries.

Figure III.11.8 **Students' life satisfaction, by students feeling really bad when no Internet connection is possible**



Note: Statistically significant differences between students who agreed/strongly agreed and disagreed/strongly disagreed are shown next to the country/economy name (see Annex A3).

Countries and economies are ranked in descending order of the average life satisfaction of students who agreed/strongly agreed with the statement "I really feel bad when no Internet connection is possible".

Source: OECD, PISA 2018 Database, Table III.B1.11.13.

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The analysis reveals that time spent on the Internet outside of school increased between 2015 and 2018 amongst students' at all levels on the life-satisfaction scale. On average across OECD countries, students who reported being "not satisfied" with life spent the most time on the Internet outside of school (Tables III.B1.11.11 and III.B1.11.12). Across OECD countries in 2018, the average 15-year-old student who reported being "not satisfied" with life spent 29 hours per week on the Internet outside of school, while a student who reported being at least "moderately satisfied" with life spent 26 hours per week on the Internet. Between 2015 and 2018, the increase in time spent on the Internet was at least three hours for both groups. In Korea and Lithuania, the change in time spent on the Internet outside of school was more than seven hours amongst students "not satisfied" with life and at least six hours amongst "satisfied" students.

Are students' perceived feelings about the Internet and digital devices linked to their life satisfaction? PISA 2018 data show that students who agreed that they forget about time when using digital devices reported an average of 6.89 on the life-satisfaction scale, while students who disagreed with the statement reported 7.18 on the same scale, on average across OECD countries (Figure III.11.8 and Table III.B1.11.13). This difference was larger than 0.40 of a point in Brazil, Chile, Finland, Kazakhstan, Panama, Poland, Russia, Slovenia and Sweden. As shown in Figure III.11.8, in Finland, Ireland, Korea and Chinese Taipei, students who agreed with the statement "I really feel bad if no Internet connection is possible" reported a value at least 0.45 of a point lower on the life-satisfaction scale than those who disagreed with the statement.

The association between life satisfaction and using digital devices is less clear. On average across OECD countries, students who agreed that they like using digital devices reported a significantly higher rating on the life-satisfaction scale (7.01) than did students who disagreed with the statement (6.95). This pattern was also observed in Brunei Darussalam, France, Lithuania and the United Kingdom, while an opposite pattern was observed in Kazakhstan.

These results suggest that not only time spent on the Internet, but also students' feelings about using digital devices may be associated with their satisfaction with life.

HOW STUDENTS' SENSE OF MEANING IN LIFE VARIES ACROSS COUNTRIES, SCHOOLS AND STUDENTS

Understanding adolescents' resilience to the many challenges they face as teenagers is key to supporting their positive development. Amongst other things, finding a coherent meaning in life is considered to be an important protective factor for 15-year-olds (Brassai, Piko and Steger, 2011[41]), especially because having a sense of purpose in life is necessary for achieving meaningful goals and living a fulfilling life (Frankl, 1959[42]). In addition, a sense of meaning provides the impetus to set goals that steer people in positive directions (Mcknight and Kashdan, 2009[43]). PISA 2018 defines meaning in life as the extent to which 15-year-olds comprehend, make sense of, or find significance in their lives (Steger, 2009[44]).[1]

Given the growing interest in adolescents' subjective well-being, PISA 2018 asked students whether they agree or disagree ("strongly disagree", "disagree", "agree", "strongly agree") with the following statements: "My life has clear meaning or purpose"; "I have discovered a satisfactory meaning in life"; and "I have a clear sense of what gives meaning to my life". These statements were combined to create the index of meaning in life whose average is 0 and standard deviation is 1 across OECD countries. Positive values in this index mean that the student has a greater sense of meaning in life than the average student in OECD countries.

Figure III.11.9 shows the percentage of students who reported their agreement or disagreement with statements related to meaning in life. On average across OECD countries, 68% of students agreed or strongly agreed that their life has clear meaning or purpose; 66% of students agreed or strongly agreed that they have a clear sense of what gives meaning to [their] lives; and 62% of students agreed or strongly agreed that they have discovered a satisfactory meaning in life. But there are large variations across countries and economies. For example, in Albania, Indonesia, Kosovo, the Republic of North Macedonia, the Philippines, Saudi Arabia, Thailand and Viet Nam, more than 85% of students agreed that they have a clear sense of what gives meaning to their lives. By contrast, in Hungary and Japan, less than half of students reported so. The variation across countries was less pronounced concerning the statement, "My life has clear meaning or purpose". The largest shares of students who agreed or strongly agreed with this statement (90% or more) were observed in Albania and Indonesia, while the smallest shares of students who so reported (less than 60%) were observed in the Czech Republic, Ireland, Japan, Macao (China), Sweden and the United Kingdom.

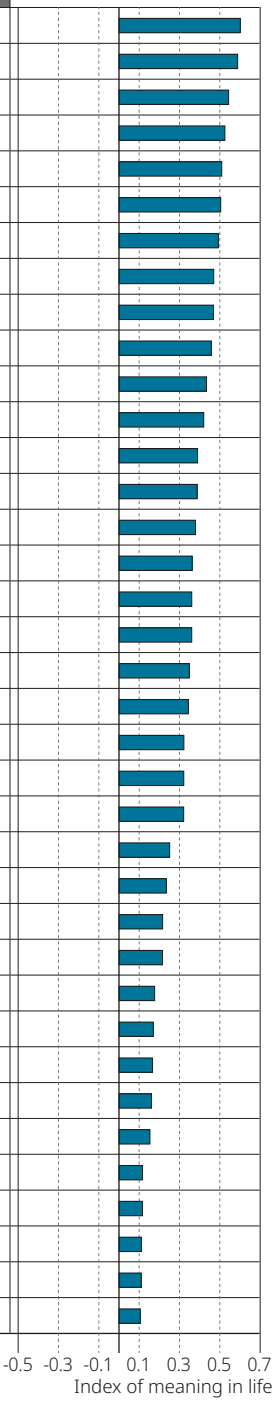
There are large differences within countries too. In 42 countries and economies, boys were more likely than girls to report a greater sense of meaning in life (Table III.B1.11.15). Differences in favour of boys were particularly large (at least one-fourth of a standard deviation) in Croatia, Korea, Poland and Slovenia, while in Jordan, Lebanon and the Philippines, girls were more likely than boys to report a much stronger sense of meaning in life (by around one-sixth of a standard deviation). On average across OECD countries, there was a slight difference between advantaged and disadvantaged students in the index of meaning in life. In 33 countries and economies, advantaged students were more likely than their disadvantaged peers to report a greater sense of meaning in life.

Figure III.11.9 Students' sense of meaning in life

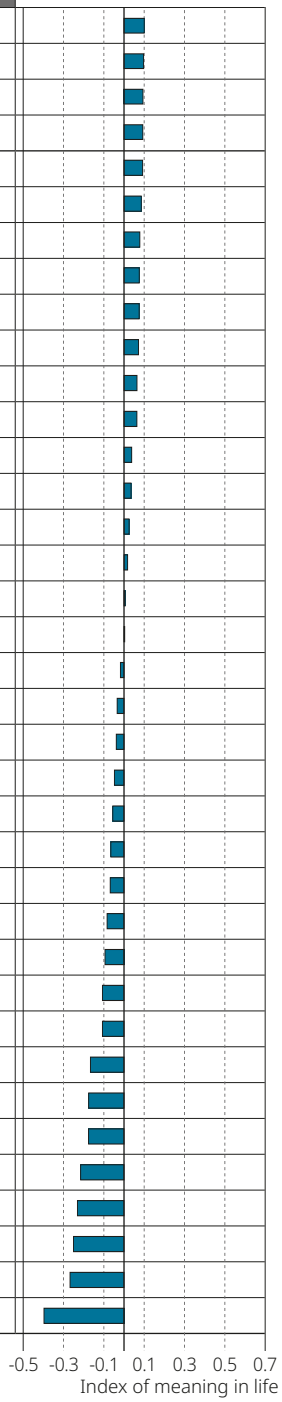
Based on students' reports

A My life has clear meaning or purpose
B I have discovered a satisfactory meaning in life
C I have a clear sense of what gives meaning to my life

	Percentage of students who agreed or strongly agreed with the following: A	B	C
Panama	86	82	85
Albania	90	80	86
Indonesia	93	90	89
North Macedonia	85	81	86
Dominican Republic	85	79	82
Peru	87	83	84
Mexico	86	81	83
Colombia	88	80	83
Kosovo	89	80	87
Costa Rica	85	75	79
Baku (Azerbaijan)	84	76	82
Kazakhstan	88	77	84
Philippines	84	83	85
Jordan	82	73	82
Thailand	86	83	89
Morocco	84	74	82
Belarus	88	83	81
United Arab Emirates	80	74	78
Saudi Arabia	85	65	86
Viet Nam	88	80	90
Montenegro	81	73	76
Moldova	85	74	81
Bosnia and Herzegovina	82	77	81
Qatar	76	72	77
Romania	79	74	74
Lebanon	72	68	77
Switzerland	73	71	71
Chile	75	67	70
Croatia	77	68	71
Serbia	76	68	73
Austria	69	65	70
Turkey	81	64	66
United States	71	65	69
Lithuania	72	63	71
Russia	73	68	73
Germany	68	65	68
Malaysia	85	60	76



	Percentage of students who agreed or strongly agreed with the following: A	B	C
France	72	69	65
Spain	70	66	68
Georgia	78	61	75
Korea	67	65	68
Portugal	70	68	71
Luxembourg	69	66	67
B-S-J-Z (China)	77	57	71
Brazil	76	67	65
Brunei Darussalam	76	67	76
Uruguay	69	65	70
Argentina	71	58	72
Finland	66	70	71
Bulgaria	76	60	67
Greece	63	66	68
Slovenia	68	65	67
OECD average	68	62	66
Ukraine	76	53	68
Belgium (Flemish)	71	65	68
Denmark	62	63	68
Hong Kong (China)	69	64	67
Slovak Republic	66	59	66
Malta	66	63	67
Estonia	67	61	64
Poland	66	56	66
Latvia	64	61	65
Iceland	65	54	60
Australia	62	59	64
Italy	67	56	62
Sweden	60	57	63
Hungary	74	50	48
Netherlands	63	53	64
Ireland	60	53	60
Czech Republic	59	52	57
Macao (China)	60	48	56
United Kingdom	57	52	58
Chinese Taipei	64	43	52
Japan	56	41	40



Countries and economies are ranked in descending order of the index of meaning in life.

Source: OECD, PISA 2018 Database, Table III.B1.11.14.

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The difference in students' sense of meaning in life related to socio-economic status, in favour of advantaged students, was particularly large in Australia, Estonia, Jordan, Lebanon and Saudi Arabia. The opposite pattern was observed in some other countries, such as Hungary, Portugal and the United Arab Emirates, where more disadvantaged than advantaged students reported a greater sense of meaning in life. On average across OECD countries, slightly more immigrant students than native students reported a greater sense of meaning in life. But there were large variations across countries and economies. For example, in the Flemish Community of Belgium, the Netherlands, Sweden and the United Kingdom, students with an immigrant background were much more likely to report a greater sense of meaning in life – at least 0.20 of a unit more – than their native-born counterparts. These results imply that boys were more likely than girls to report a greater sense of meaning in life, but the differences related to students' socio-economic and immigrant background were less pronounced across countries and economies.

PISA 2018 data show substantial differences across different types of schools in students' sense of meaning in life (Table III.B1.11.16). On average across OECD countries, about 2% of the variation in the index of meaning in life lay between schools, a proportion somewhat smaller than that of other indices examined in this report. Students in disadvantaged schools were more likely than those in advantaged schools to report a greater sense of meaning in life, on average across OECD countries. The gap in favour of disadvantaged schools was largest in Hungary and the United Arab Emirates. The opposite was observed in Saudi Arabia and the Philippines. In 23 countries and economies, students in rural schools were more likely than those in city schools to report a greater sense of meaning in life.

The degree of diversity within schools may also explain some of the variation across countries in students' sense of meaning in life. In 12 countries and economies, students in schools with a low concentration of immigrant students were more likely to report a greater sense of meaning in life than students in schools with a higher concentration of immigrant students. By contrast, in nine countries, students in schools with a higher concentration of immigrant students were significantly more likely to report a greater sense of meaning in life than students in schools with a lower concentration of immigrant students.

PISA 2018 findings support the notion that a positive school climate is linked to a greater sense of meaning in life amongst students. On average across OECD countries, a one-unit increase in the index of student co-operation was associated with a 0.19-unit increase in the index of meaning in life, after accounting for student and school characteristics (including gender, and the PISA index of socio economic, social and cultural status at the student and school levels) (Table III.B1.11.17). In the majority of PISA-participating countries and economies, student competition was also associated with an increase in the index of students' sense of meaning in life. In addition, students were more likely to report a greater sense of meaning in life when they reported a stronger sense of belonging at school. On average across OECD countries, a one-unit increase in the index of sense of belonging at school was associated with a 0.27-unit increase in the index of meaning in life, after accounting for student and school characteristics. This increase was greater than 0.35 of a unit in B-S-J-Z (China), Hong Kong (China), Thailand, the United Kingdom and the United States. Students who reported greater teacher support also reported a greater sense of meaning in life. On average across OECD countries, a one-unit increase in the index of teacher support was associated with a 0.12-unit increase in the index of meaning in life, after accounting for student and school characteristics.

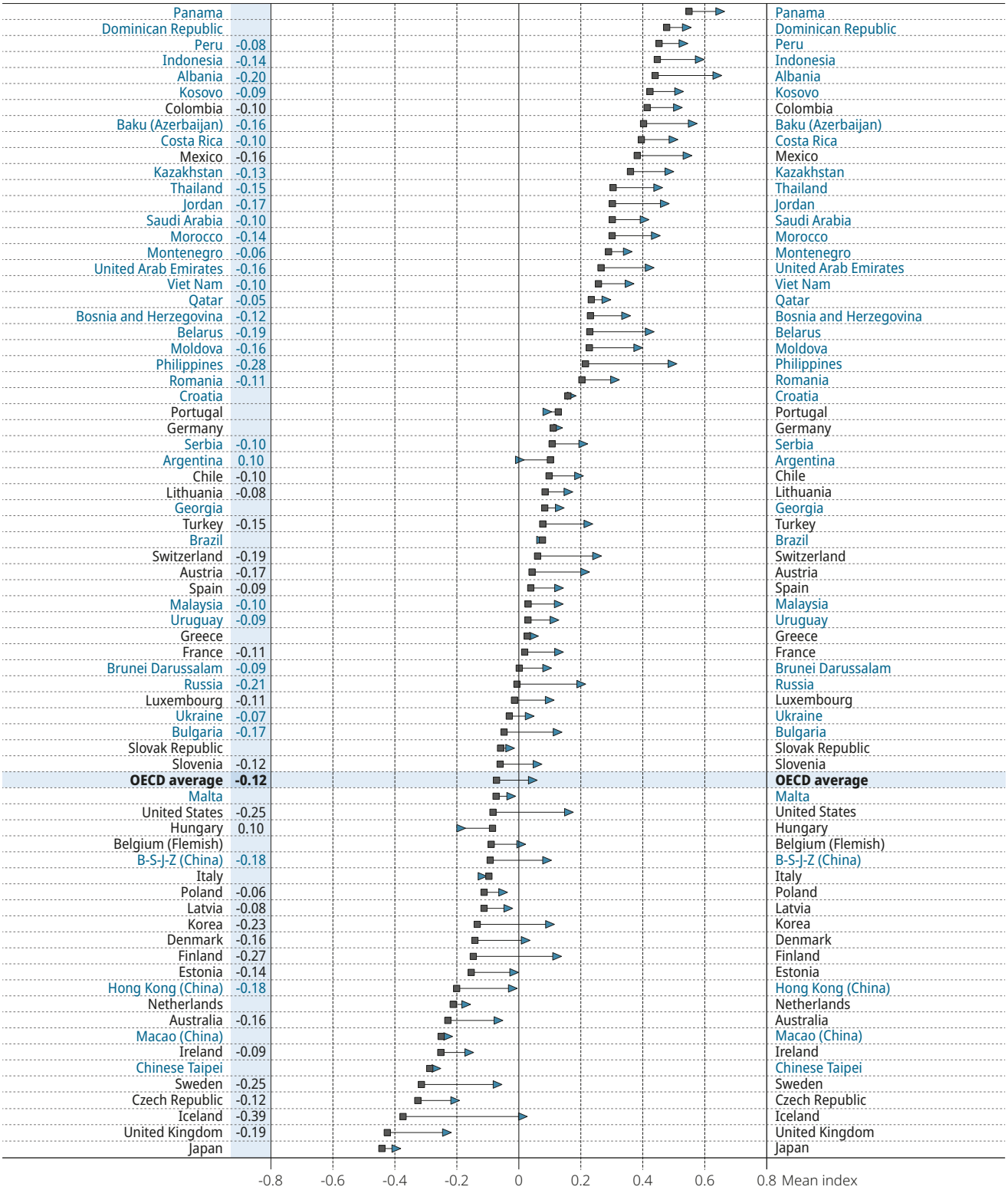
HOW STUDENTS' SENSE OF MEANING IN LIFE IS RELATED TO READING PERFORMANCE AND STUDENTS' ENGAGEMENT AT SCHOOL

The literature suggests that the components of meaning in life, such as the passionate pursuit of goals and purpose, are positively associated with academic performance (Greenway, 2006[45]). PISA 2018 data, however, show that the index of meaning in life is negatively linked to students' performance in reading, but the relationship is curvilinear (Table III.B1.11.18). On average across OECD countries, a one-unit increase in the index of meaning in life (equivalent to one standard deviation across OECD countries) was associated with a significant decrease – of eight score points – in reading performance, after accounting for students' and schools' socio-economic profile (as measured by the PISA index of economic, social and cultural status at the student and school levels). However, the results reveal large differences across countries and economies. For example, in Ireland and Chinese Taipei, this decline was greater than 15 score points, while in Jordan, Lebanon, the Philippines and Saudi Arabia, there was an increase of at least 12 score points in reading.

The correlational evidence between reading performance and the individual components used to create the index of meaning in life shows that students generally scored highest in reading when they disagreed with those statements, while they tended to score lowest when they strongly agreed (Table III.B1.11.19). On average across OECD countries, students who disagreed with the statements scored higher in reading than students who strongly disagreed, even after accounting for students' and schools' socio-economic profile (as measured by the PISA index of economic, social and cultural status at the student and school levels). For instance, students who disagreed that they have a clear sense of what gives meaning to their life scored 10 points higher in reading than students who strongly disagreed. However, the relationship between reading scores and students who agreed and strongly agreed with statements about meaning in life varied across education systems. In 26 out of 72 countries and economies with available data, students who agreed that they have discovered a satisfactory meaning in life scored significantly lower in reading than those who strongly disagreed with the same statement, after accounting for students' and schools' socio-economic profile.

Figure III.11.10 **Students' sense of meaning in life, by student truancy**

▶ I did not skip some classes in the two weeks prior to the PISA test
■ I skipped some classes at least once in the two weeks prior to the PISA test



Note: Statistically significant differences between students who had skipped classes at least once and those who had not skipped classes in the two weeks prior to the PISA test are shown next to the country/economy name (see Annex A3).

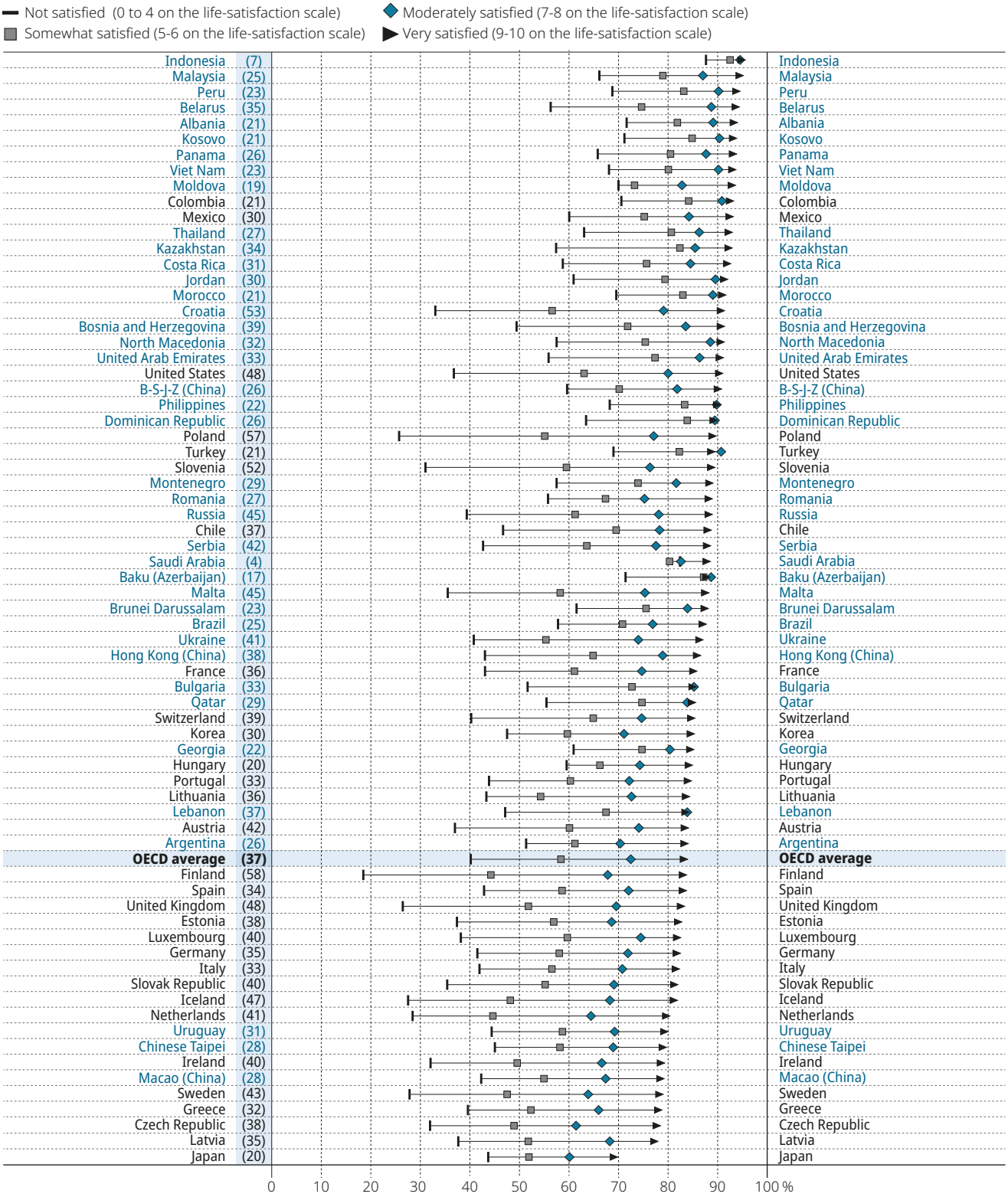
Countries and economies are ranked in descending order of the average life satisfaction of students who had skipped classes in the two weeks prior to the PISA test.

Source: OECD, PISA 2018 Database, Table III.B1.11.20.

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Figure III.11.11 **Students' life satisfaction and sense of meaning in life**

Percentage of students who agreed or strongly that "My life has clear meaning or purpose", by students' satisfaction with life



Note: The difference between students who are "satisfied" (a student who reported between 7 and 10 on the life-satisfaction scale) and "not satisfied" (a student who reported between 0 and 4 on the life-satisfaction scale) with their lives is found next to the country/economy name. All differences are statistically significant (see Annex A3).

Countries and economies are ranked in descending order of the percentage of students who are classified as "very satisfied" with life.

Source: OECD, PISA 2018 Database, Table III.B1.11.21.

StatLink http://dx.doi.org/10.1787/888934030420

By contrast, in 23 education systems, those who agreed that they have discovered a satisfactory meaning in life scored significantly higher in reading than their peers who strongly disagreed. A similar pattern holds for the statement "I have a clear sense of what gives meaning to my life".

Previous research has found that students who are less engaged in their schoolwork (e.g. they do not attend class regularly or they are not attentive in class) reported less sense of purpose in life compared to more engaged students (Rahman and Khaleque, 1996[46]). Adolescents who work to accomplish goals reported a greater sense of meaning in life than those who do not have those goals (Yeager and Bundick, 2009[47]). PISA 2018 finds that, in a majority of countries and economies, students who reported that they had arrived late for school or had skipped classes in the two weeks prior to the PISA test tended to report less of a sense of meaning in life than students who reported that they were not late or truant (Table III.B1.11.20).

For example, as shown on Figure III.11.10, on average across OECD countries, students who had not skipped some classes in the two weeks prior to the PISA test showed an average value of 0.05 in the index of meaning in life, while students who had skipped some classes at least once during that period showed an average value of 0.12 of a unit lower. In Albania, Finland, Iceland, Korea, the Philippines, Russia, Sweden and the United States, a difference of more than 0.20 of a unit in the index of meaning in life was observed between students who had skipped class at least once and those who had not skipped class at all during the period. In only two countries, Argentina and Hungary, did students who had skipped classes at least once reported a greater sense of meaning in life than students who had never skipped classes.

Arriving late for school was also linked to less of a sense of meaning in life (Table III.B1.11.20). On average across OECD countries, students who had not arrived late for school in the two weeks prior to the PISA test showed an average value of 0.05 of a unit in the index of meaning in life, while students who had arrived late for school at least once during that period showed an average value of -0.02 of a unit in the same index.

DO STUDENTS WHO ARE SATISFIED WITH THEIR LIVES HAVE A GREATER SENSE OF MEANING IN LIFE?

Empirical evidence has consistently shown that finding meaning in life is often associated with greater life satisfaction and happiness (Park, Park and Peterson, 2010[48]; Steger and Kashdan, 2007[49]; Steger, Oishi and Kashdan, 2009[50]). On average across OECD countries, students who reported being more satisfied with life were more likely to have a greater sense of meaning in life than students who reported lower levels of life satisfaction (Table III.B1.11.21). For example, on average across OECD countries, the share of students who agreed or strongly agreed that their life has clear meaning or purpose was 37 percentage points larger amongst students who reported being satisfied with their lives than amongst students who reported that they are not satisfied (Figure III.11.11). The difference between these two groups of students was 43 percentage points when considering the statement, "I have discovered a satisfactory meaning in life", and 38 percentage points when considering the statement, "I have a clear sense of what gives meaning to my life". But there were some variations across countries. For example, in Colombia, Indonesia, Kosovo, Peru, Turkey and Viet Nam, more than 90% of "moderately satisfied" students reported that their life had clear meaning or purpose, while in the Czech Republic, Japan, the Netherlands and Sweden, less than 65% of "moderately satisfied" students so reported. In Finland, fewer than one in five students who reported they are not satisfied with life also reported that their life had clear meaning or purpose, while in Indonesia and Saudi Arabia, more than four in five "not-satisfied" students so reported.

Note

1. The results on the responses to the three statements related to meaning in life might be interpreted with some caution. The Questionnaire Design Resource Centre (QDRC) in Canada and the aSPe (*analyse des Systèmes et des Pratiques d'enseignement)* at the University of Liége, Belgium, conducted qualitative testing of the questions on meaning in life for the PISA survey. In Canada, a total of 15 cognitive interviews (8 interviews in English and 7 in French), and in Belgium 10 interviews (in French) were conducted amongst 15-16 year-old participants. During the testing, participants in the cognitive interviews completed the paper questionnaire on their own and then were asked to comment on the questions.

   The two qualitative studies concluded that many respondents found the three statements similar, and some also were not sure how to interpret and answer them as they felt it the statements were very subjective. Many respondents also mentioned that this topic was sometimes discussed in their ethics course in school. The majority of respondents said that they never really thought about the meaning of their life before. When probed on the meaning of life, students gave these types of answers: happy in what I do; happy in my body; having fun in life; developing ambitions; becoming successful in my career; getting into a good university.

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PISA



Students' feelings

This chapter examines differences between countries and economies in students' feelings, and how those feelings are associated with student characteristics and reading performance. It also looks at how time spent connected to the Internet and different aspects of the school climate are related to students' feelings.

Given the growing interest in students' well-being, PISA 2018, for the first time, asked students how they normally feel in their lives. Students reported their positive – "happy", "lively", "proud", "joyful" and "cheerful" – and negative – "scared", "miserable", "afraid" and "sad" – affect states. This chapter examines the affective element of the subjective well-being of 15-year-old students. The cognitive element of subjective well-being is examined in Chapter 11.

Affect is the extent to which a person experiences certain emotions and moods (Watson, Clark and Tellegen, 1988[1]). When these feelings are related to intense and conscious experiences happening at a particular point in time, they are usually referred to as state affect or emotions; when they are related to diffuse, subconscious and general feelings, they are considered trait affect or moods (Bernoster, Mukerjee and Thurik, 2018[2]; Forgas, Wyland and Laham, 2006[3]). The question analysed in this chapter lies somewhere in between these two, as students reported on enduring emotions that can largely be described as "feeling in a good/bad mood".

Previous studies have shown that positive and negative affect states are largely independent from each other, particularly when they refer to a long time span; and they do not necessarily predict the same student outcomes (Diener and Emmons, 1984[4]). Consequently, positive and negative affect states are analysed as separate dimensions in this chapter.

Many studies have tried to understand what makes students feel good or bad. Students who feel attached to their school, love learning, persevere and are goal-oriented, for instance, are more likely to report positive affect states, such as enthusiasm, inspiration and happiness (Anderman, 1999[5]; Weber, Wagner and Ruch, 2016[6]). Students who enjoy positive life outcomes, like success, good sleep and positive relationships with parents and friends, also show more positive affect (Lyubomirsky, King and Diener, 2005[7]; Paterson et al., 2011[8]; Rogers et al., 2018[9]). Interestingly, negative affect states, like sadness, fear, despair or shame, are generally more difficult to predict than positive affect states (Weber, Wagner and Ruch, 2016[6]). Yet, some student behaviour, such as working in teams and self-regulation, and attitudes towards school and life, including enjoying a sense of belonging at school, hope and love, seem to protect students from experiencing negative emotion (Anderman, 1999[5]; Weber, Wagner and Ruch, 2016[6]).

What the data tell us

- On average across OECD countries, more than 85% of students reported sometimes or always feeling happy, cheerful or joyful; about 6% of students reported always feeling sad.
- In all countries and economies, girls were more likely than boys to report sometimes or always feeling sad.
- Compared to students who reported never feeling happy, students who reported they sometimes feel happy scored 62 points higher in reading. Students who reported feeling rarely happy and always happy also scored higher, but less so.
- The more time students spent on the Internet outside of school, the more likely they were to report feeling sad or miserable.
- In virtually all countries and economies, students were more likely to report positive feelings when they reported a stronger sense of belonging at school and greater student co-operation; they were more likely to express sadness when they were bullied more frequently.

Positive and negative affects are important student outcomes in themselves, but they are also related to students' academic growth and well-being. According to broaden-and-build theory, the experience of positive emotions, such as happiness, pride, enjoyment and love, urges students to play, explore, aspire and be creative, broadening and improving their skills in the process (Fredrickson, 2001[10]). In the school context, positive affect is positively associated with motivation, self-efficacy and engagement at school, and indirectly with academic achievement (King et al., 2015[11]; Mega, Ronconi and De Beni, 2014[12]; Pekrun et al., 2002[13]; Weber, Wagner and Ruch, 2016[6]).

The positive effects extend beyond the school context. Experiencing positive emotions, for instance, has been related to better health, fewer sleep problems, greater life satisfaction and other positive life outcomes. Experiencing negative emotions, such as sadness, anger and despair, is often negatively related to the same academic and life outcomes described above (Kuppens, Realo and Diener, 2008[14]; Lyubomirsky, King and Diener, 2005[7]; Ong et al., 2013[15]; Pressman, Jenkins and Moskowitz, 2019[16]).

This chapter examines how students normally feel in their lives. PISA asked students to report how frequently ("never", "rarely", "sometimes", "always") they feel happy, lively, proud, joyful, cheerful, scared, miserable, afraid and sad. Three of these positive feelings – happy, joyful and cheerful – were combined to create an index of positive feelings whose average is 0 and standard deviation is 1 across OECD countries. Positive values in this index mean that the student reported more positive feelings than the average student in OECD countries. An index of negative feelings was not created because of the low internal consistency of the index across PISA-participating countries.

HOW STUDENTS' FEELINGS VARY ACROSS COUNTRIES, SCHOOLS AND STUDENTS

Overall, students reported feeling good in their lives (Figure III.12.1). On average across OECD countries, more than 80% of students reported sometimes or always feeling happy, cheerful, joyful and lively; 71% reported feeling proud with the same frequency. More surprising, as many as four in ten students reported always feeling happy, cheerful and joyful (Table III.B1.12.1). By contrast, less than 40% of students sometimes or always feel scared and miserable, and about half of students reported feeling sad and afraid with the same frequency. The frequency with which students experience these negative feelings is probably expected, and is not always harmful; after all, even negative feelings have a role to play in students' lives if they arise sporadically. Fear, for instance, prevents people from engaging in risky behaviours (Warr, 2000[17]). Fortunately, few students across OECD countries always feel afraid (10%), sad (6%), miserable (5%) or scared (4%) (Table III.B1.12.2).

Countries differ in the extent to which students expressed positive feelings, though the differences are more marked for some feelings than for others (Figure III.12.1). For instance, in every country and economy except Georgia, at least 80% of students reported sometimes or always feeling happy. However, in France, Italy, Lebanon, Montenegro, the Slovak Republic and Turkey, less than 75% of students reported sometimes or always feeling lively, whereas in 16 countries and economies more than 9 in 10 students reported so.

Differences are even more pronounced in the case of negative feelings (Figure III.12.1). In Chile, Costa Rica, the Republic of Moldova (hereafter "Moldova"), Montenegro, the Republic of North Macedonia, Slovenia and Uruguay, fewer than one in four students reported feeling sometimes or always scared, while in Beijing, Shanghai, Jiangsu and Zhejiang (China) (hereafter "B-S-J-Z [China]"), Brunei Darussalam, the Czech Republic, Hong Kong (China), Indonesia, Japan and the Philippines, more than half of students so reported. Similarly, in Kazakhstan, Kosovo, Romania, Saudi Arabia and Slovenia, less than 40% of students reported sometimes or always feeling sad, but in B-S-J-Z (China) and Hong Kong (China) more than 75% of students did.

There is probably no universally acceptable way of ranking countries based on the positive and negative feelings expressed by their students; but if there is one type of answer that most people would agree should be taken seriously it is when students report that they always feel sad, scared, afraid or miserable. On average across OECD countries, around 7% of students reported so (the average percentage of students reporting across the four negative feelings) (Table III.B1.12.2). Moreover, in Brunei Darussalam, 13% of students reported always feeling scared; in Brunei Darussalam, Hong Kong (China), Lebanon, Macao (China) and Thailand, at least 10% of students reported always feeling miserable; in B-S-J-Z (China), Hong Kong (China), Japan, Korea, Portugal and the United Kingdom, more than 15% of students reported always feeling afraid; and in Brazil, Brunei Darussalam, Hong Kong (China), Macao (China), Malaysia and Viet Nam, at least 13% of students said they were always sad. By contrast, less than 2% of students in Moldova, Portugal, Spain and Ukraine reported always feeling scared, and less than 4% of students in Albania, Denmark, Finland, Germany, Kosovo, the Netherlands, Portugal, Spain and Switzerland reported always feeling sad.

In general, boys and girls reported similar levels of positive feelings, but girls were considerably more likely than boys to report that they sometimes or always feel sad (Figure III.12.2, Tables III.B1.12.5 and III.B1.12.6). In 24 school systems, girls expressed more frequent positive feelings than boys did, whereas in 19 school systems the opposite was true. However, in every country and economy, girls were more likely than boys to report that they frequently feel sad. Specifically, on average across OECD countries, 37% of boys reported that they sometimes or always feel sad, while 64% of girls so reported. The smallest gender gaps – less than 10 percentage points – were observed in B-S-J-Z (China), Indonesia, Jordan and Saudi Arabia; the largest were observed in Denmark, Finland, Germany, the Netherlands and Sweden. Obviously, these differences may reflect a real disparity between the genders in this feeling, but they could also reflect boys' unwillingness to accept (or cope with) their negative emotions (Kilmartin, 2005[18]; MacLean, Sweeting and Hunt, 2010[19]). Moreover, socio-economically advantaged students were more likely than their disadvantaged peers to report positive feelings and, to a lesser extent, to report feeling sad, on average across OECD countries.

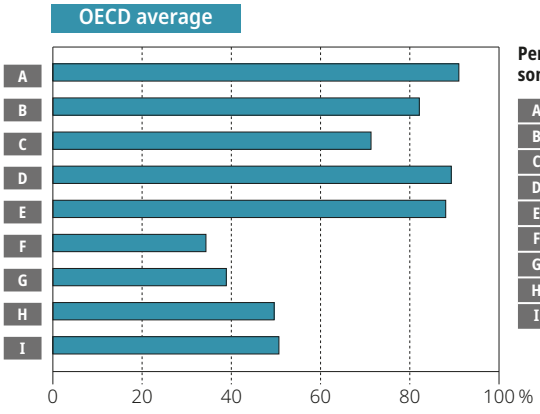
Students in different types of schools generally reported similar levels of positive feelings (Table III.B1.12.7). In this regard, just over 1% of the variation in the index of positive feelings lay between schools, considerably lower than for other indices analysed in this report. However, in a majority of countries and economies, 15-year-old students in socio-economically advantaged schools were more likely than students in disadvantaged schools to report that they frequently feel sad (Table III.B1.12.8). On average across OECD countries, students in city and private schools were more likely to report frequently feeling sad than students in rural and public schools, respectively.

HOW STUDENTS' FEELINGS ARE RELATED TO READING PERFORMANCE

The most important finding about the relationships between students' feelings and reading performance is that such relationships are largely curvilinear (increasingly positive until a certain point and decreasing thereafter), similar to what was observed when analysing life satisfaction (see Chapter 11) (Figure III.12.3). For that reason, the analyses look at how the frequency response options – "rarely", "sometimes", "always" – compare to the response option "never", as regards the relationship between students' feelings and reading performance.

Figure III.12.1 **Students' feelings**

Based on students' reports



Percentage of students who reported feeling the following sometimes or always

- A Happy
- B Lively
- C Proud
- D Joyful
- E Cheerful
- F Scared
- G Miserable
- H Afraid
- I Sad

OECD	Percentage of students who reported feeling the following sometimes or always: A	B	C	D	E	F	G	H	I
Austria	91	84	74	91	92	32	40	56	44
Canada	93	80	76	86	85	38	41	41	56
Chile	94	87	70	92	89	25	51	26	54
Colombia	93	91	72	92	92	38	25	59	50
Czech Republic	86	77	64	89	88	55	44	59	52
Denmark	91	90	84	97	97	34	29	23	48
Estonia	89	79	61	78	89	34	43	53	51
Finland	91	80	70	92	91	26	32	51	46
France	94	69	73	92	94	28	37	58	46
Germany	92	83	72	91	92	28	41	55	43
Greece	89	86	79	93	83	38	36	60	51
Hungary	92	82	72	92	83	30	41	41	45
Iceland	91	90	78	88	92	26	39	28	44
Ireland	96	89	74	87	89	36	36	34	58
Italy	91	52	73	91	66	41	46	31	55
Japan	91	90	52	94	79	61	46	83	66
Korea	87	82	66	90	87	48	30	69	52
Latvia	87	77	56	91	89	37	38	45	50
Lithuania	90	82	73	90	91	31	30	31	45
Luxembourg	91	84	75	90	91	35	44	59	49
Mexico	96	92	79	94	92	29	43	29	50
Netherlands	97	91	83	96	81	29	31	58	45
Poland	87	81	67	87	89	31	44	25	50
Portugal	96	86	71	95	94	30	38	77	48
Slovak Republic	87	74	58	87	89	34	47	51	55
Slovenia	83	79	57	64	87	21	36	52	35
Spain	96	93	76	94	95	31	38	71	54
Sweden	88	81	74	92	90	33	40	54	50
Switzerland	95	83	77	94	94	30	38	54	44
Turkey	81	70	81	81	82	26	24	44	58
United Kingdom	93	83	65	82	84	39	52	66	60
United States	93	81	78	85	83	45	40	42	63

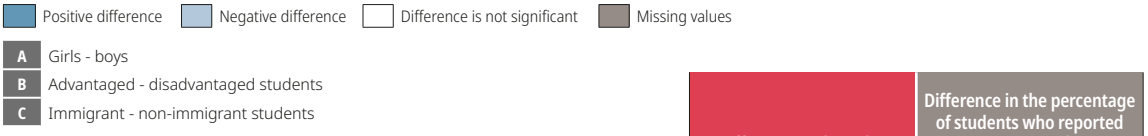
Partners	Percentage of students who reported feeling the following sometimes or always: A	B	C	D	E	F	G	H	I
Albania	95	95	94	96	91	38	10	39	43
Argentina	92	88	75	91	91	40	36	37	60
Baku (Azerbaijan)	85	84	58	88	83	35	24	54	51
Belarus	92	91	66	95	84	29	27	29	45
Bosnia and Herzegovina	92	88	86	92	94	36	35	47	43
Brazil	90	85	64	90	79	41	40	48	64
Brunei Darussalam	93	81	71	86	86	60	53	60	68
B-S-J-Z (China)	98	94	81	95	86	59	58	87	83
Bulgaria	87	81	73	87	89	33	40	56	45
Costa Rica	95	91	87	93	91	24	31	31	54
Croatia	94	84	81	91	93	37	40	58	46
Dominican Republic	92	75	78	91	91	29	29	38	56
Georgia	74	83	57	86	90	27	24	24	41
Hong Kong (China)	96	85	65	94	89	65	61	83	77
Indonesia	91	92	86	93	93	63	27	62	56
Jordan	81	82	85	78	78	35	31	41	43
Kazakhstan	93	89	54	94	95	32	17	37	35
Kosovo	94	92	93	92	96	35	11	32	39
Lebanon	82	71	75	76	77	42	41	52	51
Macao (China)	89	80	62	86	82	38	47	47	60
Malaysia	94	81	74	83	91	37	33	53	61
Malta	94	83	73	87	88	48	41	45	63
Moldova	92	89	67	93	90	24	28	43	45
Montenegro	93	51	88	92	93	23	16	25	44
Morocco	88	84	79	50	52	43	40	59	54
North Macedonia	94	92	87	94	90	23	14	42	44
Panama	95	89	76	94	94	31	50	39	58
Peru	96	94	76	96	94	27	46	30	53
Philippines	95	92	88	91	88	61	47	70	69
Qatar	88	81	78	86	85	38	39	40	58
Romania	93	89	74	92	92	33	35	30	40
Russia	85	79	57	89	76	28	18	35	49
Saudi Arabia	85	87	83	86	83	31	25	20	39
Serbia	90	80	85	89	91	25	23	31	47
Chinese Taipei	94	87	43	91	89	26	34	45	48
Thailand	92	91	82	89	93	46	58	60	57
Ukraine	91	86	58	93	94	27	14	35	48
United Arab Emirates	90	83	80	84	86	37	35	36	52
Uruguay	94	88	78	93	92	23	27	30	53
Viet Nam	85	81	74	64	91	41	24	44	48

Source: OECD, PISA 2018 Database, Tables III.B1.12.1 and III.B1.12.2.

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Figure III.12.2 **Positive and negative student feelings, by student characteristics**

Based on students' reports



OECD	Difference in the index of positive feelings[1]: A	B	C	Difference in the percentage of students who reported sometimes or always feeling sad: A	B	C
OECD average						
Austria						
Canada						
Chile						
Colombia						
Czech Republic						
Denmark						
Estonia						
Finland						
France						
Germany						
Greece						
Hungary						
Iceland						
Ireland						
Italy						
Japan						
Korea						
Latvia						
Lithuania						
Luxembourg						
Mexico						
Netherlands						
Poland						
Portugal						
Slovak Republic						
Slovenia						
Spain						
Sweden						
Switzerland						
Turkey						
United Kingdom						
United States						

Partners	Difference in the index of positive feelings[1]: A	B	C	Difference in the percentage of students who reported sometimes or always feeling sad: A	B	C
Albania						
Argentina						
Baku (Azerbaijan)						
Belarus						
Bosnia and Herzegovina						
Brazil						
Brunei Darussalam						
B-S-J-Z (China)						
Bulgaria						
Costa Rica						
Croatia						
Dominican Republic						
Georgia						
Hong Kong (China)						
Indonesia						
Jordan						
Kazakhstan						
Kosovo						
Lebanon						
Chinese Taipei						
Macao (China)						
Malaysia						
Malta						
Moldova						
Montenegro						
Morocco						
North Macedonia						
Panama						
Peru						
Philippines						
Qatar						
Romania						
Russia						
Saudi Arabia						
Serbia						
Thailand						
Ukraine						
United Arab Emirates						
Uruguay						
Viet Nam						

A	B	C	A	B	C	
24	43	3	72	15	8	Countries/economies with a positive difference
26	24	40	0	50	50	Countries/economies with no difference
19	2	20	0	7	7	Countries/economies with a negative difference

1. The index of positive feelings is based on three items: "happy", "joyful" and "cheerful".

Source: OECD, PISA 2018 Database, Tables III.B1.12.5 and III.B1.12.6.

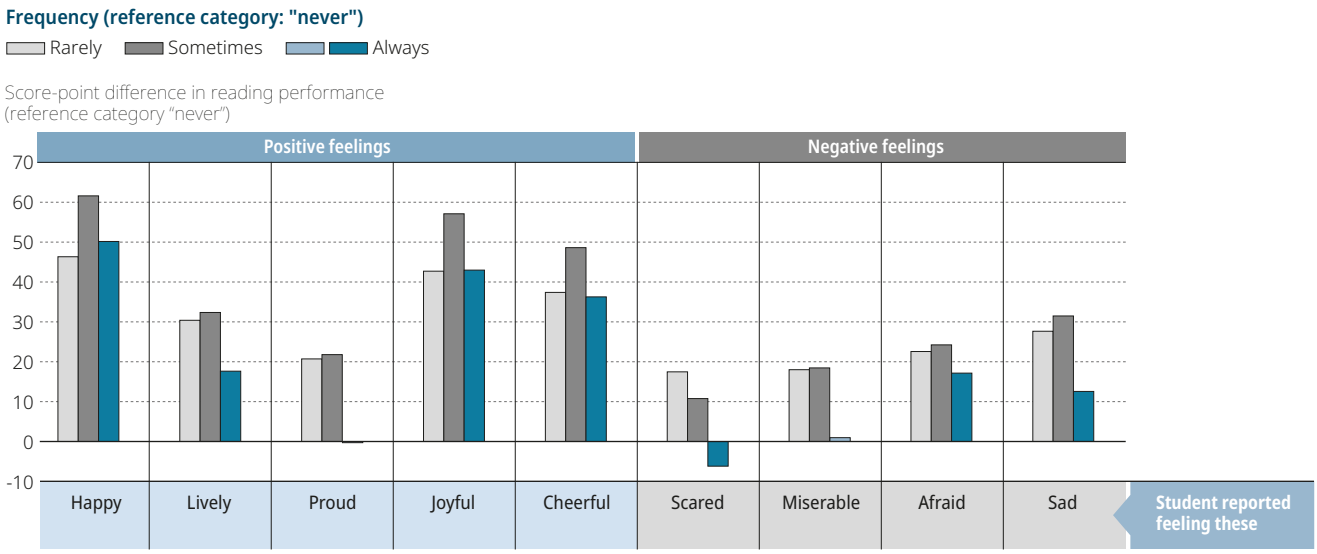
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When all response options to the statements concerning positive feelings are analysed individually, and the socio-economic profile of students and schools (as measured by the PISA index of economic, social and cultural status) is accounted for, the common findings (except when considering "pride") were that students who responded "never" scored the lowest in reading; and those who responded "sometimes" scored the highest (Figure III.12.3). For instance, compared to students who reported never feeling happy, students who said that they rarely feel happy scored 46 points higher in reading, those who reported sometimes feeling happy scored 62 points higher, and those who reported always feeling happy scored 50 points higher, on average across OECD countries.

The analyses concerning negative feelings, which also account for students' gender, also show a curvilinear relationship with reading performance (Figure III.12.3). On average across OECD countries, students who reported rarely or sometimes feeling scared, afraid, miserable or sad scored higher in the reading assessment than students who reported never or always feeling that way, by a wide margin. For instance, compared to students who reported never feeling sad, students who said that they rarely feel sad scored 28 points higher in reading, those who reported sometimes feeling sad scored 31 points higher, and those who reported always feeling sad scored 13 points higher, on average across OECD countries.

Figure III.12.3 **Intensity of students' feelings and reading performance**

OECD average



Notes: Statistically significant values are shown in darker tones (see Annex A3).

Results are based on linear regression analysis, after accounting for gender and students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Source: OECD, PISA 2018 Database, Tables III.B1.12.10 and III.B1.12.12.

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HOW IS INTERNET USE OUTSIDE OF SCHOOL RELATED TO STUDENTS' FEELINGS?

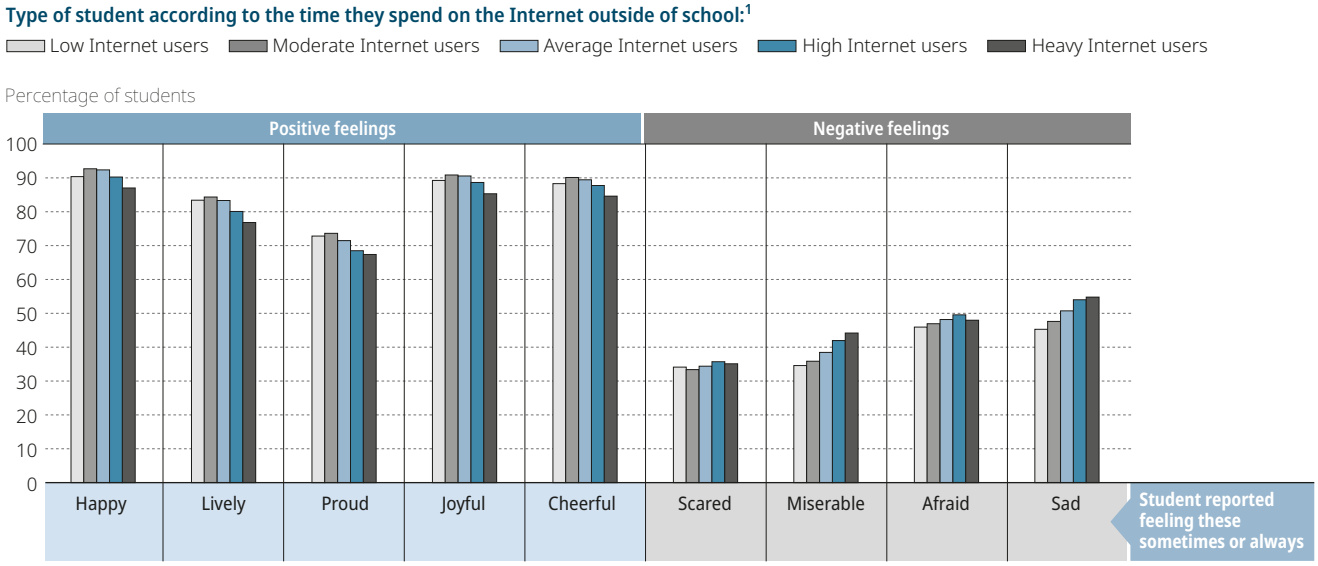
Given the amount of time 15-year-olds spend on line today, and the remarkable increase in Internet use amongst adolescents in recent years (Echazarra, 2018[20]), it is crucial to understand how time spent on the Internet is related to students' feelings. PISA 2015 results showed that heavy Internet users reported lower overall satisfaction with life than students who spend less time connected (OECD, 2017[21]), a finding that is largely congruent with previous studies on smartphone use (Lepp, Barkley and Karpinski, 2014[22]; Samaha and Hawi, 2016[23]) and video gaming (Mentzoni et al., 2011[24]). However, Brunborg, Mentzoni and Froyland (2014[25]) point out that it is addiction to video games, and not necessarily the time spent playing video games, that correlates with negative outcomes, like depression and behavioural problems.

In 51 of the 52 countries and economies that distributed the ICT questionnaire (46 of which also have data on students' feelings), PISA 2018 asked students how much time they spend using the Internet during the typical weekday and weekend day outside of school. These two questions were combined to calculate the amount of time students spend connected to the Internet during a typical week. Five categories of Internet users were then created based on this indicator: "low Internet user" (0-9 hours per week); "moderate Internet user" (10-19 hours per week); "average Internet user" (20-29 hours per week); "high Internet user" (30-39 hours per week); and "heavy Internet user" (more than 40 hours per week).

Analysing students' usual feelings against the time they spend using the Internet, it appears that low, moderate and average Internet users were more likely to report positive feelings than high and heavy users of the Internet, particularly in the case of feeling lively and proud (Figure III.12.4). When students were asked about fear-related negative feelings, their responses did not vary much across the different categories of Internet users; but when students were asked how frequently they feel sad and miserable, the differences between the categories of Internet users were greater. The more time students reported spending connected to the Internet, the more likely they were to report feeling sad and miserable. For instance, on average across OECD countries, 35% of low Internet users reported feeling miserable sometimes or always, compared to 38% of average Internet users and 44% of heavy Internet users. In Austria, Estonia, Finland and Slovenia, the difference between low and heavy Internet users in sometimes or always feeling miserable amounted to at least 15 percentage points.

Figure III.12.4 **Internet use outside of school and students' feelings**

OECD average



1. Low Internet users: 0-9 hours(h)/week(w); Moderate users: 10-19 h/w; Average users: 20-29 h/w; High users: 30-39 h/w; Heavy users: More than 40 h/w.

Note: Results are based on linear regression analysis, after accounting for gender and students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Source: OECD, PISA 2018 Database, Tables III.B1.12.15 and III.B1.12.16.

StatLink http://dx.doi.org/10.1787/888934030496

Moreover, the association between time spent on line and certain student feelings is even stronger amongst girls (Tables III.B1.12.17 and III.B1.12.18). For instance, the difference between low and heavy Internet users in the likelihood of sometimes or always feeling miserable was 7 percentage points amongst boys and 13 percentage points amongst girls, on average across OECD countries. It appears that the amount of time spent on line is a better predictor of girls' feelings than it is of boys' feelings, particularly so when it comes to negative emotions.

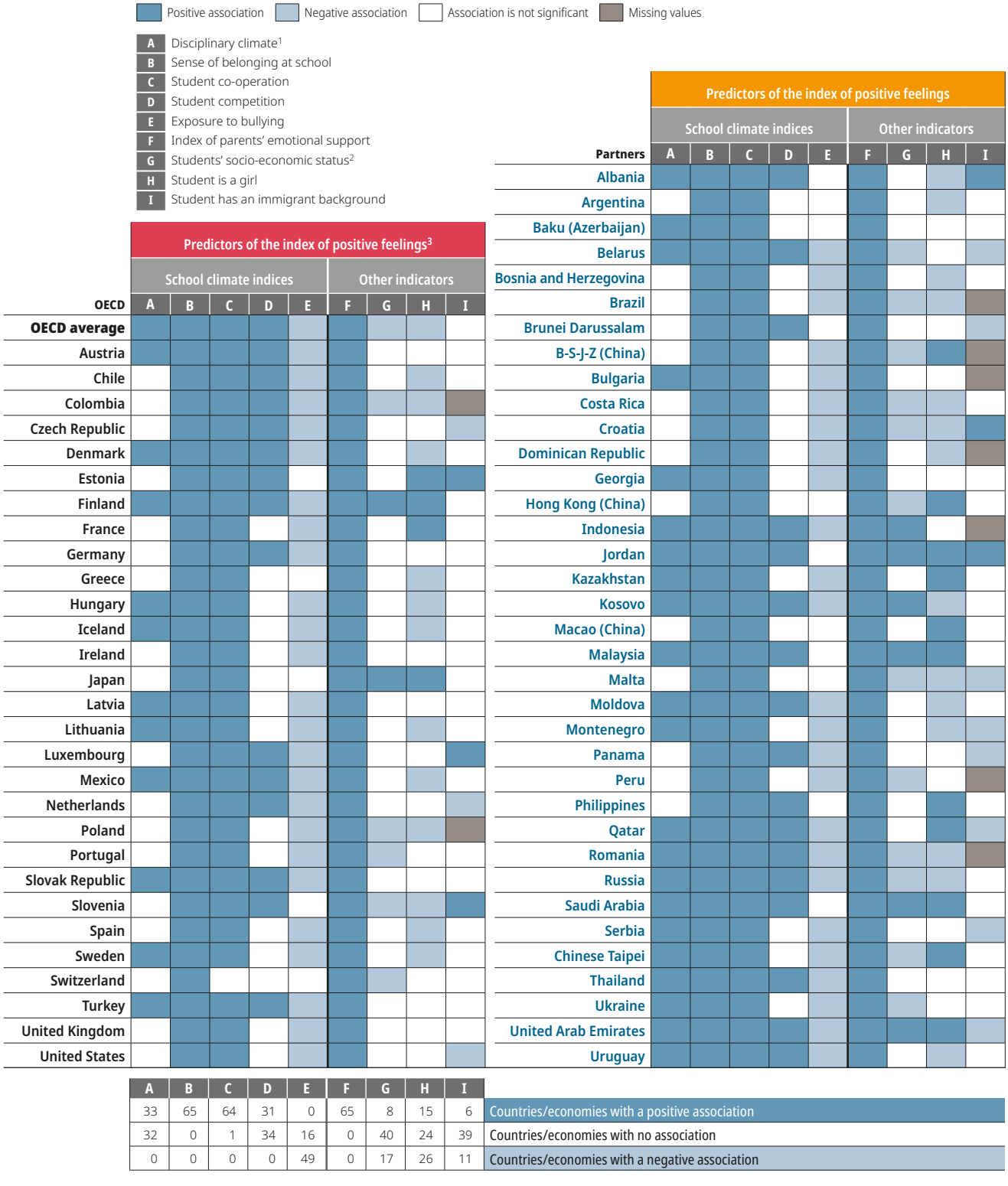
HOW IMPORTANT IS LIFE AT SCHOOL FOR STUDENTS' FEELINGS?

One of the main ideas that informs this report is that life at school is a key aspect of students' lives. School is not only the place where children acquire knowledge but, crucially for this report, it is the place where children make friends, build trusting relationships with teachers and develop an attachment to the school. Unfortunately, school can also be the place where children are bullied, punished and expelled, and where they develop negative reactions towards schooling and the world of education more generally. Aspects of the school climate, such as safety, reputation and the learning environment, are the most important criteria parents consider when choosing a school for their children (see Chapter 10); but is the school climate equally important for students?

This section looks at how different aspects of the school climate examined in the first part of this report are related to students' feelings. It should be borne in mind that events outside of school, such as a country- or regional-level economic downturns and natural disasters, as well as family-related issues, could directly and indirectly shape students' feelings. Amongst the five indices of school climate analysed, the ones that best predicted students' positive feelings across OECD countries were the index of sense of belonging at school, followed by the indices of student co-operation and exposure to bullying (Table III.B1.12.19).

Figure III.12.5 **Predictors of positive feelings**

Based on students' reports



A	B	C	D	E	F	G	H	I	
33	65	64	31	0	65	8	15	6	Countries/economies with a positive association
32	0	1	34	16	0	40	24	39	Countries/economies with no association
0	0	0	0	49	0	17	26	11	Countries/economies with a negative association

1. Higher values indicate a more positive disciplinary climate.
2. The socio-economic status of students is measured by the PISA index of economic, social and cultural status (ESCS).
3. The index of positive feelings is based on three items: "happy", "joyful" and "cheerful".

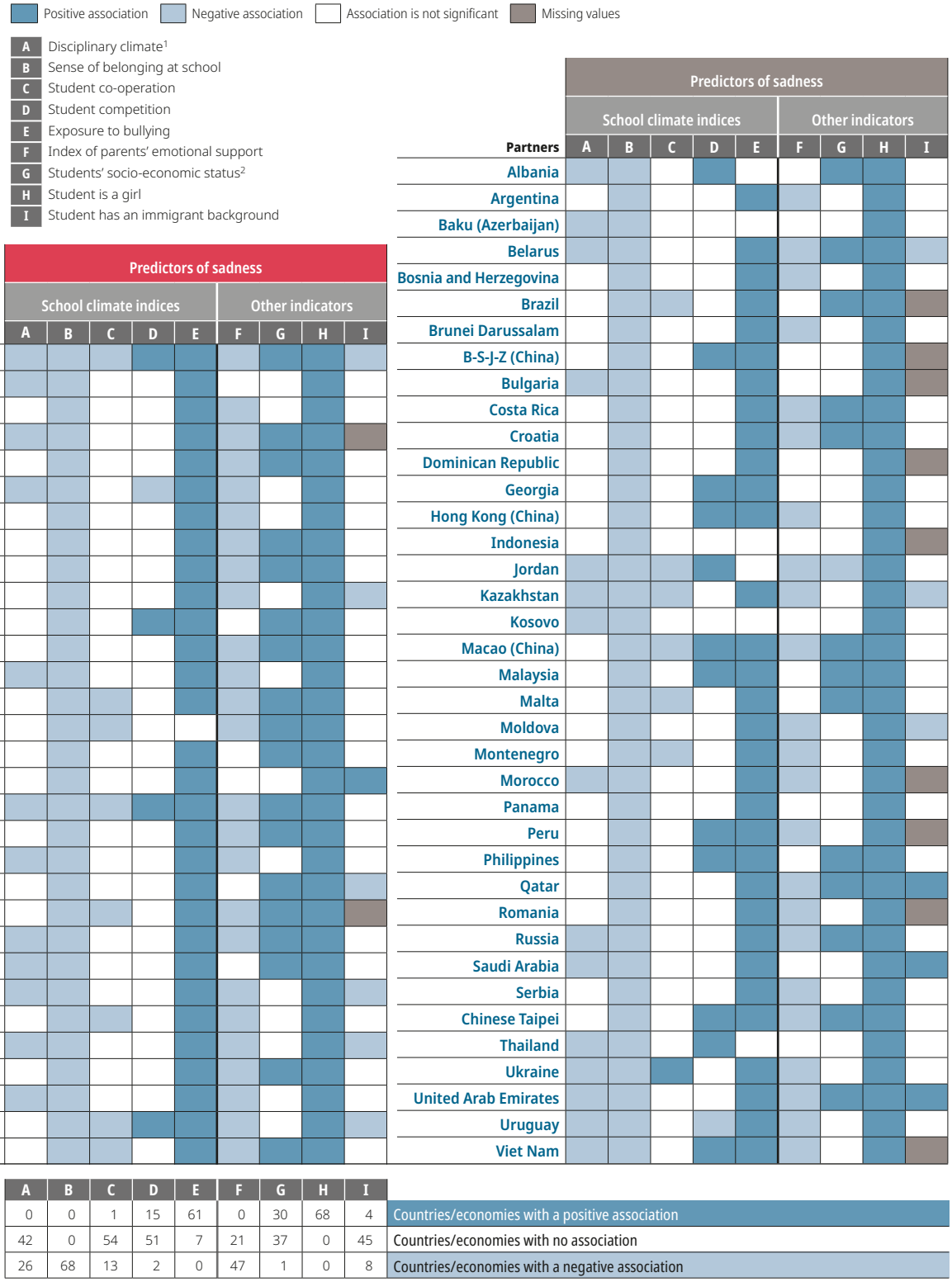
Note: All predictors were included in the same linear regression model.

Source: OECD, PISA 2018 Database, Table III.B1.12.19.

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Figure III.12.6 **Predictors of sadness**

Based on students' reports



A	B	C	D	E	F	G	H	I	
0	0	1	15	61	0	30	68	4	Countries/economies with a positive association
42	0	54	51	7	21	37	0	45	Countries/economies with no association
26	68	13	2	0	47	1	0	8	Countries/economies with a negative association

1. Higher values indicate a more positive disciplinary climate.

2. The socio-economic status of students is measured by the PISA index of economic, social and cultural status (ESCS).

Note: All predictors were included in the same logit regression model.

Source: OECD, PISA 2018 Database, Table III.B1.12.20.

StatLink http://dx.doi.org/10.1787/888934030534

In this regard, in all 65 countries and economies with available data, students were more likely to express positive feelings when they reported a stronger sense of belonging at school (Figure III.12.5). In all school systems, except in Switzerland, students who perceived their peers to be more co-operative were more likely to express positive feelings. In addition, in a majority of countries and economies, students who were more frequently bullied reported that they were happy, joyful and cheerful less frequently than students who were bullied less frequently.

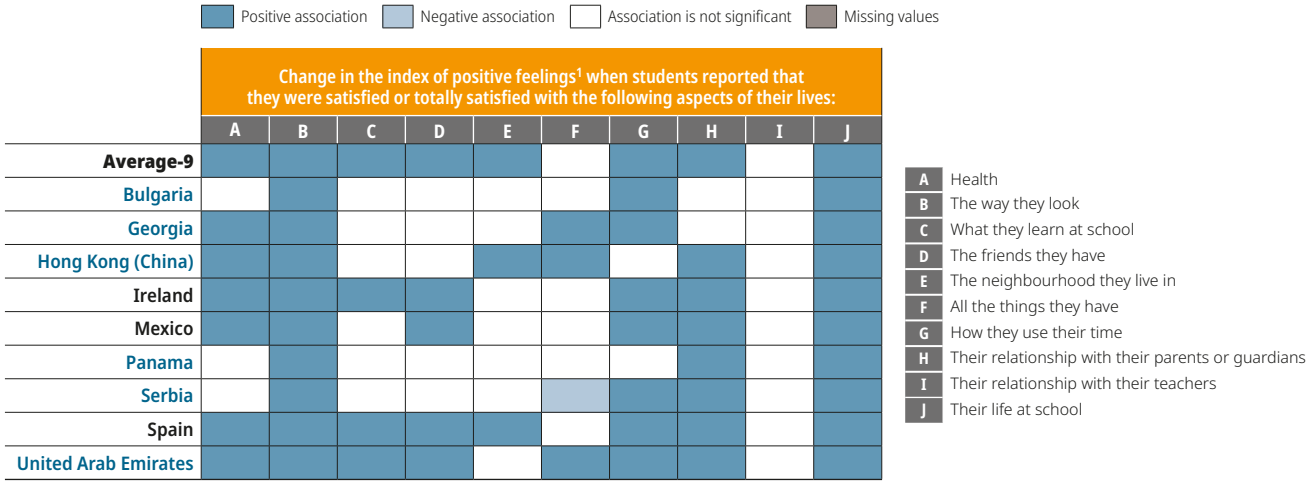
In about half of the countries and economies that participated in PISA 2018, a positive association was observed between the index of positive feelings and the indices of disciplinary climate and student competition. In every education system, parents' emotional support, as perceived by students, was positively associated with students' positive feelings. The three other aspects considered – students' socio-economic status, gender and immigrant background – did not show a clear pattern of association with students' positive feelings across countries and economies.

The results are similar, though in the opposite direction, when feelings of sadness were examined. In every school system, the index of sense of belonging at school was negatively associated with feeling sad (Figure III.12.6). This was followed by the index of exposure to bullying, which was positively related to feelings of sadness in about 9 out of 10 school systems. On average across countries, feeling sad was only moderately associated with how much students co-operate (negatively) and compete (positively) at school, or with how well students behave in class (negatively) (Table III.B1.12.20). Socio-economically advantaged students said they felt sad more frequently than disadvantaged students, on average across OECD countries and in almost half of school systems. In every school system, girls were more likely than boys to report that they feel sad sometimes or always.

That school life matters for students' lives can also be ascertained from the analysis of students' feelings and their satisfaction with different aspects of their lives. In the nine countries and economies that distributed the well-being questionnaire, students were asked how satisfied ("not at all satisfied", "not satisfied", "satisfied", "totally satisfied") they were with ten aspects of their lives: "health"; "the way [they] look"; "what [they] learn at school"; "the friends [they] have"; "the neighbourhood [they] live in"; "all the things [they] have"; "how [they] use [their] time"; "their relationship with [their] parents or guardians"; "[their] relationship with [their] teachers"; and "[their] life at school". Students' answers were recoded so that students were classified as either not satisfied ("not at all satisfied" or "not satisfied") or satisfied ("satisfied" or "totally satisfied") with these aspects of life.

Figure III.12.7 **Satisfaction with different aspects of life and positive feelings**

Based on students' reports



A	B	C	D	E	F	G	H	I	J	
6	9	3	4	2	3	7	7	0	9	Countries/economies with a positive association
3	0	6	5	7	5	2	2	9	0	Countries/economies with no association
0	0	0	0	0	1	0	0	0	0	Countries/economies with a negative association

1. The index of positive feelings is based on three items: "happy", "joyful" and "cheerful".

Notes: Results based on a linear regression analysis, after accounting for students' gender, immigrant background and socio-economic status. The socio-economic status is measured by the PISA index of economic, social and cultural status (ESCS).

All predictors were included in the same linear regression model.

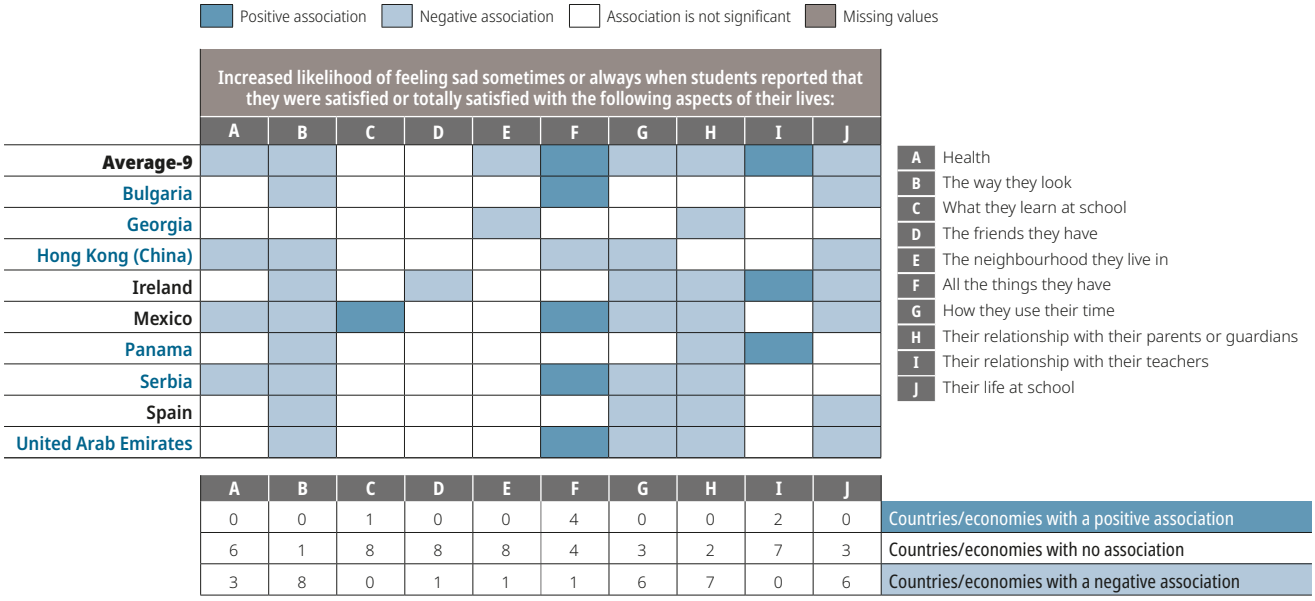
Source: OECD, PISA 2018 Database, Table III.B1.12.21.

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On average across the nine countries that distributed the well-being questionnaire, the best predictors of students' positive feelings were how satisfied they were with the way they look, their relationship with parents or guardians, and their life at school, followed by how they use their time, their health and their friends (Table III.B1.12.21). In this regard, in all nine school systems, students were more likely to say they feel happy, joyful and cheerful when they were satisfied or totally satisfied with the way they look and with their life at school (Figure III.12.7). Results were similar when considering feelings of sadness (Table III.B1.12.22 and Figure III.12.8). The best predictor was how satisfied students were with the way they look, which was negatively related to feeling sad in eight out of the nine school systems, followed by their relationship with parents or guardians and their satisfaction with school life.

Figure III.12.8 **Satisfaction with different aspects of life and feelings of sadness**

Based on students' reports



A	B	C	D	E	F	G	H	I	J	
0	0	1	0	0	4	0	0	2	0	Countries/economies with a positive association
6	1	8	8	8	4	3	2	7	3	Countries/economies with no association
3	8	0	1	1	1	6	7	0	6	Countries/economies with a negative association

Notes: Results based on logit regression analysis, after accounting for students' gender, immigration background and socio-economic status. The socio-economic status is measured by the PISA index of economic, social and cultural status (ESCS).
All predictors were included in the same logit regression model.

Source: OECD, PISA 2018 Database, Table III.B1.12.22.

StatLink http://dx.doi.org/10.1787/888934030572

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13

Students' self-efficacy and fear of failure

This chapter examines differences between countries and economies in students' general self-efficacy and fear of failure, and how they are associated with student and school characteristics. It also looks at how self-efficacy and fear of failure are related to reading performance, and explores whether students who expressed greater fear of failure are less satisfied with their lives.

Students' self-efficacy and fear of failure

Self-efficacy is the extent to which individuals believe in their own ability to engage in certain activities and perform specific tasks, especially when facing adverse circumstances (Bandura, 1977[1]). PISA has traditionally asked students to judge their capabilities in specific content areas, such as mathematics or science. In 2018 PISA asked students about their general sense of efficacy, or competence, particularly in the face of adversity.

The other side of this coin is fear of failure, which is the tendency to avoid mistakes because they may be regarded as shameful and could signal a lack of innate ability and perhaps even an uncertain future (Atkinson, 1957[2]; Conroy, Willow and Metzler, 2002[3]). The level of fear is determined by the perceived risk of failure in a given activity or task, but also by the perceived (negative) consequences associated with failing (Lazarus, 1991[4]; Warr, 2000[5]).

Consequently, fear of failure and self-efficacy go hand-in-hand: students who believe they are not capable of performing adequately in certain situations are more likely to be fearful of such situations. Self-efficacy and fear of failure are also closely related to other concepts in educational psychology, some of which have already been examined in previous PISA cycles, such as achievement motivation, avoidance goals, anxiety and perfectionism.

How students judge their abilities, and how afraid they are of failing, can shape their feelings, motivation and behaviour (Bandura, 1991[6]). According to social cognitive theory, students are more likely to set challenging goals for themselves, try harder and persist longer when they believe they will succeed (Bandura, 1977[1]; Ozer and Bandura, 1990[7]). Conversely, students lacking self-confidence may wrongly assume that investing more effort in an activity is a waste of time, which, in a self-fulfilling prophecy, undermines any incentive to persevere, making success less likely (Bandura, 1999[8]; OECD, 2013[9]). Students with less self-efficacy may thus not reach their full potential, and thwart their own education and career aspirations (Bandura et al., 2001[10]; Wigfield and Eccles, 2000[11]).

What the data tell us

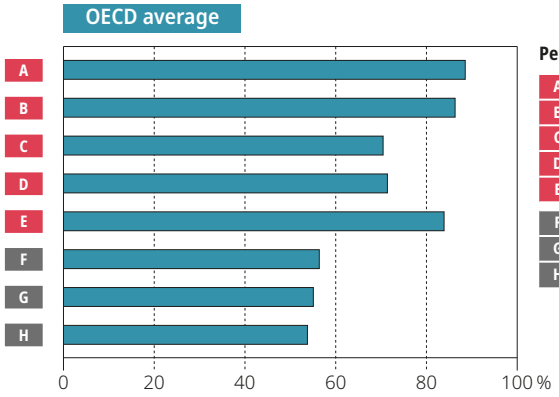
- On average across OECD countries, 84% of students agreed or strongly agreed that they can usually find a way out of difficult situations, and 56% agreed or strongly agreed that, when they fail, they worry about what others think about them.
- Students in many Asian countries and economies expressed the greatest fear of failure, while students in many European countries expressed the least fear.
- In every school system except Italy and the Netherlands, socio-economically advantaged students reported more self-confidence in their abilities than their disadvantaged peers.
- In almost every education system, girls expressed greater fear of failure than boys, and this gender gap was considerably wider amongst top-performing students.
- In a majority of school systems, students who expressed a greater fear of failure scored higher in reading and reported less satisfaction with life than students expressing less concern about failing, after accounting for the socio-economic profile of students and schools.

A rational and moderate sense of fear may urge students to expend greater effort on academic tasks. For instance, many students complete their homework because they are afraid of upsetting the teacher; others show good behaviour in class so they are not denied recess; yet others study for final exams to avoid repeating a grade. However, students who are overly concerned about failing often find it difficult to concentrate on a given activity because their minds are too busy trying to cope with the associated stress and anxiety (Ashcraft and Kirk, 2001[12]; Bandura, 1982[13]).These students also tend to avoid challenging situations that are essential for their personal growth (Heckhausen, 1975[14]; Kaye, Conroy and Fifer, 2008[15]). These avoidance behaviours, such as procrastinating, withholding effort and misbehaving, can result in students not performing in a given activity or task as would be expected (Beilock et al., 2004[16]; Kaye, Conroy and Fifer, 2008[15]; Martin, Marsh and Debus, 2003[17]).

Even if fear of failure could be used to improve student conduct and performance in certain situations, it would still be problematic, as it threatens the social and emotional well-being of students (Elliot and Sheldon, 1997[18]). Amongst other negative outcomes, fear of failure has been associated with stress, anxiety, burnout and depression (Conroy, 2001[19]; Gustafsson, Sagar and Stenling, 2017[20]; Sagar, Lavallee and Spray, 2007[21]). Previous studies have also shown that girls often experience greater fear of failure than boys do (Alkhazaleh and Mahasneh, 2016[22]; Mcgregor and Elliot, 2005[23]), and that girls' fear translates more easily into poorer learning outcomes in mathematics (Wach et al., 2015[24]).

Figure III.13.1 **Student self-efficacy and fear of failure**

Based on students' reports



Percentage of students who agreed or strongly agreed with the following

- **A** I usually manage one way or another
- **B** I feel proud that I have accomplished things
- **C** I feel that I can handle many things at a time
- **D** My belief in myself gets me through hard times
- **E** When I'm in a difficult situation, I can usually find my way out of it
- **F** When I am failing, I worry about what others think of me
- **G** When I am failing, I am afraid that I might not have enough talent
- **H** When I am failing, this makes me doubt my plans for the future

	Percentage of students who agreed or strongly agreed with the following statements:							
	Index of self-efficacy					Index of fear of failure		
OECD	A	B	C	D	E	F	G	H
Australia	93	92	73	67	86	62	64	68
Austria	85	85	71	73	84	51	43	41
Belgium (Flemish)	89	91	64	57	83	47	44	53
Canada	93	91	73	71	87	62	65	68
Chile	92	91	78	75	84	51	64	59
Colombia	89	93	75	91	90	48	51	44
Czech Republic	91	70	68	63	82	59	52	55
Denmark	91	87	78	71	90	58	58	47
Estonia	92	85	71	71	87	46	48	45
Finland	94	89	68	71	84	50	45	41
France	92	87	67	59	75	47	62	62
Germany	85	82	69	68	84	48	38	37
Greece	88	84	75	78	86	55	53	50
Hungary	91	91	74	80	90	55	51	47
Iceland	91	83	76	69	84	64	54	50
Ireland	94	90	72	66	85	64	63	65
Israel	84	82	69	80	85	m	m	m
Italy	85	86	68	72	86	57	59	57
Japan	65	69	41	56	59	77	74	61
Korea	86	91	55	77	81	75	66	54
Latvia	83	79	70	72	84	55	50	49
Lithuania	90	89	72	81	85	62	53	50
Luxembourg	87	83	73	68	81	50	49	54
Mexico	91	95	78	86	89	54	63	57
Netherlands	90	89	66	69	88	45	35	36
New Zealand	94	93	68	66	85	65	63	68
Poland	88	90	73	69	83	54	57	58
Portugal	91	92	68	73	85	56	56	54
Slovak Republic	80	77	65	66	79	59	60	53
Slovenia	89	79	75	77	85	63	55	54
Spain	85	92	82	73	84	51	53	48
Sweden	93	74	74	66	83	53	56	53
Switzerland	88	86	71	71	85	43	44	45
Turkey	87	91	79	84	86	66	57	64
United Kingdom	90	86	66	59	80	63	63	70
United States	94	92	74	75	88	58	60	65

	Percentage of students who agreed or strongly agreed with the following statements:							
	Index of self-efficacy					Index of fear of failure		
Partners	A	B	C	D	E	F	G	H
Albania	93	92	78	92	95	52	45	46
Argentina	87	84	61	78	82	41	57	51
Baku (Azerbaijan)	84	87	82	84	86	64	56	58
Belarus	86	73	56	79	90	49	53	48
Bosnia and Herzegovina	86	90	81	87	87	39	40	46
Brazil	76	88	57	75	77	55	59	57
Brunei Darussalam	87	87	56	77	78	74	70	73
B-S-J-Z (China)	82	90	61	81	74	78	53	51
Bulgaria	82	82	74	77	84	54	51	51
Costa Rica	91	96	79	84	89	47	48	42
Croatia	91	94	77	83	89	47	47	46
Dominican Republic	85	87	77	84	86	60	56	50
Georgia	82	72	69	84	83	48	44	42
Hong Kong (China)	74	84	66	72	73	82	71	72
Indonesia	72	90	71	91	89	59	46	39
Jordan	80	86	79	87	80	47	46	49
Kazakhstan	78	60	77	85	88	45	43	34
Kosovo	88	90	76	91	92	53	55	61
Lebanon	67	75	71	70	73	41	47	53
Macao (China)	79	85	51	65	72	80	78	66
Malaysia	63	85	55	80	80	75	69	67
Malta	91	90	70	74	83	58	65	72
Moldova	87	85	72	86	88	64	55	50
Montenegro	87	91	83	84	90	39	39	40
Morocco	80	86	71	80	80	44	54	53
North Macedonia	84	92	85	88	90	51	48	55
Panama	87	92	74	87	88	53	56	50
Peru	89	93	74	88	90	49	49	42
Philippines	84	89	76	83	83	72	60	63
Qatar	80	87	74	69	82	50	53	58
Romania	93	87	68	85	91	46	48	41
Russia	67	76	61	75	82	53	48	49
Saudi Arabia	83	87	74	86	80	47	43	41
Serbia	84	91	80	82	88	42	41	48
Singapore	94	95	62	77	86	72	73	78
Chinese Taipei	85	86	57	73	80	89	84	77
Thailand	89	94	67	90	86	66	68	64
Ukraine	90	88	59	80	86	51	50	39
United Arab Emirates	88	89	76	82	85	55	58	64
Uruguay	90	90	73	76	85	46	57	54
Viet Nam	88	93	30	90	79	67	53	52

Source: OECD, PISA 2018 Database, Tables III.B1.13.1 and III.B1.13.2.

StatLink http://dx.doi.org/10.1787/888934030591

This chapter examines students' self-efficacy and fear of failure. PISA asked students to report the extent to which they agree ("strongly disagree", "disagree", "agree", "strongly agree") with the following statements about themselves: "I usually manage one way or another"; "I feel proud that I have accomplished things"; "I feel that I can handle many things at a time"; "My belief in myself gets me through hard times"; and "When I'm in a difficult situation, I can usually find my way out of it". These statements were combined to create the index of self-efficacy whose average is 0 and standard deviation is 1 across OECD countries. Positive values in this index mean that the student reported higher self-efficacy than the average student in OECD countries.[1]

Students were also asked to report the extent to which they agree ("strongly disagree", "disagree", "agree", "strongly agree") with the following statements about themselves: "When I am failing, I worry about what others think of me"; "When I am failing, I am afraid that I might not have enough talent"; and "When I am failing, this makes me doubt my plans for the future". These statements were combined to create the index of fear of failure whose average is 0 and standard deviation is 1 across OECD countries. Positive values in this index mean that the student reported a greater fear of failure than the average student in OECD countries.

HOW STUDENTS' SELF-EFFICACY AND FEAR OF FAILURE VARY ACROSS COUNTRIES, SCHOOLS AND STUDENTS

The 15-year-olds who sat the PISA test expressed confidence in their ability to get things done, even when facing difficult situations (Figure III.13.1). For instance, on average across OECD countries, 89% of students agreed or strongly agreed that they usually manage one way or another; 86% agreed or strongly agreed that they feel proud when they accomplish things; and 84% agreed or strongly agreed that they can usually find a way out of difficult situations. However, fewer students agreed or strongly agreed that their belief in themselves gets them through hard times (71%) and that they can handle many things at a time (70%).

Interestingly, on average across OECD countries a majority of students expressed a fear of failure (Figure III.13.1). For instance, 56% of students agreed or strongly agreed that, when they fail, they worry about what others think about them; and 55% of students agreed or strongly agreed that, when they fail, they are afraid of not having enough talent. Even the percentages of students who strongly agreed with the three statements were sizeable. For instance, almost one in five students across OECD countries strongly agreed that failing makes them doubt about their plans for the future.

Students' self-efficacy varies considerably across countries and economies, and often in unexpected ways (Table III.B1.13.1). For instance, 15-year-old students in countries and economies whose average reading performance is below the OECD average, such as Albania, Baku (Azerbaijan), Costa Rica, the Dominican Republic, Kosovo, Mexico, Montenegro, the Republic of North Macedonia, Panama, Serbia, Turkey and the United Arab Emirates (Table I.B1.4), expressed more self-confidence in their general abilities than the average student across OECD countries. By contrast, many of the education systems where students reported the lowest self-efficacy were high performers, such as Hong Kong (China), Japan, Macao (China), Chinese Taipei and the United Kingdom.

Students in many Asian countries and economies expressed the greatest fear of failure while students in many European countries expressed the least fear (Figure III.13.1 and Table III.B1.13.2). For instance, 84% of students in Chinese Taipei agreed or strongly agreed that, when they fail, they are afraid of not having enough talent, whereas less than 40% of students in Bosnia and Herzegovina, Germany, Montenegro and the Netherlands reported so.

In every school system except Italy and the Netherlands, socio-economically advantaged students reported more self-confidence in their abilities than their disadvantaged peers (Figure III.13.2). And in almost every education system, and consistent with findings from previous studies, girls expressed greater fear of failure than boys, and markedly so in Canada, Denmark, Finland, Iceland, the Netherlands, Sweden and the United Kingdom. However, boys reported higher self-efficacy than girls in just over one in three school systems, while girls expressed more confidence in their general abilities than boys in just over one in four school systems. Moreover, in a majority of education systems, students with an immigrant background expressed similar levels of self-efficacy and fear of failure as those without an immigrant background.

In the analysis of schools, PISA finds that just under 2% of the variation in the indices of self-efficacy and fear of failure lie between schools, on average across OECD countries, which is a lower proportion than for the other indices analysed in this report (Tables III.B1.13.7 and III.B1.13.8). Students in socio-economically advantaged, city and private schools reported greater self-efficacy and fear of failure than students in disadvantaged, rural and public schools, respectively.

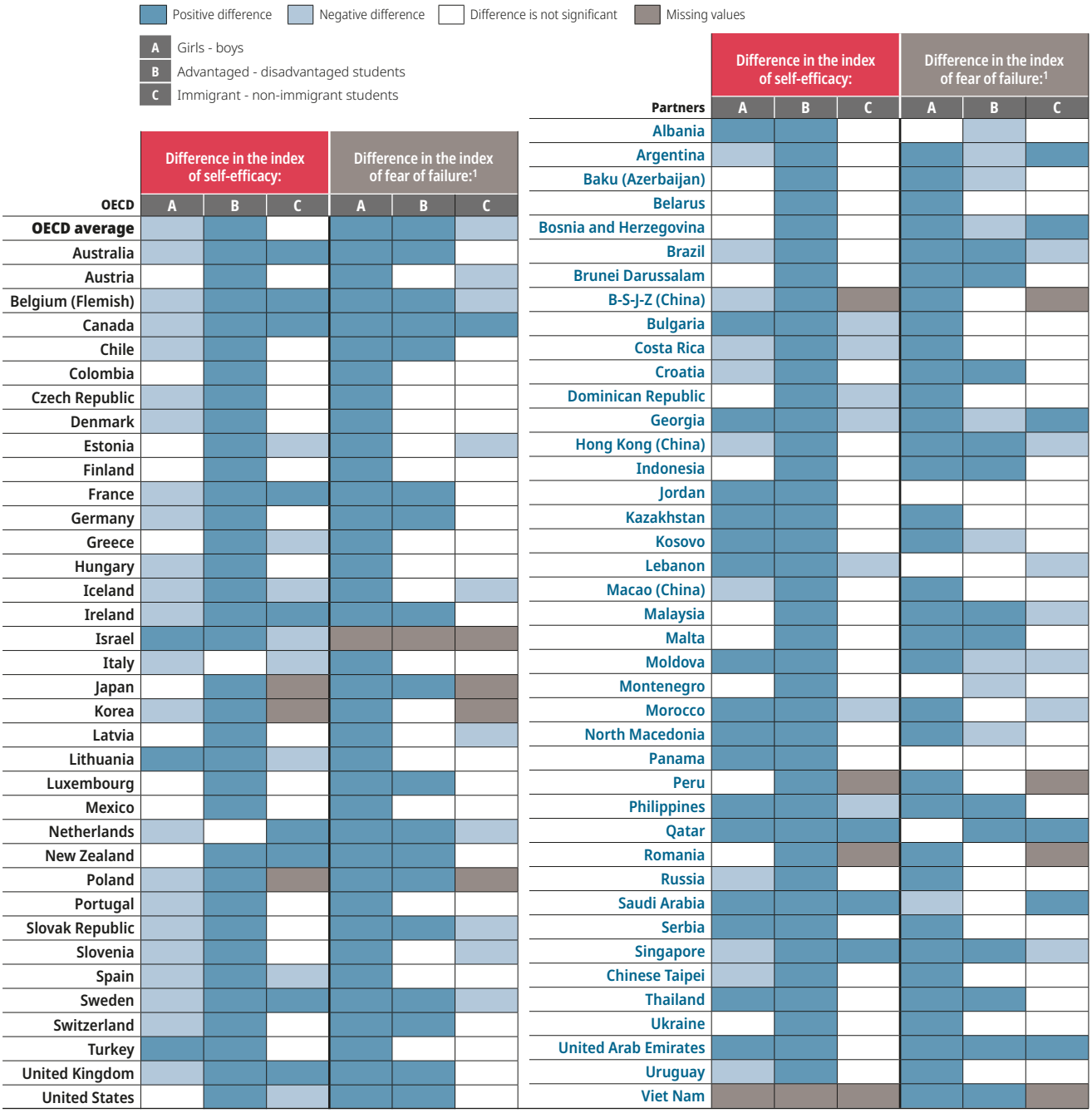
HOW STUDENTS' SELF-EFFICACY AND FEAR OF FAILURE ARE RELATED TO READING PERFORMANCE

Greater self-efficacy is associated with stronger reading performance in a majority of countries and economies, even after accounting for the socio-economic profile of students and schools (as measured by the PISA index of economic, social and cultural status) (Figure III.13.3). Specifically, across OECD countries a one-unit increase in the index of self-efficacy was associated with an increase of six score points in the reading assessment, on average. The strongest positive associations between general self-efficacy and reading performance were observed largely in countries and economies whose average reading performance

was below the OECD average, whereas the weakest associations were observed often in education systems whose reading performance was at or above the OECD average. In Beijing, Shanghai, Jiangsu and Zhejiang (China) and Japan, students who expressed more self-confidence in their ability to succeed and accomplish tasks scored lower than students who expressed less self-confidence.

Figure III.13.2 **Student self-efficacy and fear of failure, by student characteristics**

Based on students' reports



A	B	C	A	B	C	
20	74	12	69	30	7	Countries/economies with a positive difference
23	2	43	6	37	46	Countries/economies with no difference
33	0	15	1	9	16	Countries/economies with a negative difference

1. Higher values in the index indicate a greater fear of failure.

Source: OECD, PISA 2018 Database, Tables III.B1.13.5 and III.B1.13.6.

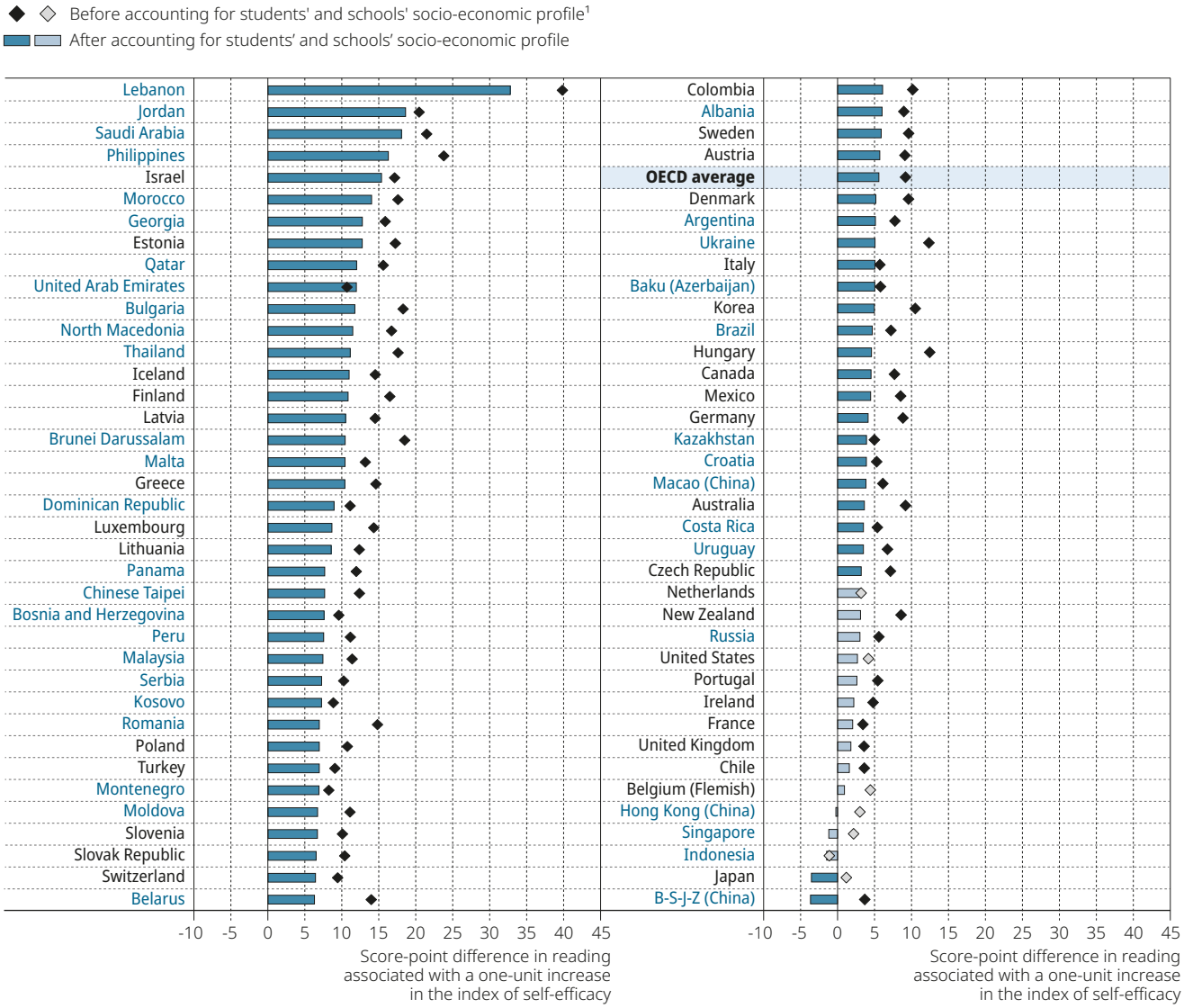
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Students' self-efficacy and fear of failure

Perhaps more surprisingly, in a majority of school systems, students who expressed a greater fear of failure scored higher in reading than students expressing less concern about failing, after accounting for the socio-economic profile of students and schools (Table III.B1.13.10). Even after accounting for gender (remember that girls tended to express greater fear of failure and tended to perform better in reading) the relationship still holds in 35 out of 75 education systems. In this case, the strongest positive associations with reading performance were observed in many countries and economies whose reading performance was at or above the OECD average, whereas the weakest and negative associations were largely observed in education systems whose reading performance was below the OECD average.

Amongst the items that are components of the indices of self-efficacy and fear of failure, those that were more positively associated with reading performance were "I usually manage one way or another" and "I feel proud that I have accomplished things", on average across OECD countries and after accounting for students' and schools' socio-economic profile. By contrast, students who agreed with the statement "When I am failing, this makes me doubt my plans for the future" scored similarly in reading to those who disagreed with the statement (a difference of one score point, after accounting for socio-economic status).

Figure III.13.3 **Student self-efficacy and reading performance**



1. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Note: Statistically significant values are shown in darker tones (see Annex A3).

Countries and economies are ranked in descending order of the score-point difference associated with the index of self-efficacy, after accounting for students' and schools' socio-economic profile.

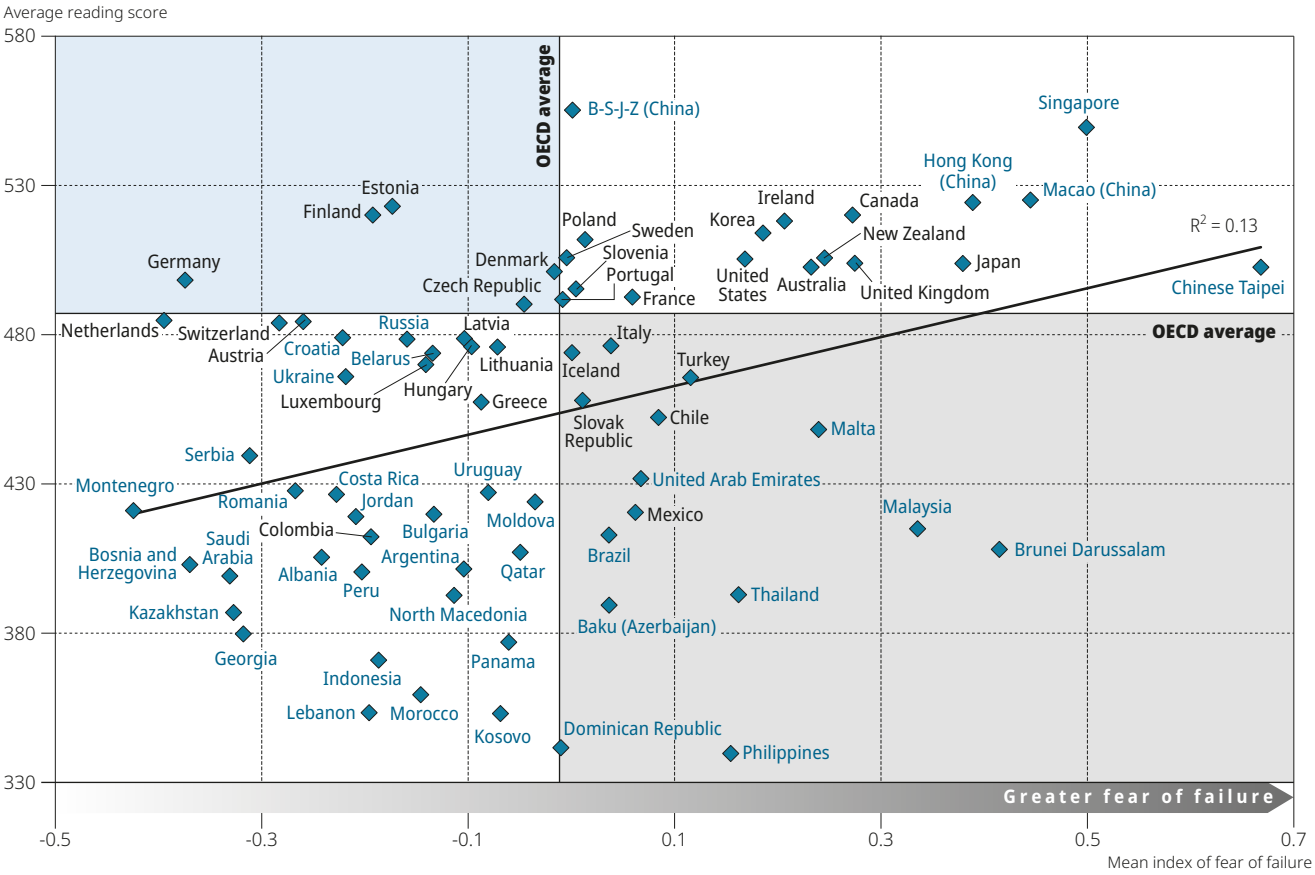
Source: OECD, PISA 2018 Database, Table III.B1.13.9.

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Moreover, students who agreed that their belief in themselves gets them through hard times scored considerably lower (a difference of 11 score points) than students who disagreed with the statement, probably because the students who agreed with this statement were implicitly admitting that they often go through "hard times".

At the system level, the greater the fear of failure expressed by students, the higher the reading scores in that education system, on average (Figure III.13.4). However, many countries and economies did not conform to this observed pattern. For instance, in Estonia, Finland and, to a lesser extent, in Germany, students expressed less fear of failure than the typical OECD student, but scored above the OECD average in reading. By contrast, in Brunei Darussalam, Malaysia, Malta, the Philippines and Thailand, students expressed more fear of failure than the typical OECD student, but their reading scores were below the OECD average. Interestingly, a large number of English-speaking and East Asian education systems were amongst those whose students were both more likely to report a fear of failure and to be high performers in reading.

Figure III.13.4 **Fear of failure and average reading performance**



Source: OECD, PISA 2018 Database, Tables III.B1.13.2 and I.B1.4.

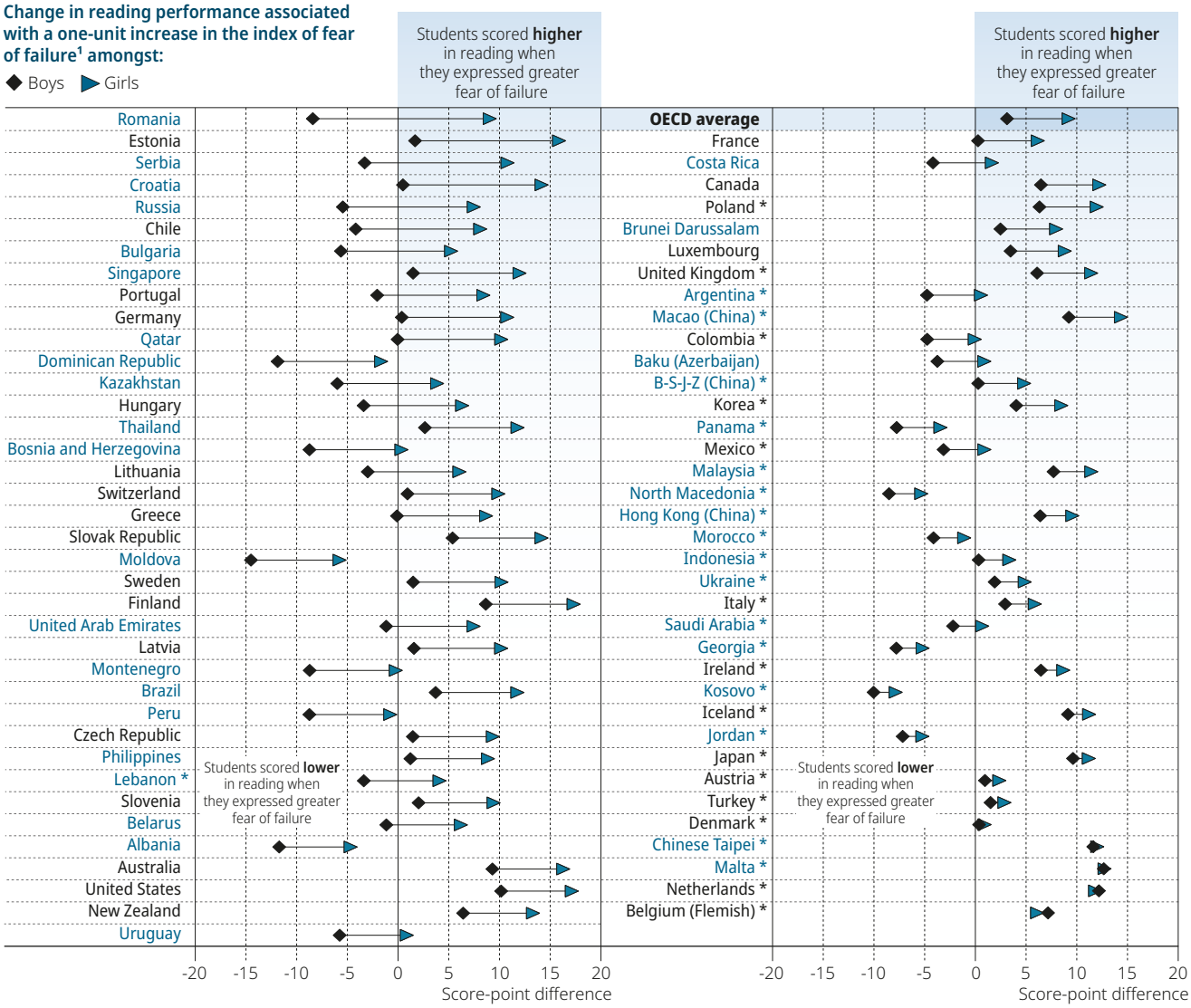
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IS FEAR OF FAILURE A BETTER PREDICTOR OF ACADEMIC PERFORMANCE AMONGST GIRLS THAN AMONGST BOYS?

In virtually every country and economy, girls expressed a greater fear of failure than boys did (Figure III.13.2) and, on average across OECD countries, the gender gap in the index of fear of failure was the largest amongst all the indices analysed in this report. This is not the only way in which fear of failure acts differently amongst boys and girls: fear of failure is a much better predictor of academic performance amongst girls than amongst boys. In the reading assessment, for instance, girls scored nine points higher for every one-unit increase in the index of fear of failure, on average across OECD countries and after accounting for students' socio-economic status and the index of self-efficacy, whereas boys scored only three points higher (Figure III.13.5). A gender gap, in favour of girls, in the association between fear of failure and reading performance was observed in a majority of school systems, particularly in Chile, Croatia, Estonia, Romania, the Russian Federation and Serbia.

Figure III.13.5 **Association between fear of failure and reading performance, by gender**

Based on students' reports



1. Higher values in the index indicate a greater fear of failure.

Notes: Countries and economies where the difference between boys and girls is not statistically significant are marked with an asterisk (see Annex A3).

The results are based on linear regression analysis, after accounting students' socio-economic profile and the index of self-efficacy. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Countries and economies are ranked in descending order of the difference between girls and boys.

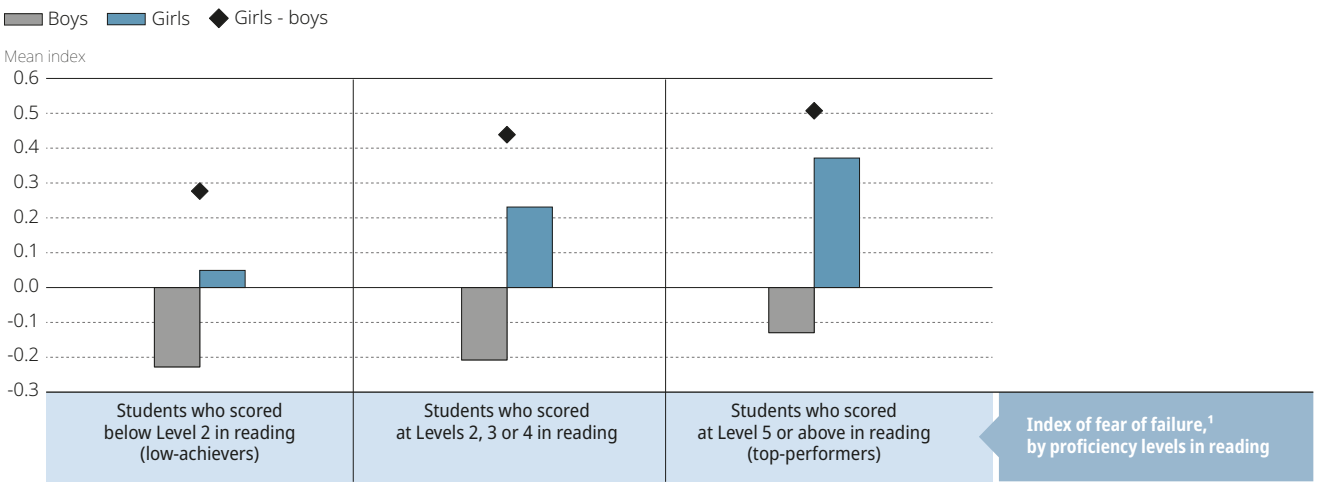
Source: OECD, PISA 2018 Database, Table III.B1.13.13.

StatLink http://dx.doi.org/10.1787/888934030686

Similar results were observed in relation to mathematics and science performance (Table III.B1.13.13). While girls who expressed a greater fear of failure scored considerably higher in mathematics and science than girls who expressed less fear of failure (differences of five and eight points, respectively, per one-unit increase in the index of fear of failure), boys who expressed a greater fear of failure scored only marginally higher in the two subjects than boys who expressed less fear of failure (a difference of one point in mathematics and two points in science). In 21 countries and economies, boys scored lower in mathematics when they expressed greater fear of failure, while in only 5 countries and economies did girls who expressed a greater fear of failure score lower in mathematics. Overall, these results suggest that girls generally expressed a greater fear of failure than boys did, and that this gender gap was considerably wider amongst top-performing students, as shown in Figure III.13.6. More precisely, amongst low achievers in reading (those scoring below Level 2), the gender gap, in favour of girls, in the index of fear of failure was about 0.3 of a unit; amongst top-performing students (those scoring at Level 5 or above) the gender gap was 0.5 of a unit.

Interestingly, the relationship between the index of self-efficacy and performance was, on average across OECD countries, almost identical amongst boys and girls, and across subjects (Table III.B1.13.13). Regardless of the subject and gender examined, test scores always rose between six and seven points for every one-unit increase in the index of self-efficacy. The results across countries were also more stable than for the index of fear of failure. The index of self-efficacy and test scores were positively associated in a majority of school systems across the three subjects and amongst both boys and girls. The only country where a negative relationship between self-efficacy and test performance was observed was Japan (only for boys' scores in reading and science).

Figure III.13.6 **Fear of failure, by proficiency levels in reading and gender**



1. Higher values in the index indicate a greater fear of failure.

Note: All differences between girls and boys are statistically significant (see Annex A3).

Source: OECD, PISA 2018 Database, Table III.B1.13.14.

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ARE STUDENTS WHO EXPRESSED A GREATER FEAR OF FAILURE LESS SATISFIED WITH THEIR LIVES?

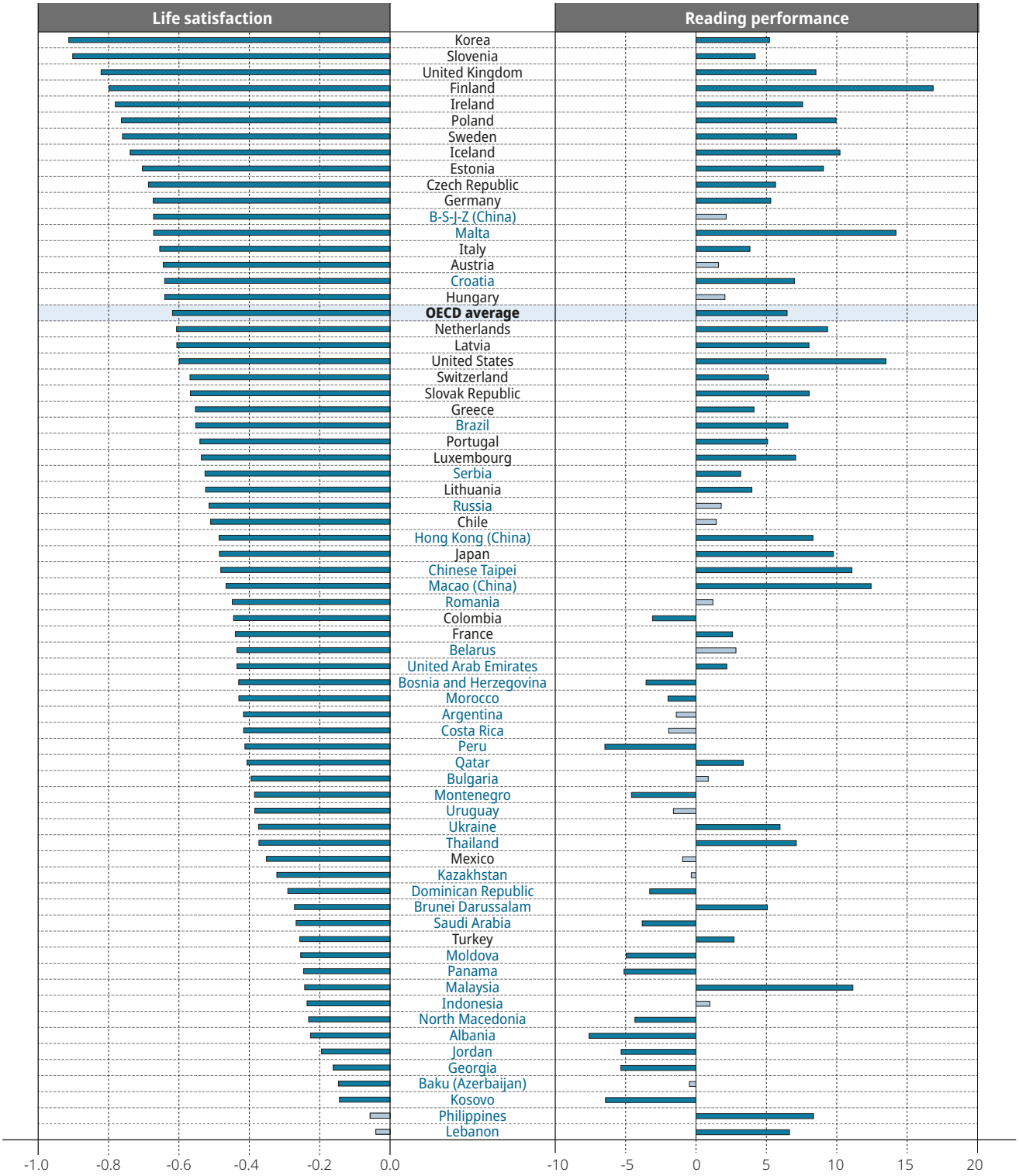
In the introduction to this chapter, it was suggested that a moderate fear of failure may prompt students to expend greater effort on academic tasks, and could therefore help improve their performance – a hypothesis that is in line with the results described in the preceding section. However, previous studies have also pointed out that a greater fear of failure may threaten an individual's social and emotional well-being (Elliot and Sheldon, 1997[18]; Gustafsson, Sagar and Stenling, 2017[20]). Do PISA 2018 results show that a greater fear of failure is negatively associated with life satisfaction?

PISA 2018 asked students to rate their satisfaction with life on a scale from 0 to 10, where 0 indicates the least satisfaction with life and 10 indicates the greatest satisfaction with life. In 69 out of 71 school systems, students reported less satisfaction with life when they expressed a greater fear of failure, after accounting for students' and schools' socio-economic profile (Table III.B1.13.15). The countries with the strongest negative associations were Estonia, Finland, Iceland, Ireland, Korea, Poland, Slovenia, Sweden and the United Kingdom, all OECD countries, while the only countries where the negative association was not significant were Lebanon and the Philippines. Figure III.13.7 shows that in 37 out of 68 education systems with available data, fear of failure is both positively associated with reading performance and negatively associated with life satisfaction.

Do PISA 2018 results show any gender disparities in the negative association between fear of failure and life satisfaction? Table III.B1.13.15 reveals that, in a clear majority of countries and economies, the negative relationship between fear of failure and life satisfaction was stronger amongst girls than amongst boys. In Korea, for instance, a one-unit increase in the index of fear or failure was associated with a decrease in the life-satisfaction scale of about 0.7 of a point amongst 15-year-old boys and of around one point amongst girls.

Figure III.13.7 **How fear of failure is related to reading performance and life satisfaction**

Change associated with a one-unit increase in the index of fear of failure[1]



1. Higher values in the index indicate a greater fear of failure.

Notes: Statistically significant values are shown in darker tones (see Annex A3).

The results are based on linear regression analysis, after accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Countries and economies are ranked in ascending order of the change in the index of life satisfaction associated with a one-unit increase in the index of fear of failure.

Source: OECD, PISA 2018 Database, Tables III.B1.13.10 and III.B1.13.15.

StatLink http://dx.doi.org/10.1787/888934030667

Note

1. While the term general self-efficacy is used widely amongst researchers and practitioners in the field of education, Bandura has argued that there is no such thing as an "all-purpose measure of perceived self-efficacy" as self-efficacy encompasses the capacity to perform well-defined tasks (Bandura, 2006[25]).

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Growth mindset

This chapter examines differences across countries and economies in students' belief in a growth mindset, and how this belief varies with student and school characteristics. The chapter also looks at the relationship between holding a growth mindset, and students' attitudes, academic achievement and expectations of further education.

Growth mindset

A growth mindset, or incremental theory of intelligence, is the belief that someone's ability and intelligence can develop over time. This is in contrast to a fixed mindset, or the belief that someone is born with a certain degree of ability and intelligence that is nearly unaltered by experience (Caniëls, Semeijn and Renders, 2018[1]; Dweck, 2006[2]). Instilling a growth mindset is often regarded as a strategy to help students expend greater effort; but effort alone is unlikely to contribute to their personal growth. Students endorsing a growth mindset also use other strategies that lead to greater learning and progress, such as learning from previous experience, responding to feedback and trying new learning strategies (Dweck, 2016[3]; Yeager and Dweck, 2012[4]). A growth mindset is not simply telling students that they can achieve any goal they have set for themselves; it involves creating an environment where students can develop this belief and providing them with the necessary resources and skills to achieve their learning goals (Dweck, 2016[5]) (see Box III.14.1 for more details on misunderstandings concerning the growth mindset).

What the data tell us

- A majority of students disagreed or strongly disagreed with the statement "Your intelligence is something about you that you can't change very much", on average across OECD countries. However, at least 60% of students in the Dominican Republic, Indonesia, Kosovo, the Republic of North Macedonia, Panama and the Philippines agreed or strongly agreed with that statement.
- On average across OECD countries, students who disagreed or strongly disagreed with the statement "Your intelligence is something about you that you can't change very much" scored 32 points higher in reading than students who agreed or strongly agreed with the statement, after accounting for the socio-economic profile of students and schools.
- On average across OECD countries, holding a growth mindset was positively associated with students' motivation to master tasks, general self-efficacy, learning goals and perceiving the value of schooling; it was negatively associated with their fear of failure.
- The relationship between endorsing a growth mindset and reading performance was generally stronger amongst socio-economically disadvantaged and immigrant students than amongst advantaged and non-immigrant students, respectively.
- In about half of education systems, students who exhibited a growth mindset were more likely than students who held a fixed mindset to expect to complete a university degree, after accounting for socio-economic status, gender, immigrant background and reading performance.

There are many ways educators can try to instil a growth mindset in students. Good teachers not only help students succeed, but they also help them believe that their effort and learning strategies are the sources of their success. When teachers respond to struggling students by giving them easier tasks and praising them excessively for completing these tasks, students may interpret this as a sign of their lack of inherent ability. Instead, teachers should set challenging learning goals for every student and do whatever is needed to ensure that all students have the opportunity to learn the material in ways that are appropriate for them. Teachers should believe that all students can learn and succeed, and design the learning environment accordingly. The ultimate goal is that students are persuaded that, with the appropriate learning strategies and investment of effort, they can improve and reach their full potential. Unfortunately, many teachers give more praise, help and coaching, and lengthier answers to questions to those students whom they perceive to have greater ability (Good and Lavigne, 2017[6]).

A growth mindset can improve the behaviours and learning outcomes of all students, but especially of those struggling academically and those from disadvantaged backgrounds (Claro, Paunesku and Dweck, 2016[7]; Paunesku et al., 2015[8]). According to several studies, instilling a growth mindset in students can result in greater motivation to learn, greater investment of effort and better academic performance (Blackwell, Trzesniewski and Dweck, 2007[9]; McCutchen et al., 2016[10]; Sriram, 2014[11]). This is because, researchers argue, students with a fixed mindset forgo challenging learning opportunities for fear that a possible failure would signal a lack of talent. By contrast, students with a growth mindset will use any strategy at their disposal, such as expending greater effort, trying new learning strategies and seeking feedback from others, to enhance their learning (Dweck, 2010[12]). Indeed, a fixed mindset has been associated with numerous negative outcomes, including performance-avoidance goals (the desire to avoid performing more poorly than others do) and an excessive type of perfectionism (Chan, 2012[13]; Snipes and Tran, 2017[14]).

This chapter examines the extent to which students believe in a growth mindset. PISA 2018 asked students whether they agreed ("strongly disagree", "disagree", "agree", "strongly agree") with the following statement: "Your intelligence is something about you that you can't change very much". Students who disagreed with the statement are considered to have a stronger growth mindset than students who agreed with the statement.

Box III.14.1. **Misunderstandings about the growth mindset**

According to Dweck (Dweck, 2016[5]; Dweck, 2016[3]), the idea of a growth mindset is sometimes misunderstood, even amongst people who are familiar with the concept. One of the misunderstandings is that some people mistake endorsing a growth mindset with being open-minded and flexible.

A second misconception is that instilling a growth mindset is only about praising and rewarding effort. That is only one part of the equation, since most unproductive efforts lead nowhere. Instilling a growth mindset is about rewarding progress, and all the processes that lead to greater learning, such as trying different learning strategies, searching for feedback, focus and, of course, hard work. Praising effort too much can have the undesired effect of making students feel happy when they are actually not making any progress. That is why endorsing a growth mindset means paying greater attention to the processes of learning, and connecting these processes with improvements in learning outcomes.

A third misunderstanding, and probably the most relevant for teachers, is that instilling a growth mindset is just about telling students that they can reach any goal. Parents and teachers should certainly believe in the ability of children to reach their potential, but they need to create an appropriate learning environment for this to happen. An appropriate learning environment is one where students are encouraged to participate and are not constantly being judged, and where educators believe in students' potential to develop their skills and provide them with the necessary support and feedback. When the role played by educators is not recognised as essential for a growth mindset to take root and flourish, the responsibility for failing lies entirely with the student, even when they do not have the necessary resources to reach their full potential.

HOW THE BELIEF IN A GROWTH MINDSET VARIES ACROSS COUNTRIES, SCHOOLS AND STUDENTS

On average across OECD countries, a majority of students disagreed or strongly disagreed that intelligence is something that they cannot change very much (Figure III.14.1). However, in spite of the considerable efforts educationalists have made in recent years to promote a growth mindset (Boaler, 2015[15]; Dweck, 2006[2]; Dweck, 2016[3]), 37% of students across OECD countries reported that they believe that intelligence cannot change very much over time (Table III.B1.14.1). Moreover, a majority of students in 26 countries and economies, including three OECD countries (Greece, Mexico and Poland) agreed with the fixed mindset statement "Your intelligence is something about you that you can't change very much", and in the Dominican Republic, Indonesia, Kosovo, the Republic of North Macedonia (hereafter "North Macedonia"), Panama and the Philippines, at least 60% of students endorsed a fixed mindset. In some of these education systems, the students with a fixed mindset were concentrated in certain schools (Table III.B1.14.2). In the Dominican Republic, Indonesia, Kosovo, Lebanon, Panama and Peru, for instance, more than 5% of students were enrolled in a school where at least 90% of their schoolmates held a fixed mindset ("agreed" or "strongly agreed" with the statement).

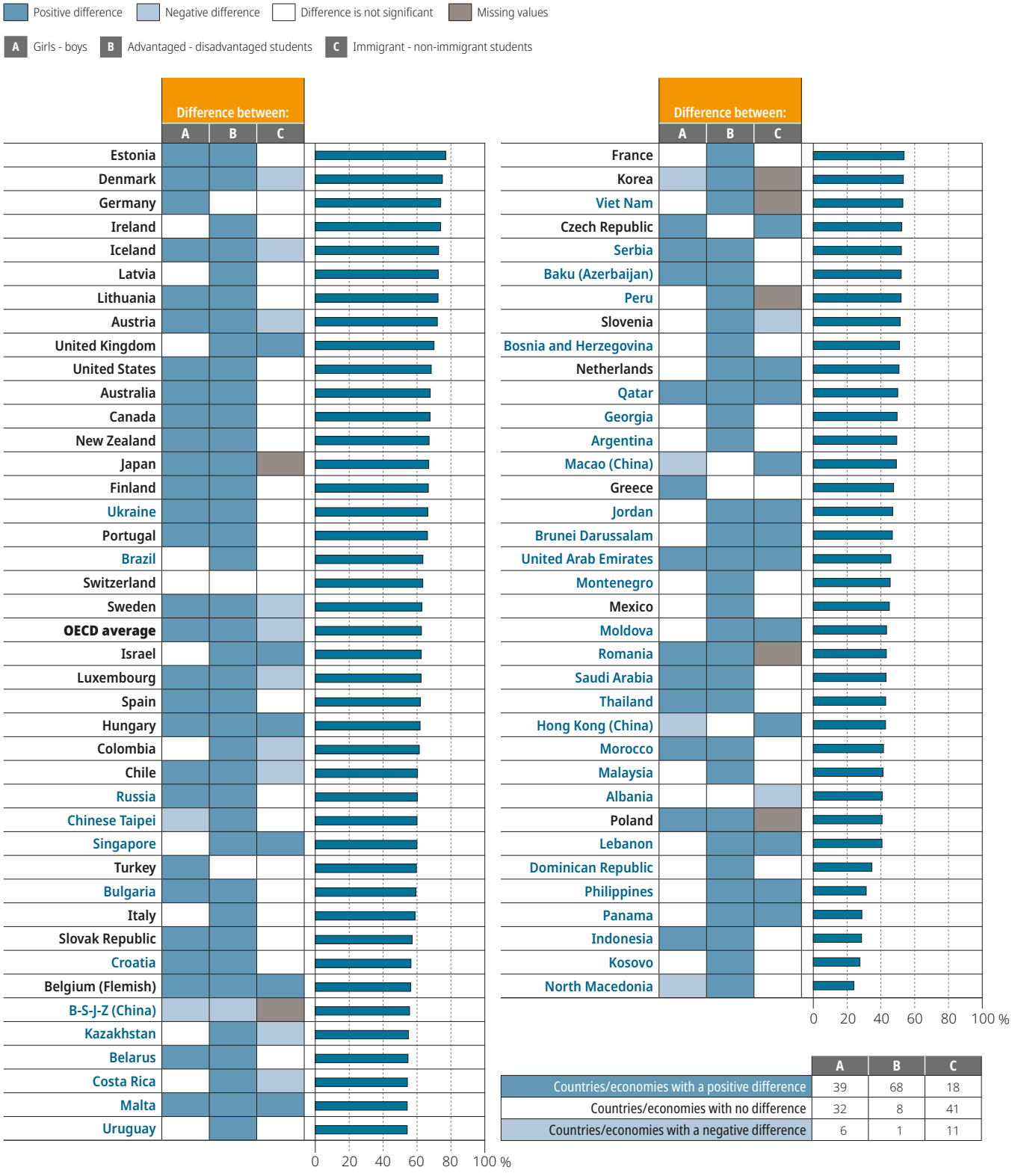
By contrast, in Austria, Denmark, Estonia, Germany, Iceland, Ireland, Latvia, Lithuania and the United Kingdom, at least 70% of students believed in a growth mindset. Of these countries, in Estonia, Latvia and Lithuania about 10% of 15-year-old students attended a school where at least 90% of their schoolmates disagreed or strongly disagreed that their intelligence cannot change much.[1]

There were also wide differences across groups of 15-year-olds (Figure III.14.1). Boys were more likely than girls to agree with the statement about fixed intelligence, on average across OECD countries and in 39 school systems. The only school systems where boys were more likely than girls to disagree with the statement were Beijing, Shanghai, Jiangsu and Zhejiang (China) (hereafter "B-S-J-Z [China]"), Hong Kong (China), Korea, Macao (China), North Macedonia and Chinese Taipei. In almost every education system, socio-economically disadvantaged students were more likely than advantaged students to believe that their intelligence cannot change very much over time. Across OECD countries, students with an immigrant background were somewhat less likely to believe in a growth mindset than students without an immigrant background. However, in 18 countries, and especially in the Czech Republic, the Republic of Moldova (hereafter "Moldova"), Panama, the Philippines, Qatar and the United Arab Emirates, the gap was in favour of immigrant students (Table III.B1.14.3).

When considering differences across schools, one of the most interesting findings is that students in city schools were significantly more likely to disagree with the statement about fixed intelligence than were students in rural schools (Table III.B1.14.4). The rural-urban gap was particularly wide in Brazil, Costa Rica, France, Hungary, Moldova and Romania. Differences between socio-economically advantaged and disadvantaged schools were also large, and were consistent with the differences observed at the student level. Differences between public and private schools, and between schools with low and high concentrations of immigrant students were generally moderate in magnitude, particularly across OECD countries. However, public school students in Argentina, Brazil, Colombia, Panama and Peru were far less likely than their peers in private schools to hold a growth mindset.

Figure III.14.1 **Growth mindset, by student characteristics**

Percentage of students who disagreed or strongly disagreed with the statement: "Your intelligence is something about you that you can't change very much"



	A	B	C
Countries/economies with a positive difference	39	68	18
Countries/economies with no difference	32	8	41
Countries/economies with a negative difference	6	1	11

Countries and economies are ranked in descending order of the percentage of students who disagreed or strongly disagreed with the statement.

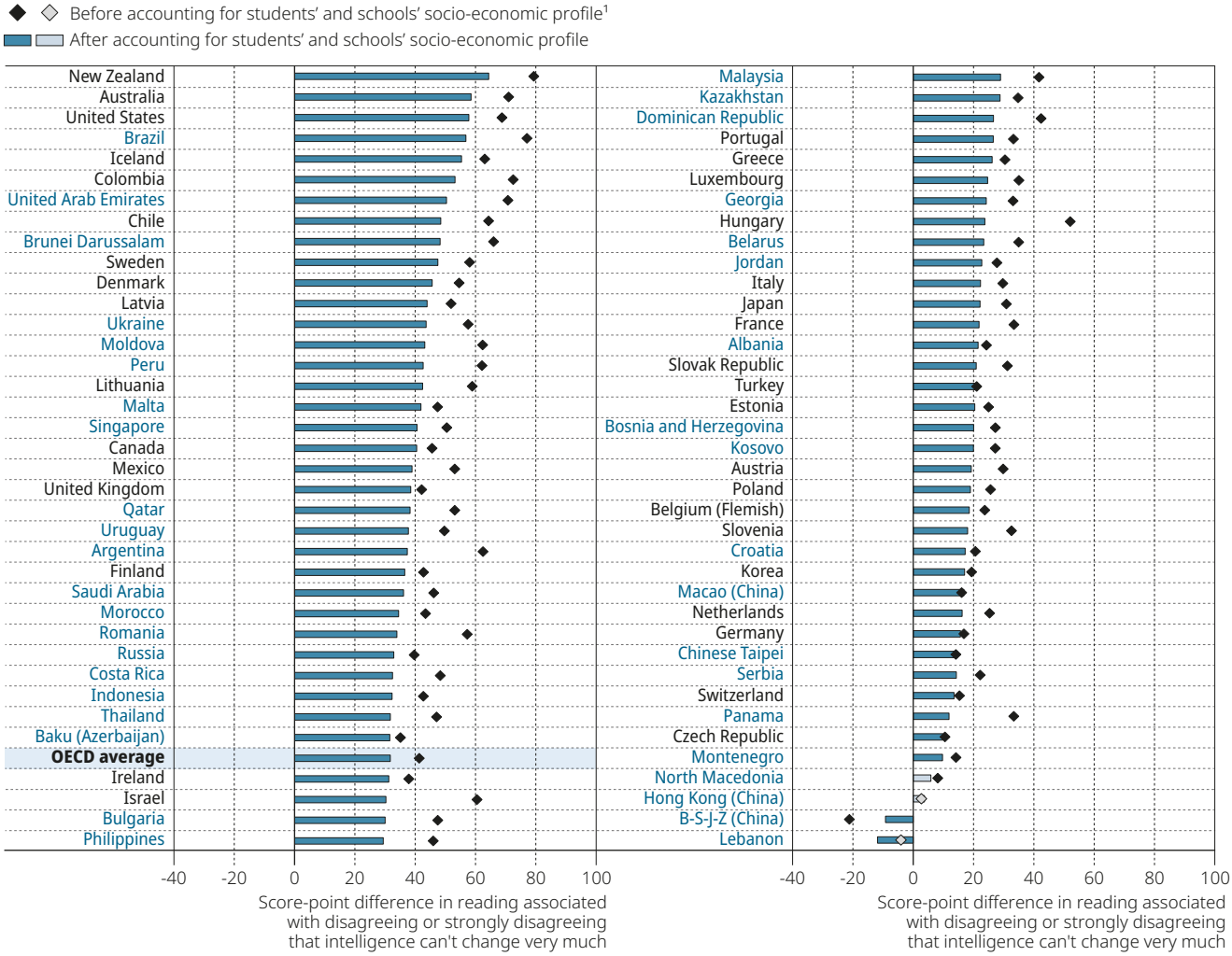
Source: OECD, PISA 2018 Database, Tables III.B1.14.1 and III.B1.14.3.

StatLink http://dx.doi.org/10.1787/888934030724

HOW A GROWTH MINDSET IS RELATED TO READING PERFORMANCE

PISA findings support the idea that instilling a growth mindset in students could result in better academic performance (Blackwell, Trzesniewski and Dweck, 2007[9]; McCutchen et al., 2016[10]). On average across OECD countries, students who disagreed or strongly disagreed with the statement "Your intelligence is something about you that you can't change very much" scored 41 points higher in reading than students who agreed or strongly agreed with the statement (Figure III.14.2). The former group of students scored 32 points higher than the latter group after accounting for the socio-economic profile of students and schools (as measured by the PISA index of economic, social and cultural status). In Australia, Brazil, Colombia, Iceland, New Zealand, the United Arab Emirates and the United States, students who disagreed that their intelligence is fixed scored at least 50 point higher than students who agreed with the statement. The only four school systems where holding a growth mindset was not positively associated with reading performance were B-S-J-Z (China), Hong Kong (China), Lebanon and North Macedonia. Interestingly, in East Asian countries, holding a growth mindset is not as strongly associated with academic performance as in most OECD countries. While, on average across OECD countries, students with a growth mindset scored 32 points higher in reading than students with a fixed mindset, the difference in scores between the two groups of students was 22 points in Japan, 17 points in Korea and Macao (China) and 15 points in Chinese Taipei. In addition, in Hong Kong (China), endorsing a growth mindset and reading performance were unrelated, and in B-S-J-Z (China), they were negatively associated.

Figure III.14.2 **Growth mindset and reading performance**



1. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Note: Statistically significant values are shown in darker tones (see Annex A3).

Countries and economies are ranked in descending order of the score-point difference associated with disagreeing or strongly disagreeing that intelligence can't change very much, after accounting for students' and schools' socio-economic profile.

Source: OECD, PISA 2018 Database, Table III.B1.14.5.

StatLink http://dx.doi.org/10.1787/888934030743

The share of students who disagreed or strongly disagreed with the statement about a fixed mindset was also positively associated with reading performance at the system level (Figure III.14.3). All the countries and economies where more than 70% of students disagreed with the statement showed an average reading performance of more than 470 score points. However, in several countries with a reading performance above the OECD average, namely B-S-J-Z (China), Hong Kong (China), Korea, Macao (China), Poland, Singapore and Chinese Taipei, the share of students with a growth mindset was comparatively small.

These findings would seem to support the theories of the numerous researchers cited above who maintain that instilling a growth mindset in students can result in stronger academic performance. However, PISA cannot prove cause and effect, and other interpretations are possible. For instance, holding a growth mindset could be the result of strong academic performance, rather than the other way around. For instance, high achievers are more likely to know – precisely because they are strong performers – that human intelligence is malleable. They are also more likely to be aware of how their intelligence has grown over time, and therefore they may be answering the PISA question based on their own experience.

Figure III.14.3 **Percentage of students with a growth mindset and average reading performance**



Source: OECD, PISA 2018 Database, Tables III.B1.14.2 and I.B1.4.

StatLink http://dx.doi.org/10.1787/888934030762

HOW DOES THE RELATIONSHIPS BETWEEN GROWTH MINDSET AND READING PERFORMANCE VARY ACROSS STUDENT CHARACTERISTICS?

Researchers have widely documented the benefits of holding a growth mindset for all students, but especially for those struggling academically and those from disadvantaged backgrounds. Claro, Paunesku and Dweck (2016[7]), for instance, show that endorsing a growth mindset is a stronger predictor of academic success amongst socio-economically disadvantaged Chilean students than amongst advantaged ones. In a study of 13 schools in the United States, Paunesku et al. (2015[8]) also reveal that a brief growth-mindset intervention – consisting of a 45-minutes online session where students read an article describing the brain's ability to grow – was most beneficial to the sample of students who were at risk of dropping out of high school. Do PISA 2018 data show any differences in the association between endorsing a growth mindset and reading performance across different groups of students?

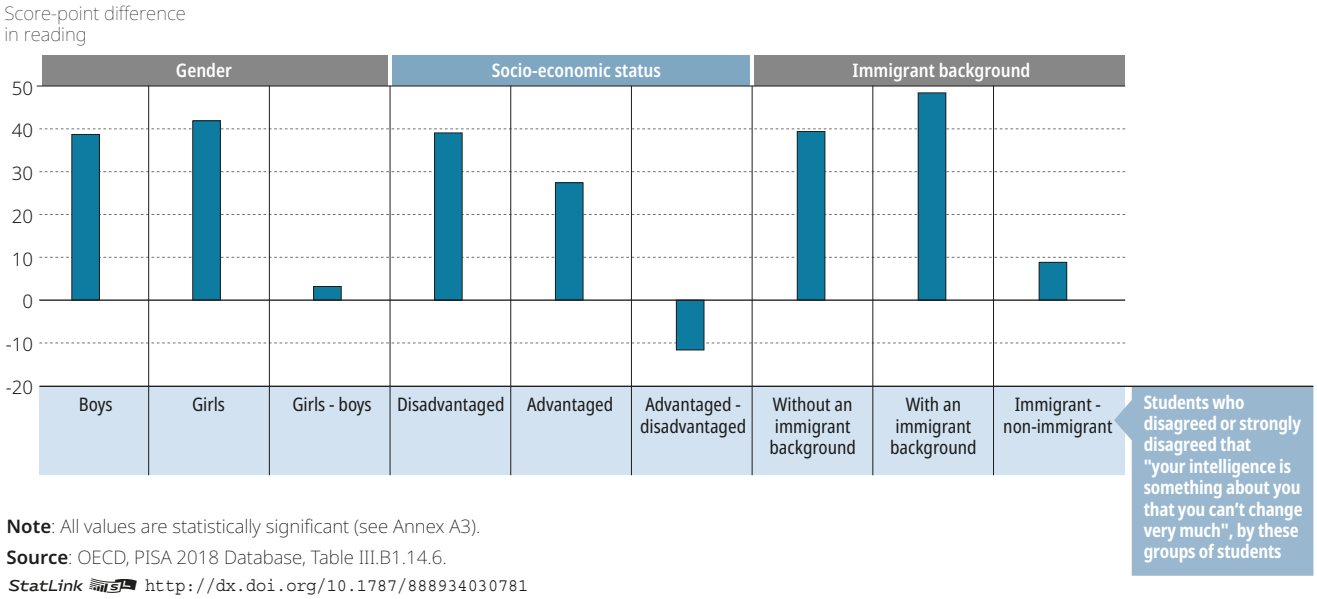
On average across OECD countries in 2018, the relationship between holding a growth mindset and reading performance was positive amongst all groups of students, but there were significant differences across groups of students (Figure III.14.4). For instance, the positive relationship was somewhat stronger amongst girls (a 42 score-point difference) than amongst boys (a 39 score-point difference). This result is consistent with a previous study that indicates that girls improved their mathematics performance more than boys did when they endorsed a growth mindset (Degol et al., 2018[16]). The gender gap, in favour of girls, was particularly large in the Flemish Community of Belgium, Bulgaria, Denmark, Jordan, North Macedonia and Saudi Arabia (more than 20 score points), whereas the relationship was stronger amongst boys only in Colombia, Hong Kong (China) and Turkey (Table III.B1.14.6).

On average across OECD countries, the relationship between endorsing a growth mindset and reading performance was considerably stronger amongst socio-economically disadvantaged students (a 39 score-point difference) than amongst advantaged students (a 27 score-point difference). This result is consistent with findings reported in previous research (Claro, Paunesku and Dweck, 2016[7]; Paunesku et al., 2015[8]). The difference, in favour of disadvantaged students, was particularly large in Germany, Ireland, Italy, Singapore and Chinese Taipei, (more than 30 score points), whereas the gap in favour of advantaged students was the largest in Brunei Darussalam, the Dominican Republic, Panama, the Philippines, Qatar and the United Arab Emirates (more than 40 score points).

Across OECD countries, students with an immigrant background showed a stronger association (a 48 score-point difference) than students without an immigrant background (a 39 score-point difference) between endorsing a growth mindset and reading performance, on average. The countries and economies where the relationship between holding a growth mindset and reading performance was the strongest amongst immigrant students, compared to non-immigrant students, were Finland, Germany, Panama and Qatar (more than 20 score points). The only education system where the relationship was stronger amongst non-immigrant students was Israel.

Figure III.14.4 **Association between growth mindset and reading performance, by student characteristics**

OECD average



Note: All values are statistically significant (see Annex A3).

Source: OECD, PISA 2018 Database, Table III.B1.14.6.

StatLink http://dx.doi.org/10.1787/888934030781

DO STUDENTS WITH A GROWTH MINDSET SHOW POSITIVE ATTITUDES?

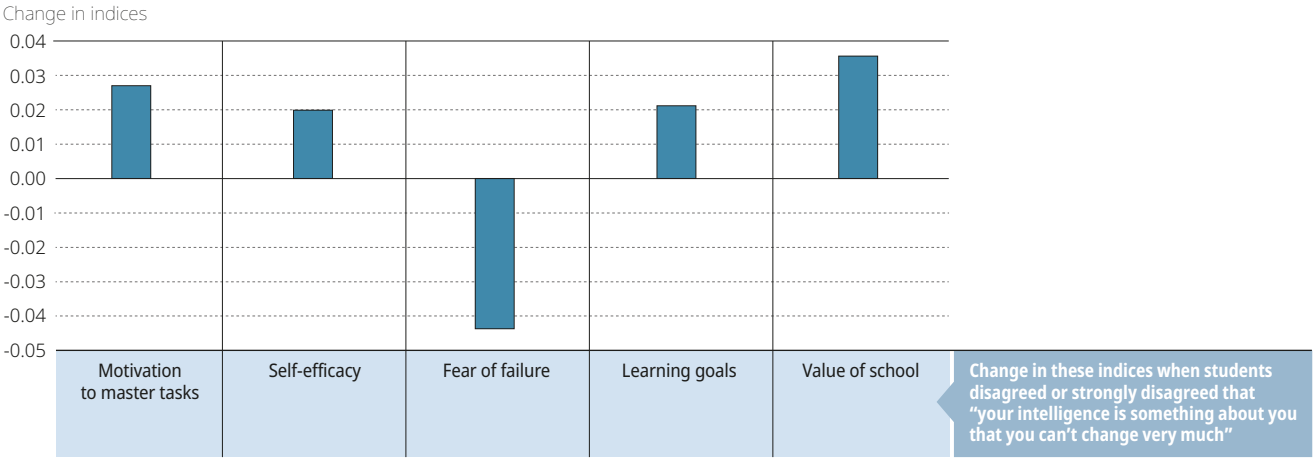
One of the most frequently cited arguments in favour of instilling a growth mindset in students is the positive effect it can have on their self-efficacy, motivation to learn and effort they invest in school activities (Blackwell, Trzesniewski and Dweck, 2007[9]; McCutchen et al., 2016[10]; Sriram, 2014[11]). Self-efficacy is of particular importance, because of all the judgements people make about themselves, the most influential is how capable they think they are of completing a task successfully (Bandura, 2012[17]). In this regard, previous research shows that when people believe that they are responsible for the results of their behaviour, and that this behaviour may lead to the results they are trying to achieve, they invest greater effort (Weiner, 2004[18]). PISA 2018 asked students many questions about their general attitudes, including perseverance, self-efficacy, fear of failure, and their attitudes towards learning and school, such as their learning goals and the value they give to school.

Growth mindset

PISA asked students to report the extent to which they agree with four statements about their motivation to master tasks in general, including "Once I start a task, I persist until it is finished" and "I find satisfaction in working as hard as I can". Three of these statements were combined to create an index of motivation to master tasks (see Chapter 5 for more details). On average across OECD countries and in about half of the PISA-participating education systems, holding a growth mindset was positively associated with student motivation to master tasks, after accounting for the socio-economic profile of students and schools (Figure III.14.5 and Table III.B1.14.7). In only eight countries and economies – Baku (Azerbaijan), Belarus, the Dominican Republic, Kazakhstan, Lebanon, North Macedonia, Panama and the Philippines – did students who agreed with the fixed intelligence statement report greater motivation to master tasks than students who disagreed with the statement.

Figure III.14.5 **Growth mindset and student attitudes**

OECD average



Notes: All values are statistically significant (see Annex A3).

All linear regression models account for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Source: OECD, PISA 2018 Database, Table III.B1.14.7.

StatLink http://dx.doi.org/10.1787/888934030800

PISA also asked students the extent to which they agreed with five statements about their general self-efficacy (e.g. "I usually manage one way or another") and three statements about their fear of failure (e.g. "When I am failing, I am afraid that I might not have enough talent") (see Chapter 13 for more details). In 31 school systems, and markedly so in B-S-J-Z (China), Hong Kong (China), Ireland, Japan, Korea, Macao (China) and Chinese Taipei, students holding a growth mindset reported greater self-efficacy than students holding a fixed mindset. But in 20 countries and economies, all of whose average reading scores were below the OECD average in 2018, students with a fixed mindset were more likely to report a stronger belief in their general capabilities. The findings are clearer when considering students' fear of failure: in every school system except the Flemish Community of Belgium and Germany, students holding a growth mindset reported less fear of failing than students with a fixed mindset.

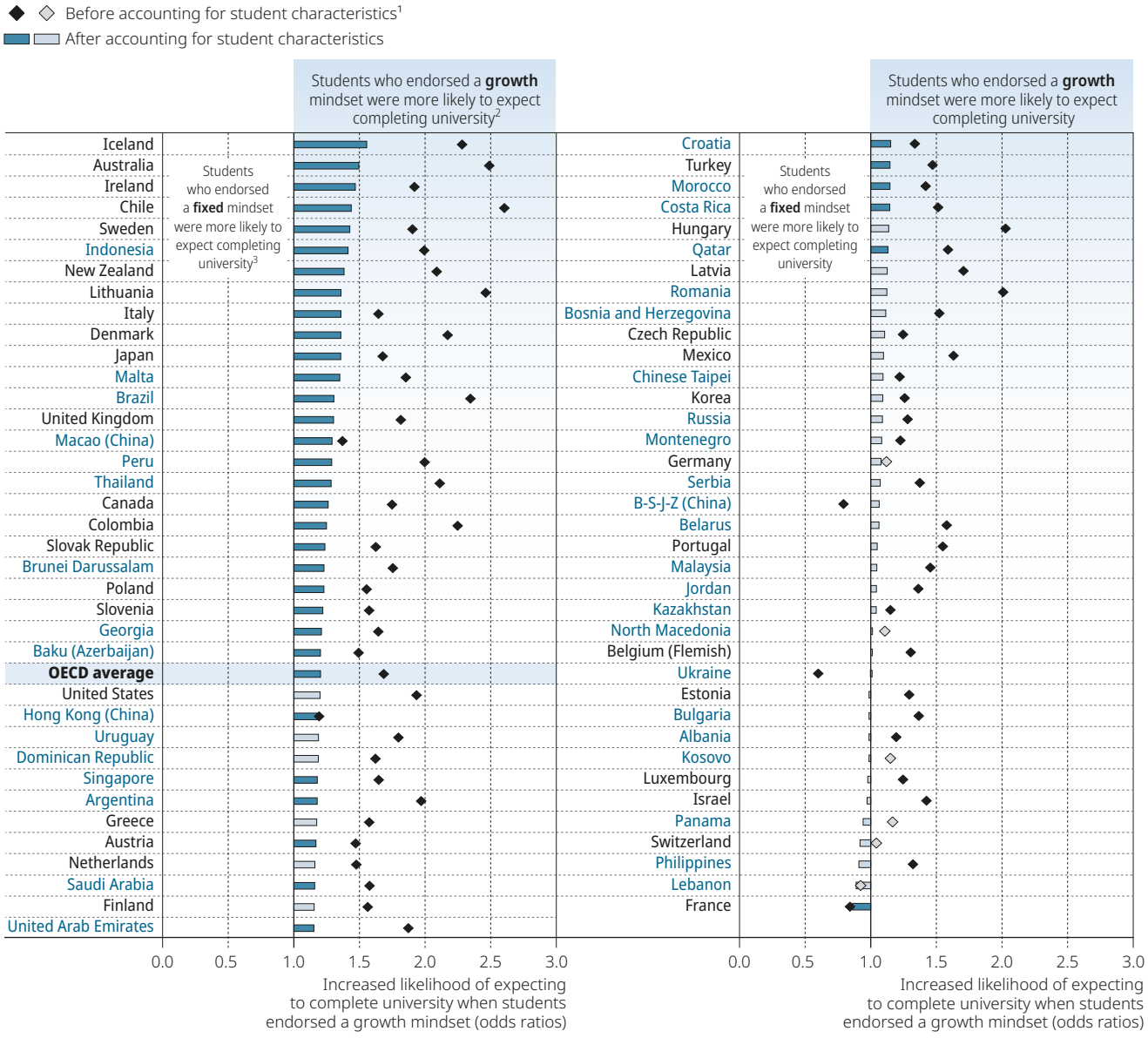
Students who sat the PISA test were also asked about their attitudes towards learning and schooling. Specifically, PISA asked students how much they identified ("not at all true of me", "slightly true of me", "moderately true of me", "very true of me", "extremely true of me") with the following statements about their (ambitious) learning goals: "My goal is to learn as much as possible"; "My goal is to completely master the material presented in my classes"; and "My goal is to understand the content of my classes as thoroughly as possible". These statements were combined to create the index of learning goals whose average is 0 and standard deviation is 1 across OECD countries. PISA also asked students the extent to which they agreed with three statements about the value of schooling, including "Trying hard at school will help me get a good job" (see Chapter 4 for more details). Students who believe that their intelligence cannot change are expected to set less-ambitious goals for themselves, and to give less importance to schooling. After all, if students do not believe that their intelligence can grow, why should they care about the institution (i.e. the school) that can be viewed as best representing the idea of personal growth?

On average across OECD countries, students with a growth mindset reported more ambitious learning goals and attributed greater value to school than students with a fixed mindset. However, in 18 countries and economies – all of them with an average reading performance below the OECD average – students with a growth mindset reported less-ambitious learning goals than those with a fixed mindset. In Belarus and Moldova, students with a growth mindset valued school less than students with a fixed mindset did.

ARE STUDENTS WHO ENDORSE A GROWTH MINDSET MORE LIKELY TO EXPECT TO COMPLETE TERTIARY EDUCATION THAN STUDENTS HOLDING A FIXED MINDSET?

One of the best, if not the best, ways in which students who endorse a growth mindset can actually develop their intelligence is through education. By contrast, students who believe that their intelligence is fixed and cannot develop over time should be less interested in pursuing further studies. The results presented in Figure III.14.5 show that students holding a growth mindset establish more ambitious academic goals for themselves and ascribe greater importance to school than did students who endorsed a fixed mindset. Are students with a growth mindset also more likely to expect to complete tertiary education?

Figure III.14.6 **Growth mindset and educational expectations**



1. Student characteristics include socio-economic status, gender, immigrant background and reading performance. The socio-economic status is measured by the PISA index of economic, social and cultural status (ESCS).

2. Students who endorsed a growth mindset are those who disagreed or strongly disagreed that "your intelligence is something about you that you can't change very much".

3. Students who endorsed a fixed mindset are those who agreed or strongly agreed that "your intelligence is something about you that you can't change very much".

Note: Statistically significant values are shown in darker tones (see Annex A3).

Countries and economies are ranked in descending order of the change in the likelihood of completing university associated with endorsing a growth mindset.

Source: OECD, PISA 2018 Database, Table III.B1.14.8.

StatLink http://dx.doi.org/10.1787/888934030819

PISA asked students if they expect to complete tertiary education, including obtaining a bachelor's, master's or doctoral degree (ISCED 5A and 6). In every education system except B-S-J-Z (China), France, Germany, Kosovo, Lebanon, North Macedonia, Panama, Switzerland and Ukraine, students who endorsed a growth mindset were more likely to expect to complete higher education than did students holding a fixed mindset (Figure III.14.6). Even after accounting for students' socio-economic status, gender, immigrant background and reading performance, there were still 36 countries and economies where students who disagreed that their intelligence cannot change very much were more likely to expect to complete higher education than students who agreed with the statement. The only country where students were more likely to expect to complete tertiary education when they held a fixed mindset, after accounting for students' socio-demographic characteristics and reading performance, was France. The school systems with the strongest positive associations between endorsing a growth mindset and expectations of completing higher education were Australia, Chile, Iceland, Indonesia, Ireland and Sweden.

Note

1. A large part of these country differences can be explained by the levels of individualism and respect for authority across PISA-participating countries and economies. Using Hofstede's six cultural dimensions (see www.hofstede-insights.com/product/compare-countries/, last accessed on 28/08/2019), the percentage of students who endorse a growth mindset (strongly disagreed or disagreed with the fixed mindset statement "Your intelligence is something about you that you can't change very much") is positively associated with the dimension of individualism, and negatively associated with the index of power distance (respect for authority). For the 56 countries and economies with available data, the Pearson correlation coefficients between the percentage of students who strongly disagreed or disagreed that "Your intelligence is something about you that you can't change very much" and Hofstede's dimensions of individualism and power distance (respect for authority) are 0.56 and -0.69, respectively. The correlations with Hofstede's dimensions of masculinity (-0.03), uncertainty avoidance (-0.17), long-term orientation (0.15) and indulgence (0.21) are weak or moderate.

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PISA

ANNEX A

PISA 2018 technical background

All figures and tables in Annex A are available on line

Annex A1: Construction of indices
https://doi.org/10.1787/888934030838

Annex A2: The PISA target population, the PISA samples and the definition of schools
https://doi.org/10.1787/888934028862

Annex A3: Technical notes on analyses in this volume

Annex A4: Quality assurance

Annex A5: Interpreting the results by student and school characteristics
https://doi.org/10.1787/888934030857

ANNEX A1
Construction of indices

EXPLANATION OF THE INDICES

This section explains the indices derived from the PISA 2018 student, school, parent and ICT questionnaires used in this volume.

Several PISA measures reflect indices that summarise responses from students, their parents, teachers or school representatives (typically principals) to a series of related questions. The questions were selected from a larger pool on the basis of theoretical considerations and previous research. The *PISA 2018 Assessment and Analytical Framework* (OECD, 2019[1]) provides an in-depth description of this conceptual framework. Item response theory (IRT) modelling was used to confirm the theoretically expected behaviour of the indices and to validate their comparability across countries. For a detailed description of the methods, see the section "Cross-country comparability of scaled indices" in this chapter, and the *PISA 2018 Technical Report* (OECD, forthcoming[2]).

There are three types of indices: simple indices, new scale indices and trend scale indices.

Simple indices are the variables that are constructed through the arithmetic transformation or recoding of one or more items in exactly the same way across assessments. Here, item responses are used to calculate meaningful variables, such as the recoding of the four-digit ISCO-08 codes into "Highest parents' socio-economic index (HISEI)" or teacher-student ratio based on information from the school questionnaire.

Scale indices are the variables constructed through the scaling of multiple items. Unless otherwise indicated, the index was scaled using a two-parameter item-response model (a generalised partial credit model was used in the case of items with more than two categories) and values of the index correspond to Warm likelihood estimates (WLE) (Warm, 1989[3]). For details on how each scale index was constructed, see the *PISA 2018 Technical Report* (OECD, forthcoming[2]). In general, the scaling was done in two stages:

- The item parameters were estimated based on all students from equally-weighted countries and economies; only cases with a minimum number of three valid responses to items that are part of the index were included. In the case of some trend indices, a common calibration linking procedure was used: countries/economies that participated in both PISA 2009 and PISA 2018 contributed both samples to the calibration of item parameters; each cycle and, within each cycle, each country/economy contributed equally to the estimation.[1]
- For new scale indices, the Warm likelihood estimates were then standardised so that the mean of the index value for the OECD student population was zero and the standard deviation was one (countries were given equal weight in the standardisation process).

Sequential codes were assigned to the different response categories of the questions in the sequence in which the latter appeared in the student, school or parent questionnaires. Where indicated in this section, these codes were inverted for the purpose of constructing indices or scales. Negative values for an index do not necessarily imply that students responded negatively to the underlying questions. A negative value merely indicates that a respondent answered less positively than other respondents did on average across OECD countries. Likewise, a positive value on an index indicates that a respondent answered more favourably, or more positively, on average, than other respondents in OECD countries did.

Terms enclosed in brackets < > in the following descriptions were replaced in the national versions of the student, school and parent questionnaires by the appropriate national equivalent. For example, the term <qualification at ISCED level 5A> was translated in the United States into "Bachelor's degree, post-graduate certificate program, Master's degree program or first professional degree program". Similarly, the term <classes in the language of assessment> in Luxembourg was translated into "German classes" or "French classes", depending on whether students received the German or French version of the assessment instruments.

In addition to simple and scaled indices described in this annex, there are a number of variables from the questionnaires that were used in this volume and correspond to single items. These non-recoded variables have prefix of "ST", "SC", "PA", "IC" and "WB" for the questionnaire items in the student, school, parent, ICT and Well-being questionnaires, respectively. All the context questionnaires, and the PISA international database, including all variables, are available through www.oecd.org/pisa.

STUDENT-LEVEL SIMPLE INDICES

Immigrant background

Information on the country of birth of the students and their parents was collected. Included in the database are three country-specific variables relating to the country of birth of the student, mother and father (ST019). The variables are binary and indicate whether the student, mother and father were born in the country of assessment or elsewhere. The index on immigrant

background (IMMIG) is calculated from these variables, and has the following categories: (1) native students (those students who had at least one parent born in the country); (2) second-generation students (those born in the country of assessment but whose parents were born in another country); and (3) first-generation students (those students born outside the country of assessment and whose parents were also born in another country). Students with missing responses for either the student or for both parents were given missing values for this variable.

Grade repetition

The grade repetition variable (REPEAT) was computed by recoding variables ST127Q01TA, ST127Q02TA and ST127Q03TA. REPEAT took the value of "1" if the student had repeated a grade in at least one ISCED level and the value of "0" if "no, never" was chosen at least once, provided that the student had not repeated a grade in any of the other ISCED levels. The index was assigned a missing value if none of the three categories were ticked for any of the three ISCED levels.

Education expectations

Students' responses to question ST225 regarding the level of education they expect to complete were used for identifying those students who expected to complete tertiary education, defined using International Standardised Classification of Education 1997 <ISCED level 5A> and/or <ISCED level 6> (theoretically oriented tertiary and post-graduate).

Skipping classes or days of school

Students' responses to whether, in the two weeks prior to the PISA test, they had skipped classes (ST062Q02TA) or days of school (ST062Q01TA) at least once were used to derive an indicator of student truancy. The indicator takes a value of 0 if students reported that they had not skipped any class or whole day of school in the two weeks prior to the PISA test, and a value of 1 if students reported that they had skipped classes or days of school at least once in the same period.

Arriving late for school

Students responded to a question about whether and how frequently they had arrived late for school during the two weeks prior to the PISA test (ST062Q03TA). This variable was used to derive an indicator of lateness that takes a value of 0 if students reported that they had not arrived late for school in the two weeks prior to the PISA test, and takes a value of 1 if students reported that they had arrived late for school at least once in the same period.

Time spent online outside of school

In 51 of the 52 countries and economies that distributed the ICT questionnaire, PISA 2018 asked students how much time they spend using the Internet during the typical weekday (IC006) and weekend day (IC007) outside of school. These two questions were combined to calculate the amount of time students spend connected to the Internet during a typical week. For each category, the intermediate value was used (e.g. 15.5 minutes for the category "1-30 minutes per day"), and a value of 420 minutes was used for the category "More than 6 hours per day". Five categories of Internet users were then created based on this indicator: "low Internet user" (0-9 hours per week); "moderate Internet user" (10-19 hours per week); "average Internet user" (20-29 hours per week); "high Internet user" (30-39 hours per week); and "heavy Internet user" (more than 40 hours per week).

STUDENT-LEVEL SCALE INDICES

Adaptive instruction

The index of adaptive instruction (ADAPTIVITY) was constructed using students' responses to a new question developed for PISA 2018 (ST212). Students reported how often ("never or almost never", "some lessons", "many lessons", "every lesson or almost every lesson") the following things happened in language-of-instruction lessons: "The teacher adapts the lesson to my class's needs and knowledge"; "The teacher provides individual help when a student has difficulties understanding a topic or task"; and "The teacher changes the structure of the lesson on a topic that most students find difficult to understand". Positive values on this scale mean that students perceived their language-of-instruction teachers to be more adaptive than did the average student across OECD countries.

Attitudes towards competition

The index of attitudes towards competition (COMPETE) was constructed using students' responses to a new question (ST181) over the extent they "strongly disagreed", "disagreed", "agreed" or "strongly agreed" with the following statements: "I enjoy working in situations involving competition with others"; "It is important for me to perform better than other people on a task"; and "I try harder when I'm in competition with other people". Positive values on this scale mean that students expressed more favourable attitudes towards competition than did the average student across OECD countries.

Exposure to bullying

PISA 2018 asked (ST038) students how often ("never or almost never", "a few times a year", "a few times a month", "once a week or more") during the 12 months prior to the PISA test they had the following experiences in school, including those that happen in social media: "Other students left me out of things on purpose"; "Other students made fun of me"; "I was threatened by other students"; "Other students took away or destroyed things that belong to me"; "I got hit or pushed around by other students"; and "Other students spread nasty rumours about me". The first three statements were combined to construct the index of exposure to bullying (BEINGBULLIED). Positive values on this scale indicate that the student was more exposed to bullying at school than the average student in OECD countries; negative values on this scale indicate that the student was less exposed to bullying at school than the average student across OECD countries.

Fear of failure

Students in PISA 2018 were asked to report the extent to which they agree ("strongly disagree", "disagree", "agree", "strongly agree") with the following statements (ST183): "When I am failing, I worry about what others think of me"; "When I am failing, I am afraid that I might not have enough talent"; and "When I am failing, this makes me doubt my plans for the future". These statements were combined to create the index of fear of failure (GFOFAIL). Positive values in this index mean that the student expressed a greater fear of failure than did the average student across OECD countries.

Learning goals

Students in PISA 2018 were asked (ST208) to respond how true ("not at all true of me", "slightly true of me", "moderately true of me", "very true of me", "extremely true of me") the following statements are for them: "My goal is to learn as much as possible"; "My goal is to completely master the material presented in my classes"; and "My goal is to understand the content of my classes as thoroughly as possible". These statements were combined to construct the index of learning goals (MASTGOAL). Positive values in the index indicate more ambitious learning goals than the average student across OECD countries.

Motivation to master tasks

PISA 2018 asked students (ST182) to report the extent to which they agree ("strongly disagree", "disagree", "agree", "strongly agree") with the following statements about themselves: "I find satisfaction in working as hard as I can"; "Once I start a task, I persist until it is finished"; "Part of the enjoyment I get from doing things is when I improve on my past performance"; and "If I am not good at something, I would rather keep struggling to master it than move on to something I may be good at". The first three statements were combined to create the index of motivation to master tasks (WORKMAST). Positive values in the index indicate greater motivation than the average student across OECD countries.

Meaning in life

PISA 2018 asked students (ST185) to report the extent to which they agree ("strongly agree", "agree", "disagree", "strongly disagree") with the following statements: "My life has clear meaning or purpose"; "I have discovered a satisfactory meaning in life"; and "I have a clear sense of what gives meaning to my life". These statements were combined to form the index of meaning in life (EUDMO). Positive values in the index indicate greater meaning in life than the average student across OECD countries.

Positive feelings

PISA 2018 asked students (ST186) to report how frequently ("never", "rarely", "sometimes", "always") they feel happy, lively, proud, joyful, cheerful, scared, miserable, afraid and sad. Three of these positive feelings – happy, joyful and cheerful – were combined to create an index of positive feelings (SWBP). Positive values in this index mean that the student reported more positive feelings than the average student across OECD countries. An index of negative feelings was not created because of the low internal consistency of the index across PISA-participating countries.

Self-efficacy

PISA 2018 asked (ST188) students to report the extent to which they agree ("strongly disagree", "disagree, "agree", "strongly agree") with the following statements about themselves: "I usually manage one way or another"; "I feel proud that I have accomplished things"; "I feel that I can handle many things at a time"; "My belief in myself gets me through hard times"; and "When I'm in a difficult situation, I can usually find my way out of it". These statements were combined to create the index of self-efficacy (RESILIENCE). Positive values in this index mean that the student reported higher self-efficacy than did the average student across OECD countries.

Student competition

PISA 2018 asked (ST205) students how true ("not at all true", "slightly true", "very true", "extremely true") the following statements about their school are: "Students seem to value competition"; "It seems that students are competing with each other"; "Students seem to share the feeling that competing with each other is important"; and "Students feel that they are being compared with

others". The first three statements were combined to create the index of student competition (PERCOMP). Positive values in this index mean that students perceived their peers to compete with each other to a greater extent than did the average student across OECD countries.

Student co-operation

PISA 2018 asked (ST206) students how true ("not at all true", "slightly true", "very true", "extremely true") the following statements about their school are: "Students seem to value co-operation"; "It seems that students are co-operating with each other"; "Students seem to share the feeling that co-operating with each other is important"; and "Students feel that they are encouraged to cooperate with others". The first three statements were combined to create the index of student co-operation (PERCOOP). Positive values in this index mean that students perceived their peers to co-operate to a greater extent than did the average student across OECD countries.

Teacher enthusiasm

PISA 2018 asked (ST213) students whether they agree ("strongly agree", "agree", "disagree", "strongly disagree") with the following statements about the two language-of-instruction lessons they attended prior to sitting the PISA test: "It was clear to me that the teacher liked teaching us"; "The enthusiasm of the teacher inspired me"; "It was clear that the teacher likes to deal with the topic of the lesson"; and "The teacher showed enjoyment in teaching". These statements were combined to create the index of teacher enthusiasm (TEACHINT). Positive values in this index mean that students perceived their language-of-instruction teachers to be more enthusiastic than did the average student across OECD countries.

INDICES INCLUDED IN EARLIER ASSESSMENTS

Disciplinary climate

The index of disciplinary climate (DISCLIMA) was constructed using students' responses to a trend question about how often ("every lesson", "most lessons", "some lessons", "never or hardly ever") the following happened in their language-of-instruction lessons (ST097): "Students don't listen to what the teacher says"; "There is noise and disorder"; "The teacher has to wait a long time for students to quiet down"; "Students cannot work well"; and "Students don't start working for a long time after the lesson begins". Positive values on this scale mean that the student enjoyed a better disciplinary climate in language-of-instruction lessons than the average student across OECD countries. Values in the index of disciplinary climate are directly comparable between PISA 2009 and PISA 2018 (see note 1 for more details).

Enjoyment of reading

The index of enjoyment of reading (JOYREAD) was constructed based on a trend question (ST160) from PISA 2009 (ID in 2009: ST24) asking students whether they agree ("strongly disagree", "disagree", "agree", "strongly agree") with the following statements: "I read only if I have to"; "Reading is one of my favourite hobbies"; "I like talking about books with other people"; "For me, reading is a waste of time"; and "I read only to get information that I need". Positive values on this scale mean that the student enjoyed reading to a greater extent than the average student across OECD countries. Scores of the index of enjoyment of reading are directly comparable between PISA 2009 and PISA 2018 (see note 1 for more details).

Parents' emotional support

The index of parents' emotional support (EMOSUPS) was constructed based on a trend question (ST123) asking students whether they agree ("strongly disagree", "disagree", "agree", "strongly agree") with the following statements related to the academic year when they sat the PISA test: "My parents support my educational efforts and achievements"; "My parents support me when I am facing difficulties at school"; and "My parents encourage me to be confident". Positive values on this scale mean that students perceived greater levels of emotional support from their parents than did the average student across OECD countries.

Sense of belonging

The index of sense of belonging (BELONG) was constructed using students' responses to a trend question about their sense of belonging to school. Students were asked whether they agree ("strongly disagree", "disagree", "agree", "strongly agree") with the following school-related statements (ST034): "I feel like an outsider (or left out of things) at school"; "I make friends easily at school"; "I feel like I belong at school"; "I feel awkward and out of place in my school"; "Other students seem to like me"; and "I feel lonely at school". Positive values on this scale mean that students reported a greater sense of belonging at school than did the average student across OECD countries.

Teacher-directed instruction

The index of teacher-directed instruction (DIRINS) was constructed from students' reports on how often ("never or hardly never", "some lessons", "most lessons", "every lesson") the following happened in their language-of-instruction lessons (ST102): "The teacher sets clear goals for our learning"; "The teacher asks questions to check whether we have understood what was taught";

"At the beginning of a lesson, the teacher presents a short summary of the previous lesson"; and "The teacher tells us what we have to learn". Positive values on this scale mean that students perceived their teachers to use teacher-directed practices more frequently than did the average student across OECD countries.

Teacher feedback

The index of teacher feedback (PERFEED) was constructed using students' responses to a trend question (ST104) about how often ("never or almost ever", "some lessons", "many lessons", "every lesson or almost every lesson") the following things happen in their language-of-instruction lessons: "The teacher gives me feedback on my strengths in this subject"; "The teacher tells me in which areas I can still improve"; and "The teacher tells me how I can improve my performance". Positive values on this scale mean that students perceived their teachers to provide feedback more frequently than did the average student across OECD countries.

Teachers' stimulation of reading engagement

The index of teachers' stimulation of reading engagement (STIMREAD) was constructed based on a trend question (ST152) from PISA 2009 (ID in 2009: ST37) asking students how often ("never or hardly ever", "in some lessons", "in most lessons", "in all lessons") the following occur in their language-of-instruction lessons: "The teacher encourages students to express their opinion about a text"; "The teacher helps students relate the stories they read to their lives"; "The teacher shows students how the information in texts builds on what they already know"; and "The teacher poses questions that motivate students to participate actively". Positive values on this scale mean that the students perceived their teacher to provide greater stimulation than did the average student across OECD countries.

Teacher support

The index of teacher support (TEACHSUP) was constructed using students' responses to a trend question (ST100) about how often ("every lesson", "most lessons", "some lessons", "never or hardly ever") the following things happen in their language-of-instruction lessons: "The teacher shows an interest in every student's learning"; "The teacher gives extra help when students need it"; "The teacher helps students with their learning"; and "The teacher continues teaching until the students understand". Positive values on this scale mean that students perceived their teacher to support them more frequently than did the average student across OECD countries.

Value of school

The index of value of school (ATTLNACT) was constructed based on a trend question (ST036) asking students whether they agree ("strongly disagree", "disagree", "agree", "strongly agree") with the following school-related statements: "Trying hard at school will help me get a good job"; "Trying hard at school will help me get into a good <college>"; and "Trying hard at school is important". Positive values on this scale mean that the student valued schooling to a greater extent than the average student across OECD countries.

SCALING OF INDICES RELATED TO THE PISA INDEX OF ECONOMIC SOCIAL AND CULTURAL STATUS

The PISA index of economic, social and cultural status (ESCS) was derived, as in previous cycles, from three variables related to family background: parents' highest level of education (PARED), parents' highest occupational status (HISEI), and home possessions (HOMEPOS), including books in the home.

Parents' highest level of education

Students' responses to questions ST005, ST006, ST007 and ST008 regarding their parents' education were classified using ISCED 1997 (OECD, 1999[4]). Indices on parental education were constructed by recoding educational qualifications into the following categories: (0) None, (1) <ISCED level 1> (primary education), (2) <ISCED level 2> (lower secondary), (3) <ISCED level 3B or 3C> (vocational/pre-vocational upper secondary), (4) <ISCED level 3A> (general upper secondary) and/or <ISCED level 4> (non-tertiary post-secondary), (5) <ISCED level 5B> (vocational tertiary) and (6) <ISCED level 5A> and/or <ISCED level 6> (theoretically oriented tertiary and post-graduate). Indices with these categories were provided for a student's mother (MISCED) and father (FISCED), and the index of highest education level of parents (HISCED) corresponded to the higher ISCED level of either parent. The index of highest education level of parents was also recoded into estimated number of years of schooling (PARED). In PISA 2018, to avoid issues related to the misreporting of parental education by students, students' answers about post-secondary qualifications were considered only for those students who reported their parents' highest level of schooling to be at least lower secondary education. The conversion from ISCED levels to year of education is common to all countries. This international conversion was determined by using the modal years of education across countries for each ISCED level. The correspondence is available in the *PISA 2018 Technical Report* (OECD, forthcoming[2]).

Parents' highest occupational status

Occupational data for both the student's father and the student's mother were obtained from responses to open-ended questions. The responses were coded to four-digit ISCO codes (ILO, 2007) and then mapped to the international socio-economic index of

occupational status (ISEI) (Ganzeboom and Treiman, 2003[5]). In PISA 2018, as in PISA 2015, the new ISCO and ISEI in their 2008 version were used rather than the 1988 versions that had been applied in the previous four cycles (Ganzeboom, 2010[6]). Three indices were calculated based on this information: father's occupational status (BFMJ2); mother's occupational status (BMMJ1); and the highest occupational status of parents (HISEI), which corresponds to the higher ISEI score of either parent or to the only available parent's ISEI score. For all three indices, higher ISEI scores indicate higher levels of occupational status. In PISA 2018, in order to reduce missing values, an ISEI value of 17 (equivalent to the ISEI value for ISCO code 9000, corresponding to the major group "Elementary Occupations") was attributed to pseudo-ISCO codes 9701, 9702 and 9703 ("Doing housework, bringing up children", "Learning, studying", "Retired, pensioner, on unemployment benefits").

Household possessions

In PISA 2018, students reported the availability of 16 household items at home (ST011), including three country-specific household items that were seen as appropriate measures of family wealth within the country's context. In addition, students reported the amount of possessions and books at home (ST012, ST013). HOMEPOS is a summary index of all household and possession items (ST011, ST012 and ST013).

Computation of ESCS

For the purpose of computing the PISA index of economic, social and cultural status (ESCS), values for students with missing PARED, HISEI or HOMEPOS were imputed with predicted values plus a random component based on a regression on the other two variables. If there were missing data on more than one of the three variables, ESCS was not computed and a missing value was assigned for ESCS.

In previous cycles, the PISA index of economic, social and cultural status was derived from a principal component analysis of standardised variables (each variable has an OECD mean of zero and a standard deviation of one), taking the factor scores for the first principal component as measures of the PISA index of economic, social and cultural status. In PISA 2018, ESCS is computed by attributing equal weight to the three standardised components. As in PISA 2015, the three components were standardised across all countries and economies (both OECD and partner countries/economies), with each country/economy contributing equally (in cycles prior to 2015, the standardisation and principal component analysis was based on OECD countries only). As in every previous cycle, the final ESCS variable was transformed, with 0 the score of an average OECD student and 1 the standard deviation across equally weighted OECD countries.

SCHOOL-LEVEL SIMPLE INDICES

School type

Schools are classified as either public or private, according to whether a private entity or a public agency has the ultimate power to make decisions concerning its affairs (Question SC013). Public schools are managed directly or indirectly by a public education authority, government agency, or governing board appointed by government or elected by public franchise. Private schools are managed directly or indirectly by a non-government organisation, such as a church, trade union, business or other private institution. In some countries and economies, such as Ireland, the information from SC013 is combined with administrative data to determine whether the school is privately or publicly managed.

Socio-economic profile of the schools

Advantaged and disadvantaged schools are defined in terms of the socio-economic profile of schools. All schools in each PISA-participating education system are ranked according to their average PISA index of economic, social and cultural status (ESCS) and then divided into four groups with approximately an equal number of students (quarters). Schools in the bottom quarter are referred to as "socio-economically disadvantaged schools"; and schools in the top quarter are referred to as "socio-economically advantaged schools".

SCHOOL-LEVEL SCALE INDICES

Indices included in earlier assessments

Shortage of educational staff

As in PISA 2015 and 2012, PISA 2018 included an eight-item question (SC017) about school resources, measuring school principals' perceptions of potential factors hindering instruction at school ("Is your school's capacity to provide instruction hindered by any of the following issues?"). The four response categories were "not at all", "very little", "to some extent", and "a lot". A similar question was used in previous cycles, but items were reduced and reworded for 2012 focusing on two derived variables. The index of staff shortage (STAFFSHORT) was derived from the first four items: a lack of teaching staff; inadequate or poorly qualified teaching staff; a lack of assisting staff; inadequate or poorly qualified assisting staff. Positive values in this index mean that principals viewed the amount and/or quality of the human resources in their schools as an obstacle to providing instruction to a greater extent than the OECD average.

Teacher behaviour hindering learning

The index of teacher behaviour hindering learning (TEACHBEHA) was constructed using school principals' responses to a trend question (SC061) about the extent to which ("not at all", "very little", "to some extent", "a lot") they think that student learning in their schools is hindered by such factors as "Teachers not meeting individual students' needs"; "Teacher absenteeism"; "School staff resisting change"; "Teachers being too strict with students"; and "Teachers not being well-prepared for classes". Positive values reflect principals' perceptions that these teacher-related behaviours hinder learning to a greater extent; negative values indicate that principals believed that these teacher-related behaviours hinder learning to a lesser extent, compared to the OECD average.

PARENT-LEVEL SCALE INDICES

Indices included in earlier assessments

Parents' perceived school quality

The index of parents' perceived school quality (PQSCHOOL) was constructed using parents' responses to the trend question (PA007) about the extent to which they agree ("strongly disagree", "disagree", "agree", "strongly agree") with the following statements: "Most of my child's school teachers seem competent and dedicated"; "Standards of achievement are high in my child's school"; "I am happy with the content taught and the instructional methods used in my child's school"; "I am satisfied with the disciplinary atmosphere in my child's school"; "My child's progress is carefully monitored by the school"; "My child's school provides regular and useful information on my child's progress"; and "My child's school does a good job in educating students". Positive values reflect that parents perceived their child's school to be of higher quality, negative values indicate that parents perceived their child's school to be of lower quality, than the OECD average parents' perceptions.

School policies for parental involvement

The index of school policies for parental involvement (PASCHPOL) was constructed using parents' responses to the trend question (PA007) about the extent to which they agree ("strongly disagree", "disagree", "agree", "strongly agree") with the following statements: "My child's school provides an inviting atmosphere for parents to get involved"; "My child's school provides effective communication between the school and families"; "My child's school involves parents in the school's decision-making process"; "My child's school offers parent education"; "My child's school informs families about how to help students with homework and other school-related activities"; and "My child's school co-operates with <community services> to strengthen school programmes and student development". Positive values reflect parents' perceptions that these school policies for parental involvement exist to a greater extent, negative values indicate that these school policies for parental involvement exist to a lesser extent, than the OECD average.

CROSS-COUNTRY COMPARABILITY OF SCALED INDICES

While the forthcoming PISA 2018 Technical Report (OECD, forthcoming[2]) will explain in detail the scaling procedures and the construct validation of all context- questionnaire data, this section presents a summary of the analyses carried out to validate the cross-country comparability of the main scaled indices used in this volume. The internal consistency of scaled indices and the invariance of item parameters are the two approaches that PISA 2018 used to examine the comparability of scaled indices across school systems. Based on these two approaches, all indices examined in this volume met the reporting criteria.

Internal consistency refers to the extent to which the items that make up an index are inter-related. Cronbach's Alpha was used to check the internal consistency of each scale within the countries/economies and to compare it amongst countries/economies. The coefficient of Cronbach's Alpha ranges from 0 to 1, with higher values indicating higher internal consistency. Similar and high values across countries/economies are an indication of having measured reliably across countries/economies. Commonly accepted cut-off values are 0.9 for excellent, 0.8 for good, and 0.7 for acceptable internal consistency. In the PISA 2018 context, indices were always omitted for countries and economies with values below 0.6, and for some countries and economies with values between 0.6 and 0.7.

Table III.A1.1, available online, presents the Cronbach's Alpha for the main scaled indices in this volume. Based on these results, the following indices were omitted from individual countries/economies:

- Exposure to bullying (BEINGBULLIED): Korea
- Teacher support (TEACHSUP): Ukraine
- Positive feelings (SWBP): Italy, Morocco and Viet Nam
- Self-efficacy (RESILIENCE): Viet Nam

PISA 2018 examined the cross-country comparability of scaled indices also through the invariance of item parameters. The idea was to test whether the item parameters of an index could be assumed to be the same (invariant) across groups of participating countries and language groups. In a first step, groups were defined based on samples of at least 300 students responding to the same language-version questionnaire in a country. In a second step, international and student parameters were estimated based

on students across all groups. In a third step, the root mean square deviance (RMSD) item-fit statistics was calculated for each group and item. Values close to zero signal a good item fit, indicating that the international model describes student responses within individual groups accurately. Any group receiving a value above 0.3 was flagged and a group-specific item parameter was calculated. Steps 2 and 3 were then repeated until all items exhibited RMSD values below 0.3. The RMSD values will be reported in the forthcoming PISA 2018 Technical Report. Amongst the main indices examined in this volume, some needed just one round to ensure that all items exhibited acceptable levels of RMSD, whereas other indices needed several iterations:

- One round: exposure to bullying, teacher support, teacher feedback, student co-operation, meaning in life, positive feelings and fear of failure.
- Several rounds: disciplinary climate (2 rounds), teacher enthusiasm (2 rounds), teacher behaviour hindering learning (4 rounds), student competition (2 rounds), sense of belonging (2 rounds) and self-efficacy (2 rounds).

In addition to country-specific omissions, some indices were also omitted for all countries. With regard to this volume, the original plan was to produce an index of negative feelings, in the same way that an index of positive feelings was created (which includes the items "happy", "joyful" and "cheerful"; see Chapter 12). However, an index of negative feelings was omitted because it showed low internal consistency and low invariance of item parameters. Consequently, negative feelings are analysed individually in the report.

Tables available on line
https://doi.org/10.1787/888934030838

- Table III.A1.1 Internal consistency of the main scaled indices

Notes

1. PISA expert groups identified a few indices that should be scaled to make index values directly comparable between PISA 2009 and PISA 2018. These indices include DISCLIMA, JOYREAD and JOYREADP. For these trend indices, a common calibration linking procedure was used. Countries and economies that participated in both PISA 2009 and PISA 2018 contributed both samples to the calibration of item parameters. Each country/economy contributed equally to the estimation in each cycle. Trend indices were equated so that the mean and standard deviation of rescaled PISA 2009 estimates and of the original estimates included in the PISA 2009 database, across OECD countries, matched. Trend indices are therefore reported on the same scale as used in PISA 2009, so that values can be directly compared to those included in the PISA 2009 database.

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ANNEX A2
The PISA target population, the PISA samples and the definition of schools
Exclusions and coverage ratios

WHO IS THE PISA TARGET POPULATION?

PISA 2018 assessed the cumulative outcomes of education and learning at a point at which most young people are still enrolled in formal education – when they are 15 years old.

Any international survey of education must guarantee the comparability of its target population across nations. One way to do this is to assess students at the same grade level. However, differences between countries in the nature and extent of pre-primary education and care, the age at entry into formal schooling, and the institutional structure of education systems do not allow for a definition of internationally comparable grade levels.

Other international assessments have defined their target population by the grade level that provides maximum coverage of a particular age cohort. However, this method is particularly sensitive to the distribution of students across age and grade levels; small changes in this distribution can lead to the selection of different target grades, even within the same country over different PISA cycles. There also may be differences across countries in whether students who are older or younger than the desired age cohort are represented in the modal grade, further rendering such grade-level-based samples difficult to compare.

To overcome these problems, PISA uses an age-based definition of its target population, one that is not tied to the institutional structures of national education systems. PISA assesses students who are aged between 15 years and 3 (complete) months and 16 years and 2 (complete) months[1] at the beginning of the assessment period, plus or minus an allowed 1-month variation, and who are enrolled in an educational institution[2] at grade 7 or higher.[3] All students who met these criteria were eligible to sit the PISA assessment in 2018, regardless of the type of educational institution in which they were enrolled and whether they were enrolled in full-time or part-time education. This also allows PISA to evaluate students shortly before they are faced with major life choices, such as whether to continue with education or enter the workforce.

Hence, PISA makes statements about the knowledge and skills of a group of individuals who were born within a comparable reference period, but who may have undergone different educational experiences both in and outside of school. These students may be distributed over different ranges of grades (both in terms of the specific grade levels and the spread in grade levels) in different countries, or over different tracks or streams. It is important to consider these differences when comparing PISA results across countries. In addition, differences in performance observed when students are 15 may disappear later on if students' experiences in education converge over time.

If a country's mean scores in reading, mathematics or science are significantly higher than those of another country, it cannot automatically be inferred that schools or particular parts of the education system in the first country are more effective than those in the second. However, one can legitimately conclude that it is the cumulative impact of learning experiences in the first country, starting in early childhood and up to the age of 15, and including all experiences, whether they be at school, home or elsewhere, that have resulted in the better outcomes of the first country in the subjects that PISA assesses.[4]

The PISA target population does not include residents of a country who attend school in another country. It does, however, include foreign nationals who attend school in the country of assessment.

To accommodate countries that requested grade-based results for the purpose of national analyses, PISA 2018 provided a sampling option to supplement age-based sampling with grade-based sampling.

HOW WERE STUDENTS CHOSEN?

The accuracy of the results from any survey depends on the quality of the information drawn from those surveyed as well as on the sampling procedures. Quality standards, procedures, instruments and verification mechanisms were developed for PISA that ensured that national samples yielded comparable data and that the results could be compared across countries with confidence. Experts from the PISA Consortium selected the samples for most participating countries/economies and monitored the sample-selection process closely in those countries that selected their own samples.

Most PISA samples were designed as two-stage stratified samples.[5] The first stage sampled schools in which 15-year-old students may be enrolled. Schools were sampled systematically with probabilities proportional to the estimated size of their (eligible) 15-year-old population. At least 150 schools[6] were selected in each country, although the requirements for national analyses often demanded a larger sample. Replacement schools for each sampled school were simultaneously identified, in case an originally sampled school chose not to participate in PISA 2018.

The second stage of the selection process sampled students within sampled schools. Once schools were selected, a list of each sampled school's 15-year-old students was prepared. From this list, 42 students were then selected with equal probability (all 15-year-old students were selected if fewer than 42 were enrolled). The target number of students who were to be sampled in a school could deviate from 42 but could not fall below 20.

Data-quality standards in PISA required minimum participation rates for schools as well as for students. These standards were established to minimise the potential for bias resulting from non-response. Indeed, it was likely that any bias resulting from non-response would be negligible – i.e. typically smaller than the sampling error – in countries that met these standards.

At least 85% of the schools initially selected to take part in the PISA assessment were required to agree to conduct the test. Where the initial response rate of schools was between 65% and 85%, however, an acceptable school-response rate could still be achieved through the use of replacement schools. Inherent in this procedure was a risk of introducing bias, if replacement schools differed from initially sampled schools along dimensions other than those considered for sampling. Participating countries and economies were therefore encouraged to persuade as many of the schools in the original sample as possible to participate.

Schools with a student participation rate of between 25% and 50% were not considered to be participating schools, but data (from both the cognitive assessment and questionnaire) from these schools were included in the database and contributed to the various estimates. Data from schools with a student participation rate of less than 25% were excluded from the database.

In PISA 2018, five countries and economies – Hong Kong (China) (69%), Latvia (82%), New Zealand (83%), the United Kingdom (73%) and the United States (65%) – did not meet the 85% threshold, but met the 65% threshold, amongst schools initially selected to take part in the PISA assessment. Upon replacement, Hong Kong (China) (79%), the United Kingdom (87%) and the United States (76%) still failed to reach an acceptable participation rate.[7] Amongst the schools initially selected before replacement, the Netherlands (61%) did not meet the 65% school response-rate threshold, but it reached a response rate of 87% upon replacement. However, these were not considered to be major issues as, for each of these countries/economies, additional non-response analyses showed that there were limited differences between schools that did participate and the full set of schools originally drawn in the sample.[8] Data from these jurisdictions were hence considered to be largely comparable with, and were therefore reported together with, data from other countries/economies.

PISA 2018 also required that at least 80% of the students chosen within participating schools participated themselves. This threshold was calculated at the national level and did not have to be met in each participating school. Follow-up sessions were required in schools where too few students had participated in the original assessment sessions. Student-participation rates were calculated over all original schools; and also over all schools, whether original or replacement schools. Students who participated in either the original or in any follow-up assessment sessions were counted in these participation rates; those who attended only the questionnaire session were included in the international database and contributed to the statistics presented in this publication if they provided at least a description of their father's or mother's occupation.

This 80% threshold was met in every country/economy except Portugal, where only 76% of students who were sampled actually participated. The high level of non-responding students could lead to biased results, e.g. if students who did not respond were more likely to be low-performing students. This was indeed the case in Portugal, but a non-response analysis based on data from a national mathematics assessment in the country showed that the upward bias of Portugal's overall results was likely small enough to preserve comparability over time and with other countries. Data from Portugal was therefore reported along with data from the countries/economies that met this 80% student-participation threshold.

Table I.A2.6 shows the response rate for students and schools, before and after replacement.

- **Column 1** shows the weighted participation rate of schools before replacement; it is equivalent to Column 2 divided by Column 3 (multiplied by 100 to give a percentage).
- **Column 2** shows the number of responding schools before school replacement, weighted by student enrolment.
- **Column 3** shows the number of sampled schools before school replacement, weighted by student enrolment. This includes both responding and non-responding schools.
- **Column 4** shows the unweighted number of responding schools before school replacement.

- **Column 5** shows the unweighted number of sampled schools before school replacement, including both responding and non-responding schools.
- **Columns 6 to 10** repeat Columns 1 to 5 for schools *after* school replacement, i.e. after non-responding schools were replaced by the replacement schools identified during the initial sampling procedure.
- **Columns 11 to 15** repeat Columns 6 to 10 but for *students* in schools after school replacement. Note that the weighted and unweighted numbers of students sampled (Columns 13 and 15) include students who were assessed and those who should have been assessed but who were absent on the day of assessment. Furthermore, as mentioned above, any students in schools where the student response rate was less than 50% were not considered to be attending participating schools, and were thus excluded from Columns 14 and 15 (and, similarly, from Columns 4, 5, 9 and 10).

WHAT PROPORTION OF 15-YEAR-OLDS DOES PISA REPRESENT?

All countries and economies attempted to maximise the coverage of 15-year-olds enrolled in education in their national samples, including students enrolled in special-education institutions.

The sampling standards used in PISA only permitted countries and economies to exclude up to a total of 5% of the relevant population (i.e. 15-year-old students enrolled in school at grade 7 or higher) either by excluding schools or excluding students within schools. All but 16 countries and economies – Sweden (11.09%), Israel (10.21%), Luxembourg (7.92%), Norway (7.88%), Canada (6.87%), New Zealand (6.78%), Switzerland (6.68%), the Netherlands (6.24%), Cyprus (5.99%), Iceland (5.99%), Kazakhstan (5.87%), Australia (5.72%), Denmark (5.70%), Turkey (5.66%), the United Kingdom (5.45%) and Estonia (5.03%) – achieved this standard, and in 28 countries and economies, the overall exclusion rate was less than 2% (Table I.A2.1) When language exclusions[9] were accounted for (i.e. removed from the overall exclusion rate), Estonia and Iceland no longer had exclusion rates greater than 5%. More details can be found in the *PISA 2018 Technical Report* (OECD, forthcoming[1]).

Exclusions that should remain within the above limits include both:

- at the school level:
  - schools that were geographically inaccessible or where the administration of the PISA assessment was not considered feasible
  - schools that provided teaching only for students in the categories defined under "within-school exclusions", such as schools for the blind.

  The percentage of 15-year-olds enrolled in such schools had to be less than 2.5% of the nationally desired target population (0.5% maximum for the former group and 2% maximum for the latter group). The magnitude, nature and justification of school-level exclusions are documented in the *PISA 2018 Technical Report* (OECD, forthcoming[1]).
- at the student level:
  - students with an intellectual disability, i.e. a mental or emotional disability resulting in the student being so cognitively delayed that he/she could not perform in the PISA testing environment
  - students with a functional disability, i.e. a moderate to severe permanent physical disability resulting in the student being unable to perform in the PISA testing environment
  - students with limited assessment-language proficiency. These students were unable to read or speak any of the languages of assessment in the country at a sufficient level and unable to overcome such a language barrier in the PISA testing environment, and were typically students who had received less than one year of instruction in the language of assessment
  - other exclusions, a category defined by the PISA national centres in individual participating countries and approved by the PISA international consortium
  - students taught in a language of instruction for the major domain for which no materials were available.

  Students could not be excluded solely because of low proficiency or common disciplinary problems. The percentage of 15-year-olds excluded within schools had to be less than 2.5% of the national desired target population.

Although exceeding the exclusion rate limit of 5% (Table I.A2.1), data from the 16 countries and economies listed above were all deemed to be acceptable for the reasons listed below. In particular, all of these reasons were accepted by a data-adjudication panel to allow for the reliable comparison of PISA results across countries and economies and across time; thus the data from these countries were reported together with data from other countries/economies.

- In Australia, Canada, Denmark, Luxembourg, New Zealand and Norway, exclusion rates remained close to those observed in previous cycles. In the United Kingdom, exclusion rates were also above 5% but have decreased markedly across cycles.
- In Cyprus, Iceland, Kazakhstan, the Netherlands and Switzerland, exclusions increased but remained close to the 5% limit. The increase could be largely attributed to a marked increase in students who were excluded within schools due to intellectual or functional disabilities. Moreover, in the Netherlands, some 17% of students were not excluded but assigned to UH (*une heure*) booklets, which were intended for students with special education needs. As these booklets did not cover the domain of financial literacy (see *PISA 2018 Results [Volume IV]: Are Students Smart about Money?* [OECD, forthcoming$_{[2]}$]), the effective exclusion rate for the Netherlands in financial literacy was over 20%. This resulted in a strong upward bias in the country mean and other population statistics in that domain. Data from the Netherlands in financial literacy are not comparable with data from other education systems; but data from the Netherlands in the core PISA subjects were still deemed to be largely comparable.
- The higher exclusion rate in Turkey was likely the result of a higher school-level exclusion rate due to a particular type of non-formal educational institution that was not listed (and hence not excluded) in 2015 but was listed and excluded in 2018.
- The higher exclusion rate in Israel was the result of a higher school-level exclusion rate due to the lack of participation by a particular type of boys' school. These schools were considered to be non-responding schools in cycles up to 2015 but were treated as school-level exclusions in 2018.
- Sweden had the highest exclusion rate: 11.07%. It is believed that this increase in the exclusion rate was due to a large and temporary increase in immigrant and refugee inflows, although because of Swedish data-collection laws, this could not be explicitly stated in student-tracking forms. Instead, students confronted with language barriers were classified as being excluded "for other reasons", as were students with intellectual and functional disabilities. It is expected that the exclusion rate will decrease to previous levels in future cycles of PISA, as such inflows stabilise or shrink.[10]

Table I.A2.1 describes the target population of the countries participating in PISA 2018. Further information on the target population and the implementation of PISA sampling standards can be found in the *PISA 2018 Technical Report* (OECD, forthcoming$_{[1]}$).

- **Column 1** shows the total number of 15-year-olds according to the most recent available information, which in most countries and economies means from 2017, the year before the assessment.
- **Column 2** shows the number of 15-year-olds enrolled in school in grade 7 or above, which is referred to as the "eligible population".
- **Column 3** shows the national desired target population. Countries and economies were allowed to exclude up to 0.5% of students *a priori* from the eligible population, essentially for practical reasons. The following *a priori* exclusions exceed this limit but were agreed with the PISA Consortium:
  - Canada excluded 1.17% of its population: students living in the Yukon, Northwest Territories and Nunavut, and Aboriginal students living on reserves
  - Chile excluded 0.05% of its population: students living on Easter Island, the Juan Fernandez Archipelago and Antarctica
  - Cyprus excluded 0.10% of its population: students attending schools on the northern part of the island
  - the Philippines excluded 2.42% of its population: students living in the Autonomous Region in Muslim Mindanao
  - Saudi Arabia excluded 7.59% of its population: students living in the regions of Najran and Jizan
  - Ukraine excluded 0.37% of its population: some students attending schools in the Donetsk and Luhansk regions
  - the United Arab Emirates excluded 0.04% of its population: home-schooled students.
- **Column 4** shows the number of students enrolled in schools that were excluded from the national desired target population, either from the sampling frame or later in the field during data collection. In other words, these are school-level exclusions.
- **Column 5** shows the size of the national desired target population after subtracting the students enrolled in excluded schools. This column is obtained by subtracting Column 4 from Column 3.
- **Column 6** shows the percentage of students enrolled in excluded schools. This is obtained by dividing Column 4 by Column 3 and multiplying by 100.
- **Column 7** shows the number of students who participated in PISA 2018. Note that in some cases, this number does not account for 15-year-olds assessed as part of additional national options.

- **Column 8** shows the weighted number of participating students, i.e. the number of students in the nationally defined target population that the PISA sample represents.
- **Column 9** shows the total number of students excluded within schools. In each sampled school, all eligible students – namely, those 15 years of age, regardless of grade – were listed, and a reason for the exclusion was provided for each student who was to be excluded from the sample. These reasons are further described and classified into specific categories in Table I.A2.4.
- **Column 10** shows the weighted number of students excluded within schools, i.e. the overall number of students in the national defined target population represented by the number of students from the sample excluded within schools. This weighted number is also described and classified by exclusion categories in Table I.A2.4.
- **Column 11** shows the percentage of students excluded within schools. This is equivalent to the weighted number of excluded students (Column 10) divided by the weighted number of excluded and participating students (the sum of Columns 8 and 10), multiplied by 100.
- **Column 12** shows the overall exclusion rate, which represents the weighted percentage of the national desired target population excluded from PISA either through school-level exclusions or through the exclusion of students within schools. It is equivalent to the school-level exclusion rate (Column 6) plus the product of the within-school exclusion rate and 1 minus the school-level exclusion rate expressed as a decimal (Column 6 divided by 100).[11]
- **Column 13** shows an index of the extent to which the national desired target population was covered by the PISA sample. As mentioned above, 16 countries/economies fell below the coverage of 95%. This is also known as Coverage Index 1.
- **Column 14** shows an index of the extent to which 15-year-olds *enrolled in school* were covered by the PISA sample. The index, also known as Coverage Index 2, measures the overall proportion of the national enrolled population that is covered by the non-excluded portion of the student sample, and takes into account both school- and student-level exclusions. Values close to 100 indicate that the PISA sample represents the entire (grade 7 and higher) education system as defined for PISA 2018. This is calculated in a similar manner to Column 13; however, the total enrolled population of 15-year-olds in grade 7 or above (Column 2) is used as a base instead of the national desired target population (Column 3).
- **Column 15** shows an index of the coverage of the 15-year-old population. The index is the weighted number of participating students (Column 8) divided by the total population of 15-year-old students (Column 1). This is also known as Coverage Index 3.

A high level of coverage contributes to the comparability of the assessment results. For example, even assuming that the excluded students would have systematically scored worse than those who participated, and that this relationship is moderately strong, an exclusion rate on the order of 5% would likely lead to an overestimation of national mean scores of less than 5 score points on the PISA scale (where the standard deviation is 100 score points).[12]

DEFINITION OF SCHOOLS

In some countries, subunits within schools were sampled instead of schools, which may affect the estimate of the between-school variance. In Austria, the Czech Republic, Germany, Hungary, Japan, Romania and Slovenia, schools with more than one programme of study were split into the units delivering these programmes. In the Netherlands, locations were listed as sampling units. In the Flemish Community of Belgium, each campus (or implantation) of a multi-campus school was sampled independently, whereas the larger administrative unit of a multi-campus school was sampled as a whole in the French Community of Belgium.

In Argentina, Australia, Colombia and Croatia, each campus of a multi-campus school was sampled independently. Schools in the Basque Country of Spain that were divided into sections by language of instruction were split into these linguistic sections for sampling. International schools in Luxembourg were split into two sampling units: one for students who were instructed in a language for which testing material was available,[13] and one for students who were instructed in a language for which no testing material was available (and who were hence excluded).

Some schools in the United Arab Emirates were sampled as a whole unit, while others were split by curriculum and sometimes by gender. Due to reorganisation, some schools in Sweden were split into two parts, each part with its own principal. Some schools in Portugal were organised into clusters where all units in a cluster shared the same teachers and principal; each of these clusters constituted a single sampling unit.

THE DISTRIBUTION OF PISA STUDENTS ACROSS GRADES

Students assessed in PISA 2018 were enrolled in various grade levels. The percentage of students at each grade level is presented, by country, in Table I.A2.8 and Table I.A2.9, and by gender within each country in Table I.A2.12 and Table I.A2.13.

Table I.A2.1 [1/4] **PISA target populations and samples**

		Population and sample information						
		Total population of 15-year-olds	Total enrolled population of 15-year-olds at grade 7 or above	Total in national desired target population	Total school-level exclusions	Total in national desired target population after all school exclusions and before within-school exclusions	School-level exclusion rate (%)	Number of participating students
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
OECD	Australia	288 195	284 687	284 687	5 610	279 077	1.97	14 273
	Austria	84 473	80 108	80 108	603	79 505	0.75	6 802
	Belgium	126 031	122 808	122 808	1 877	120 931	1.53	8 475
	Canada	388 205	400 139	395 448	7 950	387 498	2.01	22 653
	Chile	239 492	215 580	215 470	2 151	213 319	1.00	7 621
	Colombia	856 081	645 339	645 339	950	644 389	0.15	7 522
	Czech Republic	92 013	90 835	90 835	1 510	89 325	1.66	7 019
	Denmark	68 313	67 414	67 414	653	66 761	0.97	7 657
	Estonia	12 257	12 120	12 120	413	11 707	3.41	5 316
	Finland	58 325	57 552	57 552	496	57 056	0.86	5 649
	France	828 196	798 480	798 480	13 732	784 748	1.72	6 308
	Germany	739 792	739 792	739 792	15 448	724 344	2.09	5 451
	Greece	102 868	100 203	100 203	1 266	98 937	1.26	6 403
	Hungary	96 838	91 297	91 297	1 992	89 305	2.18	5 132
	Iceland	4 232	4 177	4 177	35	4 142	0.84	3 294
	Ireland	61 999	61 188	61 188	59	61 129	0.10	5 577
	Israel	136 848	128 419	128 419	10 613	117 806	8.26	6 623
	Italy	616 185	544 279	544 279	748	543 531	0.14	11 785
	Japan	1 186 849	1 159 226	1 159 226	27 743	1 131 483	2.39	6 109
	Korea	517 040	517 040	517 040	2 489	514 551	0.48	6 650
	Latvia	17 977	17 677	17 677	692	16 985	3.92	5 303
	Lithuania	27 075	25 998	25 998	494	25 504	1.90	6 885
	Luxembourg	6 291	5 952	5 952	156	5 796	2.62	5 230
	Mexico	2 231 751	1 697 100	1 697 100	8 013	1 689 087	0.47	7 299
	Netherlands	208 704	204 753	204 753	10 347	194 406	5.05	4 765
	New Zealand	59 700	58 131	58 131	857	57 274	1.47	6 173
	Norway	60 968	60 794	60 794	852	59 942	1.40	5 813
	Poland	354 020	331 850	331 850	6 853	324 997	2.07	5 625
	Portugal	112 977	110 732	110 732	709	110 023	0.64	5 932
	Slovak Republic	51 526	50 100	50 100	587	49 513	1.17	5 965
	Slovenia	17 501	18 236	18 236	337	17 899	1.85	6 401
	Spain	454 168	436 560	436 560	2 368	434 192	0.54	35 943
	Sweden	108 622	107 824	107 824	1 492	106 332	1.38	5 504
	Switzerland	80 590	78 059	78 059	3 227	74 832	4.13	5 822
	Turkey	1 218 693	1 038 993	1 038 993	43 928	995 065	4.23	6 890
	United Kingdom	703 991	697 603	697 603	1 315	64 076	2.01	13 818
	United States	4 133 719	4 058 637	4 058 637	24 757	4 033 880	0.61	4 838

Notes: For a full explanation of the details in this table please refer to the *PISA 2018 Technical Report* (OECD, forthcoming[1]).

The figure for total national population of 15-year-olds enrolled in Column 2 may occasionally be larger than the total number of 15-year-olds in Column 1 due to differing data sources.

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Table I.A2.1 [2/4] **PISA target populations and samples**

		Population and sample information						
		Total population of 15-year-olds	Total enrolled population of 15-year-olds at grade 7 or above	Total in national desired target population	Total school-level exclusions	Total in national desired target population after all school exclusions and before within-school exclusions	School-level exclusion rate (%)	Number of participating students
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
Partners	Albania	36 955	30 160	30 160	0	30 160	0.00	6 359
	Argentina	702 788	678 151	678 151	5 597	672 554	0.83	11 975
	Baku (Azerbaijan)	43 798	22 672	22 672	454	22 218	2.00	6 827
	Belarus	89 440	82 580	82 580	1 440	81 140	1.74	5 803
	Bosnia and Herzegovina	35 056	32 313	32 313	243	32 070	0.75	6 480
	Brazil	3 132 463	2 980 084	2 980 084	74 772	2 905 312	2.51	10 691
	Brunei Darussalam	7 081	7 384	7 384	0	7 384	0.00	6 828
	B-S-J-Z (China)	1 221 746	1 097 296	1 097 296	33 279	1 064 017	3.03	12 058
	Bulgaria	66 499	51 674	51 674	388	51 286	0.75	5 294
	Costa Rica	72 444	58 789	58 789	0	58 789	0.00	7 221
	Croatia	39 812	30 534	30 534	409	30 125	1.34	6 609
	Cyprus	8 285	8 285	8 277	138	8 139	1.67	5 503
	Dominican Republic	192 198	148 033	148 033	2 755	145 278	1.86	5 674
	Georgia	46 605	41 750	41 750	1 018	40 732	2.44	5 572
	Hong Kong (China)	51 935	51 328	51 328	643	50 685	1.25	6 037
	Indonesia	4 439 086	3 684 980	3 684 980	3 892	3 681 088	0.11	12 098
	Jordan	212 777	132 291	132 291	90	132 201	0.07	8 963
	Kazakhstan	230 646	230 018	230 018	9 814	220 204	4.27	19 507
	Kosovo	30 494	27 288	27 288	87	27 201	0.32	5 058
	Lebanon	61 979	59 687	59 687	1 300	58 387	2.18	5 614
	Macao (China)	4 300	3 845	3 845	14	3 831	0.36	3 775
	Malaysia	537 800	455 358	455 358	3 503	451 855	0.77	6 111
	Malta	4 039	4 056	4 056	37	4 019	0.91	3 363
	Moldova	29 716	29 467	29 467	78	29 389	0.26	5 367
	Montenegro	7 484	7 432	7 432	40	7 392	0.54	6 666
	Morocco	601 250	415 806	415 806	8 292	407 514	1.99	6 814
	North Macedonia	18 812	18 812	18 812	298	18 514	1.59	5 569
	Panama	72 084	60 057	60 057	585	59 472	0.97	6 270
	Peru	580 690	484 352	484 352	10 483	473 869	2.16	6 086
	Philippines	2 063 564	1 734 997	1 692 950	42 290	1 650 660	2.50	7 233
	Qatar	16 492	16 408	16 408	245	16 163	1.49	13 828
	Romania	203 940	171 685	171 685	4 653	167 032	2.71	5 075
	Russia	1 343 738	1 339 706	1 339 706	48 114	1 291 592	3.59	7 608
	Saudi Arabia	418 788	406 768	375 914	8 940	366 974	2.38	6 136
	Serbia	69 972	66 729	66 729	1 175	65 554	1.76	6 609
	Singapore	46 229	45 178	45 178	552	44 626	1.22	6 676
	Chinese Taipei	246 260	240 241	240 241	1 978	238 263	0.82	7 243
	Thailand	795 130	696 833	696 833	10 014	686 819	1.44	8 633
	Ukraine	351 424	321 833	320 636	8 352	312 284	2.60	5 998
	United Arab Emirates	59 275	59 203	59 178	847	58 331	1.43	19 277
	Uruguay	50 965	46 768	46 768	0	46 768	0.00	5 263
	Viet Nam	1 332 000	1 251 842	1 251 842	6 169	1 245 673	0.49	5 377

Notes: For a full explanation of the details in this table please refer to the *PISA 2018 Technical Report* (OECD, forthcoming[1]).

The figure for total national population of 15-year-olds enrolled in Column 2 may occasionally be larger than the total number of 15-year-olds in Column 1 due to differing data sources.

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Table I.A2.1 [3/4] **PISA target populations and samples**

		Population and sample information					Coverage indices		
		Weighted number of participating students	Number of excluded students	Weighted number of excluded students	Within-school exclusion rate (%)	Overall exclusion rate (%)	Coverage Index 1: Coverage of national desired population	Coverage Index 2: Coverage of national enrolled population	Coverage Index 3: Coverage of 15-year-old population
		(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
OECD	Australia	257 779	716	10 249	3.82	5.72	0.943	0.943	0.894
	Austria	75 077	117	1 379	1.80	2.54	0.975	0.975	0.889
	Belgium	118 025	45	494	0.42	1.94	0.981	0.981	0.936
	Canada	335 197	1 481	17 496	4.96	6.87	0.931	0.920	0.863
	Chile	213 832	68	2 029	0.94	1.93	0.981	0.980	0.893
	Colombia	529 976	28	1 812	0.34	0.49	0.995	0.995	0.619
	Czech Republic	87 808	1	11	0.01	1.67	0.983	0.983	0.954
	Denmark	59 967	444	3 009	4.78	5.70	0.943	0.943	0.878
	Estonia	11 414	96	195	1.68	5.03	0.950	0.950	0.931
	Finland	56 172	157	1 491	2.59	3.42	0.966	0.966	0.963
	France	756 477	56	6 644	0.87	2.58	0.974	0.974	0.913
	Germany	734 915	42	4 847	0.66	2.73	0.973	0.973	0.993
	Greece	95 370	52	798	0.83	2.08	0.979	0.979	0.927
	Hungary	86 754	75	1 353	1.54	3.68	0.963	0.963	0.896
	Iceland	3 875	209	212	5.19	5.99	0.940	0.940	0.916
	Ireland	59 639	257	2 370	3.82	3.91	0.961	0.961	0.962
	Israel	110 645	152	2 399	2.12	10.21	0.898	0.898	0.809
	Italy	521 223	93	3 219	0.61	0.75	0.992	0.992	0.846
	Japan	1 078 921	0	0	0.00	2.39	0.976	0.976	0.909
	Korea	455 544	7	378	0.08	0.56	0.994	0.994	0.881
	Latvia	15 932	23	62	0.38	4.29	0.957	0.957	0.886
	Lithuania	24 453	95	360	1.45	3.32	0.967	0.967	0.903
	Luxembourg	5 478	315	315	5.44	7.92	0.921	0.921	0.871
	Mexico	1 480 904	44	11 457	0.77	1.24	0.988	0.988	0.664
	Netherlands	190 281	78	2 407	1.25	6.24	0.938	0.938	0.912
	New Zealand	53 000	443	3 016	5.38	6.78	0.932	0.932	0.888
	Norway	55 566	452	3 906	6.57	7.88	0.921	0.921	0.911
	Poland	318 724	116	5 635	1.74	3.77	0.962	0.962	0.900
	Portugal	98 628	158	1 749	1.74	2.37	0.976	0.976	0.873
	Slovak Republic	44 418	12	72	0.16	1.33	0.987	0.987	0.862
	Slovenia	17 138	124	298	1.71	3.52	0.965	0.965	0.979
	Spain	416 703	747	8 951	2.10	2.63	0.974	0.974	0.918
	Sweden	93 129	681	10 163	9.84	11.09	0.889	0.889	0.857
	Switzerland	71 683	152	1 955	2.66	6.68	0.933	0.933	0.889
	Turkey	884 971	95	13 463	1.50	5.66	0.943	0.943	0.726
	United Kingdom	597 240	688	20 562	3.33	5.45	0.945	0.945	0.848
	United States	3 559 045	194	119 057	3.24	3.83	0.962	0.962	0.861

Notes: For a full explanation of the details in this table please refer to the *PISA 2018 Technical Report* (OECD, forthcoming[1]).

The figure for total national population of 15-year-olds enrolled in Column 2 may occasionally be larger than the total number of 15-year-olds in Column 1 due to differing data sources.

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Table I.A2.1 [4/4] **PISA target populations and samples**

		Population and sample information					Coverage indices		
		Weighted number of participating students	Number of excluded students	Weighted number of excluded students	Within-school exclusion rate (%)	Overall exclusion rate (%)	Coverage Index 1: Coverage of national desired population	Coverage Index 2: Coverage of national enrolled population	Coverage Index 3: Coverage of 15-year-old population
		(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Partners	Albania	27 963	0	0	0.00	0.00	1.000	1.000	0.757
	Argentina	566 486	118	4 083	0.72	1.54	0.985	0.985	0.806
	Baku (Azerbaijan)	20 271	0	0	0.00	2.00	0.980	0.980	0.463
	Belarus	78 333	31	462	0.59	2.32	0.977	0.977	0.876
	Bosnia and Herzegovina	28 843	24	106	0.36	1.11	0.989	0.989	0.823
	Brazil	2 036 861	41	8 180	0.40	2.90	0.971	0.971	0.650
	Brunei Darussalam	6 899	53	53	0.76	0.76	0.992	0.992	0.974
	B-S-J-Z (China)	992 302	34	1 452	0.15	3.17	0.968	0.968	0.812
	Bulgaria	47 851	80	685	1.41	2.15	0.978	0.978	0.720
	Costa Rica	45 475	39	249	0.54	0.54	0.995	0.995	0.628
	Croatia	35 462	135	637	1.76	3.08	0.969	0.969	0.891
	Cyprus	7 639	201	351	4.40	5.99	0.940	0.939	0.922
	Dominican Republic	140 330	0	0	0.00	1.86	0.981	0.981	0.730
	Georgia	38 489	26	180	0.46	2.89	0.971	0.971	0.826
	Hong Kong (China)	51 101	0	0	0.00	1.25	0.987	0.987	0.984
	Indonesia	3 768 508	0	0	0.00	0.11	0.999	0.999	0.849
	Jordan	114 901	44	550	0.48	0.54	0.995	0.995	0.540
	Kazakhstan	212 229	300	3 624	1.68	5.87	0.941	0.941	0.920
	Kosovo	25 739	26	132	0.51	0.83	0.992	0.992	0.844
	Lebanon	53 726	1	8	0.02	2.19	0.978	0.978	0.867
	Macao (China)	3 799	0	0	0.00	0.36	0.996	0.996	0.883
	Malaysia	388 638	37	2 419	0.62	1.38	0.986	0.986	0.723
	Malta	3 925	56	56	1.41	2.31	0.977	0.977	0.972
	Moldova	28 252	35	207	0.73	0.99	0.990	0.990	0.951
	Montenegro	7 087	4	12	0.18	0.71	0.993	0.993	0.947
	Morocco	386 408	4	220	0.06	2.05	0.980	0.980	0.643
	North Macedonia	17 820	18	85	0.48	2.05	0.979	0.979	0.947
	Panama	38 540	24	106	0.27	1.24	0.988	0.988	0.535
	Peru	424 586	20	1 360	0.32	2.48	0.975	0.975	0.731
	Philippines	1 400 584	10	2 039	0.15	2.64	0.974	0.950	0.679
	Qatar	15 228	192	192	1.25	2.72	0.973	0.973	0.923
	Romania	148 098	24	930	0.62	3.32	0.967	0.967	0.726
	Russia	1 257 388	96	14 905	1.17	4.72	0.953	0.953	0.936
	Saudi Arabia	354 013	1	53	0.01	2.39	0.976	0.902	0.845
	Serbia	61 895	42	409	0.66	2.41	0.976	0.976	0.885
	Singapore	44 058	35	232	0.52	1.74	0.983	0.983	0.953
	Chinese Taipei	226 698	38	1 297	0.57	1.39	0.986	0.986	0.921
	Thailand	575 713	17	1 002	0.17	1.61	0.984	0.984	0.724
	Ukraine	304 855	34	1 704	0.56	3.15	0.969	0.965	0.867
	United Arab Emirates	54 403	166	331	0.60	2.03	0.980	0.979	0.918
	Uruguay	39 746	25	164	0.41	0.41	0.996	0.996	0.780
	Viet Nam	926 260	0	0	0.00	0.49	0.995	0.995	0.695

Notes: For a full explanation of the details in this table please refer to the *PISA 2018 Technical Report* (OECD, forthcoming[1]).

The figure for total national population of 15-year-olds enrolled in Column 2 may occasionally be larger than the total number of 15-year-olds in Column 1 due to differing data sources.

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Table I.A2.2 [1/4] **Change in the enrolment of 15-year-olds in grade 7 and above (PISA 2003 through PISA 2018)**

		PISA 2018				PISA 2015				PISA 2012			
		Total population of 15-year-olds	Total population of 15-year-olds enrolled in grade 7 or above	Weighted number of participating students	Coverage Index 3: Coverage of the national 15-year-old population	Total population of 15-year-olds	Total population of 15-year-olds enrolled in grade 7 or above	Weighted number of participating students	Coverage Index 3: Coverage of the national 15-year-old population	Total population of 15-year-olds	Total population of 15-year-olds enrolled in grade 7 or above	Weighted number of participating students	Coverage Index 3: Coverage of the national 15-year-old population
OECD	**Australia**	288 195	284 687	257 779	0.89	282 888	282 547	256 329	0.91	291 967	288 159	250 779	0.86
	Austria	84 473	80 108	75 077	0.89	88 013	82 683	73 379	0.83	93 537	89 073	82 242	0.88
	Belgium	126 031	122 808	118 025	0.94	123 630	121 954	114 902	0.93	123 469	121 493	117 912	0.95
	Canada	388 205	400 139	335 197	0.86	396 966	381 660	331 546	0.84	417 873	409 453	348 070	0.83
	Chile	239 492	215 580	213 832	0.89	255 440	245 947	203 782	0.80	274 803	252 733	229 199	0.83
	Colombia	856 081	645 339	529 976	0.62	760 919	674 079	567 848	0.75	889 729	620 422	560 805	0.63
	Czech Republic	92 013	90 835	87 808	0.95	90 391	90 076	84 519	0.94	96 946	93 214	82 101	0.85
	Denmark	68 313	67 414	59 967	0.88	68 174	67 466	60 655	0.89	72 310	70 854	65 642	0.91
	Estonia	12 257	12 120	11 414	0.93	11 676	11 491	10 834	0.93	12 649	12 438	11 634	0.92
	Finland	58 325	57 552	56 172	0.96	58 526	58 955	56 934	0.97	62 523	62 195	60 047	0.96
	France	828 196	798 480	756 477	0.91	807 867	778 679	734 944	0.91	792 983	755 447	701 399	0.88
	Germany	739 792	739 792	734 915	0.99	774 149	774 149	743 969	0.96	798 136	798 136	756 907	0.95
	Greece	102 868	100 203	95 370	0.93	105 530	105 253	96 157	0.91	110 521	105 096	96 640	0.87
	Hungary	96 838	91 297	86 754	0.90	94 515	90 065	84 644	0.90	111 761	108 816	91 179	0.82
	Iceland	4 232	4 177	3 875	0.92	4 250	4 195	3 966	0.93	4 505	4 491	4 169	0.93
	Ireland	61 999	61 188	59 639	0.96	61 234	59 811	59 082	0.96	59 296	57 979	54 010	0.91
	Israel	136 848	128 419	110 645	0.81	124 852	118 997	117 031	0.94	118 953	113 278	107 745	0.91
	Italy	616 185	544 279	521 223	0.85	616 761	567 268	495 093	0.80	605 490	566 973	521 288	0.86
	Japan	1 186 849	1 159 226	1 078 921	0.91	1 201 615	1 175 907	1 138 349	0.95	1 241 786	1 214 756	1 128 179	0.91
	Korea	517 040	517 040	455 544	0.88	620 687	619 950	569 106	0.92	687 104	672 101	603 632	0.88
	Latvia	17 977	17 677	15 932	0.89	17 255	16 955	15 320	0.89	18 789	18 389	16 054	0.85
	Lithuania	27 075	25 998	24 453	0.90	33 163	32 097	29 915	0.90	38 524	35 567	33 042	0.86
	Luxembourg	6 291	5 952	5 478	0.87	6 327	6 053	5 540	0.88	6 187	6 082	5 523	0.85
	Mexico	2 231 751	1 697 100	1 480 904	0.66	2 257 399	1 401 247	1 392 995	0.62	2 114 745	1 472 875	1 326 025	0.63
	Netherlands	208 704	204 753	190 281	0.91	203 234	200 976	191 817	0.94	194 000	193 190	196 262	1.01
	New Zealand	59 700	58 131	53 000	0.89	60 162	57 448	54 274	0.90	60 940	59 118	53 414	0.88
	Norway	60 968	60 794	55 566	0.91	63 642	63 491	58 083	0.91	64 917	64 777	59 432	0.92
	Poland	354 020	331 850	318 724	0.90	380 366	361 600	345 709	0.91	425 597	410 700	379 275	0.89
	Portugal	112 977	110 732	98 628	0.87	110 939	101 107	97 214	0.88	108 728	127 537	96 034	0.88
	Slovak Republic	51 526	50 100	44 418	0.86	55 674	55 203	49 654	0.89	59 723	59 367	54 486	0.91
	Slovenia	17 501	18 236	17 138	0.98	18 078	17 689	16 773	0.93	19 471	18 935	18 303	0.94
	Spain	454 168	436 560	416 703	0.92	440 084	414 276	399 935	0.91	423 444	404 374	374 266	0.88
	Sweden	108 622	107 824	93 129	0.86	97 749	97 210	91 491	0.94	102 087	102 027	94 988	0.93
	Switzerland	80 590	78 059	71 683	0.89	85 495	83 655	82 223	0.96	87 200	85 239	79 679	0.91
	Turkey	1 218 693	1 038 993	884 971	0.73	1 324 089	1 100 074	925 366	0.70	1 266 638	965 736	866 681	0.68
	United Kingdom	703 991	697 603	597 240	0.85	747 593	746 328	627 703	0.84	738 066	745 581	688 236	0.93
	United States	4 133 719	4 058 637	3 559 045	0.86	4 220 325	3 992 053	3 524 497	0.84	3 985 714	4 074 457	3 536 153	0.89

Notes: Costa Rica, Georgia, Malta and Moldova conducted the PISA 2009 assessment in 2010 as part of PISA 2009+.

For Albania, Brazil, Chile, Jordan, the Netherlands, Romania, Uruguay and Viet Nam, estimates of the total population of 15-year-olds across years have been updated to align data sources with those used in 2018. Therefore, the estimates reported in this table do not match those that appear in previous PISA reports.

For Mexico, in 2015, the total population of 15-year-olds enrolled in grade 7 or above is an estimate of the target population size of the sample frame from which the 15-year-old students were selected for the PISA test. At the time Mexico provided the information to PISA, the official figure for this population was 1 573 952.

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Table I.A2.2 [2/4] **Change in the enrolment of 15-year-olds in grade 7 and above (PISA 2003 through PISA 2018)**

		PISA 2018				PISA 2015				PISA 2012			
		Total population of 15-year-olds	Total population of 15-year-olds enrolled in grade 7 or above	Weighted number of participating students	Coverage Index 3: Coverage of the national 15-year-old population	Total population of 15-year-olds	Total population of 15-year-olds enrolled in grade 7 or above	Weighted number of participating students	Coverage Index 3: Coverage of the national 15-year-old population	Total population of 15-year-olds	Total population of 15-year-olds enrolled in grade 7 or above	Weighted number of participating students	Coverage Index 3: Coverage of the national 15-year-old population
Partners	Albania	36 955	30 160	27 963	0.76	45 667	45 163	40 896	0.90	55 099	50 157	42 466	0.77
	Argentina	702 788	678 151	566 486	0.81	718 635	578 308	394 917	0.55	684 879	637 603	545 942	0.80
	Baku (Azerbaijan)	43 798	22 672	20 271	0.46	m	m	m	m	m	m	m	m
	Belarus	89 440	82 580	78 333	0.88	m	m	m	m	m	m	m	m
	Bosnia and Herzegovina	35 056	32 313	28 843	0.82	m	m	m	m	m	m	m	m
	Brazil	3 132 463	2 980 084	2 036 861	0.65	3 379 467	2 853 388	2 425 961	0.72	3 520 371	2 786 064	2 470 804	0.70
	Brunei Darussalam	7 081	7 384	6 899	0.97	m	m	m	m	m	m	m	m
	B-S-J-Z (China)	1 221 746	1 097 296	992 302	0.81	m	m	m	m	m	m	m	m
	Bulgaria	66 499	51 674	47 851	0.72	66 601	59 397	53 685	0.81	70 188	59 684	54 255	0.77
	Costa Rica	72 444	58 789	45 475	0.63	81 773	66 524	51 897	0.63	81 489	64 326	40 384	0.50
	Croatia	39 812	30 534	35 462	0.89	45 031	35 920	40 899	0.91	48 155	46 550	45 502	0.94
	Cyprus	8 285	8 285	7 639	0.92	9 255	9 255	8 785	0.95	9 956	9 956	9 650	0.97
	Dominican Republic	192 198	148 033	140 330	0.73	193 153	139 555	132 300	0.68	m	m	m	m
	Georgia	46 605	41 750	38 489	0.83	48 695	43 197	38 334	0.79	m	m	m	m
	Hong Kong (China)	51 935	51 328	51 101	0.98	65 100	61 630	57 662	0.89	84 200	77 864	70 636	0.84
	Indonesia	4 439 086	3 684 980	3 768 508	0.85	4 534 216	3 182 816	3 092 773	0.68	4 174 217	3 599 844	2 645 155	0.63
	Jordan	212 777	132 291	114 901	0.54	196 734	121 729	108 669	0.55	153 293	125 333	111 098	0.72
	Kazakhstan	230 646	230 018	212 229	0.92	211 407	209 555	192 909	0.91	258 716	247 048	208 411	0.81
	Kosovo	30 494	27 288	25 739	0.84	31 546	28 229	22 333	0.71	m	m	m	m
	Lebanon	61 979	59 687	53 726	0.87	64 044	62 281	42 331	0.66	m	m	m	m
	Macao (China)	4 300	3 845	3 799	0.88	5 100	4 417	4 507	0.88	6 600	5 416	5 366	0.81
	Malaysia	537 800	455 358	388 638	0.72	540 000	448 838	412 524	0.76	544 302	457 999	432 080	0.79
	Malta	4 039	4 056	3 925	0.97	4 397	4 406	4 296	0.98	m	m	m	m
	Moldova	29 716	29 467	28 252	0.95	31 576	30 601	29 341	0.93	m	m	m	m
	Montenegro	7 484	7 432	7 087	0.95	7 524	7 506	6 777	0.90	8 600	8 600	7 714	0.90
	Morocco	601 250	415 806	386 408	0.64	m	m	m	m	m	m	m	m
	North Macedonia	18 812	18 812	17 820	0.95	16 719	16 717	15 847	0.95	m	m	m	m
	Panama	72 084	60 057	38 540	0.53	m	m	m	m	m	m	m	m
	Peru	580 690	484 352	424 586	0.73	580 371	478 229	431 738	0.74	584 294	508 969	419 945	0.72
	Philippines	2 063 564	1 734 997	1 400 584	0.68	m	m	m	m	m	m	m	m
	Qatar	16 492	16 408	15 228	0.92	13 871	13 850	12 951	0.93	11 667	11 532	11 003	0.94
	Romania	203 940	171 685	148 098	0.73	218 846	176 334	164 216	0.75	212 694	146 243	140 915	0.66
	Russia	1 343 738	1 339 706	1 257 388	0.94	1 176 473	1 172 943	1 120 932	0.95	1 272 632	1 268 814	1 172 539	0.92
	Saudi Arabia	418 788	406 768	354 013	0.85	m	m	m	m	m	m	m	m
	Serbia	69 972	66 729	61 895	0.88	m	m	m	m	85 121	75 870	67 934	0.80
	Singapore	46 229	45 178	44 058	0.95	48 218	47 050	46 224	0.96	53 637	52 163	51 088	0.95
	Chinese Taipei	246 260	240 241	226 698	0.92	m	m	m	m	m	m	m	m
	Thailand	795 130	696 833	575 713	0.72	895 513	756 917	634 795	0.71	982 080	784 897	703 012	0.72
	Ukraine	351 424	321 833	304 855	0.87	m	m	m	m	m	m	m	m
	United Arab Emirates	59 275	59 203	54 403	0.92	51 687	51 518	46 950	0.91	48 824	48 446	40 612	0.83
	Uruguay	50 965	46 768	39 746	0.78	53 533	43 865	38 287	0.72	54 638	46 442	39 771	0.73
	Viet Nam	1 332 000	1 251 842	926 260	0.70	1 340 000	1 032 599	874 859	0.65	1 393 000	1 091 462	956 517	0.69

Notes: Costa Rica, Georgia, Malta and Moldova conducted the PISA 2009 assessment in 2010 as part of PISA 2009+.

For Albania, Brazil, Chile, Jordan, the Netherlands, Romania, Uruguay and Viet Nam, estimates of the total population of 15-year-olds across years have been updated to align data sources with those used in 2018. Therefore, the estimates reported in this table do not match those that appear in previous PISA reports.

For Mexico, in 2015, the total population of 15-year-olds enrolled in grade 7 or above is an estimate of the target population size of the sample frame from which the 15-year-old students were selected for the PISA test. At the time Mexico provided the information to PISA, the official figure for this population was 1 573 952.

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Table I.A2.2 [3/4] **Change in the enrolment of 15-year-olds in grade 7 and above (PISA 2003 through PISA 2018)**

		PISA 2009				PISA 2006				PISA 2003			
		Total population of 15-year-olds	Total population of 15-year-olds enrolled in grade 7 or above	Weighted number of participating students	Coverage Index 3: Coverage of the national 15-year-old population	Total population of 15-year-olds	Total population of 15-year-olds enrolled in grade 7 or above	Weighted number of participating students	Coverage Index 3: Coverage of the national 15-year-old population	Total population of 15-year-olds	Total population of 15-year-olds enrolled in grade 7 or above	Weighted number of participating students	Coverage Index 3: Coverage of the national 15-year-old population
OECD	**Australia**	286 334	269 669	240 851	0.84	270 115	256 754	234 940	0.87	268 164	250 635	235 591	0.88
	Austria	99 818	94 192	87 326	0.87	97 337	92 149	89 925	0.92	94 515	89 049	85 931	0.91
	Belgium	126 377	126 335	119 140	0.94	124 943	124 557	123 161	0.99	120 802	118 185	111 831	0.93
	Canada	430 791	426 590	360 286	0.84	426 967	428 876	370 879	0.87	398 865	399 265	330 436	0.83
	Chile	290 056	265 542	247 270	0.85	297 085	255 459	233 526	0.79	m	m	m	m
	Colombia	893 057	582 640	522 388	0.58	897 477	543 630	537 262	0.60	m	m	m	m
	Czech Republic	122 027	116 153	113 951	0.93	127 748	124 764	128 827	1.01	130 679	126 348	121 183	0.93
	Denmark	70 522	68 897	60 855	0.86	66 989	65 984	57 013	0.85	59 156	58 188	51 741	0.87
	Estonia	14 248	14 106	12 978	0.91	19 871	19 623	18 662	0.94	m	m	m	m
	Finland	66 198	66 198	61 463	0.93	66 232	66 232	61 387	0.93	61 107	61 107	57 883	0.95
	France	749 808	732 825	677 620	0.90	809 375	809 375	739 428	0.91	809 053	808 276	734 579	0.91
	Germany	852 044	852 044	766 993	0.90	951 535	1 062 920	903 512	0.95	951 800	916 869	884 358	0.93
	Greece	102 229	105 664	93 088	0.91	107 505	110 663	96 412	0.90	111 286	108 314	105 131	0.94
	Hungary	121 155	118 387	105 611	0.87	124 444	120 061	106 010	0.85	129 138	123 762	107 044	0.83
	Iceland	4 738	4 738	4 410	0.93	4 820	4 777	4 624	0.96	4 168	4 112	3 928	0.94
	Ireland	56 635	55 464	52 794	0.93	58 667	57 648	55 114	0.94	61 535	58 997	54 850	0.89
	Israel	122 701	112 254	103 184	0.84	122 626	109 370	93 347	0.76	m	m	m	m
	Italy	586 904	573 542	506 733	0.86	578 131	639 971	520 055	0.90	561 304	574 611	481 521	0.86
	Japan	1 211 642	1 189 263	1 113 403	0.92	1 246 207	1 222 171	1 113 701	0.89	1 365 471	1 328 498	1 240 054	0.91
	Korea	717 164	700 226	630 030	0.88	660 812	627 868	576 669	0.87	606 722	606 370	533 504	0.88
	Latvia	28 749	28 149	23 362	0.81	34 277	33 659	29 232	0.85	37 544	37 138	33 643	0.90
	Lithuania	51 822	43 967	40 530	0.78	53 931	51 808	50 329	0.93	m	m	m	m
	Luxembourg	5 864	5 623	5 124	0.87	4 595	4 595	4 733	1.03	4 204	4 204	4 080	0.97
	Mexico	2 151 771	1 425 397	1 305 461	0.61	2 200 916	1 383 364	1 190 420	0.54	2 192 452	1 273 163	1 071 650	0.49
	Netherlands	199 000	198 334	183 546	0.92	197 046	193 769	189 576	0.96	194 216	194 216	184 943	0.95
	New Zealand	63 460	60 083	55 129	0.87	63 800	59 341	53 398	0.84	55 440	53 293	48 638	0.88
	Norway	63 352	62 948	57 367	0.91	61 708	61 449	59 884	0.97	56 060	55 648	52 816	0.94
	Poland	482 500	473 700	448 866	0.93	549 000	546 000	515 993	0.94	589 506	569 294	534 900	0.91
	Portugal	115 669	107 583	96 820	0.84	115 426	100 816	90 079	0.78	109 149	99 216	96 857	0.89
	Slovak Republic	72 826	72 454	69 274	0.95	79 989	78 427	76 201	0.95	84 242	81 945	77 067	0.91
	Slovenia	20 314	19 571	18 773	0.92	23 431	23 018	20 595	0.88	m	m	m	m
	Spain	433 224	425 336	387 054	0.89	439 415	436 885	381 686	0.87	454 064	418 005	344 372	0.76
	Sweden	121 486	121 216	113 054	0.93	129 734	127 036	126 393	0.97	109 482	112 258	107 104	0.98
	Switzerland	90 623	89 423	80 839	0.89	87 766	86 108	89 651	1.02	83 247	81 020	86 491	1.04
	Turkey	1 336 842	859 172	757 298	0.57	1 423 514	800 968	665 477	0.47	1 351 492	725 030	481 279	0.36
	United Kingdom	786 626	786 825	683 380	0.87	779 076	767 248	732 004	0.94	768 180	736 785	698 579	0.91
	United States	4 103 738	4 210 475	3 373 264	0.82	4 192 939	4 192 939	3 578 040	0.85	3 979 116	3 979 116	3 147 089	0.79

Notes: Costa Rica, Georgia, Malta and Moldova conducted the PISA 2009 assessment in 2010 as part of PISA 2009+.

For Albania, Brazil, Chile, Jordan, the Netherlands, Romania, Uruguay and Viet Nam, estimates of the total population of 15-year-olds across years have been updated to align data sources with those used in 2018. Therefore, the estimates reported in this table do not match those that appear in previous PISA reports.

For Mexico, in 2015, the total population of 15-year-olds enrolled in grade 7 or above is an estimate of the target population size of the sample frame from which the 15-year-old students were selected for the PISA test. At the time Mexico provided the information to PISA, the official figure for this population was 1 573 952.

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Table I.A2.2 [4/4] **Change in the enrolment of 15-year-olds in grade 7 and above (PISA 2003 through PISA 2018)**

		PISA 2009				PISA 2006				PISA 2003			
		Total population of 15-year-olds	Total population of 15-year-olds enrolled in grade 7 or above	Weighted number of participating students	Coverage Index 3: Coverage of the national 15-year-old population	Total population of 15-year-olds	Total population of 15-year-olds enrolled in grade 7 or above	Weighted number of participating students	Coverage Index 3: Coverage of the national 15-year-old population	Total population of 15-year-olds	Total population of 15-year-olds enrolled in grade 7 or above	Weighted number of participating students	Coverage Index 3: Coverage of the national 15-year-old population
Partners	Albania	55 587	42 767	34 134	0.61	m	m	m	m	m	m	m	m
	Argentina	688 434	636 713	472 106	0.69	662 686	579 222	523 048	0.79	m	m	m	m
	Baku (Azerbaijan)	m	m	m	m	m	m	m	m	m	m	m	m
	Belarus	m	m	m	m	m	m	m	m	m	m	m	m
	Bosnia and Herzegovina	m	m	m	m	m	m	m	m	m	m	m	m
	Brazil	3 434 101	2 654 489	2 080 159	0.61	3 439 795	2 374 044	1 875 461	0.55	3 560 650	2 359 854	1 952 253	0.55
	Brunei Darussalam	m	m	m	m	m	m	m	m	m	m	m	m
	B-S-J-Z (China)	m	m	m	m	m	m	m	m	m	m	m	m
	Bulgaria	80 226	70 688	57 833	0.72	89 751	88 071	74 326	0.83	m	m	m	m
	Costa Rica	80 523	63 603	42 954	0.53	m	m	m	m	m	m	m	m
	Croatia	48 491	46 256	43 065	0.89	54 500	51 318	46 523	0.85	m	m	m	m
	Cyprus	m	m	m	m	m	m	m	m	m	m	m	m
	Dominican Republic	m	m	m	m	m	m	m	m	m	m	m	m
	Georgia	56 070	51 351	42 641	0.76	m	m	m	m	m	m	m	m
	Hong Kong (China)	85 000	78 224	75 548	0.89	77 398	75 542	75 145	0.97	75 000	72 631	72 484	0.97
	Indonesia	4 267 801	3 158 173	2 259 118	0.53	4 238 600	3 119 393	2 248 313	0.53	4 281 895	3 113 548	1 971 476	0.46
	Jordan	133 953	107 254	104 056	0.78	122 354	126 708	90 267	0.74	m	m	m	m
	Kazakhstan	281 659	263 206	250 657	0.89	m	m	m	m	m	m	m	m
	Kosovo	m	m	m	m	m	m	m	m	m	m	m	m
	Lebanon	m	m	m	m	m	m	m	m	m	m	m	m
	Macao (China)	7 500	5 969	5 978	0.80	m	m	m	m	8 318	6 939	6 546	0.79
	Malaysia	539 295	492 758	421 448	0.78	m	m	m	m	m	m	m	m
	Malta	5 152	4 930	4 807	0.93	m	m	m	m	m	m	m	m
	Moldova	47 873	44 069	43 195	0.90	m	m	m	m	m	m	m	m
	Montenegro	8 500	8 493	7 728	0.91	9 190	8 973	7 734	0.84	m	m	m	m
	Morocco	m	m	m	m	m	m	m	m	m	m	m	m
	North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m
	Panama	57 919	43 623	30 510	0.53	m	m	m	m	m	m	m	m
	Peru	585 567	491 514	427 607	0.73	m	m	m	m	m	m	m	m
	Philippines	m	m	m	m	m	m	m	m	m	m	m	m
	Qatar	10 974	10 665	9 806	0.89	8 053	7 865	7 271	0.90	m	m	m	m
	Romania	220 264	152 084	151 130	0.69	312 483	241 890	223 887	0.72	m	m	m	m
	Russia	1 673 085	1 667 460	1 290 047	0.77	2 243 924	2 077 231	1 810 856	0.81	2 496 216	2 366 285	2 153 373	0.86
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m
	Serbia	85 121	75 128	70 796	0.83	88 584	80 692	73 907	0.83	m	m	m	m
	Singapore	54 982	54 212	51 874	0.94	m	m	m	m	m	m	m	m
	Chinese Taipei	m	m	m	m	m	m	m	m	m	m	m	m
	Thailand	949 891	763 679	691 916	0.73	895 924	727 860	644 125	0.72	927 070	778 267	637 076	0.69
	Ukraine	m	m	m	m	m	m	m	m	m	m	m	m
	United Arab Emirates	41 564	40 447	38 707	0.93	m	m	m	m	m	m	m	m
	Uruguay	53 801	43 281	33 971	0.63	52 119	40 815	36 011	0.69	53 948	40 023	33 775	0.63
	Viet Nam	m	m	m	m	m	m	m	m	m	m	m	m

Notes: Costa Rica, Georgia, Malta and Moldova conducted the PISA 2009 assessment in 2010 as part of PISA 2009+.

For Albania, Brazil, Chile, Jordan, the Netherlands, Romania, Uruguay and Viet Nam, estimates of the total population of 15-year-olds across years have been updated to align data sources with those used in 2018. Therefore, the estimates reported in this table do not match those that appear in previous PISA reports.

For Mexico, in 2015, the total population of 15-year-olds enrolled in grade 7 or above is an estimate of the target population size of the sample frame from which the 15-year-old students were selected for the PISA test. At the time Mexico provided the information to PISA, the official figure for this population was 1 573 952.

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Table I.A2.4 [1/2] **Exclusions**

		Student exclusions (unweighted)						Student exclusions (weighted)					
		Number of excluded students with functional disability	Number of excluded students with intellectual disability	Number of excluded students because of language	Number of excluded students for other reasons	Number of excluded students because of no materials available in the language of instruction	Total number of excluded students	Number of excluded students with functional disability	Number of excluded students with intellectual disability	Number of excluded students because of language	Number of excluded students for other reasons	Number of excluded students because of no materials available in the language of instruction	Total number of excluded students
		(Code 1)	(Code 2)	(Code 3)	(Code 4)	(Code 5)		(Code 1)	(Code 2)	(Code 3)	(Code 4)	(Code 5)	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Australia	69	555	92	0	0	716	1 054	7 895	1 300	0	0	10 249
	Austria	7	49	61	0	0	117	77	531	771	0	0	1 379
	Belgium	8	19	18	0	0	45	87	211	196	0	0	494
	Canada	125	1 040	316	0	0	1 481	1 611	11 744	4 141	0	0	17 496
	Chile	6	58	4	0	0	68	173	1 727	129	0	0	2 029
	Colombia	4	24	0	0	0	28	346	1 466	0	0	0	1 812
	Czech Republic	1	0	0	0	0	1	11	0	0	0	0	11
	Denmark	15	179	88	162	0	444	98	1 453	427	1 032	0	3 009
	Estonia	3	85	8	0	0	96	8	174	13	0	0	195
	Finland	6	100	22	17	12	157	55	966	204	155	111	1 491
	France	8	28	20	0	0	56	776	3 397	2 471	0	0	6 644
	Germany	2	18	22	0	0	42	199	1 859	2 789	0	0	4 847
	Greece	2	39	11	0	0	52	29	590	179	0	0	798
	Hungary	5	20	4	46	0	75	77	432	67	777	0	1 353
	Iceland	5	133	61	10	0	209	5	135	62	10	0	212
	Ireland	39	90	45	83	0	257	367	831	420	752	0	2 370
	Israel	25	87	40	0	0	152	406	1 382	611	0	0	2 399
	Italy	0	0	0	93	0	93	0	0	0	3 219	0	3 219
	Japan	0	0	0	0	0	0	0	0	0	0	0	0
	Korea	5	1	1	0	0	7	302	74	2	0	0	378
	Latvia	2	20	1	0	0	23	5	54	2	0	0	62
	Lithuania	4	91	0	0	0	95	16	344	0	0	0	360
	Luxembourg	5	233	77	0	0	315	5	233	77	0	0	315
	Mexico	13	28	3	0	0	44	2 609	7 301	1 547	0	0	11 457
	Netherlands	7	58	9	4	0	78	236	1 813	224	134	0	2 407
	New Zealand	42	279	119	0	3	443	278	1 905	812	0	21	3 016
	Norway	17	327	108	0	0	452	147	2 814	944	0	0	3 906
	Poland	21	87	8	0	0	116	964	4 190	481	0	0	5 635
	Portugal	10	139	9	0	0	158	126	1 551	73	0	0	1 749
	Slovak Republic	1	8	0	3	0	12	5	50	0	18	0	72
	Slovenia	13	36	75	0	0	124	20	85	193	0	0	298
	Spain	39	481	227	0	0	747	423	5 400	3 128	0	0	8 951
	Sweden	0	0	0	681	0	681	0	0	0	10 163	0	10 163
	Switzerland	8	71	73	0	0	152	86	813	1 056	0	0	1 955
	Turkey	10	46	39	0	0	95	1 248	6 389	5 825	0	0	13 463
	United Kingdom	75	573	40	0	0	688	2 448	16 592	1 522	0	0	20 562
	United States	38	106	39	11	0	194	25 164	62 555	24 972	6 367	0	119 057

Note: For a full explanation of other details in this table please refer to the *PISA 2018 Technical Report* (OECD, forthcoming[1]).

Exclusion codes:

Code 1: Functional disability – student has a moderate to severe permanent physical disability.

Code 2: Intellectual disability – student has a mental or emotional disability and has either been tested as cognitively delayed or is considered in the professional opinion of qualified staff to be cognitively delayed.

Code 3: Limited assessment language proficiency – student is not a native speaker of any of the languages of the assessment in the country and has been resident in the country for less than one year.

Code 4: Other reasons defined by the national centres and approved by the international centre.

Code 5: No materials available in the language of instruction.

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Table I.A2.4 [2/2] **Exclusions**

		Student exclusions (unweighted)						Student exclusions (weighted)					
		Number of excluded students with functional disability	Number of excluded students with intellectual disability	Number of excluded students because of language	Number of excluded students for other reasons	Number of excluded students because of no materials available in the language of instruction	Total number of excluded students	Number of excluded students with functional disability	Number of excluded students with intellectual disability	Number of excluded students because of language	Number of excluded students for other reasons	Number of excluded students because of no materials available in the language of instruction	Total number of excluded students
		(Code 1)	(Code 2)	(Code 3)	(Code 4)	(Code 5)		(Code 1)	(Code 2)	(Code 3)	(Code 4)	(Code 5)	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Partners	Albania	0	0	0	0	0	0	0	0	0	0	0	0
	Argentina	21	96	1	0	0	118	871	3 199	13	0	0	4 083
	Baku (Azerbaijan)	0	0	0	0	0	0	0	0	0	0	0	0
	Belarus	30	1	0	0	0	31	449	13	0	0	0	462
	Bosnia and Herzegovina	8	16	0	0	0	24	29	77	0	0	0	106
	Brazil	4	36	1	0	0	41	693	7 100	386	0	0	8 180
	Brunei Darussalam	9	44	0	0	0	53	9	44	0	0	0	53
	B-S-J-Z (China)	2	24	8	0	0	34	49	1 194	209	0	0	1 452
	Bulgaria	4	76	0	0	0	80	31	653	0	0	0	685
	Costa Rica	22	12	5	0	0	39	139	78	31	0	0	249
	Croatia	7	84	4	0	40	135	33	397	24	0	182	637
	Cyprus	17	143	41	0	0	201	25	250	77	0	0	351
	Dominican Republic	0	0	0	0	0	0	0	0	0	0	0	0
	Georgia	6	20	0	0	0	26	46	134	0	0	0	180
	Hong Kong (China)	0	0	0	0	0	0	0	0	0	0	0	0
	Indonesia	0	0	0	0	0	0	0	0	0	0	0	0
	Jordan	25	17	2	0	0	44	322	204	23	0	0	550
	Kazakhstan	132	157	11	0	0	300	1 673	1 617	334	0	0	3 624
	Kosovo	0	14	0	0	12	26	0	53	0	0	79	132
	Lebanon	0	1	0	0	0	1	0	8	0	0	0	8
	Macao (China)	0	0	0	0	0	0	0	0	0	0	0	0
	Malaysia	15	22	0	0	0	37	968	1 451	0	0	0	2 419
	Malta	6	48	2	0	0	56	6	48	2	0	0	56
	Moldova	4	29	2	0	0	35	25	164	18	0	0	207
	Montenegro	0	4	0	0	0	4	0	12	0	0	0	12
	Morocco	4	0	0	0	0	4	220	0	0	0	0	220
	North Macedonia	2	3	0	0	13	18	4	8	0	0	73	85
	Panama	5	18	1	0	0	24	12	91	3	0	0	106
	Peru	11	9	0	0	0	20	756	603	0	0	0	1 360
	Philippines	2	8	0	0	0	10	376	1 663	0	0	0	2 039
	Qatar	30	150	12	0	0	192	30	150	12	0	0	192
	Romania	2	19	3	0	0	24	58	700	172	0	0	930
	Russia	14	81	1	0	0	96	2 126	12 620	159	0	0	14 905
	Saudi Arabia	0	1	0	0	0	1	0	53	0	0	0	53
	Serbia	8	11	2	0	21	42	71	148	16	0	174	409
	Singapore	4	22	9	0	0	35	25	145	62	0	0	232
	Chinese Taipei	9	28	1	0	0	38	320	957	20	0	0	1 297
	Thailand	1	16	0	0	0	17	75	927	0	0	0	1 002
	Ukraine	28	6	0	0	0	34	1 389	315	0	0	0	1 704
	United Arab Emirates	16	124	26	0	0	166	26	256	49	0	0	331
	Uruguay	4	20	1	0	0	25	29	131	5	0	0	164
	Viet Nam	0	0	0	0	0	0	0	0	0	0	0	0

Note: For a full explanation of other details in this table please refer to the *PISA 2018 Technical Report* (OECD, forthcoming[1]).

Exclusion codes:

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Table I.A2.6 [1/2] **Response rates**

		Initial sample – before school replacement					Final sample – after school replacement					Final sample – students within schools after school replacement				
		Weighted school participation rate before replacement (%)	Weighted number of responding schools (weighted also by enrolment)	Weighted number of schools sampled (responding and non-responding) (weighted also by enrolment)	Number of responding schools (unweighted)	Number of responding and non-responding schools (unweighted)	Weighted school participation rate before replacement (%)	Weighted number of responding schools (weighted also by enrolment)	Weighted number of schools sampled (responding and non-responding) (weighted also by enrolment)	Number of responding schools (unweighted)	Number of responding and non-responding schools (unweighted)	Weighted student participation rate before replacement (%)	Number of students assessed (weighted)	Number of students sampled (assessed and absent) (weighted)	Number of students assessed (unweighted)	Number of students sampled (assessed and absent) (unweighted)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
OECD	**Australia**	95	264 304	278 765	734	779	96	267 078	278 765	740	779	85	210 665	247 433	14 081	16 756
OECD	**Austria**	100	78 872	78 946	291	293	100	78 872	78 946	291	293	93	69 426	75 019	6 802	7 555
	Belgium	87	103 631	119 744	256	308	95	113 259	119 719	285	308	91	101 504	111 421	8 431	9 271
	Canada	86	328 935	383 699	782	914	89	339 896	383 738	804	914	84	251 025	298 737	22 440	26 252
	Chile	90	190 060	210 669	224	258	100	209 953	210 666	255	258	93	197 940	212 625	7 601	8 156
	Colombia	95	596 406	629 729	238	250	97	610 211	629 088	244	250	93	475 820	512 614	7 480	8 036
	Czech Republic	99	86 650	87 689	330	334	99	86 650	87 689	330	334	92	79 903	86 943	6 996	7 628
	Denmark	88	52 392	59 459	328	371	93	55 170	59 109	344	371	86	48 473	56 078	7 607	8 891
	Estonia	100	11 684	11 684	231	231	100	11 684	11 684	231	231	92	10 532	11 436	5 316	5 786
	Finland	99	57 420	57 710	213	214	100	57 710	57 710	214	214	93	52 102	56 124	5 649	6 084
	France	98	769 117	784 728	244	252	100	783 049	784 728	250	252	93	698 721	754 842	6 295	6 817
	Germany	96	739 666	773 082	215	226	98	759 094	773 040	221	226	90	652 025	721 258	5 431	6 036
	Greece	85	83 158	97 793	212	256	96	94 540	98 005	240	256	96	88 019	91 991	6 371	6 664
	Hungary	98	89 754	91 208	235	245	99	90 303	91 208	236	245	94	80 693	85 878	5 129	5 458
	Iceland	98	4 178	4 282	140	160	98	4 178	4 282	140	160	87	3 285	3 791	3 285	3 791
	Ireland	100	63 179	63 179	157	157	100	63 179	63 179	157	157	86	51 575	59 639	5 577	6 445
	Israel	95	109 810	115 015	164	174	100	114 896	115 108	173	174	91	99 978	110 459	6 614	7 306
	Italy	93	505 813	541 477	510	550	98	529 552	541 672	531	550	86	437 219	506 762	11 679	13 540
	Japan	89	995 577	1 114 316	175	196	93	1 041 540	1 114 316	183	196	96	971 454	1 008 286	6 109	6 338
	Korea	100	514 768	514 768	188	188	100	514 768	514 768	188	188	97	443 719	455 544	6 650	6 810
	Latvia	82	14 020	17 049	274	349	89	15 219	17 021	308	349	89	12 752	14 282	5 303	5 923
	Lithuania	100	25 370	25 467	363	364	100	25 370	25 467	363	364	93	22 614	24 405	6 885	7 421
	Luxembourg	100	5 796	5 796	44	44	100	5 796	5 796	44	44	95	5 230	5 478	5 230	5 478
	Mexico	89	1 494 409	1 670 484	268	302	96	1 599 670	1 670 484	286	302	96	1 357 446	1 412 604	7 299	7 612
	Netherlands	61	118 705	194 486	106	175	87	169 033	194 397	150	175	83	138 134	165 739	4 668	5 617
	New Zealand	83	47 335	57 316	170	208	91	52 085	57 292	189	208	83	39 801	48 214	6 128	7 450
	Norway	98	58 521	59 889	247	254	99	59 128	59 889	250	254	91	50 009	54 862	5 802	6 368
	Poland	92	302 200	329 827	222	253	99	325 266	329 756	239	253	86	267 756	311 300	5 603	6 540
	Portugal	85	92 797	108 948	233	280	91	99 760	109 168	255	280	76	68 659	90 208	5 690	7 431
	Slovak Republic	92	45 799	49 713	348	388	96	48 391	50 361	373	388	93	39 730	42 628	5 947	6 406
	Slovenia	99	17 702	17 900	337	350	99	17 744	17 900	340	350	91	15 409	16 994	6 374	7 021
	Spain	99	427 230	432 969	1 079	1 102	99	427 899	432 969	1 082	1 102	90	368 767	410 820	35 849	39 772
	Sweden	99	101 591	102 873	218	227	99	102 075	102 873	219	227	86	79 604	92 069	5 487	6 356
	Switzerland	86	68 579	79 671	201	231	99	78 808	79 213	228	231	94	67 261	71 290	5 822	6 157
	Turkey	97	947 428	975 317	181	186	100	975 317	975 317	186	186	99	873 992	884 971	6 890	6 980
	United Kingdom	73	496 742	681 510	399	538	87	590 558	682 212	461	538	83	427 944	514 975	13 668	16 443
	United States	65	2 516 631	3 874 298	136	215	76	2 960 088	3 873 842	162	215	85	2 301 006	2 713 513	4 811	5 686

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Table I.A2.6 [2/2] **Response rates**

		Initial sample – before school replacement					Final sample – after school replacement					Final sample – students within schools after school replacement				
		Weighted school participation rate before replacement (%)	Weighted number of responding schools (weighted also by enrolment)	Weighted number of schools sampled (responding and non-responding) (weighted also by enrolment)	Number of responding schools (unweighted)	Number of responding and non-responding schools (unweighted)	Weighted school participation rate before replacement (%)	Weighted number of responding schools (weighted also by enrolment)	Weighted number of schools sampled (responding and non-responding) (weighted also by enrolment)	Number of responding schools (unweighted)	Number of responding and non-responding schools (unweighted)	Weighted student participation rate before replacement (%)	Number of students assessed (weighted)	Number of students sampled (assessed and absent) (weighted)	Number of students assessed (unweighted)	Number of students sampled (assessed and absent) (unweighted)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Partners	**Albania**	97	29 234	30 163	322	336	97	29 260	30 163	323	336	98	26 611	27 081	6 333	6 438
	Argentina	95	626 740	658 143	439	458	96	629 651	658 143	445	458	86	467 613	541 981	11 836	13 532
	Baku (Azerbaijan)	93	18 730	20 040	181	197	100	20 249	20 249	197	197	89	18 049	20 312	6 827	7 607
	Belarus	100	79 623	79 623	234	234	100	79 623	79 623	234	234	97	76 321	78 333	5 803	5 963
	Bosnia and Herzegovina	100	31 025	31 058	212	213	100	31 051	31 051	213	213	96	27 562	28 843	6 480	6 781
	Brazil	87	2 483 766	2 862 749	547	638	93	2 649 165	2 858 009	586	638	89	1 683 080	1 894 398	10 606	11 956
	Brunei Darussalam	100	6 681	6 681	55	55	100	6 681	6 681	55	55	99	6 828	6 899	6 828	6 899
	B-S-J-Z (China)	96	1 030 427	1 068 463	355	362	99	1 062 001	1 068 486	361	362	99	978 803	986 556	12 058	12 156
	Bulgaria	96	48 095	50 164	191	199	99	49 568	50 145	197	199	93	44 003	47 275	5 294	5 673
	Costa Rica	100	58 843	58 843	205	205	100	58 843	58 843	205	205	97	44 179	45 522	7 221	7 433
	Croatia	97	28 382	29 188	178	183	100	29 177	29 177	183	183	92	32 632	35 462	6 609	7 190
	Cyprus	98	7 946	8 122	90	99	98	7 946	8 122	90	99	93	6 975	7 472	5 503	5 890
	Dominican Republic	96	138 500	143 842	225	235	100	143 816	143 816	235	235	90	126 090	140 330	5 674	6 328
	Georgia	99	40 450	40 814	321	326	99	40 542	40 810	322	326	95	36 366	38 226	5 572	5 874
	Hong Kong (China)	69	34 976	50 371	120	174	79	39 765	50 608	136	174	85	34 219	40 108	5 706	6 692
	Indonesia	99	3 623 573	3 647 226	398	399	99	3 623 573	3 647 226	398	399	96	3 570 441	3 733 024	12 098	12 570
	Jordan	100	123 056	123 056	313	313	100	123 056	123 056	313	313	98	112 213	114 901	8 963	9 172
	Kazakhstan	100	220 344	220 344	616	616	100	220 344	220 344	616	616	99	210 226	212 229	19 507	19 721
	Kosovo	94	25 768	27 304	203	224	97	26 324	27 269	211	224	96	23 902	24 845	5 058	5 259
	Lebanon	94	54 392	58 119	302	320	98	56 652	58 093	313	320	91	47 855	52 453	5 614	6 154
	Macao (China)	100	3 830	3 830	45	45	100	3 830	3 830	45	45	99	3 775	3 799	3 775	3 799
	Malaysia	99	445 667	450 371	189	191	100	450 371	450 371	191	191	97	378 791	388 638	6 111	6 264
	Malta	100	3 997	3 999	50	51	100	3 997	3 999	50	51	86	3 363	3 923	3 363	3 923
	Moldova	100	29 054	29 054	236	236	100	29 054	29 054	236	236	98	27 700	28 252	5 367	5 474
	Montenegro	99	7 242	7 299	60	61	100	7 280	7 280	61	61	96	6 822	7 087	6 666	6 912
	Morocco	99	404 138	406 348	178	179	100	406 348	406 348	179	179	97	375 677	386 408	6 814	7 011
	North Macedonia	100	18 489	18 502	117	120	100	18 489	18 502	117	120	92	16 467	17 808	5 569	5 999
	Panama	94	54 475	57 873	241	260	97	56 455	58 002	251	260	90	34 060	37 944	6 256	7 058
	Peru	99	455 964	460 276	336	342	100	460 276	460 276	342	342	99	419 329	425 036	6 086	6 170
	Philippines	99	1 551 977	1 560 748	186	187	100	1 560 748	1 560 748	187	187	97	1 359 350	1 400 584	7 233	7 457
	Qatar	100	16 163	16 163	188	188	100	16 163	16 163	188	188	91	13 828	15 228	13 828	15 228
	Romania	98	157 747	160 607	167	170	100	160 607	160 607	170	170	98	144 688	148 098	5 075	5 184
	Russia	100	1 354 843	1 355 318	264	265	100	1 354 843	1 355 318	264	265	96	1 209 339	1 257 352	7 608	7 911
	Saudi Arabia	99	362 426	364 675	233	235	100	364 291	364 620	234	235	97	343 747	353 702	6 136	6 320
	Serbia	97	62 037	63 877	183	190	99	63 448	63 877	187	190	94	57 342	61 233	6 609	7 062
	Singapore	97	43 138	44 691	161	167	98	43 738	44 569	164	167	95	40 960	43 290	6 646	7 019
	Chinese Taipei	97	232 563	238 821	186	193	99	236 227	239 027	189	193	95	211 796	223 812	7 196	7 584
	Thailand	100	691 460	691 460	290	290	100	691 460	691 460	290	290	99	568 456	575 713	8 633	8 739
	Ukraine	98	301 552	308 245	244	250	100	308 163	308 163	250	250	96	291 850	304 855	5 998	6 263
	United Arab Emirates	99	57 891	58 234	754	760	99	57 891	58 234	754	760	96	51 517	53 904	19 265	20 191
	Uruguay	97	44 528	46 032	183	189	99	45 745	46 018	188	189	87	34 333	39 459	5 247	6 026
	Viet Nam	100	1 116 404	1 116 404	151	151	100	1 116 404	1 116 404	151	151	99	914 874	926 260	5 377	5 445

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Table I.A2.8 [1/2] **Percentage of students at each grade level**

		All students													
		7th grade		8th grade		9th grade		10th grade		11th grade		12th grade and above		Information unavailable	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	0.0	c	0.1	(0.0)	11.5	(0.4)	81.0	(0.5)	7.4	(0.4)	0.0	(0.0)	0.0	c
	Austria	0.4	(0.1)	6.8	(0.4)	44.5	(0.7)	48.1	(0.8)	0.2	(0.1)	0.0	c	0.0	c
	Belgium	0.3	(0.1)	6.1	(0.4)	26.7	(0.7)	63.3	(0.8)	1.3	(0.1)	0.0	c	2.3	(0.3)
	Canada	0.3	(0.1)	1.0	(0.2)	9.7	(0.3)	87.7	(0.3)	1.1	(0.1)	0.1	(0.0)	0.0	c
	Chile	1.0	(0.2)	4.4	(0.5)	20.6	(0.7)	68.5	(0.9)	5.6	(0.3)	0.0	c	0.0	c
	Colombia	4.4	(0.4)	11.3	(0.5)	22.8	(0.6)	43.0	(0.8)	18.5	(0.7)	0.0	c	0.0	c
	Czech Republic	0.6	(0.2)	3.3	(0.4)	48.5	(1.2)	47.5	(1.3)	0.0	c	0.0	c	0.0	c
	Denmark	0.1	(0.0)	16.3	(0.5)	81.7	(0.5)	1.7	(0.3)	0.0	c	0.1	(0.1)	0.0	c
	Estonia	0.4	(0.1)	21.8	(0.6)	76.4	(0.6)	1.3	(0.2)	0.0	(0.0)	0.0	c	0.0	c
	Finland	0.3	(0.1)	13.9	(0.4)	85.6	(0.5)	0.2	(0.1)	0.0	c	0.0	c	0.0	c
	France	0.0	(0.0)	0.5	(0.1)	16.9	(0.6)	79.2	(0.6)	3.2	(0.2)	0.1	(0.0)	0.0	c
	Germany	0.4	(0.1)	8.1	(0.4)	46.4	(1.0)	44.0	(1.1)	1.1	(0.3)	0.0	(0.0)	0.0	c
	Greece	0.1	(0.0)	0.7	(0.2)	3.7	(0.5)	95.5	(0.6)	0.0	c	0.0	c	0.0	c
	Hungary	1.7	(0.3)	8.3	(0.5)	71.1	(0.7)	18.9	(0.6)	0.0	(0.0)	0.0	c	0.0	c
	Iceland	0.0	c	0.0	c	0.0	c	99.2	(0.1)	0.8	(0.1)	0.0	c	0.0	c
	Ireland	0.0	(0.0)	2.0	(0.2)	61.6	(0.7)	27.9	(0.9)	8.5	(0.7)	0.0	c	0.0	c
	Israel	0.0	(0.0)	0.1	(0.1)	16.7	(0.9)	82.4	(0.9)	0.7	(0.2)	0.0	(0.0)	0.0	c
	Italy	0.0	c	1.0	(0.2)	13.5	(0.5)	77.8	(0.5)	7.7	(0.3)	0.0	c	0.0	c
	Japan	0.0	c	0.0	c	0.0	c	100.0	c	0.0	c	0.0	c	0.0	c
	Korea	0.0	c	0.0	c	16.1	(0.7)	83.8	(0.7)	0.1	(0.0)	0.0	c	0.0	c
	Latvia	0.7	(0.1)	9.8	(0.5)	86.0	(0.5)	2.5	(0.2)	0.0	(0.0)	0.0	c	1.1	(0.2)
	Lithuania	0.1	(0.1)	2.4	(0.2)	90.2	(0.5)	7.3	(0.4)	0.0	c	0.0	c	0.0	c
	Luxembourg	0.3	(0.1)	10.0	(0.1)	48.3	(0.1)	40.3	(0.1)	1.1	(0.1)	0.0	c	0.0	c
	Mexico	0.9	(0.2)	2.9	(0.4)	17.6	(1.1)	77.8	(1.0)	0.6	(0.1)	0.1	(0.1)	0.0	c
	Netherlands	0.1	(0.0)	2.6	(0.3)	36.8	(0.8)	59.3	(0.8)	1.2	(0.2)	0.0	(0.0)	0.0	c
	New Zealand	0.0	c	0.0	c	0.1	(0.0)	6.6	(0.5)	89.0	(0.4)	4.2	(0.2)	0.0	c
	Norway	0.0	c	0.0	c	0.3	(0.1)	99.3	(0.3)	0.4	(0.2)	0.0	c	0.0	c
	Poland	0.3	(0.1)	3.1	(0.3)	95.1	(0.5)	1.4	(0.4)	0.0	c	0.0	c	0.0	c
	Portugal	2.4	(0.2)	7.2	(0.4)	17.2	(0.9)	57.4	(1.3)	0.2	(0.1)	0.0	c	15.7	(1.5)
	Slovak Republic	1.9	(0.2)	4.3	(0.4)	40.8	(1.1)	51.3	(1.0)	1.7	(0.5)	0.0	c	0.0	c
	Slovenia	0.3	(0.0)	0.7	(0.2)	6.2	(0.4)	92.4	(0.4)	0.4	(0.1)	0.0	c	0.0	c
	Spain	0.0	(0.0)	5.9	(0.2)	24.1	(0.4)	69.9	(0.5)	0.1	(0.0)	0.0	c	0.0	c
	Sweden	0.0	c	2.1	(0.3)	96.3	(0.6)	1.6	(0.5)	0.0	c	0.0	c	0.0	c
	Switzerland	0.5	(0.1)	10.2	(0.6)	60.8	(1.4)	27.8	(1.4)	0.7	(0.3)	0.0	(0.0)	0.0	c
	Turkey	0.1	(0.1)	0.4	(0.2)	17.7	(1.1)	78.8	(1.1)	2.9	(0.3)	0.1	(0.0)	0.0	c
	United Kingdom	0.0	c	0.0	c	0.0	(0.0)	1.0	(0.6)	93.4	(0.6)	5.6	(0.2)	0.0	c
	United States	0.0	c	0.1	(0.1)	7.5	(0.5)	73.6	(0.8)	18.7	(0.7)	0.1	(0.1)	0.0	c

Note: The large number of students with missing grade-level information in Ukraine can be attributed to missing data from students in the first and second year of vocational colleges. Most of these 15-year-old students would have been in the first year of vocational college, which is equivalent to grade 10.

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Table I.A2.8 [2/2] **Percentage of students at each grade level**

		All students													
		7th grade		8th grade		9th grade		10th grade		11th grade		12th grade and above		Information unavailable	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	0.2	(0.1)	1.2	(0.3)	36.6	(1.4)	61.5	(1.4)	0.5	(0.1)	0.0	(0.0)	0.0	c
	Argentina	2.1	(0.5)	9.8	(0.7)	22.1	(0.8)	63.8	(1.4)	1.8	(1.0)	0.0	(0.0)	0.4	(0.4)
	Baku (Azerbaijan)	0.2	(0.1)	2.8	(0.9)	34.7	(0.7)	61.5	(1.2)	0.7	(0.1)	0.0	c	0.0	c
	Belarus	0.1	(0.0)	0.9	(0.2)	42.8	(0.9)	56.2	(0.9)	0.0	c	0.0	c	0.0	c
	Bosnia and Herzegovina	0.0	(0.0)	0.2	(0.1)	16.2	(1.1)	83.4	(1.1)	0.1	(0.1)	0.0	c	0.0	c
	Brazil	4.1	(0.2)	8.1	(0.5)	13.5	(0.6)	33.5	(0.8)	39.3	(0.8)	1.5	(0.1)	0.0	c
	Brunei Darussalam	0.0	(0.0)	0.5	(0.1)	6.5	(0.1)	59.7	(0.1)	29.2	(0.1)	4.1	(0.0)	0.0	c
	B-S-J-Z (China)	0.3	(0.1)	1.5	(0.2)	38.7	(1.7)	58.2	(1.6)	1.3	(0.2)	0.0	(0.0)	0.0	c
	Bulgaria	0.2	(0.1)	2.7	(0.4)	92.8	(0.5)	4.2	(0.3)	0.0	(0.0)	0.0	c	0.0	c
	Costa Rica	4.8	(0.5)	13.8	(0.7)	36.5	(1.1)	44.7	(1.5)	0.2	(0.1)	0.0	c	0.0	c
	Croatia	0.0	(0.0)	0.3	(0.2)	78.9	(0.4)	20.8	(0.4)	0.0	c	0.0	c	0.0	c
	Cyprus	0.0	c	0.1	(0.1)	4.4	(0.4)	94.4	(0.4)	1.1	(0.1)	0.0	c	0.0	c
	Dominican Republic	6.4	(0.6)	12.5	(0.8)	23.6	(0.8)	43.8	(1.2)	12.6	(0.7)	1.2	(0.1)	0.0	c
	Georgia	0.1	(0.0)	0.5	(0.1)	14.3	(0.6)	84.2	(0.6)	1.0	(0.2)	0.0	c	0.0	c
	Hong Kong (China)	1.2	(0.2)	5.9	(0.5)	26.1	(0.9)	66.0	(1.1)	0.8	(0.5)	0.0	c	0.0	c
	Indonesia	3.4	(1.1)	8.1	(1.0)	33.7	(2.0)	49.2	(2.2)	4.2	(0.7)	1.4	(0.9)	0.0	c
	Jordan	0.2	(0.1)	1.6	(0.2)	11.2	(0.6)	87.0	(0.7)	0.0	c	0.0	c	0.0	c
	Kazakhstan	0.1	(0.0)	1.7	(0.1)	44.0	(0.7)	53.4	(0.7)	0.8	(0.1)	0.0	(0.0)	0.0	c
	Kosovo	0.0	c	0.4	(0.1)	23.2	(0.9)	74.6	(0.9)	1.7	(0.2)	0.0	(0.0)	0.0	c
	Lebanon	5.3	(0.5)	8.5	(0.5)	16.3	(0.9)	58.2	(1.0)	11.7	(0.5)	0.1	(0.1)	0.0	c
	Macao (China)	1.9	(0.1)	9.4	(0.2)	29.7	(0.2)	57.9	(0.2)	1.0	(0.1)	0.0	(0.0)	0.0	c
	Malaysia	0.0	c	0.0	c	5.5	(0.6)	94.2	(0.6)	0.3	(0.1)	0.0	c	0.0	c
	Malta	0.0	c	0.0	c	0.1	(0.0)	5.4	(0.2)	94.4	(0.1)	0.1	(0.0)	0.0	c
	Moldova	0.2	(0.1)	6.2	(0.5)	83.2	(0.8)	10.4	(0.8)	0.0	(0.0)	0.0	c	0.0	c
	Montenegro	0.0	c	0.0	c	3.3	(0.3)	93.8	(0.3)	2.9	(0.1)	0.0	c	0.0	c
	Morocco	8.0	(0.7)	13.9	(1.1)	32.1	(1.9)	38.4	(2.7)	7.7	(0.8)	0.0	c	0.0	c
	North Macedonia	0.0	c	0.2	(0.1)	95.8	(0.1)	4.0	(0.1)	0.0	c	0.0	c	0.0	c
	Panama	3.2	(0.5)	6.9	(0.6)	20.6	(1.0)	65.4	(1.4)	3.8	(0.4)	0.0	(0.0)	0.0	c
	Peru	1.8	(0.3)	5.7	(0.4)	14.3	(0.5)	54.5	(0.7)	23.6	(0.6)	0.0	c	0.0	c
	Philippines	4.5	(0.4)	12.8	(0.6)	51.1	(0.7)	30.9	(0.7)	0.6	(0.3)	0.0	(0.0)	0.0	c
	Qatar	1.3	(0.1)	4.5	(0.1)	18.0	(0.1)	63.4	(0.1)	12.9	(0.1)	0.0	(0.0)	0.0	c
	Romania	0.9	(0.3)	6.0	(0.9)	77.9	(0.9)	15.1	(0.5)	0.0	(0.0)	0.0	c	0.0	c
	Russia	0.4	(0.0)	7.7	(0.4)	81.1	(0.9)	10.7	(1.1)	0.1	(0.0)	0.0	c	0.0	c
	Saudi Arabia	1.2	(0.2)	3.6	(0.6)	14.0	(1.8)	77.5	(2.4)	3.6	(0.3)	0.1	(0.0)	0.0	c
	Serbia	0.1	(0.1)	0.8	(0.2)	87.7	(0.4)	11.4	(0.4)	0.0	c	0.0	c	0.0	c
	Singapore	0.0	(0.0)	1.1	(0.1)	7.6	(0.3)	90.8	(0.5)	0.4	(0.2)	0.0	c	0.0	c
	Chinese Taipei	0.0	c	0.1	(0.0)	35.7	(0.9)	64.2	(0.9)	0.0	(0.0)	0.0	c	0.0	c
	Thailand	0.2	(0.1)	0.7	(0.2)	19.9	(0.9)	76.6	(0.9)	2.5	(0.3)	0.0	c	0.0	c
	Ukraine	0.0	c	0.4	(0.1)	29.8	(1.3)	41.3	(1.8)	0.5	(0.1)	0.0	c	28.0	(2.4)
	United Arab Emirates	0.3	(0.1)	1.5	(0.1)	9.6	(0.3)	56.8	(0.6)	29.9	(0.5)	1.9	(0.2)	0.0	c
	Uruguay	4.2	(0.5)	11.2	(0.5)	20.5	(0.7)	63.4	(1.1)	0.6	(0.1)	0.0	c	0.0	c
	Viet Nam	0.2	(0.1)	0.8	(0.3)	4.0	(1.2)	92.3	(2.5)	0.0	(0.0)	0.0	c	2.7	(2.0)

Note: The large number of students with missing grade-level information in Ukraine can be attributed to missing data from students in the first and second year of vocational colleges. Most of these 15-year-old students would have been in the first year of vocational college, which is equivalent to grade 10.

StatLink https://doi.org/10.1787/888934028862

Tables available on line
https://doi.org/10.1787/888934028862

- Table I.A2.3 PISA target populations and samples, by adjudicated regions
- Table I.A2.5 Exclusions, by adjudicated regions
- Table I.A2.7 Response rates, by adjudicated regions
- Table I.A2.9 Percentage of students at each grade level, excluding students with missing grade information
- Table I.A2.10 Percentage of students at each grade level, by adjudicated regions
- Table I.A2.11 Percentage of students at each grade level, by adjudicated regions, excluding students with missing grade information
- Table I.A2.12 Percentage of students at each grade level, by gender
- Table I.A2.13 Percentage of students at each grade level, by gender, excluding students with missing grade information
- Table I.A2.14 Percentage of students at each grade level, by gender and adjudicated regions
- Table I.A2.15 Percentage of students at each grade level, by gender and adjudicated regions, excluding students with missing grade information

Notes

1. More precisely, PISA assessed students who were at least 15 years and 3 complete months old and who were at most 16 years and 3 complete months old (i.e. younger than 16 years, 2 months and roughly 30 days old), with a tolerance of one month on each side of this age window. If the PISA assessment was conducted in April 2018, as was the case in most countries, all students born in 2002 would have been eligible.
2. Educational institutions are generally referred to as schools in this publication, although some educational institutions (in particular, some types of vocational education establishments) may not be referred to as schools in certain countries.
3. As might be expected from this definition, the average age of students across OECD countries was 15 years and 9 months. The range in country means was 2 months and 13 days (0.20 year), from the minimum country mean of 15 years and 8 months to the maximum country mean of 15 years and 11 months.
4. Such a comparison is complicated by first-generation immigrant students, who received part of their education in a country other than the one in which they were assessed. Mean scores in any country/economy should be interpreted in the context of student demographics within that country/economy.
5. Details for countries that applied different sampling designs are documented in the *PISA 2018 Technical Report* (OECD, forthcoming[1]).
6. Due to the small size of these education systems, all schools and all eligible students within these schools were included in the samples of Brunei Darussalam, Cyprus (see note 8), Iceland, Luxembourg, Macao (China), Malta, Montenegro and Qatar.
7. The threshold for an acceptable participation rate after replacement varies between 85% and 100%, depending on the participation rate before replacement.
8. In particular, in the case of the Netherlands and the United Kingdom, non-response bias analyses relied on direct measures of school performance external to PISA, typically from national assessments. More indirect correlates of school performance were analysed in Hong Kong (China) and the United States, due to the absence of national assessments. The non-response problem in Hong Kong (China) can be attributed to two causes: lack of initiative amongst schools and teachers to participate in PISA, and a large number of schools that were considered to be non-responding schools, as less than 50% of sampled students in these schools sat the assessment.

9. These exclusions refer only to those students with limited proficiency in the language of instruction/assessment. Exclusions related to the unavailability of test material in the language of instruction are not considered in this analysis.

10. The preliminary attribution of school codes in the process of selecting, and then excluding, students and schools may have resulted in the double exclusion (at both the school and student levels) of some of the students with special education needs in Sweden. As a result, the overall exclusion rate in Sweden may have been overestimated by (at most) 0.5 of a percentage point. In this scenario, the overall exclusion rate would still be over 10% and the highest amongst PISA-participating countries/economies.

11. The overall exclusion rate includes those students who were excluded at the school level (Column 6) and those students who were excluded within schools (Column 11); however, only students enrolled in non-excluded schools were affected by within-school exclusions, hence the presence of the term equivalent to 1 minus Column 6 (expressed as a decimal).

12. If the correlation between the propensity of exclusions and student performance were 0.3, then resulting mean scores would likely have been overestimated by 1 score point if the exclusion rate were 1%; by 3 score points if the exclusion rate were 5%; and by 6 score points if the exclusion rate were 10%. If the correlation between the propensity of exclusions and student performance were 0.5, then resulting mean scores would likely have been overestimated by 1 score point if the exclusion rate were 1%; by 5 score points if the exclusion rate were 5%; and by 10 score points if the exclusion rate were 10%. For this calculation, a model was used that assumed a bivariate normal distribution for performance and the propensity to participate.

13. Testing material was adapted to each country. Versions in the same language thus differed across countries, and students in Luxembourg who were not instructed in one of the three languages in which testing material was available (English, French and German) were unable to sit the PISA assessment, even if such material were available in their language of instruction in a different country.

References

OECD (forthcoming), *PISA 2018 Results (Volume IV): Are Students Smart about Money?,* PISA, OECD Publishing, Paris. [2]

OECD (forthcoming), *PISA 2018 Technical Report*, OECD Publishing, Paris. [1]

ANNEX A3
Technical notes on analyses in this volume

STANDARD ERRORS, CONFIDENCE INTERVALS AND SIGNIFICANCE TESTS

The statistics in this report represent estimates based on samples of students, rather than values that could be calculated if every student in every country had answered every question. Consequently, it is important to measure the degree of uncertainty of the estimates. In PISA, each estimate has an associated degree of uncertainty, which is expressed through a standard error. The use of confidence intervals provides a way to make inferences about the population parameters (e.g. means and proportions) in a manner that reflects the uncertainty associated with the sample estimates. If numerous different samples were drawn from the same population, according to the same procedures as the original sample, then in 95 out of 100 samples the calculated confidence interval would encompass the true population parameter. For many parameters, sample estimators follow a normal distribution and the 95% confidence interval can be constructed as the estimated parameter, plus or minus 1.96 times the associated standard error.

In many cases, readers are primarily interested in whether a given value in a particular country is different from a second value in the same or another country, e.g. whether girls in a country perform better than boys in the same country. In the tables and figures used in this report, differences are labelled as statistically significant when a difference would be observed less than 5% of the time if there were actually no difference in corresponding population values (statistical significance at the 95% level). In other words, the risk of reporting a difference as significant when such difference, in fact, does not exist, is contained at 5%.

Throughout the report, significance tests were undertaken to assess the statistical significance of the comparisons made.

Statistical significance of gender differences and differences between subgroup means

Gender differences in student performance or other indices were tested for statistical significance. Positive differences indicate higher scores for girls while negative differences indicate higher scores for boys. Generally, differences marked in bold in the tables in this volume are statistically significant at the 95% confidence level.

Similarly, differences between other groups of students (e.g. non-immigrant students and students with an immigrant background, or socio-economically advantaged and disadvantaged students) were tested for statistical significance. The definitions of the subgroups can, in general, be found in the tables and the text accompanying the analysis. All differences marked in bold in the tables presented in Annex B of this report are statistically significant at the 95% level.

Statistical significance of differences between subgroup means, after accounting for other variables

For many tables, subgroup comparisons were performed both on the observed difference ("before accounting for other variables") and after accounting for other variables, such as the PISA index of economic, social and cultural status of students. The adjusted differences were estimated using linear regression and tested for significance at the 95% confidence level. Significant differences are marked in bold.

Statistical significance of performance differences between the top and bottom quartiles of PISA indices and scales

Differences in average performance between the top and bottom quarters of the PISA indices and scales were tested for statistical significance. Figures marked in bold indicate that performance between the top and bottom quarters of students on the respective index is statistically significantly different at the 95% confidence level.

Change in the performance per unit of an index

For many tables, the difference in student performance per unit of an index was calculated. Figures in bold indicate that the differences are statistically and significantly different from zero at the 95% confidence level.

ODDS RATIOS

The odds ratio is a measure of the relative likelihood of a particular outcome across two groups. The odds ratio for observing the outcome when an antecedent is present is simply

$$\mathrm{OR} = \frac{(p_{11}/p_{12})}{(p_{21}/p_{22})}$$

where p_{11}/p_{12} represents the "odds" of observing the outcome when the antecedent is present, and p_{21}/p_{22} represents the "odds" of observing the outcome when the antecedent is not present.

Logistic regression can be used to estimate the odds ratio: the exponentiated logit coefficient for a binary variable is equivalent to the odds ratio.

Statistical significance of odds ratios

Figures in bold in the data tables presented in Annex B1 of this report indicate that the odds ratio is statistically significantly different from 1 at the 95% confidence level. To construct a 95% confidence interval for the odds ratio, the estimator is assumed to follow a log-normal distribution, rather than a normal distribution.

In many tables, odds ratios after accounting for other variables are also presented. These odds ratios were estimated using logistic regression and tested for significance against the null hypothesis of an odds ratio equal to 1 (i.e. equal likelihoods, after accounting for other variables).

USE OF STUDENT AND SCHOOL WEIGHTS

The target population in PISA is 15-year-old students, but a two-stage sampling procedure was used. After the population was defined, school samples were selected with a probability proportional to the expected number of eligible students in each school. Only in a second sampling stage were students drawn from amongst the eligible students in each selected school.

Although the student samples were drawn from within a sample of schools, the school sample was designed to optimise the resulting sample of students, rather than to give an optimal sample of schools. It is therefore preferable to analyse the school-level variables as attributes of students (e.g. in terms of the share of 15-year-old students affected), rather than as elements in their own right.

Most analyses of student and school characteristics are therefore weighted by student final weights (or their sum, in the case of school characteristics), and use student replicate weights for estimating standard errors.

In PISA 2018, as in PISA 2012 and 2015, multilevel models weights are used at both the student and school levels. The purpose of these weights is to account for differences in the probabilities of students being selected in the sample. Since PISA applies a two-stage sampling procedure, these differences are due to factors at both the school and the student levels. For the multilevel models, student final weights (W_FSTUWT) were used. Within-school weights correspond to student final weights, rescaled to amount to the sample size within each school. Between-school weights correspond to the sum of final student weights (W_FSTUWT) within each school.

STATISTICS BASED ON MULTILEVEL MODELS

Statistics based on multilevel models include variance components (between- and within-school variance), and the intra-cluster correlation coefficient derived from these components. Multilevel models are specified as two-level regression models (the student and school levels), with normally distributed residuals, and estimated with maximum likelihood estimation. Models were estimated using the Stata (version 15.1) "mixed" module.

The intra-cluster correlation coefficient, or proportion of the variation that lies between schools, is defined and estimated as:

$$100 * \frac{\sigma_B^2}{\sigma_W^2 + \sigma_B^2}$$

where σ_B^2 and σ_W^2, respectively, represent the between- and within-variance estimates.

Standard errors in statistics estimated from multilevel models

For statistics based on multilevel models, such as the estimates of variance components, the standard errors are not estimated with the usual replication method, which accounts for stratification and sampling rates from finite populations. Instead, standard errors are "model-based": their computation assumes that schools, and students within schools, are sampled at random (with sampling probabilities reflected in school and student weights) from a theoretical, infinite population of schools and students, which complies with the model's parametric assumptions. The standard error for the estimated index of inclusion is calculated by deriving an approximate distribution for it from the (model-based) standard errors for the variance components, using the delta method.

Reference

OECD (forthcoming), *PISA 2018 Technical Report*, OECD Publishing, Paris. [1]

ANNEX A4
Quality assurance

Quality assurance procedures were implemented in all parts of PISA 2018, as was done for all previous PISA surveys. The PISA 2018 Technical Standards (available on line at www.oecd.org/pisa) specify the way in which PISA must be implemented in each country, economy and adjudicated region. International contractors monitor the implementation in each of these and adjudicate on their adherence to the standards.

The consistent quality and linguistic equivalence of the PISA 2018 assessment instruments were facilitated by assessing the ease with which the original English version could be translated. Two source versions of the assessment instruments, in English and French, were prepared (except for the financial literacy assessment and the operational manuals, which were provided only in English) in order for countries to conduct a double translation design, i.e. two independent translations from the source language(s), and reconciliation by a third person. Detailed instructions for the localisation (adaptation, translation and validation) of the instruments for the field trial and for their review for the main survey, and translation/adaptation guidelines were supplied. An independent team of expert verifiers, appointed and trained by the PISA Consortium, verified each national version against the English and/or French source versions. These translators' mother tongue was the language of instruction in the country concerned, and the translators were knowledgeable about education systems. For further information on PISA translation procedures, see the *PISA 2018 Technical Report* (OECD, forthcoming[1]).

The survey was implemented through standardised procedures. The PISA Consortium provided comprehensive manuals that explained the implementation of the survey, including precise instructions for the work of school co-ordinators and scripts for test administrators to use during the assessment sessions. Proposed adaptations to survey procedures, or proposed modifications to the assessment session script, were submitted to the PISA Consortium for approval prior to verification. The PISA Consortium then verified the national translation and adaptation of these manuals.

To establish the credibility of PISA as valid and unbiased and to encourage uniformity in conducting the assessment sessions, test administrators in participating countries were selected using the following criteria: it was required that the test administrator not be the reading, mathematics or science instructor of any student in the sessions he or she would conduct for PISA; and it was considered preferable that the test administrator not be a member of the staff of any school in the PISA sample. Participating countries organised an in-person training session for test administrators.

Participating countries and economies were required to ensure that test administrators worked with the school co-ordinator to prepare the assessment session, including reviewing and updating the Student Tracking Form; completing the Session Attendance Form, which is designed to record students' attendance and instruments allocation; completing the Session Report Form, which is designed to summarise session times, any disturbance to the session, etc.; ensuring that the number of test booklets and questionnaires collected from students tallied with the number sent to the school (for countries using the paper-based assessment) or ensuring that the number of USB sticks or external laptops used for the assessment were accounted for (for countries using the computer-based assessment); and sending or uploading the school questionnaire, student questionnaires, parent and teacher questionnaires (if applicable), and all test materials (both completed and not completed) to the national centre after the assessment.

The PISA Consortium responsible for overseeing survey operations implemented all phases of the PISA Quality Monitor (PQM) process: interviewing and hiring PQM candidates in each of the countries, organising their training, selecting the schools to visit, and collecting information from the PQM visits. PQMs are independent contractors located in participating countries who are hired by the international survey operations contractor. They visit a sample of schools to observe test administration and to record the implementation of the documented field-operations procedures in the main survey.

Typically, two or four PQMs were hired for each country, and they visited an average of 15 schools in each country. If there were adjudicated regions in a country, it was usually necessary to hire additional PQMs, as a minimum of five schools were observed in adjudicated regions.

Approximately one-third of test items are open-ended items in PISA. Reliable human coding is critical for ensuring the validity of assessment results within a country, as well as the comparability of assessment results across countries. Coder reliability in PISA 2018 was evaluated and reported at both within- and across-country levels. The evaluation of coder reliability was made possible by the design of multiple coding: a portion or all of the responses from each human-coded constructed-response item were coded by at least two human coders.

All quality-assurance data collected throughout the PISA 2018 assessment were entered and collated in a central data-adjudication database on the quality of field operations, printing, translation, school and student sampling, and coding. Comprehensive reports were then generated for the PISA Adjudication Group. This group was formed by the Technical Advisory Group and the Sampling Referee. Its role is to review the adjudication database and reports in order to recommend adequate treatment to preserve the quality of PISA data. For further information, see the *PISA 2018 Technical Report* (OECD, forthcoming[1]). Overall, the review suggested good adherence of national implementations of PISA to the technical standards. Despite the overall high quality of data, a few countries' data failed to meet critical standards or presented inexplicable anomalies, such that the Adjudication Group recommends a special treatment of these data in databases and/or reporting.

The major issues for adjudication discussed at the adjudication meeting are listed below:

- In Viet Nam, while no major standard violation was identified, there were several minor violations and the adjudication group has identified technical issues affecting the comparability of their data, an essential dimension of data quality in PISA. Viet Nam's cognitive data show poor fit to the item-response-theory model, with more significant misfit than any other country/ language group. In particular, selected-response questions, as a group, appeared to be significantly easier for students in Viet Nam than expected, given the usual relationship between open-ended and selected-response questions reflected in the international model parameters. In addition, for several selected-response items, response patterns are not consistent across field trial and main survey administrations, ruling out possible explanations of misfit in terms of familiarity, curriculum or cultural differences. For this reason, the OECD cannot currently assure full international comparability of the results.
- The Netherlands missed the standard for overall exclusions by a small margin. At the same time, in the Netherlands UH booklets, intended for students with special education needs, were assigned to about 17% of the non-excluded students. Because UH booklets do not cover the domain of financial literacy, the effective exclusion rate for the financial literacy additional sample is above 20%.The fact that students that receive support for learning in school were systematically excluded from the financial literacy sample results in a strong upward bias for the country mean and other population statistics. Therefore, the Netherlands' results in financial literacy may not be comparable to those of other counties or to results for the Netherlands from previous years. The Netherlands also missed the school response rate (before replacement) by a large margin, and could only reach close to an acceptable response rate through the use of replacement schools. Based on evidence provided in a non-response bias analysis, the Netherlands' results in reading, mathematics and science were accepted as largely comparable, but, in consideration of the low response rate amongst originally sampled schools, are reported with an annotation.
- Portugal did not meet the student-response rate standard. In Portugal, response rates dropped between 2015 and 2018. A student-non-response-bias analysis was submitted, investigating bias amongst students in grades 9 and above. Students in grades 7 and 8 represented about 11% of the total sample, but 20% of the non-respondents. A comparison of the linked responding and non-responding cases, using sampling weights, revealed that non-respondents tended to score about one-third of a standard deviation below respondents on the national mathematics examination (implying a "raw" upward bias of about 10% of a standard deviation on population statistics that are based on respondents only). At the same time, a significant proportion of the performance differences could be accounted for by variables considered in non-response adjustments (including grade level). Nevertheless, a residual upward bias in population statistics remained, even when using non-response adjusted weights. The non-response bias analysis therefore implies a small upward bias for PISA 2018 performance results in Portugal. The Adjudication Group also considered that trend comparisons and performance comparisons with other countries may not be particularly affected, because an upward bias of that size cannot be excluded even in countries that met the response-rate standard or for previous cycles of PISA. Therefore, Portugal's results are reported with an annotation.

While the adjudication group did not consider the violation of response-rate standards by Hong Kong (China) and the United States (see Annex A2) as major adjudication issues, they noted several limitations in the data used in non-response-bias analyses submitted by Hong Kong (China) and the United States. In consideration of the lower response rates, compared to other countries, the data for Hong Kong (China) and the United States are reported with an annotation.

In Spain, while no major standard violation was identified, subsequent data analyses identified sub-optimal response behaviours of some students. This was especially evident in the reading-fluency items. The reporting of Spain's reading performance will be deferred as this issue will be further investigated. For more details, see Annex A9 in *PISA 2018 Results (Volume I): What Students Know and Can Do* (OECD, 2019[2]).

Reference

OECD (2019), *PISA 2018 Results (Volume I): What Students Know and Can Do,* PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/5f07c754-en. [2]

OECD (forthcoming), *PISA 2018 Technical Report*, OECD Publishing, Paris. [1]

ANNEX A5
Interpreting the results by student and school characteristics

REPORTING THRESHOLDS IN PISA 2018

When presenting the results by students' gender, socio-economic status, education level and immigrant background, and schools' socio-economic profile, location, type and concentration of immigrant students, the number of students and schools in each subsample has to meet the PISA reporting requirements of at least 30 students and 5 schools. Even when these reporting requirements are met, the reader should interpret the results cautiously when the number of students or schools is just above the reporting threshold. Tables III.A5.1 and III.A5.2, available on line, show the unweighted number of students and schools by student and school characteristics in the PISA 2018 sample so that the reader can interpret the results appropriately.

READING PERFORMANCE, BY STUDENT AND SCHOOL CHARACTERISTICS

Tables III.A5.3 and III.A5.4, available on line, show the average reading performance, by student and school characteristics. These results provide useful information for interpreting the analyses in this volume that show how the school climate and well-being indicators vary by student and school characteristics.

Tables available on line
https://doi.org/10.1787/888934030857

- Table III.A5.1 Unweighted number of students and schools, by student characteristics
- Table III.A5.2 Unweighted number of students and schools, by school characteristics
- Table III.A5.3 Reading performance, by student characteristics
- Table III.A5.4 Reading performance, by school characteristics

PISA

ANNEX B

PISA 2018 Data

All tables in Annex B are available on line

Annex B1: Results for countries and economies
https://doi.org/10.1787/888934030876
https://doi.org/10.1787/888934030895
https://doi.org/10.1787/888934030914
https://doi.org/10.1787/888934030933
https://doi.org/10.1787/888934030952
https://doi.org/10.1787/888934030971
https://doi.org/10.1787/888934030990
https://doi.org/10.1787/888934031009
https://doi.org/10.1787/888934031028
https://doi.org/10.1787/888934031047
https://doi.org/10.1787/888934031066
https://doi.org/10.1787/888934031085
https://doi.org/10.1787/888934031104

Annex B2: Results for regions within countries
https://doi.org/10.1787/888934031123

Annex B3: PISA 2018 system-level indicators
https://doi.org/10.1787/888934029128

ANNEX B1
Results for countries and economies

Table III.B1.2.1 [1/8] **Students' exposure to bullying**
Based on students' reports

		Index of exposure to bullying[1]				Percentage of frequently bullied students[2]		Any type of bullying act							
		Average		Variability				Never or almost never		A few times a year		A few times a month		Once a week or more	
		Mean index	S.E.	S.D.	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	0.33	(0.01)	1.12	(0.01)	13.0	(0.4)	36.8	(0.5)	33.7	(0.5)	16.3	(0.4)	13.2	(0.4)
OECD	Austria	-0.02	(0.02)	0.97	(0.02)	6.8	(0.5)	46.9	(0.9)	29.9	(0.7)	13.4	(0.6)	9.8	(0.5)
OECD	Belgium	-0.11	(0.01)	0.89	(0.01)	5.3	(0.2)	45.7	(0.6)	35.7	(0.6)	11.6	(0.4)	7.0	(0.3)
OECD	Canada	0.14	(0.01)	1.04	(0.01)	9.3	(0.3)	43.4	(0.6)	31.4	(0.5)	15.2	(0.4)	10.0	(0.3)
OECD	Chile	0.00	(0.02) †	1.00	(0.02) †	7.8	(0.4) †	46.2	(0.7) †	30.0	(0.6) †	15.5	(0.6) †	8.3	(0.4) †
OECD	Colombia	0.18	(0.02) †	1.09	(0.01) †	11.7	(0.5) †	41.3	(0.8) †	26.4	(0.8) †	20.1	(0.8) †	12.2	(0.6) †
OECD	Czech Republic	0.02	(0.02)	1.03	(0.02)	8.2	(0.4)	42.1	(0.9)	28.2	(0.6)	15.9	(0.6)	13.8	(0.6)
OECD	Denmark	0.03	(0.02)	0.89	(0.01)	5.0	(0.4)	38.7	(1.0)	39.9	(0.8)	13.8	(0.5)	7.6	(0.4)
OECD	Estonia	0.08	(0.02)	0.99	(0.01)	8.3	(0.4)	44.8	(0.9)	29.8	(0.8)	15.8	(0.7)	9.6	(0.5)
OECD	Finland	-0.03	(0.02)	0.96	(0.01)	6.2	(0.4)	49.3	(0.7)	32.9	(0.7)	10.6	(0.4)	7.1	(0.4)
OECD	France	-0.08	(0.02)	0.98	(0.01)	6.8	(0.3)	51.3	(0.8)	28.9	(0.7)	11.9	(0.5)	7.9	(0.4)
OECD	Germany	-0.01	(0.02) ‡	0.93	(0.02) ‡	6.2	(0.5) ‡	42.7	(1.1) ‡	34.6	(0.9) ‡	14.4	(0.8) ‡	8.2	(0.6) ‡
OECD	Greece	0.01	(0.02)	1.00	(0.02)	7.6	(0.4)	47.9	(0.8)	25.1	(0.6)	14.9	(0.5)	12.1	(0.5)
OECD	Hungary	-0.11	(0.02)	0.99	(0.02)	7.4	(0.4)	52.6	(1.0)	24.9	(0.8)	12.8	(0.5)	9.8	(0.6)
OECD	Iceland	-0.19	(0.02) †	0.92	(0.02) †	4.9	(0.4) †	62.6	(0.9) †	20.2	(0.8) †	10.3	(0.6) †	6.9	(0.4) †
OECD	Ireland	0.13	(0.02)	1.01	(0.01)	8.7	(0.4)	41.1	(0.8)	36.2	(0.8)	12.8	(0.5)	9.9	(0.4)
OECD	Israel	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Italy	-0.07	(0.02)	1.02	(0.02)	7.9	(0.4)	53.4	(0.7)	22.9	(0.7)	12.9	(0.6)	10.8	(0.5)
OECD	Japan	-0.28	(0.01)	0.87	(0.01)	4.3	(0.3)	65.3	(0.9)	17.4	(0.6)	8.6	(0.4)	8.6	(0.5)
OECD	Korea	m	m	m	m	m	m	80.1	(0.7)	10.5	(0.4)	4.2	(0.3)	5.2	(0.3)
OECD	Latvia	0.37	(0.02)	1.03	(0.01)	11.3	(0.6)	28.8	(0.6)	35.7	(0.7)	21.7	(0.6)	13.8	(0.6)
OECD	Lithuania	0.02	(0.02)	1.07	(0.01)	9.7	(0.4)	52.3	(0.7)	25.0	(0.6)	13.7	(0.5)	9.0	(0.5)
OECD	Luxembourg	-0.04	(0.01)	0.97	(0.01)	6.9	(0.4)	47.6	(0.7)	31.7	(0.7)	12.7	(0.5)	7.9	(0.4)
OECD	Mexico	0.00	(0.02) ‡	1.01	(0.02) ‡	8.8	(0.5) ‡	49.2	(0.9) †	27.8	(0.7) †	14.2	(0.6) †	8.8	(0.6) †
OECD	Netherlands*	-0.30	(0.01)	0.74	(0.02)	2.3	(0.3)	53.8	(1.0)	34.1	(1.0)	8.2	(0.5)	4.0	(0.3)
OECD	New Zealand	0.40	(0.02)	1.12	(0.01)	15.0	(0.6)	33.0	(0.7)	35.5	(0.7)	17.5	(0.6)	14.1	(0.5)
OECD	Norway	-0.13	(0.02)	0.93	(0.01)	5.0	(0.3)	51.0	(0.8)	30.2	(0.7)	11.5	(0.5)	7.3	(0.4)
OECD	Poland	0.07	(0.02)	1.03	(0.01)	8.3	(0.4)	42.6	(0.9)	31.0	(0.7)	15.5	(0.6)	10.8	(0.5)
OECD	Portugal*	-0.25	(0.01)	0.87	(0.01)	5.3	(0.3)	61.4	(0.9)	25.0	(0.7)	8.2	(0.5)	5.4	(0.3)
OECD	Slovak Republic	0.08	(0.02)	1.05	(0.02)	9.2	(0.5)	44.3	(0.8)	27.5	(0.7)	15.8	(0.6)	12.5	(0.5)
OECD	Slovenia	-0.11	(0.02)	0.98	(0.01)	6.6	(0.4)	52.4	(0.8)	26.7	(0.7)	12.6	(0.6)	8.3	(0.5)
OECD	Spain	-0.21	(0.01) †	0.91	(0.01) †	5.3	(0.2) †	56.2	(0.6) †	26.6	(0.4) †	10.1	(0.3) †	7.2	(0.2) †
OECD	Sweden	-0.12	(0.02)	0.93	(0.02)	5.6	(0.3)	49.7	(0.9)	31.0	(0.8)	11.2	(0.5)	8.0	(0.4)
OECD	Switzerland	0.00	(0.02) †	0.97	(0.02) †	6.7	(0.5) †	43.6	(1.1) †	34.0	(1.0) †	14.4	(0.8) †	8.0	(0.5) †
OECD	Turkey	-0.05	(0.02)	1.05	(0.01)	8.9	(0.4)	55.1	(0.9)	20.8	(0.5)	14.2	(0.4)	9.9	(0.5)
OECD	United Kingdom	0.24	(0.02)	1.06	(0.01)	10.9	(0.5)	37.9	(0.7)	35.1	(0.6)	15.4	(0.4)	11.7	(0.5)
OECD	United States*	0.15	(0.02)	1.05	(0.01)	10.3	(0.5)	43.1	(0.9)	30.9	(0.7)	15.1	(0.6)	10.9	(0.5)
	OECD average	0.00	(0.00)	0.98	(0.00)	7.8	(0.1)	48.2	(0.1)	29.1	(0.1)	13.4	(0.1)	9.3	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of exposure to bullying includes the following statements: "Other students left me out of things on purpose"; "Other students made fun of me"; and "I was threatened by other students". Higher values in the index indicate more exposure to bullying.

2. A student is frequently bullied if he or she is in the top 10% of the index of exposure to bullying across all countries/economies.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.2.1 [2/8] **Students' exposure to bullying**

Based on students' reports

		Index of exposure to bullying[1]				Percentage of frequently bullied students[2]		Any type of bullying act							
		Average		Variability				Never or almost never		A few times a year		A few times a month		Once a week or more	
		Mean index	S.E.	S.D.	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	-0.06	(0.02)	0.99	(0.02)	7.1	(0.4)	50.5	(0.9)	24.0	(0.7)	14.6	(0.5)	10.8	(0.5)
	Argentina	0.17	(0.02) †	1.08	(0.01) †	11.3	(0.5) †	37.5	(0.8) †	30.0	(0.7) †	16.0	(0.5) †	16.4	(0.6) †
	Baku (Azerbaijan)	0.24	(0.02) †	1.30	(0.02) †	18.0	(0.8) †	49.0	(1.0) †	15.3	(0.7) †	20.5	(0.8) †	15.3	(0.7) †
	Belarus	-0.16	(0.01)	0.93	(0.01)	5.6	(0.4)	57.6	(0.8)	23.9	(0.7)	12.8	(0.5)	5.7	(0.4)
	Bosnia and Herzegovina	-0.07	(0.02)	1.06	(0.02)	9.4	(0.5)	55.3	(0.9)	19.4	(0.5)	13.7	(0.5)	11.6	(0.5)
	Brazil	0.15	(0.02) †	1.11	(0.01) †	11.8	(0.5) †	43.8	(0.7) †	27.3	(0.6) †	15.5	(0.5) †	13.5	(0.5) †
	Brunei Darussalam	0.82	(0.01) †	1.11	(0.01) †	26.3	(0.6) †	19.3	(0.5) †	30.6	(0.6) †	23.7	(0.6) †	26.4	(0.6) †
	B-S-J-Z (China)	-0.20	(0.01)	0.89	(0.01)	4.0	(0.3)	51.7	(0.9)	30.6	(0.6)	11.4	(0.5)	6.3	(0.3)
	Bulgaria	0.19	(0.02) †	1.20	(0.02) †	13.5	(0.6) †	43.6	(1.0)	22.5	(0.7)	17.6	(0.8)	16.3	(0.7)
	Costa Rica	-0.02	(0.02)	1.06	(0.01)	8.8	(0.4)	48.0	(0.7)	27.7	(0.7)	13.1	(0.5)	11.2	(0.5)
	Croatia	-0.20	(0.02)	0.96	(0.02)	5.9	(0.3)	58.4	(0.8)	23.4	(0.6)	10.3	(0.4)	7.9	(0.4)
	Cyprus	0.26	(0.02) †	1.20	(0.02) †	14.6	(0.6) †	41.2	(0.7) †	24.8	(0.7) †	16.7	(0.6) †	17.3	(0.6) †
	Dominican Republic	0.52	(0.05) ‡	1.29	(0.03) ‡	22.0	(1.4) ‡	34.0	(1.5) ‡	22.1	(1.1) ‡	23.9	(1.1) ‡	19.9	(1.2) ‡
	Georgia	-0.21	(0.02)	1.01	(0.02)	8.4	(0.5)	58.1	(1.0)	18.3	(0.6)	12.3	(0.6)	11.3	(0.6)
	Hong Kong (China)*	0.11	(0.02)	1.05	(0.01)	9.1	(0.4)	45.5	(0.8)	25.2	(0.6)	15.5	(0.6)	13.8	(0.5)
	Indonesia	0.39	(0.02)	1.16	(0.01)	15.2	(0.7)	34.1	(0.9)	24.8	(0.8)	22.8	(0.8)	18.4	(0.7)
	Jordan	0.28	(0.02)	1.16	(0.02)	12.9	(0.7)	38.5	(0.8)	23.6	(0.7)	18.9	(0.6)	19.1	(0.7)
	Kazakhstan	0.12	(0.02)	1.15	(0.01)	12.6	(0.4)	51.0	(0.6)	16.9	(0.4)	19.7	(0.5)	12.4	(0.4)
	Kosovo	0.12	(0.02)	1.01	(0.01)	8.5	(0.5)	40.7	(0.8)	27.4	(0.7)	19.0	(0.7)	12.9	(0.6)
	Lebanon	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Macao (China)	0.14	(0.02)	1.03	(0.01)	10.3	(0.5)	42.1	(0.8)	30.9	(0.6)	13.9	(0.5)	13.1	(0.6)
	Malaysia	0.36	(0.02)	1.09	(0.01)	13.7	(0.5)	34.0	(0.7)	30.3	(0.6)	20.6	(0.6)	15.2	(0.6)
	Malta	0.33	(0.02)	1.13	(0.02)	13.9	(0.6)	37.2	(0.8)	31.0	(0.8)	17.9	(0.6)	13.9	(0.6)
	Moldova	0.01	(0.02)	0.94	(0.01)	6.4	(0.3)	40.3	(1.0)	35.8	(0.7)	14.9	(0.6)	9.0	(0.4)
	Montenegro	-0.07	(0.01)	1.08	(0.01)	9.1	(0.4)	54.9	(0.7)	20.0	(0.6)	12.8	(0.5)	12.2	(0.5)
	Morocco	0.39	(0.03) ‡	1.09	(0.02) ‡	14.1	(0.8) ‡	28.5	(1.0) ‡	27.7	(0.8) ‡	25.2	(1.1) ‡	18.6	(0.9) ‡
	North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Panama	0.16	(0.03) ‡	1.12	(0.02) ‡	13.1	(0.9) ‡	42.9	(1.2) ‡	24.0	(1.3) ‡	18.7	(1.0) ‡	14.5	(0.9) ‡
	Peru	-0.10	(0.02) ‡	0.96	(0.02) ‡	6.0	(0.5) ‡	48.1	(1.2) ‡	29.4	(1.0) ‡	13.7	(0.9) ‡	8.8	(0.6) ‡
	Philippines	1.27	(0.02)	1.16	(0.01)	40.1	(0.8)	12.3	(0.5)	22.8	(0.6)	29.8	(0.6)	35.1	(0.8)
	Qatar	0.29	(0.01)	1.12	(0.01)	13.0	(0.3)	36.3	(0.4)	30.4	(0.4)	19.1	(0.3)	14.2	(0.3)
	Romania	0.30	(0.03)	1.07	(0.01)	11.5	(0.6)	33.2	(0.9)	33.0	(0.8)	19.1	(0.7)	14.7	(0.7)
	Russia	0.33	(0.02)	1.11	(0.01)	12.4	(0.5)	37.2	(0.8)	26.2	(0.6)	20.5	(0.5)	16.1	(0.6)
	Saudi Arabia	0.03	(0.02)	1.02	(0.01)	7.5	(0.4)	46.0	(0.8)	24.1	(0.7)	16.0	(0.5)	13.9	(0.5)
	Serbia	-0.10	(0.02) †	1.07	(0.02) †	9.7	(0.6) †	56.9	(0.9)	17.6	(0.5)	14.0	(0.6)	11.6	(0.6)
	Singapore	0.26	(0.01)	1.02	(0.01)	9.8	(0.4)	36.0	(0.7)	38.0	(0.7)	14.7	(0.4)	11.2	(0.4)
	Chinese Taipei	-0.36	(0.01)	0.80	(0.01)	3.1	(0.3)	68.1	(0.8)	18.7	(0.6)	8.4	(0.4)	4.8	(0.3)
	Thailand	0.16	(0.02)	1.14	(0.01)	12.6	(0.5)	49.8	(0.9)	23.1	(0.6)	16.2	(0.6)	10.9	(0.4)
	Ukraine	-0.03	(0.02)	0.98	(0.01)	7.6	(0.4)	48.3	(0.8)	29.5	(0.7)	13.4	(0.5)	8.9	(0.4)
	United Arab Emirates	0.24	(0.01)	1.14	(0.01)	12.6	(0.4)	40.7	(0.7)	28.2	(0.4)	17.0	(0.4)	14.1	(0.3)
	Uruguay	0.05	(0.02) †	1.02	(0.02) †	8.5	(0.5) †	45.5	(1.0) †	28.9	(0.9) †	15.6	(0.8) †	10.0	(0.6) †
	Viet Nam	0.08	(0.02)	0.95	(0.01)	6.9	(0.5)	37.9	(1.0)	35.2	(0.8)	16.9	(0.7)	10.0	(0.5)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of exposure to bullying includes the following statements: "Other students left me out of things on purpose"; "Other students made fun of me"; and "I was threatened by other students". Higher values in the index indicate more exposure to bullying.

2. A student is frequently bullied if he or she is in the top 10% of the index of exposure to bullying across all countries/economies.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.2.1 [3/8] **Students' exposure to bullying**

Based on students' reports

		Percentage of students who reported the following:															
		Other students left me out of things on purpose								Other students made fun of me							
		Never or almost never		A few times a year		A few times a month		Once a week or more		Never or almost never		A few times a year		A few times a month		Once a week or more	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	58.3	(0.5)	28.2	(0.5)	8.8	(0.3)	4.7	(0.2)	50.1	(0.5)	28.9	(0.6)	12.0	(0.4)	9.0	(0.3)
	Austria	80.1	(0.7)	12.8	(0.5)	4.3	(0.3)	2.7	(0.3)	58.2	(0.9)	27.4	(0.8)	9.0	(0.4)	5.4	(0.4)
	Belgium	81.4	(0.5)	13.1	(0.5)	3.3	(0.2)	2.2	(0.2)	62.4	(0.6)	26.5	(0.5)	7.0	(0.3)	4.1	(0.3)
	Canada	64.6	(0.6)	24.4	(0.4)	7.5	(0.3)	3.5	(0.2)	57.7	(0.5)	25.7	(0.5)	10.1	(0.3)	6.5	(0.3)
	Chile	69.2	(0.7) †	20.6	(0.7) †	7.7	(0.4) †	2.5	(0.2) †	64.0	(0.7) †	22.6	(0.6) †	9.4	(0.4) †	4.0	(0.4) †
	Colombia	63.9	(0.7) †	20.2	(0.6) †	11.8	(0.6) †	4.1	(0.3) †	57.2	(1.0) †	24.7	(0.7) †	13.0	(0.6) †	5.1	(0.4) †
	Czech Republic	69.6	(0.8)	18.2	(0.6)	7.5	(0.4)	4.6	(0.4)	64.8	(0.9)	21.5	(0.7)	8.6	(0.5)	5.1	(0.4)
	Denmark	72.5	(0.7)	21.3	(0.7)	4.5	(0.3)	1.7	(0.2)	55.4	(0.9)	31.1	(0.8)	9.2	(0.4)	4.3	(0.3)
	Estonia	72.3	(0.7)	19.4	(0.6)	5.6	(0.3)	2.7	(0.2)	55.4	(0.9)	27.1	(0.8)	11.7	(0.5)	5.8	(0.3)
	Finland	74.1	(0.7)	19.0	(0.6)	4.2	(0.3)	2.8	(0.3)	61.8	(0.8)	26.4	(0.6)	7.6	(0.4)	4.2	(0.3)
	France	78.5	(0.7)	13.9	(0.5)	4.6	(0.3)	3.0	(0.3)	64.1	(0.8)	23.7	(0.7)	7.6	(0.4)	4.7	(0.3)
	Germany	77.7	(1.1) ‡	15.7	(0.9) ‡	4.4	(0.4) ‡	2.3	(0.3) ‡	56.7	(1.1) ‡	30.0	(1.0) ‡	8.2	(0.6) ‡	5.1	(0.5) ‡
	Greece	80.5	(0.7)	11.9	(0.5)	4.4	(0.3)	3.1	(0.2)	57.8	(0.8)	25.2	(0.6)	10.7	(0.5)	6.3	(0.3)
	Hungary	71.7	(0.8)	17.7	(0.6)	6.8	(0.4)	3.8	(0.3)	72.2	(0.9)	16.6	(0.7)	7.3	(0.5)	3.8	(0.3)
	Iceland	84.4	(0.8) †	10.0	(0.7) †	3.5	(0.4) †	2.2	(0.3) †	70.5	(0.9) †	17.9	(0.8) †	7.3	(0.5) †	4.3	(0.4) †
	Ireland	65.3	(0.7)	26.1	(0.7)	5.6	(0.4)	3.0	(0.2)	55.4	(0.7)	28.7	(0.6)	8.9	(0.5)	6.9	(0.4)
	Israel	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Italy	72.1	(0.6)	17.9	(0.6)	6.6	(0.4)	3.4	(0.3)	70.1	(0.8)	18.5	(0.6)	7.9	(0.4)	3.6	(0.3)
	Japan	89.0	(0.4)	7.4	(0.4)	1.9	(0.2)	1.6	(0.2)	73.2	(0.8)	13.0	(0.4)	6.9	(0.4)	7.0	(0.4)
	Korea	96.5	(0.3)	2.3	(0.2)	0.7	(0.1)	0.5	(0.1)	85.2	(0.5)	6.8	(0.3)	3.4	(0.3)	4.6	(0.3)
	Latvia	53.8	(0.7)	30.0	(0.7)	11.7	(0.5)	4.5	(0.3)	49.3	(0.8)	32.9	(0.7)	11.8	(0.5)	5.9	(0.4)
	Lithuania	72.4	(0.7)	17.5	(0.5)	7.3	(0.4)	2.8	(0.2)	63.4	(0.7)	23.3	(0.6)	9.2	(0.4)	4.1	(0.3)
	Luxembourg	76.7	(0.6)	15.7	(0.5)	4.9	(0.4)	2.7	(0.2)	61.4	(0.7)	26.5	(0.7)	8.0	(0.4)	4.1	(0.3)
	Mexico	71.5	(0.9) †	17.1	(0.7) †	8.4	(0.4) †	3.1	(0.3) †	62.7	(0.9) †	23.3	(0.7) †	9.9	(0.6) †	4.2	(0.4) †
	Netherlands*	88.5	(0.6)	9.1	(0.5)	1.5	(0.2)	0.9	(0.2)	69.7	(0.8)	23.8	(0.8)	4.9	(0.3)	1.6	(0.2)
	New Zealand	56.4	(0.8)	29.7	(0.7)	9.2	(0.4)	4.7	(0.3)	46.4	(0.8)	30.2	(0.7)	13.3	(0.6)	10.0	(0.5)
	Norway	81.8	(0.5)	13.0	(0.4)	3.0	(0.3)	2.2	(0.2)	65.5	(0.8)	22.6	(0.6)	7.7	(0.4)	4.2	(0.2)
	Poland	69.2	(0.7)	22.2	(0.6)	5.6	(0.4)	3.0	(0.2)	59.3	(0.9)	26.5	(0.7)	8.9	(0.5)	5.3	(0.3)
	Portugal*	82.7	(0.6)	11.6	(0.5)	4.0	(0.3)	1.7	(0.2)	73.4	(0.7)	18.0	(0.6)	5.6	(0.4)	3.1	(0.3)
	Slovak Republic	65.7	(0.8)	22.6	(0.7)	7.2	(0.4)	4.4	(0.3)	62.8	(0.7)	24.1	(0.6)	8.5	(0.4)	4.5	(0.3)
	Slovenia	76.6	(0.7)	15.6	(0.6)	5.2	(0.4)	2.6	(0.3)	67.6	(0.9)	21.4	(0.8)	7.5	(0.5)	3.5	(0.3)
	Spain	83.4	(0.4) †	11.0	(0.3) †	3.3	(0.2) †	2.2	(0.1) †	70.2	(0.5) †	20.8	(0.4) †	6.0	(0.3) †	3.1	(0.2) †
	Sweden	79.4	(0.6)	14.2	(0.5)	3.5	(0.3)	2.9	(0.3)	67.2	(0.8)	21.0	(0.7)	7.4	(0.4)	4.4	(0.3)
	Switzerland	77.4	(0.9) †	15.3	(0.7) †	4.6	(0.3) †	2.7	(0.3) †	56.6	(1.0) †	30.7	(1.0) †	9.0	(0.7) †	3.7	(0.4) †
	Turkey	72.9	(0.6)	16.5	(0.5)	6.8	(0.3)	3.8	(0.2)	69.7	(0.9)	17.5	(0.6)	8.5	(0.4)	4.3	(0.3)
	United Kingdom	64.4	(0.8)	24.8	(0.7)	7.1	(0.3)	3.7	(0.3)	50.7	(0.8)	29.4	(0.7)	11.6	(0.5)	8.3	(0.4)
	United States*	61.8	(0.8)	25.6	(0.7)	8.8	(0.4)	3.7	(0.3)	57.9	(1.0)	24.9	(0.8)	10.4	(0.6)	6.7	(0.4)
	OECD average	73.8	(0.1)	17.5	(0.1)	5.7	(0.1)	3.0	(0.0)	62.4	(0.1)	23.9	(0.1)	8.7	(0.1)	5.0	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of exposure to bullying includes the following statements: "Other students left me out of things on purpose"; "Other students made fun of me"; and "I was threatened by other students". Higher values in the index indicate more exposure to bullying.

2. A student is frequently bullied if he or she is in the top 10% of the index of exposure to bullying across all countries/economies.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.2.1 [4/8] **Students' exposure to bullying**

Based on students' reports

		Percentage of students who reported the following:															
		Other students left me out of things on purpose								Other students made fun of me							
		Never or almost never		A few times a year		A few times a month		Once a week or more		Never or almost never		A few times a year		A few times a month		Once a week or more	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	62.5	(0.8)	20.5	(0.7)	11.1	(0.4)	5.9	(0.4)	80.4	(0.8)	11.0	(0.5)	5.7	(0.3)	2.9	(0.3)
	Argentina	65.4	(0.7) †	21.5	(0.6) †	7.3	(0.4) †	5.9	(0.3) †	57.6	(0.8) †	25.1	(0.8) †	10.0	(0.5) †	7.3	(0.4) †
	Baku (Azerbaijan)	61.2	(0.9) †	18.1	(0.7) †	14.1	(0.6) †	6.6	(0.5) †	61.2	(1.0) †	18.1	(0.7) †	14.8	(0.6) †	5.9	(0.4) †
	Belarus	76.8	(0.6)	16.3	(0.6)	5.0	(0.3)	1.9	(0.2)	70.7	(0.7)	18.6	(0.6)	8.1	(0.4)	2.5	(0.2)
	Bosnia and Herzegovina	76.3	(0.7)	13.3	(0.5)	6.8	(0.4)	3.5	(0.3)	71.0	(0.7)	16.9	(0.6)	8.3	(0.4)	3.8	(0.3)
	Brazil	63.7	(0.7) †	22.7	(0.5) †	8.4	(0.4) †	5.2	(0.3) †	59.8	(0.6) †	23.8	(0.5) †	9.7	(0.4) †	6.8	(0.4) †
	Brunei Darussalam	46.7	(0.7) †	34.5	(0.7) †	13.2	(0.5) †	5.7	(0.3) †	30.8	(0.6) †	30.6	(0.7) †	18.6	(0.5) †	20.1	(0.6) †
	B-S-J-Z (China)	79.9	(0.6)	14.7	(0.5)	3.5	(0.2)	1.9	(0.2)	70.1	(0.8)	20.3	(0.6)	6.4	(0.4)	3.1	(0.3)
	Bulgaria	69.4	(1.0) †	16.3	(0.7) †	8.6	(0.5) †	5.7	(0.4) †	58.2	(0.9) †	24.9	(0.8) †	10.7	(0.6) †	6.3	(0.4) †
	Costa Rica	73.2	(0.6)	17.0	(0.5)	5.7	(0.3)	4.2	(0.3)	65.9	(0.7)	21.0	(0.5)	8.2	(0.5)	4.8	(0.3)
	Croatia	82.7	(0.6)	11.0	(0.4)	3.5	(0.3)	2.8	(0.2)	72.5	(0.7)	18.4	(0.5)	5.9	(0.4)	3.3	(0.2)
	Cyprus	65.5	(0.7) †	19.6	(0.6) †	9.4	(0.5) †	5.5	(0.4) †	54.2	(0.8) †	26.6	(0.8) †	12.7	(0.5) †	6.5	(0.4) †
	Dominican Republic	54.3	(1.4) ‡	21.7	(1.2) ‡	16.0	(1.1) ‡	8.0	(0.8) ‡	49.9	(1.8) ‡	24.4	(1.2) ‡	17.4	(1.2) ‡	8.4	(0.8) ‡
	Georgia	80.1	(0.8)	10.3	(0.5)	6.0	(0.4)	3.6	(0.3)	73.8	(1.0)	14.9	(0.7)	7.5	(0.5)	3.8	(0.3)
	Hong Kong (China)*	78.0	(0.7)	13.8	(0.7)	4.9	(0.2)	3.2	(0.2)	54.0	(0.8)	22.8	(0.6)	13.1	(0.6)	10.1	(0.5)
	Indonesia	54.4	(0.9)	26.6	(0.8)	12.9	(0.7)	6.1	(0.4)	54.0	(1.0)	23.6	(0.7)	14.1	(0.7)	8.3	(0.5)
	Jordan	61.3	(0.7)	22.5	(0.5)	10.2	(0.5)	5.9	(0.4)	60.5	(0.9)	23.2	(0.7)	11.0	(0.5)	5.2	(0.3)
	Kazakhstan	60.8	(0.5)	17.5	(0.4)	15.3	(0.4)	6.4	(0.2)	71.3	(0.6)	14.4	(0.4)	10.4	(0.3)	4.0	(0.2)
	Kosovo	56.3	(0.8)	25.9	(0.7)	12.9	(0.6)	5.0	(0.3)	72.0	(0.7)	16.8	(0.6)	7.6	(0.4)	3.6	(0.3)
	Lebanon	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Macao (China)	72.6	(0.7)	20.3	(0.7)	5.2	(0.3)	1.9	(0.2)	52.7	(0.9)	26.6	(0.7)	10.8	(0.5)	9.8	(0.5)
	Malaysia	56.1	(0.8)	28.6	(0.6)	10.9	(0.5)	4.4	(0.3)	47.2	(0.8)	29.2	(0.6)	14.6	(0.5)	8.9	(0.5)
	Malta	59.3	(0.9)	25.2	(0.8)	10.4	(0.6)	5.1	(0.4)	50.6	(0.8)	29.5	(0.8)	12.7	(0.6)	7.2	(0.4)
	Moldova	72.2	(0.9)	21.2	(0.8)	4.5	(0.3)	2.1	(0.2)	62.7	(0.8)	25.7	(0.7)	8.1	(0.4)	3.5	(0.3)
	Montenegro	76.2	(0.6)	14.0	(0.5)	6.0	(0.3)	3.9	(0.3)	71.0	(0.6)	18.0	(0.6)	6.9	(0.3)	4.1	(0.3)
	Morocco	56.1	(0.9) ‡	26.2	(0.8) ‡	12.8	(0.6) ‡	4.9	(0.5) ‡	51.7	(1.3) ‡	29.9	(1.0) ‡	14.2	(0.8) ‡	4.2	(0.5) ‡
	North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Panama	66.7	(1.1) ‡	18.7	(0.9) ‡	10.1	(0.9) ‡	4.4	(0.6) ‡	58.7	(1.3) ‡	21.9	(0.9) ‡	13.2	(0.8) ‡	6.2	(0.6) ‡
	Peru	72.8	(1.1) ‡	17.9	(0.9) ‡	7.0	(0.7) ‡	2.3	(0.3) ‡	68.9	(1.0) ‡	20.0	(0.8) ‡	7.8	(0.7) ‡	3.3	(0.4) ‡
	Philippines	33.4	(0.7)	33.9	(0.7)	21.8	(0.5)	10.8	(0.5)	20.7	(0.7)	29.6	(0.6)	24.0	(0.6)	25.7	(0.6)
	Qatar	60.8	(0.4)	25.4	(0.4)	9.2	(0.3)	4.6	(0.2)	51.9	(0.4)	28.8	(0.4)	12.7	(0.3)	6.6	(0.2)
	Romania	58.6	(1.1)	28.0	(0.8)	9.0	(0.5)	4.4	(0.4)	51.8	(1.0)	30.7	(0.7)	11.8	(0.5)	5.7	(0.4)
	Russia	51.1	(0.9)	25.6	(0.7)	13.8	(0.4)	9.6	(0.4)	60.0	(0.8)	23.8	(0.5)	10.5	(0.4)	5.7	(0.3)
	Saudi Arabia	77.6	(0.7)	14.8	(0.5)	4.8	(0.3)	2.8	(0.3)	62.4	(0.8)	24.8	(0.7)	8.5	(0.3)	4.2	(0.3)
	Serbia	74.6	(0.9) †	13.3	(0.5) †	7.5	(0.5) †	4.6	(0.4) †	73.3	(0.9) †	14.8	(0.6) †	8.4	(0.5) †	3.4	(0.3) †
	Singapore	60.5	(0.6)	29.4	(0.6)	6.6	(0.3)	3.4	(0.2)	47.8	(0.7)	32.0	(0.6)	11.6	(0.4)	8.5	(0.3)
	Chinese Taipei	87.4	(0.4)	8.8	(0.3)	2.7	(0.2)	1.0	(0.1)	77.2	(0.6)	13.5	(0.4)	5.8	(0.4)	3.4	(0.2)
	Thailand	67.1	(0.9)	20.9	(0.6)	8.9	(0.4)	3.0	(0.2)	58.5	(0.8)	22.5	(0.5)	12.2	(0.5)	6.7	(0.3)
	Ukraine	66.2	(0.7)	24.4	(0.6)	6.7	(0.3)	2.8	(0.3)	70.9	(0.7)	18.4	(0.6)	7.2	(0.4)	3.5	(0.3)
	United Arab Emirates	64.3	(0.5)	22.9	(0.5)	8.3	(0.2)	4.4	(0.2)	54.2	(0.5)	27.0	(0.4)	11.5	(0.4)	7.3	(0.3)
	Uruguay	67.3	(0.9) †	20.6	(0.8) †	8.4	(0.6) †	3.7	(0.4) †	61.5	(1.1) †	25.4	(0.9) †	8.2	(0.6) †	4.9	(0.4) †
	Viet Nam	69.7	(0.8)	21.7	(0.7)	6.3	(0.4)	2.3	(0.2)	57.4	(0.9)	28.8	(0.8)	9.9	(0.5)	3.9	(0.3)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of exposure to bullying includes the following statements: "Other students left me out of things on purpose"; "Other students made fun of me"; and "I was threatened by other students". Higher values in the index indicate more exposure to bullying.

2. A student is frequently bullied if he or she is in the top 10% of the index of exposure to bullying across all countries/economies.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.2.1 [5/8] **Students' exposure to bullying**

Based on students' reports

		Percentage of students who reported the following:															
		I was threatened by other students								Other students took away or destroyed things that belong to me							
		Never or almost never		A few times a year		A few times a month		Once a week or more		Never or almost never		A few times a year		A few times a month		Once a week or more	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	**Australia**	73.7	(0.5)	17.1	(0.4)	5.9	(0.3)	3.2	(0.2)	78.6	(0.5)	14.2	(0.4)	4.6	(0.2)	2.6	(0.2)
	Austria	86.2	(0.7)	8.1	(0.5)	4.1	(0.4)	1.6	(0.2)	77.6	(0.9)	14.5	(0.6)	5.4	(0.4)	2.4	(0.3)
	Belgium	88.0	(0.4)	8.8	(0.3)	2.3	(0.2)	0.9	(0.1)	86.6	(0.4)	10.1	(0.4)	2.4	(0.2)	0.8	(0.1)
	Canada	81.2	(0.5)	12.6	(0.4)	4.0	(0.2)	2.2	(0.2)	84.3	(0.4)	10.7	(0.3)	3.4	(0.2)	1.6	(0.1)
	Chile	84.1	(0.7) †	9.5	(0.6) †	4.5	(0.3) †	1.9	(0.3) †	78.3	(0.6) †	13.4	(0.5) †	6.1	(0.4) †	2.2	(0.3) †
	Colombia	78.7	(0.9) †	10.7	(0.5) †	8.1	(0.6) †	2.5	(0.3) †	74.6	(0.9) †	13.2	(0.5) †	9.0	(0.5) †	3.2	(0.3) †
	Czech Republic	84.8	(0.7)	8.2	(0.4)	4.6	(0.4)	2.4	(0.3)	73.8	(0.9)	16.1	(0.6)	6.0	(0.4)	4.1	(0.3)
	Denmark	88.9	(0.6)	8.2	(0.5)	1.9	(0.2)	1.0	(0.1)	77.5	(0.8)	17.9	(0.6)	3.3	(0.3)	1.3	(0.2)
	Estonia	84.4	(0.6)	9.9	(0.5)	4.1	(0.3)	1.7	(0.2)	81.8	(0.7)	11.8	(0.6)	4.6	(0.3)	1.7	(0.2)
	Finland	84.9	(0.6)	10.9	(0.5)	2.6	(0.2)	1.6	(0.2)	87.5	(0.5)	9.3	(0.4)	2.1	(0.2)	1.1	(0.2)
	France	85.8	(0.6)	8.6	(0.4)	3.6	(0.3)	2.0	(0.2)	85.2	(0.6)	9.2	(0.4)	3.7	(0.3)	1.9	(0.2)
	Germany	87.6	(0.7) ‡	7.2	(0.5) ‡	4.2	(0.4) ‡	1.0	(0.2) ‡	78.1	(1.0) ‡	14.8	(0.9) ‡	5.2	(0.6) ‡	1.8	(0.3) ‡
	Greece	84.7	(0.8)	7.8	(0.4)	5.3	(0.5)	2.2	(0.2)	79.1	(0.7)	11.6	(0.4)	5.9	(0.4)	3.3	(0.3)
	Hungary	85.2	(0.8)	8.2	(0.5)	4.7	(0.4)	1.8	(0.2)	82.8	(0.9)	9.9	(0.6)	5.1	(0.4)	2.2	(0.3)
	Iceland	86.2	(0.7) †	9.1	(0.6) †	3.4	(0.4) †	1.3	(0.3) †	90.0	(0.6) †	6.9	(0.5) †	2.0	(0.3) †	1.2	(0.2) †
	Ireland	81.4	(0.6)	13.0	(0.5)	3.7	(0.3)	2.0	(0.2)	79.2	(0.6)	15.3	(0.5)	3.8	(0.3)	1.6	(0.2)
	Israel	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Italy	81.9	(0.8)	9.4	(0.6)	6.7	(0.5)	2.0	(0.2)	76.3	(0.8)	12.7	(0.5)	7.2	(0.4)	3.8	(0.3)
	Japan	94.7	(0.4)	3.0	(0.2)	1.3	(0.2)	1.0	(0.1)	91.1	(0.5)	6.1	(0.4)	1.7	(0.2)	1.0	(0.1)
	Korea	97.4	(0.2)	1.5	(0.2)	0.7	(0.1)	0.4	(0.1)	95.6	(0.3)	3.2	(0.2)	0.7	(0.1)	0.5	(0.1)
	Latvia	72.6	(0.8)	16.9	(0.6)	7.7	(0.5)	2.8	(0.3)	70.3	(0.8)	19.4	(0.6)	7.3	(0.4)	3.0	(0.3)
	Lithuania	76.5	(0.6)	13.4	(0.5)	7.8	(0.4)	2.3	(0.2)	79.7	(0.6)	10.8	(0.4)	6.5	(0.3)	3.0	(0.2)
	Luxembourg	84.9	(0.5)	9.1	(0.5)	4.3	(0.3)	1.7	(0.2)	81.6	(0.5)	11.9	(0.5)	4.7	(0.3)	1.8	(0.2)
	Mexico	84.1	(0.8) †	9.1	(0.5) †	5.2	(0.4) †	1.6	(0.3) †	82.6	(0.8) †	10.0	(0.5) †	5.5	(0.4) †	1.9	(0.3) †
	Netherlands*	93.1	(0.5)	5.4	(0.5)	0.9	(0.2)	0.6	(0.1)	84.4	(0.6)	12.8	(0.6)	1.9	(0.3)	0.9	(0.2)
	New Zealand	71.7	(0.8)	18.4	(0.6)	6.5	(0.4)	3.4	(0.3)	77.7	(0.7)	15.0	(0.6)	4.9	(0.3)	2.3	(0.2)
	Norway	87.7	(0.6)	8.6	(0.5)	2.3	(0.2)	1.5	(0.2)	80.0	(0.7)	15.2	(0.6)	3.3	(0.3)	1.5	(0.2)
	Poland	80.7	(0.7)	11.8	(0.5)	5.4	(0.4)	2.1	(0.2)	77.8	(0.8)	13.4	(0.6)	6.2	(0.4)	2.6	(0.3)
	Portugal*	88.7	(0.5)	7.3	(0.3)	3.1	(0.3)	0.9	(0.1)	87.0	(0.6)	8.4	(0.4)	3.3	(0.3)	1.3	(0.2)
	Slovak Republic	77.3	(0.9)	13.2	(0.6)	7.5	(0.6)	2.0	(0.2)	72.1	(1.0)	17.0	(0.7)	7.4	(0.5)	3.5	(0.3)
	Slovenia	83.9	(0.6)	9.9	(0.5)	4.8	(0.4)	1.5	(0.2)	81.2	(0.6)	11.6	(0.5)	5.2	(0.4)	2.0	(0.2)
	Spain	86.5	(0.3) †	8.6	(0.3) †	3.5	(0.2) †	1.4	(0.1) †	81.2	(0.4) †	12.4	(0.3) †	4.4	(0.3) †	2.0	(0.1) †
	Sweden	87.8	(0.5)	8.1	(0.5)	2.6	(0.2)	1.5	(0.2)	82.0	(0.7)	13.4	(0.6)	2.9	(0.2)	1.7	(0.2)
	Switzerland	83.7	(0.9) †	10.0	(0.7) †	4.5	(0.4) †	1.8	(0.3) †	76.4	(1.0) †	15.4	(0.8) †	5.7	(0.5) †	2.6	(0.3) †
	Turkey	80.0	(0.8)	11.5	(0.5)	6.3	(0.4)	2.3	(0.1)	80.9	(0.8)	10.4	(0.5)	5.8	(0.4)	2.9	(0.3)
	United Kingdom	79.6	(0.6)	13.4	(0.5)	4.4	(0.3)	2.6	(0.2)	85.3	(0.6)	9.8	(0.4)	3.1	(0.3)	1.7	(0.2)
	United States*	81.7	(0.7)	11.8	(0.5)	4.5	(0.4)	2.1	(0.2)	85.0	(0.7)	10.4	(0.5)	3.4	(0.3)	1.2	(0.2)
	OECD average	83.9	(0.1)	10.0	(0.1)	4.4	(0.1)	1.8	(0.0)	81.2	(0.1)	12.2	(0.1)	4.5	(0.1)	2.1	(0.0)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of exposure to bullying includes the following statements: "Other students left me out of things on purpose"; "Other students made fun of me"; and "I was threatened by other students". Higher values in the index indicate more exposure to bullying.

2. A student is frequently bullied if he or she is in the top 10% of the index of exposure to bullying across all countries/economies.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.2.1 [6/8] **Students' exposure to bullying**

Based on students' reports

		Percentage of students who reported the following:															
		I was threatened by other students								Other students took away or destroyed things that belong to me							
		Never or almost never		A few times a year		A few times a month		Once a week or more		Never or almost never		A few times a year		A few times a month		Once a week or more	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	85.9	(0.7)	6.6	(0.4)	5.1	(0.3)	2.4	(0.2)	80.2	(0.7)	10.9	(0.4)	5.9	(0.3)	3.0	(0.2)
	Argentina	79.7	(0.6) †	11.1	(0.5) †	5.9	(0.4) †	3.4	(0.3) †	67.5	(0.9) †	17.3	(0.6) †	9.1	(0.5) †	6.1	(0.4) †
	Baku (Azerbaijan)	65.5	(1.0) †	14.0	(0.6) †	14.6	(0.7) †	5.8	(0.5) †	63.6	(1.1) †	15.5	(0.7) †	14.5	(0.6) †	6.3	(0.5) †
	Belarus	85.0	(0.6)	9.6	(0.5)	4.2	(0.3)	1.2	(0.2)	83.8	(0.6)	10.8	(0.5)	4.3	(0.3)	1.2	(0.2)
	Bosnia and Herzegovina	77.1	(0.9)	11.0	(0.5)	8.3	(0.4)	3.6	(0.3)	78.2	(0.8)	10.8	(0.5)	7.7	(0.4)	3.3	(0.3)
	Brazil	77.6	(0.7) †	12.3	(0.5) †	7.2	(0.4) †	2.9	(0.2) †	73.6	(0.7) †	14.7	(0.5) †	8.1	(0.4) †	3.6	(0.3) †
	Brunei Darussalam	59.8	(0.6) †	20.4	(0.6) †	13.1	(0.5) †	6.7	(0.4) †	69.7	(0.6) †	18.0	(0.6) †	8.7	(0.4) †	3.7	(0.2) †
	B-S-J-Z (China)	89.9	(0.4)	7.2	(0.3)	1.7	(0.2)	1.3	(0.2)	65.1	(0.8)	24.7	(0.6)	7.4	(0.4)	2.8	(0.2)
	Bulgaria	67.4	(1.1) †	16.6	(0.8) †	12.0	(0.7) †	4.1	(0.3) †	64.2	(1.0) †	18.6	(0.7) †	11.2	(0.6) †	6.1	(0.5) †
	Costa Rica	80.8	(0.6)	11.1	(0.5)	5.4	(0.3)	2.8	(0.2)	87.2	(0.5)	7.8	(0.3)	3.3	(0.3)	1.7	(0.2)
	Croatia	84.0	(0.6)	9.8	(0.4)	3.8	(0.3)	2.4	(0.2)	84.3	(0.6)	9.4	(0.4)	4.0	(0.3)	2.2	(0.2)
	Cyprus	69.6	(0.7) †	14.0	(0.6) †	11.8	(0.5) †	4.5	(0.3) †	70.4	(0.7) †	12.7	(0.5) †	10.2	(0.5) †	6.7	(0.4) †
	Dominican Republic	59.3	(1.8) ‡	18.1	(1.3) ‡	15.9	(1.3) ‡	6.7	(0.8) ‡	56.4	(1.8) ‡	18.7	(1.1) ‡	16.9	(1.2) ‡	7.9	(0.8) ‡
	Georgia	83.3	(0.8)	8.2	(0.5)	6.3	(0.4)	2.2	(0.3)	77.8	(0.9)	11.3	(0.5)	7.9	(0.6)	3.0	(0.3)
	Hong Kong (China)*	86.0	(0.6)	7.8	(0.4)	3.8	(0.3)	2.4	(0.2)	77.8	(0.6)	13.2	(0.5)	5.6	(0.3)	3.4	(0.3)
	Indonesia	69.7	(1.1)	16.3	(0.6)	9.7	(0.6)	4.3	(0.3)	56.8	(1.1)	21.3	(0.7)	14.7	(0.6)	7.2	(0.4)
	Jordan	66.4	(1.0)	15.4	(0.5)	14.1	(0.7)	4.1	(0.3)	62.0	(1.0)	17.3	(0.6)	13.4	(0.5)	7.2	(0.4)
	Kazakhstan	75.3	(0.7)	10.9	(0.4)	10.3	(0.4)	3.5	(0.2)	74.3	(0.7)	11.3	(0.4)	10.1	(0.4)	4.3	(0.2)
	Kosovo	77.0	(0.7)	12.9	(0.5)	7.8	(0.5)	2.3	(0.3)	74.4	(0.8)	14.2	(0.6)	7.9	(0.5)	3.4	(0.3)
	Lebanon	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Macao (China)	81.9	(0.6)	11.3	(0.5)	4.5	(0.3)	2.2	(0.3)	73.8	(0.7)	17.7	(0.6)	5.7	(0.4)	2.8	(0.3)
	Malaysia	75.5	(0.9)	15.1	(0.6)	7.1	(0.5)	2.3	(0.2)	69.9	(0.9)	18.4	(0.6)	8.5	(0.5)	3.2	(0.3)
	Malta	71.8	(0.7)	15.6	(0.6)	9.3	(0.5)	3.4	(0.4)	73.3	(0.7)	15.3	(0.7)	7.1	(0.5)	4.3	(0.4)
	Moldova	79.1	(0.6)	14.4	(0.6)	4.8	(0.3)	1.7	(0.2)	76.5	(0.7)	17.1	(0.6)	4.7	(0.4)	1.7	(0.2)
	Montenegro	76.3	(0.6)	12.1	(0.5)	7.7	(0.4)	3.8	(0.2)	78.3	(0.7)	11.3	(0.6)	6.7	(0.4)	3.7	(0.3)
	Morocco	60.2	(1.5) ‡	20.8	(0.9) ‡	15.2	(1.0) ‡	3.7	(0.4) ‡	58.3	(1.6) ‡	21.5	(0.8) ‡	14.5	(0.9) ‡	5.7	(0.5) ‡
	North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Panama	76.2	(1.0) ‡	10.8	(0.9) ‡	9.2	(0.6) ‡	3.8	(0.4) ‡	73.8	(1.1) ‡	12.9	(1.0) ‡	9.1	(0.8) ‡	4.2	(0.5) ‡
	Peru	86.5	(0.8) ‡	7.7	(0.6) ‡	4.2	(0.5) ‡	1.6	(0.3) ‡	76.5	(0.9) ‡	14.7	(0.6) ‡	5.8	(0.6) ‡	3.0	(0.4) ‡
	Philippines	38.3	(1.1)	27.2	(0.6)	22.4	(0.7)	12.2	(0.5)	42.1	(1.0)	27.1	(0.7)	21.0	(0.5)	9.8	(0.5)
	Qatar	71.5	(0.4)	16.2	(0.3)	8.9	(0.3)	3.4	(0.2)	68.6	(0.4)	17.5	(0.3)	9.5	(0.3)	4.4	(0.2)
	Romania	71.5	(1.1)	17.0	(0.7)	8.1	(0.5)	3.4	(0.3)	63.7	(1.1)	22.6	(0.9)	9.1	(0.5)	4.6	(0.4)
	Russia	76.1	(0.8)	12.5	(0.6)	8.3	(0.4)	3.1	(0.2)	73.8	(0.6)	13.7	(0.4)	8.3	(0.3)	4.2	(0.3)
	Saudi Arabia	76.0	(0.8)	12.4	(0.5)	8.8	(0.4)	2.8	(0.3)	71.6	(0.8)	15.1	(0.5)	8.1	(0.5)	5.3	(0.4)
	Serbia	78.6	(1.1) †	10.5	(0.5) †	8.0	(0.6) †	2.9	(0.3) †	79.6	(1.0) †	9.7	(0.5) †	6.9	(0.5) †	3.7	(0.3) †
	Singapore	82.8	(0.4)	12.1	(0.4)	3.1	(0.2)	2.0	(0.2)	80.3	(0.6)	14.5	(0.5)	3.4	(0.2)	1.9	(0.2)
	Chinese Taipei	94.5	(0.3)	3.8	(0.3)	1.1	(0.1)	0.6	(0.1)	83.1	(0.6)	11.8	(0.5)	3.7	(0.2)	1.4	(0.1)
	Thailand	72.3	(0.8)	15.8	(0.5)	8.9	(0.4)	3.0	(0.3)	70.0	(0.9)	16.9	(0.5)	9.9	(0.5)	3.3	(0.2)
	Ukraine	80.5	(0.8)	12.2	(0.5)	5.6	(0.5)	1.7	(0.2)	81.4	(0.8)	11.0	(0.5)	5.1	(0.4)	2.5	(0.3)
	United Arab Emirates	73.8	(0.5)	14.2	(0.4)	8.4	(0.3)	3.6	(0.2)	71.9	(0.6)	15.4	(0.4)	8.2	(0.3)	4.5	(0.2)
	Uruguay	80.8	(0.8) †	11.2	(0.7) †	6.5	(0.5) †	1.6	(0.2) †	77.0	(0.9) †	13.6	(0.7) †	6.8	(0.5) †	2.6	(0.3) †
	Viet Nam	80.3	(0.8)	14.0	(0.7)	4.4	(0.4)	1.4	(0.2)	61.3	(1.1)	24.4	(0.8)	9.9	(0.5)	4.4	(0.3)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of exposure to bullying includes the following statements: "Other students left me out of things on purpose"; "Other students made fun of me"; and "I was threatened by other students". Higher values in the index indicate more exposure to bullying.

2. A student is frequently bullied if he or she is in the top 10% of the index of exposure to bullying across all countries/economies.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.2.1 [7/8] **Students' exposure to bullying**

Based on students' reports

		Percentage of students who reported the following:															
		I got hit or pushed around by other students								Other students spread nasty rumours about me							
		Never or almost never		A few times a year		A few times a month		Once a week or more		Never or almost never		A few times a year		A few times a month		Once a week or more	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	**Australia**	76.4	(0.5)	14.5	(0.4)	5.8	(0.2)	3.4	(0.2)	67.9	(0.5)	19.5	(0.4)	8.1	(0.3)	4.4	(0.2)
	Austria	84.1	(0.7)	8.7	(0.5)	4.6	(0.4)	2.7	(0.3)	71.8	(0.7)	17.3	(0.6)	7.0	(0.4)	3.9	(0.4)
	Belgium	86.5	(0.5)	9.3	(0.4)	2.8	(0.2)	1.4	(0.1)	69.4	(0.7)	22.1	(0.6)	5.9	(0.3)	2.6	(0.2)
	Canada	80.8	(0.5)	12.0	(0.4)	4.5	(0.2)	2.7	(0.2)	73.5	(0.5)	16.8	(0.4)	6.3	(0.3)	3.3	(0.2)
	Chile	83.2	(0.7) †	10.3	(0.5) †	4.7	(0.4) †	1.8	(0.3) †	68.5	(0.8) †	18.9	(0.6) †	8.4	(0.4) †	4.3	(0.3) †
	Colombia	77.3	(0.9) †	11.5	(0.6) †	7.9	(0.5) †	3.3	(0.3) †	62.2	(0.8) †	19.9	(0.7) †	11.7	(0.5) †	6.3	(0.4) †
	Czech Republic	75.7	(0.8)	14.3	(0.5)	5.9	(0.4)	4.0	(0.3)	64.1	(0.9)	21.3	(0.6)	8.5	(0.5)	6.0	(0.5)
	Denmark	81.3	(0.7)	12.7	(0.5)	3.4	(0.3)	2.6	(0.3)	71.0	(0.7)	21.9	(0.5)	5.4	(0.4)	1.7	(0.2)
	Estonia	81.7	(0.7)	11.6	(0.5)	4.6	(0.3)	2.1	(0.3)	74.5	(0.7)	16.6	(0.6)	6.2	(0.4)	2.7	(0.2)
	Finland	84.1	(0.6)	10.8	(0.5)	2.8	(0.2)	2.3	(0.3)	74.9	(0.7)	17.8	(0.5)	4.9	(0.3)	2.4	(0.2)
	France	86.1	(0.6)	8.4	(0.4)	3.6	(0.3)	1.9	(0.2)	74.1	(0.8)	16.9	(0.6)	6.0	(0.4)	3.1	(0.3)
	Germany	87.0	(0.8) ‡	8.0	(0.6) ‡	3.5	(0.4) ‡	1.4	(0.2) ‡	70.4	(1.0) ‡	19.3	(0.9) ‡	7.8	(0.6) ‡	2.4	(0.3) ‡
	Greece	81.8	(0.8)	9.1	(0.4)	6.1	(0.4)	3.0	(0.2)	73.9	(0.9)	14.9	(0.6)	7.2	(0.4)	4.1	(0.3)
	Hungary	84.9	(0.9)	7.9	(0.5)	4.6	(0.4)	2.6	(0.3)	69.1	(0.9)	17.4	(0.6)	8.3	(0.5)	5.1	(0.5)
	Iceland	89.3	(0.6) †	7.0	(0.5) †	2.7	(0.4) †	1.0	(0.2) †	83.6	(0.7) †	10.8	(0.6) †	3.8	(0.4) †	1.7	(0.2) †
	Ireland	81.8	(0.5)	12.2	(0.4)	3.6	(0.3)	2.4	(0.2)	73.9	(0.7)	18.1	(0.6)	5.1	(0.4)	2.9	(0.3)
	Israel	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Italy	83.6	(0.9)	7.8	(0.5)	6.2	(0.5)	2.5	(0.3)	73.0	(0.8)	15.2	(0.6)	7.3	(0.4)	4.5	(0.4)
	Japan	86.7	(0.6)	7.4	(0.3)	3.1	(0.3)	2.9	(0.2)	83.4	(0.7)	11.4	(0.5)	3.0	(0.3)	2.2	(0.2)
	Korea	98.0	(0.2)	1.0	(0.1)	0.6	(0.1)	0.4	(0.1)	91.4	(0.5)	6.3	(0.3)	1.4	(0.2)	0.9	(0.2)
	Latvia	66.8	(0.8)	21.0	(0.6)	8.7	(0.4)	3.6	(0.4)	56.7	(0.8)	27.2	(0.7)	11.0	(0.5)	5.1	(0.4)
	Lithuania	77.6	(0.6)	11.4	(0.4)	8.0	(0.4)	3.0	(0.2)	71.1	(0.6)	16.3	(0.5)	8.3	(0.4)	4.2	(0.3)
	Luxembourg	85.8	(0.6)	7.8	(0.4)	4.4	(0.3)	1.9	(0.2)	70.5	(0.7)	18.7	(0.6)	7.1	(0.4)	3.8	(0.3)
	Mexico	80.9	(0.8) ‡	10.8	(0.6) ‡	6.3	(0.5) ‡	1.9	(0.2) ‡	70.5	(0.9) ‡	16.3	(0.7) ‡	9.4	(0.5) ‡	3.8	(0.5) ‡
	Netherlands*	91.6	(0.5)	5.9	(0.4)	1.5	(0.2)	1.0	(0.1)	76.0	(0.9)	17.7	(0.8)	4.4	(0.3)	1.8	(0.2)
	New Zealand	75.5	(0.7)	15.5	(0.6)	6.1	(0.3)	2.9	(0.3)	65.7	(0.8)	21.1	(0.7)	8.2	(0.3)	5.0	(0.3)
	Norway	84.5	(0.6)	10.1	(0.4)	2.8	(0.2)	2.6	(0.2)	76.5	(0.7)	16.2	(0.6)	4.7	(0.3)	2.5	(0.3)
	Poland	79.5	(0.7)	12.3	(0.5)	5.8	(0.4)	2.4	(0.2)	59.0	(0.9)	25.4	(0.7)	10.4	(0.5)	5.2	(0.3)
	Portugal*	91.0	(0.5)	5.2	(0.3)	3.0	(0.3)	0.9	(0.2)	79.4	(0.7)	13.8	(0.6)	4.7	(0.3)	2.2	(0.2)
	Slovak Republic	77.4	(0.9)	11.8	(0.6)	7.6	(0.5)	3.1	(0.3)	60.9	(0.9)	22.9	(0.6)	9.8	(0.5)	6.3	(0.4)
	Slovenia	78.5	(0.6)	12.7	(0.5)	6.2	(0.3)	2.5	(0.2)	69.7	(0.7)	19.1	(0.6)	7.3	(0.4)	3.9	(0.3)
	Spain	85.9	(0.4) †	8.7	(0.2) †	3.5	(0.2) †	1.9	(0.1) †	75.9	(0.5) †	15.1	(0.3) †	5.8	(0.2) †	3.2	(0.2) †
	Sweden	80.6	(0.7)	12.8	(0.6)	4.0	(0.3)	2.6	(0.3)	75.5	(0.7)	17.0	(0.7)	4.8	(0.4)	2.8	(0.3)
	Switzerland	81.8	(0.9) †	10.8	(0.6) †	5.4	(0.5) †	2.0	(0.2) †	68.9	(1.1) †	19.4	(0.9) †	8.3	(0.6) †	3.4	(0.4) †
	Turkey	82.0	(0.8)	9.6	(0.5)	5.7	(0.4)	2.8	(0.2)	71.4	(0.8)	16.0	(0.5)	8.0	(0.4)	4.6	(0.3)
	United Kingdom	81.6	(0.7)	11.9	(0.5)	3.9	(0.3)	2.6	(0.2)	69.3	(0.6)	20.4	(0.5)	6.3	(0.4)	4.0	(0.3)
	United States*	84.9	(0.7)	9.7	(0.5)	3.7	(0.3)	1.8	(0.2)	72.7	(0.8)	17.0	(0.6)	6.7	(0.4)	3.6	(0.3)
	OECD average	82.7	(0.1)	10.3	(0.1)	4.7	(0.1)	2.3	(0.0)	71.7	(0.1)	17.8	(0.1)	6.9	(0.1)	3.6	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of exposure to bullying includes the following statements: "Other students left me out of things on purpose"; "Other students made fun of me"; and "I was threatened by other students". Higher values in the index indicate more exposure to bullying.

2. A student is frequently bullied if he or she is in the top 10% of the index of exposure to bullying across all countries/economies.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.2.1 [8/8] **Students' exposure to bullying**

Based on students' reports

		Percentage of students who reported the following:															
		I got hit or pushed around by other students								Other students spread nasty rumours about me							
		Never or almost never		A few times a year		A few times a month		Once a week or more		Never or almost never		A few times a year		A few times a month		Once a week or more	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	82.8	(0.8)	8.7	(0.4)	5.4	(0.4)	3.1	(0.2)	78.1	(0.7)	11.4	(0.4)	6.2	(0.4)	4.3	(0.3)
	Argentina	83.5	(0.6) †	8.5	(0.5) †	5.2	(0.4) †	2.8	(0.3) †	67.0	(0.9) †	18.0	(0.6) †	8.1	(0.4) †	7.0	(0.4) †
	Baku (Azerbaijan)	65.8	(1.1) †	12.6	(0.5) †	14.8	(0.7) †	6.8	(0.4) †	62.6	(1.0) †	14.6	(0.7) †	14.4	(0.7) †	8.4	(0.5) †
	Belarus	85.9	(0.6)	8.9	(0.5)	4.1	(0.3)	1.2	(0.2)	73.1	(0.7)	17.4	(0.5)	7.0	(0.4)	2.5	(0.3)
	Bosnia and Herzegovina	83.3	(0.7)	7.0	(0.4)	6.7	(0.4)	3.0	(0.3)	68.9	(0.8)	15.7	(0.5)	9.7	(0.4)	5.7	(0.3)
	Brazil	80.9	(0.6) †	10.1	(0.4) †	6.4	(0.4) †	2.6	(0.2) †	67.3	(0.6) †	18.2	(0.5) †	9.0	(0.5) †	5.5	(0.4) †
	Brunei Darussalam	65.8	(0.6) †	19.3	(0.6) †	10.3	(0.4) †	4.6	(0.3) †	58.6	(0.8) †	24.2	(0.7) †	11.3	(0.5) †	5.9	(0.3) †
	B-S-J-Z (China)	89.3	(0.5)	7.3	(0.4)	2.0	(0.2)	1.3	(0.2)	82.2	(0.6)	12.7	(0.5)	3.3	(0.2)	1.8	(0.2)
	Bulgaria	63.5	(1.0) †	17.8	(0.8) †	12.5	(0.7) †	6.2	(0.4) †	59.0	(1.2) †	21.1	(0.7) †	12.2	(0.6) †	7.7	(0.5) †
	Costa Rica	86.8	(0.6)	7.8	(0.4)	3.2	(0.3)	2.2	(0.2)	63.6	(0.7)	21.5	(0.6)	9.0	(0.4)	5.9	(0.4)
	Croatia	83.9	(0.6)	9.3	(0.4)	4.4	(0.3)	2.4	(0.2)	73.0	(0.7)	16.1	(0.6)	6.9	(0.3)	3.9	(0.2)
	Cyprus	68.8	(0.7) †	13.3	(0.7) †	11.3	(0.4) †	6.6	(0.4) †	59.3	(0.7) †	20.2	(0.6) †	11.5	(0.5) †	9.0	(0.5) †
	Dominican Republic	64.3	(1.9) ‡	14.9	(1.0) ‡	14.7	(1.0) ‡	6.1	(0.9) ‡	51.0	(1.7) ‡	19.5	(1.1) ‡	17.9	(1.2) ‡	11.6	(1.1) ‡
	Georgia	78.8	(0.9)	9.9	(0.6)	7.5	(0.4)	3.8	(0.3)	72.7	(0.8)	13.4	(0.5)	8.2	(0.5)	5.7	(0.4)
	Hong Kong (China)*	80.9	(0.6)	9.7	(0.4)	5.3	(0.3)	4.1	(0.3)	73.3	(0.6)	16.1	(0.5)	6.4	(0.4)	4.2	(0.3)
	Indonesia	64.6	(1.0)	17.5	(0.7)	11.6	(0.6)	6.2	(0.4)	58.9	(0.9)	20.9	(0.6)	12.6	(0.7)	7.6	(0.4)
	Jordan	66.7	(1.0)	14.5	(0.5)	12.6	(0.7)	6.1	(0.4)	62.2	(1.0)	16.6	(0.6)	12.4	(0.5)	8.8	(0.5)
	Kazakhstan	76.0	(0.7)	9.8	(0.4)	10.3	(0.4)	4.0	(0.2)	70.8	(0.7)	13.0	(0.4)	10.9	(0.4)	5.4	(0.3)
	Kosovo	74.8	(0.7)	13.8	(0.6)	8.1	(0.4)	3.4	(0.3)	69.6	(0.7)	16.0	(0.6)	9.0	(0.5)	5.4	(0.4)
	Lebanon	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Macao (China)	84.8	(0.6)	9.2	(0.5)	3.7	(0.3)	2.2	(0.2)	68.6	(0.7)	20.8	(0.6)	7.0	(0.4)	3.7	(0.3)
	Malaysia	76.8	(0.9)	13.0	(0.6)	7.5	(0.5)	2.7	(0.2)	58.7	(0.7)	24.8	(0.6)	11.8	(0.6)	4.7	(0.3)
	Malta	71.4	(0.8)	16.0	(0.7)	8.4	(0.4)	4.2	(0.4)	64.9	(1.0)	19.8	(0.8)	10.1	(0.6)	5.2	(0.4)
	Moldova	77.8	(0.7)	15.3	(0.6)	4.9	(0.3)	2.0	(0.2)	61.3	(0.9)	25.7	(0.7)	8.7	(0.4)	4.4	(0.3)
	Montenegro	80.5	(0.6)	9.3	(0.4)	6.8	(0.3)	3.4	(0.2)	67.0	(0.7)	17.9	(0.6)	9.0	(0.4)	6.0	(0.3)
	Morocco	60.8	(1.7) ‡	20.1	(1.0) ‡	14.2	(0.9) ‡	4.8	(0.5) ‡	50.6	(1.2) ‡	24.5	(0.9) ‡	15.3	(0.9) ‡	9.5	(0.5) ‡
	North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Panama	77.0	(1.2) ‡	10.6	(1.0) ‡	8.5	(0.7) ‡	3.8	(0.5) ‡	63.8	(1.1) ‡	18.1	(1.0) ‡	10.7	(0.9) ‡	7.3	(0.6) ‡
	Peru	82.4	(0.8) ‡	10.1	(0.5) ‡	5.4	(0.5) ‡	2.1	(0.3) ‡	67.8	(1.2) ‡	20.2	(1.1) ‡	7.8	(0.7) ‡	4.2	(0.4) ‡
	Philippines	39.8	(1.0)	28.0	(0.7)	21.1	(0.6)	11.1	(0.5)	40.4	(0.9)	27.1	(0.7)	21.3	(0.6)	11.1	(0.5)
	Qatar	70.7	(0.4)	15.6	(0.3)	9.6	(0.2)	4.0	(0.2)	61.3	(0.5)	21.5	(0.4)	11.1	(0.3)	6.1	(0.2)
	Romania	71.5	(1.1)	16.1	(0.6)	8.7	(0.6)	3.6	(0.3)	60.7	(1.1)	23.4	(0.8)	9.7	(0.6)	6.2	(0.4)
	Russia	78.9	(0.7)	9.8	(0.4)	7.8	(0.4)	3.4	(0.2)	68.5	(0.8)	17.1	(0.7)	9.2	(0.4)	5.1	(0.3)
	Saudi Arabia	79.2	(0.8)	9.9	(0.5)	7.4	(0.5)	3.5	(0.3)	67.8	(0.8)	17.4	(0.6)	8.7	(0.4)	6.2	(0.4)
	Serbia	80.7	(1.0) †	8.4	(0.6) †	7.8	(0.5) †	3.0	(0.3) †	68.0	(0.9) †	16.6	(0.5) †	9.9	(0.5) †	5.6	(0.4) †
	Singapore	80.8	(0.5)	13.1	(0.4)	3.8	(0.2)	2.3	(0.2)	69.9	(0.6)	21.6	(0.5)	5.5	(0.3)	3.0	(0.2)
	Chinese Taipei	96.5	(0.2)	2.1	(0.2)	0.8	(0.1)	0.6	(0.1)	85.9	(0.5)	9.6	(0.4)	3.2	(0.2)	1.4	(0.2)
	Thailand	76.3	(1.0)	12.9	(0.5)	8.0	(0.5)	2.7	(0.2)	69.0	(0.9)	17.3	(0.6)	9.8	(0.5)	3.9	(0.3)
	Ukraine	82.5	(0.8)	10.6	(0.6)	5.0	(0.5)	1.9	(0.2)	70.8	(0.8)	18.0	(0.6)	7.6	(0.4)	3.7	(0.3)
	United Arab Emirates	73.9	(0.7)	13.3	(0.5)	8.6	(0.3)	4.2	(0.2)	65.0	(0.8)	19.0	(0.5)	10.0	(0.3)	6.0	(0.3)
	Uruguay	80.0	(0.9) †	11.1	(0.7) †	6.8	(0.6) †	2.1	(0.2) †	68.9	(1.0) †	18.0	(0.7) †	8.9	(0.5) †	4.2	(0.4) †
	Viet Nam	81.5	(0.9)	11.9	(0.6)	5.0	(0.4)	1.5	(0.2)	76.2	(0.7)	15.1	(0.6)	5.5	(0.3)	3.2	(0.3)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of exposure to bullying includes the following statements: "Other students left me out of things on purpose"; "Other students made fun of me"; and "I was threatened by other students". Higher values in the index indicate more exposure to bullying.

2. A student is frequently bullied if he or she is in the top 10% of the index of exposure to bullying across all countries/economies.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.2.15 [1/6] **Students' attitudes towards bullying**

Based on students' reports

		Percentage of students who reported the following:															
		It irritates me when nobody defends bullied students								It is a good thing to help students who can't defend themselves							
		Strongly disagree		Disagree		Agree		Strongly agree		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	4.7	(0.2)	8.8	(0.3)	48.9	(0.6)	37.6	(0.5)	2.6	(0.2)	4.7	(0.2)	53.0	(0.6)	39.6	(0.6)
	Austria	13.0	(0.6)	11.5	(0.6)	35.2	(0.8)	40.3	(1.0)	6.0	(0.4)	10.0	(0.6)	36.0	(0.9)	47.9	(1.0)
	Belgium	11.4	(0.4)	8.8	(0.4)	47.9	(0.7)	31.8	(0.7)	2.7	(0.2)	4.5	(0.3)	58.9	(0.7)	33.9	(0.7)
	Canada	6.2	(0.3)	8.7	(0.3)	49.8	(0.5)	35.3	(0.6)	3.2	(0.2)	5.0	(0.2)	53.7	(0.5)	38.1	(0.6)
	Chile	10.0	(0.6) †	6.1	(0.4) †	37.8	(0.8) †	46.1	(1.0) †	5.8	(0.4) †	5.9	(0.5) †	43.2	(0.7) †	45.1	(1.0) †
	Colombia	12.3	(0.6) †	13.0	(0.6) †	48.1	(0.9) †	26.6	(0.8) †	6.0	(0.4) †	10.4	(0.6) †	57.1	(0.7) †	26.5	(0.8) †
	Czech Republic	8.6	(0.4)	7.9	(0.4)	52.0	(0.8)	31.5	(0.8)	5.2	(0.4)	6.2	(0.3)	58.0	(0.8)	30.6	(0.7)
	Denmark	5.2	(0.4)	6.8	(0.4)	48.9	(0.7)	39.1	(0.7)	2.8	(0.3)	5.1	(0.4)	55.7	(0.7)	36.4	(0.8)
	Estonia	6.9	(0.4)	11.9	(0.5)	55.3	(0.8)	25.9	(0.7)	4.0	(0.3)	7.5	(0.4)	59.9	(0.8)	28.7	(0.7)
	Finland	6.7	(0.3)	11.6	(0.5)	55.2	(0.8)	26.5	(0.7)	3.7	(0.3)	5.0	(0.3)	57.2	(0.8)	34.1	(0.7)
	France	8.8	(0.5)	7.4	(0.4)	45.9	(0.7)	37.9	(0.8)	4.1	(0.4)	6.1	(0.4)	53.0	(0.7)	36.7	(0.7)
	Germany	11.5	(0.7) ‡	11.5	(0.8) ‡	38.8	(1.2) ‡	38.3	(1.3) ‡	5.1	(0.5) ‡	8.7	(0.7) ‡	39.6	(1.2) ‡	46.6	(1.4) ‡
	Greece	9.0	(0.5)	7.3	(0.4)	42.3	(0.7)	41.4	(0.8)	4.6	(0.3)	10.2	(0.6)	45.9	(0.8)	39.3	(0.8)
	Hungary	10.2	(0.6)	14.0	(0.6)	52.4	(0.9)	23.3	(0.8)	6.1	(0.4)	11.0	(0.6)	59.6	(0.9)	23.2	(0.7)
	Iceland	15.4	(0.7) †	6.1	(0.4) †	37.8	(1.0) †	40.8	(1.0) †	8.4	(0.5) †	3.8	(0.4) †	42.5	(1.0) †	45.3	(1.0) †
	Ireland	3.6	(0.3)	6.5	(0.3)	49.1	(0.8)	40.9	(0.9)	2.2	(0.2)	4.0	(0.3)	53.0	(0.7)	40.9	(0.8)
	Israel	9.0	(0.4)	8.6	(0.5)	41.6	(0.7)	40.8	(0.9)	4.7	(0.3)	9.2	(0.5)	44.1	(0.8)	41.9	(0.9)
	Italy	8.9	(0.5)	7.0	(0.5)	45.1	(0.9)	39.0	(0.9)	4.2	(0.4)	8.9	(0.6)	49.6	(0.8)	37.3	(0.8)
	Japan	10.7	(0.5)	18.3	(0.6)	50.6	(0.8)	20.4	(0.7)	6.8	(0.4)	13.2	(0.5)	58.5	(0.6)	21.5	(0.7)
	Korea	6.4	(0.4)	7.9	(0.3)	59.7	(0.7)	26.0	(0.6)	3.1	(0.2)	2.9	(0.2)	61.8	(0.7)	32.3	(0.7)
	Latvia	11.4	(0.5)	14.7	(0.6)	50.4	(0.9)	23.6	(0.8)	5.9	(0.3)	12.1	(0.5)	59.1	(0.8)	22.9	(0.7)
	Lithuania	14.5	(0.5)	13.0	(0.5)	41.1	(0.7)	31.4	(0.6)	9.4	(0.4)	11.6	(0.5)	40.0	(0.8)	39.1	(0.7)
	Luxembourg	12.4	(0.5)	9.7	(0.5)	39.2	(0.7)	38.7	(0.7)	5.5	(0.3)	7.8	(0.3)	42.3	(0.7)	44.4	(0.7)
	Mexico	12.7	(0.6) ‡	9.7	(0.6) ‡	45.1	(0.8) ‡	32.5	(1.0) ‡	6.5	(0.5) ‡	7.6	(0.5) ‡	51.3	(0.8) ‡	34.6	(1.0) ‡
	Netherlands*	14.1	(0.6)	15.5	(0.6)	49.3	(0.7)	21.1	(0.7)	2.8	(0.3)	5.9	(0.4)	66.2	(0.9)	25.0	(0.9)
	New Zealand	4.6	(0.3)	7.8	(0.4)	50.3	(0.7)	37.2	(0.8)	2.7	(0.2)	4.1	(0.3)	54.0	(0.7)	39.2	(0.7)
	Norway	6.3	(0.4)	4.8	(0.3)	40.0	(0.7)	48.9	(0.7)	4.3	(0.3)	2.6	(0.2)	42.9	(0.6)	50.2	(0.6)
	Poland	11.8	(0.6)	12.5	(0.5)	49.7	(0.6)	26.1	(0.7)	7.4	(0.4)	9.7	(0.6)	56.9	(0.7)	26.0	(0.8)
	Portugal*	8.2	(0.4)	10.6	(0.5)	50.2	(0.7)	31.0	(0.7)	2.0	(0.2)	3.8	(0.3)	52.2	(0.8)	42.1	(0.8)
	Slovak Republic	14.1	(0.5)	13.3	(0.5)	50.5	(0.8)	22.2	(0.6)	7.6	(0.4)	13.1	(0.6)	55.3	(0.8)	24.0	(0.7)
	Slovenia	9.1	(0.4)	11.0	(0.6)	54.7	(0.9)	25.1	(0.7)	4.7	(0.3)	9.2	(0.5)	58.8	(0.8)	27.4	(0.8)
	Spain	6.9	(0.3) †	5.9	(0.2) †	39.4	(0.4) †	47.8	(0.5) †	3.3	(0.2) †	5.1	(0.2) †	44.5	(0.4) †	47.1	(0.5) †
	Sweden	7.4	(0.5)	8.3	(0.5)	48.0	(0.8)	36.3	(0.7)	4.5	(0.4)	5.4	(0.3)	53.1	(0.8)	37.0	(0.7)
	Switzerland	15.0	(0.8) †	12.4	(0.7) †	39.9	(1.0) †	32.7	(0.9) †	6.7	(0.5) †	10.8	(0.7) †	44.3	(1.1) †	38.1	(1.0) †
	Turkey	12.4	(0.5)	8.0	(0.4)	34.7	(0.6)	44.9	(0.8)	7.1	(0.4)	8.8	(0.5)	42.5	(0.6)	41.6	(0.7)
	United Kingdom	4.1	(0.3)	7.5	(0.4)	49.6	(0.7)	38.7	(0.8)	2.3	(0.2)	4.1	(0.3)	55.0	(0.8)	38.6	(0.8)
	United States*	4.8	(0.3)	6.9	(0.5)	46.8	(0.8)	41.5	(0.8)	2.5	(0.3)	4.0	(0.3)	46.8	(0.7)	46.6	(0.7)
	OECD average	9.4	(0.1)	9.8	(0.1)	46.5	(0.1)	34.3	(0.1)	4.8	(0.1)	7.2	(0.1)	51.5	(0.1)	36.5	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.2.15 [2/6] **Students' attitudes towards bullying**

Based on students' reports

		Percentage of students who reported the following:															
		It irritates me when nobody defends bullied students								It is a good thing to help students who can't defend themselves							
		Strongly disagree		Disagree		Agree		Strongly agree		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	8.1	(0.5)	5.6	(0.3)	45.5	(0.8)	40.8	(0.8)	4.8	(0.3)	6.4	(0.4)	44.7	(0.7)	44.0	(0.7)
	Argentina	11.2	(0.6) †	7.5	(0.4) †	39.6	(0.8) †	41.6	(0.9) †	5.4	(0.4) †	7.7	(0.5) †	46.3	(0.8) †	40.6	(0.8) †
	Baku (Azerbaijan)	16.4	(0.7) †	12.3	(0.6) †	43.2	(0.9) †	28.1	(0.8) †	10.0	(0.5) †	12.5	(0.5) †	47.0	(0.7) †	30.5	(0.8) †
	Belarus	14.5	(0.6)	17.8	(0.6)	52.8	(0.8)	14.8	(0.6)	6.5	(0.4)	12.0	(0.6)	63.1	(0.9)	18.3	(0.7)
	Bosnia and Herzegovina	13.1	(0.6)	7.3	(0.4)	42.1	(0.7)	37.5	(0.8)	6.3	(0.4)	8.1	(0.4)	47.2	(0.8)	38.4	(0.8)
	Brazil	16.5	(0.6) †	12.2	(0.5) †	42.2	(0.7) †	29.1	(0.7) †	6.4	(0.4) †	8.7	(0.4) †	51.3	(0.7) †	33.6	(0.7) †
	Brunei Darussalam	7.2	(0.4) †	11.7	(0.5) †	42.8	(0.7) †	38.3	(0.7) †	3.2	(0.2) †	7.6	(0.4) †	46.4	(0.8) †	42.9	(0.8) †
	B-S-J-Z (China)	4.1	(0.3)	7.6	(0.4)	61.5	(0.8)	26.8	(0.8)	5.4	(0.3)	11.8	(0.4)	59.4	(0.8)	23.5	(0.7)
	Bulgaria	18.1	(0.8) †	13.6	(0.6) †	45.0	(0.9) †	23.3	(0.7) †	10.3	(0.7) †	16.5	(0.7) †	49.3	(0.9) †	23.9	(0.9) †
	Costa Rica	9.3	(0.5)	7.1	(0.4)	34.3	(0.7)	49.4	(0.9)	5.2	(0.4)	5.3	(0.4)	41.4	(0.7)	48.2	(0.8)
	Croatia	8.7	(0.5)	8.4	(0.4)	49.2	(0.8)	33.6	(0.8)	4.4	(0.4)	6.8	(0.4)	52.0	(0.7)	36.8	(0.7)
	Cyprus	14.7	(0.6) †	11.4	(0.5) †	39.2	(0.8) †	34.7	(0.8) †	7.6	(0.4) †	13.4	(0.6) †	42.9	(0.9) †	36.0	(0.7) †
	Dominican Republic	16.9	(1.1) ‡	10.9	(0.8) ‡	41.2	(1.4) ‡	30.9	(1.5) ‡	10.2	(0.9) ‡	13.0	(1.2) ‡	43.8	(1.3) ‡	33.1	(1.5) ‡
	Georgia	11.1	(0.6)	8.4	(0.5)	40.1	(0.9)	40.4	(0.9)	6.3	(0.4)	8.2	(0.6)	42.4	(0.8)	43.0	(0.8)
	Hong Kong (China)*	6.8	(0.4)	18.0	(0.7)	59.4	(0.7)	15.8	(0.7)	5.9	(0.3)	13.2	(0.6)	64.4	(0.7)	16.5	(0.7)
	Indonesia	14.5	(0.5)	11.2	(0.5)	51.7	(0.8)	22.6	(0.9)	9.4	(0.5)	11.1	(0.6)	57.1	(0.9)	22.4	(0.9)
	Jordan	24.9	(0.9)	14.6	(0.5)	38.3	(0.8)	22.2	(0.6)	9.1	(0.4)	16.6	(0.6)	42.2	(0.7)	32.1	(0.8)
	Kazakhstan	19.0	(0.4)	16.3	(0.4)	48.3	(0.5)	16.4	(0.4)	11.9	(0.3)	14.3	(0.5)	55.0	(0.5)	18.8	(0.4)
	Kosovo	13.4	(0.5)	9.4	(0.5)	46.7	(0.9)	30.5	(0.8)	7.7	(0.5)	9.8	(0.5)	49.3	(0.8)	33.2	(0.8)
	Lebanon	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Macao (China)	6.1	(0.4)	19.3	(0.6)	57.4	(0.7)	17.2	(0.5)	3.0	(0.3)	13.3	(0.5)	64.9	(0.7)	18.8	(0.6)
	Malaysia	8.1	(0.4)	9.6	(0.5)	50.7	(0.8)	31.5	(0.9)	4.9	(0.3)	8.2	(0.6)	49.8	(0.8)	37.1	(1.0)
	Malta	7.1	(0.5)	5.9	(0.4)	42.2	(1.1)	44.7	(1.0)	3.6	(0.3)	6.3	(0.5)	44.0	(0.9)	46.1	(0.9)
	Moldova	12.2	(0.6)	14.3	(0.6)	53.5	(0.8)	20.1	(0.7)	3.0	(0.3)	5.9	(0.5)	61.7	(0.8)	29.3	(0.8)
	Montenegro	12.2	(0.5)	8.5	(0.4)	40.6	(0.6)	38.7	(0.6)	6.4	(0.3)	9.2	(0.4)	44.3	(0.6)	40.1	(0.7)
	Morocco	19.8	(1.0) ‡	13.3	(0.7) ‡	41.9	(0.9) ‡	25.0	(1.3) ‡	10.1	(0.6) ‡	17.3	(1.0) ‡	45.7	(1.0) ‡	26.9	(1.2) ‡
	North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Panama	16.2	(1.1) ‡	10.8	(0.8) ‡	36.1	(1.5) ‡	37.0	(1.6) ‡	6.9	(0.6) ‡	9.8	(1.0) ‡	46.1	(1.5) ‡	37.3	(1.5) ‡
	Peru	13.3	(0.9) ‡	9.3	(0.6) ‡	42.1	(1.2) ‡	35.2	(1.2) ‡	6.0	(0.5) ‡	6.3	(0.7) ‡	48.5	(1.3) ‡	39.2	(1.3) ‡
	Philippines	8.1	(0.4)	14.5	(0.6)	55.3	(0.8)	22.0	(0.7)	4.8	(0.4)	11.3	(0.5)	58.3	(0.7)	25.6	(0.9)
	Qatar	13.1	(0.3)	9.4	(0.3)	36.6	(0.5)	40.9	(0.5)	7.1	(0.2)	9.7	(0.3)	39.5	(0.4)	43.8	(0.5)
	Romania	10.3	(0.7)	12.7	(0.6)	51.6	(0.9)	25.4	(0.9)	3.9	(0.3)	11.5	(0.7)	56.3	(0.9)	28.4	(0.9)
	Russia	12.3	(0.5)	13.9	(0.6)	52.8	(0.8)	21.0	(0.7)	5.9	(0.4)	12.6	(0.5)	59.9	(0.7)	21.6	(0.7)
	Saudi Arabia	20.3	(0.8)	10.3	(0.5)	40.5	(0.7)	28.8	(0.7)	10.2	(0.6)	15.0	(0.6)	42.7	(0.7)	32.0	(0.8)
	Serbia	12.7	(0.7) †	9.2	(0.4) †	44.0	(0.7) †	34.1	(0.8) †	6.9	(0.5) †	9.0	(0.6) †	49.5	(0.9) †	34.5	(0.8) †
	Singapore	3.4	(0.3)	7.0	(0.3)	50.4	(0.7)	39.1	(0.7)	2.5	(0.2)	3.5	(0.2)	52.0	(0.6)	42.1	(0.6)
	Chinese Taipei	8.4	(0.4)	16.5	(0.5)	57.7	(0.6)	17.4	(0.5)	7.6	(0.4)	8.6	(0.4)	61.3	(0.6)	22.4	(0.5)
	Thailand	15.4	(0.6)	17.1	(0.6)	52.8	(0.7)	14.7	(0.6)	9.5	(0.5)	14.0	(0.6)	57.9	(0.7)	18.7	(0.8)
	Ukraine	10.9	(0.5)	13.3	(0.6)	55.3	(0.8)	20.4	(0.7)	6.6	(0.4)	10.3	(0.5)	60.1	(0.7)	23.0	(0.7)
	United Arab Emirates	13.3	(0.4)	9.3	(0.3)	35.7	(0.5)	41.7	(0.5)	7.5	(0.3)	9.3	(0.3)	38.5	(0.5)	44.7	(0.5)
	Uruguay	10.7	(0.7) †	6.2	(0.5) †	39.1	(0.9) †	44.0	(1.0) †	5.9	(0.5) †	7.9	(0.6) †	44.6	(0.9) †	41.6	(0.9) †
	Viet Nam	12.1	(0.6)	16.7	(0.8)	53.8	(1.0)	17.4	(1.0)	5.7	(0.4)	9.8	(0.5)	64.5	(1.1)	20.0	(1.2)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.2.15 [3/6] **Students' attitudes towards bullying**

Based on students' reports

		Percentage of students who reported the following:															
		It is a wrong thing to join in bullying								I feel bad seeing other students bullied							
		Strongly disagree		Disagree		Agree		Strongly agree		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	4.1	(0.3)	4.1	(0.2)	36.1	(0.6)	55.8	(0.6)	2.9	(0.2)	5.1	(0.3)	44.4	(0.6)	47.6	(0.6)
	Austria	6.2	(0.4)	6.8	(0.4)	19.0	(0.7)	67.9	(1.0)	7.4	(0.5)	12.9	(0.6)	33.1	(0.9)	46.7	(1.0)
	Belgium	3.2	(0.3)	2.6	(0.2)	32.8	(0.6)	61.4	(0.8)	3.4	(0.3)	9.7	(0.4)	48.6	(0.6)	38.3	(0.7)
	Canada	4.0	(0.2)	3.6	(0.2)	38.3	(0.6)	54.1	(0.6)	3.3	(0.2)	5.5	(0.2)	45.3	(0.6)	45.8	(0.6)
	Chile	8.5	(0.4) †	5.1	(0.4) †	29.8	(0.7) †	56.5	(1.0) †	6.1	(0.4) †	6.7	(0.5) †	38.6	(0.7) †	48.6	(0.9) †
	Colombia	9.9	(0.6) †	21.9	(0.8) †	42.3	(0.8) †	25.8	(1.0) †	6.1	(0.5) †	11.7	(0.5) †	54.6	(1.0) †	27.6	(0.8) †
	Czech Republic	6.9	(0.4)	5.0	(0.3)	41.7	(0.9)	46.4	(0.9)	6.5	(0.4)	7.4	(0.4)	50.6	(0.8)	35.4	(0.9)
	Denmark	3.7	(0.3)	1.9	(0.2)	30.1	(0.8)	64.3	(0.9)	3.2	(0.3)	5.2	(0.3)	41.1	(0.8)	50.4	(0.9)
	Estonia	4.3	(0.3)	6.6	(0.4)	47.5	(0.8)	41.6	(0.8)	4.3	(0.4)	10.1	(0.4)	53.7	(0.8)	31.8	(0.8)
	Finland	3.5	(0.3)	3.4	(0.3)	37.0	(0.7)	56.1	(0.8)	3.7	(0.2)	7.2	(0.4)	46.7	(0.8)	42.4	(0.8)
	France	4.0	(0.4)	3.1	(0.3)	32.4	(0.8)	60.4	(0.9)	4.5	(0.4)	6.6	(0.3)	42.3	(0.8)	46.6	(0.8)
	Germany	4.4	(0.5) ‡	5.3	(0.6) ‡	20.3	(1.0) ‡	70.0	(1.4) ‡	6.4	(0.5) ‡	13.5	(0.8) ‡	36.1	(1.2) ‡	44.0	(1.4) ‡
	Greece	6.3	(0.4)	8.5	(0.5)	35.6	(0.7)	49.6	(0.9)	4.5	(0.3)	7.5	(0.4)	41.9	(0.7)	46.0	(0.9)
	Hungary	9.3	(0.5)	15.5	(0.5)	46.2	(0.8)	29.0	(0.8)	6.5	(0.4)	13.7	(0.6)	53.1	(0.8)	26.7	(0.8)
	Iceland	9.0	(0.5) †	2.7	(0.3) †	28.2	(0.9) †	60.2	(0.9) †	8.6	(0.5) †	5.3	(0.4) †	33.7	(1.0) †	52.4	(1.1) †
	Ireland	3.8	(0.3)	2.5	(0.3)	31.5	(0.7)	62.2	(0.7)	2.0	(0.2)	3.3	(0.3)	43.0	(0.8)	51.7	(0.8)
	Israel	6.5	(0.3)	9.5	(0.5)	33.5	(0.7)	50.4	(0.9)	4.6	(0.2)	8.4	(0.4)	40.7	(0.8)	46.3	(0.9)
	Italy	6.9	(0.4)	7.9	(0.4)	38.4	(0.9)	46.9	(1.0)	5.4	(0.3)	11.7	(0.6)	49.5	(0.9)	33.5	(0.9)
	Japan	3.8	(0.3)	3.3	(0.3)	37.8	(0.7)	55.1	(0.9)	4.6	(0.3)	5.3	(0.3)	42.7	(0.7)	47.4	(0.8)
	Korea	3.6	(0.2)	3.1	(0.2)	46.7	(0.7)	46.6	(0.7)	2.8	(0.2)	2.7	(0.3)	58.5	(0.6)	35.9	(0.7)
	Latvia	7.2	(0.4)	10.2	(0.5)	51.2	(0.9)	31.4	(0.8)	6.6	(0.4)	16.2	(0.7)	53.5	(0.9)	23.7	(0.8)
	Lithuania	10.2	(0.5)	8.9	(0.5)	31.3	(0.6)	49.6	(0.8)	10.3	(0.5)	12.2	(0.4)	37.8	(0.7)	39.7	(0.6)
	Luxembourg	6.3	(0.4)	5.1	(0.3)	24.2	(0.5)	64.4	(0.6)	6.7	(0.3)	11.4	(0.5)	36.1	(0.7)	45.8	(0.7)
	Mexico	9.4	(0.6) ‡	8.5	(0.6) ‡	36.7	(0.9) ‡	45.4	(1.2) ‡	7.4	(0.5) ‡	8.5	(0.5) ‡	46.8	(0.8) ‡	37.4	(1.1) ‡
	Netherlands*	3.2	(0.3)	2.0	(0.2)	37.3	(0.8)	57.5	(0.8)	2.6	(0.3)	6.7	(0.5)	53.3	(0.8)	37.4	(0.8)
	New Zealand	4.2	(0.3)	3.9	(0.3)	36.2	(0.7)	55.7	(0.7)	2.8	(0.2)	4.7	(0.3)	44.1	(0.8)	48.4	(0.7)
	Norway	4.6	(0.3)	1.8	(0.2)	24.5	(0.6)	69.1	(0.8)	5.1	(0.3)	4.1	(0.3)	29.7	(0.7)	61.1	(0.8)
	Poland	8.0	(0.4)	11.8	(0.6)	50.5	(0.8)	29.6	(0.9)	7.8	(0.4)	13.2	(0.5)	53.6	(0.8)	25.5	(0.7)
	Portugal*	4.3	(0.3)	9.5	(0.5)	42.0	(0.7)	44.2	(0.9)	2.1	(0.2)	4.7	(0.3)	49.9	(0.9)	43.2	(0.9)
	Slovak Republic	8.4	(0.4)	11.2	(0.6)	49.1	(0.7)	31.4	(0.7)	7.8	(0.4)	12.3	(0.6)	51.6	(0.7)	28.3	(0.7)
	Slovenia	5.8	(0.4)	10.0	(0.5)	48.4	(0.9)	35.8	(0.8)	4.7	(0.3)	8.6	(0.5)	56.0	(0.9)	30.7	(0.8)
	Spain	5.6	(0.2) †	4.8	(0.3) †	24.6	(0.4) †	65.0	(0.5) †	3.7	(0.2) †	5.3	(0.2) †	37.6	(0.4) †	53.4	(0.5) †
	Sweden	5.2	(0.4)	2.8	(0.3)	29.7	(0.7)	62.3	(0.9)	6.0	(0.5)	10.7	(0.5)	41.9	(0.7)	41.4	(0.8)
	Switzerland	6.7	(0.5) †	7.4	(0.6) †	27.2	(0.9) †	58.7	(1.0) †	7.4	(0.5) †	13.3	(0.6) †	37.6	(1.1) †	41.6	(0.9) †
	Turkey	9.6	(0.4)	10.5	(0.4)	36.9	(0.6)	43.0	(0.7)	7.1	(0.4)	8.0	(0.3)	42.2	(0.6)	42.6	(0.7)
	United Kingdom	3.0	(0.2)	2.3	(0.2)	30.7	(0.8)	64.0	(0.8)	2.1	(0.2)	4.7	(0.3)	42.7	(0.7)	50.6	(0.8)
	United States*	3.8	(0.3)	2.7	(0.3)	33.1	(0.7)	60.3	(0.9)	2.5	(0.2)	4.4	(0.4)	41.4	(0.7)	51.7	(0.8)
	OECD average	5.9	(0.1)	6.4	(0.1)	35.7	(0.1)	52.1	(0.1)	5.1	(0.1)	8.3	(0.1)	44.7	(0.1)	41.8	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.2.15 [4/6] **Students' attitudes towards bullying**

Based on students' reports

		Percentage of students who reported the following:															
		It is a wrong thing to join in bullying								I feel bad seeing other students bullied							
		Strongly disagree		Disagree		Agree		Strongly agree		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	7.8	(0.4)	6.5	(0.4)	34.3	(0.7)	51.4	(0.7)	4.9	(0.3)	4.7	(0.3)	39.2	(0.7)	51.2	(0.8)
	Argentina	10.5	(0.6) †	10.0	(0.5) †	32.5	(0.8) †	46.9	(0.8) †	6.3	(0.4) †	8.2	(0.4) †	42.6	(0.7) †	42.9	(0.8) †
	Baku (Azerbaijan)	12.1	(0.6) †	12.3	(0.5) †	44.9	(1.0) †	30.7	(0.8) †	9.9	(0.6) †	11.0	(0.5) †	47.7	(0.9) †	31.4	(0.8) †
	Belarus	10.2	(0.4)	13.9	(0.5)	53.0	(0.8)	22.9	(0.8)	7.9	(0.5)	20.2	(0.6)	55.2	(0.8)	16.7	(0.7)
	Bosnia and Herzegovina	7.9	(0.4)	6.4	(0.4)	41.9	(0.8)	43.7	(0.9)	6.1	(0.4)	6.9	(0.4)	45.1	(0.7)	41.9	(0.9)
	Brazil	8.0	(0.4) †	8.6	(0.4) †	40.5	(0.7) †	42.9	(0.9) †	6.1	(0.4) †	8.3	(0.4) †	46.2	(0.7) †	39.4	(0.8) †
	Brunei Darussalam	7.0	(0.4) †	6.3	(0.3) †	30.8	(0.7) †	56.0	(0.7) †	3.5	(0.3) †	6.2	(0.3) †	37.8	(0.7) †	52.5	(0.7) †
	B-S-J-Z (China)	2.6	(0.2)	1.7	(0.2)	43.9	(0.8)	51.8	(0.8)	2.6	(0.2)	8.0	(0.4)	60.5	(0.7)	28.9	(0.7)
	Bulgaria	10.1	(0.6) †	12.8	(0.7) †	44.9	(1.0) †	32.2	(1.0) †	10.3	(0.7) †	14.8	(0.7) †	45.7	(1.1) †	29.2	(0.9) †
	Costa Rica	8.1	(0.4)	5.9	(0.3)	30.3	(0.7)	55.8	(1.0)	5.8	(0.5)	6.4	(0.4)	38.4	(0.7)	49.4	(0.9)
	Croatia	5.2	(0.4)	6.1	(0.4)	41.1	(0.7)	47.6	(0.8)	4.5	(0.3)	8.0	(0.4)	47.1	(0.8)	40.4	(0.8)
	Cyprus	8.8	(0.4) †	12.3	(0.6) †	35.7	(0.9) †	43.2	(0.9) †	6.9	(0.5) †	10.8	(0.4) †	40.3	(0.8) †	42.0	(0.8) †
	Dominican Republic	12.5	(0.8) ‡	13.8	(0.9) ‡	40.8	(1.3) ‡	32.9	(1.6) ‡	10.9	(0.9) ‡	10.6	(0.9) ‡	45.2	(1.4) ‡	33.4	(1.5) ‡
	Georgia	9.3	(0.4)	10.8	(0.5)	36.7	(0.8)	43.2	(1.0)	6.4	(0.3)	7.6	(0.5)	39.9	(0.9)	46.0	(0.9)
	Hong Kong (China)*	4.3	(0.3)	4.7	(0.3)	53.3	(0.8)	37.8	(0.8)	5.0	(0.3)	12.4	(0.5)	60.8	(0.8)	21.8	(0.8)
	Indonesia	22.2	(0.7)	20.6	(0.7)	34.4	(0.7)	22.7	(0.9)	9.7	(0.5)	10.8	(0.5)	57.0	(0.8)	22.5	(0.8)
	Jordan	12.9	(0.5)	17.5	(0.6)	44.3	(0.7)	25.3	(0.8)	9.4	(0.4)	10.8	(0.4)	42.4	(0.6)	37.4	(0.7)
	Kazakhstan	14.0	(0.3)	14.4	(0.4)	49.6	(0.5)	22.0	(0.5)	13.2	(0.3)	16.8	(0.4)	51.6	(0.5)	18.4	(0.4)
	Kosovo	12.2	(0.6)	11.6	(0.5)	40.4	(0.8)	35.8	(0.8)	7.9	(0.5)	8.0	(0.4)	46.5	(0.9)	37.5	(0.9)
	Lebanon	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Macao (China)	2.6	(0.3)	4.5	(0.4)	48.2	(0.8)	44.7	(0.8)	2.6	(0.3)	11.8	(0.5)	59.4	(0.7)	26.2	(0.6)
	Malaysia	8.2	(0.4)	7.8	(0.4)	35.7	(0.8)	48.3	(1.0)	4.6	(0.3)	8.0	(0.4)	49.7	(0.7)	37.7	(0.9)
	Malta	5.8	(0.4)	4.6	(0.4)	33.7	(0.9)	55.9	(0.9)	3.9	(0.4)	5.4	(0.4)	38.1	(0.8)	52.6	(0.9)
	Moldova	8.3	(0.5)	17.3	(0.7)	46.6	(0.9)	27.9	(0.7)	4.7	(0.3)	12.6	(0.4)	57.3	(0.8)	25.3	(0.7)
	Montenegro	7.9	(0.4)	9.1	(0.4)	39.1	(0.6)	43.9	(0.7)	6.6	(0.4)	9.0	(0.4)	42.9	(0.6)	41.5	(0.6)
	Morocco	11.3	(0.7) ‡	21.6	(0.9) ‡	41.9	(0.9) ‡	25.2	(1.2) ‡	10.0	(0.6) ‡	16.1	(0.9) ‡	44.9	(0.9) ‡	29.0	(1.2) ‡
	North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Panama	13.6	(0.9) ‡	12.2	(0.8) ‡	34.2	(1.3) ‡	40.0	(1.4) ‡	8.5	(0.8) ‡	10.5	(0.9) ‡	42.4	(1.4) ‡	38.5	(1.6) ‡
	Peru	9.6	(0.7) ‡	9.1	(0.8) ‡	36.5	(1.3) ‡	44.8	(1.5) ‡	6.2	(0.6) ‡	7.8	(0.6) ‡	46.2	(1.2) ‡	39.8	(1.3) ‡
	Philippines	8.7	(0.4)	12.7	(0.5)	43.8	(0.8)	34.8	(0.9)	6.3	(0.3)	11.7	(0.5)	49.3	(0.8)	32.7	(0.8)
	Qatar	10.2	(0.3)	10.7	(0.3)	31.4	(0.5)	47.7	(0.5)	7.3	(0.2)	8.4	(0.3)	36.1	(0.4)	48.2	(0.5)
	Romania	10.0	(0.6)	14.7	(0.7)	43.3	(0.9)	32.0	(1.1)	4.8	(0.4)	13.6	(0.6)	52.1	(0.8)	29.6	(0.8)
	Russia	6.8	(0.4)	9.5	(0.5)	53.7	(0.8)	30.0	(1.0)	6.8	(0.4)	16.2	(0.5)	54.1	(0.6)	22.8	(0.8)
	Saudi Arabia	14.9	(0.6)	14.4	(0.5)	31.6	(0.7)	39.2	(1.0)	10.4	(0.5)	10.7	(0.4)	37.1	(0.6)	41.8	(0.9)
	Serbia	7.9	(0.5) †	9.4	(0.5) †	42.6	(0.8) †	40.2	(0.9) †	7.2	(0.6) †	9.4	(0.5) †	46.0	(0.9) †	37.5	(0.8) †
	Singapore	2.5	(0.2)	1.7	(0.2)	36.5	(0.6)	59.2	(0.6)	2.1	(0.2)	3.7	(0.3)	43.2	(0.6)	51.0	(0.6)
	Chinese Taipei	4.5	(0.3)	3.1	(0.2)	47.3	(0.7)	45.1	(0.8)	5.0	(0.3)	12.2	(0.5)	57.9	(0.8)	24.9	(0.7)
	Thailand	13.7	(0.6)	14.6	(0.6)	47.6	(0.7)	24.1	(0.9)	8.6	(0.5)	11.8	(0.6)	56.8	(0.7)	22.9	(0.8)
	Ukraine	10.3	(0.5)	11.8	(0.5)	50.3	(0.7)	27.5	(0.9)	9.5	(0.5)	11.5	(0.5)	52.7	(0.6)	26.2	(0.8)
	United Arab Emirates	13.5	(0.3)	9.2	(0.3)	28.7	(0.5)	48.6	(0.6)	7.6	(0.3)	7.4	(0.3)	33.2	(0.5)	51.8	(0.6)
	Uruguay	7.9	(0.6) †	8.5	(0.6) †	33.5	(1.0) †	50.1	(1.2) †	5.6	(0.5) †	7.4	(0.5) †	42.2	(0.9) †	44.8	(1.0) †
	Viet Nam	9.3	(0.5)	8.3	(0.6)	49.3	(1.2)	33.1	(1.5)	6.4	(0.4)	7.7	(0.5)	56.8	(1.1)	29.1	(1.2)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.2.15 [5/6] **Students' attitudes towards bullying**

Based on students' reports

		Percentage of students who reported the following:											
		I like it when someone stands up for other students who are being bullied											
		Strongly disagree			Disagree			Agree			Strongly agree		
		%	S.E.		%	S.E.		%	S.E.		%	S.E.	
OECD	Australia	2.3	(0.1)		3.5	(0.2)		44.2	(0.6)		49.9	(0.6)	
	Austria	6.3	(0.4)		7.3	(0.5)		27.8	(0.8)		58.6	(1.1)	
	Belgium	2.4	(0.2)		3.1	(0.2)		50.2	(0.7)		44.3	(0.7)	
	Canada	2.9	(0.2)		3.7	(0.2)		45.2	(0.6)		48.3	(0.6)	
	Chile	6.4	(0.5)	†	4.6	(0.4)	†	36.1	(0.7)	†	52.9	(1.0)	†
	Colombia	5.8	(0.4)	†	8.6	(0.5)	†	51.0	(0.9)	†	34.6	(0.9)	†
	Czech Republic	5.5	(0.4)		5.1	(0.3)		50.8	(0.9)		38.6	(0.9)	
	Denmark	3.0	(0.3)		3.2	(0.3)		41.6	(0.8)		52.2	(0.9)	
	Estonia	4.5	(0.3)		6.8	(0.4)		53.4	(0.9)		35.4	(0.8)	
	Finland	3.1	(0.2)		4.5	(0.3)		47.2	(0.8)		45.2	(0.8)	
	France	3.9	(0.4)		3.5	(0.3)		43.4	(0.8)		49.2	(0.8)	
	Germany	4.1	(0.5)	‡	5.6	(0.6)	‡	30.2	(1.3)	‡	60.0	(1.5)	‡
	Greece	4.8	(0.3)		6.4	(0.4)		39.8	(0.6)		49.0	(0.8)	
	Hungary	6.1	(0.4)		9.0	(0.5)		52.5	(0.9)		32.4	(0.9)	
	Iceland	9.4	(0.5)	†	4.7	(0.4)	†	37.1	(0.9)	†	48.9	(0.9)	†
	Ireland	1.9	(0.2)		2.0	(0.2)		42.4	(0.8)		53.7	(0.8)	
	Israel	4.5	(0.3)		6.1	(0.4)		36.8	(0.7)		52.5	(0.8)	
	Italy	5.0	(0.4)		6.2	(0.4)		45.9	(0.9)		43.0	(0.9)	
	Japan	7.1	(0.4)		9.2	(0.4)		48.5	(0.7)		35.1	(0.7)	
	Korea	2.7	(0.2)		3.4	(0.3)		58.6	(0.6)		35.4	(0.7)	
	Latvia	6.7	(0.4)		9.1	(0.5)		54.8	(0.9)		29.4	(0.8)	
	Lithuania	9.1	(0.4)		8.6	(0.4)		35.2	(0.8)		47.1	(0.7)	
	Luxembourg	5.7	(0.3)		5.8	(0.3)		33.4	(0.7)		55.0	(0.6)	
	Mexico	7.0	(0.5)	‡	5.9	(0.5)	‡	44.0	(0.8)	‡	43.0	(1.0)	‡
	Netherlands*	1.9	(0.3)		2.5	(0.3)		47.3	(0.8)		48.3	(0.9)	
	New Zealand	2.3	(0.2)		3.3	(0.2)		43.5	(0.8)		51.0	(0.8)	
	Norway	5.4	(0.3)		2.2	(0.2)		30.4	(0.6)		62.0	(0.7)	
	Poland	7.3	(0.4)		8.6	(0.5)		52.7	(0.7)		31.4	(0.7)	
	Portugal*	3.2	(0.3)		4.1	(0.3)		47.0	(0.8)		45.7	(0.8)	
	Slovak Republic	7.3	(0.4)		9.1	(0.5)		51.8	(0.8)		31.8	(0.7)	
	Slovenia	5.6	(0.3)		8.1	(0.4)		51.5	(0.8)		34.9	(0.8)	
	Spain	3.5	(0.2)	†	3.6	(0.2)	†	33.8	(0.4)	†	59.1	(0.5)	†
	Sweden	4.5	(0.4)		3.4	(0.3)		41.4	(0.7)		50.8	(0.8)	
	Switzerland	5.5	(0.5)	†	7.5	(0.5)	†	35.6	(0.9)	†	51.4	(1.0)	†
	Turkey	9.8	(0.4)		8.6	(0.4)		38.3	(0.6)		43.3	(0.7)	
	United Kingdom	1.6	(0.2)		2.8	(0.2)		44.0	(0.8)		51.5	(0.8)	
	United States*	2.2	(0.2)		2.7	(0.3)		39.9	(0.8)		55.2	(0.9)	
	OECD average	4.9	(0.1)		5.5	(0.1)		43.4	(0.1)		46.2	(0.1)	

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.2.15 [6/6] **Students' attitudes towards bullying**

Based on students' reports

		Percentage of students who reported the following:											
		I like it when someone stands up for other students who are being bullied											
		Strongly disagree			Disagree			Agree			Strongly agree		
		%	S.E.		%	S.E.		%	S.E.		%	S.E.	
Partners	Albania	4.6	(0.4)		4.0	(0.3)		37.1	(0.8)		54.3	(0.8)	
	Argentina	6.1	(0.4)	†	5.5	(0.4)	†	38.6	(0.7)	†	49.8	(0.8)	†
	Baku (Azerbaijan)	10.9	(0.5)	†	10.0	(0.6)	†	44.6	(0.8)	†	34.5	(0.9)	†
	Belarus	7.2	(0.4)		10.3	(0.5)		59.5	(0.9)		23.0	(0.7)	
	Bosnia and Herzegovina	6.1	(0.4)		5.1	(0.3)		42.8	(0.7)		46.0	(0.9)	
	Brazil	6.7	(0.4)	†	6.0	(0.4)	†	44.9	(0.7)	†	42.5	(0.8)	†
	Brunei Darussalam	4.7	(0.3)	†	7.3	(0.4)	†	34.1	(0.8)	†	54.0	(0.8)	†
	B-S-J-Z (China)	2.9	(0.3)		6.4	(0.3)		55.1	(0.7)		35.6	(0.7)	
	Bulgaria	11.8	(0.7)	†	11.9	(0.7)	†	44.9	(1.0)	†	31.4	(0.9)	†
	Costa Rica	5.8	(0.4)		4.0	(0.3)		34.2	(0.7)		56.0	(0.7)	
	Croatia	4.5	(0.3)		5.2	(0.3)		46.6	(0.7)		43.7	(0.8)	
	Cyprus	8.0	(0.4)	†	9.5	(0.5)	†	37.9	(0.8)	†	44.6	(0.8)	†
	Dominican Republic	11.1	(0.9)	‡	8.7	(0.7)	‡	39.7	(1.4)	‡	40.5	(1.5)	‡
	Georgia	9.3	(0.5)		10.4	(0.6)		39.2	(0.9)		41.1	(0.9)	
	Hong Kong (China)*	4.4	(0.3)		7.1	(0.4)		60.2	(0.7)		28.4	(0.7)	
	Indonesia	14.4	(0.6)		12.7	(0.5)		46.7	(0.8)		26.2	(0.8)	
	Jordan	10.8	(0.5)		9.7	(0.4)		39.0	(0.7)		40.5	(0.8)	
	Kazakhstan	13.0	(0.4)		12.6	(0.4)		52.7	(0.5)		21.8	(0.5)	
	Kosovo	8.5	(0.6)		8.4	(0.5)		42.4	(0.8)		40.7	(0.9)	
	Lebanon	m	m		m	m		m	m		m	m	
	Macao (China)	2.2	(0.2)		7.3	(0.5)		57.8	(0.7)		32.8	(0.6)	
	Malaysia	6.0	(0.4)		6.8	(0.5)		43.4	(0.8)		43.8	(1.0)	
	Malta	3.7	(0.3)		3.9	(0.4)		37.0	(0.9)		55.4	(0.9)	
	Moldova	6.3	(0.5)		8.9	(0.5)		50.4	(0.9)		34.4	(0.9)	
	Montenegro	6.6	(0.4)		6.7	(0.4)		41.6	(0.6)		45.1	(0.6)	
	Morocco	11.1	(0.8)	‡	14.9	(0.9)	‡	41.1	(1.0)	‡	33.0	(1.1)	‡
	North Macedonia	m	m		m	m		m	m		m	m	
	Panama	8.2	(0.8)	‡	7.4	(0.7)	‡	39.8	(1.5)	‡	44.6	(1.4)	‡
	Peru	7.0	(0.6)	‡	6.0	(0.5)	‡	42.9	(1.2)	‡	44.2	(1.2)	‡
	Philippines	8.0	(0.4)		13.7	(0.5)		47.4	(0.9)		30.9	(0.9)	
	Qatar	7.5	(0.2)		7.1	(0.2)		31.7	(0.5)		53.7	(0.5)	
	Romania	5.0	(0.4)		8.4	(0.5)		49.0	(0.7)		37.6	(0.9)	
	Russia	6.2	(0.4)		9.9	(0.4)		57.6	(0.7)		26.3	(0.7)	
	Saudi Arabia	11.9	(0.6)		9.4	(0.5)		33.2	(0.7)		45.5	(0.9)	
	Serbia	7.2	(0.5)	†	6.6	(0.4)	†	44.9	(0.8)	†	41.4	(0.9)	†
	Singapore	1.6	(0.2)		2.9	(0.2)		41.9	(0.7)		53.7	(0.8)	
	Chinese Taipei	5.1	(0.3)		11.1	(0.4)		56.9	(0.7)		26.9	(0.7)	
	Thailand	7.9	(0.5)		10.8	(0.5)		55.5	(0.8)		25.8	(0.8)	
	Ukraine	6.2	(0.4)		7.5	(0.5)		54.6	(0.7)		31.7	(0.8)	
	United Arab Emirates	7.6	(0.3)		6.4	(0.2)		30.8	(0.4)		55.2	(0.5)	
	Uruguay	5.5	(0.5)	†	5.4	(0.4)	†	39.0	(1.0)	†	50.1	(1.0)	†
	Viet Nam	5.4	(0.4)		5.9	(0.4)		49.9	(1.0)		38.8	(1.2)	

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.3.1 [1/6] **Disciplinary climate in language-of-instruction lessons**

Based on students' reports

		Index of disciplinary climate[1]				Percentage of students who reported that the following things happen in their language-of-instruction lessons:							
						Students don't listen to what the teacher says							
		Average		Variability		Never or hardly ever		Some lessons		Most lessons		Every lesson	
		Mean index	S.E.	S.D.	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	-0.20	(0.02)	1.08	(0.01)	16.8	(0.5)	46.3	(0.5)	22.4	(0.5)	14.4	(0.4)
OECD	Austria	0.29	(0.03)	1.18	(0.01)	37.6	(1.0)	35.4	(0.6)	15.8	(0.6)	11.1	(0.5)
OECD	Belgium	-0.21	(0.02)	1.04	(0.01)	18.6	(0.7)	47.3	(0.8)	21.3	(0.6)	12.8	(0.5)
OECD	Canada	-0.09	(0.01)	1.05	(0.01)	20.3	(0.6)	48.8	(0.4)	19.9	(0.4)	11.0	(0.3)
OECD	Chile	-0.12	(0.03)	0.98	(0.01)	20.1	(0.9)	52.9	(0.7)	19.8	(0.7)	7.2	(0.4)
OECD	Colombia	0.11	(0.02)	0.87	(0.01)	22.4	(0.9)	57.4	(0.8)	13.3	(0.6)	6.9	(0.4)
OECD	Czech Republic	-0.02	(0.03)	1.15	(0.01)	17.9	(0.8)	43.3	(0.9)	19.7	(0.7)	19.0	(0.8)
OECD	Denmark	0.19	(0.03)	0.90	(0.01)	25.4	(1.0)	52.6	(0.8)	14.2	(0.7)	7.9	(0.5)
OECD	Estonia	0.20	(0.02)	1.01	(0.01)	18.6	(0.7)	50.9	(0.8)	22.0	(0.7)	8.5	(0.4)
OECD	Finland	-0.11	(0.02)	0.95	(0.01)	13.2	(0.7)	56.9	(0.8)	22.8	(0.7)	7.0	(0.4)
OECD	France	-0.34	(0.03)	1.12	(0.02)	16.6	(0.8)	41.6	(0.8)	25.9	(0.7)	15.9	(0.8)
OECD	Germany	0.04	(0.02)	1.05	(0.01)	19.5	(0.8)	44.5	(0.9)	23.0	(0.7)	13.0	(0.7)
OECD	Greece	-0.26	(0.02)	0.93	(0.01)	12.0	(0.6)	49.6	(0.8)	25.3	(0.7)	13.1	(0.6)
OECD	Hungary	0.07	(0.03)	1.09	(0.01)	18.3	(0.7)	51.1	(0.8)	20.0	(0.6)	10.6	(0.5)
OECD	Iceland	-0.01	(0.02)	0.96	(0.01)	22.5	(0.7)	53.6	(0.9)	17.1	(0.6)	6.9	(0.5)
OECD	Ireland	0.04	(0.03)	1.09	(0.01)	19.8	(0.8)	47.2	(0.8)	20.2	(0.7)	12.8	(0.6)
OECD	Israel	-0.03	(0.04)	1.20	(0.02)	23.3	(1.0)	46.1	(0.8)	19.7	(0.7)	10.9	(0.7)
OECD	Italy	-0.02	(0.02)	1.05	(0.01)	17.8	(0.7)	49.3	(0.7)	23.6	(0.6)	9.3	(0.4)
OECD	Japan	0.78	(0.03)	0.97	(0.01)	45.0	(1.2)	46.5	(0.9)	6.4	(0.4)	2.1	(0.3)
OECD	Korea	1.07	(0.02)	1.01	(0.01)	62.1	(1.0)	31.3	(0.8)	5.5	(0.3)	1.2	(0.2)
OECD	Latvia	0.14	(0.02)	1.06	(0.01)	20.5	(0.8)	47.5	(0.9)	20.7	(0.6)	11.4	(0.5)
OECD	Lithuania	0.28	(0.02)	1.13	(0.01)	24.1	(0.7)	48.2	(0.7)	17.1	(0.5)	10.6	(0.4)
OECD	Luxembourg	-0.01	(0.02)	1.18	(0.01)	23.9	(0.5)	41.5	(0.8)	18.8	(0.6)	15.8	(0.5)
OECD	Mexico	-0.03	(0.02)	0.89	(0.01)	17.8	(0.8)	56.9	(0.8)	17.9	(0.6)	7.5	(0.4)
OECD	Netherlands*	-0.20	(0.02)	0.87	(0.01)	17.8	(0.8)	55.9	(0.9)	19.5	(0.7)	6.8	(0.5)
OECD	New Zealand	-0.16	(0.02)	1.02	(0.01)	17.0	(0.6)	47.8	(0.7)	23.2	(0.6)	12.0	(0.4)
OECD	Norway	0.04	(0.02)	0.94	(0.01)	24.6	(0.9)	53.2	(0.8)	16.6	(0.6)	5.6	(0.4)
OECD	Poland	0.04	(0.03)	1.07	(0.01)	16.8	(0.8)	46.6	(0.7)	24.0	(0.7)	12.6	(0.5)
OECD	Portugal*	0.01	(0.02)	0.99	(0.01)	17.9	(0.7)	53.5	(0.8)	21.2	(0.7)	7.4	(0.5)
OECD	Slovak Republic	0.07	(0.03)	1.08	(0.02)	16.4	(0.8)	51.4	(1.0)	21.8	(0.8)	10.3	(0.6)
OECD	Slovenia	-0.01	(0.01)	1.11	(0.01)	15.4	(0.5)	42.2	(0.7)	27.3	(0.6)	15.0	(0.4)
OECD	Spain	-0.22	(0.01)	1.02	(0.01)	13.9	(0.4)	48.8	(0.5)	25.8	(0.4)	11.5	(0.4)
OECD	Sweden	0.06	(0.02)	0.97	(0.01)	24.3	(1.0)	51.6	(0.9)	18.1	(0.6)	6.1	(0.3)
OECD	Switzerland	0.04	(0.03)	1.08	(0.01)	21.6	(0.9)	44.5	(0.7)	19.5	(0.7)	14.3	(0.8)
OECD	Turkey	-0.08	(0.02)	0.96	(0.01)	23.1	(0.8)	59.2	(0.8)	12.7	(0.5)	5.0	(0.4)
OECD	United Kingdom	0.09	(0.02)	1.11	(0.01)	25.7	(0.8)	44.1	(0.7)	19.1	(0.6)	11.1	(0.5)
OECD	United States*	0.14	(0.03)	1.05	(0.01)	23.9	(1.0)	50.5	(0.9)	17.8	(0.8)	7.8	(0.5)
	OECD average	0.04	(0.00)	1.03	(0.00)	22.0	(0.1)	48.5	(0.1)	19.4	(0.1)	10.1	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. Higher values in the index indicate a more positive disciplinary climate.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.3.1 [2/6] **Disciplinary climate in language-of-instruction lessons**

Based on students' reports

		Index of disciplinary climate[1]				Percentage of students who reported that the following things happen in their language-of-instruction lessons:							
						Students don't listen to what the teacher says							
		Average		Variability		Never or hardly ever		Some lessons		Most lessons		Every lesson	
		Mean index	S.E.	S.D.	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	0.84	(0.02)	1.01	(0.01)	54.2	(1.0)	35.2	(0.8)	6.5	(0.4)	4.1	(0.3)
	Argentina	-0.44	(0.02)	0.92	(0.01)	10.6	(0.6)	47.9	(0.7)	25.7	(0.6)	15.8	(0.6)
	Baku (Azerbaijan)	0.35	(0.02)	1.12	(0.01)	35.1	(0.8)	46.9	(0.8)	9.6	(0.5)	8.4	(0.4)
	Belarus	0.71	(0.02)	0.99	(0.01)	36.6	(0.8)	49.4	(0.6)	10.4	(0.6)	3.5	(0.2)
	Bosnia and Herzegovina	0.08	(0.03)	1.08	(0.02)	15.5	(0.8)	50.3	(1.0)	21.8	(0.8)	12.4	(0.7)
	Brazil	-0.37	(0.02)	0.99	(0.01)	15.0	(0.6)	45.0	(0.7)	27.1	(0.6)	13.0	(0.4)
	Brunei Darussalam	-0.02	(0.01)	0.82	(0.01)	16.5	(0.5)	64.5	(0.6)	12.9	(0.4)	6.1	(0.3)
	B-S-J-Z (China)	0.79	(0.03)	1.03	(0.01)	45.7	(1.1)	43.5	(0.8)	7.8	(0.4)	3.1	(0.3)
	Bulgaria	0.00	(0.03)	1.19	(0.01)	23.1	(0.9)	39.4	(0.9)	21.5	(0.6)	16.0	(0.8)
	Costa Rica	0.11	(0.02)	0.96	(0.01)	26.9	(0.9)	52.0	(0.7)	13.8	(0.6)	7.2	(0.4)
	Croatia	0.04	(0.02)	1.06	(0.01)	12.4	(0.6)	49.4	(0.7)	26.9	(0.6)	11.3	(0.4)
	Cyprus	-0.28	(0.01)	1.10	(0.01)	16.0	(0.5)	43.7	(0.7)	21.8	(0.6)	18.6	(0.4)
	Dominican Republic	0.07	(0.02)	0.99	(0.01)	24.1	(0.7)	47.7	(0.7)	15.1	(0.5)	13.1	(0.6)
	Georgia	0.40	(0.03)	1.16	(0.02)	31.9	(1.1)	46.3	(0.9)	11.2	(0.6)	10.5	(0.7)
	Hong Kong (China)*	0.24	(0.03)	1.09	(0.01)	29.4	(1.1)	51.2	(0.9)	12.3	(0.6)	7.0	(0.4)
	Indonesia	0.21	(0.03)	1.06	(0.02)	31.4	(1.0)	48.4	(1.1)	10.2	(0.6)	10.0	(0.6)
	Jordan	0.30	(0.03)	1.22	(0.01)	43.5	(1.1)	32.9	(0.8)	13.4	(0.5)	10.2	(0.5)
	Kazakhstan	0.93	(0.01)	0.98	(0.01)	52.5	(0.7)	37.1	(0.6)	5.0	(0.2)	5.5	(0.2)
	Kosovo	0.50	(0.02)	1.04	(0.01)	37.0	(0.8)	44.0	(0.8)	12.0	(0.5)	7.0	(0.4)
	Lebanon	m	m	m	m	m	m	m	m	m	m	m	m
	Macao (China)	0.12	(0.01)	0.82	(0.01)	11.3	(0.5)	65.8	(0.7)	18.0	(0.6)	4.8	(0.3)
	Malaysia	0.05	(0.02)	0.88	(0.01)	19.4	(0.8)	64.5	(0.8)	11.1	(0.6)	5.0	(0.4)
	Malta	-0.17	(0.02)	1.13	(0.01)	19.3	(0.6)	44.0	(0.9)	21.9	(0.7)	14.8	(0.5)
	Moldova	0.60	(0.03)	0.92	(0.01)	30.1	(1.0)	54.2	(0.9)	11.0	(0.6)	4.7	(0.4)
	Montenegro	0.44	(0.01)	1.13	(0.01)	28.5	(0.5)	45.0	(0.6)	16.8	(0.5)	9.7	(0.4)
	Morocco	-0.20	(0.02)	1.07	(0.01)	21.0	(0.7)	41.6	(0.7)	19.6	(0.6)	17.8	(0.6)
	North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m
	Panama	-0.12	(0.02)	0.88	(0.01)	13.2	(0.6)	59.5	(0.8)	16.5	(0.6)	10.8	(0.5)
	Peru	0.23	(0.01)	0.84	(0.01)	20.6	(0.7)	63.5	(0.7)	10.9	(0.5)	5.1	(0.3)
	Philippines	-0.21	(0.02)	0.88	(0.01)	15.3	(0.7)	59.7	(1.0)	11.2	(0.5)	13.9	(0.7)
	Qatar	-0.05	(0.01)	1.17	(0.01)	24.3	(0.3)	44.6	(0.4)	18.9	(0.3)	12.2	(0.3)
	Romania	0.38	(0.03)	1.02	(0.02)	24.9	(1.1)	56.2	(0.9)	9.2	(0.4)	9.6	(0.6)
	Russia	0.50	(0.02)	1.13	(0.01)	33.7	(0.9)	43.8	(0.6)	14.1	(0.6)	8.5	(0.4)
	Saudi Arabia	0.27	(0.03)	1.09	(0.01)	35.6	(1.0)	39.9	(0.8)	15.9	(0.5)	8.6	(0.6)
	Serbia	0.03	(0.03)	1.17	(0.02)	14.6	(0.7)	46.4	(0.8)	22.8	(0.6)	16.2	(0.7)
	Singapore	0.09	(0.01)	1.06	(0.01)	22.8	(0.6)	50.5	(0.6)	18.5	(0.5)	8.1	(0.3)
	Chinese Taipei	0.18	(0.02)	1.09	(0.01)	23.0	(0.7)	54.4	(0.7)	16.9	(0.6)	5.7	(0.3)
	Thailand	0.31	(0.02)	0.82	(0.01)	23.7	(0.8)	67.9	(0.7)	5.6	(0.3)	2.8	(0.3)
	Ukraine	0.53	(0.02)	0.96	(0.01)	28.9	(0.8)	48.8	(0.7)	14.8	(0.6)	7.6	(0.4)
	United Arab Emirates	0.29	(0.01)	1.20	(0.01)	37.2	(0.6)	40.3	(0.5)	13.4	(0.3)	9.1	(0.3)
	Uruguay	-0.10	(0.02)	0.98	(0.01)	20.4	(0.8)	51.8	(0.7)	19.4	(0.6)	8.4	(0.5)
	Viet Nam	0.63	(0.03)	0.89	(0.01)	43.9	(1.4)	50.4	(1.2)	4.1	(0.4)	1.6	(0.2)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. Higher values in the index indicate a more positive disciplinary climate.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.3.1 [3/6] **Disciplinary climate in language-of-instruction lessons**

Based on students' reports

		Percentage of students who reported that the following things happen in their language-of-instruction lessons:															
		There is noise and disorder								The teacher has to wait a long time for students to quiet down							
		Never or hardly ever		Some lessons		Most lessons		Every lesson		Never or hardly ever		Some lessons		Most lessons		Every lesson	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	**Australia**	14.0	(0.5)	43.1	(0.5)	26.4	(0.5)	16.5	(0.4)	23.1	(0.5)	44.5	(0.6)	20.3	(0.5)	12.1	(0.4)
	Austria	36.7	(1.0)	37.1	(0.7)	16.2	(0.5)	10.0	(0.5)	39.7	(1.1)	33.7	(0.7)	16.0	(0.6)	10.6	(0.7)
	Belgium	14.2	(0.7)	41.9	(0.6)	26.8	(0.6)	17.1	(0.6)	22.7	(0.8)	40.2	(0.8)	22.6	(0.5)	14.5	(0.5)
	Canada	16.9	(0.4)	44.2	(0.5)	24.6	(0.4)	14.3	(0.4)	29.1	(0.6)	43.8	(0.5)	17.9	(0.4)	9.2	(0.3)
	Chile	13.1	(0.7)	48.2	(0.7)	26.4	(0.7)	12.3	(0.6)	23.8	(1.0)	41.0	(0.8)	23.4	(0.7)	11.8	(0.6)
	Colombia	18.0	(0.7)	54.2	(0.7)	18.2	(0.6)	9.6	(0.5)	36.9	(1.0)	43.3	(0.8)	13.2	(0.5)	6.7	(0.4)
	Czech Republic	25.1	(1.1)	42.0	(0.8)	18.0	(0.7)	15.0	(0.8)	30.8	(1.1)	40.5	(0.8)	16.0	(0.6)	12.7	(0.7)
	Denmark	17.9	(0.7)	56.2	(0.8)	19.2	(0.8)	6.7	(0.4)	40.8	(1.2)	45.5	(0.8)	10.6	(0.6)	3.1	(0.4)
	Estonia	31.7	(1.0)	44.7	(0.9)	17.6	(0.6)	6.0	(0.4)	36.2	(1.0)	43.8	(0.8)	15.0	(0.6)	5.0	(0.4)
	Finland	11.0	(0.6)	52.5	(0.9)	27.3	(0.7)	9.2	(0.5)	21.0	(0.7)	51.5	(0.8)	20.2	(0.8)	7.3	(0.5)
	France	12.0	(0.7)	36.1	(0.8)	28.5	(0.8)	23.4	(0.9)	25.9	(1.0)	35.1	(0.7)	22.2	(0.7)	16.7	(0.8)
	Germany	29.0	(1.0)	42.2	(0.9)	20.0	(0.7)	8.8	(0.6)	29.5	(0.9)	41.3	(0.7)	20.2	(0.7)	9.0	(0.6)
	Greece	14.8	(0.7)	46.0	(0.8)	24.4	(0.7)	14.8	(0.6)	26.1	(0.9)	40.3	(0.8)	19.6	(0.6)	14.0	(0.6)
	Hungary	23.3	(0.9)	46.2	(0.9)	20.7	(0.7)	9.9	(0.6)	29.8	(1.0)	41.5	(0.8)	19.2	(0.7)	9.5	(0.6)
	Iceland	15.3	(0.6)	53.0	(0.9)	24.0	(0.7)	7.7	(0.5)	24.8	(0.7)	50.9	(0.8)	18.2	(0.6)	6.1	(0.5)
	Ireland	20.8	(0.9)	44.4	(0.8)	22.2	(0.7)	12.6	(0.6)	32.3	(1.1)	42.1	(0.8)	16.6	(0.6)	9.0	(0.5)
	Israel	24.5	(1.2)	44.0	(0.7)	20.0	(0.8)	11.5	(0.7)	26.2	(1.0)	41.8	(0.8)	19.9	(0.7)	12.0	(0.7)
	Italy	19.6	(0.8)	43.3	(0.8)	24.7	(0.8)	12.4	(0.5)	32.7	(0.8)	37.1	(0.7)	19.2	(0.6)	11.0	(0.4)
	Japan	55.4	(1.2)	34.9	(0.9)	7.1	(0.5)	2.6	(0.3)	57.4	(1.2)	33.9	(0.9)	6.4	(0.4)	2.3	(0.2)
	Korea	57.5	(1.0)	34.6	(0.8)	6.7	(0.4)	1.2	(0.2)	58.4	(0.9)	33.7	(0.8)	6.4	(0.4)	1.5	(0.2)
	Latvia	27.0	(0.9)	45.8	(0.8)	18.1	(0.6)	9.0	(0.4)	33.0	(1.0)	44.8	(0.7)	14.4	(0.5)	7.8	(0.4)
	Lithuania	32.1	(0.8)	46.9	(0.7)	13.9	(0.5)	7.0	(0.3)	39.5	(0.8)	42.0	(0.7)	11.7	(0.4)	6.8	(0.3)
	Luxembourg	26.6	(0.5)	41.0	(0.7)	19.1	(0.5)	13.3	(0.5)	34.2	(0.7)	36.4	(0.6)	15.9	(0.5)	13.5	(0.5)
	Mexico	13.6	(0.7)	50.7	(0.8)	23.7	(0.6)	12.0	(0.7)	36.7	(1.0)	40.9	(0.7)	15.2	(0.5)	7.1	(0.4)
	Netherlands*	11.5	(0.7)	52.8	(1.0)	27.4	(0.8)	8.3	(0.5)	16.1	(0.8)	49.9	(1.0)	25.6	(0.8)	8.4	(0.6)
	New Zealand	15.4	(0.6)	43.0	(0.7)	28.2	(0.6)	13.4	(0.5)	24.9	(0.8)	44.9	(0.7)	20.3	(0.6)	9.9	(0.5)
	Norway	16.6	(0.8)	56.8	(0.7)	20.5	(0.7)	6.1	(0.4)	26.7	(1.0)	51.0	(0.8)	16.6	(0.7)	5.7	(0.4)
	Poland	25.1	(1.1)	46.2	(0.8)	19.1	(0.7)	9.6	(0.5)	30.7	(1.2)	42.9	(0.8)	17.4	(0.7)	9.1	(0.5)
	Portugal*	19.9	(0.8)	48.2	(0.8)	21.8	(0.7)	10.1	(0.5)	26.2	(0.9)	45.8	(0.9)	19.6	(0.8)	8.4	(0.5)
	Slovak Republic	29.6	(1.1)	45.4	(0.9)	16.6	(0.6)	8.5	(0.5)	32.3	(1.0)	42.1	(0.9)	16.6	(0.6)	9.0	(0.6)
	Slovenia	26.5	(0.6)	41.8	(0.8)	20.3	(0.6)	11.4	(0.4)	31.2	(0.7)	40.7	(0.8)	17.3	(0.6)	10.9	(0.5)
	Spain	16.2	(0.4)	43.2	(0.6)	26.8	(0.5)	13.8	(0.4)	20.4	(0.5)	40.5	(0.6)	25.6	(0.5)	13.6	(0.4)
	Sweden	19.8	(0.9)	52.9	(0.9)	20.8	(0.7)	6.5	(0.3)	26.8	(1.0)	46.7	(0.8)	19.5	(0.7)	6.9	(0.4)
	Switzerland	23.2	(0.9)	43.9	(0.8)	20.4	(0.8)	12.6	(0.6)	35.9	(1.0)	38.4	(0.6)	16.5	(0.7)	9.2	(0.5)
	Turkey	22.6	(0.9)	53.8	(0.7)	16.0	(0.6)	7.7	(0.5)	27.8	(0.9)	47.5	(0.8)	15.3	(0.5)	9.4	(0.5)
	United Kingdom	21.4	(0.7)	44.8	(0.6)	21.6	(0.5)	12.1	(0.5)	31.4	(0.8)	43.1	(0.7)	16.2	(0.5)	9.3	(0.4)
	United States*	23.5	(0.9)	48.3	(0.8)	19.2	(0.7)	9.0	(0.5)	31.8	(1.2)	46.4	(0.8)	15.3	(0.6)	6.5	(0.5)
	OECD average	22.7	(0.1)	45.8	(0.1)	20.9	(0.1)	10.6	(0.1)	31.2	(0.2)	42.4	(0.1)	17.4	(0.1)	9.1	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. Higher values in the index indicate a more positive disciplinary climate.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.3.1 [4/6] **Disciplinary climate in language-of-instruction lessons**

Based on students' reports

		Percentage of students who reported that the following things happen in their language-of-instruction lessons:															
		There is noise and disorder								The teacher has to wait a long time for students to quiet down							
		Never or hardly ever		Some lessons		Most lessons		Every lesson		Never or hardly ever		Some lessons		Most lessons		Every lesson	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	55.9	(1.1)	34.7	(0.9)	6.5	(0.4)	2.9	(0.3)	61.2	(0.9)	27.4	(0.8)	7.0	(0.4)	4.3	(0.3)
	Argentina	11.4	(0.6)	33.5	(0.8)	29.1	(0.7)	25.9	(0.7)	22.3	(0.8)	37.5	(0.8)	22.8	(0.6)	17.5	(0.8)
	Baku (Azerbaijan)	31.2	(0.8)	48.1	(0.7)	12.7	(0.5)	7.9	(0.4)	43.6	(0.9)	38.3	(0.8)	10.2	(0.5)	7.9	(0.3)
	Belarus	45.1	(1.0)	43.0	(0.8)	9.2	(0.5)	2.7	(0.2)	57.1	(1.0)	32.6	(0.7)	8.0	(0.5)	2.4	(0.2)
	Bosnia and Herzegovina	28.1	(0.9)	45.3	(0.8)	15.8	(0.6)	10.8	(0.6)	37.1	(1.0)	38.1	(0.7)	14.5	(0.7)	10.3	(0.6)
	Brazil	13.0	(0.5)	42.5	(0.7)	26.6	(0.6)	17.9	(0.5)	20.3	(0.6)	38.7	(0.6)	25.3	(0.6)	15.7	(0.4)
	Brunei Darussalam	13.1	(0.4)	51.1	(0.7)	23.8	(0.5)	12.0	(0.4)	29.9	(0.5)	45.5	(0.6)	16.4	(0.4)	8.2	(0.3)
	B-S-J-Z (China)	46.8	(1.1)	44.3	(0.9)	6.3	(0.4)	2.6	(0.3)	59.5	(0.9)	32.8	(0.7)	5.3	(0.4)	2.4	(0.2)
	Bulgaria	29.0	(1.1)	37.2	(0.9)	20.3	(0.7)	13.5	(0.7)	34.9	(1.1)	33.7	(0.7)	18.0	(0.7)	13.4	(0.7)
	Costa Rica	19.1	(0.6)	48.3	(0.8)	20.6	(0.5)	12.0	(0.5)	40.3	(0.9)	38.0	(0.7)	14.2	(0.5)	7.5	(0.4)
	Croatia	25.6	(0.8)	46.0	(0.7)	19.4	(0.5)	9.1	(0.5)	33.1	(0.9)	41.4	(0.7)	16.9	(0.6)	8.6	(0.4)
	Cyprus	18.3	(0.5)	42.6	(0.6)	20.9	(0.6)	18.2	(0.5)	25.8	(0.5)	39.4	(0.7)	19.3	(0.5)	15.5	(0.5)
	Dominican Republic	26.8	(0.7)	46.4	(0.7)	16.3	(0.6)	10.5	(0.5)	41.6	(1.0)	35.6	(0.8)	13.3	(0.6)	9.5	(0.5)
	Georgia	39.9	(1.2)	42.4	(0.9)	9.9	(0.5)	7.8	(0.5)	43.0	(1.2)	36.4	(0.8)	11.2	(0.5)	9.4	(0.6)
	Hong Kong (China)*	28.5	(1.1)	52.5	(0.9)	12.2	(0.6)	6.7	(0.4)	40.5	(1.1)	43.4	(0.8)	10.4	(0.6)	5.7	(0.4)
	Indonesia	26.9	(1.0)	43.4	(1.0)	19.2	(0.8)	10.5	(0.6)	40.8	(1.2)	34.5	(0.9)	14.0	(0.7)	10.7	(0.6)
	Jordan	36.9	(1.0)	36.2	(0.8)	15.8	(0.5)	11.2	(0.6)	44.2	(1.0)	29.3	(0.7)	14.1	(0.5)	12.3	(0.6)
	Kazakhstan	55.9	(0.8)	36.5	(0.7)	4.5	(0.2)	3.1	(0.1)	66.2	(0.5)	25.7	(0.4)	4.3	(0.2)	3.8	(0.2)
	Kosovo	45.7	(1.0)	39.1	(0.9)	10.0	(0.5)	5.2	(0.4)	49.4	(0.9)	31.6	(0.7)	11.6	(0.5)	7.5	(0.4)
	Lebanon	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Macao (China)	22.6	(0.7)	61.0	(0.9)	12.5	(0.5)	3.9	(0.3)	31.7	(0.7)	54.6	(0.7)	10.4	(0.5)	3.3	(0.3)
	Malaysia	16.1	(0.7)	52.7	(0.7)	22.6	(0.6)	8.6	(0.4)	30.7	(1.0)	45.0	(0.8)	16.7	(0.5)	7.6	(0.4)
	Malta	18.9	(0.7)	41.7	(0.8)	22.7	(0.7)	16.7	(0.6)	20.1	(0.7)	41.3	(0.9)	22.9	(0.8)	15.6	(0.5)
	Moldova	46.7	(1.2)	42.0	(0.8)	8.7	(0.6)	2.6	(0.3)	51.9	(1.2)	35.1	(0.8)	9.4	(0.6)	3.6	(0.3)
	Montenegro	51.5	(0.5)	32.4	(0.5)	9.4	(0.3)	6.7	(0.3)	49.7	(0.6)	31.4	(0.6)	11.2	(0.4)	7.8	(0.3)
	Morocco	25.1	(0.7)	35.1	(0.6)	21.1	(0.7)	18.7	(0.6)	34.5	(0.9)	28.3	(0.6)	18.4	(0.5)	18.7	(0.6)
	North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Panama	13.9	(0.7)	54.3	(0.7)	18.9	(0.5)	12.8	(0.4)	27.5	(0.9)	46.7	(0.8)	16.3	(0.7)	9.4	(0.5)
	Peru	18.4	(0.7)	58.2	(0.7)	15.1	(0.6)	8.2	(0.4)	46.4	(0.9)	39.3	(0.7)	9.9	(0.5)	4.4	(0.3)
	Philippines	13.7	(0.6)	52.7	(0.7)	20.7	(0.6)	12.9	(0.5)	19.4	(0.6)	45.9	(0.8)	19.4	(0.5)	15.4	(0.6)
	Qatar	24.0	(0.4)	42.4	(0.4)	20.5	(0.3)	13.1	(0.3)	29.0	(0.4)	37.0	(0.5)	18.8	(0.3)	15.2	(0.3)
	Romania	34.3	(1.2)	49.8	(1.0)	8.8	(0.4)	7.1	(0.5)	44.3	(1.3)	38.8	(0.9)	9.4	(0.4)	7.5	(0.6)
	Russia	43.4	(0.9)	39.6	(0.7)	10.7	(0.4)	6.3	(0.4)	49.1	(0.9)	34.4	(0.6)	10.6	(0.4)	6.0	(0.4)
	Saudi Arabia	35.5	(1.0)	37.2	(0.8)	17.8	(0.6)	9.5	(0.5)	43.1	(1.0)	29.0	(0.7)	15.9	(0.5)	12.1	(0.6)
	Serbia	31.2	(0.9)	42.1	(0.7)	15.3	(0.5)	11.4	(0.7)	34.4	(0.9)	38.4	(0.6)	15.7	(0.5)	11.5	(0.7)
	Singapore	20.5	(0.6)	46.4	(0.5)	21.7	(0.5)	11.4	(0.4)	29.4	(0.7)	44.8	(0.8)	16.6	(0.4)	9.3	(0.3)
	Chinese Taipei	24.8	(0.8)	54.8	(0.7)	15.5	(0.6)	5.0	(0.3)	32.4	(0.8)	48.7	(0.7)	13.5	(0.5)	5.4	(0.3)
	Thailand	21.7	(0.7)	61.8	(0.7)	12.3	(0.5)	4.1	(0.3)	29.9	(0.7)	55.9	(0.8)	10.6	(0.5)	3.6	(0.3)
	Ukraine	48.6	(1.1)	39.6	(1.0)	8.2	(0.4)	3.6	(0.2)	48.9	(1.2)	38.0	(1.0)	9.2	(0.5)	3.8	(0.3)
	United Arab Emirates	32.7	(0.5)	41.2	(0.5)	15.7	(0.3)	10.3	(0.3)	39.1	(0.5)	35.6	(0.5)	14.5	(0.3)	10.8	(0.3)
	Uruguay	15.0	(0.5)	44.9	(0.8)	25.1	(0.7)	15.0	(0.6)	21.5	(0.9)	41.0	(0.9)	22.8	(0.7)	14.7	(0.6)
	Viet Nam	47.7	(1.4)	43.1	(1.1)	6.4	(0.5)	2.8	(0.2)	38.3	(1.2)	48.4	(1.0)	9.1	(0.6)	4.1	(0.3)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. Higher values in the index indicate a more positive disciplinary climate.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.3.1 [5/6] **Disciplinary climate in language-of-instruction lessons**

Based on students' reports

		Percentage of students who reported that the following things happen in their language-of-instruction lessons:															
		Students cannot work well								Students don't start working for a long time after the lesson begins							
		Never or hardly ever		Some lessons		Most lessons		Every lesson		Never or hardly ever		Some lessons		Most lessons		Every lesson	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	30.3	(0.6)	48.3	(0.5)	13.5	(0.4)	7.9	(0.3)	30.2	(0.6)	43.7	(0.5)	16.6	(0.4)	9.5	(0.4)
	Austria	52.7	(0.9)	31.2	(0.7)	10.2	(0.4)	5.9	(0.5)	45.2	(0.9)	30.6	(0.6)	13.8	(0.5)	10.4	(0.6)
	Belgium	39.7	(0.7)	41.1	(0.7)	12.7	(0.5)	6.5	(0.4)	28.7	(0.8)	39.1	(0.6)	20.1	(0.5)	12.1	(0.5)
	Canada	34.1	(0.6)	46.9	(0.5)	12.6	(0.3)	6.4	(0.2)	26.4	(0.6)	44.4	(0.5)	19.9	(0.4)	9.3	(0.3)
	Chile	38.4	(1.0)	42.8	(0.7)	14.1	(0.5)	4.8	(0.4)	27.7	(0.9)	43.6	(0.7)	20.5	(0.7)	8.3	(0.5)
	Colombia	46.5	(0.9)	40.2	(0.8)	8.8	(0.4)	4.5	(0.3)	31.9	(0.7)	42.1	(0.8)	17.7	(0.6)	8.3	(0.5)
	Czech Republic	45.5	(1.2)	36.5	(0.8)	9.6	(0.6)	8.3	(0.5)	39.4	(1.0)	36.6	(0.8)	13.3	(0.5)	10.7	(0.6)
	Denmark	34.0	(1.0)	53.1	(0.9)	10.0	(0.5)	2.9	(0.3)	35.5	(1.0)	49.1	(0.8)	11.8	(0.6)	3.7	(0.4)
	Estonia	31.6	(0.8)	51.6	(0.8)	12.6	(0.6)	4.1	(0.3)	45.4	(0.9)	39.0	(0.7)	11.2	(0.5)	4.4	(0.3)
	Finland	35.1	(0.8)	49.4	(0.7)	11.2	(0.5)	4.3	(0.4)	26.4	(0.8)	48.4	(0.7)	17.7	(0.6)	7.5	(0.5)
	France	40.6	(1.1)	34.2	(0.7)	15.1	(0.5)	10.0	(0.6)	25.9	(0.8)	33.6	(0.7)	22.2	(0.6)	18.3	(0.7)
	Germany	38.1	(1.0)	40.4	(0.8)	14.7	(0.6)	6.8	(0.5)	40.1	(1.1)	36.8	(0.8)	14.9	(0.6)	8.2	(0.5)
	Greece	28.0	(0.8)	43.8	(0.8)	18.8	(0.6)	9.3	(0.5)	27.8	(0.6)	40.8	(0.7)	20.3	(0.5)	11.0	(0.5)
	Hungary	39.5	(1.0)	41.8	(0.8)	13.3	(0.6)	5.5	(0.4)	45.7	(1.1)	34.4	(0.8)	12.8	(0.6)	7.1	(0.5)
	Iceland	29.3	(0.7)	54.4	(0.9)	11.9	(0.6)	4.4	(0.4)	24.2	(0.7)	54.2	(0.9)	15.8	(0.6)	5.8	(0.4)
	Ireland	42.3	(0.9)	42.7	(0.8)	9.9	(0.5)	5.1	(0.4)	38.0	(1.0)	40.5	(0.7)	14.5	(0.7)	7.0	(0.4)
	Israel	34.5	(1.2)	40.4	(0.8)	15.5	(0.6)	9.6	(0.7)	33.2	(1.1)	38.8	(0.7)	16.7	(0.6)	11.2	(0.8)
	Italy	40.6	(0.8)	40.8	(0.8)	12.2	(0.5)	6.4	(0.4)	40.5	(0.8)	35.5	(0.8)	14.4	(0.5)	9.5	(0.4)
	Japan	44.3	(1.0)	41.6	(0.9)	11.0	(0.5)	3.1	(0.3)	59.6	(1.1)	32.0	(0.9)	6.1	(0.4)	2.3	(0.2)
	Korea	69.7	(1.0)	24.9	(0.7)	4.4	(0.3)	1.0	(0.2)	68.3	(0.9)	25.3	(0.8)	5.3	(0.3)	1.1	(0.2)
	Latvia	34.2	(0.9)	47.1	(0.7)	13.0	(0.6)	5.7	(0.4)	46.8	(1.0)	37.3	(0.8)	10.1	(0.5)	5.8	(0.4)
	Lithuania	41.5	(0.8)	41.8	(0.8)	10.6	(0.4)	6.1	(0.3)	45.8	(0.8)	37.5	(0.6)	10.1	(0.4)	6.6	(0.3)
	Luxembourg	43.0	(0.6)	34.5	(0.7)	12.8	(0.5)	9.7	(0.5)	33.7	(0.7)	35.9	(0.7)	16.5	(0.4)	14.0	(0.5)
	Mexico	35.7	(0.9)	45.0	(0.8)	13.3	(0.6)	6.1	(0.4)	29.8	(0.9)	44.2	(0.7)	18.1	(0.6)	7.9	(0.4)
	Netherlands*	32.8	(0.9)	51.2	(0.8)	12.4	(0.6)	3.6	(0.4)	16.3	(0.7)	44.3	(0.9)	28.9	(0.8)	10.5	(0.6)
	New Zealand	31.2	(0.7)	49.2	(0.7)	13.1	(0.5)	6.6	(0.4)	26.9	(0.7)	45.8	(0.6)	19.4	(0.6)	7.9	(0.4)
	Norway	30.0	(0.9)	52.3	(0.8)	13.2	(0.6)	4.5	(0.3)	26.0	(0.8)	51.0	(0.8)	17.1	(0.6)	5.9	(0.4)
	Poland	38.2	(1.0)	41.7	(0.9)	13.1	(0.5)	7.0	(0.4)	42.2	(1.1)	37.3	(0.8)	12.7	(0.5)	7.7	(0.5)
	Portugal*	40.4	(1.0)	44.4	(0.8)	11.3	(0.6)	4.0	(0.4)	33.6	(0.8)	41.2	(0.7)	17.5	(0.6)	7.7	(0.5)
	Slovak Republic	41.4	(1.0)	38.0	(0.8)	12.4	(0.6)	8.2	(0.5)	33.9	(1.0)	40.0	(0.7)	16.2	(0.5)	9.8	(0.5)
	Slovenia	44.2	(0.7)	37.4	(0.8)	11.6	(0.5)	6.8	(0.3)	36.7	(0.7)	36.9	(0.7)	16.5	(0.5)	9.9	(0.4)
	Spain	39.7	(0.6)	39.6	(0.5)	13.7	(0.3)	6.9	(0.3)	27.6	(0.4)	39.8	(0.5)	20.8	(0.4)	11.8	(0.4)
	Sweden	31.9	(0.9)	51.1	(0.7)	13.0	(0.5)	4.0	(0.3)	29.8	(0.9)	48.3	(0.7)	16.3	(0.6)	5.6	(0.3)
	Switzerland	43.9	(1.0)	37.0	(0.7)	12.4	(0.5)	6.7	(0.4)	39.2	(1.0)	35.3	(0.7)	14.9	(0.6)	10.7	(0.5)
	Turkey	15.4	(0.6)	49.7	(0.7)	24.1	(0.7)	10.9	(0.5)	18.0	(0.7)	45.1	(0.6)	24.5	(0.7)	12.4	(0.5)
	United Kingdom	43.7	(0.9)	41.2	(0.7)	9.7	(0.4)	5.5	(0.3)	40.6	(0.8)	40.3	(0.6)	12.4	(0.4)	6.6	(0.3)
	United States*	42.6	(1.2)	42.7	(1.0)	10.1	(0.5)	4.6	(0.4)	35.8	(1.0)	44.1	(0.8)	14.0	(0.6)	6.2	(0.4)
	OECD average	38.5	(0.1)	43.0	(0.1)	12.5	(0.1)	6.0	(0.1)	35.2	(0.1)	40.3	(0.1)	16.0	(0.1)	8.5	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. Higher values in the index indicate a more positive disciplinary climate.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.3.1 [6/6] **Disciplinary climate in language-of-instruction lessons**

Based on students' reports

		Percentage of students who reported that the following things happen in their language-of-instruction lessons:															
		Students cannot work well								Students don't start working for a long time after the lesson begins							
		Never or hardly ever		Some lessons		Most lessons		Every lesson		Never or hardly ever		Some lessons		Most lessons		Every lesson	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	48.4	(0.9)	41.1	(0.8)	7.7	(0.5)	2.7	(0.2)	63.0	(0.9)	26.2	(0.7)	7.5	(0.3)	3.3	(0.3)
	Argentina	32.2	(0.7)	41.8	(0.6)	16.2	(0.6)	9.9	(0.4)	21.1	(0.6)	39.1	(0.6)	24.3	(0.6)	15.5	(0.5)
	Baku (Azerbaijan)	39.2	(0.9)	46.5	(0.8)	8.7	(0.4)	5.7	(0.4)	46.1	(0.8)	35.8	(0.7)	10.4	(0.5)	7.7	(0.4)
	Belarus	48.2	(0.8)	41.8	(0.7)	7.9	(0.4)	2.1	(0.2)	62.5	(0.9)	29.0	(0.8)	6.4	(0.4)	2.1	(0.2)
	Bosnia and Herzegovina	39.2	(0.9)	40.2	(0.7)	12.2	(0.5)	8.5	(0.5)	46.6	(1.0)	31.7	(0.7)	11.0	(0.5)	10.6	(0.6)
	Brazil	29.8	(0.6)	40.5	(0.6)	20.2	(0.5)	9.5	(0.3)	22.2	(0.6)	33.8	(0.6)	25.6	(0.5)	18.4	(0.5)
	Brunei Darussalam	26.1	(0.6)	57.1	(0.6)	13.0	(0.3)	3.8	(0.3)	40.1	(0.6)	44.2	(0.6)	11.1	(0.4)	4.6	(0.3)
	B-S-J-Z (China)	53.2	(1.2)	37.7	(1.0)	6.7	(0.4)	2.4	(0.2)	54.8	(1.1)	36.1	(0.9)	6.6	(0.4)	2.5	(0.2)
	Bulgaria	32.3	(0.9)	44.3	(0.8)	15.2	(0.6)	8.2	(0.5)	41.7	(1.0)	32.0	(0.8)	14.2	(0.5)	12.2	(0.6)
	Costa Rica	48.9	(0.9)	36.3	(0.7)	9.3	(0.5)	5.5	(0.3)	33.5	(0.8)	40.1	(0.7)	17.1	(0.5)	9.2	(0.4)
	Croatia	40.2	(0.7)	41.0	(0.6)	12.4	(0.5)	6.5	(0.4)	39.9	(0.7)	37.0	(0.6)	14.2	(0.4)	8.9	(0.5)
	Cyprus	29.0	(0.7)	42.2	(0.7)	15.6	(0.5)	13.2	(0.5)	26.7	(0.7)	40.5	(0.9)	19.2	(0.6)	13.6	(0.5)
	Dominican Republic	42.4	(1.1)	37.1	(1.0)	11.2	(0.5)	9.4	(0.4)	33.6	(0.9)	32.7	(0.8)	17.8	(0.5)	15.9	(0.5)
	Georgia	45.8	(1.0)	39.2	(0.7)	8.5	(0.4)	6.5	(0.4)	52.0	(1.1)	31.2	(0.7)	8.7	(0.5)	8.1	(0.6)
	Hong Kong (China)*	31.5	(1.0)	51.7	(0.8)	10.8	(0.5)	6.0	(0.4)	28.0	(1.0)	50.8	(0.8)	13.9	(0.6)	7.4	(0.4)
	Indonesia	46.3	(1.0)	37.1	(0.9)	10.0	(0.6)	6.6	(0.4)	44.1	(1.2)	35.3	(0.9)	12.7	(0.7)	7.8	(0.5)
	Jordan	45.8	(0.8)	31.5	(0.7)	14.3	(0.5)	8.4	(0.5)	47.5	(0.9)	28.6	(0.7)	13.7	(0.6)	10.1	(0.5)
	Kazakhstan	61.5	(0.6)	30.0	(0.5)	4.9	(0.2)	3.6	(0.1)	68.4	(0.6)	24.1	(0.6)	4.2	(0.2)	3.3	(0.1)
	Kosovo	45.1	(0.8)	40.6	(0.8)	10.2	(0.4)	4.1	(0.3)	53.0	(0.8)	29.8	(0.7)	11.4	(0.5)	5.8	(0.4)
	Lebanon	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Macao (China)	32.7	(0.7)	53.6	(0.8)	10.5	(0.5)	3.2	(0.3)	22.5	(0.6)	57.9	(0.9)	15.1	(0.6)	4.5	(0.3)
	Malaysia	35.2	(0.8)	48.1	(0.7)	12.3	(0.5)	4.4	(0.3)	34.0	(0.8)	46.1	(0.7)	14.5	(0.5)	5.5	(0.3)
	Malta	40.9	(0.7)	38.3	(0.9)	12.6	(0.5)	8.2	(0.4)	32.3	(0.7)	39.8	(0.9)	16.6	(0.7)	11.2	(0.5)
	Moldova	45.3	(1.0)	44.6	(0.8)	7.9	(0.4)	2.2	(0.2)	58.1	(1.0)	31.4	(0.8)	7.3	(0.4)	3.2	(0.3)
	Montenegro	48.0	(0.7)	34.1	(0.7)	11.1	(0.4)	6.7	(0.3)	49.5	(0.6)	30.2	(0.6)	11.5	(0.4)	8.7	(0.3)
	Morocco	25.1	(0.6)	43.7	(0.6)	20.6	(0.5)	10.5	(0.5)	36.2	(0.8)	27.1	(0.6)	19.6	(0.5)	17.0	(0.6)
	North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Panama	29.3	(0.8)	50.2	(0.9)	13.3	(0.6)	7.2	(0.4)	29.0	(0.8)	43.7	(0.8)	17.2	(0.7)	10.2	(0.6)
	Peru	34.7	(0.8)	54.3	(0.8)	8.2	(0.4)	2.8	(0.2)	41.1	(0.8)	43.7	(0.7)	10.9	(0.4)	4.2	(0.3)
	Philippines	29.9	(0.7)	50.1	(0.9)	12.3	(0.4)	7.7	(0.5)	26.0	(0.7)	46.3	(0.7)	15.9	(0.5)	11.8	(0.5)
	Qatar	38.5	(0.4)	37.3	(0.4)	14.5	(0.3)	9.6	(0.2)	35.2	(0.4)	35.9	(0.4)	16.7	(0.3)	12.2	(0.3)
	Romania	48.1	(1.1)	40.4	(0.8)	6.9	(0.4)	4.6	(0.4)	49.6	(1.2)	34.3	(0.8)	8.2	(0.4)	7.9	(0.5)
	Russia	43.9	(0.8)	39.7	(0.8)	11.1	(0.5)	5.4	(0.4)	55.8	(1.0)	31.3	(0.6)	7.8	(0.4)	5.1	(0.3)
	Saudi Arabia	46.7	(0.9)	33.8	(0.7)	13.9	(0.5)	5.6	(0.4)	49.3	(0.9)	27.3	(0.7)	14.2	(0.5)	9.1	(0.5)
	Serbia	43.8	(1.0)	34.9	(0.7)	12.1	(0.4)	9.2	(0.6)	38.2	(0.9)	34.2	(0.6)	15.2	(0.5)	12.4	(0.7)
	Singapore	44.2	(0.6)	42.1	(0.6)	9.2	(0.4)	4.6	(0.3)	40.1	(0.6)	41.6	(0.6)	12.6	(0.4)	5.7	(0.3)
	Chinese Taipei	34.1	(0.8)	48.1	(0.6)	12.8	(0.5)	5.0	(0.3)	28.4	(0.8)	50.5	(0.6)	15.4	(0.6)	5.8	(0.3)
	Thailand	35.1	(0.8)	56.8	(0.7)	5.9	(0.3)	2.2	(0.2)	46.9	(0.9)	46.0	(0.9)	5.0	(0.3)	2.1	(0.2)
	Ukraine	41.2	(1.0)	45.4	(0.9)	9.9	(0.5)	3.5	(0.3)	52.4	(1.0)	35.7	(0.7)	8.6	(0.4)	3.4	(0.3)
	United Arab Emirates	48.9	(0.5)	33.1	(0.5)	11.1	(0.3)	6.8	(0.3)	47.4	(0.6)	31.3	(0.4)	12.3	(0.3)	9.0	(0.3)
	Uruguay	45.1	(1.0)	37.9	(0.9)	11.0	(0.4)	6.0	(0.4)	38.8	(1.0)	37.2	(0.9)	15.4	(0.6)	8.7	(0.5)
	Viet Nam	27.6	(1.1)	62.9	(1.1)	6.8	(0.5)	2.7	(0.2)	48.6	(1.2)	39.7	(0.9)	8.1	(0.5)	3.6	(0.3)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. Higher values in the index indicate a more positive disciplinary climate.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.4.1 [1/4] **Student truancy and lateness**

Based on students' reports

		Percentage of students who reported that the following happened in the two weeks prior to the PISA test:															
		I skipped a whole day of school								I skipped some classes							
		Never		Once or twice		Three or four times		Five or more times		Never		Once or twice		Three or four times		Five or more times	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	67.0	(0.6)	25.5	(0.5)	4.1	(0.2)	3.4	(0.2)	78.8	(0.5)	15.4	(0.4)	3.5	(0.2)	2.2	(0.2)
	Austria	82.7	(0.6)	11.8	(0.5)	2.8	(0.2)	2.7	(0.2)	74.0	(0.9)	18.3	(0.7)	4.3	(0.3)	3.4	(0.3)
	Belgium	91.3	(0.4)	6.4	(0.3)	1.0	(0.1)	1.3	(0.2)	85.8	(0.5)	10.6	(0.4)	2.0	(0.2)	1.6	(0.2)
	Canada	76.8	(0.5)	17.9	(0.4)	2.9	(0.2)	2.4	(0.1)	67.2	(0.7)	23.1	(0.5)	5.9	(0.3)	3.8	(0.2)
	Chile	89.5	(0.5) †	7.0	(0.4) †	1.7	(0.2) †	1.8	(0.2) †	81.1	(0.8) †	13.4	(0.6) †	3.4	(0.3) †	2.2	(0.2) †
	Colombia	56.4	(0.8) †	36.5	(0.8) †	4.6	(0.4) †	2.4	(0.2) †	56.1	(0.9) †	35.4	(0.9) †	6.0	(0.4) †	2.4	(0.2) †
	Czech Republic	89.5	(0.5)	6.4	(0.4)	1.9	(0.2)	2.2	(0.3)	88.1	(0.5)	7.9	(0.4)	2.3	(0.2)	1.7	(0.2)
	Denmark	80.3	(0.7)	14.6	(0.6)	2.6	(0.2)	2.4	(0.2)	75.6	(0.9)	17.9	(0.7)	3.7	(0.4)	2.9	(0.3)
	Estonia	82.5	(0.6)	13.3	(0.5)	2.2	(0.2)	1.9	(0.2)	69.0	(0.9)	23.5	(0.7)	4.6	(0.3)	2.9	(0.3)
	Finland	86.8	(0.6)	10.7	(0.5)	1.3	(0.1)	1.3	(0.2)	80.1	(0.6)	16.0	(0.5)	2.3	(0.2)	1.7	(0.2)
	France	83.9	(0.7)	10.4	(0.5)	2.4	(0.2)	3.3	(0.3)	70.5	(0.9)	19.7	(0.5)	5.1	(0.3)	4.7	(0.4)
	Germany	86.7	(0.9) ‡	9.2	(0.6) ‡	2.0	(0.3) ‡	2.1	(0.3) ‡	79.0	(1.1) ‡	14.9	(0.8) ‡	3.5	(0.4) ‡	2.6	(0.4) ‡
	Greece	71.4	(0.6)	20.7	(0.6)	4.2	(0.3)	3.7	(0.3)	48.8	(1.3)	33.4	(0.9)	10.5	(0.5)	7.3	(0.4)
	Hungary	88.0	(0.7)	8.7	(0.5)	2.2	(0.2)	1.1	(0.2)	80.8	(0.9)	14.0	(0.7)	3.5	(0.4)	1.7	(0.2)
	Iceland	92.6	(0.5)	4.2	(0.4)	1.6	(0.2)	1.6	(0.2)	75.6	(0.9)	16.5	(0.8)	4.3	(0.4)	3.6	(0.4)
	Ireland	70.1	(0.8)	24.2	(0.7)	3.2	(0.3)	2.5	(0.2)	72.3	(1.0)	20.6	(0.8)	4.8	(0.4)	2.3	(0.2)
	Israel	61.6	(0.8)	26.0	(0.7)	7.1	(0.3)	5.3	(0.4)	55.0	(1.1)	29.6	(0.8)	9.0	(0.5)	6.4	(0.4)
	Italy	43.2	(1.0)	39.8	(0.8)	8.0	(0.4)	8.9	(0.5)	47.6	(0.9)	37.9	(0.8)	8.9	(0.5)	5.6	(0.3)
	Japan	97.9	(0.4)	1.7	(0.3)	0.1	(0.0)	0.3	(0.1)	96.5	(0.4)	2.8	(0.3)	0.4	(0.1)	0.4	(0.1)
	Korea	97.8	(0.3)	1.5	(0.3)	0.4	(0.1)	0.3	(0.1)	97.4	(0.4)	1.8	(0.2)	0.4	(0.1)	0.4	(0.1)
	Latvia	71.3	(0.8)	21.7	(0.6)	4.3	(0.4)	2.7	(0.2)	59.3	(0.8)	30.1	(0.8)	6.8	(0.3)	3.9	(0.3)
	Lithuania	72.2	(0.7)	19.2	(0.6)	5.4	(0.3)	3.3	(0.2)	58.1	(0.8)	29.6	(0.7)	8.4	(0.5)	3.9	(0.3)
	Luxembourg	84.8	(0.6)	10.4	(0.5)	2.6	(0.3)	2.2	(0.2)	80.7	(0.6)	12.9	(0.5)	3.7	(0.3)	2.7	(0.2)
	Mexico	71.3	(1.0) †	23.7	(0.9) †	3.8	(0.3) †	1.2	(0.2) †	71.3	(0.9) †	23.2	(0.8) †	4.4	(0.4) †	1.1	(0.2) †
	Netherlands*	92.8	(0.5)	5.6	(0.4)	0.9	(0.2)	0.8	(0.2)	77.6	(1.0)	16.6	(0.8)	3.2	(0.3)	2.6	(0.3)
	New Zealand	71.0	(0.8)	22.2	(0.7)	3.7	(0.3)	3.1	(0.3)	73.5	(0.9)	19.4	(0.7)	4.3	(0.3)	2.8	(0.2)
	Norway	86.4	(0.5)	9.2	(0.5)	2.2	(0.2)	2.2	(0.2)	79.1	(0.7)	14.5	(0.5)	3.4	(0.3)	3.0	(0.2)
	Poland	76.1	(1.0)	16.0	(0.7)	3.5	(0.3)	4.4	(0.4)	64.5	(1.0)	23.2	(0.7)	6.3	(0.4)	6.0	(0.4)
	Portugal*	71.9	(0.7)	21.5	(0.6)	4.1	(0.3)	2.5	(0.3)	60.2	(0.9)	30.9	(0.7)	5.6	(0.3)	3.3	(0.2)
	Slovak Republic	82.5	(0.7)	12.1	(0.6)	2.9	(0.3)	2.5	(0.2)	75.8	(0.8)	17.0	(0.6)	4.9	(0.3)	2.3	(0.2)
	Slovenia	82.2	(0.6)	12.5	(0.6)	3.0	(0.2)	2.3	(0.2)	68.7	(0.7)	21.9	(0.7)	6.1	(0.4)	3.2	(0.3)
	Spain	70.4	(0.6) †	23.2	(0.5) †	3.8	(0.2) †	2.7	(0.2) †	63.6	(0.5) †	27.1	(0.5) †	6.0	(0.3) †	3.3	(0.2) †
	Sweden	90.1	(0.5)	6.9	(0.4)	1.5	(0.2)	1.5	(0.2)	83.0	(0.7)	11.7	(0.6)	2.8	(0.3)	2.5	(0.3)
	Switzerland	84.6	(1.0) †	10.0	(0.7) †	2.7	(0.3) †	2.7	(0.3) †	75.9	(1.2) †	16.3	(0.9) †	4.3	(0.4) †	3.5	(0.4) †
	Turkey	48.4	(0.9)	29.3	(0.6)	10.3	(0.5)	12.0	(0.5)	52.7	(1.0)	28.5	(0.7)	9.9	(0.4)	8.9	(0.5)
	United Kingdom	81.2	(0.5)	15.2	(0.5)	2.0	(0.2)	1.5	(0.2)	84.3	(0.6)	12.0	(0.5)	2.2	(0.2)	1.5	(0.1)
	United States*	80.1	(0.8)	16.4	(0.7)	2.1	(0.2)	1.4	(0.2)	81.2	(0.8)	14.6	(0.6)	2.5	(0.3)	1.7	(0.2)
	OECD average	78.7	(0.1)	15.4	(0.1)	3.1	(0.0)	2.7	(0.0)	72.7	(0.1)	19.5	(0.1)	4.7	(0.1)	3.1	(0.0)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.4.1 [2/4] **Student truancy and lateness**

Based on students' reports

		Percentage of students who reported that the following happened in the two weeks prior to the PISA test:															
		I skipped a whole day of school								I skipped some classes							
		Never		Once or twice		Three or four times		Five or more times		Never		Once or twice		Three or four times		Five or more times	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	68.5	(0.8)	23.6	(0.6)	4.8	(0.3)	3.1	(0.3)	74.5	(0.7)	18.2	(0.6)	4.8	(0.4)	2.4	(0.2)
	Argentina	55.5	(0.9) †	31.7	(0.9) †	6.7	(0.4) †	6.1	(0.3) †	43.9	(1.0) †	38.1	(0.7) †	10.2	(0.5) †	7.7	(0.4) †
	Baku (Azerbaijan)	53.5	(0.9) †	31.6	(0.9) †	8.6	(0.5) †	6.3	(0.5) †	43.3	(0.8) †	39.8	(0.7) †	10.7	(0.6) †	6.2	(0.5) †
	Belarus	75.8	(0.7)	18.9	(0.6)	3.1	(0.3)	2.1	(0.2)	69.0	(0.9)	23.5	(0.7)	4.9	(0.4)	2.6	(0.2)
	Bosnia and Herzegovina	53.5	(0.9)	32.0	(0.8)	7.0	(0.3)	7.5	(0.4)	73.7	(0.9)	16.6	(0.6)	5.4	(0.4)	4.3	(0.3)
	Brazil	49.6	(0.8) †	37.1	(0.6) †	7.9	(0.4) †	5.4	(0.3) †	49.5	(0.9) †	36.7	(0.6) †	8.5	(0.4) †	5.4	(0.3) †
	Brunei Darussalam	89.7	(0.4) †	7.6	(0.4) †	1.7	(0.2) †	1.0	(0.1) †	79.8	(0.5) †	16.2	(0.5) †	2.7	(0.2) †	1.3	(0.1) †
	B-S-J-Z (China)	98.8	(0.1)	0.9	(0.1)	0.2	(0.0)	0.2	(0.0)	93.1	(0.5)	5.8	(0.4)	0.7	(0.1)	0.4	(0.1)
	Bulgaria	55.9	(0.9)	28.5	(0.7)	8.4	(0.5)	7.3	(0.4)	50.8	(1.1)	32.0	(0.9)	10.5	(0.5)	6.8	(0.5)
	Costa Rica	61.2	(0.9)	28.7	(0.7)	4.6	(0.3)	5.5	(0.5)	59.9	(0.7)	31.3	(0.7)	5.8	(0.4)	3.0	(0.3)
	Croatia	84.3	(0.7)	10.8	(0.5)	2.7	(0.3)	2.2	(0.2)	75.9	(0.7)	16.6	(0.5)	4.2	(0.3)	3.2	(0.2)
	Cyprus	68.0	(0.9) †	18.2	(0.5) †	8.1	(0.6) †	5.7	(0.4) †	57.7	(0.8) †	24.4	(0.7) †	11.3	(0.6) †	6.7	(0.4) †
	Dominican Republic	47.9	(1.5) ‡	35.1	(1.2) ‡	10.0	(0.8) ‡	7.0	(0.8) ‡	42.8	(1.7) ‡	40.7	(1.6) ‡	10.2	(0.8) ‡	6.3	(0.8) ‡
	Georgia	37.8	(0.9)	39.6	(0.9)	11.1	(0.4)	11.5	(0.5)	38.8	(1.0)	39.5	(0.8)	12.8	(0.5)	8.8	(0.5)
	Hong Kong (China)*	93.0	(0.4)	4.6	(0.4)	1.3	(0.2)	1.1	(0.2)	92.2	(0.4)	5.4	(0.3)	1.4	(0.2)	1.0	(0.1)
	Indonesia	78.9	(1.0)	16.6	(0.8)	2.8	(0.3)	1.7	(0.2)	73.5	(1.0)	21.5	(0.8)	3.5	(0.4)	1.5	(0.2)
	Jordan	46.8	(0.7)	36.8	(0.8)	10.1	(0.5)	6.3	(0.4)	54.6	(0.9)	32.6	(0.7)	9.0	(0.4)	3.9	(0.3)
	Kazakhstan	47.9	(0.7)	37.2	(0.7)	9.2	(0.2)	5.6	(0.2)	45.8	(0.6)	37.8	(0.5)	11.0	(0.3)	5.5	(0.2)
	Kosovo	54.1	(0.8)	34.2	(0.7)	7.3	(0.4)	4.4	(0.3)	51.9	(0.9)	35.0	(0.7)	8.6	(0.5)	4.6	(0.3)
	Lebanon	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Macao (China)	91.2	(0.4)	6.7	(0.4)	1.1	(0.2)	0.9	(0.2)	86.8	(0.6)	10.3	(0.5)	1.6	(0.2)	1.2	(0.2)
	Malaysia	84.2	(0.6)	12.1	(0.5)	2.3	(0.2)	1.4	(0.2)	74.9	(1.0)	20.0	(0.7)	3.4	(0.3)	1.7	(0.2)
	Malta	49.4	(1.0)	37.1	(0.9)	7.6	(0.5)	5.9	(0.5)	64.0	(0.8)	24.5	(0.7)	6.8	(0.4)	4.6	(0.4)
	Moldova	60.5	(0.9)	28.1	(0.6)	6.9	(0.4)	4.5	(0.4)	63.5	(0.8)	26.3	(0.7)	6.7	(0.4)	3.5	(0.3)
	Montenegro	42.5	(0.7)	36.1	(0.7)	10.4	(0.4)	11.0	(0.4)	45.3	(0.8)	34.0	(0.7)	10.3	(0.4)	10.4	(0.3)
	Morocco	55.8	(1.1) ‡	31.1	(0.9) ‡	8.1	(0.5) ‡	5.0	(0.4) ‡	40.8	(1.1) ‡	40.0	(1.0) ‡	13.9	(0.7) ‡	5.3	(0.5) ‡
	North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Panama	42.0	(1.4) ‡	43.7	(1.4) ‡	8.1	(0.7) ‡	6.3	(0.7) ‡	43.3	(1.6) ‡	42.4	(1.5) ‡	10.1	(0.7) ‡	4.3	(0.6) ‡
	Peru	51.5	(1.2) ‡	38.3	(1.1) ‡	6.4	(0.6) ‡	3.9	(0.4) ‡	53.7	(1.2) ‡	36.8	(1.0) ‡	6.5	(0.5) ‡	3.0	(0.4) ‡
	Philippines	71.2	(0.9)	20.8	(0.7)	4.6	(0.4)	3.4	(0.2)	65.5	(0.9)	25.5	(0.7)	6.0	(0.4)	3.0	(0.2)
	Qatar	52.8	(0.5)	29.0	(0.4)	11.0	(0.3)	7.1	(0.3)	54.3	(0.4)	29.5	(0.5)	11.4	(0.3)	4.8	(0.2)
	Romania	49.9	(1.1)	34.7	(0.8)	8.5	(0.5)	6.9	(0.5)	40.2	(1.1)	40.9	(0.9)	12.0	(0.5)	6.9	(0.4)
	Russia	74.7	(0.7)	17.2	(0.6)	4.0	(0.3)	4.1	(0.3)	61.0	(1.1)	26.8	(0.8)	6.3	(0.3)	5.8	(0.4)
	Saudi Arabia	43.8	(0.9)	35.8	(0.6)	11.5	(0.5)	8.8	(0.4)	44.5	(0.9)	36.8	(0.7)	12.3	(0.6)	6.4	(0.4)
	Serbia	75.5	(0.9)	15.7	(0.6)	4.1	(0.3)	4.8	(0.3)	58.7	(1.0)	26.5	(0.7)	9.1	(0.4)	5.6	(0.4)
	Singapore	86.8	(0.4)	10.2	(0.4)	1.7	(0.2)	1.3	(0.1)	88.3	(0.4)	9.4	(0.4)	1.4	(0.1)	1.0	(0.1)
	Chinese Taipei	94.5	(0.3)	3.7	(0.2)	1.0	(0.1)	0.8	(0.1)	87.0	(0.6)	9.6	(0.5)	2.0	(0.2)	1.4	(0.1)
	Thailand	61.2	(1.1)	30.1	(0.8)	6.3	(0.4)	2.4	(0.2)	54.4	(0.9)	37.2	(0.7)	6.6	(0.4)	1.9	(0.2)
	Ukraine	62.4	(1.0)	26.8	(0.7)	6.5	(0.4)	4.2	(0.3)	59.5	(1.0)	29.6	(0.8)	7.5	(0.4)	3.4	(0.3)
	United Arab Emirates	71.8	(0.5)	19.4	(0.4)	5.0	(0.2)	3.8	(0.2)	63.8	(0.7)	23.8	(0.6)	7.8	(0.3)	4.6	(0.2)
	Uruguay	47.3	(1.0) †	39.6	(0.9) †	6.7	(0.4) †	6.4	(0.5) †	53.7	(1.1) †	34.0	(0.9) †	7.7	(0.5) †	4.7	(0.4) †
	Viet Nam	94.3	(0.5)	4.4	(0.4)	0.9	(0.1)	0.4	(0.1)	87.5	(0.8)	10.3	(0.6)	1.5	(0.2)	0.6	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.4.1 [3/4] **Student truancy and lateness**

Based on students' reports

		Percentage of students who reported that the following happened in the two weeks prior to the PISA test:											
		I arrived late for school											
		Never			Once or twice			Three or four times			Five or more times		
		%	S.E.		%	S.E.		%	S.E.		%	S.E.	
OECD	Australia	54.4	(0.6)		29.7	(0.5)		8.4	(0.3)		7.5	(0.3)	
	Austria	57.9	(0.8)		26.5	(0.7)		8.3	(0.4)		7.3	(0.5)	
	Belgium	46.4	(0.7)		31.5	(0.5)		9.8	(0.4)		12.3	(0.5)	
	Canada	47.7	(0.6)		30.8	(0.4)		10.7	(0.4)		10.8	(0.4)	
	Chile	31.6	(0.9)	†	35.1	(0.7)	†	14.8	(0.6)	†	18.6	(0.8)	†
	Colombia	54.9	(1.0)	†	33.4	(0.9)	†	8.0	(0.4)	†	3.7	(0.4)	†
	Czech Republic	46.2	(1.0)		32.8	(0.7)		10.5	(0.5)		10.5	(0.6)	
	Denmark	52.1	(0.9)		29.8	(0.7)		9.6	(0.5)		8.5	(0.4)	
	Estonia	55.3	(0.8)		29.0	(0.7)		9.6	(0.5)		6.1	(0.4)	
	Finland	55.4	(0.8)		31.3	(0.7)		8.3	(0.4)		5.0	(0.3)	
	France	43.0	(0.9)		31.9	(0.7)		12.1	(0.5)		13.0	(0.6)	
	Germany	54.1	(1.4)	‡	29.1	(1.1)	‡	8.8	(0.5)	‡	8.0	(0.7)	‡
	Greece	44.2	(0.8)		29.8	(0.7)		13.3	(0.6)		12.8	(0.5)	
	Hungary	58.5	(1.1)		28.3	(0.8)		7.9	(0.6)		5.3	(0.4)	
	Iceland	50.5	(0.9)		28.3	(0.9)		11.2	(0.6)		10.1	(0.6)	
	Ireland	66.4	(1.0)		24.5	(0.8)		5.3	(0.4)		3.9	(0.3)	
	Israel	38.9	(0.9)		32.5	(0.5)		15.3	(0.5)		13.3	(0.6)	
	Italy	54.9	(1.0)		27.3	(0.7)		10.1	(0.6)		7.7	(0.5)	
	Japan	87.3	(0.7)		10.3	(0.5)		1.3	(0.2)		1.0	(0.2)	
	Korea	80.8	(0.8)		14.0	(0.5)		2.9	(0.3)		2.3	(0.3)	
	Latvia	45.1	(0.8)		34.1	(0.8)		12.6	(0.5)		8.2	(0.5)	
	Lithuania	50.2	(0.8)		30.6	(0.6)		11.3	(0.4)		7.8	(0.4)	
	Luxembourg	45.3	(0.8)		31.5	(0.7)		11.4	(0.4)		11.8	(0.4)	
	Mexico	53.0	(1.2)	†	34.1	(0.9)	†	9.4	(0.5)	†	3.5	(0.3)	†
	Netherlands*	51.2	(1.1)		30.6	(0.8)		8.4	(0.6)		9.7	(0.7)	
	New Zealand	52.4	(0.9)		28.8	(0.7)		9.7	(0.5)		9.2	(0.5)	
	Norway	50.7	(0.9)		30.5	(0.7)		9.0	(0.4)		9.8	(0.5)	
	Poland	44.7	(1.1)		29.9	(0.6)		11.2	(0.5)		14.2	(0.7)	
	Portugal*	50.2	(0.9)		32.0	(0.7)		10.2	(0.4)		7.5	(0.3)	
	Slovak Republic	47.6	(1.0)		31.3	(0.8)		11.5	(0.6)		9.6	(0.4)	
	Slovenia	44.8	(0.7)		37.3	(0.8)		10.4	(0.5)		7.5	(0.5)	
	Spain	56.1	(0.6)	†	27.0	(0.4)	†	9.1	(0.3)	†	7.7	(0.3)	†
	Sweden	47.0	(0.9)		32.0	(0.8)		11.2	(0.6)		9.8	(0.5)	
	Switzerland	49.6	(1.4)	†	29.6	(1.0)	†	11.3	(0.8)	†	9.5	(0.6)	†
	Turkey	52.5	(0.8)		28.4	(0.7)		9.4	(0.4)		9.7	(0.5)	
	United Kingdom	60.6	(0.9)		26.0	(0.7)		7.8	(0.4)		5.6	(0.3)	
	United States*	56.7	(1.0)		30.3	(0.6)		7.8	(0.5)		5.3	(0.5)	
	OECD average	52.4	(0.2)		29.5	(0.1)		9.7	(0.1)		8.5	(0.1)	

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.4.1 [4/4] **Student truancy and lateness**

Based on students' reports

		Percentage of students who reported that the following happened in the two weeks prior to the PISA test:											
		I arrived late for school											
		Never			Once or twice			Three or four times			Five or more times		
		%	S.E.		%	S.E.		%	S.E.		%	S.E.	
Partners	Albania	56.3	(0.7)		30.4	(0.6)		8.3	(0.4)		5.0	(0.3)	
	Argentina	47.4	(1.1)	†	28.7	(0.8)	†	10.9	(0.5)	†	12.9	(0.6)	†
	Baku (Azerbaijan)	39.8	(0.9)	†	37.2	(0.8)	†	13.8	(0.6)	†	9.3	(0.6)	†
	Belarus	53.5	(0.8)		33.5	(0.7)		8.0	(0.4)		5.0	(0.4)	
	Bosnia and Herzegovina	54.7	(1.0)		29.6	(0.8)		8.4	(0.4)		7.2	(0.4)	
	Brazil	56.0	(0.8)	†	29.6	(0.6)	†	8.2	(0.4)	†	6.2	(0.3)	†
	Brunei Darussalam	48.1	(0.7)	†	34.9	(0.7)	†	9.5	(0.4)	†	7.5	(0.3)	†
	B-S-J-Z (China)	66.8	(0.8)		27.2	(0.6)		3.7	(0.3)		2.3	(0.2)	
	Bulgaria	42.9	(1.0)		31.8	(0.7)		14.1	(0.6)		11.3	(0.6)	
	Costa Rica	49.4	(0.9)		34.5	(0.7)		9.5	(0.4)		6.6	(0.4)	
	Croatia	50.6	(1.0)		31.5	(0.7)		9.6	(0.4)		8.3	(0.5)	
	Cyprus	37.1	(0.7)	†	28.2	(0.7)	†	18.5	(0.6)	†	16.2	(0.6)	†
	Dominican Republic	49.7	(1.5)	‡	32.0	(1.3)	‡	10.5	(0.9)	‡	7.9	(0.7)	‡
	Georgia	39.5	(1.1)		33.8	(0.8)		13.2	(0.7)		13.4	(0.6)	
	Hong Kong (China)*	75.4	(0.7)		18.0	(0.6)		3.6	(0.3)		2.9	(0.3)	
	Indonesia	48.4	(1.2)		39.3	(0.9)		7.8	(0.4)		4.6	(0.3)	
	Jordan	50.2	(1.0)		27.9	(0.8)		13.0	(0.6)		8.9	(0.5)	
	Kazakhstan	45.7	(0.7)		38.5	(0.6)		10.1	(0.3)		5.7	(0.2)	
	Kosovo	61.7	(0.9)		26.5	(0.7)		7.1	(0.4)		4.7	(0.4)	
	Lebanon	m	m		m	m		m	m		m	m	
	Macao (China)	71.6	(0.6)		22.2	(0.6)		3.7	(0.3)		2.6	(0.3)	
	Malaysia	63.1	(0.8)		26.8	(0.7)		5.9	(0.3)		4.2	(0.3)	
	Malta	68.1	(0.9)		20.7	(0.9)		6.5	(0.5)		4.7	(0.4)	
	Moldova	41.5	(1.1)		38.4	(0.7)		12.2	(0.5)		7.9	(0.4)	
	Montenegro	33.4	(0.6)		38.7	(0.6)		15.6	(0.5)		12.3	(0.4)	
	Morocco	40.7	(1.0)	‡	36.2	(0.9)	‡	15.7	(0.7)	‡	7.4	(0.6)	‡
	North Macedonia	m	m		m	m		m	m		m	m	
	Panama	41.3	(1.2)	‡	36.6	(1.3)	‡	12.8	(0.9)	‡	9.3	(0.7)	‡
	Peru	37.7	(1.3)	‡	38.1	(1.1)	‡	13.7	(0.7)	‡	10.4	(0.8)	‡
	Philippines	38.9	(0.8)		39.6	(0.7)		11.2	(0.4)		10.3	(0.4)	
	Qatar	46.7	(0.4)		30.4	(0.4)		13.7	(0.3)		9.3	(0.3)	
	Romania	42.4	(1.0)		35.1	(0.8)		12.6	(0.6)		9.9	(0.5)	
	Russia	43.4	(0.8)		32.3	(0.9)		11.2	(0.5)		13.2	(0.7)	
	Saudi Arabia	44.5	(0.8)		30.9	(0.6)		14.3	(0.5)		10.2	(0.5)	
	Serbia	38.9	(1.1)		34.3	(0.7)		13.0	(0.5)		13.8	(0.7)	
	Singapore	62.6	(0.6)		26.0	(0.5)		6.0	(0.3)		5.4	(0.3)	
	Chinese Taipei	62.0	(1.0)		25.5	(0.7)		6.4	(0.4)		6.1	(0.4)	
	Thailand	56.2	(1.0)		28.3	(0.8)		9.4	(0.5)		6.1	(0.4)	
	Ukraine	37.6	(1.1)		37.0	(0.8)		15.0	(0.6)		10.4	(0.5)	
	United Arab Emirates	54.8	(0.6)		27.7	(0.5)		11.0	(0.3)		6.4	(0.2)	
	Uruguay	32.1	(1.2)	†	39.4	(1.0)	†	15.6	(0.7)	†	12.8	(0.7)	†
	Viet Nam	55.4	(1.0)		36.4	(0.8)		5.5	(0.4)		2.7	(0.3)	

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.5.1 [1/6] **Teacher enthusiasm**

Based on students' reports

		Index of teacher enthusiasm				Percentage of students who reported the following about their language-of-instruction lessons:							
						It was clear to me that the teacher liked teaching us							
		Average		Variability		Strongly disagree		Disagree		Agree		Strongly agree	
		Mean index	S.E.	S.D.	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	0.20	(0.01)	0.98	(0.01)	5.9	(0.3)	15.9	(0.4)	53.1	(0.5)	25.1	(0.5)
OECD	Austria	-0.09	(0.02)	1.09	(0.01)	12.8	(0.6)	21.0	(0.7)	39.3	(0.8)	26.8	(0.9)
OECD	Belgium	0.04	(0.02)	0.96	(0.01)	7.5	(0.4)	18.0	(0.6)	50.2	(0.7)	24.3	(0.7)
OECD	Canada	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Chile	0.32	(0.02)	1.04	(0.01)	6.1	(0.4)	8.8	(0.5)	49.7	(0.9)	35.4	(1.1)
OECD	Colombia	0.34	(0.02)	0.93	(0.01)	5.0	(0.4)	7.1	(0.5)	56.0	(0.8)	31.9	(0.9)
OECD	Czech Republic	-0.31	(0.02)	0.92	(0.01)	11.9	(0.7)	25.0	(0.8)	48.1	(0.9)	15.1	(0.7)
OECD	Denmark	0.19	(0.02)	0.91	(0.01)	4.0	(0.3)	13.5	(0.6)	54.3	(0.8)	28.3	(1.0)
OECD	Estonia	-0.08	(0.02)	0.96	(0.01)	8.5	(0.4)	22.9	(0.7)	52.4	(0.8)	16.3	(0.6)
OECD	Finland	-0.15	(0.02)	0.93	(0.01)	7.2	(0.4)	21.5	(0.7)	54.8	(0.8)	16.5	(0.7)
OECD	France	0.03	(0.02)	1.02	(0.01)	9.9	(0.6)	18.2	(0.6)	46.2	(0.7)	25.7	(0.7)
OECD	Germany	-0.12	(0.02)	0.97	(0.01)	8.8	(0.5)	21.2	(0.7)	43.3	(1.0)	26.8	(0.8)
OECD	Greece	-0.22	(0.02)	0.92	(0.01)	10.7	(0.5)	25.4	(0.7)	50.7	(0.8)	13.3	(0.6)
OECD	Hungary	-0.03	(0.03)	1.02	(0.01)	10.5	(0.7)	20.6	(0.9)	48.3	(0.9)	20.6	(0.9)
OECD	Iceland	0.05	(0.02)	1.03	(0.01)	7.2	(0.4)	18.2	(0.7)	50.6	(0.9)	24.0	(0.7)
OECD	Ireland	0.14	(0.02)	0.94	(0.01)	6.3	(0.4)	17.6	(0.7)	54.8	(0.8)	21.3	(0.8)
OECD	Israel	-0.08	(0.03)	1.11	(0.01)	13.8	(0.8)	20.6	(0.8)	43.8	(0.9)	21.8	(0.9)
OECD	Italy	-0.07	(0.02)	0.95	(0.01)	8.6	(0.4)	17.5	(0.7)	54.2	(0.7)	19.7	(0.6)
OECD	Japan	-0.24	(0.02)	0.99	(0.01)	10.4	(0.5)	26.6	(0.8)	47.7	(0.8)	15.3	(0.6)
OECD	Korea	0.44	(0.02)	0.93	(0.01)	2.6	(0.2)	8.7	(0.5)	59.1	(0.7)	29.6	(0.9)
OECD	Latvia	-0.20	(0.02)	0.88	(0.01)	9.4	(0.5)	30.2	(0.8)	48.9	(1.0)	11.5	(0.6)
OECD	Lithuania	-0.08	(0.02)	1.04	(0.01)	11.7	(0.4)	21.3	(0.6)	49.6	(0.7)	17.4	(0.6)
OECD	Luxembourg	-0.16	(0.01)	1.04	(0.01)	12.1	(0.4)	21.0	(0.6)	45.3	(0.7)	21.6	(0.6)
OECD	Mexico	0.26	(0.02)	0.94	(0.01)	6.1	(0.4)	9.5	(0.5)	59.1	(0.8)	25.3	(0.8)
OECD	Netherlands*	-0.18	(0.02)	0.91	(0.01)	6.8	(0.6)	20.8	(0.9)	55.1	(1.0)	17.3	(0.8)
OECD	New Zealand	0.23	(0.02)	0.95	(0.01)	4.4	(0.3)	15.3	(0.5)	54.3	(0.7)	26.0	(0.8)
OECD	Norway	0.09	(0.02)	1.00	(0.01)	5.6	(0.3)	14.5	(0.6)	51.3	(0.8)	28.6	(0.8)
OECD	Poland	-0.24	(0.02)	0.98	(0.01)	11.4	(0.6)	21.0	(0.8)	49.5	(0.8)	18.1	(0.8)
OECD	Portugal*	0.10	(0.02)	0.95	(0.01)	7.4	(0.4)	20.1	(0.7)	53.2	(0.8)	19.4	(0.8)
OECD	Slovak Republic	-0.27	(0.02)	0.89	(0.01)	10.5	(0.5)	23.2	(0.8)	51.5	(0.9)	14.9	(0.8)
OECD	Slovenia	-0.10	(0.01)	0.98	(0.01)	9.4	(0.5)	19.9	(0.6)	50.9	(0.8)	19.7	(0.7)
OECD	Spain	0.03	(0.02)	1.04	(0.01)	9.2	(0.3)	16.6	(0.5)	48.0	(0.5)	26.3	(0.6)
OECD	Sweden	0.01	(0.03)	1.01	(0.01)	7.6	(0.5)	19.8	(0.7)	50.0	(0.8)	22.6	(0.9)
OECD	Switzerland	0.11	(0.03)	1.03	(0.01)	8.2	(0.6)	15.4	(0.7)	44.3	(0.9)	32.1	(1.1)
OECD	Turkey	-0.10	(0.02)	1.09	(0.01)	13.0	(0.5)	20.5	(0.6)	45.0	(0.7)	21.5	(0.7)
OECD	United Kingdom	0.23	(0.02)	0.98	(0.01)	6.0	(0.4)	15.1	(0.5)	51.9	(0.8)	27.1	(0.8)
OECD	United States*	0.25	(0.02)	0.96	(0.01)	4.3	(0.3)	14.0	(0.6)	56.1	(0.9)	25.6	(1.0)
	OECD average	0.01	(0.00)	0.98	(0.00)	8.4	(0.1)	18.5	(0.1)	50.6	(0.1)	22.6	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.5.1 [2/6] **Teacher enthusiasm**

Based on students' reports

		Index of teacher enthusiasm				Percentage of students who reported the following about their language-of-instruction lessons:							
						It was clear to me that the teacher liked teaching us							
		Average		Variability		Strongly disagree		Disagree		Agree		Strongly agree	
		Mean index	S.E.	S.D.	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	0.81	(0.02)	0.87	(0.01)	2.4	(0.2)	2.6	(0.2)	41.5	(0.8)	53.5	(0.8)
	Argentina	0.21	(0.02)	1.00	(0.01)	7.7	(0.5)	8.7	(0.5)	49.8	(0.8)	33.9	(0.9)
	Baku (Azerbaijan)	0.28	(0.02)	1.18	(0.01)	12.4	(0.5)	7.7	(0.4)	47.6	(0.8)	32.3	(0.6)
	Belarus	0.08	(0.02)	0.87	(0.01)	4.7	(0.3)	19.3	(0.7)	59.2	(0.9)	16.8	(0.8)
	Bosnia and Herzegovina	-0.04	(0.02)	0.95	(0.01)	10.2	(0.6)	15.7	(0.6)	56.3	(0.8)	17.8	(0.7)
	Brazil	0.22	(0.02)	0.92	(0.01)	5.3	(0.3)	10.2	(0.4)	55.9	(0.7)	28.6	(0.7)
	Brunei Darussalam	0.22	(0.01)	0.76	(0.01)	2.9	(0.2)	12.0	(0.4)	64.6	(0.6)	20.4	(0.5)
	B-S-J-Z (China)	0.29	(0.02)	0.97	(0.01)	5.3	(0.4)	18.8	(0.8)	51.3	(0.7)	24.6	(0.8)
	Bulgaria	-0.02	(0.03)	1.10	(0.01)	15.1	(0.8)	16.2	(0.7)	47.5	(0.9)	21.1	(0.8)
	Costa Rica	0.28	(0.03)	1.04	(0.01)	6.6	(0.3)	7.1	(0.4)	47.1	(0.9)	39.2	(1.1)
	Croatia	-0.02	(0.02)	1.01	(0.01)	7.6	(0.4)	17.4	(0.5)	52.2	(0.6)	22.8	(0.7)
	Cyprus	-0.12	(0.01)	1.08	(0.01)	13.7	(0.6)	20.4	(0.6)	45.9	(0.7)	20.0	(0.5)
	Dominican Republic	0.31	(0.02)	1.08	(0.01)	11.1	(0.6)	5.4	(0.4)	49.3	(0.9)	34.2	(0.9)
	Georgia	0.09	(0.02)	0.99	(0.01)	10.0	(0.6)	12.6	(0.5)	56.9	(0.7)	20.6	(0.6)
	Hong Kong (China)*	0.06	(0.02)	0.90	(0.01)	5.3	(0.3)	14.4	(0.6)	61.2	(0.8)	19.0	(0.7)
	Indonesia	0.39	(0.02)	0.82	(0.01)	3.8	(0.4)	7.1	(0.4)	62.1	(0.9)	27.0	(0.9)
	Jordan	0.27	(0.02)	1.07	(0.01)	12.3	(0.7)	10.7	(0.5)	46.9	(0.8)	30.1	(1.0)
	Kazakhstan	0.33	(0.01)	0.98	(0.01)	7.1	(0.3)	7.6	(0.2)	57.0	(0.5)	28.3	(0.6)
	Kosovo	0.48	(0.02)	0.88	(0.01)	4.1	(0.3)	4.7	(0.3)	51.3	(0.8)	39.9	(0.8)
	Lebanon	m	m	m	m	m	m	m	m	m	m	m	m
	Macao (China)	-0.12	(0.01)	0.83	(0.01)	5.8	(0.4)	25.8	(0.7)	57.6	(0.8)	10.8	(0.5)
	Malaysia	0.23	(0.02)	0.78	(0.01)	2.3	(0.3)	10.6	(0.5)	62.3	(0.8)	24.7	(0.8)
	Malta	0.22	(0.02)	1.05	(0.01)	8.2	(0.5)	13.0	(0.5)	48.4	(0.8)	30.4	(0.7)
	Moldova	0.30	(0.02)	0.83	(0.01)	3.3	(0.3)	11.5	(0.7)	60.6	(0.8)	24.5	(0.9)
	Montenegro	0.10	(0.01)	1.02	(0.01)	10.0	(0.4)	11.4	(0.4)	54.7	(0.7)	23.8	(0.5)
	Morocco	-0.02	(0.02)	0.98	(0.01)	13.3	(0.5)	18.4	(0.6)	51.3	(0.8)	17.0	(0.7)
	North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m
	Panama	0.37	(0.02)	0.99	(0.01)	7.0	(0.5)	7.7	(0.4)	50.7	(0.8)	34.6	(0.9)
	Peru	0.28	(0.02)	0.89	(0.01)	3.9	(0.3)	8.4	(0.5)	62.9	(0.7)	24.8	(0.7)
	Philippines	0.30	(0.02)	0.89	(0.01)	6.1	(0.4)	9.1	(0.5)	58.4	(0.8)	26.4	(0.7)
	Qatar	0.09	(0.01)	1.07	(0.01)	11.5	(0.3)	14.6	(0.3)	48.3	(0.5)	25.7	(0.4)
	Romania	0.24	(0.02)	0.94	(0.01)	5.0	(0.5)	9.4	(0.4)	55.8	(1.0)	29.9	(1.0)
	Russia	-0.03	(0.02)	0.95	(0.01)	8.2	(0.5)	22.0	(0.8)	53.3	(0.9)	16.6	(0.7)
	Saudi Arabia	0.22	(0.03)	1.01	(0.01)	9.5	(0.6)	10.5	(0.6)	52.0	(0.7)	28.0	(1.1)
	Serbia	0.01	(0.02)	0.99	(0.01)	7.9	(0.5)	13.9	(0.5)	53.6	(0.7)	24.6	(0.7)
	Singapore	0.27	(0.01)	0.96	(0.01)	5.1	(0.2)	15.8	(0.4)	54.6	(0.6)	24.4	(0.6)
	Chinese Taipei	0.11	(0.02)	0.91	(0.01)	5.4	(0.3)	22.1	(0.6)	53.3	(0.7)	19.2	(0.6)
	Thailand	0.33	(0.02)	0.79	(0.01)	2.8	(0.2)	9.3	(0.5)	66.1	(0.7)	21.8	(0.7)
	Ukraine	-0.09	(0.02)	0.85	(0.01)	7.6	(0.4)	19.5	(0.6)	59.1	(0.7)	13.9	(0.5)
	United Arab Emirates	0.27	(0.02)	1.08	(0.01)	8.7	(0.4)	12.1	(0.5)	46.0	(0.5)	33.2	(0.7)
	Uruguay	0.10	(0.02)	0.95	(0.01)	7.8	(0.6)	12.1	(0.6)	58.1	(0.8)	22.0	(0.8)
	Viet Nam	0.31	(0.03)	0.80	(0.01)	4.0	(0.4)	15.5	(0.7)	59.8	(0.8)	20.7	(0.9)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.5.1 [3/6] **Teacher enthusiasm**

Based on students' reports

		Percentage of students who reported the following about their language-of-instruction lessons:															
		The enthusiasm of the teacher inspired me								It was clear that the teacher likes to deal with the topic of the lesson							
		Strongly disagree		Disagree		Agree		Strongly agree		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	8.9	(0.3)	29.0	(0.5)	42.9	(0.5)	19.3	(0.5)	3.7	(0.2)	10.2	(0.3)	57.6	(0.5)	28.5	(0.4)
	Austria	25.1	(0.8)	35.6	(0.6)	28.0	(0.7)	11.2	(0.4)	8.8	(0.5)	16.4	(0.6)	41.7	(0.8)	33.1	(0.9)
	Belgium	11.9	(0.5)	32.3	(0.7)	39.8	(0.6)	16.1	(0.7)	4.3	(0.3)	13.6	(0.5)	58.5	(0.6)	23.6	(0.7)
	Canada	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Chile	9.7	(0.4)	23.9	(0.8)	44.6	(0.8)	21.7	(0.9)	5.1	(0.3)	8.4	(0.5)	51.1	(0.9)	35.4	(1.0)
	Colombia	5.9	(0.3)	21.0	(0.7)	52.7	(0.8)	20.4	(0.8)	4.1	(0.3)	6.5	(0.4)	59.2	(0.7)	30.2	(0.8)
	Czech Republic	16.0	(0.8)	42.3	(0.7)	33.4	(0.8)	8.3	(0.4)	7.0	(0.4)	17.8	(0.6)	53.7	(0.9)	21.5	(0.8)
	Denmark	8.0	(0.5)	35.4	(1.0)	43.1	(0.9)	13.5	(0.6)	2.6	(0.3)	11.1	(0.5)	56.9	(0.8)	29.4	(0.9)
	Estonia	9.6	(0.5)	30.5	(0.9)	45.9	(0.9)	14.0	(0.6)	5.6	(0.4)	17.0	(0.6)	57.2	(0.7)	20.2	(0.6)
	Finland	15.0	(0.7)	41.7	(0.9)	34.3	(0.7)	8.9	(0.5)	5.3	(0.3)	15.6	(0.6)	59.5	(0.8)	19.6	(0.7)
	France	16.9	(0.7)	30.8	(0.6)	35.8	(0.8)	16.5	(0.6)	6.3	(0.4)	11.7	(0.4)	54.3	(0.7)	27.7	(0.7)
	Germany	23.1	(0.8)	41.3	(0.8)	26.8	(0.7)	8.8	(0.5)	6.8	(0.5)	21.5	(0.6)	46.9	(0.7)	24.9	(0.7)
	Greece	14.5	(0.5)	36.3	(0.6)	38.1	(0.7)	11.2	(0.5)	7.1	(0.4)	19.0	(0.6)	56.9	(0.7)	17.0	(0.6)
	Hungary	12.2	(0.7)	28.4	(0.8)	44.2	(0.8)	15.2	(0.7)	7.9	(0.6)	15.5	(0.6)	53.1	(0.8)	23.4	(0.8)
	Iceland	11.8	(0.6)	32.8	(0.8)	40.5	(1.0)	14.9	(0.6)	6.8	(0.4)	16.0	(0.6)	53.8	(0.8)	23.4	(0.7)
	Ireland	8.8	(0.5)	31.2	(0.8)	41.8	(0.8)	18.1	(0.7)	3.8	(0.3)	10.7	(0.4)	61.9	(0.7)	23.7	(0.8)
	Israel	17.5	(0.8)	31.9	(0.8)	33.4	(0.8)	17.1	(0.8)	8.8	(0.6)	14.6	(0.6)	46.9	(0.9)	29.7	(1.1)
	Italy	15.6	(0.5)	32.5	(0.8)	39.7	(0.7)	12.2	(0.6)	6.9	(0.4)	15.7	(0.6)	58.5	(0.7)	19.0	(0.6)
	Japan	13.7	(0.6)	34.0	(0.7)	39.6	(0.6)	12.7	(0.6)	11.2	(0.5)	32.4	(0.7)	43.5	(0.7)	13.0	(0.6)
	Korea	3.1	(0.2)	14.7	(0.6)	53.5	(0.6)	28.7	(0.9)	2.2	(0.2)	9.2	(0.5)	58.4	(0.7)	30.2	(0.9)
	Latvia	9.8	(0.5)	34.7	(0.8)	44.2	(0.9)	11.4	(0.5)	5.5	(0.3)	17.8	(0.7)	60.1	(0.8)	16.6	(0.6)
	Lithuania	16.0	(0.5)	24.6	(0.6)	41.0	(0.7)	18.4	(0.6)	8.6	(0.4)	17.8	(0.6)	50.0	(0.7)	23.6	(0.6)
	Luxembourg	21.5	(0.6)	34.2	(0.6)	32.2	(0.7)	12.1	(0.4)	9.1	(0.4)	19.1	(0.6)	48.9	(0.7)	22.9	(0.6)
	Mexico	7.0	(0.4)	24.5	(0.8)	51.1	(0.8)	17.4	(0.6)	4.6	(0.3)	8.2	(0.4)	58.5	(0.8)	28.7	(0.7)
	Netherlands*	13.4	(0.7)	42.1	(0.9)	34.7	(0.9)	9.8	(0.6)	5.6	(0.4)	22.1	(0.8)	59.4	(0.8)	12.9	(0.6)
	New Zealand	7.5	(0.4)	29.5	(0.8)	43.2	(0.7)	19.7	(0.7)	2.8	(0.2)	10.4	(0.5)	59.6	(0.7)	27.2	(0.7)
	Norway	13.1	(0.5)	34.4	(0.7)	37.3	(0.7)	15.3	(0.7)	5.1	(0.3)	14.3	(0.6)	55.3	(0.8)	25.3	(0.8)
	Poland	16.1	(0.7)	34.6	(0.8)	38.1	(0.8)	11.2	(0.6)	8.3	(0.5)	19.8	(0.6)	54.9	(0.8)	17.0	(0.7)
	Portugal*	8.8	(0.5)	29.0	(0.8)	45.7	(0.9)	16.5	(0.8)	4.4	(0.3)	14.2	(0.6)	58.6	(0.8)	22.8	(0.8)
	Slovak Republic	13.6	(0.6)	41.3	(0.8)	37.2	(1.0)	7.9	(0.5)	6.3	(0.4)	17.3	(0.6)	58.9	(0.7)	17.4	(0.8)
	Slovenia	17.1	(0.7)	38.6	(0.6)	33.8	(0.8)	10.5	(0.4)	6.2	(0.4)	16.8	(0.6)	55.5	(0.8)	21.5	(0.7)
	Spain	14.3	(0.4)	31.9	(0.5)	38.5	(0.5)	15.3	(0.5)	6.5	(0.3)	13.7	(0.3)	50.7	(0.5)	29.1	(0.6)
	Sweden	12.6	(0.6)	35.6	(0.8)	38.0	(0.7)	13.8	(0.7)	6.1	(0.4)	18.7	(0.6)	52.5	(0.9)	22.8	(1.0)
	Switzerland	17.7	(0.7)	33.0	(1.0)	35.4	(1.0)	13.8	(0.7)	5.7	(0.4)	15.4	(0.7)	48.0	(0.8)	30.8	(1.0)
	Turkey	12.7	(0.5)	29.2	(0.7)	39.0	(0.7)	19.0	(0.7)	9.6	(0.5)	20.0	(0.6)	51.1	(0.8)	19.3	(0.7)
	United Kingdom	8.3	(0.4)	27.6	(0.6)	43.4	(0.7)	20.7	(0.7)	3.6	(0.3)	10.5	(0.5)	57.3	(0.7)	28.7	(0.7)
	United States*	7.4	(0.5)	27.6	(0.8)	44.1	(0.8)	21.0	(0.8)	3.3	(0.3)	10.7	(0.5)	58.2	(0.9)	27.8	(1.0)
	OECD average	12.9	(0.1)	32.2	(0.1)	39.9	(0.1)	15.1	(0.1)	6.0	(0.1)	15.3	(0.1)	54.6	(0.1)	24.1	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.5.1 [4/6] **Teacher enthusiasm**

Based on students' reports

		Percentage of students who reported the following about their language-of-instruction lessons:															
		The enthusiasm of the teacher inspired me								It was clear that the teacher likes to deal with the topic of the lesson							
		Strongly disagree		Disagree		Agree		Strongly agree		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	2.6	(0.2)	11.1	(0.4)	47.3	(0.7)	39.1	(0.8)	1.6	(0.2)	4.4	(0.3)	43.0	(0.9)	51.1	(1.0)
	Argentina	9.1	(0.5)	24.6	(0.7)	46.5	(0.8)	19.9	(0.8)	5.9	(0.4)	9.3	(0.6)	56.3	(0.8)	28.5	(0.9)
	Baku (Azerbaijan)	11.5	(0.4)	12.7	(0.6)	47.2	(0.8)	28.6	(0.6)	10.3	(0.4)	6.9	(0.4)	50.1	(0.8)	32.7	(0.8)
	Belarus	5.8	(0.3)	32.3	(0.9)	48.6	(0.8)	13.4	(0.6)	2.7	(0.3)	8.6	(0.4)	61.5	(0.9)	27.2	(0.8)
	Bosnia and Herzegovina	11.9	(0.5)	27.9	(0.8)	47.8	(0.8)	12.3	(0.5)	7.1	(0.4)	13.8	(0.5)	59.2	(0.8)	20.0	(0.7)
	Brazil	8.2	(0.3)	29.1	(0.6)	45.6	(0.6)	17.1	(0.5)	3.8	(0.2)	9.5	(0.4)	60.4	(0.5)	26.3	(0.6)
	Brunei Darussalam	3.0	(0.2)	23.0	(0.5)	57.8	(0.6)	16.2	(0.4)	1.9	(0.1)	9.8	(0.4)	70.5	(0.5)	17.7	(0.4)
	B-S-J-Z (China)	4.8	(0.3)	19.0	(0.5)	52.1	(0.7)	24.1	(0.7)	3.4	(0.2)	14.6	(0.6)	54.6	(0.6)	27.4	(0.8)
	Bulgaria	14.7	(0.7)	24.1	(0.8)	42.7	(1.0)	18.5	(0.8)	10.2	(0.6)	12.7	(0.6)	52.4	(0.9)	24.7	(0.9)
	Costa Rica	9.7	(0.5)	24.1	(0.8)	44.5	(0.9)	21.7	(1.2)	5.9	(0.3)	10.6	(0.5)	49.9	(0.9)	33.5	(1.1)
	Croatia	13.6	(0.5)	33.5	(0.8)	39.3	(0.6)	13.6	(0.6)	6.4	(0.3)	16.9	(0.5)	53.2	(0.7)	23.5	(0.5)
	Cyprus	15.9	(0.5)	32.1	(0.6)	37.0	(0.6)	15.0	(0.5)	9.6	(0.4)	16.6	(0.6)	50.5	(0.7)	23.4	(0.6)
	Dominican Republic	10.3	(0.5)	13.0	(0.6)	48.9	(0.8)	27.8	(0.8)	8.8	(0.4)	8.8	(0.4)	53.3	(0.9)	29.1	(0.8)
	Georgia	9.8	(0.5)	21.4	(0.7)	51.9	(0.9)	16.8	(0.7)	6.9	(0.4)	11.2	(0.5)	57.7	(0.7)	24.2	(0.7)
	Hong Kong (China)*	9.7	(0.5)	28.6	(0.8)	48.2	(0.8)	13.5	(0.5)	5.7	(0.4)	15.2	(0.6)	63.9	(0.8)	15.2	(0.7)
	Indonesia	3.2	(0.3)	8.1	(0.6)	58.3	(0.8)	30.3	(0.8)	2.8	(0.3)	6.3	(0.4)	68.3	(0.8)	22.6	(0.7)
	Jordan	9.5	(0.5)	17.1	(0.6)	42.6	(0.8)	30.8	(1.0)	6.7	(0.4)	9.5	(0.4)	52.6	(0.8)	31.2	(0.9)
	Kazakhstan	6.5	(0.2)	12.2	(0.4)	54.3	(0.5)	27.0	(0.5)	5.9	(0.2)	6.8	(0.2)	60.9	(0.4)	26.4	(0.5)
	Kosovo	5.8	(0.4)	17.1	(0.6)	53.9	(0.8)	23.3	(0.7)	2.8	(0.2)	5.8	(0.4)	54.8	(0.7)	36.6	(0.8)
	Lebanon	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Macao (China)	7.9	(0.4)	32.0	(0.8)	50.4	(0.8)	9.7	(0.5)	5.4	(0.4)	26.2	(0.7)	56.3	(0.8)	12.1	(0.5)
	Malaysia	1.6	(0.2)	10.1	(0.7)	54.0	(0.8)	34.3	(1.0)	1.7	(0.2)	9.8	(0.6)	64.3	(0.7)	24.2	(0.8)
	Malta	8.9	(0.5)	23.1	(0.7)	44.9	(0.8)	23.1	(0.7)	5.0	(0.4)	11.7	(0.6)	56.6	(0.9)	26.7	(0.8)
	Moldova	4.2	(0.3)	20.6	(0.8)	55.4	(0.7)	19.9	(0.9)	2.3	(0.2)	9.8	(0.5)	63.0	(0.7)	25.0	(0.9)
	Montenegro	13.3	(0.4)	25.9	(0.5)	44.3	(0.6)	16.5	(0.4)	7.0	(0.4)	10.2	(0.4)	54.6	(0.6)	28.2	(0.6)
	Morocco	12.3	(0.6)	21.6	(0.7)	46.6	(0.7)	19.5	(0.7)	8.3	(0.4)	12.2	(0.5)	54.4	(0.6)	25.1	(0.7)
	North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Panama	7.7	(0.4)	18.7	(0.7)	47.5	(0.7)	26.1	(0.7)	5.5	(0.3)	8.0	(0.4)	51.8	(0.9)	34.7	(1.0)
	Peru	4.4	(0.3)	18.9	(0.6)	54.9	(0.7)	21.8	(0.7)	3.7	(0.3)	10.2	(0.5)	61.2	(0.7)	25.0	(0.7)
	Philippines	5.1	(0.4)	15.2	(0.6)	58.5	(0.7)	21.2	(0.7)	5.5	(0.4)	9.5	(0.5)	61.2	(0.8)	23.9	(0.8)
	Qatar	10.9	(0.3)	23.5	(0.4)	43.3	(0.4)	22.2	(0.4)	7.8	(0.2)	13.3	(0.3)	52.7	(0.4)	26.2	(0.4)
	Romania	7.2	(0.5)	24.9	(0.7)	48.1	(0.8)	19.7	(0.8)	4.7	(0.4)	12.6	(0.6)	57.2	(0.9)	25.4	(0.8)
	Russia	7.8	(0.5)	27.3	(0.9)	48.3	(0.9)	16.6	(0.6)	4.9	(0.3)	14.7	(0.5)	59.8	(0.8)	20.6	(0.8)
	Saudi Arabia	8.9	(0.5)	15.3	(0.6)	43.2	(0.7)	32.7	(0.9)	7.1	(0.5)	11.6	(0.6)	53.9	(0.7)	27.4	(0.9)
	Serbia	12.9	(0.5)	32.2	(0.7)	40.2	(0.7)	14.7	(0.6)	6.9	(0.4)	15.6	(0.6)	53.7	(0.7)	23.8	(0.7)
	Singapore	6.2	(0.3)	21.7	(0.5)	47.9	(0.6)	24.2	(0.5)	3.6	(0.2)	11.3	(0.4)	59.0	(0.6)	26.1	(0.5)
	Chinese Taipei	6.8	(0.4)	28.5	(0.7)	49.9	(0.8)	14.8	(0.6)	3.9	(0.3)	16.8	(0.5)	57.6	(0.8)	21.7	(0.7)
	Thailand	2.3	(0.2)	11.9	(0.5)	63.6	(0.7)	22.2	(0.8)	1.9	(0.2)	8.8	(0.5)	69.0	(0.7)	20.2	(0.8)
	Ukraine	8.3	(0.4)	30.9	(0.8)	48.2	(0.8)	12.6	(0.5)	5.1	(0.3)	14.9	(0.5)	62.4	(0.8)	17.6	(0.6)
	United Arab Emirates	8.5	(0.6)	18.4	(0.5)	44.3	(0.6)	28.7	(0.7)	6.2	(0.2)	12.1	(0.6)	49.8	(0.5)	31.8	(0.8)
	Uruguay	9.3	(0.6)	27.2	(0.9)	46.0	(1.0)	17.4	(0.8)	5.8	(0.4)	10.5	(0.5)	60.5	(0.8)	23.3	(0.8)
	Viet Nam	2.7	(0.2)	11.6	(0.8)	56.6	(0.9)	29.1	(1.2)	2.2	(0.2)	10.7	(0.7)	62.6	(1.1)	24.4	(1.2)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.5.1 [5/6] **Teacher enthusiasm**

Based on students' reports

		Percentage of students who reported the following about their language-of-instruction lessons:							
		The teacher showed enjoyment in teaching							
		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	5.0	(0.2)	13.1	(0.3)	51.7	(0.5)	30.2	(0.5)
OECD	Austria	11.6	(0.6)	18.9	(0.7)	38.9	(0.8)	30.6	(0.9)
OECD	Belgium	6.5	(0.4)	18.4	(0.6)	50.9	(0.7)	24.1	(0.8)
OECD	Canada	m	m	m	m	m	m	m	m
OECD	Chile	6.8	(0.4)	12.6	(0.6)	46.0	(0.8)	34.6	(1.0)
OECD	Colombia	4.7	(0.3)	10.4	(0.6)	53.3	(0.8)	31.6	(1.0)
OECD	Czech Republic	12.6	(0.7)	32.5	(0.8)	42.5	(0.9)	12.4	(0.6)
OECD	Denmark	3.4	(0.3)	13.9	(0.7)	55.5	(0.8)	27.2	(0.9)
OECD	Estonia	7.7	(0.4)	24.7	(0.6)	49.6	(0.8)	18.0	(0.7)
OECD	Finland	8.5	(0.5)	22.1	(0.7)	50.4	(0.8)	19.1	(0.8)
OECD	France	8.7	(0.5)	16.7	(0.5)	47.5	(0.7)	27.1	(0.7)
OECD	Germany	8.5	(0.5)	19.5	(0.6)	44.0	(0.8)	28.0	(0.8)
OECD	Greece	9.9	(0.5)	24.9	(0.7)	47.9	(0.7)	17.3	(0.6)
OECD	Hungary	8.7	(0.6)	18.7	(0.7)	49.9	(0.8)	22.8	(0.9)
OECD	Iceland	6.7	(0.4)	14.5	(0.6)	52.6	(0.9)	26.2	(0.9)
OECD	Ireland	5.0	(0.4)	11.8	(0.6)	55.1	(0.8)	28.1	(0.8)
OECD	Israel	12.5	(0.8)	20.7	(0.7)	42.3	(0.7)	24.6	(1.0)
OECD	Italy	8.0	(0.5)	18.0	(0.6)	52.8	(0.7)	21.2	(0.7)
OECD	Japan	9.1	(0.5)	21.0	(0.6)	48.8	(0.7)	21.1	(0.8)
OECD	Korea	2.2	(0.2)	9.8	(0.5)	57.7	(0.8)	30.3	(1.0)
OECD	Latvia	7.6	(0.4)	23.7	(0.7)	53.4	(0.8)	15.2	(0.6)
OECD	Lithuania	11.0	(0.5)	19.3	(0.5)	45.7	(0.7)	23.9	(0.6)
OECD	Luxembourg	11.0	(0.4)	20.1	(0.6)	45.3	(0.7)	23.6	(0.6)
OECD	Mexico	5.1	(0.3)	10.1	(0.5)	51.9	(0.7)	32.9	(0.8)
OECD	Netherlands*	7.4	(0.5)	23.2	(0.9)	53.1	(1.1)	16.4	(0.8)
OECD	New Zealand	4.3	(0.3)	13.3	(0.6)	51.0	(0.7)	31.4	(0.8)
OECD	Norway	6.4	(0.4)	16.9	(0.6)	50.9	(0.8)	25.8	(0.8)
OECD	Poland	13.4	(0.6)	27.5	(0.8)	43.6	(0.9)	15.5	(0.7)
OECD	Portugal*	5.0	(0.3)	12.3	(0.6)	53.2	(0.9)	29.5	(0.9)
OECD	Slovak Republic	11.1	(0.6)	30.1	(1.0)	46.5	(0.9)	12.3	(0.7)
OECD	Slovenia	9.0	(0.5)	19.4	(0.6)	46.9	(0.7)	24.7	(0.7)
OECD	Spain	9.1	(0.3)	18.9	(0.5)	46.0	(0.4)	26.0	(0.6)
OECD	Sweden	6.4	(0.4)	15.4	(0.6)	51.1	(0.8)	27.1	(1.0)
OECD	Switzerland	7.2	(0.5)	14.8	(0.6)	44.2	(0.8)	33.9	(1.0)
OECD	Turkey	11.6	(0.5)	21.2	(0.7)	45.4	(0.7)	21.8	(0.7)
OECD	United Kingdom	5.2	(0.3)	13.4	(0.6)	49.1	(0.7)	32.4	(0.8)
OECD	United States*	4.3	(0.3)	12.5	(0.6)	51.3	(0.9)	32.0	(1.0)
	OECD average	7.8	(0.1)	18.2	(0.1)	49.1	(0.1)	25.0	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.5.1 [6/6] **Teacher enthusiasm**

Based on students' reports

		Percentage of students who reported the following about their language-of-instruction lessons:							
		The teacher showed enjoyment in teaching							
		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	1.9	(0.2)	5.1	(0.3)	43.1	(0.8)	49.9	(0.9)
	Argentina	8.0	(0.5)	17.5	(0.7)	47.3	(0.7)	27.2	(0.8)
	Baku (Azerbaijan)	11.4	(0.5)	10.0	(0.5)	45.4	(0.7)	33.2	(0.7)
	Belarus	4.2	(0.3)	19.1	(0.7)	56.8	(0.7)	19.8	(0.8)
	Bosnia and Herzegovina	8.6	(0.6)	16.9	(0.7)	53.0	(0.8)	21.4	(0.8)
	Brazil	4.5	(0.2)	12.4	(0.4)	55.5	(0.6)	27.7	(0.7)
	Brunei Darussalam	3.2	(0.2)	12.1	(0.4)	54.6	(0.6)	30.2	(0.5)
	B-S-J-Z (China)	2.9	(0.2)	9.9	(0.5)	53.1	(0.6)	34.1	(0.8)
	Bulgaria	11.4	(0.6)	17.2	(0.8)	44.9	(0.9)	26.4	(0.9)
	Costa Rica	8.2	(0.4)	15.7	(0.7)	44.2	(0.8)	32.0	(1.2)
	Croatia	8.1	(0.4)	20.0	(0.5)	48.6	(0.6)	23.2	(0.6)
	Cyprus	12.4	(0.4)	19.4	(0.6)	45.5	(0.7)	22.7	(0.6)
	Dominican Republic	10.4	(0.5)	8.8	(0.5)	44.4	(0.8)	36.4	(0.9)
	Georgia	9.1	(0.5)	13.5	(0.6)	52.6	(0.9)	24.7	(0.7)
	Hong Kong (China)*	4.7	(0.4)	12.7	(0.5)	58.8	(0.8)	23.7	(0.7)
	Indonesia	2.9	(0.3)	9.1	(0.5)	62.9	(0.7)	25.1	(0.6)
	Jordan	9.1	(0.4)	12.7	(0.5)	43.3	(0.8)	34.9	(1.0)
	Kazakhstan	6.7	(0.2)	9.0	(0.3)	54.8	(0.5)	29.4	(0.5)
	Kosovo	4.3	(0.3)	8.7	(0.4)	50.3	(0.8)	36.7	(0.8)
	Lebanon	m	m	m	m	m	m	m	m
	Macao (China)	4.9	(0.4)	15.7	(0.6)	61.0	(0.8)	18.3	(0.6)
	Malaysia	2.4	(0.2)	13.7	(0.6)	58.1	(0.6)	25.9	(0.8)
	Malta	8.1	(0.5)	14.0	(0.6)	45.9	(0.9)	31.9	(0.8)
	Moldova	2.6	(0.3)	11.0	(0.6)	56.1	(0.9)	30.2	(0.9)
	Montenegro	9.0	(0.4)	15.7	(0.5)	46.2	(0.6)	29.1	(0.6)
	Morocco	11.5	(0.5)	17.8	(0.6)	44.5	(0.7)	26.1	(0.8)
	North Macedonia	m	m	m	m	m	m	m	m
	Panama	6.2	(0.4)	11.1	(0.6)	48.5	(0.8)	34.2	(0.9)
	Peru	4.1	(0.3)	14.0	(0.5)	55.8	(0.8)	26.1	(0.7)
	Philippines	5.5	(0.4)	8.2	(0.4)	52.9	(0.8)	33.4	(0.8)
	Qatar	10.8	(0.3)	16.4	(0.3)	44.4	(0.5)	28.4	(0.4)
	Romania	6.0	(0.5)	13.6	(0.6)	50.3	(0.8)	30.2	(0.8)
	Russia	7.7	(0.4)	23.3	(0.7)	51.0	(0.7)	17.9	(0.7)
	Saudi Arabia	10.6	(0.6)	14.5	(0.6)	44.9	(0.7)	29.9	(0.9)
	Serbia	8.5	(0.5)	19.8	(0.6)	47.9	(0.7)	23.8	(0.6)
	Singapore	4.4	(0.3)	11.6	(0.4)	51.4	(0.5)	32.6	(0.5)
	Chinese Taipei	3.5	(0.3)	11.0	(0.4)	57.5	(0.7)	28.0	(0.7)
	Thailand	2.3	(0.2)	9.6	(0.4)	62.6	(0.7)	25.5	(0.8)
	Ukraine	7.5	(0.4)	24.6	(0.7)	51.2	(0.7)	16.6	(0.5)
	United Arab Emirates	9.3	(0.5)	14.9	(0.4)	42.7	(0.5)	33.2	(0.8)
	Uruguay	7.5	(0.5)	16.2	(0.7)	52.3	(0.9)	24.0	(0.8)
	Viet Nam	2.6	(0.3)	10.8	(0.7)	58.1	(1.1)	28.5	(1.2)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.6.1 [1/6] **Teacher support**

Based on students' reports

		Index of teacher support				Percentage of students who reported the following things happen in their language-of-instruction lessons:							
						The teacher shows an interest in every student's learning							
		Average		Variability		Never or hardly ever		Some lessons		Most lessons		Every lesson	
		Mean index	S.E.	S.D.	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	0.25	(0.01)	0.97	(0.01)	5.0	(0.2)	16.3	(0.4)	32.4	(0.5)	46.3	(0.6)
OECD	Austria	-0.45	(0.02)	1.08	(0.01)	14.5	(0.6)	22.4	(0.6)	34.0	(0.7)	29.0	(0.8)
OECD	Belgium	-0.17	(0.02)	0.99	(0.01)	11.9	(0.5)	23.5	(0.6)	33.0	(0.6)	31.6	(0.7)
OECD	Canada	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Chile	0.44	(0.02)	0.90	(0.01)	2.7	(0.2)	10.5	(0.6)	25.1	(0.7)	61.6	(1.0)
OECD	Colombia	0.34	(0.02)	0.89	(0.01)	2.9	(0.2)	8.9	(0.4)	24.0	(0.7)	64.1	(0.9)
OECD	Czech Republic	-0.22	(0.02)	0.97	(0.01)	8.7	(0.5)	21.3	(0.6)	32.0	(0.7)	38.0	(1.0)
OECD	Denmark	0.14	(0.02)	0.85	(0.01)	5.3	(0.4)	18.1	(0.7)	40.2	(0.6)	36.4	(0.9)
OECD	Estonia	-0.11	(0.02)	0.93	(0.01)	11.5	(0.6)	28.3	(0.7)	34.8	(0.7)	25.5	(0.7)
OECD	Finland	0.21	(0.02)	0.91	(0.01)	6.2	(0.4)	20.2	(0.7)	38.6	(0.8)	35.0	(0.9)
OECD	France	-0.22	(0.02)	1.05	(0.01)	16.6	(0.7)	26.1	(0.7)	30.0	(0.7)	27.3	(0.7)
OECD	Germany	-0.24	(0.02)	1.00	(0.01)	13.6	(0.6)	25.3	(0.7)	32.1	(0.6)	29.0	(0.7)
OECD	Greece	-0.17	(0.02)	0.99	(0.01)	17.6	(0.6)	26.3	(0.6)	27.3	(0.6)	28.8	(0.7)
OECD	Hungary	-0.16	(0.02)	0.99	(0.01)	7.8	(0.4)	19.6	(0.6)	35.3	(0.8)	37.3	(0.8)
OECD	Iceland	0.21	(0.02)	0.96	(0.01)	5.2	(0.3)	17.9	(0.7)	37.5	(0.8)	39.4	(0.9)
OECD	Ireland	0.16	(0.02)	0.99	(0.01)	5.7	(0.4)	17.8	(0.6)	30.3	(0.7)	46.1	(1.0)
OECD	Israel	-0.09	(0.03)	1.09	(0.01)	12.4	(0.7)	23.8	(0.6)	28.1	(0.8)	35.7	(1.0)
OECD	Italy	0.02	(0.02)	0.97	(0.01)	7.4	(0.4)	17.1	(0.6)	32.6	(0.7)	43.0	(0.9)
OECD	Japan	0.07	(0.02)	0.97	(0.01)	7.1	(0.4)	18.1	(0.6)	44.0	(0.7)	30.8	(0.8)
OECD	Korea	0.18	(0.02)	0.92	(0.01)	3.7	(0.2)	16.9	(0.6)	39.0	(0.6)	40.4	(0.9)
OECD	Latvia	0.05	(0.02)	0.87	(0.01)	10.6	(0.5)	28.1	(0.8)	34.6	(0.7)	26.7	(0.7)
OECD	Lithuania	0.04	(0.02)	0.95	(0.01)	10.9	(0.4)	28.4	(0.6)	34.0	(0.7)	26.8	(0.7)
OECD	Luxembourg	-0.22	(0.01)	1.06	(0.01)	12.0	(0.4)	22.4	(0.6)	31.3	(0.6)	34.3	(0.6)
OECD	Mexico	0.41	(0.02)	0.88	(0.01)	2.6	(0.3)	8.9	(0.4)	23.6	(0.7)	64.9	(0.9)
OECD	Netherlands*	-0.43	(0.02)	0.91	(0.01)	11.2	(0.5)	28.2	(0.7)	38.9	(0.8)	21.7	(0.8)
OECD	New Zealand	0.25	(0.02)	0.93	(0.01)	4.4	(0.3)	17.9	(0.5)	33.2	(0.7)	44.5	(0.8)
OECD	Norway	-0.07	(0.02)	0.97	(0.01)	8.1	(0.4)	21.8	(0.7)	40.5	(0.7)	29.6	(0.8)
OECD	Poland	-0.26	(0.02)	1.01	(0.01)	11.8	(0.5)	26.5	(0.6)	35.5	(0.7)	26.2	(0.7)
OECD	Portugal*	0.47	(0.02)	0.89	(0.01)	3.3	(0.3)	12.5	(0.5)	25.7	(0.6)	58.4	(0.8)
OECD	Slovak Republic	-0.18	(0.02)	1.00	(0.01)	7.9	(0.4)	22.3	(0.7)	33.0	(0.8)	36.8	(0.9)
OECD	Slovenia	-0.61	(0.01)	1.03	(0.01)	18.9	(0.5)	28.5	(0.7)	30.7	(0.7)	21.9	(0.6)
OECD	Spain	0.07	(0.01)	0.99	(0.01)	6.5	(0.2)	18.7	(0.4)	29.9	(0.5)	44.9	(0.6)
OECD	Sweden	0.14	(0.02)	0.97	(0.01)	7.4	(0.4)	16.3	(0.6)	34.7	(0.6)	41.6	(1.0)
OECD	Switzerland	-0.15	(0.02)	1.01	(0.01)	12.7	(0.6)	21.7	(0.7)	32.5	(0.7)	33.1	(0.9)
OECD	Turkey	0.22	(0.02)	0.94	(0.01)	7.4	(0.4)	19.4	(0.6)	27.5	(0.7)	45.7	(0.9)
OECD	United Kingdom	0.30	(0.02)	0.94	(0.01)	5.3	(0.3)	15.6	(0.5)	30.9	(0.6)	48.1	(0.8)
OECD	United States*	0.15	(0.02)	0.94	(0.01)	4.2	(0.4)	18.8	(0.6)	33.9	(0.7)	43.1	(1.0)
	OECD average	0.01	(0.00)	0.96	(0.00)	8.6	(0.1)	20.4	(0.1)	32.8	(0.1)	38.2	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.6.1 [2/6] **Teacher support**

Based on students' reports

		Index of teacher support				Percentage of students who reported the following things happen in their language-of-instruction lessons:							
						The teacher shows an interest in every student's learning							
		Average		Variability		Never or hardly ever		Some lessons		Most lessons		Every lesson	
		Mean index	S.E.	S.D.	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	0.72	(0.01)	0.80	(0.01)	7.4	(0.3)	5.5	(0.4)	11.2	(0.4)	75.9	(0.7)
	Argentina	0.39	(0.02)	0.91	(0.02)	3.3	(0.4)	10.9	(0.5)	17.8	(0.5)	67.9	(0.9)
	Baku (Azerbaijan)	0.50	(0.01)	0.93	(0.01)	4.4	(0.3)	9.4	(0.4)	20.2	(0.5)	66.0	(0.7)
	Belarus	0.37	(0.02)	0.88	(0.01)	3.5	(0.3)	10.6	(0.5)	24.8	(0.6)	61.2	(0.9)
	Bosnia and Herzegovina	-0.03	(0.02)	1.07	(0.01)	8.5	(0.5)	16.0	(0.7)	25.5	(0.7)	49.9	(1.0)
	Brazil	0.43	(0.01)	0.91	(0.01)	3.5	(0.3)	10.5	(0.4)	19.6	(0.5)	66.4	(0.6)
	Brunei Darussalam	0.23	(0.01)	0.78	(0.01)	3.7	(0.3)	25.3	(0.5)	36.7	(0.6)	34.3	(0.6)
	B-S-J-Z (China)	0.36	(0.02)	0.89	(0.01)	3.5	(0.2)	13.3	(0.7)	29.1	(0.7)	54.1	(1.1)
	Bulgaria	0.10	(0.02)	1.09	(0.01)	8.7	(0.4)	14.8	(0.5)	26.0	(0.8)	50.5	(0.9)
	Costa Rica	0.47	(0.02)	0.90	(0.01)	2.9	(0.2)	8.2	(0.4)	18.0	(0.6)	70.9	(0.8)
	Croatia	-0.34	(0.02)	1.02	(0.01)	10.4	(0.4)	25.1	(0.6)	28.5	(0.6)	36.0	(0.8)
	Cyprus	-0.05	(0.01)	1.09	(0.01)	14.9	(0.4)	21.5	(0.6)	25.7	(0.6)	37.9	(0.7)
	Dominican Republic	0.57	(0.02)	0.89	(0.01)	4.0	(0.3)	7.2	(0.5)	13.7	(0.5)	75.2	(0.8)
	Georgia	0.29	(0.02)	0.95	(0.01)	4.2	(0.3)	9.3	(0.5)	16.9	(0.7)	69.6	(0.9)
	Hong Kong (China)*	-0.02	(0.02)	0.97	(0.01)	5.3	(0.4)	21.2	(0.8)	41.3	(0.7)	32.1	(0.7)
	Indonesia	0.39	(0.02)	0.86	(0.01)	7.1	(0.4)	20.2	(0.9)	21.7	(0.7)	51.0	(0.9)
	Jordan	0.60	(0.02)	0.95	(0.02)	5.4	(0.4)	8.8	(0.5)	14.9	(0.6)	71.0	(0.9)
	Kazakhstan	0.35	(0.01)	0.86	(0.01)	5.0	(0.2)	14.7	(0.4)	31.0	(0.5)	49.3	(0.6)
	Kosovo	0.48	(0.01)	0.88	(0.01)	12.3	(0.5)	12.1	(0.5)	17.0	(0.6)	58.5	(0.8)
	Lebanon	m	m	m	m	m	m	m	m	m	m	m	m
	Macao (China)	-0.08	(0.01)	0.89	(0.01)	4.5	(0.3)	25.8	(0.7)	41.0	(0.7)	28.7	(0.7)
	Malaysia	0.41	(0.02)	0.81	(0.01)	2.9	(0.3)	18.3	(0.7)	29.3	(0.6)	49.5	(1.0)
	Malta	0.34	(0.02)	1.02	(0.01)	6.0	(0.4)	12.8	(0.6)	26.1	(0.8)	55.1	(0.9)
	Moldova	0.46	(0.02)	0.83	(0.01)	5.3	(0.4)	10.7	(0.5)	22.2	(0.6)	61.8	(1.0)
	Montenegro	0.12	(0.01)	1.10	(0.01)	7.7	(0.3)	12.6	(0.4)	22.9	(0.6)	56.7	(0.7)
	Morocco	0.09	(0.02)	1.01	(0.01)	11.2	(0.5)	16.9	(0.6)	20.2	(0.5)	51.7	(0.8)
	North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m
	Panama	0.33	(0.02)	0.91	(0.01)	2.7	(0.3)	12.7	(0.6)	19.7	(0.6)	64.8	(0.9)
	Peru	0.38	(0.02)	0.86	(0.01)	2.2	(0.2)	10.6	(0.4)	22.4	(0.7)	64.8	(0.9)
	Philippines	0.46	(0.02)	0.86	(0.01)	2.8	(0.2)	12.1	(0.5)	22.4	(0.6)	62.7	(0.9)
	Qatar	0.38	(0.01)	1.01	(0.01)	6.0	(0.2)	13.5	(0.3)	24.1	(0.4)	56.4	(0.4)
	Romania	0.22	(0.02)	0.97	(0.02)	8.1	(0.5)	18.1	(0.7)	23.3	(0.9)	50.5	(1.1)
	Russia	0.20	(0.03)	0.96	(0.01)	6.7	(0.4)	17.1	(0.9)	30.6	(0.6)	45.6	(1.2)
	Saudi Arabia	0.54	(0.02)	0.91	(0.01)	6.3	(0.4)	10.2	(0.4)	16.3	(0.6)	67.3	(0.9)
	Serbia	0.04	(0.02)	1.08	(0.01)	8.2	(0.4)	15.4	(0.5)	25.5	(0.6)	50.9	(0.9)
	Singapore	0.24	(0.01)	0.89	(0.01)	3.3	(0.2)	16.4	(0.5)	38.7	(0.7)	41.6	(0.6)
	Chinese Taipei	0.04	(0.02)	0.92	(0.01)	7.9	(0.4)	35.0	(0.7)	32.7	(0.6)	24.3	(0.6)
	Thailand	0.33	(0.02)	0.93	(0.01)	1.9	(0.2)	15.4	(0.7)	26.5	(0.7)	56.2	(1.1)
	Ukraine	m	m	m	m	43.5	(0.9)	13.2	(0.6)	17.3	(0.6)	26.0	(0.7)
	United Arab Emirates	0.38	(0.01)	1.02	(0.01)	6.0	(0.2)	12.8	(0.6)	23.2	(0.4)	58.0	(0.8)
	Uruguay	0.27	(0.02)	0.94	(0.01)	5.0	(0.5)	12.5	(0.6)	27.2	(0.8)	55.3	(1.2)
	Viet Nam	0.38	(0.02)	0.80	(0.01)	2.4	(0.2)	8.9	(0.6)	33.1	(0.8)	55.6	(1.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.6.1 [3/6] **Teacher support**

Based on students' reports

		Percentage of students who reported the following things happen in their language-of-instruction lessons:															
		The teacher gives extra help when students need it								The teacher helps students with their learning							
		Never or hardly ever		Some lessons		Most lessons		Every lesson		Never or hardly ever		Some lessons		Most lessons		Every lesson	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	**Australia**	4.4	(0.2)	14.5	(0.4)	29.9	(0.5)	51.2	(0.6)	3.0	(0.2)	11.7	(0.3)	28.4	(0.5)	57.0	(0.6)
	Austria	14.0	(0.6)	21.3	(0.6)	27.8	(0.6)	36.9	(0.8)	23.3	(0.7)	25.0	(0.7)	26.6	(0.7)	25.2	(0.7)
	Belgium	7.7	(0.3)	19.6	(0.5)	31.0	(0.6)	41.8	(0.8)	13.1	(0.5)	23.0	(0.6)	28.8	(0.6)	35.2	(0.6)
	Canada	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Chile	4.6	(0.3)	14.5	(0.6)	26.9	(0.6)	53.9	(1.0)	1.9	(0.2)	9.2	(0.5)	24.3	(0.7)	64.6	(1.0)
	Colombia	5.7	(0.3)	18.5	(0.7)	27.4	(0.7)	48.4	(1.0)	1.9	(0.2)	11.3	(0.6)	25.6	(0.6)	61.1	(0.9)
	Czech Republic	5.7	(0.4)	15.8	(0.7)	28.7	(0.7)	49.7	(1.0)	14.0	(0.6)	25.2	(0.5)	29.7	(0.6)	31.1	(0.9)
	Denmark	4.8	(0.4)	17.0	(0.6)	37.7	(0.8)	40.5	(1.0)	2.1	(0.2)	10.9	(0.5)	35.8	(0.8)	51.2	(0.9)
	Estonia	5.8	(0.4)	20.7	(0.6)	33.3	(0.7)	40.3	(0.8)	5.6	(0.4)	18.4	(0.6)	34.2	(0.8)	41.7	(0.8)
	Finland	3.0	(0.3)	11.7	(0.4)	30.4	(0.7)	54.9	(0.8)	2.7	(0.3)	10.1	(0.4)	29.5	(0.7)	57.7	(0.9)
	France	11.7	(0.5)	23.1	(0.6)	27.4	(0.6)	37.8	(0.8)	10.4	(0.5)	20.9	(0.6)	28.9	(0.7)	39.9	(0.8)
	Germany	8.0	(0.5)	19.4	(0.6)	29.5	(0.7)	43.1	(0.8)	13.4	(0.7)	23.5	(0.6)	30.0	(0.7)	33.1	(0.7)
	Greece	9.8	(0.5)	23.2	(0.6)	29.6	(0.6)	37.4	(0.8)	6.3	(0.4)	18.8	(0.5)	29.2	(0.6)	45.7	(0.9)
	Hungary	8.3	(0.5)	19.2	(0.8)	31.3	(0.8)	41.2	(0.9)	11.1	(0.5)	21.2	(0.7)	30.6	(0.7)	37.0	(0.9)
	Iceland	5.4	(0.4)	17.4	(0.7)	33.0	(0.8)	44.2	(0.7)	2.8	(0.3)	11.7	(0.6)	31.1	(0.8)	54.4	(0.8)
	Ireland	6.5	(0.4)	18.7	(0.6)	28.6	(0.6)	46.3	(0.9)	4.2	(0.3)	14.7	(0.5)	27.1	(0.7)	54.0	(1.0)
	Israel	11.7	(0.6)	22.8	(0.7)	27.6	(0.6)	37.9	(1.0)	9.0	(0.6)	22.2	(0.7)	28.0	(0.7)	40.8	(1.1)
	Italy	7.2	(0.4)	20.4	(0.6)	33.1	(0.7)	39.3	(0.8)	5.3	(0.4)	16.4	(0.6)	31.2	(0.7)	47.1	(0.8)
	Japan	5.4	(0.3)	13.5	(0.6)	38.9	(0.7)	42.1	(0.9)	4.6	(0.4)	12.0	(0.6)	38.8	(0.6)	44.6	(0.8)
	Korea	4.2	(0.3)	16.2	(0.6)	37.9	(0.7)	41.7	(0.8)	2.4	(0.2)	10.7	(0.5)	35.6	(0.8)	51.3	(1.0)
	Latvia	4.4	(0.3)	16.2	(0.6)	31.3	(0.7)	48.0	(1.0)	3.4	(0.3)	14.3	(0.5)	30.9	(0.6)	51.4	(0.9)
	Lithuania	4.8	(0.3)	18.3	(0.6)	30.4	(0.7)	46.5	(0.8)	3.8	(0.3)	15.2	(0.5)	28.9	(0.6)	52.1	(0.7)
	Luxembourg	8.9	(0.4)	19.7	(0.6)	30.0	(0.6)	41.4	(0.6)	16.9	(0.5)	21.9	(0.6)	28.6	(0.6)	32.6	(0.6)
	Mexico	3.7	(0.3)	13.7	(0.5)	26.3	(0.6)	56.4	(0.9)	1.8	(0.2)	11.3	(0.6)	25.8	(0.7)	61.0	(0.9)
	Netherlands*	7.1	(0.5)	24.0	(0.8)	38.3	(0.7)	30.7	(0.9)	16.4	(0.7)	31.6	(0.9)	31.7	(0.7)	20.3	(0.8)
	New Zealand	3.6	(0.3)	14.3	(0.5)	30.4	(0.6)	51.7	(0.8)	2.4	(0.2)	11.6	(0.5)	28.4	(0.5)	57.6	(0.7)
	Norway	6.8	(0.4)	22.1	(0.8)	37.3	(0.6)	33.8	(0.9)	4.8	(0.3)	15.6	(0.6)	37.4	(0.8)	42.2	(1.0)
	Poland	8.7	(0.5)	23.5	(0.7)	30.8	(0.7)	36.9	(0.9)	9.4	(0.6)	26.0	(0.7)	32.2	(0.7)	32.4	(0.7)
	Portugal*	2.9	(0.3)	11.5	(0.5)	24.1	(0.7)	61.5	(0.8)	1.9	(0.2)	9.3	(0.5)	22.6	(0.7)	66.2	(0.9)
	Slovak Republic	6.7	(0.4)	19.8	(0.6)	30.5	(0.7)	43.0	(0.9)	12.1	(0.5)	25.4	(0.7)	28.4	(0.7)	34.1	(0.8)
	Slovenia	15.3	(0.6)	25.2	(0.7)	28.5	(0.6)	30.9	(0.7)	25.8	(0.6)	30.1	(0.7)	23.1	(0.7)	21.0	(0.6)
	Spain	9.2	(0.3)	21.9	(0.4)	29.2	(0.4)	39.7	(0.5)	4.2	(0.2)	16.3	(0.4)	29.2	(0.4)	50.3	(0.6)
	Sweden	6.1	(0.4)	17.5	(0.7)	33.9	(0.7)	42.5	(0.8)	3.8	(0.3)	12.4	(0.6)	32.0	(0.7)	51.8	(0.9)
	Switzerland	8.2	(0.4)	17.8	(0.7)	29.6	(0.7)	44.4	(1.0)	12.9	(0.6)	20.6	(0.6)	29.8	(0.6)	36.8	(1.0)
	Turkey	5.8	(0.3)	20.4	(0.6)	27.0	(0.6)	46.9	(0.8)	3.0	(0.2)	11.6	(0.5)	24.6	(0.6)	60.7	(0.8)
	United Kingdom	4.3	(0.3)	14.3	(0.5)	28.2	(0.6)	53.2	(0.9)	2.3	(0.2)	9.7	(0.4)	26.1	(0.6)	61.8	(0.8)
	United States*	3.7	(0.3)	18.9	(0.7)	31.2	(0.8)	46.1	(1.0)	2.3	(0.3)	15.0	(0.6)	29.9	(0.8)	52.8	(1.0)
	OECD average	6.8	(0.1)	18.5	(0.1)	30.8	(0.1)	43.9	(0.1)	7.3	(0.1)	17.1	(0.1)	29.5	(0.1)	46.1	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.6.1 [4/6] **Teacher support**

Based on students' reports

		Percentage of students who reported the following things happen in their language-of-instruction lessons:															
		The teacher gives extra help when students need it								The teacher helps students with their learning							
		Never or hardly ever		Some lessons		Most lessons		Every lesson		Never or hardly ever		Some lessons		Most lessons		Every lesson	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	2.9	(0.2)	9.8	(0.5)	20.0	(0.6)	67.3	(0.8)	2.0	(0.2)	4.8	(0.3)	11.4	(0.5)	81.9	(0.6)
	Argentina	5.9	(0.4)	15.4	(0.5)	23.5	(0.6)	55.2	(0.9)	2.9	(0.3)	10.9	(0.5)	21.5	(0.6)	64.6	(0.9)
	Baku (Azerbaijan)	4.5	(0.3)	15.5	(0.5)	21.7	(0.6)	58.3	(0.7)	2.7	(0.2)	8.2	(0.4)	19.1	(0.5)	70.0	(0.6)
	Belarus	3.7	(0.3)	14.0	(0.5)	28.3	(0.7)	54.0	(0.9)	2.3	(0.2)	9.0	(0.5)	21.8	(0.6)	66.9	(0.8)
	Bosnia and Herzegovina	6.7	(0.4)	16.8	(0.7)	26.0	(0.6)	50.4	(0.9)	13.8	(0.6)	23.5	(0.6)	24.0	(0.6)	38.6	(0.9)
	Brazil	5.9	(0.3)	16.3	(0.5)	25.0	(0.6)	52.7	(0.6)	2.2	(0.2)	10.0	(0.4)	20.4	(0.5)	67.4	(0.5)
	Brunei Darussalam	2.4	(0.2)	16.4	(0.4)	32.6	(0.6)	48.6	(0.7)	1.3	(0.1)	11.1	(0.4)	29.8	(0.6)	57.8	(0.6)
	B-S-J-Z (China)	3.1	(0.3)	11.4	(0.4)	23.1	(0.5)	62.5	(0.8)	3.4	(0.3)	10.8	(0.4)	22.0	(0.7)	63.7	(0.9)
	Bulgaria	11.1	(0.6)	19.0	(0.6)	24.3	(0.6)	45.6	(1.1)	10.8	(0.6)	15.5	(0.6)	21.6	(0.8)	52.2	(1.0)
	Costa Rica	5.1	(0.3)	13.4	(0.5)	23.3	(0.6)	58.2	(0.7)	2.6	(0.2)	9.2	(0.5)	20.8	(0.6)	67.5	(0.8)
	Croatia	9.6	(0.5)	23.7	(0.6)	28.6	(0.6)	38.1	(0.7)	16.5	(0.5)	27.7	(0.6)	26.1	(0.6)	29.6	(0.7)
	Cyprus	9.6	(0.4)	19.8	(0.6)	29.0	(0.6)	41.5	(0.7)	7.4	(0.3)	17.0	(0.6)	27.7	(0.7)	48.0	(0.7)
	Dominican Republic	4.9	(0.3)	14.0	(0.5)	20.2	(0.7)	60.9	(0.9)	2.4	(0.2)	8.7	(0.5)	16.9	(0.6)	72.0	(0.9)
	Georgia	8.6	(0.4)	23.5	(0.7)	23.0	(0.6)	44.9	(0.9)	5.0	(0.3)	13.3	(0.5)	18.0	(0.7)	63.7	(0.9)
	Hong Kong (China)*	4.7	(0.3)	21.0	(0.7)	38.2	(0.6)	36.1	(0.8)	3.9	(0.3)	18.3	(0.7)	38.3	(0.6)	39.5	(0.9)
	Indonesia	3.7	(0.3)	15.3	(0.6)	23.0	(0.7)	58.0	(0.9)	2.0	(0.2)	10.1	(0.6)	19.7	(0.6)	68.2	(0.8)
	Jordan	4.9	(0.4)	9.7	(0.5)	19.0	(0.5)	66.3	(0.8)	4.0	(0.4)	8.3	(0.4)	15.0	(0.6)	72.7	(0.8)
	Kazakhstan	3.5	(0.2)	15.0	(0.3)	29.4	(0.4)	52.1	(0.5)	2.8	(0.2)	9.3	(0.3)	26.9	(0.4)	61.0	(0.5)
	Kosovo	3.9	(0.3)	13.5	(0.5)	20.2	(0.7)	62.5	(0.9)	2.8	(0.3)	8.6	(0.4)	15.9	(0.6)	72.7	(0.7)
	Lebanon	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Macao (China)	4.6	(0.3)	23.1	(0.8)	37.3	(0.8)	35.1	(0.8)	3.8	(0.3)	20.8	(0.7)	37.7	(0.8)	37.7	(0.8)
	Malaysia	2.1	(0.2)	13.7	(0.6)	26.9	(0.7)	57.3	(1.0)	1.2	(0.2)	9.8	(0.5)	23.6	(0.7)	65.4	(0.9)
	Malta	5.8	(0.4)	13.7	(0.6)	27.1	(0.8)	53.4	(0.9)	4.2	(0.4)	11.0	(0.5)	24.7	(0.8)	60.1	(0.8)
	Moldova	4.6	(0.4)	15.5	(0.5)	23.6	(0.8)	56.2	(1.1)	2.4	(0.3)	8.4	(0.4)	18.1	(0.6)	71.1	(0.9)
	Montenegro	8.2	(0.3)	15.6	(0.4)	24.8	(0.5)	51.4	(0.7)	11.2	(0.3)	17.5	(0.5)	23.3	(0.6)	48.0	(0.7)
	Morocco	13.4	(0.6)	20.7	(0.5)	21.4	(0.5)	44.4	(0.7)	7.7	(0.4)	15.6	(0.6)	19.7	(0.5)	57.0	(0.9)
	North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Panama	4.2	(0.3)	20.1	(0.6)	24.7	(0.6)	51.1	(0.9)	2.2	(0.2)	15.2	(0.5)	22.4	(0.7)	60.2	(0.9)
	Peru	3.5	(0.2)	16.3	(0.6)	27.1	(0.7)	53.1	(0.9)	1.6	(0.2)	11.8	(0.5)	25.6	(0.6)	61.1	(0.8)
	Philippines	2.2	(0.2)	15.8	(0.6)	25.8	(0.6)	56.2	(0.8)	2.2	(0.2)	11.9	(0.5)	20.7	(0.6)	65.2	(0.8)
	Qatar	5.3	(0.2)	13.2	(0.3)	23.8	(0.4)	57.7	(0.4)	4.2	(0.2)	11.2	(0.3)	21.6	(0.3)	63.0	(0.4)
	Romania	7.7	(0.5)	19.7	(0.6)	21.2	(0.6)	51.5	(0.8)	6.4	(0.5)	13.7	(0.6)	19.5	(0.7)	60.4	(1.1)
	Russia	4.8	(0.3)	14.3	(0.6)	27.3	(0.7)	53.6	(1.2)	4.4	(0.3)	16.6	(0.7)	27.7	(0.7)	51.3	(1.2)
	Saudi Arabia	5.6	(0.4)	11.5	(0.5)	19.2	(0.6)	63.7	(0.9)	3.6	(0.3)	8.5	(0.4)	13.4	(0.5)	74.6	(0.9)
	Serbia	6.3	(0.4)	15.6	(0.6)	26.9	(0.6)	51.2	(0.9)	12.8	(0.5)	21.2	(0.6)	23.1	(0.6)	42.8	(0.8)
	Singapore	2.8	(0.2)	13.3	(0.5)	35.9	(0.6)	48.0	(0.6)	1.8	(0.2)	10.7	(0.4)	34.9	(0.6)	52.6	(0.7)
	Chinese Taipei	2.9	(0.2)	18.1	(0.5)	32.7	(0.6)	46.4	(0.7)	2.6	(0.2)	15.6	(0.5)	32.0	(0.6)	49.8	(0.8)
	Thailand	2.7	(0.2)	18.6	(0.7)	27.2	(0.6)	51.5	(1.1)	2.1	(0.2)	16.2	(0.6)	24.7	(0.7)	57.0	(1.1)
	Ukraine	11.1	(0.5)	25.6	(0.5)	33.6	(0.6)	29.7	(0.6)	6.0	(0.3)	16.4	(0.5)	30.5	(0.6)	47.1	(0.8)
	United Arab Emirates	6.0	(0.2)	13.5	(0.4)	24.3	(0.4)	56.2	(0.6)	4.6	(0.2)	10.7	(0.3)	20.9	(0.5)	63.7	(0.7)
	Uruguay	7.1	(0.5)	16.5	(0.7)	27.8	(0.8)	48.6	(1.2)	3.1	(0.3)	13.4	(0.7)	26.6	(0.7)	57.0	(1.0)
	Viet Nam	1.9	(0.2)	11.8	(0.8)	32.2	(0.8)	54.1	(1.0)	1.9	(0.2)	9.6	(0.5)	31.4	(0.8)	57.1	(1.0)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.6.1 [5/6] **Teacher support**

Based on students' reports

		Percentage of students who reported the following things happen in their language-of-instruction lessons:							
		The teacher continues teaching until students understand							
		Never or hardly ever		Some lessons		Most lessons		Every lesson	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	6.6	(0.3)	17.9	(0.4)	31.3	(0.4)	44.2	(0.6)
OECD	Austria	16.6	(0.6)	24.9	(0.6)	28.7	(0.6)	29.7	(0.8)
OECD	Belgium	8.4	(0.4)	21.4	(0.6)	31.7	(0.6)	38.5	(0.7)
OECD	Canada	m	m	m	m	m	m	m	m
OECD	Chile	4.0	(0.3)	13.5	(0.6)	25.8	(0.6)	56.7	(1.0)
OECD	Colombia	4.4	(0.3)	17.2	(0.6)	27.2	(0.6)	51.1	(1.0)
OECD	Czech Republic	14.8	(0.8)	29.1	(0.8)	30.2	(0.7)	25.9	(0.9)
OECD	Denmark	4.4	(0.3)	16.2	(0.6)	37.4	(0.7)	42.0	(0.9)
OECD	Estonia	9.8	(0.4)	22.7	(0.6)	35.2	(0.8)	32.3	(0.8)
OECD	Finland	5.9	(0.4)	19.4	(0.6)	36.0	(0.6)	38.8	(0.8)
OECD	France	13.5	(0.6)	20.7	(0.6)	28.1	(0.6)	37.7	(0.8)
OECD	Germany	11.3	(0.6)	25.2	(0.6)	30.8	(0.7)	32.7	(0.7)
OECD	Greece	13.2	(0.5)	25.3	(0.6)	28.6	(0.6)	33.0	(0.8)
OECD	Hungary	13.8	(0.7)	22.6	(0.6)	31.9	(0.7)	31.7	(0.9)
OECD	Iceland	4.4	(0.4)	16.0	(0.7)	32.5	(0.9)	47.2	(0.9)
OECD	Ireland	8.0	(0.4)	18.2	(0.6)	30.0	(0.6)	43.8	(0.9)
OECD	Israel	8.4	(0.5)	19.4	(0.7)	26.9	(0.7)	45.3	(1.0)
OECD	Italy	10.0	(0.5)	19.8	(0.6)	30.9	(0.7)	39.3	(0.8)
OECD	Japan	7.0	(0.4)	16.5	(0.6)	39.1	(0.7)	37.4	(0.9)
OECD	Korea	4.7	(0.3)	20.0	(0.7)	36.8	(0.6)	38.6	(0.8)
OECD	Latvia	6.7	(0.3)	18.5	(0.6)	33.3	(0.7)	41.4	(0.9)
OECD	Lithuania	7.7	(0.4)	20.9	(0.5)	30.3	(0.6)	41.2	(0.8)
OECD	Luxembourg	11.1	(0.4)	22.2	(0.6)	30.5	(0.6)	36.2	(0.7)
OECD	Mexico	4.2	(0.3)	16.6	(0.7)	27.6	(0.7)	51.6	(0.9)
OECD	Netherlands*	10.2	(0.6)	29.1	(0.8)	35.7	(0.8)	25.0	(0.8)
OECD	New Zealand	6.4	(0.4)	18.7	(0.5)	32.6	(0.7)	42.2	(0.7)
OECD	Norway	8.8	(0.4)	22.1	(0.6)	36.4	(0.7)	32.8	(0.9)
OECD	Poland	12.6	(0.6)	25.3	(0.6)	30.2	(0.7)	31.9	(0.8)
OECD	Portugal*	3.5	(0.3)	13.2	(0.6)	26.5	(0.6)	56.8	(0.9)
OECD	Slovak Republic	12.4	(0.5)	25.9	(0.6)	29.1	(0.7)	32.5	(0.7)
OECD	Slovenia	18.1	(0.6)	30.0	(0.8)	28.3	(0.7)	23.6	(0.6)
OECD	Spain	7.6	(0.3)	21.1	(0.4)	29.2	(0.4)	42.1	(0.5)
OECD	Sweden	6.3	(0.4)	17.6	(0.7)	32.6	(0.8)	43.5	(1.0)
OECD	Switzerland	10.0	(0.6)	20.7	(0.8)	31.4	(0.7)	38.0	(0.9)
OECD	Turkey	5.4	(0.3)	18.4	(0.5)	26.9	(0.6)	49.3	(0.7)
OECD	United Kingdom	6.6	(0.4)	17.5	(0.5)	29.1	(0.6)	46.8	(0.9)
OECD	United States*	6.9	(0.5)	25.3	(0.7)	31.1	(0.7)	36.7	(0.9)
	OECD average	8.7	(0.1)	20.8	(0.1)	31.1	(0.1)	39.4	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.6.1 [6/6] **Teacher support**
Based on students' reports

		Percentage of students who reported the following things happen in their language-of-instruction lessons:							
		The teacher continues teaching until students understand							
		Never or hardly ever		Some lessons		Most lessons		Every lesson	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	2.5	(0.3)	5.8	(0.3)	13.2	(0.5)	78.5	(0.7)
	Argentina	5.8	(0.5)	16.7	(0.6)	21.7	(0.6)	55.7	(1.0)
	Baku (Azerbaijan)	4.6	(0.3)	12.3	(0.5)	18.8	(0.6)	64.3	(0.7)
	Belarus	6.3	(0.4)	18.0	(0.6)	29.5	(0.6)	46.1	(1.0)
	Bosnia and Herzegovina	10.8	(0.6)	20.7	(0.6)	24.7	(0.5)	43.8	(0.9)
	Brazil	4.9	(0.3)	13.5	(0.4)	21.0	(0.5)	60.6	(0.6)
	Brunei Darussalam	2.8	(0.2)	14.8	(0.4)	31.2	(0.7)	51.1	(0.6)
	B-S-J-Z (China)	5.0	(0.3)	18.8	(0.6)	30.8	(0.6)	45.5	(0.9)
	Bulgaria	9.6	(0.5)	15.2	(0.6)	21.6	(0.7)	53.6	(1.0)
	Costa Rica	4.9	(0.3)	15.3	(0.6)	23.8	(0.5)	56.0	(0.9)
	Croatia	17.7	(0.6)	29.8	(0.6)	24.7	(0.6)	27.7	(0.7)
	Cyprus	11.8	(0.4)	21.6	(0.5)	27.7	(0.7)	38.9	(0.7)
	Dominican Republic	4.4	(0.3)	11.1	(0.5)	16.3	(0.6)	68.2	(0.9)
	Georgia	9.1	(0.5)	13.5	(0.5)	18.1	(0.6)	59.3	(0.9)
	Hong Kong (China)*	6.0	(0.4)	23.6	(0.8)	37.1	(0.7)	33.2	(0.8)
	Indonesia	3.0	(0.3)	14.0	(0.7)	21.5	(0.6)	61.5	(0.9)
	Jordan	5.5	(0.4)	7.7	(0.5)	13.3	(0.6)	73.5	(0.9)
	Kazakhstan	3.3	(0.2)	10.8	(0.3)	28.1	(0.4)	57.8	(0.5)
	Kosovo	4.1	(0.3)	9.0	(0.5)	14.5	(0.6)	72.5	(0.6)
	Lebanon	m	m	m	m	m	m	m	m
	Macao (China)	5.4	(0.4)	26.2	(0.7)	36.6	(0.7)	31.9	(0.7)
	Malaysia	2.4	(0.2)	13.2	(0.6)	26.7	(0.7)	57.7	(1.0)
	Malta	6.2	(0.4)	13.4	(0.6)	25.4	(0.8)	54.9	(0.9)
	Moldova	3.5	(0.4)	10.8	(0.4)	20.9	(0.6)	64.8	(1.0)
	Montenegro	10.6	(0.4)	17.8	(0.5)	22.0	(0.6)	49.6	(0.7)
	Morocco	9.7	(0.4)	15.4	(0.5)	17.8	(0.5)	57.1	(0.9)
	North Macedonia	m	m	m	m	m	m	m	m
	Panama	4.5	(0.3)	19.7	(0.6)	22.7	(0.7)	53.1	(0.9)
	Peru	3.4	(0.3)	17.5	(0.5)	26.2	(0.6)	52.8	(0.8)
	Philippines	3.2	(0.2)	11.3	(0.5)	21.1	(0.6)	64.4	(1.0)
	Qatar	6.8	(0.2)	13.3	(0.3)	21.9	(0.3)	58.0	(0.4)
	Romania	6.1	(0.5)	15.5	(0.6)	19.2	(0.6)	59.2	(1.1)
	Russia	7.0	(0.4)	16.3	(0.6)	25.3	(0.6)	51.4	(1.1)
	Saudi Arabia	5.4	(0.3)	9.0	(0.5)	15.8	(0.6)	69.8	(1.0)
	Serbia	10.5	(0.5)	19.8	(0.6)	24.2	(0.5)	45.5	(0.9)
	Singapore	4.1	(0.3)	17.4	(0.5)	36.7	(0.7)	41.7	(0.6)
	Chinese Taipei	4.6	(0.3)	25.0	(0.6)	33.8	(0.6)	36.6	(0.7)
	Thailand	2.9	(0.3)	18.5	(0.7)	26.2	(0.6)	52.4	(1.1)
	Ukraine	8.0	(0.5)	18.2	(0.5)	29.7	(0.6)	44.0	(0.8)
	United Arab Emirates	6.9	(0.2)	12.7	(0.5)	21.7	(0.4)	58.6	(0.6)
	Uruguay	4.9	(0.4)	16.1	(0.7)	26.3	(0.8)	52.7	(1.1)
	Viet Nam	2.6	(0.3)	12.3	(0.8)	32.9	(0.8)	52.2	(1.0)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.6.2 [1/4] **Teacher emotional support**

Based on students' reports

		Percentage of students who reported the following occurred during the previous two language-of-instruction lessons:															
		The teacher made me feel confident in my ability to do well in the course								The teacher listened to my view on how to do things							
		Strongly disagree		Disagree		Agree		Strongly agree		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	7.9	(0.3)	13.9	(0.4)	56.0	(0.6)	22.2	(0.5)	8.7	(0.3)	17.7	(0.4)	55.1	(0.5)	18.5	(0.4)
OECD	Austria	18.0	(0.7)	23.0	(0.6)	39.3	(0.6)	19.6	(0.6)	15.7	(0.5)	24.3	(0.7)	39.3	(0.6)	20.7	(0.6)
OECD	Belgium	7.9	(0.4)	16.9	(0.7)	57.5	(0.7)	17.7	(0.5)	9.0	(0.4)	20.3	(0.6)	56.2	(0.8)	14.5	(0.5)
OECD	Canada	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Chile	13.1	(0.4)	10.7	(0.5)	50.1	(0.8)	26.2	(0.8)	13.3	(0.5)	14.0	(0.5)	48.1	(0.8)	24.5	(0.8)
OECD	Colombia	9.4	(0.4)	8.7	(0.4)	56.1	(0.8)	25.7	(0.7)	9.3	(0.4)	14.0	(0.5)	55.0	(0.7)	21.7	(0.7)
OECD	Czech Republic	13.6	(0.6)	31.3	(0.7)	46.4	(0.9)	8.8	(0.4)	14.1	(0.6)	32.9	(0.7)	45.1	(0.9)	7.9	(0.4)
OECD	Denmark	5.3	(0.4)	12.3	(0.5)	60.0	(0.6)	22.4	(0.7)	7.1	(0.4)	19.7	(0.8)	57.2	(0.8)	15.9	(0.6)
OECD	Estonia	11.7	(0.5)	24.8	(0.7)	51.0	(0.8)	12.5	(0.6)	12.5	(0.5)	24.7	(0.6)	50.0	(0.8)	12.8	(0.5)
OECD	Finland	8.3	(0.4)	19.5	(0.6)	55.8	(0.8)	16.4	(0.7)	9.5	(0.5)	21.9	(0.6)	55.7	(0.8)	12.9	(0.5)
OECD	France	15.3	(0.6)	23.6	(0.6)	46.6	(0.8)	14.5	(0.6)	16.4	(0.5)	24.6	(0.6)	46.0	(0.8)	13.0	(0.5)
OECD	Germany	14.2	(0.6)	25.4	(0.7)	43.1	(0.9)	17.3	(0.6)	13.6	(0.5)	26.2	(0.7)	42.4	(0.9)	17.8	(0.6)
OECD	Greece	7.6	(0.5)	17.3	(0.5)	56.7	(0.7)	18.4	(0.6)	8.8	(0.4)	20.9	(0.5)	53.0	(0.6)	17.3	(0.6)
OECD	Hungary	8.6	(0.5)	16.8	(0.6)	56.2	(0.8)	18.5	(0.6)	12.7	(0.5)	23.7	(0.7)	49.8	(0.8)	13.8	(0.5)
OECD	Iceland	15.2	(0.7)	16.5	(0.6)	47.1	(1.0)	21.3	(0.8)	11.9	(0.5)	16.4	(0.6)	51.5	(0.8)	20.2	(0.7)
OECD	Ireland	6.1	(0.3)	15.7	(0.6)	55.8	(0.7)	22.4	(0.7)	7.0	(0.4)	21.5	(0.7)	55.8	(0.8)	15.7	(0.6)
OECD	Israel	11.7	(0.6)	16.4	(0.6)	47.9	(0.8)	23.9	(0.9)	12.4	(0.5)	22.2	(0.7)	44.2	(0.8)	21.2	(0.8)
OECD	Italy	8.3	(0.4)	15.7	(0.5)	59.3	(0.7)	16.6	(0.6)	10.5	(0.5)	22.6	(0.7)	53.7	(0.8)	13.2	(0.5)
OECD	Japan	12.0	(0.5)	36.6	(0.8)	42.9	(0.7)	8.6	(0.6)	16.2	(0.5)	36.5	(0.7)	39.5	(0.6)	7.8	(0.5)
OECD	Korea	7.5	(0.4)	17.9	(0.6)	53.8	(0.6)	20.7	(0.6)	7.1	(0.4)	16.2	(0.6)	54.1	(0.7)	22.6	(0.7)
OECD	Latvia	11.6	(0.5)	22.8	(0.6)	54.0	(0.7)	11.5	(0.5)	11.9	(0.5)	22.4	(0.7)	52.9	(0.8)	12.9	(0.5)
OECD	Lithuania	12.6	(0.5)	14.2	(0.5)	48.9	(0.7)	24.3	(0.6)	14.7	(0.4)	18.2	(0.5)	44.3	(0.7)	22.8	(0.6)
OECD	Luxembourg	13.9	(0.5)	20.5	(0.5)	47.2	(0.7)	18.4	(0.6)	13.9	(0.5)	22.6	(0.6)	46.3	(0.7)	17.2	(0.5)
OECD	Mexico	11.8	(0.5)	9.0	(0.4)	53.7	(0.9)	25.5	(0.9)	11.4	(0.5)	12.6	(0.5)	54.5	(0.8)	21.5	(0.7)
OECD	Netherlands*	5.7	(0.4)	16.4	(0.8)	64.0	(1.0)	13.8	(0.7)	8.1	(0.5)	23.9	(0.9)	58.5	(0.9)	9.5	(0.6)
OECD	New Zealand	6.4	(0.3)	13.5	(0.5)	55.7	(0.7)	24.3	(0.7)	7.4	(0.4)	17.4	(0.5)	56.4	(0.7)	18.8	(0.5)
OECD	Norway	10.1	(0.5)	18.0	(0.6)	51.0	(0.7)	20.8	(0.6)	10.6	(0.5)	21.6	(0.6)	52.1	(0.6)	15.8	(0.6)
OECD	Poland	10.7	(0.5)	19.1	(0.6)	55.3	(0.7)	15.0	(0.6)	13.1	(0.6)	25.9	(0.6)	50.6	(0.8)	10.4	(0.5)
OECD	Portugal*	6.4	(0.4)	15.9	(0.7)	55.5	(0.7)	22.2	(0.6)	6.8	(0.3)	16.3	(0.6)	58.1	(0.8)	18.8	(0.7)
OECD	Slovak Republic	13.2	(0.6)	24.2	(0.7)	50.6	(0.8)	12.0	(0.5)	13.6	(0.5)	28.4	(0.7)	48.0	(0.7)	10.1	(0.4)
OECD	Slovenia	12.1	(0.5)	23.5	(0.6)	52.9	(0.8)	11.5	(0.4)	12.7	(0.5)	27.2	(0.7)	48.7	(0.7)	11.4	(0.4)
OECD	Spain	10.2	(0.3)	17.6	(0.4)	50.3	(0.5)	21.9	(0.4)	12.9	(0.4)	21.5	(0.4)	48.3	(0.5)	17.4	(0.5)
OECD	Sweden	10.7	(0.4)	18.9	(0.7)	50.4	(0.6)	20.0	(0.7)	8.9	(0.5)	17.5	(0.6)	53.7	(0.7)	19.9	(0.7)
OECD	Switzerland	13.2	(0.6)	21.6	(0.7)	47.4	(0.8)	17.8	(0.8)	12.6	(0.6)	21.2	(0.7)	46.7	(0.6)	19.6	(0.7)
OECD	Turkey	14.4	(0.6)	21.9	(0.6)	46.1	(0.8)	17.7	(0.7)	13.8	(0.6)	24.5	(0.6)	45.6	(0.7)	16.1	(0.6)
OECD	United Kingdom	6.9	(0.3)	13.1	(0.5)	55.0	(0.7)	25.0	(0.7)	8.4	(0.3)	19.0	(0.6)	54.9	(0.6)	17.7	(0.6)
OECD	United States*	7.5	(0.4)	11.9	(0.6)	56.1	(0.8)	24.6	(0.8)	8.7	(0.4)	19.6	(0.8)	53.2	(0.8)	18.4	(0.7)
	OECD average	10.5	(0.1)	18.5	(0.1)	52.1	(0.1)	18.9	(0.1)	11.3	(0.1)	21.7	(0.1)	50.7	(0.1)	16.4	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.6.2 [2/4] **Teacher emotional support**

Based on students' reports

		Percentage of students who reported the following occurred during the previous two language-of-instruction lessons:															
		The teacher made me feel confident in my ability to do well in the course								The teacher listened to my view on how to do things							
		Strongly disagree		Disagree		Agree		Strongly agree		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	4.9	(0.3)	3.9	(0.3)	45.4	(0.8)	45.8	(0.7)	6.1	(0.4)	10.1	(0.4)	48.6	(0.7)	35.2	(0.7)
	Argentina	9.5	(0.5)	13.9	(0.6)	55.9	(0.7)	20.7	(0.6)	9.2	(0.4)	20.4	(0.6)	53.5	(0.6)	16.9	(0.6)
	Baku (Azerbaijan)	18.6	(0.6)	9.7	(0.4)	42.2	(0.6)	29.5	(0.7)	17.0	(0.5)	11.0	(0.6)	47.1	(0.7)	25.0	(0.7)
	Belarus	6.9	(0.4)	16.5	(0.6)	59.2	(0.7)	17.3	(0.6)	7.5	(0.4)	20.6	(0.6)	57.4	(0.7)	14.5	(0.5)
	Bosnia and Herzegovina	12.4	(0.6)	14.3	(0.6)	54.9	(0.8)	18.4	(0.6)	13.2	(0.6)	21.7	(0.6)	51.4	(0.7)	13.8	(0.5)
	Brazil	9.9	(0.4)	18.7	(0.4)	55.0	(0.6)	16.4	(0.4)	9.6	(0.4)	23.0	(0.6)	54.0	(0.6)	13.4	(0.4)
	Brunei Darussalam	3.4	(0.2)	9.8	(0.3)	66.7	(0.5)	20.1	(0.5)	4.0	(0.2)	18.5	(0.4)	66.2	(0.5)	11.3	(0.4)
	B-S-J-Z (China)	4.9	(0.3)	12.7	(0.4)	56.5	(0.7)	25.9	(0.8)	5.5	(0.4)	13.5	(0.5)	55.3	(0.7)	25.7	(0.9)
	Bulgaria	16.7	(0.7)	15.0	(0.7)	46.3	(0.8)	22.0	(0.8)	12.2	(0.5)	14.5	(0.7)	49.7	(0.7)	23.6	(0.8)
	Costa Rica	10.2	(0.4)	9.8	(0.5)	49.4	(0.7)	30.6	(0.8)	10.6	(0.5)	15.3	(0.5)	50.9	(0.7)	23.2	(0.7)
	Croatia	12.5	(0.4)	25.5	(0.7)	49.0	(0.7)	13.0	(0.5)	15.6	(0.5)	28.1	(0.6)	45.3	(0.8)	11.1	(0.4)
	Cyprus	12.2	(0.4)	18.7	(0.6)	50.1	(0.7)	19.0	(0.6)	14.9	(0.5)	24.9	(0.7)	45.0	(0.7)	15.1	(0.6)
	Dominican Republic	19.0	(0.6)	7.6	(0.5)	43.3	(0.8)	30.1	(0.7)	16.4	(0.6)	10.9	(0.5)	48.0	(0.8)	24.6	(0.7)
	Georgia	13.8	(0.6)	12.7	(0.5)	53.6	(0.9)	19.8	(0.7)	11.3	(0.5)	12.6	(0.5)	53.7	(0.7)	22.4	(0.6)
	Hong Kong (China)*	9.1	(0.4)	19.4	(0.8)	59.1	(0.8)	12.4	(0.6)	8.7	(0.5)	18.5	(0.7)	60.4	(0.8)	12.3	(0.6)
	Indonesia	5.9	(0.4)	3.9	(0.3)	59.4	(1.0)	30.8	(0.9)	4.9	(0.3)	7.5	(0.4)	66.3	(1.0)	21.3	(0.8)
	Jordan	12.8	(0.6)	9.9	(0.5)	48.3	(0.9)	28.9	(0.8)	9.3	(0.4)	11.0	(0.5)	51.4	(0.9)	28.3	(0.8)
	Kazakhstan	11.9	(0.3)	7.3	(0.3)	55.0	(0.5)	25.9	(0.5)	11.2	(0.3)	12.1	(0.3)	54.4	(0.5)	22.3	(0.5)
	Kosovo	9.1	(0.5)	7.5	(0.4)	50.8	(0.8)	32.5	(0.8)	9.7	(0.4)	20.3	(0.6)	51.4	(0.8)	18.6	(0.7)
	Lebanon	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Macao (China)	6.5	(0.4)	21.4	(0.6)	61.7	(0.8)	10.5	(0.5)	7.1	(0.5)	25.6	(0.6)	58.6	(0.7)	8.6	(0.4)
	Malaysia	3.1	(0.3)	8.1	(0.6)	61.7	(0.8)	27.1	(0.9)	4.0	(0.3)	14.8	(0.6)	64.0	(0.7)	17.2	(0.6)
	Malta	8.4	(0.5)	10.0	(0.5)	50.1	(0.9)	31.5	(0.9)	8.1	(0.5)	15.7	(0.6)	53.1	(0.8)	23.1	(0.8)
	Moldova	8.2	(0.4)	14.9	(0.6)	59.3	(0.8)	17.7	(0.7)	5.3	(0.3)	15.0	(0.7)	60.6	(0.8)	19.2	(0.6)
	Montenegro	14.3	(0.4)	18.5	(0.6)	51.3	(0.6)	15.9	(0.5)	11.8	(0.4)	16.8	(0.5)	52.2	(0.6)	19.2	(0.5)
	Morocco	10.2	(0.5)	12.9	(0.6)	55.6	(0.8)	21.3	(0.6)	10.7	(0.4)	17.4	(0.5)	52.4	(0.7)	19.6	(0.5)
	North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Panama	13.3	(0.5)	10.8	(0.6)	47.6	(0.7)	28.2	(0.7)	12.0	(0.5)	14.7	(0.5)	49.3	(0.8)	24.1	(0.7)
	Peru	6.8	(0.4)	10.8	(0.4)	58.3	(0.8)	24.1	(0.7)	6.1	(0.4)	12.2	(0.5)	60.4	(0.7)	21.3	(0.6)
	Philippines	9.1	(0.5)	8.6	(0.4)	59.2	(0.9)	23.1	(0.7)	8.2	(0.5)	12.3	(0.5)	62.7	(0.8)	16.8	(0.7)
	Qatar	14.5	(0.3)	15.0	(0.3)	47.7	(0.4)	22.8	(0.4)	13.2	(0.3)	19.0	(0.4)	48.3	(0.4)	19.4	(0.4)
	Romania	8.1	(0.5)	11.5	(0.7)	54.4	(0.8)	26.0	(0.8)	8.5	(0.5)	19.3	(0.7)	56.0	(0.9)	16.2	(0.7)
	Russia	12.0	(0.6)	21.1	(0.7)	52.0	(0.7)	14.9	(0.6)	15.5	(0.6)	30.1	(0.9)	43.9	(0.7)	10.5	(0.4)
	Saudi Arabia	11.1	(0.5)	11.5	(0.6)	54.3	(0.8)	23.1	(0.9)	10.5	(0.6)	15.6	(0.6)	52.0	(0.8)	21.9	(0.8)
	Serbia	12.3	(0.5)	17.0	(0.6)	52.8	(0.7)	17.9	(0.6)	15.2	(0.6)	28.2	(0.5)	43.2	(0.7)	13.3	(0.5)
	Singapore	6.7	(0.3)	14.3	(0.5)	59.5	(0.7)	19.5	(0.5)	7.0	(0.3)	14.9	(0.5)	60.2	(0.6)	18.0	(0.5)
	Chinese Taipei	5.2	(0.3)	15.7	(0.6)	61.6	(0.7)	17.4	(0.6)	4.7	(0.3)	12.9	(0.5)	62.1	(0.7)	20.3	(0.7)
	Thailand	4.9	(0.3)	10.4	(0.5)	71.3	(0.6)	13.4	(0.6)	4.5	(0.3)	8.7	(0.4)	69.9	(0.7)	16.9	(0.7)
	Ukraine	9.0	(0.5)	18.1	(0.6)	57.4	(0.9)	15.5	(0.5)	8.6	(0.4)	21.2	(0.7)	56.4	(0.8)	13.8	(0.6)
	United Arab Emirates	11.3	(0.3)	10.6	(0.3)	49.3	(0.5)	28.8	(0.5)	10.1	(0.3)	13.9	(0.3)	49.3	(0.5)	26.7	(0.5)
	Uruguay	10.7	(0.5)	12.0	(0.6)	53.3	(0.8)	23.9	(0.8)	10.0	(0.5)	18.1	(0.8)	53.4	(0.8)	18.6	(0.7)
	Viet Nam	3.8	(0.3)	16.1	(0.9)	63.9	(0.9)	16.2	(0.7)	3.4	(0.3)	12.9	(0.8)	62.0	(0.9)	21.7	(0.8)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.6.2 [3/4] **Teacher emotional support**

Based on students' reports

		Percentage of students who reported the following occurred during the previous two language-of-instruction lessons:							
		I felt that my teacher understood me							
		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	9.2	(0.3)	16.6	(0.4)	53.4	(0.5)	20.7	(0.4)
OECD	Austria	13.7	(0.5)	19.2	(0.5)	39.8	(0.6)	27.4	(0.8)
OECD	Belgium	10.0	(0.4)	20.5	(0.6)	54.1	(0.7)	15.4	(0.5)
OECD	Canada	m	m	m	m	m	m	m	m
OECD	Chile	13.6	(0.4)	15.1	(0.6)	46.3	(0.7)	25.1	(0.8)
OECD	Colombia	9.6	(0.4)	13.8	(0.6)	55.0	(0.8)	21.6	(0.6)
OECD	Czech Republic	13.5	(0.6)	26.6	(0.7)	49.4	(0.8)	10.5	(0.5)
OECD	Denmark	6.1	(0.4)	13.9	(0.7)	57.7	(0.7)	22.3	(0.7)
OECD	Estonia	10.6	(0.5)	19.0	(0.5)	55.0	(0.6)	15.4	(0.6)
OECD	Finland	9.0	(0.5)	18.3	(0.6)	55.9	(0.9)	16.8	(0.7)
OECD	France	17.3	(0.6)	23.2	(0.6)	45.2	(0.7)	14.3	(0.4)
OECD	Germany	10.6	(0.5)	20.2	(0.6)	45.7	(0.8)	23.5	(0.6)
OECD	Greece	10.5	(0.5)	21.3	(0.5)	50.4	(0.6)	17.9	(0.6)
OECD	Hungary	11.0	(0.5)	19.5	(0.6)	52.1	(0.7)	17.4	(0.6)
OECD	Iceland	12.1	(0.6)	15.5	(0.7)	49.3	(0.8)	23.2	(0.7)
OECD	Ireland	6.2	(0.3)	18.2	(0.6)	56.9	(0.7)	18.7	(0.6)
OECD	Israel	12.8	(0.6)	20.3	(0.7)	43.0	(0.8)	23.9	(0.9)
OECD	Italy	11.1	(0.5)	21.0	(0.6)	50.9	(0.8)	17.0	(0.6)
OECD	Japan	13.7	(0.5)	32.8	(0.7)	45.3	(0.7)	8.2	(0.5)
OECD	Korea	7.6	(0.4)	15.9	(0.6)	53.0	(0.6)	23.5	(0.8)
OECD	Latvia	12.0	(0.4)	20.5	(0.6)	51.8	(0.7)	15.7	(0.5)
OECD	Lithuania	12.6	(0.5)	14.2	(0.5)	46.8	(0.7)	26.5	(0.6)
OECD	Luxembourg	12.8	(0.5)	19.0	(0.5)	46.5	(0.7)	21.7	(0.5)
OECD	Mexico	11.4	(0.5)	15.5	(0.6)	53.2	(0.8)	19.8	(0.7)
OECD	Netherlands*	6.4	(0.5)	16.4	(0.8)	62.9	(0.9)	14.3	(0.7)
OECD	New Zealand	8.1	(0.4)	16.6	(0.5)	53.2	(0.7)	22.0	(0.6)
OECD	Norway	10.3	(0.5)	20.2	(0.6)	51.2	(0.7)	18.3	(0.7)
OECD	Poland	10.7	(0.5)	19.0	(0.5)	56.3	(0.7)	14.0	(0.6)
OECD	Portugal*	6.3	(0.4)	15.2	(0.6)	57.5	(0.7)	20.9	(0.8)
OECD	Slovak Republic	13.0	(0.5)	22.7	(0.6)	53.2	(0.8)	11.1	(0.4)
OECD	Slovenia	11.2	(0.5)	21.2	(0.7)	54.9	(0.8)	12.8	(0.5)
OECD	Spain	12.8	(0.3)	21.9	(0.4)	46.9	(0.4)	18.4	(0.4)
OECD	Sweden	9.4	(0.5)	15.3	(0.6)	51.8	(0.7)	23.5	(0.7)
OECD	Switzerland	10.8	(0.5)	18.8	(0.7)	45.8	(0.7)	24.5	(0.8)
OECD	Turkey	15.9	(0.5)	22.4	(0.6)	42.5	(0.7)	19.2	(0.7)
OECD	United Kingdom	7.9	(0.3)	16.5	(0.5)	53.6	(0.7)	22.1	(0.6)
OECD	United States*	8.9	(0.5)	19.5	(0.7)	50.7	(0.8)	20.9	(0.8)
	OECD average	10.8	(0.1)	19.0	(0.1)	51.0	(0.1)	19.1	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.6.2 [4/4] **Teacher emotional support**

Based on students' reports

		Percentage of students who reported the following occurred during the previous two language-of-instruction lessons:							
		I felt that my teacher understood me							
		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	5.9	(0.4)	7.5	(0.4)	46.1	(0.8)	40.5	(0.8)
	Argentina	9.5	(0.5)	16.2	(0.5)	52.5	(0.7)	21.8	(0.6)
	Baku (Azerbaijan)	17.2	(0.6)	9.0	(0.4)	45.9	(0.8)	27.8	(0.7)
	Belarus	7.0	(0.4)	17.7	(0.6)	56.6	(0.8)	18.7	(0.7)
	Bosnia and Herzegovina	13.1	(0.6)	17.9	(0.6)	51.0	(0.8)	18.0	(0.5)
	Brazil	10.2	(0.4)	21.5	(0.5)	51.5	(0.6)	16.8	(0.5)
	Brunei Darussalam	6.1	(0.3)	20.5	(0.5)	59.4	(0.6)	14.1	(0.4)
	B-S-J-Z (China)	6.5	(0.3)	16.4	(0.5)	52.6	(0.6)	24.6	(0.7)
	Bulgaria	14.3	(0.6)	15.3	(0.6)	48.0	(0.9)	22.4	(0.8)
	Costa Rica	10.7	(0.5)	12.6	(0.6)	51.1	(0.6)	25.7	(0.7)
	Croatia	12.4	(0.4)	21.1	(0.6)	50.6	(0.8)	15.9	(0.6)
	Cyprus	14.1	(0.5)	21.7	(0.6)	43.4	(0.7)	20.7	(0.6)
	Dominican Republic	17.0	(0.5)	9.7	(0.5)	44.8	(0.8)	28.6	(0.8)
	Georgia	13.0	(0.5)	12.4	(0.5)	50.3	(0.8)	24.3	(0.7)
	Hong Kong (China)*	10.4	(0.5)	22.3	(0.8)	54.9	(0.8)	12.4	(0.6)
	Indonesia	5.9	(0.4)	11.3	(0.5)	64.9	(1.0)	18.0	(0.8)
	Jordan	11.0	(0.4)	10.9	(0.5)	46.6	(0.7)	31.5	(0.8)
	Kazakhstan	11.2	(0.3)	8.4	(0.3)	52.9	(0.4)	27.5	(0.5)
	Kosovo	9.2	(0.4)	13.3	(0.6)	53.6	(0.8)	23.9	(0.7)
	Lebanon	m	m	m	m	m	m	m	m
	Macao (China)	12.4	(0.4)	34.4	(0.7)	45.8	(0.7)	7.3	(0.4)
	Malaysia	5.3	(0.3)	19.6	(0.7)	59.5	(0.8)	15.6	(0.6)
	Malta	8.3	(0.5)	13.7	(0.6)	51.4	(0.9)	26.6	(0.8)
	Moldova	5.0	(0.3)	11.3	(0.6)	59.9	(0.8)	23.7	(0.7)
	Montenegro	12.4	(0.4)	16.0	(0.5)	50.2	(0.6)	21.4	(0.6)
	Morocco	10.7	(0.5)	15.8	(0.5)	50.6	(0.7)	22.9	(0.6)
	North Macedonia	m	m	m	m	m	m	m	m
	Panama	11.5	(0.6)	12.9	(0.5)	49.2	(0.8)	26.5	(0.8)
	Peru	6.1	(0.4)	12.2	(0.4)	59.5	(0.7)	22.2	(0.7)
	Philippines	8.6	(0.5)	11.8	(0.5)	61.2	(0.8)	18.5	(0.6)
	Qatar	15.1	(0.3)	18.5	(0.3)	44.4	(0.4)	22.0	(0.4)
	Romania	7.4	(0.4)	12.7	(0.7)	56.0	(1.0)	23.9	(0.8)
	Russia	12.0	(0.5)	17.9	(0.7)	49.5	(0.7)	20.6	(0.7)
	Saudi Arabia	12.0	(0.6)	17.9	(0.7)	45.6	(0.7)	24.6	(0.9)
	Serbia	12.5	(0.5)	17.4	(0.6)	51.5	(0.7)	18.7	(0.6)
	Singapore	8.3	(0.4)	16.5	(0.5)	57.2	(0.6)	17.9	(0.5)
	Chinese Taipei	11.0	(0.4)	32.4	(0.7)	46.3	(0.8)	10.2	(0.4)
	Thailand	4.9	(0.3)	14.2	(0.6)	66.8	(0.6)	14.0	(0.5)
	Ukraine	7.9	(0.4)	14.5	(0.5)	58.6	(0.9)	19.1	(0.6)
	United Arab Emirates	11.9	(0.3)	15.4	(0.4)	46.2	(0.5)	26.5	(0.6)
	Uruguay	10.4	(0.5)	17.4	(0.8)	53.5	(0.9)	18.7	(0.8)
	Viet Nam	5.4	(0.4)	26.2	(1.0)	55.3	(1.0)	13.0	(0.6)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.6.3 [1/4] **Teacher feedback**

Based on students' reports

		Index of perceived feedback				Percentage of students who reported the following things occur in their language-of-instruction lessons:							
						The teacher gives me feedback on my strengths in this subject							
		Average		Variability		Never or almost never		Some lessons		Many lessons		Every lesson or almost every lesson	
		Mean index	S.E.	S.D.	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	0.35	(0.01)	0.99	(0.01)	13.3	(0.4)	35.2	(0.4)	35.3	(0.5)	16.3	(0.3)
	Austria	-0.04	(0.02)	0.98	(0.01)	37.8	(0.8)	32.5	(0.7)	21.0	(0.6)	8.6	(0.4)
	Belgium	-0.32	(0.01)	0.89	(0.01)	41.2	(0.8)	37.6	(0.6)	16.7	(0.4)	4.5	(0.3)
	Canada	m	m	m	m	m	m	m	m	m	m	m	m
	Chile	0.18	(0.03)	1.09	(0.01)	22.9	(0.7)	34.6	(0.7)	27.3	(0.8)	15.2	(0.7)
	Colombia	0.25	(0.02)	0.97	(0.01)	22.9	(0.8)	40.6	(0.7)	23.8	(0.7)	12.7	(0.6)
	Czech Republic	-0.24	(0.02)	0.92	(0.01)	33.7	(0.9)	42.0	(0.8)	17.6	(0.7)	6.7	(0.4)
	Denmark	0.11	(0.02)	0.90	(0.01)	15.0	(0.7)	40.5	(0.7)	34.2	(0.8)	10.2	(0.5)
	Estonia	-0.13	(0.02)	0.92	(0.01)	20.8	(0.6)	44.5	(0.7)	26.8	(0.8)	7.9	(0.4)
	Finland	-0.16	(0.02)	0.93	(0.01)	22.9	(0.8)	45.1	(0.8)	25.0	(0.8)	7.0	(0.3)
	France	-0.21	(0.02)	0.99	(0.01)	46.8	(0.8)	30.8	(0.7)	15.1	(0.5)	7.3	(0.4)
	Germany	-0.07	(0.02)	0.92	(0.01)	38.3	(0.8)	35.6	(0.7)	19.8	(0.6)	6.2	(0.4)
	Greece	-0.10	(0.02)	0.95	(0.01)	39.4	(0.8)	35.7	(0.7)	17.5	(0.6)	7.3	(0.4)
	Hungary	-0.05	(0.02)	0.92	(0.01)	26.8	(0.8)	40.6	(0.8)	24.9	(0.7)	7.7	(0.4)
	Iceland	-0.20	(0.02)	1.06	(0.01)	36.9	(0.9)	34.0	(0.8)	20.6	(0.7)	8.5	(0.5)
	Ireland	0.30	(0.02)	0.97	(0.01)	15.4	(0.6)	37.5	(0.7)	32.3	(0.6)	14.8	(0.6)
	Israel	-0.13	(0.02)	1.05	(0.01)	32.6	(0.9)	35.2	(0.7)	21.2	(0.6)	11.0	(0.6)
	Italy	-0.04	(0.02)	0.93	(0.01)	39.1	(0.8)	35.6	(0.6)	18.8	(0.7)	6.6	(0.4)
	Japan	-0.30	(0.02)	0.98	(0.01)	52.1	(1.0)	29.0	(0.7)	13.1	(0.5)	5.8	(0.4)
	Korea	0.18	(0.02)	1.17	(0.01)	26.2	(0.7)	29.6	(0.6)	27.6	(0.7)	16.6	(0.5)
	Latvia	0.10	(0.02)	0.91	(0.01)	24.8	(0.8)	40.8	(0.8)	25.7	(0.7)	8.6	(0.4)
	Lithuania	0.13	(0.02)	1.00	(0.01)	28.7	(0.7)	37.4	(0.6)	23.4	(0.5)	10.5	(0.4)
	Luxembourg	-0.07	(0.01)	1.01	(0.01)	34.6	(0.6)	34.1	(0.7)	22.0	(0.5)	9.3	(0.4)
	Mexico	0.07	(0.02)	1.02	(0.01)	28.1	(0.8)	39.8	(0.6)	22.9	(0.7)	9.2	(0.4)
	Netherlands*	-0.15	(0.02)	0.90	(0.01)	29.3	(1.1)	41.6	(0.7)	23.9	(0.9)	5.2	(0.5)
	New Zealand	0.49	(0.02)	0.95	(0.01)	10.4	(0.5)	33.6	(0.6)	38.2	(0.7)	17.8	(0.6)
	Norway	0.13	(0.02)	0.99	(0.01)	22.4	(0.7)	38.5	(0.7)	26.9	(0.6)	12.2	(0.5)
	Poland	0.06	(0.01)	0.88	(0.01)	28.1	(0.7)	39.7	(0.8)	24.4	(0.6)	7.8	(0.4)
	Portugal*	-0.01	(0.02)	0.96	(0.01)	37.6	(1.0)	36.6	(0.9)	19.0	(0.6)	6.7	(0.4)
	Slovak Republic	-0.11	(0.02)	0.92	(0.01)	29.1	(0.8)	42.9	(0.8)	20.9	(0.7)	7.2	(0.4)
	Slovenia	-0.41	(0.02)	0.94	(0.01)	49.2	(0.9)	32.5	(0.8)	13.1	(0.7)	5.2	(0.4)
	Spain	-0.18	(0.01)	1.00	(0.01)	42.0	(0.6)	33.0	(0.4)	17.6	(0.3)	7.4	(0.3)
	Sweden	0.04	(0.02)	1.02	(0.01)	28.1	(0.8)	37.0	(0.6)	23.4	(0.6)	11.5	(0.5)
	Switzerland	-0.12	(0.02)	0.99	(0.01)	40.0	(1.0)	33.4	(0.7)	18.8	(0.6)	7.8	(0.5)
	Turkey	0.02	(0.02)	1.02	(0.01)	19.5	(0.6)	41.2	(0.8)	25.8	(0.6)	13.5	(0.6)
	United Kingdom	0.53	(0.02)	0.95	(0.01)	8.6	(0.4)	33.5	(0.7)	38.1	(0.5)	19.8	(0.7)
	United States*	0.31	(0.02)	1.05	(0.01)	16.1	(0.6)	37.2	(0.9)	28.8	(0.7)	17.9	(0.8)
	OECD average	0.01	(0.00)	0.97	(0.00)	29.5	(0.1)	36.9	(0.1)	23.7	(0.1)	10.0	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.6.3 [2/4] **Teacher feedback**

Based on students' reports

		Index of perceived feedback				Percentage of students who reported the following things occur in their language-of-instruction lessons:							
						The teacher gives me feedback on my strengths in this subject							
		Average		Variability		Never or almost never		Some lessons		Many lessons		Every lesson or almost every lesson	
		Mean index	S.E.	S.D.	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	0.77	(0.02)	0.95	(0.01)	9.7	(0.5)	28.3	(0.8)	30.1	(0.7)	31.9	(0.7)
	Argentina	-0.16	(0.02)	0.96	(0.01)	32.5	(0.8)	43.2	(0.7)	17.4	(0.5)	6.9	(0.4)
	Baku (Azerbaijan)	0.42	(0.01)	0.99	(0.01)	11.5	(0.4)	34.9	(0.7)	33.2	(0.6)	20.5	(0.5)
	Belarus	0.17	(0.02)	0.99	(0.01)	18.6	(0.6)	37.9	(0.7)	32.4	(0.7)	11.2	(0.5)
	Bosnia and Herzegovina	-0.15	(0.02)	0.99	(0.01)	26.7	(0.8)	42.0	(0.7)	22.2	(0.6)	9.1	(0.4)
	Brazil	-0.16	(0.01)	0.96	(0.01)	46.7	(0.7)	35.2	(0.5)	12.3	(0.4)	5.7	(0.3)
	Brunei Darussalam	0.33	(0.01)	0.85	(0.01)	11.6	(0.4)	50.6	(0.5)	25.5	(0.6)	12.3	(0.4)
	B-S-J-Z (China)	0.28	(0.02)	1.03	(0.01)	23.8	(0.7)	35.6	(0.5)	23.5	(0.6)	17.0	(0.6)
	Bulgaria	0.11	(0.02)	1.10	(0.01)	29.0	(0.9)	31.3	(0.7)	23.2	(0.8)	16.4	(0.6)
	Costa Rica	-0.25	(0.02)	1.05	(0.01)	48.2	(0.9)	30.5	(0.6)	13.7	(0.5)	7.7	(0.4)
	Croatia	-0.23	(0.02)	0.93	(0.01)	40.3	(0.8)	39.4	(0.6)	15.2	(0.5)	5.1	(0.3)
	Cyprus	0.01	(0.02)	1.03	(0.01)	35.7	(0.7)	32.6	(0.7)	20.5	(0.6)	11.3	(0.5)
	Dominican Republic	0.41	(0.02)	0.96	(0.01)	13.8	(0.7)	28.5	(0.7)	35.0	(0.8)	22.7	(0.6)
	Georgia	0.21	(0.02)	0.99	(0.01)	23.4	(0.7)	38.2	(0.8)	25.6	(0.7)	12.9	(0.5)
	Hong Kong (China)*	0.12	(0.02)	0.90	(0.01)	18.5	(0.6)	46.4	(0.7)	26.9	(0.7)	8.2	(0.4)
	Indonesia	0.38	(0.02)	0.94	(0.01)	15.7	(0.6)	48.9	(0.9)	18.9	(0.6)	16.4	(0.7)
	Jordan	0.37	(0.02)	1.09	(0.01)	20.5	(0.7)	29.3	(0.5)	25.7	(0.6)	24.5	(0.8)
	Kazakhstan	0.38	(0.01)	0.87	(0.01)	12.7	(0.4)	44.5	(0.6)	31.8	(0.6)	11.0	(0.4)
	Kosovo	0.38	(0.02)	0.96	(0.01)	13.8	(0.5)	38.8	(0.8)	27.3	(0.8)	20.0	(0.6)
	Lebanon	m	m	m	m	m	m	m	m	m	m	m	m
	Macao (China)	-0.13	(0.01)	0.86	(0.01)	36.3	(0.8)	43.4	(0.9)	15.4	(0.5)	5.0	(0.3)
	Malaysia	0.44	(0.02)	0.86	(0.01)	11.9	(0.5)	46.8	(0.9)	29.3	(0.7)	12.0	(0.5)
	Malta	0.38	(0.02)	1.01	(0.01)	14.9	(0.5)	34.1	(0.9)	33.2	(0.9)	17.8	(0.7)
	Moldova	0.10	(0.02)	0.87	(0.01)	27.9	(0.8)	38.0	(0.7)	23.7	(0.7)	10.4	(0.6)
	Montenegro	0.02	(0.01)	1.06	(0.01)	23.1	(0.5)	37.9	(0.6)	25.1	(0.6)	13.8	(0.4)
	Morocco	-0.10	(0.02)	0.91	(0.01)	37.0	(0.7)	39.6	(0.5)	16.4	(0.5)	7.0	(0.3)
	North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m
	Panama	0.19	(0.03)	0.97	(0.01)	26.3	(0.9)	42.2	(0.7)	21.1	(0.6)	10.4	(0.5)
	Peru	0.26	(0.02)	0.88	(0.01)	18.7	(0.5)	44.5	(0.8)	27.6	(0.7)	9.1	(0.4)
	Philippines	0.35	(0.02)	0.91	(0.01)	10.2	(0.5)	46.9	(0.8)	25.8	(0.5)	17.1	(0.7)
	Qatar	0.20	(0.01)	1.04	(0.01)	20.6	(0.4)	37.1	(0.4)	26.2	(0.4)	16.0	(0.4)
	Romania	0.00	(0.02)	0.92	(0.01)	33.3	(0.8)	40.3	(0.8)	17.9	(0.7)	8.4	(0.5)
	Russia	0.22	(0.02)	1.02	(0.01)	23.5	(0.8)	33.2	(0.7)	29.7	(0.9)	13.7	(0.4)
	Saudi Arabia	-0.03	(0.02)	1.06	(0.01)	30.7	(0.9)	35.8	(0.8)	18.7	(0.6)	14.8	(0.7)
	Serbia	0.20	(0.02)	1.04	(0.01)	16.6	(0.6)	36.2	(0.7)	29.7	(0.6)	17.6	(0.5)
	Singapore	0.42	(0.01)	0.94	(0.01)	11.2	(0.4)	39.0	(0.6)	34.4	(0.6)	15.4	(0.5)
	Chinese Taipei	0.34	(0.01)	0.97	(0.01)	16.0	(0.4)	37.7	(0.6)	31.2	(0.5)	15.1	(0.5)
	Thailand	0.14	(0.01)	0.88	(0.01)	9.4	(0.4)	50.1	(0.7)	27.1	(0.6)	13.3	(0.6)
	Ukraine	0.09	(0.02)	0.83	(0.01)	24.9	(0.9)	46.3	(0.7)	23.0	(0.6)	5.8	(0.4)
	United Arab Emirates	0.36	(0.01)	1.08	(0.01)	17.6	(0.4)	33.3	(0.4)	28.8	(0.4)	20.3	(0.4)
	Uruguay	-0.25	(0.02)	0.92	(0.01)	40.5	(0.9)	39.5	(0.7)	14.1	(0.6)	6.0	(0.4)
	Viet Nam	0.14	(0.02)	0.84	(0.01)	21.6	(0.9)	49.4	(0.9)	20.3	(0.7)	8.6	(0.5)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.6.3 [3/4] **Teacher feedback**

Based on students' reports

		Percentage of students who reported the following things occur in their language-of-instruction lessons:															
		The teacher tells me in which areas I can still improve								The teacher tells me how I can improve my performance							
		Never or almost never		Some lessons		Many lessons		Every lesson or almost every lesson		Never or almost never		Some lessons		Many lessons		Every lesson or almost every lesson	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	10.6	(0.3)	32.2	(0.4)	38.8	(0.5)	18.5	(0.4)	11.4	(0.3)	32.6	(0.4)	37.2	(0.5)	18.7	(0.4)
	Austria	17.7	(0.5)	38.8	(0.8)	30.7	(0.7)	12.9	(0.5)	20.7	(0.6)	36.6	(0.8)	29.4	(0.7)	13.2	(0.5)
	Belgium	28.1	(0.8)	42.5	(0.6)	23.2	(0.5)	6.2	(0.3)	25.6	(0.6)	42.6	(0.5)	23.9	(0.5)	7.9	(0.3)
	Canada	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Chile	22.4	(0.7)	28.6	(0.6)	29.4	(0.7)	19.6	(0.8)	18.0	(0.6)	28.2	(0.7)	29.6	(0.6)	24.3	(0.8)
	Colombia	12.4	(0.5)	35.6	(0.8)	33.2	(0.7)	18.7	(0.7)	11.5	(0.5)	32.9	(0.8)	33.5	(0.8)	22.2	(0.7)
	Czech Republic	26.6	(0.9)	41.7	(0.8)	23.7	(0.7)	8.0	(0.4)	23.5	(0.8)	42.6	(0.6)	24.4	(0.7)	9.5	(0.5)
	Denmark	12.7	(0.6)	41.4	(0.7)	35.0	(0.8)	10.9	(0.5)	15.3	(0.6)	41.9	(0.7)	32.4	(0.7)	10.4	(0.6)
	Estonia	27.8	(0.8)	39.8	(0.7)	25.2	(0.6)	7.2	(0.4)	18.7	(0.6)	40.9	(0.8)	29.9	(0.8)	10.4	(0.5)
	Finland	21.4	(0.7)	45.4	(0.8)	25.7	(0.7)	7.6	(0.3)	22.6	(0.8)	44.5	(0.8)	25.4	(0.7)	7.6	(0.4)
	France	26.8	(0.7)	37.1	(0.6)	25.4	(0.6)	10.7	(0.4)	23.1	(0.6)	38.4	(0.7)	25.7	(0.6)	12.8	(0.4)
	Germany	16.1	(0.5)	41.3	(0.9)	30.8	(0.7)	11.8	(0.5)	20.6	(0.6)	39.1	(0.8)	30.0	(0.8)	10.2	(0.6)
	Greece	19.6	(0.7)	39.4	(0.7)	29.8	(0.7)	11.3	(0.4)	21.6	(0.7)	38.6	(0.6)	26.9	(0.5)	12.9	(0.6)
	Hungary	21.6	(0.8)	40.2	(0.7)	29.8	(0.8)	8.4	(0.4)	16.1	(0.7)	38.8	(0.7)	34.2	(0.8)	10.9	(0.5)
	Iceland	26.4	(0.8)	38.0	(0.9)	25.4	(0.8)	10.2	(0.5)	27.2	(0.8)	36.6	(0.8)	25.3	(0.8)	10.9	(0.5)
	Ireland	10.1	(0.5)	35.1	(0.8)	37.1	(0.6)	17.7	(0.6)	11.6	(0.5)	34.9	(0.8)	36.2	(0.7)	17.3	(0.6)
	Israel	27.5	(0.8)	36.4	(0.8)	24.6	(0.6)	11.6	(0.6)	25.3	(0.7)	33.6	(0.6)	27.0	(0.6)	14.1	(0.6)
	Italy	16.5	(0.5)	39.8	(0.7)	31.6	(0.7)	12.0	(0.5)	18.5	(0.6)	38.0	(0.7)	29.6	(0.8)	13.9	(0.5)
	Japan	38.0	(1.0)	32.5	(0.7)	21.5	(0.7)	8.0	(0.5)	19.4	(0.6)	35.1	(0.7)	31.3	(0.7)	14.2	(0.5)
	Korea	21.8	(0.7)	28.0	(0.6)	30.6	(0.7)	19.5	(0.6)	18.4	(0.6)	28.2	(0.6)	32.8	(0.6)	20.6	(0.6)
	Latvia	14.0	(0.6)	37.1	(0.7)	34.5	(0.8)	14.4	(0.5)	17.8	(0.6)	35.0	(0.8)	32.7	(0.8)	14.6	(0.5)
	Lithuania	15.5	(0.5)	35.4	(0.6)	32.9	(0.7)	16.2	(0.6)	15.9	(0.5)	34.2	(0.6)	32.1	(0.6)	17.7	(0.6)
	Luxembourg	20.1	(0.6)	38.0	(0.7)	29.4	(0.6)	12.5	(0.4)	23.2	(0.6)	36.4	(0.6)	27.6	(0.7)	12.9	(0.4)
	Mexico	18.8	(0.6)	36.0	(0.8)	29.8	(0.7)	15.4	(0.6)	16.9	(0.6)	33.4	(0.7)	30.5	(0.7)	19.2	(0.7)
	Netherlands*	21.4	(0.9)	41.4	(0.9)	30.1	(0.9)	7.0	(0.5)	19.9	(0.9)	42.2	(1.0)	31.2	(0.9)	6.7	(0.6)
	New Zealand	7.8	(0.4)	27.9	(0.8)	42.2	(0.7)	22.1	(0.6)	8.3	(0.4)	30.0	(0.6)	39.8	(0.7)	21.9	(0.7)
	Norway	13.0	(0.5)	38.2	(0.7)	33.9	(0.7)	14.9	(0.6)	15.6	(0.6)	39.7	(0.7)	31.0	(0.7)	13.7	(0.6)
	Poland	13.0	(0.5)	39.1	(0.7)	36.0	(0.7)	11.9	(0.5)	15.3	(0.5)	39.2	(0.7)	33.7	(0.6)	11.7	(0.5)
	Portugal*	19.6	(0.7)	37.9	(0.7)	30.4	(0.8)	12.2	(0.5)	14.5	(0.5)	36.3	(0.8)	33.0	(0.7)	16.2	(0.5)
	Slovak Republic	22.8	(0.7)	41.2	(0.7)	26.7	(0.6)	9.3	(0.5)	19.1	(0.6)	41.3	(0.7)	28.5	(0.6)	11.1	(0.5)
	Slovenia	31.9	(0.8)	41.4	(0.7)	20.2	(0.7)	6.6	(0.4)	28.8	(0.7)	41.9	(0.8)	21.5	(0.7)	7.8	(0.4)
	Spain	26.1	(0.5)	35.7	(0.4)	26.5	(0.4)	11.7	(0.3)	25.4	(0.5)	35.2	(0.4)	26.6	(0.4)	12.8	(0.3)
	Sweden	17.4	(0.7)	40.2	(0.8)	28.4	(0.8)	14.0	(0.5)	18.0	(0.7)	38.0	(0.8)	28.6	(0.6)	15.3	(0.6)
	Switzerland	21.7	(0.8)	37.4	(0.7)	29.5	(0.8)	11.3	(0.5)	23.2	(0.7)	36.9	(0.8)	28.1	(0.8)	11.8	(0.5)
	Turkey	25.1	(0.8)	35.8	(0.7)	25.4	(0.7)	13.7	(0.6)	18.7	(0.6)	36.4	(0.6)	27.7	(0.7)	17.2	(0.6)
	United Kingdom	6.3	(0.3)	29.3	(0.8)	40.9	(0.7)	23.5	(0.7)	7.9	(0.4)	31.1	(0.8)	38.6	(0.7)	22.5	(0.7)
	United States*	14.0	(0.6)	32.0	(0.8)	32.8	(0.7)	21.2	(0.8)	13.7	(0.6)	33.0	(0.8)	32.2	(0.8)	21.2	(0.8)
	OECD average	19.8	(0.1)	37.2	(0.1)	30.0	(0.1)	13.0	(0.1)	18.6	(0.1)	36.8	(0.1)	30.2	(0.1)	14.3	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.6.3 [4/4] **Teacher feedback**

Based on students' reports

		Percentage of students who reported the following things occur in their language-of-instruction lessons:															
		The teacher tells me in which areas I can still improve								The teacher tells me how I can improve my performance							
		Never or almost never		Some lessons		Many lessons		Every lesson or almost every lesson		Never or almost never		Some lessons		Many lessons		Every lesson or almost every lesson	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	7.6	(0.4)	25.3	(0.7)	34.2	(0.7)	32.8	(0.8)	4.4	(0.3)	19.4	(0.6)	33.0	(0.7)	43.2	(0.8)
	Argentina	30.0	(0.8)	36.5	(0.6)	22.9	(0.6)	10.7	(0.5)	22.1	(0.7)	34.9	(0.6)	27.1	(0.6)	15.9	(0.6)
	Baku (Azerbaijan)	11.1	(0.5)	33.2	(0.8)	35.1	(0.8)	20.6	(0.5)	10.4	(0.4)	29.7	(0.7)	35.6	(0.7)	24.2	(0.6)
	Belarus	17.3	(0.7)	34.0	(0.7)	35.0	(0.7)	13.7	(0.5)	13.9	(0.6)	33.4	(0.7)	36.4	(0.6)	16.3	(0.7)
	Bosnia and Herzegovina	28.6	(0.8)	38.3	(0.7)	23.5	(0.7)	9.6	(0.4)	22.1	(0.8)	38.2	(0.7)	27.7	(0.6)	12.1	(0.5)
	Brazil	25.3	(0.6)	37.7	(0.5)	25.0	(0.5)	12.1	(0.4)	19.7	(0.5)	35.5	(0.6)	28.3	(0.5)	16.5	(0.4)
	Brunei Darussalam	8.4	(0.3)	38.5	(0.6)	35.6	(0.6)	17.4	(0.5)	6.9	(0.3)	36.5	(0.6)	35.4	(0.6)	21.3	(0.5)
	B-S-J-Z (China)	10.2	(0.4)	34.9	(0.8)	33.5	(0.6)	21.4	(0.7)	14.0	(0.5)	36.9	(0.7)	29.2	(0.5)	19.9	(0.7)
	Bulgaria	28.4	(0.8)	28.5	(0.7)	25.9	(0.8)	17.2	(0.6)	16.2	(0.7)	27.7	(0.8)	31.5	(0.8)	24.6	(0.8)
	Costa Rica	30.9	(0.9)	34.8	(0.6)	22.6	(0.6)	11.8	(0.5)	26.5	(0.9)	34.0	(0.6)	24.4	(0.6)	15.2	(0.6)
	Croatia	20.8	(0.7)	44.5	(0.6)	25.7	(0.6)	9.0	(0.4)	24.6	(0.7)	43.4	(0.7)	23.0	(0.6)	9.1	(0.4)
	Cyprus	19.6	(0.6)	35.2	(0.7)	30.9	(0.6)	14.3	(0.5)	20.1	(0.5)	33.6	(0.6)	30.5	(0.6)	15.8	(0.6)
	Dominican Republic	14.3	(0.6)	29.7	(0.8)	37.0	(0.7)	19.1	(0.6)	11.6	(0.6)	25.8	(0.8)	38.3	(0.8)	24.3	(0.7)
	Georgia	15.2	(0.7)	36.9	(0.7)	31.1	(0.7)	16.9	(0.6)	13.1	(0.6)	32.2	(0.8)	32.4	(0.8)	22.3	(0.6)
	Hong Kong (China)*	10.4	(0.5)	43.0	(0.8)	35.7	(0.8)	10.8	(0.5)	11.4	(0.5)	42.6	(0.8)	34.9	(0.8)	11.1	(0.5)
	Indonesia	7.9	(0.5)	41.3	(0.8)	26.6	(0.7)	24.2	(0.8)	6.1	(0.4)	38.1	(0.9)	26.8	(0.8)	29.0	(1.0)
	Jordan	17.0	(0.7)	29.3	(0.6)	28.9	(0.6)	24.8	(0.7)	15.7	(0.6)	26.1	(0.6)	27.7	(0.7)	30.5	(0.7)
	Kazakhstan	10.0	(0.4)	31.0	(0.5)	41.3	(0.5)	17.8	(0.5)	7.7	(0.3)	28.6	(0.5)	41.1	(0.5)	22.7	(0.5)
	Kosovo	12.5	(0.6)	35.3	(0.7)	31.6	(0.7)	20.6	(0.6)	9.0	(0.5)	32.5	(0.9)	31.2	(0.7)	27.2	(0.7)
	Lebanon	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Macao (China)	14.7	(0.6)	46.2	(0.8)	30.9	(0.8)	8.2	(0.5)	17.7	(0.6)	46.7	(0.7)	27.7	(0.7)	7.8	(0.4)
	Malaysia	5.9	(0.4)	32.6	(0.8)	39.0	(0.7)	22.5	(0.8)	7.2	(0.5)	32.7	(0.7)	35.2	(0.6)	24.9	(0.8)
	Malta	11.2	(0.5)	31.5	(0.8)	36.6	(0.9)	20.8	(0.7)	11.3	(0.6)	31.7	(0.8)	36.2	(0.9)	20.9	(0.7)
	Moldova	20.2	(0.8)	41.1	(0.9)	27.3	(0.8)	11.3	(0.6)	9.4	(0.4)	32.9	(0.7)	35.5	(0.8)	22.2	(0.7)
	Montenegro	26.3	(0.6)	34.0	(0.6)	25.5	(0.6)	14.2	(0.4)	19.8	(0.5)	33.4	(0.6)	28.8	(0.6)	18.0	(0.5)
	Morocco	22.5	(0.7)	39.1	(0.7)	27.9	(0.6)	10.4	(0.4)	20.5	(0.7)	35.2	(0.6)	28.1	(0.6)	16.1	(0.5)
	North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Panama	16.4	(0.9)	32.2	(0.8)	33.3	(0.8)	18.1	(0.6)	14.5	(0.9)	30.5	(0.8)	31.1	(0.8)	24.0	(0.9)
	Peru	12.9	(0.6)	35.8	(0.7)	35.1	(0.7)	16.2	(0.5)	9.3	(0.4)	31.3	(0.7)	35.9	(0.7)	23.5	(0.7)
	Philippines	9.9	(0.5)	41.0	(0.6)	30.1	(0.5)	19.1	(0.7)	8.7	(0.4)	36.2	(0.7)	28.9	(0.5)	26.2	(0.7)
	Qatar	18.4	(0.4)	33.7	(0.4)	30.4	(0.4)	17.6	(0.3)	15.2	(0.3)	31.6	(0.3)	30.9	(0.4)	22.3	(0.3)
	Romania	23.3	(0.9)	38.5	(0.8)	27.0	(0.8)	11.3	(0.6)	13.6	(0.8)	33.2	(0.8)	32.8	(0.7)	20.4	(0.8)
	Russia	16.5	(0.7)	33.9	(0.7)	32.4	(0.7)	17.3	(0.6)	13.4	(0.6)	30.8	(0.8)	35.0	(0.7)	20.8	(0.6)
	Saudi Arabia	31.4	(0.8)	31.2	(0.7)	20.2	(0.6)	17.2	(0.7)	22.9	(0.7)	31.0	(0.7)	23.7	(0.6)	22.4	(0.7)
	Serbia	17.2	(0.7)	34.4	(0.7)	31.3	(0.6)	17.0	(0.6)	17.3	(0.7)	34.1	(0.6)	30.1	(0.7)	18.5	(0.6)
	Singapore	7.1	(0.3)	32.3	(0.6)	41.3	(0.6)	19.3	(0.5)	7.7	(0.3)	33.2	(0.6)	40.2	(0.6)	18.9	(0.5)
	Chinese Taipei	10.1	(0.4)	33.7	(0.6)	37.7	(0.6)	18.6	(0.5)	10.0	(0.4)	33.8	(0.6)	36.8	(0.6)	19.3	(0.5)
	Thailand	12.6	(0.4)	48.8	(0.5)	25.3	(0.6)	13.3	(0.5)	12.7	(0.5)	43.9	(0.6)	27.9	(0.6)	15.5	(0.5)
	Ukraine	12.1	(0.5)	41.0	(0.7)	36.8	(0.7)	10.2	(0.5)	10.9	(0.6)	39.2	(0.8)	37.0	(0.7)	12.9	(0.6)
	United Arab Emirates	13.9	(0.3)	29.9	(0.5)	32.6	(0.5)	23.6	(0.4)	15.0	(0.3)	29.1	(0.6)	30.8	(0.4)	25.1	(0.5)
	Uruguay	26.9	(0.7)	42.1	(0.6)	23.1	(0.6)	7.9	(0.4)	20.9	(0.7)	42.4	(0.9)	25.2	(0.8)	11.4	(0.5)
	Viet Nam	18.9	(0.7)	43.2	(0.9)	26.4	(0.7)	11.5	(0.6)	6.1	(0.5)	31.5	(0.7)	39.4	(0.8)	23.0	(0.7)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.7.1 [1/6] **Teacher behaviour hindering student learning**

Based on principals' reports

		Index of teacher behaviour hindering learning[1]				Percentage of students in schools whose principal reported that the following behaviours hinder student learning:							
						Teachers not meeting individual students' needs							
		Average		Variability		Not at all		Very little		To some extent		A lot	
		Mean index	S.E.	S.D.	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	0.32	(0.03)	0.85	(0.03)	8.7	(1.3)	53.4	(2.1)	35.8	(2.0)	2.2	(0.6)
OECD	Austria	-0.05	(0.06)	0.90	(0.04)	21.2	(2.8)	55.1	(3.1)	20.0	(2.7)	3.7	(1.0)
OECD	Belgium	0.59	(0.05)	0.79	(0.05)	6.9	(1.6)	57.4	(3.1)	33.8	(2.9)	1.9	(0.9)
OECD	Canada	0.32	(0.04)	0.89	(0.03)	10.5	(1.2)	56.0	(2.3)	31.1	(2.2)	2.4	(0.9)
OECD	Chile	0.62	(0.07)	0.93	(0.04)	6.4	(1.9)	54.8	(4.1)	33.9	(4.0)	4.8	(1.5)
OECD	Colombia	0.37	(0.08)	1.13	(0.06)	19.9	(2.7)	44.4	(3.3)	28.1	(3.1)	7.5	(1.9)
OECD	Czech Republic	-0.33	(0.06)	0.88	(0.03)	32.1	(3.2)	57.8	(3.4)	9.9	(1.8)	0.1	(0.1)
OECD	Denmark	-0.22	(0.06)	0.89	(0.04)	23.7	(2.9)	61.0	(3.5)	13.9	(2.3)	1.4	(0.8)
OECD	Estonia	0.06	(0.04)	0.94	(0.03)	16.2	(1.7)	48.5	(2.3)	29.5	(1.8)	5.8	(0.8)
OECD	Finland	0.04	(0.06)	0.81	(0.04)	7.6	(1.9)	60.7	(3.3)	31.2	(3.3)	0.5	(0.5)
OECD	France	0.28	(0.07)	1.03	(0.05)	19.0	(2.5)	45.4	(3.6)	31.3	(3.5)	4.2	(1.5)
OECD	Germany	0.46	(0.05)	0.65	(0.04)	11.1	(2.4)	59.2	(3.3)	28.1	(3.5)	1.5	(0.9)
OECD	Greece	-0.24	(0.07)	1.05	(0.05)	31.8	(3.0)	47.5	(3.3)	19.5	(2.6)	1.3	(0.7)
OECD	Hungary	-0.35	(0.07)	0.96	(0.06)	19.7	(2.9)	56.2	(3.6)	23.6	(3.1)	0.5	(0.5)
OECD	Iceland	0.28	(0.00)	0.90	(0.00)	7.1	(0.2)	44.6	(0.3)	46.3	(0.3)	2.0	(0.0)
OECD	Ireland	0.29	(0.06)	0.76	(0.05)	5.3	(1.5)	62.9	(4.0)	31.9	(3.9)	0.0	c
OECD	Israel	0.46	(0.08)	1.08	(0.06)	12.9	(2.4)	51.7	(4.3)	29.7	(3.8)	5.6	(1.6)
OECD	Italy	0.22	(0.06)	0.98	(0.04)	18.2	(2.3)	58.4	(2.9)	21.5	(2.2)	2.0	(0.8)
OECD	Japan	0.51	(0.05)	0.64	(0.07)	3.9	(1.5)	54.4	(3.6)	41.2	(3.3)	0.5	(0.5)
OECD	Korea	-0.04	(0.09)	1.09	(0.06)	17.4	(3.0)	51.6	(3.6)	29.1	(3.5)	1.9	(1.0)
OECD	Latvia	-0.30	(0.04)	0.89	(0.04)	25.6	(1.9)	54.2	(1.8)	19.3	(1.6)	0.9	(0.3)
OECD	Lithuania	-0.37	(0.03)	0.87	(0.03)	25.0	(1.9)	61.9	(2.3)	12.1	(1.1)	0.9	(0.5)
OECD	Luxembourg	0.12	(0.00)	0.60	(0.00)	4.9	(0.0)	73.1	(0.1)	21.9	(0.1)	0.0	c
OECD	Mexico	0.07	(0.06)	1.05	(0.05)	21.5	(2.5)	60.3	(3.2)	14.6	(2.1)	3.6	(1.3)
OECD	Netherlands*	0.93	(0.05)	0.64	(0.04)	3.0	(1.4)	28.2	(4.3)	61.0	(4.5)	7.7	(2.1)
OECD	New Zealand	0.29	(0.05)	0.71	(0.04)	3.9	(1.5)	56.7	(3.3)	37.0	(2.9)	2.4	(0.9)
OECD	Norway	0.38	(0.05)	0.70	(0.04)	4.8	(1.5)	50.3	(3.0)	42.9	(3.1)	2.0	(1.0)
OECD	Poland	-0.37	(0.06)	0.98	(0.04)	30.4	(3.0)	57.8	(3.2)	11.2	(2.4)	0.6	(0.5)
OECD	Portugal*	0.53	(0.06)	0.93	(0.06)	7.2	(1.6)	47.9	(3.3)	41.6	(3.3)	3.3	(1.2)
OECD	Slovak Republic	-0.26	(0.04)	0.88	(0.03)	20.3	(2.3)	60.5	(2.7)	18.7	(2.1)	0.5	(0.5)
OECD	Slovenia	0.23	(0.01)	0.91	(0.01)	19.4	(0.6)	51.1	(0.7)	29.5	(0.4)	0.0	c
OECD	Spain	-0.05	(0.04)	0.94	(0.03)	25.4	(1.8)	54.4	(2.0)	18.3	(1.6)	1.8	(0.6)
OECD	Sweden	0.07	(0.06)	0.89	(0.04)	11.3	(1.9)	49.0	(3.6)	36.9	(3.7)	2.8	(1.2)
OECD	Switzerland	-0.17	(0.06)	0.82	(0.04)	16.7	(2.8)	64.0	(3.3)	18.2	(2.6)	1.1	(0.7)
OECD	Turkey	-0.18	(0.08)	0.93	(0.05)	18.3	(3.2)	55.9	(3.9)	24.0	(3.0)	1.9	(1.0)
OECD	United Kingdom	0.05	(0.06)	0.81	(0.05)	11.0	(2.5)	62.8	(3.7)	26.2	(3.1)	0.0	c
OECD	United States*	0.25	(0.06)	0.80	(0.05)	10.1	(2.5)	54.9	(3.8)	34.5	(3.6)	0.5	(0.6)
	OECD average	0.13	(0.01)	0.88	(0.01)	15.1	(0.4)	54.7	(0.5)	28.0	(0.5)	2.2	(0.2)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. Higher values in the index indicate that teacher behaviour hinders student learning to a greater extent.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.7.1 [2/6] **Teacher behaviour hindering student learning**

Based on principals' reports

		Index of teacher behaviour hindering learning[1]				Percentage of students in schools whose principal reported that the following behaviours hinder student learning:							
						Teachers not meeting individual students' needs							
		Average		Variability		Not at all		Very little		To some extent		A lot	
		Mean index	S.E.	S.D.	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	-0.89	(0.06)	1.06	(0.06)	66.6	(2.8)	26.7	(2.5)	4.3	(1.3)	2.4	(1.3)
	Argentina	0.54	(0.06)	1.00	(0.04)	11.8	(2.3)	46.7	(2.6)	37.3	(3.0)	4.2	(1.3)
	Baku (Azerbaijan)	-0.18	(0.11) †	1.24	(0.05) †	31.2	(4.0) †	42.0	(4.3) †	20.8	(4.0) †	6.0	(1.8) †
	Belarus	-0.75	(0.07)	1.04	(0.06)	53.9	(3.8)	35.9	(3.8)	8.8	(2.0)	1.4	(0.8)
	Bosnia and Herzegovina	0.27	(0.07)	1.03	(0.05)	23.2	(2.8)	49.0	(3.6)	21.6	(3.0)	6.2	(1.8)
	Brazil	0.44	(0.05)	1.13	(0.04)	12.0	(1.6)	42.1	(2.2)	38.0	(2.3)	7.8	(1.2)
	Brunei Darussalam	0.50	(0.00)	0.84	(0.00)	16.4	(0.1)	32.0	(0.1)	46.3	(0.1)	5.3	(0.0)
	B-S-J-Z (China)	0.46	(0.09)	1.42	(0.05)	12.5	(2.1)	35.5	(3.9)	45.0	(3.3)	7.0	(1.9)
	Bulgaria	-0.26	(0.11)	1.34	(0.09)	37.5	(3.9)	37.3	(3.5)	19.8	(3.4)	5.4	(1.6)
	Costa Rica	0.49	(0.07)	1.00	(0.07)	9.7	(2.3)	50.1	(3.3)	35.8	(3.0)	4.4	(1.5)
	Croatia	0.45	(0.07)	1.06	(0.06)	12.3	(2.6)	48.0	(3.7)	34.7	(3.6)	5.0	(1.4)
	Cyprus	-0.14	(0.01)	0.88	(0.01)	28.5	(0.8)	61.7	(0.8)	9.7	(0.2)	0.0	c
	Dominican Republic	0.04	(0.07)	0.90	(0.04)	13.9	(2.4)	65.3	(3.1)	19.1	(2.6)	1.7	(0.8)
	Georgia	-0.38	(0.07)	1.29	(0.07)	45.5	(2.9)	33.6	(3.0)	15.3	(2.5)	5.5	(1.5)
	Hong Kong (China)*	0.47	(0.07)	0.80	(0.08)	1.2	(1.0)	42.4	(4.4)	49.5	(4.7)	6.9	(2.7)
	Indonesia	-0.30	(0.10)	1.08	(0.06)	45.2	(4.5)	40.2	(4.5)	11.5	(3.0)	3.1	(2.2)
	Jordan	0.47	(0.08)	1.22	(0.06)	15.7	(2.3)	46.4	(3.4)	29.9	(3.1)	7.9	(1.9)
	Kazakhstan	1.31	(0.08)	1.59	(0.04)	13.4	(1.7)	25.8	(1.9)	37.8	(2.3)	23.0	(2.4)
	Kosovo	0.13	(0.04)	1.12	(0.04)	31.6	(1.5)	43.5	(1.6)	21.6	(1.5)	3.3	(0.8)
	Lebanon	0.05	(0.08)	1.29	(0.06)	28.6	(2.8)	42.4	(2.8)	21.3	(2.6)	7.8	(1.6)
	Macao (China)	0.00	(0.00)	1.01	(0.00)	10.8	(0.0)	63.5	(0.0)	23.8	(0.0)	1.9	(0.0)
	Malaysia	0.13	(0.09)	1.10	(0.06)	24.8	(3.6)	50.0	(3.8)	20.7	(3.0)	4.5	(1.5)
	Malta	0.22	(0.00)	1.02	(0.00)	16.0	(0.1)	47.8	(0.1)	33.0	(0.2)	3.3	(0.1)
	Moldova	-0.02	(0.08)	1.19	(0.05)	32.8	(3.3)	45.0	(3.8)	16.0	(2.3)	6.1	(2.0)
	Montenegro	-0.23	(0.01)	0.84	(0.01)	31.3	(0.4)	63.3	(0.6)	5.4	(0.5)	0.0	c
	Morocco	0.48	(0.10)	1.36	(0.06)	16.7	(3.0)	35.9	(4.0)	35.0	(3.6)	12.4	(2.7)
	North Macedonia	-0.39	(0.00)	1.40	(0.00)	40.9	(0.1)	39.7	(0.1)	14.1	(0.1)	5.3	(0.0)
	Panama	0.45	(0.06)	0.98	(0.05)	14.6	(2.0)	58.0	(2.4)	24.6	(2.4)	2.8	(1.0)
	Peru	0.41	(0.06)	1.12	(0.05)	17.1	(2.1)	52.7	(2.7)	21.3	(2.2)	9.0	(1.7)
	Philippines	-0.08	(0.10)	1.19	(0.09)	23.2	(3.0)	56.0	(3.0)	14.8	(2.5)	6.0	(2.0)
	Qatar	-0.63	(0.00)	1.09	(0.00)	41.7	(0.1)	43.8	(0.1)	13.8	(0.1)	0.7	(0.0)
	Romania	-0.21	(0.08)	0.97	(0.05)	25.7	(4.2)	55.5	(4.5)	18.0	(3.2)	0.8	(0.7)
	Russia	0.56	(0.09)	1.54	(0.06)	19.2	(2.3)	29.6	(3.4)	32.8	(3.6)	18.4	(2.7)
	Saudi Arabia	-0.23	(0.09)	1.27	(0.08)	46.9	(3.5)	34.8	(3.5)	15.0	(2.4)	3.3	(1.2)
	Serbia	-0.25	(0.08)	1.00	(0.04)	32.2	(3.7)	51.9	(3.4)	14.8	(2.8)	1.2	(0.8)
	Singapore	0.06	(0.02)	0.89	(0.02)	10.4	(0.6)	64.1	(0.7)	23.6	(0.4)	1.9	(0.0)
	Chinese Taipei	0.33	(0.09)	1.13	(0.07)	12.6	(2.3)	55.8	(3.7)	26.5	(3.1)	5.1	(1.7)
	Thailand	-0.49	(0.07)	1.01	(0.04)	44.1	(3.9)	42.0	(4.0)	13.8	(2.7)	0.1	(0.1)
	Ukraine	-0.11	(0.12)	1.45	(0.07)	30.9	(3.3)	41.9	(3.5)	17.8	(3.1)	9.4	(2.1)
	United Arab Emirates	0.20	(0.03)	1.41	(0.03)	21.2	(0.9)	50.3	(1.8)	16.9	(1.0)	11.5	(0.6)
	Uruguay	0.76	(0.07)	1.11	(0.06)	14.8	(2.4)	38.8	(3.8)	39.6	(3.6)	6.8	(1.8)
	Viet Nam	0.01	(0.09)	0.99	(0.08)	18.9	(3.5)	63.5	(4.5)	15.4	(3.4)	2.3	(1.3)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. Higher values in the index indicate that teacher behaviour hinders student learning to a greater extent.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.7.1 [3/6] **Teacher behaviour hindering student learning**

Based on principals' reports

		Percentage of students in schools whose principal reported that the following behaviours hinder student learning:															
		Teacher absenteeism								Staff resisting change							
		Not at all		Very little		To some extent		A lot		Not at all		Very little		To some extent		A lot	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	18.4	(1.5)	62.2	(1.8)	18.2	(1.3)	1.2	(0.4)	12.4	(1.2)	50.7	(1.7)	32.8	(1.6)	4.2	(0.9)
OECD	Austria	31.9	(2.9)	50.5	(3.2)	15.3	(2.5)	2.3	(0.9)	27.1	(3.0)	48.0	(3.7)	21.8	(2.8)	3.1	(1.0)
OECD	Belgium	6.4	(1.6)	51.9	(2.9)	38.4	(2.9)	3.3	(1.2)	5.9	(1.5)	41.6	(2.9)	42.4	(3.0)	10.1	(2.0)
OECD	Canada	22.6	(2.0)	58.0	(2.4)	17.6	(2.1)	1.8	(0.8)	9.9	(1.4)	51.4	(2.4)	31.0	(2.1)	7.7	(1.3)
OECD	Chile	13.7	(2.1)	51.2	(4.0)	25.0	(3.4)	10.2	(2.4)	12.0	(2.3)	44.6	(4.0)	32.4	(3.7)	11.0	(2.4)
OECD	Colombia	23.2	(2.9)	45.0	(3.0)	26.0	(3.2)	5.8	(1.7)	14.5	(2.4)	42.2	(4.1)	33.6	(4.0)	9.7	(2.1)
OECD	Czech Republic	26.9	(2.7)	61.1	(2.8)	12.1	(1.6)	0.0	c	41.1	(3.3)	42.1	(3.4)	15.8	(2.2)	0.9	(0.6)
OECD	Denmark	11.8	(2.1)	71.0	(3.2)	16.2	(2.6)	1.0	(0.7)	33.8	(3.5)	49.4	(3.4)	16.3	(2.3)	0.5	(0.5)
OECD	Estonia	39.0	(2.0)	41.4	(2.0)	15.6	(1.3)	4.1	(0.7)	27.1	(1.9)	45.9	(2.0)	23.2	(1.6)	3.8	(0.7)
OECD	Finland	21.4	(2.9)	65.9	(2.8)	12.8	(2.3)	0.0	c	22.6	(2.8)	50.7	(3.3)	24.7	(2.9)	2.0	(1.0)
OECD	France	26.8	(3.3)	56.6	(3.7)	15.4	(2.3)	1.2	(0.8)	18.6	(2.8)	35.5	(3.4)	35.9	(3.6)	10.1	(2.0)
OECD	Germany	9.4	(2.3)	48.3	(3.8)	38.7	(3.5)	3.5	(1.3)	9.2	(2.2)	53.6	(3.2)	34.1	(3.3)	3.1	(1.4)
OECD	Greece	41.7	(3.4)	44.6	(3.4)	11.8	(2.3)	1.9	(1.0)	32.5	(3.0)	42.4	(3.4)	21.4	(2.8)	3.6	(1.4)
OECD	Hungary	52.0	(3.5)	43.1	(3.2)	4.3	(1.6)	0.6	(0.5)	43.3	(3.9)	46.5	(4.0)	9.0	(2.2)	1.2	(0.8)
OECD	Iceland	15.3	(0.2)	55.5	(0.3)	22.5	(0.2)	6.6	(0.0)	20.9	(0.2)	41.8	(0.3)	37.3	(0.2)	0.0	c
OECD	Ireland	18.2	(3.1)	62.2	(4.1)	18.7	(3.1)	0.9	(0.8)	16.3	(3.0)	54.1	(4.2)	25.5	(3.5)	4.0	(1.6)
OECD	Israel	11.3	(2.5)	42.4	(4.4)	39.2	(4.1)	7.1	(2.0)	23.9	(3.0)	46.0	(3.6)	21.8	(3.1)	8.3	(2.4)
OECD	Italy	38.3	(3.3)	50.3	(3.5)	10.5	(1.9)	1.0	(0.7)	15.4	(2.4)	36.5	(3.3)	40.1	(3.0)	8.0	(1.9)
OECD	Japan	60.9	(3.4)	32.7	(3.8)	6.4	(1.8)	0.0	c	13.1	(2.3)	57.7	(3.6)	27.1	(3.3)	2.1	(0.9)
OECD	Korea	85.3	(2.5)	9.9	(2.1)	2.2	(1.1)	2.5	(1.2)	40.6	(3.8)	42.6	(3.7)	14.7	(2.5)	2.0	(1.0)
OECD	Latvia	54.2	(1.9)	37.4	(1.6)	8.2	(1.3)	0.3	(0.3)	36.1	(2.2)	53.5	(2.3)	10.1	(1.2)	0.3	(0.3)
OECD	Lithuania	94.2	(0.9)	4.5	(0.9)	0.9	(0.1)	0.4	(0.3)	34.4	(1.5)	55.9	(1.6)	8.9	(0.7)	0.8	(0.5)
OECD	Luxembourg	14.5	(0.1)	80.7	(0.1)	4.8	(0.0)	0.0	c	9.9	(0.1)	78.3	(0.1)	11.8	(0.1)	0.1	(0.0)
OECD	Mexico	28.3	(2.7)	57.7	(3.2)	11.7	(2.1)	2.3	(0.8)	25.5	(2.6)	41.2	(3.4)	27.6	(2.9)	5.7	(1.5)
OECD	Netherlands*	3.8	(1.5)	49.1	(4.8)	37.9	(4.7)	9.2	(2.4)	5.5	(2.0)	36.2	(3.9)	52.4	(4.0)	5.9	(2.1)
OECD	New Zealand	31.9	(3.4)	58.4	(3.4)	9.7	(2.0)	0.0	c	7.9	(2.1)	58.0	(3.2)	32.9	(3.2)	1.1	(0.7)
OECD	Norway	8.4	(1.9)	60.8	(3.1)	29.2	(2.8)	1.6	(0.9)	18.7	(2.6)	60.1	(3.0)	21.1	(2.5)	0.0	c
OECD	Poland	49.8	(3.7)	40.8	(3.6)	8.4	(1.8)	1.0	(0.7)	39.7	(3.1)	39.9	(3.3)	17.5	(2.4)	2.9	(1.2)
OECD	Portugal*	18.0	(2.5)	68.1	(3.1)	11.7	(2.5)	2.2	(1.0)	6.4	(1.5)	35.1	(3.3)	48.3	(3.5)	10.3	(2.1)
OECD	Slovak Republic	63.4	(2.7)	29.7	(2.7)	6.3	(1.4)	0.6	(0.5)	35.0	(3.0)	50.1	(3.3)	13.1	(2.1)	1.8	(0.9)
OECD	Slovenia	18.1	(0.6)	59.2	(0.7)	21.2	(0.5)	1.5	(0.0)	14.9	(0.7)	47.2	(0.7)	33.2	(0.4)	4.8	(0.1)
OECD	Spain	51.7	(2.0)	41.0	(2.0)	6.1	(0.9)	1.2	(0.5)	18.8	(1.5)	43.8	(2.0)	34.0	(2.0)	3.4	(0.5)
OECD	Sweden	19.8	(2.6)	59.6	(3.4)	18.2	(2.6)	2.4	(1.1)	28.1	(3.5)	53.7	(3.8)	16.7	(2.9)	1.5	(0.8)
OECD	Switzerland	41.4	(3.6)	53.8	(3.9)	4.7	(1.7)	0.0	c	24.9	(3.2)	51.3	(3.9)	22.1	(2.9)	1.8	(1.0)
OECD	Turkey	28.4	(3.6)	64.6	(3.7)	6.9	(2.0)	0.0	(0.0)	38.0	(4.2)	46.9	(4.5)	12.9	(2.8)	2.2	(1.1)
OECD	United Kingdom	16.2	(2.5)	63.2	(3.3)	20.3	(2.9)	0.2	(0.1)	25.0	(3.3)	63.9	(3.5)	10.5	(2.2)	0.7	(0.6)
OECD	United States*	25.5	(3.4)	60.3	(4.4)	11.9	(2.5)	2.2	(1.4)	14.4	(2.9)	50.7	(4.0)	31.3	(3.7)	3.6	(1.5)
	OECD average	30.9	(0.4)	51.2	(0.5)	15.8	(0.4)	2.2	(0.2)	22.2	(0.4)	48.4	(0.5)	25.6	(0.4)	3.8	(0.2)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. Higher values in the index indicate that teacher behaviour hinders student learning to a greater extent.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.7.1 [4/6] **Teacher behaviour hindering student learning**

Based on principals' reports

		Percentage of students in schools whose principal reported that the following behaviours hinder student learning:															
		Teacher absenteeism								Staff resisting change							
		Not at all		Very little		To some extent		A lot		Not at all		Very little		To some extent		A lot	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	69.9	(2.5)	25.3	(2.4)	2.5	(1.0)	2.3	(0.8)	66.8	(2.6)	22.4	(2.6)	9.6	(1.7)	1.2	(0.6)
	Argentina	9.4	(1.8)	36.7	(2.9)	41.3	(3.2)	12.6	(2.1)	15.4	(2.0)	40.6	(3.1)	33.9	(3.0)	10.1	(1.9)
	Baku (Azerbaijan)	65.9	(4.1) †	9.9	(2.2) †	10.2	(2.9) †	13.9	(2.9) †	55.5	(4.6) †	22.4	(3.5) †	19.4	(4.1) †	2.7	(0.7) †
	Belarus	92.8	(1.7)	2.7	(1.2)	1.9	(0.9)	2.6	(1.2)	72.7	(2.9)	19.6	(2.7)	6.4	(1.8)	1.4	(0.8)
	Bosnia and Herzegovina	26.2	(2.8)	55.2	(3.4)	10.5	(2.0)	8.1	(2.1)	18.7	(2.6)	42.9	(3.6)	34.5	(3.2)	3.9	(1.3)
	Brazil	24.1	(2.2)	39.8	(2.6)	28.1	(2.2)	8.1	(1.2)	18.3	(1.9)	44.5	(2.7)	28.0	(2.3)	9.3	(1.0)
	Brunei Darussalam	25.7	(0.1)	58.5	(0.1)	13.1	(0.1)	2.7	(0.0)	8.6	(0.1)	58.3	(0.1)	30.5	(0.1)	2.7	(0.0)
	B-S-J-Z (China)	51.3	(4.0)	16.9	(2.9)	13.9	(2.4)	18.0	(2.5)	22.9	(2.6)	24.0	(3.5)	35.5	(3.3)	17.6	(3.0)
	Bulgaria	39.4	(4.3)	40.4	(4.1)	15.1	(2.9)	5.1	(2.0)	49.1	(4.0)	28.5	(3.5)	15.5	(2.8)	7.0	(2.2)
	Costa Rica	15.0	(2.7)	53.5	(3.6)	24.6	(3.4)	6.9	(1.7)	16.5	(2.7)	44.8	(4.0)	30.4	(3.3)	8.3	(1.8)
	Croatia	37.7	(3.4)	46.9	(3.4)	11.4	(2.0)	4.1	(1.3)	12.0	(2.3)	46.8	(3.6)	31.8	(3.1)	9.4	(2.0)
	Cyprus	15.7	(0.5)	73.5	(0.5)	8.4	(0.4)	2.4	(0.0)	30.6	(0.5)	52.6	(0.5)	16.3	(0.2)	0.6	(0.0)
	Dominican Republic	39.7	(3.3)	54.3	(3.7)	5.4	(1.8)	0.6	(0.5)	23.7	(3.3)	50.2	(4.0)	21.7	(2.9)	4.5	(1.3)
	Georgia	50.7	(3.0)	38.0	(3.1)	6.3	(1.7)	5.0	(1.4)	60.6	(2.8)	28.6	(2.6)	8.0	(2.0)	2.8	(1.0)
	Hong Kong (China)*	23.7	(4.1)	63.1	(4.8)	11.8	(3.0)	1.3	(1.3)	12.7	(3.6)	44.4	(4.4)	37.1	(4.1)	5.7	(1.8)
	Indonesia	37.3	(4.1)	53.7	(4.3)	6.2	(2.3)	2.8	(2.1)	76.3	(4.4)	20.0	(4.3)	3.3	(1.7)	0.3	(0.3)
	Jordan	15.1	(2.2)	43.4	(3.6)	24.8	(2.9)	16.8	(2.6)	21.9	(2.9)	42.8	(3.6)	26.0	(2.7)	9.2	(1.7)
	Kazakhstan	25.7	(2.0)	12.9	(1.6)	21.6	(2.2)	39.7	(2.6)	27.2	(2.0)	17.9	(2.1)	29.0	(2.3)	25.9	(2.2)
	Kosovo	20.0	(1.2)	60.1	(1.6)	14.3	(1.2)	5.6	(1.1)	29.0	(1.4)	43.8	(1.4)	21.6	(1.6)	5.6	(1.0)
	Lebanon	31.8	(3.0)	45.3	(3.1)	15.0	(2.0)	7.9	(1.8)	33.9	(2.6)	40.4	(2.8)	19.3	(2.5)	6.4	(1.4)
	Macao (China)	48.3	(0.1)	37.4	(0.1)	12.4	(0.0)	1.9	(0.0)	29.8	(0.0)	59.6	(0.1)	8.7	(0.0)	1.9	(0.0)
	Malaysia	27.2	(3.1)	48.4	(3.5)	15.9	(2.6)	8.5	(2.1)	36.1	(3.6)	48.8	(3.7)	11.9	(2.3)	3.2	(1.2)
	Malta	31.6	(0.1)	46.1	(0.1)	22.3	(0.1)	0.0	c	16.9	(0.1)	58.8	(0.2)	22.5	(0.1)	1.9	(0.0)
	Moldova	46.8	(3.4)	34.5	(3.1)	12.2	(2.1)	6.5	(1.9)	25.8	(2.7)	45.5	(3.8)	25.6	(3.3)	3.1	(1.3)
	Montenegro	25.0	(0.4)	69.0	(0.6)	5.9	(0.5)	0.0	c	32.9	(0.3)	55.3	(0.6)	11.8	(0.6)	0.0	c
	Morocco	32.5	(3.3)	32.5	(3.6)	16.1	(3.1)	18.8	(3.2)	27.4	(3.2)	28.7	(3.5)	29.5	(3.6)	14.4	(2.9)
	North Macedonia	40.4	(0.1)	48.6	(0.1)	3.9	(0.0)	7.1	(0.0)	41.4	(0.1)	35.7	(0.1)	10.0	(0.0)	12.9	(0.1)
	Panama	11.1	(1.7)	61.8	(2.7)	22.6	(2.0)	4.4	(1.4)	13.3	(2.3)	49.5	(2.9)	30.0	(2.4)	7.2	(1.6)
	Peru	25.5	(2.6)	57.0	(2.9)	10.6	(1.8)	6.8	(1.5)	18.9	(2.1)	47.8	(2.9)	22.6	(2.4)	10.7	(1.9)
	Philippines	29.3	(3.9)	57.7	(3.7)	8.7	(2.1)	4.3	(1.7)	38.7	(3.8)	50.8	(3.9)	6.7	(2.0)	3.8	(1.6)
	Qatar	48.3	(0.1)	40.5	(0.1)	9.1	(0.0)	2.1	(0.0)	57.0	(0.1)	32.0	(0.1)	9.9	(0.1)	1.1	(0.0)
	Romania	65.2	(3.5)	31.2	(3.4)	1.5	(0.9)	2.1	(0.7)	16.7	(3.3)	48.9	(3.9)	29.5	(3.6)	4.8	(1.5)
	Russia	46.9	(3.2)	16.1	(2.2)	17.9	(2.8)	19.2	(2.7)	26.9	(2.8)	28.1	(3.4)	32.8	(3.4)	12.2	(2.3)
	Saudi Arabia	27.9	(3.0)	49.1	(3.6)	15.3	(2.7)	7.7	(1.9)	38.6	(3.3)	36.6	(3.1)	17.9	(2.8)	6.9	(1.9)
	Serbia	48.1	(3.6)	46.9	(3.4)	5.0	(1.8)	0.0	c	32.6	(3.5)	44.1	(3.4)	21.5	(3.1)	1.8	(1.2)
	Singapore	45.3	(1.1)	50.4	(1.0)	3.0	(0.4)	1.3	(0.0)	15.6	(0.9)	59.4	(1.4)	22.8	(1.0)	2.2	(0.0)
	Chinese Taipei	69.7	(3.3)	23.1	(3.3)	2.4	(1.0)	4.9	(1.7)	18.7	(2.4)	49.9	(4.0)	21.6	(2.9)	9.8	(2.4)
	Thailand	54.3	(3.8)	41.7	(3.8)	3.5	(1.1)	0.5	(0.5)	55.6	(4.0)	38.1	(4.0)	5.1	(1.7)	1.1	(0.8)
	Ukraine	75.6	(3.3)	4.4	(1.5)	3.5	(1.1)	16.4	(2.9)	54.9	(4.0)	23.4	(3.1)	11.3	(2.2)	10.4	(2.2)
	United Arab Emirates	27.5	(1.3)	46.1	(1.9)	12.9	(0.7)	13.6	(1.0)	36.4	(1.6)	35.4	(1.8)	19.5	(1.1)	8.7	(0.8)
	Uruguay	8.5	(2.0)	30.1	(3.8)	43.5	(3.9)	17.9	(3.1)	13.4	(2.3)	27.0	(3.3)	44.9	(4.1)	14.7	(2.8)
	Viet Nam	44.9	(4.6)	49.1	(4.7)	3.8	(1.6)	2.2	(1.4)	67.9	(4.1)	29.0	(4.0)	2.4	(1.4)	0.7	(0.8)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. Higher values in the index indicate that teacher behaviour hinders student learning to a greater extent.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.7.1 [5/6] **Teacher behaviour hindering student learning**

Based on principals' reports

		Percentage of students in schools whose principal reported that the following behaviours hinder student learning:															
		Teachers being too strict with students								Teachers not being well prepared for classes							
		Not at all		Very little		To some extent		A lot		Not at all		Very little		To some extent		A lot	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	29.5	(1.8)	61.1	(2.0)	9.4	(1.3)	0.0	c	20.0	(1.6)	66.5	(2.0)	11.4	(1.5)	2.1	(0.6)
	Austria	29.5	(3.7)	59.4	(3.8)	10.9	(2.2)	0.2	(0.2)	43.2	(3.5)	52.8	(3.6)	2.7	(1.1)	1.3	(0.9)
	Belgium	14.1	(2.2)	66.4	(3.1)	15.8	(2.3)	3.6	(1.2)	12.8	(2.3)	66.2	(3.3)	18.8	(2.3)	2.2	(1.0)
	Canada	20.2	(1.7)	62.4	(2.5)	15.9	(2.0)	1.5	(0.6)	22.9	(2.0)	68.5	(2.2)	7.4	(1.0)	1.2	(0.6)
	Chile	12.6	(2.6)	60.3	(3.7)	26.2	(3.5)	0.8	(0.8)	24.5	(3.4)	44.4	(3.9)	22.2	(3.3)	9.0	(2.4)
	Colombia	16.9	(2.5)	56.7	(3.2)	23.6	(2.7)	2.7	(1.1)	43.0	(3.6)	36.5	(3.6)	12.0	(2.3)	8.4	(2.0)
	Czech Republic	29.2	(2.9)	63.9	(3.2)	6.9	(1.5)	0.0	c	56.1	(3.3)	41.2	(3.3)	1.2	(0.5)	1.5	(0.6)
	Denmark	38.0	(3.2)	59.2	(3.3)	2.1	(0.8)	0.8	(0.6)	40.4	(3.5)	52.6	(3.4)	5.6	(1.6)	1.4	(0.8)
	Estonia	26.1	(2.1)	55.0	(2.0)	18.9	(1.3)	0.0	c	44.0	(1.9)	49.6	(1.9)	4.2	(0.6)	2.3	(0.8)
	Finland	39.8	(3.7)	54.2	(4.0)	6.0	(1.7)	0.0	c	39.4	(3.4)	55.7	(3.3)	4.3	(1.5)	0.5	(0.5)
	France	27.5	(3.1)	48.7	(3.8)	19.3	(2.8)	4.5	(1.5)	26.9	(3.1)	54.4	(3.7)	17.1	(2.9)	1.6	(0.9)
	Germany	25.2	(2.9)	64.6	(3.3)	10.2	(2.2)	0.0	c	11.8	(2.4)	74.6	(3.4)	12.8	(2.4)	0.8	(0.8)
	Greece	36.0	(3.4)	54.2	(3.5)	7.4	(1.8)	2.3	(1.1)	57.0	(2.9)	30.0	(2.5)	7.3	(1.7)	5.7	(1.7)
	Hungary	43.0	(3.4)	46.6	(3.6)	10.0	(2.4)	0.5	(0.5)	49.0	(3.9)	42.6	(3.6)	5.5	(1.7)	2.8	(1.3)
	Iceland	48.0	(0.3)	46.0	(0.2)	6.1	(0.1)	0.0	c	29.2	(0.2)	60.5	(0.2)	8.2	(0.1)	2.2	(0.1)
	Ireland	23.8	(3.7)	67.3	(3.8)	8.8	(2.2)	0.0	c	18.1	(3.1)	68.5	(3.9)	12.1	(2.8)	1.3	(0.9)
	Israel	17.2	(2.7)	62.9	(3.7)	17.7	(2.9)	2.2	(1.1)	23.9	(3.0)	53.4	(3.8)	14.4	(2.6)	8.3	(2.4)
	Italy	22.5	(2.2)	58.0	(3.1)	19.3	(2.8)	0.2	(0.1)	27.5	(3.0)	51.1	(3.4)	14.1	(2.2)	7.3	(1.7)
	Japan	10.6	(2.1)	65.5	(3.6)	22.7	(3.2)	1.2	(0.8)	5.1	(1.7)	66.5	(3.6)	25.6	(3.3)	2.8	(1.3)
	Korea	29.8	(3.8)	52.7	(3.9)	17.1	(2.8)	0.3	(0.3)	32.6	(3.8)	47.8	(3.7)	15.4	(2.8)	4.2	(1.6)
	Latvia	31.7	(1.9)	59.9	(1.9)	7.8	(1.1)	0.6	(0.4)	37.6	(2.0)	56.6	(1.8)	5.2	(0.8)	0.6	(0.4)
	Lithuania	49.3	(1.8)	48.4	(1.8)	2.0	(0.4)	0.3	(0.2)	39.9	(1.6)	55.5	(1.6)	2.3	(0.4)	2.3	(0.6)
	Luxembourg	26.2	(0.1)	68.3	(0.1)	2.5	(0.1)	3.0	(0.0)	18.1	(0.1)	81.8	(0.1)	0.0	c	0.1	(0.0)
	Mexico	17.9	(2.5)	55.5	(3.3)	21.7	(2.8)	4.9	(1.4)	41.4	(2.9)	47.3	(3.3)	6.9	(1.7)	4.4	(1.4)
	Netherlands*	11.1	(2.6)	64.2	(4.2)	23.3	(3.8)	1.3	(0.4)	7.7	(2.2)	58.2	(4.1)	30.1	(3.8)	3.9	(1.5)
	New Zealand	20.9	(2.8)	71.9	(3.0)	6.8	(1.7)	0.4	(0.4)	15.1	(2.4)	76.8	(2.4)	7.0	(1.2)	1.1	(0.7)
	Norway	21.8	(2.5)	71.8	(3.1)	6.5	(1.7)	0.0	c	11.8	(2.2)	78.7	(2.5)	8.9	(1.7)	0.6	(0.6)
	Poland	48.3	(3.2)	43.3	(3.2)	6.9	(1.8)	1.4	(0.8)	47.3	(3.3)	43.7	(3.6)	2.3	(1.0)	6.7	(1.7)
	Portugal*	21.5	(2.3)	65.7	(3.0)	10.2	(1.9)	2.6	(1.2)	23.6	(2.4)	56.3	(3.4)	12.7	(2.5)	7.4	(1.4)
	Slovak Republic	27.3	(2.3)	54.1	(2.6)	18.2	(2.1)	0.4	(0.3)	43.7	(2.7)	47.2	(2.7)	6.5	(1.4)	2.5	(1.0)
	Slovenia	21.5	(0.6)	68.3	(0.6)	10.1	(0.1)	0.1	(0.1)	32.6	(0.6)	53.3	(0.6)	9.4	(0.3)	4.8	(0.3)
	Spain	23.8	(1.9)	65.3	(2.0)	9.9	(1.1)	1.1	(0.3)	29.4	(1.8)	57.1	(2.1)	9.2	(1.5)	4.4	(1.0)
	Sweden	42.5	(3.7)	53.2	(3.7)	4.3	(1.5)	0.0	c	31.0	(3.0)	60.5	(3.1)	8.5	(1.7)	0.0	c
	Switzerland	28.4	(3.4)	65.9	(3.7)	5.3	(1.8)	0.4	(0.4)	46.8	(3.7)	51.2	(3.7)	1.5	(1.0)	0.5	(0.4)
	Turkey	55.9	(3.7)	43.2	(3.6)	0.0	c	0.9	(0.7)	34.2	(3.6)	51.0	(3.6)	11.0	(2.3)	3.8	(1.3)
	United Kingdom	32.9	(3.5)	64.4	(3.5)	2.7	(1.0)	0.1	(0.1)	22.3	(3.2)	72.9	(3.5)	4.1	(1.3)	0.7	(0.5)
	United States*	20.6	(3.4)	68.7	(4.4)	10.8	(2.6)	0.0	c	22.0	(3.4)	68.4	(3.5)	9.6	(2.3)	0.0	c
	OECD average	28.1	(0.5)	59.4	(0.5)	11.4	(0.3)	1.0	(0.1)	30.6	(0.5)	56.8	(0.5)	9.7	(0.3)	3.0	(0.2)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. Higher values in the index indicate that teacher behaviour hinders student learning to a greater extent.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.7.1 [6/6] **Teacher behaviour hindering student learning**

Based on principals' reports

		Percentage of students in schools whose principal reported that the following behaviours hinder student learning:															
		Teachers being too strict with students								Teachers not being well prepared for classes							
		Not at all		Very little		To some extent		A lot		Not at all		Very little		To some extent		A lot	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	47.5	(2.3)	42.1	(2.6)	8.2	(1.7)	2.2	(0.9)	69.8	(2.3)	18.5	(1.7)	3.1	(0.6)	8.5	(1.5)
	Argentina	23.4	(2.8)	53.4	(3.4)	21.8	(2.5)	1.3	(0.8)	36.1	(2.9)	41.6	(3.0)	18.6	(2.6)	3.8	(1.2)
	Baku (Azerbaijan)	27.3	(3.8) †	34.9	(3.8) †	30.4	(4.2) †	7.4	(2.0) †	55.9	(4.4) †	23.7	(3.8) †	12.8	(3.3) †	7.5	(2.3) †
	Belarus	45.3	(4.1)	42.9	(3.7)	10.8	(2.5)	1.0	(0.7)	59.1	(3.5)	28.3	(3.7)	5.4	(1.3)	7.3	(1.9)
	Bosnia and Herzegovina	20.2	(2.9)	58.1	(3.5)	20.9	(3.1)	0.9	(0.7)	27.4	(3.0)	47.5	(3.8)	18.5	(2.7)	6.6	(1.9)
	Brazil	33.6	(2.5)	48.2	(2.4)	16.0	(1.5)	2.2	(0.7)	28.9	(2.1)	38.2	(2.1)	24.1	(2.1)	8.8	(1.5)
	Brunei Darussalam	8.5	(0.1)	68.1	(0.1)	18.9	(0.1)	4.6	(0.0)	13.3	(0.0)	60.5	(0.1)	18.2	(0.1)	8.0	(0.1)
	B-S-J-Z (China)	37.2	(3.1)	40.1	(3.1)	21.0	(2.5)	1.6	(0.7)	31.6	(3.4)	27.2	(3.4)	21.2	(3.1)	20.1	(2.9)
	Bulgaria	52.1	(4.3)	35.4	(3.7)	9.6	(2.0)	2.9	(1.5)	46.6	(4.1)	35.5	(3.8)	10.1	(2.3)	7.8	(1.7)
	Costa Rica	16.5	(2.7)	58.8	(3.2)	19.5	(2.7)	5.2	(1.5)	27.4	(2.8)	47.1	(3.6)	20.7	(3.0)	4.7	(1.5)
	Croatia	22.8	(3.0)	53.6	(3.1)	18.0	(2.5)	5.6	(1.4)	16.4	(2.7)	50.6	(3.7)	22.6	(2.6)	10.3	(2.1)
	Cyprus	23.8	(0.8)	60.8	(0.3)	15.4	(0.8)	0.0	c	42.1	(0.5)	50.3	(0.5)	5.2	(0.1)	2.4	(0.0)
	Dominican Republic	18.1	(2.7)	60.7	(3.6)	18.3	(2.8)	2.9	(1.1)	37.9	(4.2)	48.1	(3.7)	10.9	(2.3)	3.1	(1.2)
	Georgia	59.5	(2.8)	29.8	(2.7)	8.0	(1.9)	2.7	(0.9)	35.2	(3.0)	34.9	(3.3)	12.2	(2.3)	17.7	(2.7)
	Hong Kong (China)*	16.9	(3.3)	71.4	(4.3)	11.6	(3.1)	0.0	c	11.8	(3.4)	65.9	(4.7)	21.1	(3.5)	1.3	(0.9)
	Indonesia	34.3	(4.2)	44.5	(4.2)	18.9	(3.4)	2.3	(1.4)	50.0	(4.3)	35.6	(4.2)	13.1	(3.7)	1.3	(0.9)
	Jordan	28.4	(3.3)	47.1	(3.3)	18.3	(2.8)	6.2	(1.7)	33.8	(3.0)	35.5	(3.5)	18.0	(2.7)	12.7	(2.1)
	Kazakhstan	19.8	(1.7)	23.4	(2.1)	37.4	(2.6)	19.4	(2.2)	13.5	(1.7)	16.4	(1.8)	26.3	(2.3)	43.8	(2.8)
	Kosovo	18.1	(1.3)	58.2	(1.7)	21.8	(1.4)	1.9	(0.5)	34.2	(1.6)	47.6	(1.7)	8.2	(1.0)	9.9	(1.3)
	Lebanon	37.1	(2.9)	41.5	(2.8)	15.8	(2.0)	5.7	(1.4)	44.7	(3.1)	35.9	(2.9)	7.9	(1.6)	11.5	(2.0)
	Macao (China)	35.7	(0.1)	48.7	(0.1)	12.8	(0.0)	2.8	(0.0)	29.9	(0.0)	55.3	(0.1)	11.7	(0.0)	3.1	(0.0)
	Malaysia	22.9	(3.2)	60.9	(3.8)	14.1	(2.6)	2.1	(1.0)	23.3	(3.2)	53.2	(3.5)	8.6	(2.0)	14.9	(2.6)
	Malta	29.7	(0.1)	39.6	(0.2)	27.6	(0.1)	3.1	(0.0)	24.3	(0.1)	58.7	(0.1)	11.7	(0.1)	5.3	(0.1)
	Moldova	30.5	(3.0)	53.4	(3.4)	13.9	(2.9)	2.2	(1.1)	34.8	(3.3)	44.2	(4.0)	11.8	(2.6)	9.2	(2.1)
	Montenegro	20.6	(0.6)	68.9	(0.3)	10.5	(0.4)	0.0	c	44.7	(0.2)	47.8	(0.3)	1.3	(0.2)	6.2	(0.2)
	Morocco	25.5	(3.6)	42.6	(4.0)	27.6	(3.2)	4.3	(1.6)	37.0	(3.7)	28.4	(3.6)	17.5	(2.8)	17.1	(2.8)
	North Macedonia	40.4	(0.1)	42.2	(0.1)	13.5	(0.1)	3.9	(0.0)	58.4	(0.1)	27.7	(0.1)	10.0	(0.1)	3.9	(0.0)
	Panama	10.0	(1.8)	55.7	(2.7)	31.1	(2.6)	3.2	(0.7)	28.6	(2.8)	50.0	(3.0)	15.2	(1.8)	6.1	(1.1)
	Peru	15.6	(2.0)	58.5	(3.0)	19.2	(2.1)	6.7	(1.3)	18.8	(2.4)	54.3	(3.4)	19.0	(2.1)	8.0	(1.6)
	Philippines	24.5	(3.1)	59.5	(3.5)	13.4	(2.7)	2.6	(1.3)	36.4	(3.3)	50.1	(3.4)	5.9	(1.8)	7.6	(2.1)
	Qatar	55.3	(0.1)	39.4	(0.1)	5.2	(0.0)	0.0	c	54.6	(0.1)	36.9	(0.1)	5.0	(0.0)	3.6	(0.0)
	Romania	27.9	(3.9)	59.5	(4.2)	11.8	(2.4)	0.8	(0.7)	55.0	(4.2)	38.5	(3.9)	3.7	(1.5)	2.8	(1.0)
	Russia	26.0	(2.3)	36.3	(2.7)	31.3	(2.6)	6.4	(1.4)	31.7	(3.0)	24.0	(2.9)	18.2	(2.1)	26.1	(3.3)
	Saudi Arabia	63.1	(3.3)	25.2	(3.2)	7.5	(2.0)	4.1	(1.4)	46.5	(3.5)	36.0	(3.1)	11.2	(2.3)	6.3	(1.8)
	Serbia	36.6	(3.6)	51.3	(3.7)	12.1	(2.7)	0.0	c	38.6	(3.6)	44.1	(3.5)	15.9	(3.0)	1.3	(0.8)
	Singapore	21.6	(0.5)	63.6	(0.9)	14.8	(0.6)	0.0	c	21.2	(0.8)	70.6	(0.9)	7.1	(0.5)	1.1	(0.0)
	Chinese Taipei	20.7	(3.1)	59.7	(3.8)	16.5	(3.0)	3.1	(1.3)	26.8	(3.0)	49.7	(3.8)	17.7	(3.0)	5.8	(1.9)
	Thailand	31.3	(3.5)	50.0	(3.9)	17.0	(3.1)	1.7	(0.9)	45.9	(3.4)	36.6	(3.5)	11.1	(2.0)	6.4	(2.1)
	Ukraine	38.2	(3.5)	39.9	(3.4)	17.2	(3.1)	4.7	(1.5)	48.2	(4.1)	31.2	(3.3)	5.1	(1.6)	15.5	(2.7)
	United Arab Emirates	33.1	(1.1)	45.1	(1.7)	16.1	(1.1)	5.6	(0.5)	34.4	(1.5)	41.3	(2.0)	10.7	(0.9)	13.6	(0.4)
	Uruguay	26.1	(3.3)	50.1	(3.8)	19.0	(2.5)	4.8	(1.4)	21.9	(3.0)	43.0	(3.8)	29.8	(3.3)	5.3	(1.5)
	Viet Nam	23.6	(3.5)	62.6	(4.1)	13.2	(3.0)	0.7	(0.7)	21.1	(3.5)	67.6	(4.0)	8.6	(2.5)	2.7	(1.5)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. Higher values in the index indicate that teacher behaviour hinders student learning to a greater extent.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.8.1 [1/6] **Student co-operation**

Based on students' reports

		Index of student co-operation[1]					Percentage of students who reported the following:									
							Students seem to value co-operation									
		Average			Variability		Not at all true			Slightly true			Very true			Extremely true		
		Mean index	S.E.		S.D.	S.E.	%	S.E.		%	S.E.		%	S.E.		%	S.E.	
OECD	Australia	0.02	(0.01)	†	0.94	(0.01)	†	5.1	(0.2)		36.2	(0.5)		46.7	(0.5)		11.9	(0.4)	
	Austria	0.36	(0.02)		1.01	(0.01)		7.4	(0.5)		19.9	(0.8)		48.4	(0.7)		24.3	(0.8)	
	Belgium	-0.06	(0.02)		0.98	(0.01)		7.7	(0.4)		35.2	(0.7)		48.2	(0.7)		8.9	(0.4)	
	Canada	m	m		m	m		m	m		m	m		m	m		m	m	
	Chile	-0.17	(0.02)	†	1.03	(0.01)	†	9.2	(0.5)	†	42.4	(0.9)	†	35.7	(0.8)	†	12.7	(0.7)	†
	Colombia	-0.13	(0.02)	†	1.00	(0.01)	†	13.2	(0.7)	†	33.4	(0.9)	†	45.1	(0.9)	†	8.3	(0.4)	†
	Czech Republic	-0.22	(0.02)		0.97	(0.01)		10.2	(0.5)		46.8	(0.9)		34.0	(0.8)		9.0	(0.5)	
	Denmark	0.34	(0.01)		0.86	(0.01)		2.7	(0.3)		21.2	(0.8)		59.2	(0.9)		16.9	(0.6)	
	Estonia	-0.12	(0.02)		0.94	(0.01)		7.4	(0.5)		46.0	(0.8)		37.0	(0.8)		9.6	(0.4)	
	Finland	0.08	(0.02)		0.90	(0.01)		4.8	(0.3)		31.5	(0.8)		55.2	(0.8)		8.5	(0.4)	
	France	-0.38	(0.02)	†	1.00	(0.01)	†	12.4	(0.6)	†	47.0	(0.7)	†	31.9	(0.7)	†	8.6	(0.4)	†
	Germany	0.07	(0.03)	‡	1.03	(0.01)	‡	9.9	(0.8)	‡	28.1	(1.2)	‡	46.4	(1.1)	‡	15.6	(0.8)	‡
	Greece	-0.02	(0.02)		1.01	(0.01)		9.5	(0.5)		33.5	(0.7)		40.0	(0.7)		17.0	(0.5)	
	Hungary	-0.13	(0.02)		1.01	(0.01)		9.0	(0.6)		40.0	(0.9)		40.0	(1.0)		11.0	(0.6)	
	Iceland	0.31	(0.02)	†	0.98	(0.01)	†	7.6	(0.6)	†	19.1	(0.9)	†	56.8	(1.0)	†	16.5	(0.9)	†
	Ireland	-0.17	(0.02)		0.92	(0.01)		6.7	(0.4)		43.2	(0.8)		42.6	(0.9)		7.6	(0.5)	
	Israel	0.07	(0.02)		1.05	(0.01)		9.4	(0.4)		31.4	(0.8)		40.0	(0.7)		19.2	(0.9)	
	Italy	-0.31	(0.02)		0.94	(0.01)		11.8	(0.4)		47.3	(0.9)		33.4	(0.8)		7.5	(0.4)	
	Japan	0.11	(0.02)		1.05	(0.01)		5.8	(0.4)		36.4	(0.8)		40.2	(0.7)		17.7	(0.7)	
	Korea	0.16	(0.02)		1.04	(0.01)		7.9	(0.4)		27.0	(0.7)		49.3	(0.8)		15.8	(0.5)	
	Latvia	-0.22	(0.01)		0.91	(0.01)		8.7	(0.4)		47.9	(0.9)		35.4	(0.8)		8.1	(0.4)	
	Lithuania	0.22	(0.02)		1.05	(0.01)		8.2	(0.4)		26.5	(0.7)		43.9	(0.6)		21.4	(0.5)	
	Luxembourg	-0.05	(0.01)		1.03	(0.01)		10.3	(0.4)		32.6	(0.7)		44.1	(0.8)		13.1	(0.5)	
	Mexico	-0.05	(0.02)	‡	0.99	(0.01)	‡	8.0	(0.5)	‡	37.9	(1.1)	‡	42.7	(1.0)	‡	11.4	(0.6)	‡
	Netherlands*	0.18	(0.02)		0.88	(0.01)		2.7	(0.3)		30.1	(0.8)		53.6	(0.8)		13.6	(0.7)	
	New Zealand	-0.01	(0.02)		0.92	(0.01)		4.2	(0.4)		39.6	(0.9)		45.8	(0.8)		10.4	(0.5)	
	Norway	0.62	(0.02)		0.85	(0.01)		3.1	(0.3)		10.4	(0.5)		57.4	(0.9)		29.0	(0.8)	
	Poland	0.00	(0.02)		0.97	(0.01)		10.2	(0.5)		29.2	(0.8)		49.6	(0.8)		10.9	(0.5)	
	Portugal*	-0.06	(0.02)		0.93	(0.01)		4.9	(0.4)		41.5	(0.9)		44.1	(0.8)		9.6	(0.5)	
	Slovak Republic	-0.23	(0.02)		0.99	(0.01)		11.9	(0.5)		42.3	(0.7)		34.7	(0.7)		11.1	(0.5)	
	Slovenia	-0.03	(0.02)		0.96	(0.01)		6.6	(0.4)		40.9	(0.8)		39.8	(0.8)		12.8	(0.6)	
	Spain	-0.13	(0.01)	†	1.01	(0.01)	†	11.0	(0.3)	†	37.2	(0.6)	†	41.1	(0.6)	†	10.7	(0.4)	†
	Sweden	-0.05	(0.02)		0.98	(0.01)		6.9	(0.4)		36.8	(0.8)		45.2	(0.8)		11.1	(0.4)	
	Switzerland	0.13	(0.03)	†	1.04	(0.01)	†	8.7	(0.7)	†	27.1	(1.0)	†	45.0	(1.2)	†	19.3	(1.0)	†
	Turkey	-0.01	(0.02)		1.15	(0.01)		13.9	(0.4)		27.9	(0.6)		37.7	(0.6)		20.4	(0.6)	
	United Kingdom	-0.14	(0.02)		0.92	(0.01)		6.0	(0.4)		44.5	(0.7)		41.9	(0.7)		7.7	(0.4)	
	United States*	-0.16	(0.02)		0.95	(0.01)		6.6	(0.5)		42.4	(0.9)		41.5	(0.9)		9.5	(0.5)	
	OECD average	0.00	(0.00)		0.98	(0.00)		8.0	(0.1)		35.0	(0.1)		43.7	(0.1)		13.2	(0.1)	

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of student co-operation is based on the following statements: "Students seem to value co-operation"; "It seems that students are co-operating with each other"; and "Students seem to share the feeling that co-operating with each other is important".

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.8.1 [2/6] **Student co-operation**

Based on students' reports

		Index of student co-operation[1]					Percentage of students who reported the following:									
							Students seem to value co-operation									
		Average			Variability		Not at all true			Slightly true			Very true			Extremely true		
		Mean index	S.E.		S.D.	S.E.	%	S.E.		%	S.E.		%	S.E.		%	S.E.	
Partners	Albania	0.65	(0.02)		0.89	(0.01)	3.8	(0.3)		13.8	(0.5)		50.6	(0.8)		31.9	(0.9)	
	Argentina	-0.55	(0.02)	†	0.98	(0.01)	†	19.3	(0.6)	†	51.6	(0.9)	†	21.5	(0.7)	†	7.6	(0.5)	†
	Baku (Azerbaijan)	0.09	(0.02)	†	1.07	(0.01)	†	10.5	(0.7)	†	29.0	(0.8)	†	41.5	(1.0)	†	19.0	(0.7)	†
	Belarus	-0.10	(0.02)		1.01	(0.01)		9.1	(0.5)		37.8	(0.8)		41.5	(0.8)		11.6	(0.6)	
	Bosnia and Herzegovina	0.05	(0.02)		1.05	(0.01)		9.6	(0.6)		33.6	(0.7)		39.7	(0.7)		17.1	(0.6)	
	Brazil	-0.35	(0.02)	†	1.06	(0.01)	†	18.1	(0.6)	†	34.3	(0.7)	†	39.8	(0.8)	†	7.8	(0.4)	†
	Brunei Darussalam	-0.08	(0.01)	†	0.94	(0.01)	†	7.7	(0.4)	†	42.4	(0.8)	†	38.7	(0.8)	†	11.2	(0.5)	†
	B-S-J-Z (China)	0.18	(0.02)		1.01	(0.01)		4.4	(0.3)		38.0	(0.6)		40.2	(0.7)		17.5	(0.6)	
	Bulgaria	-0.36	(0.02)	†	1.07	(0.01)	†	19.9	(0.9)	†	40.6	(0.9)	†	27.4	(0.8)	†	12.1	(0.6)	†
	Costa Rica	-0.17	(0.02)		1.06	(0.01)		12.0	(0.5)		39.2	(0.9)		36.6	(1.0)		12.2	(0.6)	
	Croatia	-0.01	(0.02)		1.02	(0.01)		7.0	(0.4)		38.8	(0.7)		39.8	(0.6)		14.4	(0.6)	
	Cyprus	-0.22	(0.02)	†	1.04	(0.01)	†	13.9	(0.6)	†	40.8	(0.8)	†	32.0	(0.7)	†	13.3	(0.7)	†
	Dominican Republic	-0.08	(0.03)	‡	1.12	(0.02)	‡	18.6	(1.0)	‡	25.6	(1.5)	‡	41.3	(1.8)	‡	14.5	(1.0)	‡
	Georgia	0.26	(0.02)		1.10	(0.01)		12.6	(0.5)		15.5	(0.6)		43.3	(0.8)		28.7	(0.8)	
	Hong Kong (China)*	0.07	(0.02)		0.94	(0.01)		4.9	(0.4)		33.9	(0.8)		51.4	(0.8)		9.7	(0.5)	
	Indonesia	0.34	(0.02)		0.90	(0.01)		4.1	(0.4)		22.6	(0.7)		55.2	(0.8)		18.1	(0.6)	
	Jordan	0.01	(0.02)		1.13	(0.01)		19.4	(0.8)		26.6	(0.8)		34.0	(0.7)		20.0	(0.7)	
	Kazakhstan	0.27	(0.01)		0.99	(0.01)		8.6	(0.3)		19.8	(0.5)		55.1	(0.6)		16.5	(0.5)	
	Kosovo	0.50	(0.01)		0.96	(0.01)		7.0	(0.4)		14.6	(0.6)		48.0	(0.8)		30.4	(0.7)	
	Lebanon	-0.10	(0.03)		1.03	(0.01)		20.1	(1.1)		29.6	(0.9)		32.8	(1.0)		17.5	(0.9)	
	Macao (China)	0.04	(0.01)		0.93	(0.01)		4.4	(0.3)		38.2	(0.8)		47.5	(0.9)		9.9	(0.5)	
	Malaysia	0.51	(0.02)		0.89	(0.01)		3.2	(0.3)		18.3	(0.8)		52.7	(0.8)		25.8	(0.8)	
	Malta	-0.11	(0.02)		0.98	(0.01)		9.8	(0.5)		36.4	(1.0)		42.8	(0.8)		11.0	(0.5)	
	Moldova	0.13	(0.02)		0.90	(0.01)		6.0	(0.4)		32.1	(0.8)		49.8	(0.8)		12.0	(0.6)	
	Montenegro	0.08	(0.02)		1.06	(0.01)		10.2	(0.4)		33.5	(0.6)		37.8	(0.7)		18.5	(0.5)	
	Morocco	-0.18	(0.02)	‡	1.05	(0.01)	‡	17.8	(0.8)	‡	27.9	(0.9)	‡	44.8	(1.1)	‡	9.5	(0.6)	‡
	North Macedonia	0.40	(0.02)		0.97	(0.01)		7.1	(0.4)		22.9	(0.7)		47.2	(0.7)		22.9	(0.6)	
	Panama	-0.13	(0.03)	‡	1.06	(0.01)	‡	12.1	(0.8)	‡	39.0	(1.3)	‡	34.2	(1.4)	‡	14.6	(0.9)	‡
	Peru	0.03	(0.02)	‡	0.94	(0.01)	‡	6.4	(0.5)	‡	33.1	(1.2)	‡	50.3	(1.2)	‡	10.3	(0.8)	‡
	Philippines	0.16	(0.02)		0.95	(0.01)		5.8	(0.4)		29.4	(0.7)		48.9	(0.8)		16.0	(0.6)	
	Qatar	-0.03	(0.01)		1.08	(0.01)		11.9	(0.3)		34.6	(0.4)		36.1	(0.5)		17.5	(0.3)	
	Romania	0.10	(0.02)		0.96	(0.01)		8.7	(0.7)		27.9	(0.8)		50.0	(0.9)		13.4	(0.6)	
	Russia	-0.02	(0.02)		1.01	(0.01)		10.3	(0.4)		32.1	(0.9)		46.1	(0.9)		11.5	(0.7)	
	Saudi Arabia	-0.16	(0.03)		1.15	(0.01)		19.8	(0.9)		34.6	(0.7)		28.9	(0.6)		16.7	(0.7)	
	Serbia	-0.12	(0.02)	†	1.07	(0.01)	†	12.2	(0.6)	†	37.6	(0.7)	†	35.1	(0.7)	†	15.0	(0.6)	†
	Singapore	0.19	(0.01)		0.93	(0.01)		3.0	(0.2)		31.6	(0.6)		50.1	(0.7)		15.3	(0.5)	
	Chinese Taipei	0.28	(0.02)		1.01	(0.01)		4.6	(0.3)		28.2	(0.5)		48.1	(0.7)		19.0	(0.7)	
	Thailand	0.14	(0.02)		0.93	(0.01)		5.1	(0.4)		27.3	(0.6)		55.6	(0.7)		12.0	(0.6)	
	Ukraine	0.06	(0.02)		1.04	(0.01)		7.8	(0.4)		38.5	(1.0)		35.7	(0.8)		18.0	(0.7)	
	United Arab Emirates	0.13	(0.01)		1.09	(0.01)		9.7	(0.3)		30.7	(0.7)		38.4	(0.5)		21.2	(0.5)	
	Uruguay	-0.24	(0.03)	†	1.02	(0.01)	†	14.1	(0.7)	†	37.5	(0.9)	†	38.5	(0.9)	†	9.9	(0.7)	†
	Viet Nam	-0.07	(0.02)		0.88	(0.01)		4.2	(0.4)		42.0	(1.1)		44.9	(1.0)		8.9	(0.6)	

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of student co-operation is based on the following statements: "Students seem to value co-operation"; "It seems that students are co-operating with each other"; and "Students seem to share the feeling that co-operating with each other is important".

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.8.1 [3/6] **Student co-operation**

Based on students' reports

		Percentage of students who reported the following:															
		It seems that students are co-operating with each other								Students seem to share the feeling that co-operating with each other is important							
		Not at all true		Slightly true		Very true		Extremely true		Not at all true		Slightly true		Very true		Extremely true	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	4.0	(0.2) †	32.3	(0.5) †	52.2	(0.5) †	11.6	(0.4) †	5.5	(0.3)	34.2	(0.6)	49.1	(0.6)	11.3	(0.4)
	Austria	5.2	(0.4)	19.1	(0.7)	51.9	(0.7)	23.8	(0.7)	5.8	(0.4)	19.6	(0.7)	50.5	(0.8)	24.1	(0.7)
	Belgium	7.6	(0.4)	29.0	(0.7)	52.5	(0.7)	10.8	(0.4)	9.8	(0.4)	31.3	(0.6)	49.3	(0.7)	9.6	(0.4)
	Canada	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Chile	6.6	(0.4) †	41.9	(0.9) †	38.7	(0.8) †	12.8	(0.6) †	8.4	(0.5) †	41.6	(1.0) †	37.4	(0.8) †	12.7	(0.7) †
	Colombia	9.1	(0.5) †	32.7	(0.7) †	48.9	(0.8) †	9.2	(0.5) †	8.9	(0.6) †	31.9	(0.7) †	49.0	(0.7) †	10.2	(0.5) †
	Czech Republic	7.1	(0.4)	40.7	(0.9)	41.8	(0.9)	10.4	(0.5)	8.0	(0.5)	39.4	(0.8)	41.7	(0.7)	10.9	(0.5)
	Denmark	1.6	(0.2)	17.7	(0.6)	61.6	(0.9)	19.1	(0.7)	3.4	(0.3)	25.9	(0.7)	55.5	(0.8)	15.1	(0.6)
	Estonia	4.7	(0.4)	36.8	(0.7)	46.6	(0.8)	12.0	(0.5)	6.0	(0.4)	38.6	(0.8)	44.3	(0.8)	11.1	(0.5)
	Finland	3.9	(0.3)	26.0	(0.8)	59.7	(0.8)	10.4	(0.5)	5.2	(0.3)	30.7	(0.7)	55.1	(0.7)	8.9	(0.5)
	France	11.1	(0.5) †	43.7	(0.6) †	36.1	(0.8) †	9.0	(0.4) †	13.5	(0.5) †	42.9	(0.7) †	34.2	(0.8) †	9.3	(0.4) †
	Germany	7.6	(0.6) ‡	26.7	(1.0) ‡	50.8	(1.0) ‡	14.9	(0.8) ‡	7.9	(0.6) ‡	28.5	(1.1) ‡	48.3	(1.2) ‡	15.3	(0.8) ‡
	Greece	6.5	(0.4)	36.4	(0.7)	41.4	(0.7)	15.7	(0.5)	6.8	(0.4)	34.2	(0.7)	42.6	(0.7)	16.4	(0.6)
	Hungary	7.2	(0.5)	38.0	(1.0)	43.5	(1.1)	11.4	(0.6)	8.2	(0.6)	37.2	(0.9)	43.5	(0.9)	11.1	(0.5)
	Iceland	6.1	(0.5) †	16.2	(0.7) †	59.3	(0.9) †	18.4	(0.9) †	6.2	(0.5) †	17.5	(0.9) †	58.3	(1.0) †	18.0	(0.9) †
	Ireland	5.6	(0.3)	37.5	(0.8)	49.0	(0.9)	7.9	(0.5)	8.2	(0.4)	39.8	(0.8)	44.3	(0.8)	7.7	(0.4)
	Israel	6.3	(0.3)	31.1	(0.8)	44.7	(0.7)	17.9	(0.8)	7.3	(0.4)	29.9	(0.8)	44.5	(0.7)	18.3	(0.8)
	Italy	8.3	(0.4)	44.1	(0.9)	39.9	(0.8)	7.7	(0.4)	8.6	(0.5)	42.2	(0.9)	40.1	(0.9)	9.1	(0.4)
	Japan	5.2	(0.3)	31.1	(0.7)	44.8	(0.7)	18.8	(0.7)	5.8	(0.4)	31.3	(0.8)	44.1	(0.7)	18.7	(0.7)
	Korea	7.1	(0.3)	24.5	(0.7)	51.7	(0.8)	16.6	(0.5)	7.6	(0.4)	23.3	(0.6)	51.1	(0.7)	18.0	(0.6)
	Latvia	5.4	(0.4)	41.1	(0.8)	44.7	(0.8)	8.8	(0.4)	7.1	(0.4)	41.3	(0.9)	42.6	(0.8)	9.0	(0.4)
	Lithuania	5.8	(0.4)	25.8	(0.6)	46.9	(0.7)	21.6	(0.6)	6.3	(0.4)	25.7	(0.6)	46.5	(0.6)	21.5	(0.6)
	Luxembourg	8.3	(0.4)	30.9	(0.6)	47.5	(0.7)	13.2	(0.5)	9.1	(0.4)	31.6	(0.6)	47.1	(0.7)	12.2	(0.5)
	Mexico	6.0	(0.5) ‡	34.9	(0.9) ‡	47.3	(0.9) ‡	11.8	(0.6) ‡	6.6	(0.5) ‡	35.0	(0.9) ‡	46.4	(1.0) ‡	12.0	(0.6) ‡
	Netherlands*	1.7	(0.3)	24.0	(0.8)	59.9	(0.9)	14.4	(0.7)	4.0	(0.4)	31.7	(0.9)	52.3	(0.9)	12.0	(0.6)
	New Zealand	3.6	(0.3)	33.9	(0.9)	52.3	(0.9)	10.2	(0.5)	5.3	(0.3)	36.9	(0.8)	48.0	(0.8)	9.7	(0.5)
	Norway	2.5	(0.2)	10.4	(0.6)	60.6	(0.8)	26.4	(0.8)	3.0	(0.2)	12.4	(0.6)	59.0	(0.8)	25.6	(0.7)
	Poland	7.1	(0.4)	27.6	(0.7)	54.1	(0.8)	11.1	(0.5)	7.7	(0.4)	29.6	(0.7)	52.2	(0.8)	10.5	(0.5)
	Portugal*	4.6	(0.4)	37.0	(1.0)	48.1	(0.9)	10.3	(0.5)	5.3	(0.4)	36.6	(0.9)	48.0	(0.9)	10.1	(0.5)
	Slovak Republic	7.4	(0.4)	43.1	(0.8)	38.6	(0.7)	10.9	(0.5)	9.0	(0.4)	40.6	(0.7)	39.4	(0.7)	11.0	(0.4)
	Slovenia	4.5	(0.4)	36.4	(0.8)	45.9	(0.9)	13.3	(0.7)	5.1	(0.3)	35.2	(0.8)	46.0	(0.9)	13.7	(0.7)
	Spain	7.2	(0.3) †	35.2	(0.6) †	46.1	(0.5) †	11.5	(0.4) †	9.3	(0.3) †	35.8	(0.5) †	43.5	(0.5) †	11.4	(0.4) †
	Sweden	5.3	(0.4)	31.9	(0.8)	51.8	(0.8)	11.0	(0.5)	8.2	(0.5)	36.6	(0.8)	45.0	(0.9)	10.2	(0.4)
	Switzerland	7.0	(0.6) †	26.0	(1.0) †	47.8	(1.1) †	19.2	(0.9) †	7.1	(0.6) †	29.2	(1.0) †	45.7	(1.0) †	18.1	(0.9) †
	Turkey	11.4	(0.4)	28.5	(0.5)	41.4	(0.5)	18.6	(0.6)	12.1	(0.4)	28.9	(0.7)	40.7	(0.6)	18.3	(0.6)
	United Kingdom	4.4	(0.3)	36.7	(0.7)	49.6	(0.7)	9.3	(0.5)	7.6	(0.4)	40.4	(0.6)	43.7	(0.6)	8.4	(0.5)
	United States*	5.7	(0.4)	39.7	(0.9)	45.5	(1.0)	9.1	(0.5)	8.2	(0.5)	39.7	(0.8)	43.0	(1.0)	9.2	(0.6)
	OECD average	6.1	(0.1)	31.9	(0.1)	48.4	(0.1)	13.6	(0.1)	7.3	(0.1)	33.0	(0.1)	46.4	(0.1)	13.3	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of student co-operation is based on the following statements: "Students seem to value co-operation"; "It seems that students are co-operating with each other"; and "Students seem to share the feeling that co-operating with each other is important".

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.8.1 [4/6] **Student co-operation**

Based on students' reports

		Percentage of students who reported the following:															
		It seems that students are co-operating with each other								Students seem to share the feeling that co-operating with each other is important							
		Not at all true		Slightly true		Very true		Extremely true		Not at all true		Slightly true		Very true		Extremely true	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	1.6	(0.2)	13.9	(0.5)	51.3	(0.8)	33.2	(0.9)	2.3	(0.2)	14.7	(0.5)	50.7	(0.8)	32.4	(0.8)
	Argentina	12.4	(0.5) †	48.9	(0.7) †	30.0	(0.7) †	8.7	(0.6) †	16.1	(0.7) †	46.0	(0.9) †	28.3	(0.7) †	9.5	(0.6) †
	Baku (Azerbaijan)	7.2	(0.5) †	30.0	(0.8) †	44.8	(1.0) †	17.9	(0.7) †	7.8	(0.5) †	29.5	(0.8) †	44.1	(0.9) †	18.5	(0.7) †
	Belarus	7.0	(0.4)	34.6	(0.8)	45.8	(0.8)	12.6	(0.6)	8.1	(0.4)	38.6	(0.9)	42.8	(0.9)	10.5	(0.5)
	Bosnia and Herzegovina	6.1	(0.5)	32.7	(0.7)	43.7	(0.7)	17.5	(0.6)	6.7	(0.5)	31.9	(0.8)	44.1	(0.7)	17.4	(0.6)
	Brazil	15.5	(0.6) †	36.1	(0.8) †	40.8	(0.9) †	7.7	(0.4) †	15.8	(0.6) †	34.1	(0.7) †	42.2	(0.8) †	7.9	(0.4) †
	Brunei Darussalam	5.4	(0.3) †	36.9	(0.8) †	46.4	(0.7) †	11.3	(0.4) †	6.1	(0.3) †	33.7	(0.7) †	45.4	(0.7) †	14.8	(0.5) †
	B-S-J-Z (China)	3.4	(0.3)	30.2	(0.6)	46.8	(0.7)	19.6	(0.7)	4.0	(0.3)	28.3	(0.7)	45.0	(0.7)	22.6	(0.7)
	Bulgaria	12.5	(0.7) †	44.1	(0.9) †	31.8	(0.8) †	11.6	(0.5) †	13.0	(0.7) †	40.5	(0.8) †	33.9	(0.8) †	12.6	(0.6) †
	Costa Rica	8.6	(0.5)	37.0	(0.9)	42.0	(0.8)	12.5	(0.6)	9.9	(0.5)	37.9	(0.9)	39.2	(0.9)	13.0	(0.5)
	Croatia	5.2	(0.3)	36.8	(0.8)	42.5	(0.7)	15.5	(0.6)	5.8	(0.4)	35.9	(0.7)	42.6	(0.7)	15.7	(0.6)
	Cyprus	8.5	(0.5) †	41.7	(0.8) †	36.7	(0.9) †	13.1	(0.7) †	9.3	(0.5) †	40.3	(0.8) †	37.6	(0.9) †	12.8	(0.7) †
	Dominican Republic	12.3	(1.0) ‡	30.4	(1.5) ‡	41.8	(1.6) ‡	15.4	(0.9) ‡	13.0	(0.9) ‡	26.7	(1.3) ‡	44.3	(1.7) ‡	15.9	(1.0) ‡
	Georgia	9.0	(0.5)	21.3	(0.7)	45.7	(0.8)	24.1	(0.8)	9.1	(0.5)	22.3	(0.7)	44.9	(0.8)	23.7	(0.8)
	Hong Kong (China)*	4.3	(0.3)	30.5	(0.9)	55.2	(0.8)	10.0	(0.5)	4.8	(0.3)	29.6	(0.8)	54.7	(0.9)	10.9	(0.5)
	Indonesia	2.7	(0.3)	21.9	(0.6)	57.3	(0.6)	18.2	(0.6)	3.1	(0.3)	22.0	(0.7)	56.1	(0.8)	18.8	(0.6)
	Jordan	8.7	(0.4)	31.9	(0.7)	38.5	(0.6)	20.9	(0.7)	10.0	(0.5)	26.2	(0.7)	42.3	(0.6)	21.5	(0.6)
	Kazakhstan	6.0	(0.2)	19.7	(0.5)	56.6	(0.6)	17.7	(0.6)	6.0	(0.2)	19.3	(0.5)	56.6	(0.6)	18.1	(0.5)
	Kosovo	4.1	(0.3)	17.8	(0.7)	49.7	(0.9)	28.4	(0.6)	3.9	(0.3)	16.5	(0.7)	50.9	(0.8)	28.7	(0.6)
	Lebanon	8.7	(0.6)	35.2	(1.1)	39.2	(1.1)	16.9	(0.8)	10.4	(0.6)	28.4	(0.8)	42.1	(0.9)	19.1	(0.8)
	Macao (China)	4.3	(0.4)	31.3	(0.8)	52.8	(0.9)	11.6	(0.5)	5.3	(0.4)	32.2	(0.8)	49.9	(0.9)	12.6	(0.5)
	Malaysia	2.1	(0.2)	16.8	(0.8)	53.1	(0.8)	28.0	(0.8)	2.9	(0.2)	17.4	(0.7)	53.3	(0.7)	26.4	(0.9)
	Malta	7.6	(0.6)	35.1	(0.9)	46.6	(0.9)	10.7	(0.6)	7.7	(0.6)	34.4	(0.9)	46.7	(0.9)	11.1	(0.6)
	Moldova	3.5	(0.3)	25.7	(0.7)	56.1	(0.7)	14.7	(0.6)	4.6	(0.3)	28.0	(0.8)	53.9	(0.9)	13.5	(0.6)
	Montenegro	5.9	(0.3)	31.2	(0.7)	43.7	(0.8)	19.2	(0.6)	6.9	(0.3)	30.4	(0.7)	43.1	(0.7)	19.6	(0.6)
	Morocco	12.6	(0.7) ‡	31.4	(0.9) ‡	44.1	(0.9) ‡	11.9	(0.6) ‡	13.3	(0.6) ‡	29.9	(1.0) ‡	43.9	(1.1) ‡	12.8	(0.5) ‡
	North Macedonia	3.7	(0.3)	19.4	(0.6)	48.8	(0.7)	28.0	(0.7)	4.5	(0.3)	19.7	(0.7)	49.7	(0.9)	26.1	(0.7)
	Panama	8.4	(0.7) ‡	36.9	(1.1) ‡	39.1	(1.3) ‡	15.5	(0.9) ‡	9.6	(0.8) ‡	35.0	(1.2) ‡	39.9	(1.4) ‡	15.5	(1.2) ‡
	Peru	4.7	(0.4) ‡	31.9	(1.0) ‡	52.0	(1.0) ‡	11.4	(0.8) ‡	5.1	(0.5) ‡	31.4	(1.2) ‡	51.4	(1.1) ‡	12.1	(0.7) ‡
	Philippines	4.0	(0.3)	30.5	(0.8)	48.9	(0.8)	16.6	(0.6)	4.2	(0.3)	28.1	(0.7)	49.9	(0.7)	17.8	(0.5)
	Qatar	8.2	(0.3)	33.8	(0.4)	40.4	(0.5)	17.6	(0.3)	9.3	(0.3)	32.6	(0.4)	40.0	(0.6)	18.1	(0.4)
	Romania	4.8	(0.4)	26.2	(0.8)	53.9	(0.9)	15.1	(0.7)	7.1	(0.5)	28.3	(0.7)	50.4	(0.8)	14.2	(0.6)
	Russia	7.4	(0.4)	30.8	(0.8)	50.4	(0.9)	11.5	(0.6)	8.3	(0.4)	30.3	(0.7)	50.1	(0.9)	11.4	(0.6)
	Saudi Arabia	10.7	(0.6)	36.3	(0.8)	32.8	(0.7)	20.2	(0.8)	12.9	(0.6)	31.4	(0.7)	35.4	(0.6)	20.3	(0.8)
	Serbia	8.1	(0.5) †	37.6	(0.8) †	39.1	(0.7) †	15.2	(0.6) †	9.2	(0.4) †	36.6	(0.7) †	39.1	(0.8) †	15.1	(0.6) †
	Singapore	2.6	(0.2)	29.1	(0.6)	53.0	(0.7)	15.2	(0.5)	3.5	(0.2)	28.3	(0.6)	51.7	(0.6)	16.5	(0.5)
	Chinese Taipei	4.1	(0.2)	24.4	(0.6)	51.4	(0.7)	20.1	(0.7)	4.8	(0.3)	24.8	(0.6)	50.0	(0.7)	20.5	(0.6)
	Thailand	4.4	(0.3)	29.3	(0.8)	54.5	(0.7)	11.9	(0.6)	3.9	(0.3)	28.2	(0.7)	54.6	(0.7)	13.3	(0.6)
	Ukraine	5.2	(0.3)	32.0	(0.7)	42.2	(0.7)	20.6	(0.8)	7.0	(0.4)	31.6	(0.8)	41.5	(0.8)	19.9	(0.6)
	United Arab Emirates	6.4	(0.2)	29.1	(0.6)	42.0	(0.5)	22.5	(0.5)	7.8	(0.3)	28.3	(0.6)	41.7	(0.5)	22.2	(0.6)
	Uruguay	10.2	(0.6) †	37.9	(1.0) †	42.7	(0.9) †	9.3	(0.8) †	10.7	(0.7) †	37.2	(1.1) †	42.2	(1.0) †	10.0	(0.7) †
	Viet Nam	4.4	(0.4)	37.6	(0.9)	48.4	(1.0)	9.6	(0.7)	5.5	(0.4)	36.0	(0.9)	45.6	(0.8)	12.9	(0.8)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of student co-operation is based on the following statements: "Students seem to value co-operation"; "It seems that students are co-operating with each other"; and "Students seem to share the feeling that co-operating with each other is important".

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.8.1 [5/6] **Student co-operation**

Based on students' reports

		Percentage of students who reported the following:											
		Students feel that they are encouraged to co-operate with others											
		Not at all true			Slightly true			Very true			Extremely true		
		%	S.E.		%	S.E.		%	S.E.		%	S.E.	
OECD	Australia	4.6	(0.2)	†	28.8	(0.5)	†	52.1	(0.5)	†	14.4	(0.5)	†
OECD	Austria	6.2	(0.4)		22.1	(0.8)		48.0	(0.8)		23.7	(0.6)	
OECD	Belgium	12.1	(0.5)		33.8	(0.7)		45.2	(0.7)		8.8	(0.4)	
OECD	Canada	m	m		m	m		m	m		m	m	
OECD	Chile	8.4	(0.5)	†	39.4	(0.8)	†	37.7	(0.8)	†	14.5	(0.6)	†
OECD	Colombia	9.1	(0.6)	†	31.2	(0.8)	†	48.0	(0.9)	†	11.7	(0.6)	†
OECD	Czech Republic	9.4	(0.5)		43.7	(1.0)		36.7	(0.8)		10.3	(0.5)	
OECD	Denmark	3.1	(0.3)		22.9	(0.6)		57.5	(0.9)		16.4	(0.6)	
OECD	Estonia	7.1	(0.4)		39.6	(0.8)		42.0	(0.9)		11.3	(0.5)	
OECD	Finland	4.9	(0.3)		27.4	(0.7)		57.1	(0.7)		10.6	(0.5)	
OECD	France	13.6	(0.5)	†	40.8	(0.7)	†	35.1	(0.8)	†	10.5	(0.5)	†
OECD	Germany	8.9	(0.7)	‡	31.4	(1.1)	‡	45.5	(1.1)	‡	14.2	(0.8)	‡
OECD	Greece	8.2	(0.3)		33.9	(0.6)		39.4	(0.7)		18.5	(0.6)	
OECD	Hungary	9.1	(0.6)		38.6	(0.8)		40.2	(1.0)		12.2	(0.6)	
OECD	Iceland	6.5	(0.5)	†	16.3	(0.8)	†	58.0	(1.0)	†	19.2	(0.8)	†
OECD	Ireland	7.1	(0.5)		35.0	(0.8)		47.1	(0.9)		10.8	(0.6)	
OECD	Israel	8.4	(0.4)		26.5	(0.7)		43.3	(0.7)		21.8	(0.9)	
OECD	Italy	10.8	(0.5)		40.5	(1.0)		37.2	(0.9)		11.5	(0.5)	
OECD	Japan	7.1	(0.4)		33.2	(0.7)		41.8	(0.7)		17.9	(0.7)	
OECD	Korea	7.7	(0.4)		23.2	(0.7)		49.3	(0.8)		19.7	(0.8)	
OECD	Latvia	7.4	(0.4)		40.2	(0.9)		42.0	(0.8)		10.4	(0.5)	
OECD	Lithuania	7.2	(0.4)		25.1	(0.7)		44.8	(0.7)		23.0	(0.6)	
OECD	Luxembourg	10.3	(0.4)		32.1	(0.6)		44.4	(0.7)		13.2	(0.5)	
OECD	Mexico	6.3	(0.4)	‡	33.1	(0.9)	‡	46.9	(0.9)	‡	13.6	(0.6)	‡
OECD	Netherlands*	5.7	(0.5)		34.8	(1.0)		48.9	(1.0)		10.6	(0.7)	
OECD	New Zealand	4.4	(0.4)		31.9	(0.9)		51.4	(0.9)		12.3	(0.5)	
OECD	Norway	3.6	(0.3)		17.2	(0.7)		57.4	(0.8)		21.8	(0.7)	
OECD	Poland	8.9	(0.5)		28.8	(0.7)		49.6	(0.7)		12.7	(0.5)	
OECD	Portugal*	6.1	(0.5)		37.1	(0.9)		45.8	(0.8)		11.0	(0.5)	
OECD	Slovak Republic	9.4	(0.4)		40.4	(0.8)		36.6	(0.7)		13.6	(0.5)	
OECD	Slovenia	5.6	(0.4)		36.6	(0.8)		43.2	(0.9)		14.6	(0.7)	
OECD	Spain	9.2	(0.3)	†	33.7	(0.5)	†	43.4	(0.5)	†	13.8	(0.4)	†
OECD	Sweden	7.8	(0.5)		33.7	(0.8)		46.3	(1.0)		12.1	(0.5)	
OECD	Switzerland	8.7	(0.6)	†	28.2	(1.0)	†	45.7	(1.0)	†	17.4	(0.8)	†
OECD	Turkey	13.2	(0.4)		28.0	(0.6)		39.5	(0.5)		19.2	(0.6)	
OECD	United Kingdom	6.9	(0.3)		36.4	(0.6)		46.7	(0.7)		10.0	(0.5)	
OECD	United States*	7.5	(0.5)		34.7	(0.9)		45.9	(1.0)		11.9	(0.6)	
	OECD average	7.8	(0.1)		32.2	(0.1)		45.6	(0.1)		14.4	(0.1)	

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of student co-operation is based on the following statements: "Students seem to value co-operation"; "It seems that students are co-operating with each other"; and "Students seem to share the feeling that co-operating with each other is important".

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.8.1 [6/6] **Student co-operation**

Based on students' reports

		Percentage of students who reported the following:											
		Students feel that they are encouraged to co-operate with others											
		Not at all true			Slightly true			Very true			Extremely true		
		%	S.E.		%	S.E.		%	S.E.		%	S.E.	
Partners	Albania	2.5	(0.3)		13.5	(0.5)		49.6	(0.8)		34.3	(0.9)	
	Argentina	14.4	(0.6)	†	44.2	(0.8)	†	28.9	(0.7)	†	12.5	(0.6)	†
	Baku (Azerbaijan)	8.4	(0.4)	†	26.7	(0.8)	†	43.3	(1.0)	†	21.6	(0.8)	†
	Belarus	9.7	(0.4)		38.9	(0.8)		40.8	(0.8)		10.7	(0.5)	
	Bosnia and Herzegovina	6.8	(0.5)		30.3	(0.7)		42.6	(0.7)		20.4	(0.6)	
	Brazil	16.1	(0.6)	†	33.0	(0.7)	†	40.8	(0.8)	†	10.1	(0.4)	†
	Brunei Darussalam	5.7	(0.3)	†	31.5	(0.7)	†	47.1	(0.7)	†	15.7	(0.5)	†
	B-S-J-Z (China)	4.4	(0.3)		28.4	(0.7)		44.9	(0.7)		22.3	(0.7)	
	Bulgaria	15.2	(0.6)	†	38.6	(0.8)	†	30.6	(0.8)	†	15.6	(0.6)	†
	Costa Rica	9.7	(0.5)		35.9	(0.8)		39.3	(0.7)		15.0	(0.6)	
	Croatia	7.6	(0.4)		36.3	(0.8)		39.9	(0.7)		16.3	(0.5)	
	Cyprus	9.6	(0.5)	†	37.1	(0.7)	†	36.0	(0.9)	†	17.3	(0.6)	†
	Dominican Republic	12.0	(0.9)	‡	25.5	(1.4)	‡	41.5	(1.7)	‡	21.0	(1.1)	‡
	Georgia	11.4	(0.6)		21.6	(0.8)		43.6	(0.9)		23.5	(0.7)	
	Hong Kong (China)*	5.3	(0.3)		29.5	(0.8)		54.1	(0.7)		11.0	(0.5)	
	Indonesia	5.0	(0.3)		22.1	(0.7)		54.1	(0.8)		18.8	(0.7)	
	Jordan	9.8	(0.4)		22.8	(0.7)		38.3	(0.6)		29.1	(0.7)	
	Kazakhstan	6.7	(0.3)		19.4	(0.4)		54.7	(0.5)		19.2	(0.5)	
	Kosovo	4.8	(0.4)		17.9	(0.6)		48.8	(0.8)		28.5	(0.7)	
	Lebanon	11.2	(0.6)		25.0	(0.8)		37.7	(0.9)		26.1	(0.9)	
	Macao (China)	4.6	(0.3)		25.0	(0.8)		51.9	(0.9)		18.5	(0.6)	
	Malaysia	2.8	(0.2)		14.7	(0.7)		52.1	(0.7)		30.5	(0.9)	
	Malta	7.4	(0.5)		29.7	(0.9)		48.6	(1.0)		14.3	(0.7)	
	Moldova	5.1	(0.3)		24.9	(0.7)		52.5	(0.8)		17.4	(0.7)	
	Montenegro	7.0	(0.4)		30.9	(0.6)		40.4	(0.7)		21.6	(0.6)	
	Morocco	13.4	(0.8)	‡	24.9	(0.8)	‡	44.3	(0.9)	‡	17.4	(0.8)	‡
	North Macedonia	5.2	(0.4)		20.1	(0.6)		48.5	(0.8)		26.2	(0.7)	
	Panama	9.4	(0.8)	‡	33.1	(1.0)	‡	38.1	(1.4)	‡	19.4	(1.2)	‡
	Peru	4.8	(0.5)	‡	30.4	(1.0)	‡	51.7	(1.1)	‡	13.1	(0.9)	‡
	Philippines	4.4	(0.3)		26.3	(0.7)		49.7	(0.7)		19.6	(0.5)	
	Qatar	9.7	(0.3)		29.4	(0.5)		39.2	(0.5)		21.6	(0.3)	
	Romania	7.2	(0.5)		25.0	(0.8)		50.2	(0.8)		17.6	(0.7)	
	Russia	10.1	(0.4)		29.8	(0.6)		47.1	(0.7)		13.0	(0.7)	
	Saudi Arabia	12.6	(0.5)		29.0	(0.7)		33.5	(0.8)		24.9	(0.7)	
	Serbia	9.5	(0.4)	†	35.2	(0.7)	†	37.8	(0.7)	†	17.6	(0.6)	†
	Singapore	3.3	(0.3)		24.8	(0.6)		52.7	(0.6)		19.3	(0.4)	
	Chinese Taipei	4.7	(0.3)		24.0	(0.5)		50.2	(0.6)		21.1	(0.6)	
	Thailand	3.9	(0.3)		26.7	(0.6)		55.8	(0.7)		13.6	(0.6)	
	Ukraine	6.6	(0.4)		31.1	(0.8)		40.9	(0.7)		21.4	(0.7)	
	United Arab Emirates	7.5	(0.2)		25.9	(0.7)		40.7	(0.5)		26.0	(0.5)	
	Uruguay	11.9	(0.7)	†	35.2	(0.9)	†	39.9	(0.9)	†	13.1	(0.8)	†
	Viet Nam	4.1	(0.3)		30.3	(0.9)		49.1	(0.9)		16.6	(0.7)	

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of student co-operation is based on the following statements: "Students seem to value co-operation"; "It seems that students are co-operating with each other"; and "Students seem to share the feeling that co-operating with each other is important".

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.8.2 [1/6] **Student competition**

Based on students' reports

		Index of student competition[1]					Percentage of students who reported the following:									
							Students seem to value competition									
		Average			Variability		Not at all true			Slightly true			Very true			Extremely true		
		Mean index	S.E.		S.D.	S.E.	%	S.E.		%	S.E.		%	S.E.		%	S.E.	
OECD	Australia	0.35	(0.01)		0.95	(0.01)	3.5	(0.2)		29.7	(0.5)		48.0	(0.5)		18.8	(0.5)	
	Austria	-0.03	(0.02)		0.94	(0.01)	12.0	(0.5)		43.9	(0.8)		35.4	(0.7)		8.8	(0.5)	
	Belgium	-0.31	(0.02)		0.99	(0.01)	12.7	(0.4)		49.8	(0.7)		31.6	(0.7)		5.9	(0.4)	
	Canada	m	m		m	m	m	m		m	m		m	m		m	m	
	Chile	-0.02	(0.02)	†	1.00	(0.01)	† 10.2	(0.5)	†	47.1	(0.8)	†	31.1	(0.7)	†	11.6	(0.5)	†
	Colombia	0.12	(0.02)	†	0.87	(0.01)	† 11.8	(0.5)	†	34.7	(0.8)	†	45.7	(0.9)	†	7.8	(0.4)	†
	Czech Republic	-0.51	(0.01)		0.92	(0.01)	17.8	(0.5)		56.0	(0.7)		20.2	(0.6)		6.0	(0.4)	
	Denmark	-0.20	(0.02)		0.90	(0.01)	5.9	(0.3)		45.3	(1.0)		40.0	(0.9)		8.7	(0.5)	
	Estonia	-0.31	(0.01)		0.86	(0.01)	8.9	(0.5)		57.4	(0.7)		27.4	(0.7)		6.3	(0.4)	
	Finland	0.10	(0.02)		0.86	(0.01)	4.8	(0.3)		40.8	(0.9)		47.0	(0.9)		7.4	(0.4)	
	France	-0.18	(0.02)		1.11	(0.01)	11.8	(0.4)		44.9	(0.8)		29.6	(0.7)		13.7	(0.5)	
	Germany	-0.40	(0.02)	‡	0.94	(0.01)	‡ 16.4	(0.8)	‡	50.4	(1.0)	‡	28.3	(1.0)	‡	4.9	(0.5)	‡
	Greece	-0.06	(0.01)		0.95	(0.01)	13.6	(0.6)		50.5	(0.7)		26.8	(0.6)		9.1	(0.4)	
	Hungary	-0.20	(0.02)		0.99	(0.01)	11.3	(0.6)		48.2	(0.8)		30.8	(0.9)		9.8	(0.5)	
	Iceland	0.09	(0.02)	†	0.99	(0.01)	† 8.5	(0.5)		30.0	(0.9)		48.4	(1.0)		13.2	(0.6)	
	Ireland	0.20	(0.02)		0.97	(0.01)	4.5	(0.3)		34.5	(0.8)		44.6	(0.8)		16.4	(0.5)	
	Israel	-0.08	(0.02)		1.07	(0.01)	16.6	(0.6)		40.6	(0.7)		30.9	(0.7)		11.9	(0.6)	
	Italy	-0.21	(0.01)		0.95	(0.01)	12.6	(0.5)		46.0	(0.8)		31.0	(0.9)		10.4	(0.5)	
	Japan	-0.37	(0.02)		1.00	(0.01)	21.1	(0.7)		54.4	(0.7)		17.6	(0.6)		6.9	(0.4)	
	Korea	0.52	(0.02)		1.11	(0.01)	8.9	(0.5)		25.2	(0.6)		41.6	(0.6)		24.3	(0.7)	
	Latvia	-0.07	(0.01)		0.89	(0.01)	8.3	(0.4)		53.4	(0.8)		30.8	(0.7)		7.6	(0.4)	
	Lithuania	0.10	(0.01)		1.01	(0.01)	9.2	(0.4)		41.0	(0.7)		36.5	(0.6)		13.2	(0.4)	
	Luxembourg	-0.15	(0.02)		0.95	(0.01)	12.1	(0.5)		48.2	(0.7)		31.3	(0.6)		8.3	(0.5)	
	Mexico	0.01	(0.02)	†	0.87	(0.01)	† 6.1	(0.5)	†	41.0	(0.9)	†	44.0	(0.8)	†	9.0	(0.6)	†
	Netherlands*	-0.45	(0.02)		0.83	(0.01)	12.3	(0.6)		64.8	(0.8)		20.4	(0.6)		2.5	(0.3)	
	New Zealand	0.34	(0.01)		0.93	(0.01)	3.1	(0.3)		30.0	(0.7)		48.4	(0.9)		18.5	(0.5)	
	Norway	0.43	(0.02)		0.88	(0.01)	3.3	(0.3)		15.5	(0.5)		57.1	(0.7)		24.1	(0.7)	
	Poland	0.18	(0.01)		0.89	(0.01)	10.3	(0.6)		34.8	(0.7)		45.2	(0.8)		9.8	(0.4)	
	Portugal*	0.19	(0.01)		0.95	(0.01)	5.1	(0.3)		37.6	(0.8)		43.2	(0.9)		14.1	(0.5)	
	Slovak Republic	-0.09	(0.02)		0.93	(0.01)	11.9	(0.5)		47.6	(0.8)		30.3	(0.7)		10.3	(0.5)	
	Slovenia	-0.16	(0.02)		0.94	(0.01)	11.0	(0.5)		54.1	(0.9)		25.9	(0.8)		9.0	(0.4)	
	Spain	-0.05	(0.01)	†	1.01	(0.01)	† 9.9	(0.3)	†	36.2	(0.4)	†	41.7	(0.5)	†	12.3	(0.3)	†
	Sweden	0.10	(0.02)		1.02	(0.01)	4.9	(0.4)		35.2	(0.9)		43.2	(0.7)		16.8	(0.7)	
	Switzerland	-0.16	(0.02)	†	0.96	(0.01)	† 13.3	(0.6)	†	46.2	(1.0)	†	31.7	(0.8)	†	8.8	(0.5)	†
	Turkey	0.34	(0.02)		1.10	(0.01)	10.1	(0.4)		29.9	(0.6)		36.9	(0.6)		23.2	(0.6)	
	United Kingdom	0.30	(0.02)		0.94	(0.01)	4.4	(0.2)		37.8	(0.6)		42.6	(0.6)		15.1	(0.5)	
	United States*	0.39	(0.02)		0.98	(0.01)	3.2	(0.3)		29.8	(0.8)		44.8	(0.9)		22.1	(0.9)	
	OECD average	-0.01	(0.00)		0.96	(0.00)	9.8	(0.1)		42.0	(0.1)		36.4	(0.1)		11.8	(0.1)	

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of student competition is based on the following statements: "Students seem to value competition"; "It seems that students are competing with each other"; and "Students seem to share the feeling that competing with each other is important".

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.8.2 [2/6] **Student competition**

Based on students' reports

		Index of student competition[1]					Percentage of students who reported the following:									
							Students seem to value competition									
		Average			Variability		Not at all true			Slightly true			Very true			Extremely true		
		Mean index	S.E.		S.D.	S.E.	%	S.E.		%	S.E.		%	S.E.		%	S.E.	
Partners	Albania	0.63	(0.02)		0.92	(0.01)	5.3	(0.3)		20.2	(0.6)		50.5	(0.7)		24.0	(0.7)	
	Argentina	-0.38	(0.01)	†	0.94	(0.01)	†	20.4	(0.6)	†	55.0	(0.8)	†	17.8	(0.6)	†	6.9	(0.5)	†
	Baku (Azerbaijan)	0.29	(0.02)	†	1.04	(0.01)	†	9.3	(0.6)	†	32.5	(0.8)	†	38.6	(1.0)	†	19.6	(0.7)	†
	Belarus	-0.30	(0.01)		0.88	(0.01)		11.4	(0.4)		59.0	(0.7)		24.0	(0.6)		5.6	(0.3)	
	Bosnia and Herzegovina	0.26	(0.01)		0.98	(0.01)		9.5	(0.5)		35.1	(0.7)		38.0	(0.8)		17.5	(0.5)	
	Brazil	0.09	(0.02)	†	1.03	(0.01)	†	14.2	(0.5)	†	30.2	(0.7)	†	43.6	(0.7)	†	12.1	(0.5)	†
	Brunei Darussalam	0.27	(0.01)	†	0.90	(0.01)	†	6.0	(0.3)	†	40.2	(0.7)	†	40.6	(0.6)	†	13.2	(0.5)	†
	B-S-J-Z (China)	0.18	(0.02)		0.92	(0.01)		9.0	(0.3)		52.2	(0.8)		27.7	(0.7)		11.1	(0.5)	
	Bulgaria	-0.03	(0.02)	†	1.02	(0.01)	†	16.5	(0.6)	†	41.0	(1.0)	†	29.8	(0.8)	†	12.7	(0.5)	†
	Costa Rica	0.05	(0.02)		0.99	(0.01)		13.0	(0.5)		38.8	(0.7)		35.5	(0.6)		12.6	(0.5)	
	Croatia	-0.31	(0.02)		1.04	(0.01)		21.4	(0.6)		49.8	(0.7)		20.8	(0.5)		8.0	(0.4)	
	Cyprus	0.00	(0.02)	†	0.97	(0.01)	†	15.5	(0.6)		45.1	(0.8)		27.8	(0.7)		11.5	(0.5)	
	Dominican Republic	0.15	(0.03)	‡	1.04	(0.02)	‡	16.8	(1.0)	‡	25.8	(1.2)	‡	42.8	(1.6)	‡	14.6	(0.9)	‡
	Georgia	-0.12	(0.02)		1.03	(0.01)		18.6	(0.7)		36.9	(0.7)		31.9	(0.8)		12.6	(0.5)	
	Hong Kong (China)*	0.42	(0.02)		0.97	(0.01)		4.5	(0.3)		32.9	(0.8)		43.0	(0.7)		19.6	(0.6)	
	Indonesia	0.11	(0.02)		0.94	(0.01)		10.2	(0.7)		37.6	(0.9)		43.2	(0.9)		9.1	(0.5)	
	Jordan	0.37	(0.02)		1.04	(0.01)		18.4	(0.9)		27.0	(0.8)		36.3	(0.8)		18.3	(0.6)	
	Kazakhstan	-0.01	(0.01)		1.05	(0.01)		14.2	(0.4)		33.3	(0.6)		42.1	(0.5)		10.4	(0.3)	
	Kosovo	0.29	(0.02)		0.95	(0.01)		9.3	(0.6)		31.9	(0.7)		43.4	(0.8)		15.5	(0.5)	
	Lebanon	0.10	(0.02)		0.95	(0.01)		19.1	(1.0)		31.8	(0.9)		33.1	(1.1)		16.0	(0.8)	
	Macao (China)	0.16	(0.01)		0.94	(0.01)		4.5	(0.4)		43.1	(0.9)		39.3	(0.8)		13.1	(0.5)	
	Malaysia	0.39	(0.02)		0.85	(0.01)		6.0	(0.4)		35.0	(0.7)		48.0	(0.7)		11.0	(0.5)	
	Malta	0.36	(0.02)		0.96	(0.01)		6.6	(0.4)		28.8	(0.9)		44.9	(0.9)		19.7	(0.6)	
	Moldova	0.11	(0.01)		0.80	(0.01)		4.9	(0.3)		38.3	(0.8)		48.8	(0.7)		8.0	(0.5)	
	Montenegro	0.26	(0.01)		1.02	(0.01)		9.9	(0.4)		33.6	(0.6)		37.2	(0.8)		19.4	(0.5)	
	Morocco	0.23	(0.02)	‡	0.95	(0.01)	‡	15.1	(0.9)	‡	27.0	(0.9)	‡	47.0	(1.0)	‡	10.9	(0.6)	‡
	North Macedonia	0.24	(0.01)		0.91	(0.01)		7.5	(0.4)		36.3	(0.7)		42.7	(0.7)		13.4	(0.5)	
	Panama	0.03	(0.03)	‡	1.04	(0.02)	‡	12.8	(0.9)	‡	40.9	(1.1)	‡	32.8	(1.2)	‡	13.5	(0.9)	‡
	Peru	0.25	(0.02)	‡	0.84	(0.01)	‡	5.1	(0.5)	‡	35.4	(1.0)	‡	50.7	(1.0)	‡	8.8	(0.6)	‡
	Philippines	0.24	(0.02)		0.88	(0.01)		5.7	(0.4)		34.7	(0.8)		45.8	(0.7)		13.8	(0.6)	
	Qatar	0.20	(0.01)		1.04	(0.01)		9.9	(0.3)		37.1	(0.4)		35.4	(0.4)		17.5	(0.4)	
	Romania	0.13	(0.02)		0.92	(0.01)		8.4	(0.6)		31.8	(0.7)		47.8	(0.8)		12.0	(0.6)	
	Russia	-0.09	(0.01)		0.96	(0.01)		11.7	(0.5)		41.7	(0.9)		37.7	(0.6)		8.8	(0.4)	
	Saudi Arabia	0.23	(0.02)		1.07	(0.01)		15.2	(0.8)		33.0	(0.8)		32.9	(0.8)		18.9	(0.8)	
	Serbia	-0.01	(0.02)	†	1.04	(0.01)	†	14.5	(0.5)		43.9	(0.8)		27.1	(0.8)		14.5	(0.5)	
	Singapore	0.61	(0.01)		0.91	(0.01)		2.0	(0.2)		28.9	(0.6)		46.5	(0.7)		22.6	(0.6)	
	Chinese Taipei	0.35	(0.02)		1.01	(0.01)		5.9	(0.3)		34.9	(0.8)		41.2	(0.7)		18.1	(0.7)	
	Thailand	0.19	(0.02)		0.86	(0.01)		4.5	(0.4)		31.5	(0.6)		51.8	(0.7)		12.1	(0.5)	
	Ukraine	-0.22	(0.02)		0.96	(0.01)		12.7	(0.6)		48.7	(0.7)		29.2	(0.7)		9.4	(0.5)	
	United Arab Emirates	0.24	(0.01)		1.03	(0.01)		10.1	(0.3)		36.7	(0.6)		35.5	(0.4)		17.7	(0.4)	
	Uruguay	-0.22	(0.02)	†	1.05	(0.01)	†	15.7	(0.7)	†	40.6	(1.0)	†	33.4	(0.9)	†	10.4	(0.5)	†
	Viet Nam	-0.30	(0.02)		0.92	(0.01)		15.5	(0.7)		54.4	(0.9)		24.7	(1.0)		5.4	(0.4)	

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of student competition is based on the following statements: "Students seem to value competition"; "It seems that students are competing with each other"; and "Students seem to share the feeling that competing with each other is important".

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.8.2 [3/6] **Student competition**

Based on students' reports

		Percentage of students who reported the following:															
		It seems that students are competing with each other								Students seem to share the feeling that competing with each other is important							
		Not at all true		Slightly true		Very true		Extremely true		Not at all true		Slightly true		Very true		Extremely true	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	5.2	(0.2)	30.6	(0.5)	44.2	(0.5)	20.0	(0.5)	8.8	(0.3)	35.6	(0.6)	40.8	(0.5)	14.8	(0.4)
	Austria	11.6	(0.5)	35.9	(0.8)	41.3	(0.8)	11.2	(0.5)	13.6	(0.5)	40.7	(0.8)	37.0	(0.7)	8.7	(0.4)
	Belgium	19.5	(0.5)	39.9	(0.7)	33.4	(0.7)	7.2	(0.3)	25.9	(0.6)	38.8	(0.7)	29.2	(0.6)	6.0	(0.4)
	Canada	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Chile	10.9	(0.5) †	41.5	(0.9) †	32.8	(0.7) †	14.8	(0.6) †	14.6	(0.7) †	42.5	(0.8) †	30.5	(0.7) †	12.4	(0.6) †
	Colombia	9.4	(0.6) †	30.6	(0.7) †	49.0	(1.0) †	11.0	(0.6) †	10.7	(0.6) †	31.9	(0.8) †	47.3	(0.9) †	10.0	(0.5) †
	Czech Republic	21.2	(0.6)	51.2	(0.8)	21.6	(0.6)	6.0	(0.4)	27.6	(0.7)	49.0	(0.7)	19.1	(0.5)	4.3	(0.4)
	Denmark	12.2	(0.4)	45.2	(0.7)	34.3	(0.8)	8.4	(0.4)	24.6	(0.7)	45.8	(0.8)	24.2	(0.7)	5.4	(0.3)
	Estonia	14.4	(0.5)	52.1	(0.8)	26.6	(0.8)	6.8	(0.4)	18.7	(0.6)	51.2	(0.8)	24.7	(0.6)	5.5	(0.4)
	Finland	6.2	(0.4)	35.2	(0.8)	47.9	(0.8)	10.6	(0.5)	9.3	(0.4)	42.8	(0.8)	41.6	(0.8)	6.3	(0.3)
	France	18.6	(0.6)	40.4	(0.8)	27.2	(0.7)	13.8	(0.6)	25.1	(0.7)	38.6	(0.7)	25.0	(0.6)	11.4	(0.4)
	Germany	21.5	(0.9) ‡	45.2	(1.1) ‡	27.4	(0.9) ‡	5.9	(0.5) ‡	24.0	(0.9) ‡	44.1	(1.1) ‡	26.2	(0.8) ‡	5.7	(0.5) ‡
	Greece	9.0	(0.4)	40.3	(0.7)	35.4	(0.6)	15.3	(0.6)	15.1	(0.5)	44.5	(0.7)	31.2	(0.6)	9.2	(0.3)
	Hungary	13.5	(0.6)	47.1	(0.7)	30.4	(0.8)	9.0	(0.5)	19.0	(0.6)	46.2	(0.8)	26.5	(0.7)	8.3	(0.4)
	Iceland	10.0	(0.6)	37.0	(0.8)	40.9	(0.8)	12.1	(0.7)	12.3	(0.6)	40.5	(0.9)	38.0	(0.8)	9.3	(0.5)
	Ireland	8.0	(0.5)	34.8	(0.8)	40.0	(0.9)	17.1	(0.6)	12.1	(0.5)	37.5	(0.8)	37.5	(0.8)	12.9	(0.6)
	Israel	13.5	(0.6)	37.6	(0.7)	33.5	(0.6)	15.4	(0.6)	20.5	(0.8)	37.9	(0.7)	29.9	(0.7)	11.7	(0.6)
	Italy	15.7	(0.5)	46.5	(0.7)	29.0	(0.7)	8.8	(0.5)	18.7	(0.6)	43.5	(0.8)	29.6	(0.8)	8.2	(0.5)
	Japan	16.7	(0.7)	49.1	(0.8)	26.0	(0.8)	8.2	(0.5)	19.0	(0.7)	49.0	(0.7)	24.9	(0.7)	7.1	(0.5)
	Korea	7.0	(0.4)	20.3	(0.6)	40.7	(0.7)	32.0	(0.9)	10.8	(0.5)	23.8	(0.5)	40.6	(0.7)	24.8	(0.8)
	Latvia	8.2	(0.4)	45.6	(0.7)	35.7	(0.7)	10.6	(0.5)	12.5	(0.5)	46.7	(0.8)	32.0	(0.8)	8.8	(0.5)
	Lithuania	8.2	(0.4)	40.3	(0.6)	36.7	(0.7)	14.8	(0.6)	11.3	(0.5)	39.7	(0.7)	35.0	(0.6)	14.0	(0.5)
	Luxembourg	13.5	(0.6)	41.7	(0.7)	35.3	(0.7)	9.6	(0.5)	18.0	(0.6)	41.9	(0.7)	31.7	(0.7)	8.4	(0.4)
	Mexico	9.8	(0.5) †	42.0	(0.9) †	39.7	(0.9) †	8.5	(0.5) †	11.7	(0.6) †	41.0	(0.7) †	38.5	(0.8) †	8.8	(0.4) †
	Netherlands*	16.4	(0.7)	49.9	(0.9)	28.3	(0.7)	5.4	(0.4)	25.8	(0.8)	48.4	(1.0)	22.2	(0.8)	3.5	(0.4)
	New Zealand	4.5	(0.3)	31.1	(0.7)	45.8	(0.8)	18.6	(0.6)	8.3	(0.4)	36.2	(0.7)	42.1	(0.7)	13.3	(0.5)
	Norway	4.3	(0.3)	26.4	(0.6)	51.2	(0.8)	18.1	(0.6)	7.0	(0.4)	35.9	(0.8)	45.3	(0.8)	11.8	(0.5)
	Poland	7.3	(0.4)	31.0	(0.7)	48.3	(0.9)	13.5	(0.5)	8.3	(0.5)	35.0	(0.7)	47.3	(0.8)	9.4	(0.4)
	Portugal*	7.2	(0.5)	35.8	(0.7)	40.9	(0.8)	16.1	(0.5)	9.5	(0.4)	38.2	(0.7)	40.5	(0.8)	11.8	(0.4)
	Slovak Republic	9.7	(0.5)	45.8	(0.9)	34.2	(0.7)	10.2	(0.5)	13.5	(0.5)	45.9	(0.7)	32.2	(0.8)	8.4	(0.4)
	Slovenia	11.8	(0.6)	48.0	(0.8)	29.8	(0.7)	10.4	(0.5)	14.2	(0.6)	47.1	(0.8)	29.5	(0.7)	9.2	(0.5)
	Spain	15.9	(0.4) †	37.4	(0.4) †	33.5	(0.4) †	13.3	(0.3) †	18.4	(0.4) †	38.4	(0.4) †	33.2	(0.4) †	10.1	(0.3) †
	Sweden	9.1	(0.5)	38.9	(0.8)	37.7	(0.6)	14.3	(0.7)	15.8	(0.7)	41.0	(0.7)	30.8	(0.6)	12.4	(0.7)
	Switzerland	14.3	(0.6) †	39.4	(0.8) †	37.4	(0.9) †	8.9	(0.5) †	18.2	(0.7) †	42.0	(1.0) †	31.8	(0.9) †	8.0	(0.5) †
	Turkey	8.4	(0.3)	28.1	(0.6)	40.3	(0.6)	23.2	(0.6)	10.9	(0.4)	30.1	(0.6)	39.0	(0.6)	20.0	(0.6)
	United Kingdom	4.0	(0.2)	29.7	(0.7)	46.8	(0.6)	19.5	(0.7)	9.7	(0.4)	35.9	(0.8)	40.3	(0.7)	14.1	(0.6)
	United States*	5.9	(0.4)	30.4	(0.8)	41.1	(0.9)	22.6	(0.9)	8.4	(0.5)	34.5	(0.7)	39.0	(0.9)	18.1	(0.8)
	OECD average	11.2	(0.1)	38.9	(0.1)	36.8	(0.1)	13.1	(0.1)	15.3	(0.1)	40.6	(0.1)	33.7	(0.1)	10.3	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of student competition is based on the following statements: "Students seem to value competition"; "It seems that students are competing with each other"; and "Students seem to share the feeling that competing with each other is important".

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.8.2 [4/6] **Student competition**

Based on students' reports

		Percentage of students who reported the following:															
		It seems that students are competing with each other								Students seem to share the feeling that competing with each other is important							
		Not at all true		Slightly true		Very true		Extremely true		Not at all true		Slightly true		Very true		Extremely true	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	3.5	(0.3)	18.1	(0.6)	50.9	(0.7)	27.4	(0.8)	5.4	(0.3)	23.9	(0.6)	48.3	(0.7)	22.4	(0.7)
	Argentina	19.1	(0.6) †	45.4	(0.8) †	26.0	(0.7) †	9.4	(0.5) †	24.3	(0.7) †	43.3	(0.7) †	24.3	(0.6) †	8.0	(0.5) †
	Baku (Azerbaijan)	6.2	(0.4) †	35.0	(0.9) †	40.6	(0.9) †	18.2	(0.7) †	8.0	(0.5) †	33.8	(0.8) †	40.7	(0.9) †	17.6	(0.7) †
	Belarus	12.9	(0.5)	52.9	(0.6)	28.0	(0.6)	6.2	(0.4)	14.3	(0.4)	54.6	(0.7)	25.8	(0.6)	5.2	(0.4)
	Bosnia and Herzegovina	7.0	(0.4)	33.3	(0.6)	42.1	(0.8)	17.6	(0.7)	8.3	(0.4)	34.8	(0.7)	40.9	(0.6)	16.0	(0.6)
	Brazil	13.3	(0.5) †	29.7	(0.5) †	42.7	(0.6) †	14.4	(0.5) †	15.9	(0.5) †	30.1	(0.6) †	40.8	(0.6) †	13.2	(0.5) †
	Brunei Darussalam	4.7	(0.3) †	32.1	(0.7) †	42.5	(0.7) †	20.7	(0.5) †	9.0	(0.4) †	36.5	(0.8) †	39.7	(0.7) †	14.8	(0.5) †
	B-S-J-Z (China)	3.6	(0.2)	33.7	(0.8)	45.2	(0.8)	17.5	(0.7)	8.6	(0.4)	38.6	(0.7)	38.6	(0.8)	14.1	(0.6)
	Bulgaria	10.7	(0.6) †	42.6	(0.8) †	33.3	(0.6) †	13.4	(0.6) †	13.5	(0.5) †	40.3	(0.7) †	33.8	(0.7) †	12.3	(0.5) †
	Costa Rica	11.5	(0.5)	32.6	(0.8)	39.9	(0.9)	16.0	(0.5)	16.7	(0.6)	36.0	(0.7)	35.1	(0.8)	12.2	(0.4)
	Croatia	15.3	(0.5)	46.8	(0.7)	27.9	(0.6)	10.0	(0.4)	20.6	(0.6)	46.3	(0.7)	24.5	(0.6)	8.6	(0.4)
	Cyprus	9.4	(0.5) †	40.5	(0.7) †	35.4	(0.7) †	14.8	(0.6) †	11.3	(0.6)	42.0	(0.8)	35.2	(0.8)	11.6	(0.6)
	Dominican Republic	14.5	(0.9) ‡	29.2	(1.1) ‡	40.9	(1.3) ‡	15.5	(1.0) ‡	14.1	(0.9) ‡	26.8	(1.1) ‡	42.9	(1.4) ‡	16.2	(1.1) ‡
	Georgia	18.0	(0.7)	39.0	(0.9)	31.5	(0.8)	11.6	(0.6)	17.0	(0.7)	36.9	(0.8)	34.3	(0.9)	11.8	(0.5)
	Hong Kong (China)*	4.2	(0.3)	28.4	(0.7)	46.2	(0.8)	21.2	(0.6)	5.6	(0.3)	31.4	(0.8)	45.5	(0.8)	17.5	(0.6)
	Indonesia	10.2	(0.7)	32.4	(0.9)	46.0	(0.9)	11.4	(0.6)	10.0	(0.6)	34.2	(0.8)	44.9	(0.8)	10.9	(0.7)
	Jordan	6.9	(0.4)	28.0	(0.7)	41.1	(0.6)	24.0	(0.8)	8.5	(0.4)	24.1	(0.7)	44.7	(0.7)	22.7	(0.7)
	Kazakhstan	13.9	(0.4)	33.8	(0.5)	42.2	(0.5)	10.2	(0.3)	16.5	(0.4)	33.5	(0.6)	40.3	(0.6)	9.8	(0.3)
	Kosovo	7.5	(0.5)	33.4	(0.8)	43.4	(0.7)	15.7	(0.5)	7.7	(0.5)	26.8	(0.8)	47.7	(0.8)	17.9	(0.6)
	Lebanon	10.9	(0.6)	35.9	(0.9)	36.5	(0.9)	16.7	(0.8)	13.0	(0.6)	32.3	(0.9)	38.5	(0.9)	16.2	(0.8)
	Macao (China)	5.7	(0.4)	35.5	(0.8)	42.3	(0.8)	16.5	(0.5)	11.0	(0.5)	42.5	(0.8)	35.0	(0.8)	11.6	(0.5)
	Malaysia	4.2	(0.3)	24.1	(1.0)	49.9	(0.8)	21.9	(0.8)	6.4	(0.4)	28.4	(0.8)	50.3	(0.8)	14.9	(0.6)
	Malta	5.9	(0.4)	29.9	(0.8)	42.8	(0.8)	21.3	(0.7)	8.3	(0.6)	31.8	(0.9)	43.8	(0.9)	16.0	(0.6)
	Moldova	6.5	(0.4)	36.9	(0.9)	46.0	(0.9)	10.6	(0.5)	10.2	(0.5)	40.7	(0.8)	41.3	(0.8)	7.8	(0.5)
	Montenegro	8.5	(0.4)	35.9	(0.7)	37.3	(0.7)	18.3	(0.5)	7.5	(0.4)	33.9	(0.7)	40.2	(0.7)	18.5	(0.5)
	Morocco	8.2	(0.5) ‡	28.1	(0.9) ‡	47.4	(1.0) ‡	16.3	(0.8) ‡	10.6	(0.6) ‡	29.5	(0.8) ‡	45.7	(0.9) ‡	14.2	(0.8) ‡
	North Macedonia	7.6	(0.4)	33.8	(0.7)	41.2	(0.7)	17.5	(0.5)	8.4	(0.4)	33.7	(0.7)	42.6	(0.8)	15.3	(0.6)
	Panama	12.8	(1.0) ‡	36.7	(1.4) ‡	35.2	(1.4) ‡	15.3	(1.0) ‡	15.5	(1.0) ‡	34.2	(1.2) ‡	34.9	(1.4) ‡	15.3	(1.0) ‡
	Peru	4.5	(0.5) ‡	32.5	(1.0) ‡	50.4	(1.0) ‡	12.5	(0.7) ‡	5.9	(0.4) ‡	35.1	(1.3) ‡	47.2	(1.2) ‡	11.8	(0.8) ‡
	Philippines	5.9	(0.4)	37.4	(0.6)	42.6	(0.6)	14.0	(0.5)	6.1	(0.3)	36.0	(0.6)	44.6	(0.7)	13.3	(0.5)
	Qatar	8.5	(0.3)	35.5	(0.4)	37.1	(0.5)	18.9	(0.3)	10.9	(0.3)	35.2	(0.5)	36.8	(0.4)	17.1	(0.4)
	Romania	9.4	(0.5)	32.9	(0.8)	43.2	(0.8)	14.5	(0.7)	13.8	(0.6)	35.3	(0.8)	40.3	(0.8)	10.6	(0.5)
	Russia	11.9	(0.5)	41.7	(0.7)	38.0	(0.7)	8.3	(0.4)	15.1	(0.6)	41.3	(0.7)	36.3	(0.7)	7.3	(0.4)
	Saudi Arabia	8.1	(0.4)	33.9	(0.7)	35.7	(0.7)	22.2	(0.8)	12.6	(0.5)	31.2	(0.6)	35.5	(0.6)	20.8	(0.7)
	Serbia	10.7	(0.5)	41.5	(0.8)	32.5	(0.9)	15.3	(0.5)	13.9	(0.6)	41.8	(0.8)	31.2	(0.7)	13.0	(0.5)
	Singapore	2.1	(0.2)	21.6	(0.5)	44.0	(0.7)	32.3	(0.7)	5.5	(0.3)	29.4	(0.6)	44.0	(0.7)	21.2	(0.6)
	Chinese Taipei	4.6	(0.3)	29.2	(0.8)	45.5	(0.7)	20.7	(0.7)	7.8	(0.4)	35.4	(0.7)	39.8	(0.7)	16.9	(0.6)
	Thailand	7.5	(0.4)	38.3	(0.7)	43.9	(0.7)	10.4	(0.5)	6.6	(0.4)	36.1	(0.7)	46.9	(0.7)	10.4	(0.5)
	Ukraine	13.6	(0.5)	46.3	(0.8)	30.4	(0.7)	9.7	(0.5)	21.1	(0.6)	43.8	(0.7)	27.0	(0.8)	8.1	(0.4)
	United Arab Emirates	8.0	(0.3)	34.0	(0.4)	38.3	(0.6)	19.8	(0.4)	10.3	(0.3)	33.9	(0.4)	37.7	(0.5)	18.1	(0.4)
	Uruguay	21.8	(0.8) †	38.2	(0.9) †	29.6	(0.9) †	10.5	(0.6) †	22.4	(0.8) †	37.2	(0.9) †	30.2	(1.0) †	10.2	(0.5) †
	Viet Nam	14.0	(0.7)	41.8	(1.0)	36.2	(1.0)	8.0	(0.5)	24.1	(0.8)	44.1	(0.8)	25.7	(0.7)	6.1	(0.4)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of student competition is based on the following statements: "Students seem to value competition"; "It seems that students are competing with each other"; and "Students seem to share the feeling that competing with each other is important".

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.8.2 [5/6] **Student competition**

Based on students' reports

		Percentage of students who reported the following:											
		Students feel that they are being compared with others											
		Not at all true			Slightly true			Very true			Extremely true		
		%	S.E.		%	S.E.		%	S.E.		%	S.E.	
OECD	Australia	6.0	(0.3)		25.7	(0.4)		39.3	(0.5)		29.0	(0.5)	
	Austria	11.5	(0.5)		35.0	(0.7)		37.9	(0.8)		15.6	(0.5)	
	Belgium	12.7	(0.4)		31.2	(0.6)		38.9	(0.7)		17.3	(0.5)	
	Canada	m	m		m	m		m	m		m	m	
	Chile	13.9	(0.5)	†	39.8	(0.9)	†	29.0	(0.7)	†	17.3	(0.7)	†
	Colombia	17.1	(0.7)	†	30.9	(0.8)	†	39.0	(0.8)	†	13.0	(0.7)	†
	Czech Republic	13.3	(0.4)		43.5	(0.6)		30.1	(0.7)		13.2	(0.5)	
	Denmark	13.6	(0.5)		39.1	(0.7)		33.3	(0.6)		14.0	(0.6)	
	Estonia	10.2	(0.5)		41.5	(0.7)		32.8	(0.7)		15.5	(0.6)	
	Finland	9.6	(0.4)		37.9	(0.9)		38.6	(0.7)		13.9	(0.5)	
	France	13.2	(0.5)		32.2	(0.6)		32.5	(0.6)		22.1	(0.6)	
	Germany	12.8	(0.8)	‡	34.5	(0.9)	‡	37.0	(0.8)	‡	15.7	(0.9)	‡
	Greece	8.9	(0.4)		31.3	(0.6)		34.7	(0.7)		25.1	(0.7)	
	Hungary	15.2	(0.6)		39.4	(0.8)		30.5	(0.7)		14.8	(0.7)	
	Iceland	10.3	(0.6)		32.4	(0.9)		42.8	(0.9)		14.5	(0.7)	
	Ireland	8.6	(0.4)		26.3	(0.8)		35.9	(0.9)		29.2	(0.8)	
	Israel	16.7	(0.7)		34.5	(0.7)		28.1	(0.7)		20.6	(0.7)	
	Italy	13.2	(0.5)		39.2	(0.7)		32.4	(0.7)		15.2	(0.6)	
	Japan	19.2	(0.6)		44.9	(0.8)		24.3	(0.7)		11.6	(0.5)	
	Korea	12.3	(0.5)		24.0	(0.6)		38.3	(0.6)		25.5	(0.8)	
	Latvia	8.6	(0.4)		37.8	(0.8)		35.3	(0.8)		18.3	(0.6)	
	Lithuania	9.7	(0.4)		34.8	(0.6)		34.1	(0.7)		21.4	(0.6)	
	Luxembourg	11.4	(0.5)		34.7	(0.6)		36.8	(0.6)		17.2	(0.5)	
	Mexico	14.6	(0.6)	†	37.4	(0.9)	†	37.1	(0.9)	†	10.9	(0.6)	†
	Netherlands*	13.9	(0.6)		42.3	(0.9)		33.2	(0.8)		10.6	(0.6)	
	New Zealand	6.1	(0.4)		26.3	(0.7)		38.3	(0.7)		29.3	(0.7)	
	Norway	6.8	(0.3)		27.2	(0.7)		44.7	(0.6)		21.3	(0.6)	
	Poland	7.6	(0.5)		24.0	(0.6)		44.8	(0.8)		23.5	(0.7)	
	Portugal*	8.5	(0.4)		32.0	(0.8)		37.4	(0.8)		22.1	(0.6)	
	Slovak Republic	10.8	(0.5)		39.5	(0.8)		32.0	(0.8)		17.7	(0.7)	
	Slovenia	11.5	(0.5)		43.5	(0.7)		31.5	(0.7)		13.5	(0.5)	
	Spain	14.3	(0.3)	†	31.4	(0.5)	†	33.9	(0.5)	†	20.4	(0.3)	†
	Sweden	8.2	(0.5)		32.1	(0.7)		39.2	(0.8)		20.4	(0.8)	
	Switzerland	13.0	(0.6)	†	35.3	(1.0)	†	37.4	(0.9)	†	14.3	(0.6)	†
	Turkey	10.0	(0.5)		25.5	(0.7)		37.7	(0.7)		26.8	(0.6)	
	United Kingdom	5.9	(0.3)		26.1	(0.7)		35.6	(0.7)		32.3	(0.7)	
	United States*	7.0	(0.5)		24.9	(0.7)		35.6	(0.7)		32.5	(1.0)	
	OECD average	11.3	(0.1)		33.8	(0.1)		35.6	(0.1)		19.3	(0.1)	

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of student competition is based on the following statements: "Students seem to value competition"; "It seems that students are competing with each other"; and "Students seem to share the feeling that competing with each other is important".

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.8.2 [6/6] **Student competition**

Based on students' reports

		Percentage of students who reported the following:											
		Students feel that they are being compared with others											
		Not at all true			Slightly true			Very true			Extremely true		
		%	S.E.		%	S.E.		%	S.E.		%	S.E.	
Partners	Albania	8.3	(0.5)		21.5	(0.6)		45.0	(0.7)		25.2	(0.7)	
	Argentina	19.9	(0.7)	†	40.4	(0.8)	†	24.6	(0.7)	†	15.1	(0.6)	†
	Baku (Azerbaijan)	7.5	(0.5)	†	30.9	(0.8)	†	40.2	(0.9)	†	21.4	(0.6)	†
	Belarus	12.0	(0.4)		46.5	(0.7)		30.9	(0.8)		10.6	(0.4)	
	Bosnia and Herzegovina	8.3	(0.4)		30.6	(0.6)		38.6	(0.6)		22.5	(0.6)	
	Brazil	15.2	(0.6)	†	25.2	(0.6)	†	40.7	(0.6)	†	18.9	(0.5)	†
	Brunei Darussalam	5.2	(0.3)	†	24.4	(0.7)	†	35.7	(0.6)	†	34.6	(0.6)	†
	B-S-J-Z (China)	12.6	(0.4)		36.8	(0.6)		31.4	(0.6)		19.2	(0.5)	
	Bulgaria	12.0	(0.6)	†	34.4	(0.7)	†	32.2	(0.7)	†	21.5	(0.8)	†
	Costa Rica	19.9	(0.7)		33.0	(0.6)		31.5	(0.6)		15.5	(0.5)	
	Croatia	13.8	(0.5)		38.2	(0.7)		29.7	(0.6)		18.3	(0.5)	
	Cyprus	9.6	(0.5)	†	32.9	(0.9)	†	32.6	(0.9)	†	24.9	(0.8)	†
	Dominican Republic	19.1	(0.9)	‡	24.7	(1.2)	‡	36.6	(1.3)	‡	19.6	(1.0)	‡
	Georgia	19.1	(0.6)		29.5	(0.7)		32.8	(0.7)		18.6	(0.6)	
	Hong Kong (China)*	6.1	(0.4)		27.8	(0.7)		42.6	(0.7)		23.5	(0.7)	
	Indonesia	14.4	(0.7)		35.1	(0.6)		39.0	(0.7)		11.6	(0.6)	
	Jordan	11.6	(0.5)		24.9	(0.6)		35.3	(0.7)		28.2	(0.7)	
	Kazakhstan	16.3	(0.4)		31.2	(0.5)		40.4	(0.6)		12.1	(0.4)	
	Kosovo	7.9	(0.5)		28.6	(0.8)		43.9	(0.8)		19.6	(0.6)	
	Lebanon	20.4	(0.8)		27.4	(0.8)		28.2	(0.8)		24.0	(0.9)	
	Macao (China)	9.3	(0.5)		33.9	(0.8)		34.6	(0.8)		22.2	(0.7)	
	Malaysia	7.1	(0.3)		27.8	(0.7)		44.4	(0.7)		20.7	(0.6)	
	Malta	5.6	(0.5)		23.0	(0.8)		38.9	(0.9)		32.5	(0.8)	
	Moldova	10.4	(0.6)		34.5	(0.7)		41.1	(0.8)		14.0	(0.6)	
	Montenegro	9.3	(0.4)		31.7	(0.7)		36.4	(0.6)		22.6	(0.6)	
	Morocco	9.9	(0.6)	‡	24.5	(0.8)	‡	45.6	(0.9)	‡	20.0	(0.8)	‡
	North Macedonia	12.0	(0.5)		29.2	(0.6)		38.3	(0.8)		20.4	(0.6)	
	Panama	14.2	(0.8)	‡	30.1	(1.2)	‡	33.2	(1.2)	‡	22.6	(1.0)	‡
	Peru	9.4	(0.6)	‡	38.8	(1.0)	‡	40.4	(1.0)	‡	11.4	(0.6)	‡
	Philippines	7.0	(0.4)		33.9	(0.7)		41.4	(0.7)		17.7	(0.8)	
	Qatar	11.4	(0.3)		31.0	(0.4)		32.5	(0.4)		25.1	(0.4)	
	Romania	13.5	(0.7)		28.7	(0.7)		38.2	(0.8)		19.6	(0.8)	
	Russia	11.8	(0.4)		35.0	(0.6)		39.3	(0.6)		13.8	(0.5)	
	Saudi Arabia	16.0	(0.6)		29.0	(0.6)		31.2	(0.7)		23.8	(0.6)	
	Serbia	13.4	(0.6)		36.7	(0.7)		30.2	(0.6)		19.8	(0.5)	
	Singapore	2.9	(0.2)		18.5	(0.5)		37.7	(0.5)		40.9	(0.6)	
	Chinese Taipei	6.8	(0.3)		32.9	(0.7)		41.7	(0.7)		18.6	(0.6)	
	Thailand	9.8	(0.5)		36.5	(0.7)		41.6	(0.8)		12.0	(0.5)	
	Ukraine	15.2	(0.5)		41.4	(0.7)		29.5	(0.6)		13.9	(0.5)	
	United Arab Emirates	12.1	(0.4)		32.3	(0.5)		32.4	(0.5)		23.1	(0.6)	
	Uruguay	20.5	(0.9)	†	33.0	(1.0)	†	31.2	(1.0)	†	15.3	(0.7)	†
	Viet Nam	13.2	(0.6)		33.6	(0.8)		34.8	(0.7)		18.3	(0.8)	

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of student competition is based on the following statements: "Students seem to value competition"; "It seems that students are competing with each other"; and "Students seem to share the feeling that competing with each other is important".

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.9.1 [1/8] **Students' sense of belonging at school**

Based on students' reports

		Index of sense of belonging				I feel like an outsider (or left out of things) at school							
		Average		Variability		Strongly disagree		Disagree		Agree		Strongly agree	
		Mean index	S.E.	S.D.	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	-0.19	(0.01)	0.95	(0.01)	24.5	(0.5)	48.4	(0.5)	20.2	(0.4)	6.8	(0.3)
OECD	Austria	0.40	(0.02)	1.22	(0.01)	57.3	(0.8)	27.3	(0.7)	9.4	(0.4)	6.0	(0.4)
OECD	Belgium	0.06	(0.01)	0.89	(0.01)	41.9	(0.7)	43.3	(0.6)	10.5	(0.4)	4.3	(0.2)
OECD	Canada	-0.18	(0.01)	0.96	(0.01)	26.8	(0.5)	46.7	(0.5)	19.4	(0.4)	7.0	(0.3)
OECD	Chile	-0.10	(0.01)	1.00	(0.01)	33.1	(0.6)	44.0	(0.7)	15.9	(0.5)	7.0	(0.4)
OECD	Colombia	-0.18	(0.02)	0.89	(0.01)	26.6	(0.8)	50.3	(0.7)	16.7	(0.5)	6.4	(0.4)
OECD	Czech Republic	-0.28	(0.01)	0.78	(0.01)	20.3	(0.7)	55.7	(0.8)	17.4	(0.6)	6.7	(0.4)
OECD	Denmark	0.21	(0.02)	1.03	(0.01)	51.1	(0.8)	37.5	(0.8)	8.3	(0.4)	3.0	(0.3)
OECD	Estonia	-0.13	(0.01)	0.85	(0.01)	33.7	(0.8)	50.7	(0.8)	11.7	(0.5)	3.8	(0.3)
OECD	Finland	0.01	(0.01)	1.00	(0.01)	42.6	(0.6)	42.2	(0.6)	11.2	(0.5)	4.0	(0.3)
OECD	France	-0.07	(0.01)	0.78	(0.01)	22.2	(0.6)	47.3	(0.7)	23.3	(0.6)	7.2	(0.4)
OECD	Germany	0.28	(0.02) †	1.01	(0.01) †	54.0	(0.9) †	30.1	(0.8) †	11.7	(0.5) †	4.2	(0.4) †
OECD	Greece	0.02	(0.02)	0.93	(0.01)	33.7	(0.7)	46.4	(0.7)	13.1	(0.5)	6.8	(0.4)
OECD	Hungary	0.07	(0.02)	1.01	(0.01)	37.4	(0.7)	43.0	(0.7)	14.6	(0.4)	5.0	(0.3)
OECD	Iceland	0.10	(0.02)	1.25	(0.02)	44.2	(0.8)	35.9	(1.0)	12.0	(0.6)	7.9	(0.5)
OECD	Ireland	-0.15	(0.01)	0.85	(0.01)	26.6	(0.6)	51.4	(0.7)	16.7	(0.6)	5.3	(0.3)
OECD	Israel	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Italy	0.04	(0.02)	0.88	(0.01)	43.4	(0.8)	42.9	(0.7)	9.0	(0.4)	4.7	(0.4)
OECD	Japan	0.02	(0.02)	0.94	(0.01)	42.0	(0.8)	45.5	(0.8)	9.2	(0.4)	3.3	(0.3)
OECD	Korea	0.28	(0.02)	1.05	(0.01)	49.1	(0.7)	40.3	(0.7)	9.1	(0.4)	1.5	(0.2)
OECD	Latvia	-0.26	(0.01)	0.86	(0.02)	29.6	(0.7)	51.4	(0.8)	12.7	(0.5)	6.3	(0.4)
OECD	Lithuania	-0.13	(0.01)	1.02	(0.01)	48.5	(0.6)	25.2	(0.5)	14.1	(0.5)	12.2	(0.5)
OECD	Luxembourg	0.09	(0.01)	1.01	(0.01)	47.7	(0.6)	33.8	(0.7)	11.9	(0.5)	6.6	(0.4)
OECD	Mexico	-0.02	(0.02) †	1.03	(0.01) †	34.4	(0.7) †	44.9	(0.7) †	14.3	(0.6) †	6.4	(0.4) †
OECD	Netherlands*	0.20	(0.02)	0.89	(0.01)	50.6	(0.8)	40.2	(0.7)	6.7	(0.4)	2.6	(0.3)
OECD	New Zealand	-0.21	(0.01)	0.89	(0.01)	24.8	(0.6)	49.1	(0.7)	19.9	(0.6)	6.2	(0.3)
OECD	Norway	0.36	(0.02)	1.20	(0.01)	56.6	(0.8)	30.9	(0.7)	8.4	(0.4)	4.1	(0.3)
OECD	Poland	-0.24	(0.01)	0.87	(0.02)	28.0	(0.6)	50.5	(0.7)	14.1	(0.5)	7.4	(0.4)
OECD	Portugal*	0.12	(0.02)	0.97	(0.01)	42.6	(0.8)	44.2	(0.8)	10.0	(0.4)	3.2	(0.3)
OECD	Slovak Republic	-0.28	(0.01)	0.87	(0.02)	25.6	(0.6)	46.2	(0.8)	17.6	(0.7)	10.5	(0.5)
OECD	Slovenia	-0.11	(0.01)	0.84	(0.01)	29.4	(0.8)	50.1	(0.9)	14.9	(0.6)	5.7	(0.3)
OECD	Spain	0.46	(0.01)	1.17	(0.01)	58.5	(0.5)	30.0	(0.4)	7.0	(0.2)	4.5	(0.2)
OECD	Sweden	0.03	(0.02)	1.12	(0.02)	39.5	(0.7)	40.7	(0.6)	12.3	(0.4)	7.5	(0.4)
OECD	Switzerland	0.30	(0.02)	1.05	(0.01)	52.1	(0.8)	31.9	(0.8)	11.1	(0.4)	4.9	(0.3)
OECD	Turkey	-0.14	(0.02)	1.03	(0.01)	35.5	(0.7)	40.9	(0.7)	14.4	(0.5)	9.2	(0.4)
OECD	United Kingdom	-0.19	(0.01)	0.90	(0.01)	25.6	(0.7)	49.0	(0.7)	18.9	(0.5)	6.4	(0.4)
OECD	United States*	-0.24	(0.02)	0.97	(0.01)	22.0	(0.6)	47.0	(0.8)	23.1	(0.8)	7.9	(0.4)
	OECD average	0.00	(0.00)	0.97	(0.00)	37.8	(0.1)	42.6	(0.1)	13.6	(0.1)	5.9	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.9.1 [2/8] **Students' sense of belonging at school**

Based on students' reports

		Index of sense of belonging					I feel like an outsider (or left out of things) at school								
		Average		Variability			Strongly disagree		Disagree			Agree		Strongly agree		
		Mean index	S.E.	S.D.	S.E.		%	S.E.	%	S.E.		%	S.E.	%	S.E.	
Partners	Albania	0.40	(0.02)	1.04	(0.01)		60.2	(0.9)	28.6	(0.8)		6.4	(0.4)	4.8	(0.4)	
	Argentina	-0.11	(0.02)	0.95	(0.01)		29.3	(0.7)	43.2	(0.7)		18.2	(0.7)	9.3	(0.4)	
	Baku (Azerbaijan)	-0.21	(0.02)	1.03	(0.02)	†	32.4	(0.8)	36.1	(0.8)	†	19.2	(0.6)	12.2	(0.5)	†
	Belarus	-0.10	(0.02)	0.86	(0.02)		44.4	(0.8)	44.1	(0.8)		7.2	(0.4)	4.3	(0.3)	
	Bosnia and Herzegovina	-0.03	(0.01)	0.99	(0.01)		32.5	(0.7)	47.0	(0.7)		12.3	(0.4)	8.2	(0.4)	
	Brazil	-0.19	(0.01)	0.96	(0.01)		25.4	(0.7)	46.7	(0.8)		19.0	(0.5)	8.8	(0.4)	
	Brunei Darussalam	-0.44	(0.01)	0.67	(0.01)		15.9	(0.4)	47.1	(0.6)		29.8	(0.6)	7.1	(0.4)	
	B-S-J-Z (China)	-0.19	(0.02)	0.87	(0.02)		23.4	(0.7)	58.1	(0.8)		14.4	(0.5)	4.1	(0.3)	
	Bulgaria	-0.30	(0.02)	0.92	(0.02)		33.5	(0.8)	34.2	(0.7)		18.6	(0.6)	13.7	(0.7)	
	Costa Rica	0.05	(0.02)	1.10	(0.01)		38.2	(0.8)	41.2	(0.7)		14.2	(0.5)	6.4	(0.4)	
	Croatia	0.06	(0.01)	0.98	(0.01)		39.1	(0.7)	45.8	(0.6)		10.1	(0.4)	5.1	(0.3)	
	Cyprus	-0.07	(0.01)	0.99	(0.02)		30.6	(0.7)	44.9	(0.8)		15.0	(0.5)	9.5	(0.4)	
	Dominican Republic	-0.26	(0.02)	1.02	(0.03)	†	25.5	(0.9)	39.4	(1.1)	†	22.0	(0.9)	13.1	(0.8)	†
	Georgia	-0.10	(0.02)	0.89	(0.01)		43.1	(0.8)	38.6	(0.8)		9.1	(0.5)	9.2	(0.6)	
	Hong Kong (China)*	-0.39	(0.01)	0.70	(0.01)		14.1	(0.6)	57.0	(0.8)		23.0	(0.7)	5.9	(0.3)	
	Indonesia	-0.14	(0.01)	0.79	(0.01)		24.8	(0.7)	55.4	(0.8)		14.5	(0.6)	5.2	(0.4)	
	Jordan	-0.17	(0.02)	0.93	(0.02)		25.7	(0.7)	40.3	(0.8)		19.5	(0.5)	14.5	(0.7)	
	Kazakhstan	-0.21	(0.01)	0.92	(0.01)		29.8	(0.5)	49.0	(0.5)		13.3	(0.4)	7.9	(0.3)	
	Kosovo	0.00	(0.02)	0.83	(0.01)		42.8	(0.9)	40.4	(0.8)		10.3	(0.4)	6.5	(0.5)	
	Lebanon	m	m	m	m		m	m	m	m		m	m	m	m	
	Macao (China)	-0.40	(0.01)	0.68	(0.01)		19.6	(0.7)	57.0	(0.9)		18.7	(0.6)	4.7	(0.3)	
	Malaysia	-0.19	(0.01)	0.75	(0.01)		26.8	(0.9)	52.5	(0.8)		16.6	(0.7)	4.1	(0.3)	
	Malta	-0.24	(0.01)	0.86	(0.02)		24.3	(0.8)	44.1	(0.9)		22.7	(0.8)	8.9	(0.5)	
	Moldova	-0.06	(0.02)	0.90	(0.02)		33.8	(0.7)	51.3	(0.7)		10.9	(0.5)	4.0	(0.3)	
	Montenegro	-0.10	(0.01)	0.91	(0.01)		38.3	(0.7)	41.4	(0.7)		11.4	(0.4)	8.8	(0.3)	
	Morocco	-0.31	(0.02)	0.81	(0.02)	†	22.9	(0.8)	48.0	(0.8)	†	17.5	(0.6)	11.6	(0.6)	†
	North Macedonia	m	m	m	m		m	m	m	m		m	m	m	m	
	Panama	-0.21	(0.02)	0.95	(0.02)	†	30.1	(0.8)	39.8	(0.9)	†	18.6	(0.7)	11.4	(0.6)	†
	Peru	-0.12	(0.01)	0.83	(0.01)	†	36.8	(0.9)	46.5	(0.9)	†	10.6	(0.5)	6.1	(0.4)	†
	Philippines	-0.26	(0.01)	0.83	(0.02)		24.7	(0.8)	48.5	(0.7)		20.6	(0.6)	6.3	(0.4)	
	Qatar	-0.20	(0.01)	0.92	(0.01)		29.3	(0.4)	40.9	(0.5)		19.6	(0.4)	10.2	(0.3)	
	Romania	-0.03	(0.02)	0.94	(0.02)		32.4	(0.8)	50.8	(0.9)		12.3	(0.5)	4.6	(0.5)	
	Russia	-0.39	(0.02)	0.83	(0.02)		21.9	(0.8)	52.3	(0.6)		17.7	(0.5)	8.1	(0.4)	
	Saudi Arabia	0.03	(0.02)	1.01	(0.02)		36.7	(1.0)	40.1	(0.8)		12.6	(0.6)	10.6	(0.6)	
	Serbia	0.03	(0.02)	1.07	(0.01)		35.1	(0.8)	43.4	(0.7)		13.0	(0.5)	8.5	(0.4)	
	Singapore	-0.17	(0.01)	0.89	(0.01)		25.7	(0.5)	51.2	(0.5)		17.4	(0.5)	5.7	(0.3)	
	Chinese Taipei	-0.05	(0.01)	0.91	(0.01)		37.3	(0.6)	48.8	(0.7)		10.7	(0.4)	3.2	(0.2)	
	Thailand	-0.40	(0.02)	0.65	(0.02)		20.9	(0.8)	51.6	(0.8)		23.1	(0.8)	4.4	(0.3)	
	Ukraine	-0.24	(0.01)	0.81	(0.02)		26.0	(0.7)	54.6	(0.8)		12.6	(0.5)	6.8	(0.4)	
	United Arab Emirates	-0.10	(0.01)	0.97	(0.01)		33.9	(0.5)	39.1	(0.5)		18.4	(0.4)	8.6	(0.3)	
	Uruguay	-0.03	(0.03)	1.05	(0.02)		29.2	(0.9)	48.5	(0.8)		14.2	(0.6)	8.2	(0.5)	
	Viet Nam	-0.34	(0.02)	0.60	(0.02)		15.0	(1.0)	57.3	(0.9)		22.7	(0.7)	4.9	(0.3)	

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.9.1 [3/8] **Students' sense of belonging at school**

Based on students' reports

		Percentage of students who reported the following:															
		I make friends easily at school								I feel like I belong at school							
		Strongly disagree		Disagree		Agree		Strongly agree		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	5.0	(0.2)	19.3	(0.4)	57.1	(0.5)	18.5	(0.4)	8.0	(0.3)	23.8	(0.4)	53.5	(0.5)	14.8	(0.4)
	Austria	5.9	(0.4)	17.1	(0.5)	44.8	(0.7)	32.2	(0.7)	8.1	(0.4)	18.0	(0.6)	43.5	(0.7)	30.4	(0.7)
	Belgium	3.8	(0.2)	17.0	(0.5)	58.1	(0.6)	21.1	(0.5)	11.5	(0.5)	30.2	(0.6)	47.1	(0.6)	11.1	(0.4)
	Canada	5.1	(0.2)	20.5	(0.3)	53.0	(0.4)	21.5	(0.4)	8.7	(0.3)	23.9	(0.4)	52.8	(0.4)	14.7	(0.3)
	Chile	9.3	(0.4)	22.5	(0.6)	46.0	(0.7)	22.1	(0.6)	7.8	(0.4)	17.6	(0.5)	50.4	(0.8)	24.2	(0.6)
	Colombia	6.3	(0.4)	19.4	(0.6)	52.2	(0.8)	22.1	(0.6)	5.4	(0.3)	14.0	(0.5)	55.8	(0.8)	24.8	(0.7)
	Czech Republic	5.2	(0.4)	21.9	(0.7)	58.8	(0.6)	14.1	(0.5)	7.0	(0.4)	23.6	(0.7)	58.1	(0.7)	11.3	(0.5)
	Denmark	3.5	(0.3)	17.5	(0.5)	56.8	(0.7)	22.3	(0.7)	6.0	(0.3)	22.0	(0.6)	53.4	(0.9)	18.6	(0.6)
	Estonia	4.8	(0.3)	23.9	(0.7)	56.2	(0.9)	15.1	(0.7)	6.2	(0.3)	20.3	(0.7)	57.7	(0.7)	15.9	(0.6)
	Finland	5.1	(0.3)	20.2	(0.5)	56.0	(0.7)	18.7	(0.6)	5.9	(0.3)	18.7	(0.5)	56.8	(0.8)	18.6	(0.6)
	France	5.0	(0.3)	14.1	(0.5)	50.9	(0.6)	30.0	(0.6)	22.2	(0.7)	39.7	(0.7)	29.6	(0.7)	8.5	(0.3)
	Germany	6.4	(0.4) †	21.7	(0.7) †	49.6	(0.8) †	22.3	(0.7) †	7.0	(0.5) †	18.0	(0.5) †	47.7	(0.8) †	27.3	(0.8) †
	Greece	5.0	(0.3)	20.2	(0.5)	52.9	(0.7)	21.9	(0.7)	3.9	(0.3)	15.4	(0.6)	58.1	(0.6)	22.6	(0.6)
	Hungary	4.6	(0.3)	16.2	(0.5)	52.7	(0.7)	26.5	(0.7)	6.4	(0.4)	20.4	(0.7)	53.1	(0.9)	20.1	(0.7)
	Iceland	9.0	(0.6)	21.2	(0.8)	46.1	(0.9)	23.7	(0.7)	8.5	(0.4)	16.6	(0.8)	50.3	(0.9)	24.6	(0.7)
	Ireland	3.9	(0.3)	19.8	(0.5)	59.7	(0.6)	16.6	(0.5)	8.2	(0.4)	25.1	(0.6)	55.7	(0.8)	11.0	(0.4)
	Israel	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Italy	5.0	(0.3)	15.8	(0.6)	53.1	(0.8)	26.1	(0.7)	8.9	(0.4)	24.9	(0.6)	51.7	(0.8)	14.5	(0.5)
	Japan	6.7	(0.3)	24.3	(0.6)	46.8	(0.8)	22.3	(0.7)	5.1	(0.3)	14.6	(0.6)	60.0	(0.8)	20.3	(0.6)
	Korea	4.0	(0.3)	18.9	(0.6)	51.9	(0.8)	25.2	(0.7)	6.6	(0.3)	15.8	(0.5)	53.8	(0.7)	23.7	(0.7)
	Latvia	5.2	(0.4)	23.4	(0.6)	57.0	(0.8)	14.4	(0.6)	4.6	(0.3)	21.1	(0.6)	60.5	(0.8)	13.8	(0.5)
	Lithuania	9.9	(0.4)	18.8	(0.5)	43.2	(0.7)	28.2	(0.7)	18.9	(0.6)	25.4	(0.6)	36.5	(0.7)	19.2	(0.5)
	Luxembourg	5.7	(0.3)	19.2	(0.6)	50.3	(0.7)	24.8	(0.5)	11.2	(0.4)	24.9	(0.6)	43.3	(0.7)	20.6	(0.5)
	Mexico	7.2	(0.4) †	19.2	(0.6) †	50.2	(0.8) †	23.4	(0.7) †	5.4	(0.4) †	15.4	(0.4) †	54.4	(0.7) †	24.8	(0.6) †
	Netherlands*	2.8	(0.3)	15.9	(0.6)	61.8	(0.8)	19.4	(0.7)	5.9	(0.5)	18.2	(0.6)	62.0	(0.9)	13.9	(0.6)
	New Zealand	4.7	(0.3)	20.9	(0.6)	56.4	(0.7)	18.0	(0.5)	8.6	(0.4)	23.4	(0.6)	54.8	(0.7)	13.1	(0.5)
	Norway	4.7	(0.3)	13.0	(0.5)	50.1	(0.8)	32.2	(0.8)	7.2	(0.4)	15.8	(0.5)	49.2	(0.7)	27.7	(0.8)
	Poland	7.0	(0.3)	23.0	(0.6)	52.7	(0.7)	17.3	(0.6)	9.1	(0.4)	31.1	(0.8)	48.1	(0.8)	11.7	(0.4)
	Portugal*	4.8	(0.3)	19.4	(0.5)	51.8	(0.6)	24.1	(0.6)	3.6	(0.3)	16.2	(0.5)	58.5	(0.8)	21.7	(0.7)
	Slovak Republic	5.6	(0.3)	22.6	(0.6)	55.5	(0.8)	16.4	(0.5)	7.1	(0.4)	23.7	(0.6)	56.4	(0.7)	12.8	(0.5)
	Slovenia	4.4	(0.3)	16.8	(0.6)	58.4	(0.8)	20.4	(0.7)	5.0	(0.4)	21.4	(0.7)	58.7	(0.7)	14.9	(0.6)
	Spain	4.5	(0.2)	14.5	(0.3)	50.6	(0.4)	30.4	(0.4)	4.2	(0.2)	9.3	(0.3)	48.7	(0.5)	37.8	(0.5)
	Sweden	5.7	(0.4)	17.3	(0.6)	53.2	(0.8)	23.9	(0.7)	9.0	(0.4)	24.1	(0.7)	48.8	(0.7)	18.1	(0.6)
	Switzerland	4.9	(0.4)	16.4	(0.7)	50.8	(0.9)	27.8	(0.7)	9.5	(0.5)	21.0	(0.9)	43.8	(1.0)	25.7	(0.8)
	Turkey	6.9	(0.3)	20.6	(0.5)	49.7	(0.7)	22.8	(0.6)	7.5	(0.4)	21.0	(0.5)	49.2	(0.6)	22.3	(0.7)
	United Kingdom	5.0	(0.3)	21.9	(0.5)	56.7	(0.7)	16.4	(0.5)	9.7	(0.5)	28.1	(0.6)	50.8	(0.7)	11.4	(0.5)
	United States*	6.2	(0.3)	21.7	(0.7)	51.5	(0.8)	20.5	(0.6)	7.9	(0.4)	24.6	(0.7)	52.3	(0.9)	15.2	(0.6)
	OECD average	5.5	(0.1)	19.3	(0.1)	52.9	(0.1)	22.3	(0.1)	7.9	(0.1)	21.3	(0.1)	51.8	(0.1)	18.9	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.9.1 [4/8] **Students' sense of belonging at school**

Based on students' reports

		Percentage of students who reported the following:															
		I make friends easily at school								I feel like I belong at school							
		Strongly disagree		Disagree		Agree		Strongly agree		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	5.4	(0.3)	11.2	(0.4)	49.1	(0.7)	34.3	(0.8)	5.6	(0.3)	7.8	(0.4)	40.7	(0.8)	45.9	(0.8)
	Argentina	6.7	(0.3)	20.0	(0.6)	50.6	(0.8)	22.7	(0.6)	6.5	(0.4)	17.1	(0.6)	53.6	(0.6)	22.8	(0.6)
	Baku (Azerbaijan)	11.4	(0.6) †	17.0	(0.5) †	47.7	(0.7) †	23.9	(0.7) †	10.9	(0.5) †	16.2	(0.6) †	48.4	(0.9) †	24.6	(0.7) †
	Belarus	3.4	(0.2)	22.1	(0.6)	56.4	(0.7)	18.2	(0.6)	6.6	(0.3)	35.2	(0.8)	48.3	(0.8)	9.9	(0.5)
	Bosnia and Herzegovina	5.5	(0.4)	12.9	(0.5)	55.5	(0.8)	26.1	(0.6)	6.1	(0.3)	13.6	(0.5)	56.9	(0.6)	23.4	(0.6)
	Brazil	7.3	(0.3)	22.8	(0.5)	46.4	(0.6)	23.5	(0.5)	5.7	(0.3)	20.4	(0.5)	51.4	(0.6)	22.5	(0.5)
	Brunei Darussalam	4.3	(0.3)	20.8	(0.6)	57.0	(0.7)	17.9	(0.5)	7.2	(0.4)	32.6	(0.6)	50.2	(0.8)	10.0	(0.4)
	B-S-J-Z (China)	3.0	(0.2)	17.8	(0.5)	58.6	(0.7)	20.5	(0.7)	5.7	(0.4)	29.3	(0.6)	53.0	(0.6)	12.1	(0.6)
	Bulgaria	6.6	(0.5)	19.1	(0.7)	53.2	(0.8)	21.1	(0.5)	9.7	(0.5)	25.7	(0.7)	47.7	(0.8)	16.9	(0.5)
	Costa Rica	7.2	(0.4)	18.6	(0.6)	46.2	(0.8)	28.0	(0.7)	6.2	(0.3)	14.3	(0.5)	50.0	(0.8)	29.5	(0.7)
	Croatia	3.6	(0.2)	14.4	(0.4)	59.4	(0.5)	22.6	(0.5)	4.1	(0.3)	15.9	(0.5)	60.7	(0.7)	19.3	(0.6)
	Cyprus	6.3	(0.4)	18.7	(0.6)	51.1	(0.9)	23.9	(0.7)	7.3	(0.4)	18.6	(0.5)	51.7	(0.7)	22.5	(0.6)
	Dominican Republic	10.2	(0.6) †	16.3	(0.8) †	43.7	(1.1) †	29.8	(0.9) †	9.0	(0.7) †	14.0	(0.6) †	47.6	(1.1) †	29.4	(0.9) †
	Georgia	6.1	(0.5)	15.2	(0.6)	54.4	(0.9)	24.3	(0.8)	12.0	(0.5)	32.0	(0.9)	39.8	(0.8)	16.3	(0.6)
	Hong Kong (China)*	3.7	(0.2)	20.7	(0.6)	60.7	(0.7)	15.0	(0.6)	7.4	(0.4)	26.9	(0.8)	55.5	(0.7)	10.2	(0.5)
	Indonesia	3.3	(0.3)	9.4	(0.5)	63.5	(0.8)	23.8	(0.6)	4.3	(0.3)	13.8	(0.6)	61.9	(0.8)	20.0	(0.7)
	Jordan	6.5	(0.4)	15.4	(0.4)	48.3	(0.5)	29.8	(0.6)	7.7	(0.4)	16.9	(0.5)	45.4	(0.8)	30.0	(0.6)
	Kazakhstan	6.5	(0.3)	17.5	(0.4)	55.3	(0.5)	20.6	(0.4)	6.9	(0.2)	24.2	(0.4)	52.5	(0.5)	16.4	(0.5)
	Kosovo	4.2	(0.3)	16.2	(0.6)	58.4	(0.7)	21.2	(0.6)	4.7	(0.3)	11.1	(0.5)	56.6	(0.8)	27.6	(0.8)
	Lebanon	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Macao (China)	3.3	(0.3)	26.3	(0.7)	56.9	(0.8)	13.5	(0.6)	9.2	(0.5)	34.8	(0.9)	47.5	(0.9)	8.5	(0.4)
	Malaysia	2.3	(0.2)	13.4	(0.5)	58.3	(0.7)	26.1	(0.7)	3.1	(0.3)	23.5	(0.7)	61.5	(0.8)	11.9	(0.5)
	Malta	7.1	(0.5)	21.6	(0.7)	51.3	(0.9)	20.1	(0.7)	10.4	(0.5)	25.8	(0.9)	48.9	(1.0)	14.9	(0.6)
	Moldova	3.4	(0.3)	15.9	(0.6)	57.6	(0.8)	23.1	(0.7)	3.6	(0.3)	18.3	(0.7)	56.9	(0.9)	21.2	(0.6)
	Montenegro	5.9	(0.3)	13.0	(0.5)	51.8	(0.7)	29.3	(0.5)	12.9	(0.5)	33.2	(0.6)	38.8	(0.6)	15.1	(0.5)
	Morocco	8.2	(0.5) †	16.8	(0.6) †	51.7	(0.7) †	23.3	(0.6) †	7.5	(0.4) †	16.4	(0.6) †	52.8	(0.8) †	23.4	(0.6) †
	North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Panama	9.2	(0.5) †	19.5	(0.8) †	43.6	(0.9) †	27.7	(1.0) †	8.3	(0.5) †	18.8	(0.7) †	45.7	(0.8) †	27.2	(0.9) †
	Peru	4.8	(0.4) †	18.7	(0.7) †	55.2	(0.8) †	21.3	(0.6) †	6.3	(0.4) †	26.5	(0.7) †	53.7	(0.8) †	13.5	(0.6) †
	Philippines	3.6	(0.2)	13.1	(0.4)	59.5	(0.7)	23.8	(0.7)	4.2	(0.3)	11.1	(0.4)	54.8	(0.9)	29.9	(0.8)
	Qatar	6.9	(0.2)	19.2	(0.3)	50.7	(0.5)	23.2	(0.4)	9.1	(0.2)	22.5	(0.4)	48.8	(0.5)	19.5	(0.4)
	Romania	3.7	(0.3)	13.7	(0.5)	54.8	(0.8)	27.9	(0.7)	10.8	(0.5)	33.8	(0.8)	39.1	(0.8)	16.3	(0.6)
	Russia	6.0	(0.3)	26.4	(0.7)	54.0	(0.7)	13.6	(0.5)	5.4	(0.3)	23.5	(0.7)	56.9	(0.7)	14.2	(0.6)
	Saudi Arabia	8.0	(0.4)	18.2	(0.6)	47.6	(0.7)	26.2	(0.7)	8.1	(0.3)	18.2	(0.7)	46.5	(0.8)	27.2	(0.8)
	Serbia	6.0	(0.4)	15.3	(0.6)	51.1	(0.8)	27.6	(0.7)	7.1	(0.4)	16.8	(0.6)	52.7	(0.8)	23.3	(0.7)
	Singapore	4.1	(0.2)	17.8	(0.4)	57.8	(0.6)	20.3	(0.5)	6.9	(0.3)	19.9	(0.4)	58.1	(0.5)	15.2	(0.5)
	Chinese Taipei	3.3	(0.2)	18.6	(0.5)	57.5	(0.7)	20.7	(0.5)	3.4	(0.2)	11.9	(0.4)	64.5	(0.6)	20.2	(0.5)
	Thailand	2.7	(0.2)	17.2	(0.5)	63.4	(0.7)	16.7	(0.6)	3.1	(0.2)	21.2	(0.6)	63.7	(0.7)	12.0	(0.6)
	Ukraine	5.2	(0.3)	19.6	(0.5)	55.7	(0.7)	19.5	(0.6)	4.3	(0.3)	17.7	(0.6)	60.2	(0.5)	17.8	(0.6)
	United Arab Emirates	7.1	(0.2)	17.2	(0.3)	48.8	(0.5)	27.0	(0.4)	9.5	(0.4)	19.7	(0.4)	46.9	(0.5)	24.0	(0.5)
	Uruguay	8.4	(0.5)	21.8	(0.7)	46.8	(0.8)	23.1	(0.8)	5.2	(0.4) †	14.1	(0.6) †	55.8	(1.0) †	24.9	(0.9) †
	Viet Nam	2.5	(0.3)	17.5	(0.7)	65.5	(1.0)	14.5	(0.7)	3.1	(0.3)	23.2	(0.8)	64.4	(0.8)	9.4	(0.8)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.9.1 [5/8] **Students' sense of belonging at school**

Based on students' reports

		Percentage of students who reported the following:															
		I feel awkward and out of place in my school								Other students seem to like me							
		Strongly disagree		Disagree		Agree		Strongly agree		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	24.0	(0.5)	51.2	(0.5)	18.7	(0.4)	6.1	(0.2)	3.6	(0.2)	11.1	(0.4)	70.2	(0.5)	15.1	(0.5)
	Austria	56.4	(0.8)	25.9	(0.7)	10.9	(0.4)	6.7	(0.3)	4.8	(0.4)	10.5	(0.4)	49.6	(0.6)	35.1	(0.7)
	Belgium	35.6	(0.6)	47.7	(0.6)	12.8	(0.4)	4.0	(0.2)	2.5	(0.2)	10.4	(0.3)	73.6	(0.6)	13.5	(0.5)
	Canada	24.8	(0.5)	49.6	(0.5)	19.4	(0.4)	6.2	(0.2)	3.6	(0.2)	10.8	(0.3)	67.9	(0.5)	17.7	(0.3)
	Chile	33.4	(0.7)	46.7	(0.7)	14.4	(0.5)	5.4	(0.4)	6.8	(0.4)	18.0	(0.5)	57.2	(0.7)	18.0	(0.6)
	Colombia	25.1	(0.7)	53.0	(0.8)	16.1	(0.5)	5.7	(0.4)	5.5	(0.4)	19.2	(0.6)	60.1	(0.7)	15.2	(0.5)
	Czech Republic	21.7	(0.5)	59.0	(0.7)	14.8	(0.6)	4.5	(0.3)	4.6	(0.4)	15.1	(0.6)	66.5	(0.7)	13.8	(0.6)
	Denmark	44.2	(0.9)	43.1	(0.8)	9.3	(0.5)	3.5	(0.3)	5.1	(0.4)	11.1	(0.5)	59.4	(0.8)	24.4	(0.7)
	Estonia	27.4	(0.8)	53.8	(0.8)	15.2	(0.5)	3.6	(0.3)	5.3	(0.3)	23.7	(0.7)	61.4	(0.8)	9.6	(0.5)
	Finland	33.2	(0.6)	45.1	(0.6)	16.1	(0.6)	5.7	(0.3)	4.1	(0.3)	17.7	(0.5)	65.0	(0.7)	13.2	(0.5)
	France	36.0	(0.7)	45.2	(0.8)	13.6	(0.5)	5.2	(0.3)	3.2	(0.3)	9.1	(0.4)	69.0	(0.7)	18.7	(0.5)
	Germany	51.8	(0.9) †	32.4	(0.8) †	11.1	(0.5) †	4.6	(0.4) †	3.2	(0.3) †	10.9	(0.5) †	56.4	(0.8) †	29.5	(0.8) †
	Greece	35.5	(0.7)	47.2	(0.7)	12.6	(0.5)	4.8	(0.3)	3.3	(0.3)	13.0	(0.4)	65.1	(0.6)	18.5	(0.6)
	Hungary	41.9	(0.9)	41.5	(0.8)	12.6	(0.5)	4.0	(0.3)	3.5	(0.3)	13.7	(0.6)	65.0	(0.7)	17.8	(0.7)
	Iceland	41.7	(0.7)	36.5	(0.9)	13.5	(0.6)	8.3	(0.5)	6.4	(0.5)	13.3	(0.6)	58.5	(0.9)	21.9	(0.7)
	Ireland	24.3	(0.7)	53.9	(0.7)	17.0	(0.5)	4.8	(0.3)	2.1	(0.2)	8.9	(0.3)	75.6	(0.5)	13.3	(0.4)
	Israel	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Italy	37.3	(0.8)	47.5	(0.8)	11.1	(0.5)	4.1	(0.3)	5.9	(0.4)	17.9	(0.5)	64.9	(0.7)	11.3	(0.5)
	Japan	31.4	(0.7)	48.6	(0.7)	15.6	(0.5)	4.4	(0.3)	4.0	(0.3)	22.1	(0.6)	62.9	(0.8)	10.9	(0.4)
	Korea	49.3	(0.7)	38.2	(0.7)	10.0	(0.5)	2.5	(0.2)	3.3	(0.2)	16.0	(0.5)	61.0	(0.6)	19.7	(0.6)
	Latvia	20.8	(0.5)	50.7	(0.7)	21.4	(0.6)	7.1	(0.4)	6.5	(0.4)	28.3	(0.6)	55.8	(0.9)	9.4	(0.5)
	Lithuania	40.2	(0.7)	32.0	(0.7)	16.7	(0.5)	11.1	(0.5)	9.1	(0.4)	22.2	(0.6)	53.9	(0.6)	14.8	(0.5)
	Luxembourg	41.8	(0.7)	38.1	(0.7)	13.9	(0.5)	6.2	(0.3)	4.1	(0.3)	14.6	(0.5)	60.5	(0.6)	20.8	(0.5)
	Mexico	33.2	(0.7) †	47.0	(0.7) †	14.0	(0.6) †	5.8	(0.4) †	5.5	(0.4) †	17.4	(0.6) †	58.7	(0.7) †	18.4	(0.7) †
	Netherlands*	42.7	(0.9)	46.5	(0.8)	8.0	(0.5)	2.8	(0.3)	1.6	(0.2)	6.5	(0.4)	74.0	(0.9)	18.0	(0.7)
	New Zealand	24.5	(0.6)	51.5	(0.7)	18.8	(0.5)	5.2	(0.3)	2.9	(0.2)	12.0	(0.5)	71.7	(0.6)	13.4	(0.4)
	Norway	49.9	(0.8)	32.2	(0.7)	12.7	(0.5)	5.3	(0.4)	6.2	(0.4)	11.5	(0.5)	55.0	(0.8)	27.2	(0.7)
	Poland	26.4	(0.6)	51.1	(0.7)	15.7	(0.6)	6.8	(0.3)	6.8	(0.3)	20.1	(0.6)	59.1	(0.7)	14.0	(0.5)
	Portugal*	32.2	(0.8)	46.4	(0.7)	17.4	(0.7)	4.0	(0.4)	1.9	(0.2)	9.5	(0.4)	70.8	(0.6)	17.9	(0.6)
	Slovak Republic	26.7	(0.6)	49.4	(0.8)	16.4	(0.7)	7.5	(0.4)	5.9	(0.4)	19.6	(0.5)	62.4	(0.7)	12.1	(0.5)
	Slovenia	29.6	(0.9)	52.1	(0.9)	13.6	(0.6)	4.7	(0.3)	4.1	(0.3)	17.6	(0.5)	66.4	(0.7)	11.9	(0.5)
	Spain	51.5	(0.4)	34.7	(0.4)	9.0	(0.3)	4.8	(0.2)	3.3	(0.1)	9.8	(0.2)	59.6	(0.5)	27.2	(0.5)
	Sweden	40.8	(0.7)	42.4	(0.6)	10.7	(0.4)	6.2	(0.3)	5.2	(0.3)	15.5	(0.5)	60.6	(0.8)	18.7	(0.7)
	Switzerland	48.6	(0.9)	34.6	(0.7)	11.8	(0.5)	5.0	(0.4)	3.0	(0.3)	9.4	(0.5)	59.5	(0.9)	28.1	(0.8)
	Turkey	34.5	(0.7)	40.3	(0.7)	16.0	(0.5)	9.1	(0.3)	6.8	(0.3)	20.6	(0.6)	55.8	(0.8)	16.8	(0.6)
	United Kingdom	25.4	(0.7)	50.8	(0.7)	17.7	(0.5)	6.1	(0.3)	3.5	(0.3)	11.4	(0.4)	70.0	(0.7)	15.2	(0.5)
	United States*	22.7	(0.8)	49.7	(0.8)	21.4	(0.6)	6.2	(0.3)	3.2	(0.3)	11.7	(0.5)	66.3	(0.7)	18.7	(0.6)
	OECD average	35.2	(0.1)	44.9	(0.1)	14.4	(0.1)	5.5	(0.1)	4.5	(0.1)	14.7	(0.1)	63.0	(0.1)	17.8	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.9.1 [6/8] **Students' sense of belonging at school**

Based on students' reports

		Percentage of students who reported the following:															
		I feel awkward and out of place in my school								Other students seem to like me							
		Strongly disagree		Disagree		Agree		Strongly agree		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	49.6	(0.8)	32.6	(0.7)	11.9	(0.5)	5.9	(0.4)	7.6	(0.4)	12.7	(0.5)	55.7	(0.8)	24.0	(0.7)
	Argentina	31.9	(0.7)	48.3	(0.7)	13.6	(0.5)	6.3	(0.4)	5.7	(0.3)	13.8	(0.5)	60.9	(0.6)	19.6	(0.5)
	Baku (Azerbaijan)	32.8	(0.8) †	38.8	(0.8) †	18.3	(0.6) †	10.1	(0.5) †	10.5	(0.5) †	13.9	(0.5) †	51.3	(0.8) †	24.3	(0.7) †
	Belarus	29.1	(0.8)	54.8	(0.7)	12.1	(0.5)	4.1	(0.2)	4.7	(0.3)	25.4	(0.7)	59.7	(0.7)	10.3	(0.5)
	Bosnia and Herzegovina	35.7	(0.7)	45.6	(0.7)	12.5	(0.5)	6.3	(0.4)	6.2	(0.4)	17.1	(0.6)	60.7	(0.8)	16.0	(0.6)
	Brazil	30.5	(0.6)	46.7	(0.7)	16.4	(0.4)	6.3	(0.3)	5.2	(0.3)	17.0	(0.5)	61.1	(0.7)	16.7	(0.5)
	Brunei Darussalam	14.7	(0.4)	46.1	(0.6)	32.4	(0.6)	6.8	(0.3)	5.6	(0.3)	27.5	(0.6)	59.4	(0.6)	7.5	(0.3)
	B-S-J-Z (China)	28.0	(0.8)	55.3	(0.7)	13.5	(0.4)	3.2	(0.2)	3.9	(0.3)	30.1	(0.6)	54.6	(0.6)	11.4	(0.5)
	Bulgaria	26.6	(0.7)	43.7	(0.8)	19.7	(0.6)	10.1	(0.5)	9.5	(0.5)	22.6	(0.8)	52.9	(0.9)	15.0	(0.6)
	Costa Rica	34.9	(0.8)	46.5	(0.7)	13.1	(0.4)	5.5	(0.4)	5.7	(0.3)	15.3	(0.4)	55.7	(0.7)	23.3	(0.6)
	Croatia	37.5	(0.7)	46.3	(0.7)	12.4	(0.5)	3.8	(0.3)	4.0	(0.2)	15.3	(0.4)	67.5	(0.6)	13.2	(0.4)
	Cyprus	32.7	(0.6)	43.9	(0.7)	16.6	(0.5)	6.8	(0.3)	5.9	(0.4)	13.9	(0.5)	61.5	(0.7)	18.6	(0.6)
	Dominican Republic	25.2	(0.9) †	41.3	(1.0) †	22.2	(0.8) †	11.3	(0.6) †	9.9	(0.6) †	16.1	(0.8) †	49.5	(1.1) †	24.5	(0.9) †
	Georgia	36.9	(0.8)	45.3	(0.8)	11.8	(0.6)	5.9	(0.4)	9.0	(0.6)	27.3	(0.6)	49.7	(0.8)	14.0	(0.6)
	Hong Kong (China)*	17.2	(0.6)	59.4	(0.6)	19.2	(0.5)	4.1	(0.3)	5.2	(0.3)	22.9	(0.5)	63.3	(0.6)	8.6	(0.4)
	Indonesia	29.6	(0.8)	53.9	(0.7)	12.9	(0.6)	3.6	(0.3)	4.2	(0.4)	19.2	(0.6)	64.7	(0.7)	12.0	(0.5)
	Jordan	29.3	(0.7)	39.4	(0.6)	21.4	(0.6)	9.9	(0.4)	7.5	(0.4)	12.9	(0.4)	50.1	(0.6)	29.6	(0.6)
	Kazakhstan	24.6	(0.4)	53.8	(0.5)	15.1	(0.4)	6.5	(0.2)	6.3	(0.2)	22.7	(0.4)	58.3	(0.5)	12.6	(0.3)
	Kosovo	31.0	(0.8)	42.9	(0.9)	19.1	(0.6)	7.0	(0.5)	5.9	(0.3)	16.7	(0.6)	61.4	(0.9)	16.0	(0.6)
	Lebanon	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Macao (China)	17.8	(0.6)	57.2	(0.7)	21.3	(0.7)	3.7	(0.3)	5.7	(0.3)	32.4	(0.7)	55.0	(0.8)	6.9	(0.4)
	Malaysia	25.4	(0.8)	54.0	(0.6)	17.3	(0.7)	3.3	(0.2)	4.0	(0.2)	24.9	(0.7)	62.0	(0.6)	9.2	(0.4)
	Malta	24.9	(0.6)	49.4	(0.8)	19.5	(0.7)	6.2	(0.4)	4.8	(0.4)	12.0	(0.6)	66.9	(0.9)	16.3	(0.7)
	Moldova	31.1	(0.8)	51.5	(0.8)	13.6	(0.5)	3.7	(0.3)	3.3	(0.2)	16.7	(0.5)	64.6	(0.7)	15.4	(0.6)
	Montenegro	32.7	(0.6)	45.5	(0.7)	14.0	(0.4)	7.8	(0.4)	7.1	(0.4)	16.2	(0.5)	58.3	(0.7)	18.4	(0.5)
	Morocco	23.9	(0.7) †	48.9	(0.9) †	19.4	(0.7) †	7.8	(0.5) †	9.5	(0.5) †	18.0	(0.6) †	55.2	(0.8) †	17.3	(0.6) †
	North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Panama	25.3	(1.0) †	45.4	(1.1) †	20.0	(0.9) †	9.3	(0.6) †	6.9	(0.5) †	17.0	(0.8) †	52.6	(1.0) †	23.5	(0.9) †
	Peru	25.5	(0.8) †	54.4	(0.9) †	15.2	(0.6) †	4.9	(0.3) †	4.2	(0.3) †	15.4	(0.6) †	65.6	(0.8) †	14.8	(0.6) †
	Philippines	19.8	(0.7)	49.3	(0.7)	24.3	(0.6)	6.6	(0.3)	4.3	(0.3)	20.6	(0.6)	63.6	(0.7)	11.6	(0.5)
	Qatar	28.6	(0.4)	43.7	(0.5)	19.9	(0.4)	7.7	(0.3)	5.8	(0.2)	13.1	(0.3)	58.6	(0.4)	22.4	(0.4)
	Romania	32.5	(0.9)	49.5	(0.8)	13.8	(0.6)	4.2	(0.4)	3.4	(0.3)	11.8	(0.5)	66.5	(0.8)	18.3	(0.6)
	Russia	18.0	(0.8)	49.9	(0.7)	25.4	(0.7)	6.7	(0.3)	7.6	(0.4)	30.1	(0.8)	51.8	(0.8)	10.4	(0.4)
	Saudi Arabia	40.7	(0.9)	39.2	(0.9)	13.5	(0.6)	6.6	(0.4)	4.9	(0.4)	10.2	(0.5)	58.1	(0.7)	26.9	(0.6)
	Serbia	34.8	(0.7)	46.8	(0.7)	12.7	(0.5)	5.6	(0.4)	7.4	(0.4)	10.9	(0.5)	54.8	(0.8)	26.9	(0.6)
	Singapore	24.8	(0.5)	51.0	(0.6)	18.8	(0.5)	5.3	(0.3)	3.5	(0.2)	14.7	(0.4)	69.5	(0.5)	12.2	(0.4)
	Chinese Taipei	29.7	(0.6)	50.1	(0.5)	16.5	(0.5)	3.7	(0.2)	5.3	(0.2)	32.2	(0.6)	53.7	(0.6)	8.8	(0.3)
	Thailand	12.8	(0.6)	50.2	(0.7)	32.2	(0.7)	4.8	(0.3)	5.5	(0.3)	33.4	(0.6)	55.0	(0.6)	6.1	(0.3)
	Ukraine	25.1	(0.6)	54.4	(0.7)	14.3	(0.5)	6.3	(0.4)	5.4	(0.3)	23.5	(0.6)	59.2	(0.6)	11.9	(0.4)
	United Arab Emirates	32.2	(0.5)	41.8	(0.5)	18.4	(0.4)	7.6	(0.3)	7.4	(0.3)	14.4	(0.4)	54.5	(0.6)	23.7	(0.4)
	Uruguay	31.5	(1.0) †	49.3	(0.9) †	13.7	(0.6) †	5.5	(0.4) †	4.5	(0.3) †	7.4	(0.5) †	55.1	(0.9) †	33.0	(1.0) †
	Viet Nam	13.8	(0.7)	62.9	(0.9)	20.0	(0.6)	3.3	(0.3)	8.8	(0.4)	54.4	(0.8)	33.5	(0.8)	3.4	(0.3)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.9.1 [7/8] **Students' sense of belonging at school**

Based on students' reports

		Percentage of students who reported the following:											
		I feel lonely at school											
		Strongly disagree			Disagree			Agree			Strongly agree		
		%	S.E.		%	S.E.		%	S.E.		%	S.E.	
OECD	Australia	35.1	(0.5)		45.6	(0.5)		13.7	(0.4)		5.6	(0.2)	
OECD	Austria	64.1	(0.7)		21.8	(0.5)		8.3	(0.5)		5.9	(0.3)	
OECD	Belgium	52.6	(0.7)		37.5	(0.6)		7.0	(0.3)		3.0	(0.2)	
OECD	Canada	34.9	(0.5)		45.1	(0.5)		14.1	(0.4)		5.9	(0.3)	
OECD	Chile	40.3	(0.7)		38.0	(0.7)		14.6	(0.6)		7.1	(0.4)	
OECD	Colombia	33.0	(0.9)		47.4	(0.9)		13.2	(0.5)		6.4	(0.3)	
OECD	Czech Republic	29.8	(0.8)		51.2	(0.7)		13.6	(0.5)		5.4	(0.4)	
OECD	Denmark	52.5	(0.8)		36.5	(0.8)		8.1	(0.5)		3.0	(0.3)	
OECD	Estonia	37.7	(0.7)		46.0	(0.6)		12.3	(0.6)		4.0	(0.3)	
OECD	Finland	44.6	(0.6)		41.3	(0.7)		10.3	(0.5)		3.8	(0.3)	
OECD	France	53.6	(0.8)		34.4	(0.7)		8.1	(0.4)		3.9	(0.3)	
OECD	Germany	66.3	(0.7)	†	21.8	(0.7)	†	8.4	(0.5)	†	3.5	(0.3)	†
OECD	Greece	48.1	(0.7)		37.9	(0.7)		9.7	(0.5)		4.3	(0.3)	
OECD	Hungary	47.2	(0.8)		38.2	(0.6)		10.7	(0.5)		3.8	(0.3)	
OECD	Iceland	48.8	(0.8)		34.1	(0.9)		9.1	(0.5)		8.0	(0.5)	
OECD	Ireland	37.9	(0.7)		48.4	(0.7)		10.4	(0.4)		3.3	(0.3)	
OECD	Israel	m	m		m	m		m	m		m	m	
OECD	Italy	54.1	(0.8)		33.7	(0.7)		8.4	(0.5)		3.8	(0.3)	
OECD	Japan	45.4	(0.7)		43.0	(0.7)		8.4	(0.4)		3.3	(0.3)	
OECD	Korea	54.2	(0.7)		36.1	(0.7)		8.1	(0.4)		1.5	(0.1)	
OECD	Latvia	32.3	(0.7)		49.3	(0.8)		12.5	(0.6)		5.9	(0.4)	
OECD	Lithuania	49.2	(0.7)		27.1	(0.6)		13.2	(0.5)		10.5	(0.4)	
OECD	Luxembourg	54.6	(0.7)		30.5	(0.7)		9.9	(0.4)		4.9	(0.3)	
OECD	Mexico	42.8	(0.8)	†	40.7	(0.7)	†	10.6	(0.5)	†	5.9	(0.4)	†
OECD	Netherlands*	56.1	(0.9)		36.3	(0.9)		5.5	(0.4)		2.0	(0.2)	
OECD	New Zealand	31.3	(0.6)		51.0	(0.6)		13.1	(0.3)		4.5	(0.3)	
OECD	Norway	56.9	(0.8)		28.9	(0.8)		9.4	(0.4)		4.8	(0.3)	
OECD	Poland	34.1	(0.6)		46.6	(0.6)		12.8	(0.5)		6.5	(0.4)	
OECD	Portugal*	53.5	(0.8)		36.7	(0.8)		7.5	(0.4)		2.2	(0.2)	
OECD	Slovak Republic	30.3	(0.7)		48.2	(0.7)		14.6	(0.6)		6.9	(0.4)	
OECD	Slovenia	42.0	(0.8)		44.8	(0.8)		8.9	(0.4)		4.3	(0.3)	
OECD	Spain	63.8	(0.4)		26.4	(0.4)		6.0	(0.2)		3.8	(0.2)	
OECD	Sweden	44.3	(0.7)		39.6	(0.8)		9.8	(0.5)		6.3	(0.4)	
OECD	Switzerland	62.5	(0.9)		26.2	(0.8)		7.5	(0.4)		3.9	(0.3)	
OECD	Turkey	35.9	(0.7)		40.3	(0.6)		14.7	(0.5)		9.1	(0.4)	
OECD	United Kingdom	37.6	(0.7)		46.3	(0.7)		11.2	(0.3)		4.8	(0.3)	
OECD	United States*	31.6	(0.7)		44.8	(0.8)		16.8	(0.6)		6.8	(0.3)	
	OECD average	45.5	(0.1)		38.9	(0.1)		10.6	(0.1)		5.0	(0.1)	

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.9.1 [8/8] **Students' sense of belonging at school**

Based on students' reports

		Percentage of students who reported the following:											
		I feel lonely at school											
		Strongly disagree			Disagree			Agree			Strongly agree		
		%	S.E.		%	S.E.		%	S.E.		%	S.E.	
Partners	Albania	67.1	(0.7)		22.9	(0.6)		6.2	(0.4)		3.8	(0.3)	
	Argentina	42.7	(0.9)		38.9	(0.6)		10.6	(0.4)		7.8	(0.4)	
	Baku (Azerbaijan)	36.0	(0.9)	†	36.4	(0.8)	†	17.4	(0.5)	†	10.2	(0.5)	†
	Belarus	36.9	(0.8)		48.5	(0.8)		10.4	(0.5)		4.2	(0.3)	
	Bosnia and Herzegovina	42.0	(0.7)		41.8	(0.7)		10.4	(0.4)		5.8	(0.3)	
	Brazil	31.1	(0.7)		45.5	(0.8)		16.8	(0.4)		6.6	(0.3)	
	Brunei Darussalam	34.7	(0.5)		42.5	(0.5)		16.5	(0.5)		6.3	(0.3)	
	B-S-J-Z (China)	29.4	(0.6)		50.9	(0.5)		15.7	(0.4)		4.0	(0.3)	
	Bulgaria	33.6	(0.8)		39.6	(0.7)		17.3	(0.7)		9.5	(0.4)	
	Costa Rica	42.1	(0.7)		41.7	(0.7)		10.8	(0.4)		5.5	(0.3)	
	Croatia	42.5	(0.7)		44.1	(0.6)		9.5	(0.4)		3.8	(0.2)	
	Cyprus	46.0	(0.7)		37.1	(0.7)		11.5	(0.5)		5.5	(0.3)	
	Dominican Republic	32.7	(1.2)	†	39.0	(1.1)	†	16.6	(0.8)	†	11.7	(0.7)	†
	Georgia	42.1	(0.9)		40.7	(0.9)		10.4	(0.6)		6.8	(0.4)	
	Hong Kong (China)*	21.6	(0.6)		56.5	(0.7)		17.1	(0.5)		4.7	(0.3)	
	Indonesia	31.1	(0.8)		51.9	(0.8)		13.0	(0.6)		4.0	(0.3)	
	Jordan	45.5	(0.8)		32.2	(0.6)		14.1	(0.5)		8.2	(0.4)	
	Kazakhstan	31.6	(0.5)		48.0	(0.5)		13.4	(0.4)		7.1	(0.3)	
	Kosovo	54.5	(0.9)		32.7	(0.8)		8.8	(0.5)		4.0	(0.4)	
	Lebanon	m	m		m	m		m	m		m	m	
	Macao (China)	23.8	(0.7)		52.8	(0.8)		18.5	(0.6)		4.9	(0.3)	
	Malaysia	33.9	(0.8)		47.8	(0.7)		14.7	(0.6)		3.6	(0.3)	
	Malta	40.1	(0.9)		41.5	(1.0)		12.9	(0.7)		5.5	(0.5)	
	Moldova	35.2	(0.9)		43.0	(0.7)		15.6	(0.6)		6.2	(0.4)	
	Montenegro	44.4	(0.7)		39.9	(0.7)		9.3	(0.4)		6.4	(0.4)	
	Morocco	28.9	(0.8)	†	45.7	(0.8)	†	16.7	(0.6)	†	8.6	(0.4)	†
	North Macedonia	m	m		m	m		m	m		m	m	
	Panama	36.7	(0.9)	†	40.2	(0.9)	†	14.2	(0.7)	†	8.9	(0.6)	†
	Peru	41.8	(0.9)	†	42.9	(0.9)	†	9.8	(0.5)	†	5.5	(0.4)	†
	Philippines	27.4	(0.7)		46.6	(0.6)		19.4	(0.5)		6.6	(0.3)	
	Qatar	39.0	(0.4)		37.9	(0.5)		15.6	(0.3)		7.4	(0.2)	
	Romania	42.5	(0.8)		42.4	(0.8)		10.8	(0.5)		4.2	(0.3)	
	Russia	22.9	(0.9)		49.9	(0.8)		20.3	(0.7)		6.9	(0.3)	
	Saudi Arabia	50.4	(0.9)		31.8	(0.7)		10.2	(0.5)		7.6	(0.5)	
	Serbia	41.8	(0.8)		41.5	(0.7)		10.4	(0.5)		6.2	(0.4)	
	Singapore	34.9	(0.6)		47.8	(0.6)		12.6	(0.4)		4.7	(0.3)	
	Chinese Taipei	38.0	(0.6)		47.3	(0.6)		11.2	(0.5)		3.5	(0.2)	
	Thailand	26.2	(0.8)		49.6	(0.7)		20.0	(0.7)		4.2	(0.3)	
	Ukraine	27.9	(0.6)		49.7	(0.7)		15.5	(0.5)		7.0	(0.4)	
	United Arab Emirates	43.5	(0.5)		35.4	(0.4)		14.3	(0.3)		6.8	(0.2)	
	Uruguay	36.8	(1.1)	†	44.4	(1.0)	†	12.3	(0.6)	†	6.5	(0.4)	†
	Viet Nam	28.7	(1.1)		58.7	(1.1)		9.4	(0.5)		3.3	(0.3)	

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.10.1 [1/4] **Parental involvement in school-related activities**

Based on principals' and parents' reports

		During the previous academic year, percentage of students' parents who participated in the following school-related activities:															
		Based on principals' reports								Based on parents' reports							
		Discussed their child's progress with a teacher on their own initiative		Discussed their child's progress on the initiative of one of their child's teachers		Participated in local school government		Volunteered in physical or extracurricular activities		Discussed child's behaviour with a teacher on own initiative		Discussed child's behaviour on the initiative of teachers		Discussed child's progress with a teacher on own initiative	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.		
OECD	Australia	41.7	(1.0)	54.3	(1.1)	7.2	(0.4)	10.1	(0.6)	m	m	m	m	m	m		
	Austria	m	m	m	m	m	m	m	m	m	m	m	m	m	m		
	Belgium[1]	34.8	(1.7)	52.1	(1.9)	4.7	(0.5)	4.2	(0.5) ‡	35.7	(0.9)	41.9	(1.1)	36.9	(1.0)		
	Canada	44.2	(1.2)	52.4	(1.3)	7.4	(0.5)	10.9	(0.7)	m	m	m	m	m	m		
	Chile	40.7	(2.2)	60.3	(2.2)	36.3	(2.6)	22.8	(2.2) †	61.6	(0.7)	57.6	(1.1)	58.3	(0.8)		
	Colombia	54.2	(2.0)	68.3	(1.4)	46.6	(2.6)	15.5	(1.6)	m	m	m	m	m	m		
	Czech Republic	35.6	(1.8)	49.3	(1.8)	11.0	(1.3)	9.4	(1.3) †	m	m	m	m	m	m		
	Denmark	34.8	(1.8) †	84.1	(2.1)	9.9	(0.7) †	18.0	(2.6) ‡	m	m	m	m	m	m		
	Estonia	39.1	(1.3)	50.0	(1.4)	16.7	(0.8)	19.0	(0.9)	m	m	m	m	m	m		
	Finland	40.7	(1.9)	68.9	(2.2)	7.5	(0.8)	7.9	(1.2) †	m	m	m	m	m	m		
	France	38.5	(1.8)	55.7	(1.9)	10.5	(1.0)	3.6	(0.9) †	m	m	m	m	m	m		
	Germany	34.6	(1.5)	50.0	(2.0)	10.1	(0.9)	10.1	(1.6) †	49.3	(1.1) ‡	29.4	(1.1) ‡	45.0	(1.1) ‡		
	Greece	63.8	(1.8)	47.0	(2.4)	23.3	(1.7)	10.2	(1.3) †	m	m	m	m	m	m		
	Hungary	31.5	(1.7)	26.0	(1.2)	8.5	(1.1)	12.8	(1.6) †	m	m	m	m	m	m		
	Iceland	37.2	(0.1)	82.3	(0.2)	7.7	(0.1)	14.0	(0.1)	m	m	m	m	m	m		
	Ireland	32.0	(2.2)	43.5	(2.6)	8.2	(0.7)	7.9	(1.1) †	34.8	(0.7)	24.0	(0.7)	38.3	(0.9)		
	Israel	45.2	(2.3)	66.6	(2.2)	19.5	(2.1)	14.8	(1.6)	m	m	m	m	m	m		
	Italy	58.9	(1.7)	49.2	(1.7)	34.0	(1.9)	8.3	(1.4) †	54.7	(1.0)	35.6	(0.8)	56.1	(1.0)		
	Japan	12.6	(1.8)	78.3	(2.6)	20.2	(2.2)	18.3	(1.8)	m	m	m	m	m	m		
	Korea	41.8	(2.1)	46.3	(2.8)	32.6	(2.2)	12.0	(1.5)	47.8	(0.8)	74.6	(0.6)	39.0	(0.9)		
	Latvia	43.1	(1.1)	48.2	(1.0)	13.2	(0.6)	12.5	(0.8) †	m	m	m	m	m	m		
	Lithuania	43.8	(0.9)	55.6	(1.1)	14.0	(0.8)	12.5	(0.6)	m	m	m	m	m	m		
	Luxembourg	38.1	(0.1)	48.0	(0.1)	5.9	(0.0) †	6.0	(0.0) ‡	45.9	(0.8) †	29.9	(0.9) †	47.3	(0.9) †		
	Mexico	32.3	(1.7)	46.9	(2.2)	49.8	(2.4)	27.8	(2.7)	62.7	(0.7)	46.0	(0.7)	64.1	(0.7)		
	Netherlands*	43.1	(2.2)	58.8	(2.8)	3.6	(0.3)	5.5	(1.2)	m	m	m	m	m	m		
	New Zealand	39.8	(1.8)	55.2	(2.2)	5.0	(0.8)	14.2	(1.0)	m	m	m	m	m	m		
	Norway	28.8	(1.8)	87.9	(2.0)	11.1	(1.0)	17.2	(1.7) †	m	m	m	m	m	m		
	Poland	46.1	(2.0)	63.3	(1.9)	22.1	(1.3)	18.1	(1.4)	m	m	m	m	m	m		
	Portugal*	53.9	(1.6)	61.5	(1.5)	10.8	(0.9)	14.8	(1.9) †	73.6	(0.7)	48.2	(1.0)	70.9	(0.6)		
	Slovak Republic	39.3	(1.6)	39.5	(1.5)	33.9	(1.6)	10.6	(0.8) †	m	m	m	m	m	m		
	Slovenia	51.1	(0.3)	33.3	(0.4)	14.9	(0.2)	1.7	(0.1)	m	m	m	m	m	m		
	Spain	50.0	(1.1)	68.0	(1.0)	20.1	(0.9)	9.9	(0.9) †	m	m	m	m	m	m		
	Sweden	42.4	(2.6)	85.9	(1.8)	10.3	(1.1) †	11.7	(2.6) ‡	m	m	m	m	m	m		
	Switzerland	28.5	(2.0)	66.1	(1.9)	4.9	(0.5) †	5.2	(0.9) †	m	m	m	m	m	m		
	Turkey	48.3	(2.1)	47.2	(2.1)	36.6	(2.3)	17.8	(1.8)	m	m	m	m	m	m		
	United Kingdom	41.1	(2.2) †	68.7	(2.2) †	4.6	(0.9) †	5.8	(1.0) †	m	m	m	m	m	m		
	United States*	45.0	(1.8)	49.9	(2.5)	14.5	(1.7)	22.7	(1.9)	m	m	m	m	m	m		
	OECD average	41.0	(0.3)	57.5	(0.3)	16.6	(0.2)	12.3	(0.2)	51.8	(0.3)	43.0	(0.3)	50.7	(0.3)		

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. Only the Flemish Community distributed the parent questionnaire.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.10.1 [2/4] **Parental involvement in school-related activities**

Based on principals' and parents' reports

		During the previous academic year, percentage of students' parents who participated in the following school-related activities:													
		Based on principals' reports								Based on parents' reports					
		Discussed their child's progress with a teacher on their own initiative		Discussed their child's progress on the initiative of one of their child's teachers		Participated in local school government		Volunteered in physical or extracurricular activities		Discussed child's behaviour with a teacher on own initiative		Discussed child's behaviour on the initiative of teachers		Discussed child's progress with a teacher on own initiative	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	61.6	(1.5)	69.4	(1.7)	59.6	(1.9)	36.6	(1.6)	m	m	m	m	m	m
	Argentina	26.2	(1.6)	34.8	(1.6)	12.1	(1.2)	11.6	(1.4)	m	m	m	m	m	m
	Baku (Azerbaijan)	61.8	(2.4) †	54.8	(2.9) †	52.3	(3.4) ‡	43.5	(3.7) ‡	m	m	m	m	m	m
	Belarus	66.6	(1.9)	54.4	(2.3)	36.2	(2.1)	50.0	(1.9)	m	m	m	m	m	m
	Bosnia and Herzegovina	54.5	(2.1)	43.9	(2.0)	28.2	(2.7)	13.3	(2.0)	m	m	m	m	m	m
	Brazil	29.9	(1.2)	43.0	(1.4)	27.1	(1.6)	15.1	(1.4) †	38.4	(0.7)	32.3	(0.7)	33.0	(0.7)
	Brunei Darussalam	35.4	(0.1)	44.1	(0.1)	15.6	(0.0)	10.7	(0.0)	m	m	m	m	m	m
	B-S-J-Z (China)	69.3	(1.9)	66.7	(2.1)	41.0	(2.6)	32.2	(2.3)	m	m	m	m	m	m
	Bulgaria	37.7	(2.0)	51.1	(2.0)	20.3	(2.0)	16.9	(1.9) †	m	m	m	m	m	m
	Costa Rica	38.6	(2.5)	51.0	(2.3)	21.3	(1.9)	16.8	(1.8)	m	m	m	m	m	m
	Croatia	50.0	(2.1)	33.7	(1.6)	21.2	(2.2)	5.4	(1.2) †	66.4	(0.7)	26.5	(0.8)	62.6	(0.7)
	Cyprus	58.6	(0.2)	50.1	(0.4)	17.9	(0.2)	11.7	(0.3)	m	m	m	m	m	m
	Dominican Republic	34.0	(2.2)	51.1	(2.4)	60.6	(2.0)	21.4	(2.3)	74.5	(0.8)	66.9	(0.9)	74.3	(0.7)
	Georgia	51.6	(2.0)	49.1	(2.0)	23.2	(1.6)	24.1	(1.6)	74.7	(0.7)	65.3	(0.8)	74.3	(0.7)
	Hong Kong (China)*	41.2	(2.8)	71.3	(3.5)	20.0	(3.4) †	12.9	(1.7) †	52.4	(0.8)	61.4	(0.7)	52.7	(0.9)
	Indonesia	40.2	(3.2)	42.7	(3.4)	43.8	(3.0)	24.1	(2.7) †	m	m	m	m	m	m
	Jordan	33.0	(2.1)	31.4	(2.3)	33.3	(2.4)	19.3	(2.1)	m	m	m	m	m	m
	Kazakhstan	65.2	(1.3)	59.0	(1.5)	54.7	(1.8)	56.3	(1.4)	m	m	m	m	m	m
	Kosovo	45.8	(0.7)	51.8	(0.8)	52.2	(1.1)	25.8	(0.9)	m	m	m	m	m	m
	Lebanon	48.5	(2.0)	46.5	(2.1)	27.9	(2.2)	13.8	(1.5)	m	m	m	m	m	m
	Macao (China)	34.6	(0.0)	84.5	(0.0)	28.8	(0.0)	15.8	(0.0)	41.7	(0.7)	59.8	(0.7)	37.3	(0.8)
	Malaysia	34.4	(2.1)	38.4	(2.2)	27.1	(2.2)	20.5	(1.6)	m	m	m	m	m	m
	Malta	47.1	(0.1)	42.5	(0.1)	7.9	(0.0)	15.6	(0.1)	62.9	(0.8)	51.3	(0.9)	58.2	(0.9)
	Moldova	57.2	(2.2)	61.9	(2.3)	35.5	(2.3)	37.0	(2.1)	m	m	m	m	m	m
	Montenegro	61.3	(0.3)	42.0	(0.2)	19.0	(0.2)	9.8	(0.3)	m	m	m	m	m	m
	Morocco	24.9	(2.0)	27.8	(1.9)	33.7	(2.8)	24.0	(2.6)	m	m	m	m	m	m
	North Macedonia	57.4	(0.1)	43.9	(0.1)	21.7	(0.1)	5.0	(0.0)	m	m	m	m	m	m
	Panama	49.5	(1.7)	50.0	(1.5)	43.0	(2.2)	31.6	(2.2) †	82.8	(1.1)	60.7	(1.3)	79.1	(1.1)
	Peru	40.7	(1.6)	54.1	(1.7)	49.4	(1.7)	35.4	(2.1)	m	m	m	m	m	m
	Philippines	65.6	(2.1)	75.8	(2.0)	81.7	(1.5)	70.1	(2.2)	m	m	m	m	m	m
	Qatar	51.3	(0.0)	53.6	(0.0)	25.8	(0.0)	18.9	(0.0)	m	m	m	m	m	m
	Romania	36.3	(2.1)	42.4	(2.6)	27.7	(2.9)	16.0	(1.9)	m	m	m	m	m	m
	Russia	55.0	(1.8)	59.0	(2.0)	31.0	(1.7)	44.3	(1.5)	m	m	m	m	m	m
	Saudi Arabia	42.3	(2.0)	36.4	(2.5)	52.6	(2.6)	17.2	(2.1)	m	m	m	m	m	m
	Serbia	45.9	(2.1)	50.3	(1.8)	23.6	(2.3)	5.8	(1.0)	m	m	m	m	m	m
	Singapore	43.4	(0.9)	75.3	(0.5)	11.7	(0.1)	12.4	(0.3)	m	m	m	m	m	m
	Chinese Taipei	44.2	(2.0)	45.2	(2.2)	32.7	(2.2)	25.8	(2.1)	m	m	m	m	m	m
	Thailand	48.3	(2.5)	63.8	(2.2)	49.2	(2.7)	42.8	(2.9)	m	m	m	m	m	m
	Ukraine	57.0	(1.8)	55.2	(2.1)	23.6	(1.7)	31.5	(1.7)	m	m	m	m	m	m
	United Arab Emirates	54.8	(0.7)	60.0	(0.7)	38.3	(0.6)	34.4	(1.4)	m	m	m	m	m	m
	Uruguay	23.3	(1.6)	34.1	(1.9)	8.0	(1.1)	8.8	(1.3)	m	m	m	m	m	m
	Viet Nam	69.0	(3.4)	64.1	(3.3)	25.1	(2.9)	18.9	(2.4)	m	m	m	m	m	m

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. Only the Flemish Community distributed the parent questionnaire.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.10.1 [3/4] **Parental involvement in school-related activities**

Based on principals' and parents' reports

		During the previous academic year, percentage of students' parents who participated in the following school-related activities:													
		Based on parents' reports													
		Discussed child's progress on the initiative of teachers		Participated in local school government		Volunteered in physical or extracurricular activities		Volunteered to support school activities		Attended a scheduled meeting or conferences for parents		Talked about how to support learning at home and homework with child's teachers		Exchanged ideas on parenting, family support, or the child's development with child's teachers	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Austria	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Belgium[1]	52.9	(1.1)	4.6	(0.4)	4.1	(0.4)	2.8	(0.3)	83.0	(0.8)	43.7	(1.0)	25.6	(0.9)
	Canada	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Chile	56.9	(1.1)	25.6	(0.7)	15.0	(0.6)	11.3	(0.5)	87.3	(0.5)	66.3	(0.8)	50.9	(0.9)
	Colombia	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Czech Republic	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Denmark	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Estonia	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Finland	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	France	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Germany	27.4	(1.2) ‡	17.3	(0.7) ‡	19.8	(0.8) ‡	10.1	(0.8) ‡	91.3	(0.6) ‡	43.3	(1.1) ‡	26.1	(1.0) ‡
	Greece	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Hungary	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Iceland	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Ireland	36.8	(0.8)	8.7	(0.5)	9.6	(0.5)	7.6	(0.4)	87.7	(0.5)	59.8	(0.9)	30.4	(0.7)
	Israel	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Italy	42.4	(0.9)	14.7	(0.6)	14.9	(0.6)	4.4	(0.3)	65.6	(0.8)	44.4	(0.9)	37.2	(0.9)
	Japan	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Korea	66.1	(0.6)	16.1	(0.6)	34.6	(0.9)	14.2	(0.6)	63.2	(0.9)	31.3	(0.7)	46.1	(0.8)
	Latvia	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Lithuania	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Luxembourg	35.5	(1.0) †	7.5	(0.5) †	9.5	(0.6) †	5.5	(0.4) †	70.8	(1.1) †	43.4	(1.1) †	26.7	(0.9) †
	Mexico	48.3	(0.8)	50.5	(0.9)	30.9	(0.9)	19.6	(0.6)	89.1	(0.5)	70.6	(0.8)	45.5	(0.7)
	Netherlands*	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	New Zealand	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Norway	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Portugal*	53.0	(0.8)	9.9	(0.5)	8.1	(0.4)	5.3	(0.4)	76.2	(0.8)	60.9	(0.8)	57.6	(0.9)
	Slovak Republic	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Slovenia	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Spain	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Sweden	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Switzerland	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Turkey	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	United Kingdom	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	United States*	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	OECD average	46.6	(0.3)	17.2	(0.2)	16.3	(0.2)	9.0	(0.2)	79.3	(0.2)	51.5	(0.3)	38.5	(0.3)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. Only the Flemish Community distributed the parent questionnaire.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.10.1 [4/4] **Parental involvement in school-related activities**

Based on principals' and parents' reports

		During the previous academic year, percentage of students' parents who participated in the following school-related activities:													
		Based on parents' reports													
		Discussed child's progress on the initiative of teachers		Participated in local school government		Volunteered in physical or extracurricular activities		Volunteered to support school activities		Attended a scheduled meeting or conferences for parents		Talked about how to support learning at home and homework with child's teachers		Exchanged ideas on parenting, family support, or the child's development with child's teachers	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Argentina	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Baku (Azerbaijan)	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Belarus	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Bosnia and Herzegovina	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Brazil	30.2	(0.7)	34.6	(0.7)	10.4	(0.5)	13.3	(0.5)	71.7	(0.8)	41.9	(0.7)	39.0	(0.6)
	Brunei Darussalam	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	B-S-J-Z (China)	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Bulgaria	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Costa Rica	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Croatia	29.6	(0.7)	16.2	(0.6)	19.8	(0.6)	9.6	(0.5)	98.9	(0.1)	50.6	(0.9)	48.3	(0.7)
	Cyprus	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Dominican Republic	67.8	(0.8)	49.8	(0.9)	29.2	(0.9)	31.7	(1.0)	92.6	(0.5)	78.6	(0.7)	68.0	(0.9)
	Georgia	71.9	(0.8)	19.6	(0.7)	17.3	(0.8)	9.7	(0.7)	88.2	(0.6)	62.4	(0.9)	47.8	(0.9)
	Hong Kong (China)*	63.7	(0.7)	7.2	(0.4)	8.9	(0.5)	8.7	(0.4)	29.1	(1.1)	46.5	(0.9)	42.1	(0.7)
	Indonesia	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Jordan	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Kazakhstan	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Kosovo	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Lebanon	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Macao (China)	57.4	(0.7)	39.2	(0.7)	22.2	(0.7)	19.7	(0.7)	66.2	(0.6)	53.8	(0.9)	50.6	(0.8)
	Malaysia	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Malta	53.6	(0.9)	4.4	(0.4)	9.0	(0.6)	6.8	(0.5)	85.3	(0.7)	59.4	(0.9)	39.4	(1.0)
	Moldova	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Montenegro	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Morocco	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Panama	56.1	(1.0)	48.3	(1.2)	31.8	(1.1)	24.8	(1.0)	90.7	(0.7)	71.9	(1.2)	60.5	(1.2)
	Peru	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Philippines	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Qatar	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Romania	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Russia	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Serbia	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Singapore	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Chinese Taipei	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Thailand	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Ukraine	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	United Arab Emirates	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Uruguay	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Viet Nam	m	m	m	m	m	m	m	m	m	m	m	m	m	m

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. Only the Flemish Community distributed the parent questionnaire.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.11.1 [1/4] **Students' life satisfaction**

Based on students' reports

		Average life satisfaction			
		All students		Variability	
		Mean index	S.E.	S.D.	S.E.
OECD	**Australia**	m	m	m	m
	Austria	7.14	(0.04)	2.60	(0.03)
	Belgium	m	m	m	m
	Canada	m	m	m	m
	Chile	7.03	(0.05)	2.72	(0.03)
	Colombia	7.62	(0.05)	2.66	(0.03)
	Czech Republic	6.91	(0.05)	2.66	(0.03)
	Denmark	m	m	m	m
	Estonia	7.19	(0.04)	2.41	(0.03)
	Finland	7.61	(0.03)	2.18	(0.03)
	France	7.19	(0.03)	2.23	(0.03)
	Germany	7.02	(0.04)	2.56	(0.03)
	Greece	6.99	(0.04)	2.48	(0.03)
	Hungary	7.12	(0.05)	2.51	(0.03)
	Iceland	7.34	(0.04)	2.37	(0.04)
	Ireland	6.74	(0.05)	2.47	(0.03)
	Israel	m	m	m	m
	Italy	6.91	(0.04)	2.43	(0.03)
	Japan	6.18	(0.04)	2.60	(0.02)
	Korea	6.52	(0.04)	2.61	(0.02)
	Latvia	7.16	(0.04)	2.38	(0.03)
	Lithuania	7.61	(0.04)	2.42	(0.03)
	Luxembourg	7.04	(0.04)	2.49	(0.03)
	Mexico	8.11	(0.04)	2.21	(0.04)
	Netherlands*	7.50	(0.03)	1.70	(0.03)
	New Zealand	m	m	m	m
	Norway	m	m	m	m
	Poland	6.74	(0.05)	2.65	(0.03)
	Portugal*	7.13	(0.04)	2.21	(0.03)
	Slovak Republic	7.22	(0.04)	2.60	(0.03)
	Slovenia	6.86	(0.04)	2.74	(0.03)
	Spain	7.35	(0.02)	2.30	(0.02)
	Sweden	7.01	(0.04)	2.53	(0.03)
	Switzerland	7.38	(0.04)	2.26	(0.04)
	Turkey	5.62	(0.06)	3.06	(0.03)
	United Kingdom	6.16	(0.04)	2.66	(0.02)
	United States*	6.75	(0.05)	2.56	(0.03)
	OECD average	7.04	(0.01)	2.47	(0.01)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.11.1 [2/4] **Students' life satisfaction**
Based on students' reports

		Average life satisfaction					
		All students			Variability		
		Mean index	S.E.		S.D.	S.E.	
Partners	Albania	8.61	(0.03)		2.08	(0.04)	
	Argentina	7.26	(0.04)		2.72	(0.03)	
	Baku (Azerbaijan)	7.24	(0.05)		3.12	(0.03)	
	Belarus	8.10	(0.04)		2.04	(0.03)	
	Bosnia and Herzegovina	7.84	(0.04)		2.54	(0.03)	
	Brazil	7.05	(0.03)		2.87	(0.02)	
	Brunei Darussalam	5.80	(0.03)		2.41	(0.02)	
	B-S-J-Z (China)	6.64	(0.04)		2.51	(0.02)	
	Bulgaria	7.15	(0.05)		2.89	(0.03)	
	Costa Rica	7.96	(0.04)		2.29	(0.03)	
	Croatia	7.69	(0.03)		2.45	(0.03)	
	Cyprus	6.81	(0.04)		2.72	(0.03)	
	Dominican Republic	8.09	(0.05)	†	2.69	(0.04)	†
	Georgia	7.60	(0.05)		2.67	(0.04)	
	Hong Kong (China)*	6.27	(0.04)		2.25	(0.02)	
	Indonesia	7.47	(0.06)		2.55	(0.03)	
	Jordan	6.88	(0.06)		3.20	(0.04)	
	Kazakhstan	8.76	(0.02)		2.04	(0.02)	
	Kosovo	8.30	(0.04)		2.40	(0.04)	
	Lebanon	6.67	(0.07)		2.73	(0.05)	
	Macao (China)	6.07	(0.04)		2.34	(0.03)	
	Malaysia	7.04	(0.05)		2.41	(0.03)	
	Malta	6.56	(0.05)		2.63	(0.03)	
	Moldova	7.68	(0.05)		2.52	(0.04)	
	Montenegro	7.69	(0.03)		2.83	(0.02)	
	Morocco	6.95	(0.05)		3.05	(0.03)	
	North Macedonia	8.16	(0.03)		2.33	(0.04)	
	Panama	7.92	(0.05)	†	2.51	(0.04)	†
	Peru	7.31	(0.04)		2.53	(0.03)	
	Philippines	7.21	(0.04)		2.62	(0.03)	
	Qatar	6.84	(0.03)		2.89	(0.02)	
	Romania	7.87	(0.04)		2.32	(0.04)	
	Russia	7.32	(0.05)		2.70	(0.03)	
	Saudi Arabia	7.95	(0.04)		2.66	(0.03)	
	Serbia	7.61	(0.04)		2.64	(0.03)	
	Singapore	m	m		m	m	
	Chinese Taipei	6.52	(0.03)		2.40	(0.02)	
	Thailand	7.64	(0.04)		2.25	(0.02)	
	Ukraine	8.03	(0.03)		2.15	(0.04)	
	United Arab Emirates	6.88	(0.04)		2.83	(0.02)	
	Uruguay	7.54	(0.05)		2.51	(0.04)	
	Viet Nam	7.47	(0.04)		2.11	(0.03)	

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.11.1 [3/4] **Students' life satisfaction**

Based on students' reports

		Percentage of students who reported the following levels of life satisfaction:																			
		0-Not at all satisfied		1		2		3		4		5		6		7		8		9		10-Completely satisfied	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Austria	2.3	(0.2)	2.4	(0.2)	3.2	(0.3)	3.9	(0.2)	5.1	(0.3)	6.4	(0.4)	7.1	(0.3)	13.3	(0.5)	19.1	(0.5)	19.6	(0.5)	17.7	(0.6)
	Belgium	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Canada	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Chile	3.0	(0.3)	2.4	(0.2)	2.9	(0.2)	3.7	(0.2)	5.7	(0.3)	10.3	(0.4)	7.8	(0.3)	11.5	(0.5)	15.5	(0.5)	14.6	(0.5)	22.6	(0.7)
	Colombia	2.5	(0.2)	1.9	(0.2)	2.3	(0.2)	2.8	(0.2)	4.1	(0.3)	7.8	(0.4)	5.7	(0.3)	9.2	(0.4)	15.4	(0.5)	13.8	(0.5)	34.5	(0.9)
	Czech Republic	2.7	(0.2)	3.0	(0.2)	3.1	(0.2)	4.1	(0.3)	5.2	(0.3)	8.7	(0.4)	8.6	(0.4)	13.3	(0.5)	18.6	(0.5)	15.8	(0.5)	17.1	(0.7)
	Denmark	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Estonia	1.7	(0.2)	1.7	(0.2)	2.5	(0.3)	3.2	(0.3)	5.4	(0.4)	7.1	(0.3)	8.6	(0.4)	15.0	(0.5)	20.2	(0.6)	18.5	(0.6)	16.1	(0.6)
	Finland	1.1	(0.1)	1.3	(0.2)	1.5	(0.2)	2.8	(0.2)	3.7	(0.2)	5.4	(0.3)	6.5	(0.3)	11.4	(0.5)	23.4	(0.5)	27.8	(0.6)	15.0	(0.5)
	France	1.2	(0.1)	1.5	(0.2)	1.8	(0.2)	2.7	(0.2)	4.6	(0.3)	8.7	(0.4)	9.9	(0.4)	17.7	(0.5)	21.4	(0.6)	16.2	(0.5)	14.3	(0.4)
	Germany	2.1	(0.2)	2.3	(0.2)	2.7	(0.2)	4.9	(0.3)	4.7	(0.3)	8.7	(0.4)	8.1	(0.5)	14.0	(0.5)	18.8	(0.7)	16.9	(0.6)	16.9	(0.7)
	Greece	2.2	(0.2)	2.0	(0.2)	2.4	(0.2)	3.7	(0.2)	5.0	(0.3)	8.9	(0.4)	10.3	(0.4)	16.0	(0.4)	19.0	(0.5)	14.2	(0.4)	16.4	(0.7)
	Hungary	2.3	(0.3)	1.7	(0.2)	2.5	(0.3)	3.9	(0.3)	5.3	(0.3)	7.8	(0.4)	8.6	(0.5)	14.3	(0.5)	19.7	(0.5)	15.7	(0.6)	18.3	(0.6)
	Iceland	1.6	(0.2)	1.5	(0.2)	2.5	(0.3)	3.2	(0.3)	4.4	(0.3)	5.6	(0.4)	8.9	(0.5)	14.4	(0.7)	21.5	(0.8)	18.8	(0.7)	17.8	(0.7)
	Ireland	2.2	(0.2)	2.0	(0.2)	2.9	(0.2)	4.4	(0.2)	7.0	(0.3)	9.4	(0.4)	10.8	(0.4)	16.0	(0.4)	19.0	(0.6)	14.7	(0.5)	11.7	(0.5)
	Israel	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Italy	2.4	(0.3)	2.4	(0.2)	2.2	(0.2)	3.2	(0.2)	5.2	(0.3)	8.5	(0.4)	9.0	(0.4)	17.2	(0.6)	23.3	(0.6)	14.7	(0.4)	11.9	(0.5)
	Japan	2.7	(0.2)	3.1	(0.2)	4.2	(0.2)	6.8	(0.4)	8.0	(0.4)	13.0	(0.5)	12.0	(0.5)	15.8	(0.5)	14.6	(0.5)	8.8	(0.4)	11.0	(0.5)
	Korea	2.1	(0.2)	2.5	(0.2)	4.1	(0.3)	6.8	(0.3)	7.3	(0.3)	10.2	(0.4)	10.3	(0.4)	14.8	(0.5)	15.9	(0.4)	12.8	(0.4)	13.3	(0.6)
	Latvia	1.7	(0.2)	1.8	(0.2)	2.1	(0.2)	3.3	(0.3)	4.3	(0.3)	8.8	(0.4)	9.2	(0.4)	15.4	(0.5)	20.1	(0.6)	17.7	(0.6)	15.6	(0.6)
	Lithuania	1.6	(0.2)	1.8	(0.2)	1.9	(0.2)	2.5	(0.2)	3.9	(0.3)	6.8	(0.3)	6.1	(0.4)	12.1	(0.5)	17.7	(0.5)	21.0	(0.6)	24.7	(0.6)
	Luxembourg	2.2	(0.2)	2.0	(0.2)	2.4	(0.2)	4.0	(0.3)	5.3	(0.3)	8.5	(0.4)	7.4	(0.4)	15.9	(0.5)	19.9	(0.5)	17.6	(0.5)	14.9	(0.5)
	Mexico	1.0	(0.2)	1.2	(0.2)	1.5	(0.2)	1.8	(0.2)	2.8	(0.3)	5.6	(0.3)	3.5	(0.2)	7.6	(0.4)	19.1	(0.5)	24.0	(0.7)	31.9	(0.8)
	Netherlands*	0.3	(0.1)	0.4	(0.1)	1.0	(0.2)	1.7	(0.2)	2.3	(0.2)	4.5	(0.4)	10.4	(0.6)	22.9	(0.8)	29.8	(0.7)	17.4	(0.6)	9.4	(0.5)
	New Zealand	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Norway	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Poland	3.1	(0.3)	2.5	(0.2)	3.4	(0.3)	4.5	(0.3)	5.8	(0.4)	8.8	(0.4)	9.9	(0.4)	15.0	(0.6)	17.5	(0.5)	14.4	(0.5)	15.0	(0.6)
	Portugal*	1.1	(0.2)	1.6	(0.2)	1.5	(0.2)	3.2	(0.2)	4.8	(0.4)	9.5	(0.5)	9.4	(0.4)	17.1	(0.5)	23.0	(0.6)	16.2	(0.5)	12.5	(0.5)
	Slovak Republic	2.5	(0.2)	2.3	(0.2)	2.4	(0.2)	3.0	(0.3)	4.8	(0.3)	8.3	(0.4)	7.1	(0.4)	14.1	(0.5)	17.6	(0.5)	15.5	(0.5)	22.3	(0.6)
	Slovenia	3.4	(0.3)	3.1	(0.3)	3.0	(0.2)	4.5	(0.3)	5.6	(0.3)	8.0	(0.5)	8.3	(0.4)	12.7	(0.5)	17.2	(0.6)	17.4	(0.6)	16.7	(0.5)
	Spain	1.7	(0.1)	1.5	(0.1)	1.9	(0.1)	2.7	(0.1)	3.8	(0.2)	6.7	(0.2)	8.2	(0.2)	16.4	(0.3)	22.0	(0.3)	18.6	(0.3)	16.5	(0.4)
	Sweden	2.4	(0.3)	1.8	(0.2)	3.1	(0.2)	4.2	(0.3)	5.2	(0.3)	7.4	(0.4)	9.2	(0.4)	14.8	(0.5)	19.4	(0.6)	16.3	(0.6)	16.3	(0.6)
	Switzerland	1.3	(0.3)	1.1	(0.2)	2.2	(0.3)	3.0	(0.3)	4.4	(0.4)	6.1	(0.4)	8.5	(0.4)	15.4	(0.5)	21.3	(0.6)	20.8	(0.6)	15.8	(0.6)
	Turkey	8.2	(0.4)	5.5	(0.3)	5.2	(0.3)	6.4	(0.3)	8.5	(0.3)	13.4	(0.5)	9.3	(0.4)	11.6	(0.5)	11.2	(0.4)	8.4	(0.4)	12.4	(0.6)
	United Kingdom	3.6	(0.2)	3.3	(0.2)	4.7	(0.2)	6.3	(0.4)	8.5	(0.4)	9.9	(0.4)	11.3	(0.4)	15.7	(0.5)	16.6	(0.5)	11.3	(0.4)	8.9	(0.4)
	United States*	2.0	(0.2)	2.5	(0.2)	3.3	(0.2)	4.7	(0.3)	6.7	(0.4)	10.1	(0.5)	10.1	(0.4)	14.1	(0.5)	18.1	(0.6)	13.7	(0.5)	14.8	(0.6)
	OECD average	2.3	(0.0)	2.1	(0.0)	2.7	(0.0)	3.9	(0.0)	5.2	(0.1)	8.3	(0.1)	8.7	(0.1)	14.5	(0.1)	19.2	(0.1)	16.4	(0.1)	16.7	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.11.1 [4/4] **Students' life satisfaction**

Based on students' reports

		Percentage of students who reported the following levels of life satisfaction:										
		0-Not at all satisfied	1	2	3	4	5	6	7	8	9	10-Completely satisfied
		% S.E.	% S.E.	% S.E.	% S.E.	% S.E.	% S.E.	% S.E.	% S.E.	% S.E.	% S.E.	% S.E.
Partners	Albania	0.9 (0.1)	0.9 (0.1)	0.8 (0.1)	1.1 (0.1)	1.6 (0.2)	4.9 (0.3)	3.4 (0.3)	6.8 (0.4)	11.5 (0.5)	16.9 (0.6)	51.2 (0.8)
	Argentina	3.9 (0.3)	1.8 (0.2)	2.4 (0.2)	3.1 (0.2)	3.6 (0.3)	8.8 (0.4)	6.6 (0.3)	10.8 (0.4)	18.6 (0.5)	15.2 (0.5)	25.1 (0.6)
	Baku (Azerbaijan)	5.9 (0.4)	3.0 (0.2)	2.4 (0.2)	2.9 (0.2)	4.5 (0.4)	8.8 (0.4)	5.6 (0.3)	8.9 (0.4)	9.7 (0.5)	10.6 (0.5)	37.6 (0.7)
	Belarus	0.7 (0.1)	0.9 (0.1)	0.8 (0.1)	1.6 (0.2)	2.3 (0.2)	5.2 (0.3)	5.1 (0.3)	12.4 (0.5)	19.3 (0.7)	21.1 (0.6)	30.7 (0.7)
	Bosnia and Herzegovina	2.3 (0.2)	1.5 (0.2)	1.7 (0.2)	2.5 (0.2)	3.1 (0.3)	6.5 (0.3)	5.9 (0.4)	9.5 (0.4)	14.3 (0.6)	16.6 (0.5)	36.1 (0.8)
	Brazil	4.0 (0.2)	2.7 (0.2)	2.7 (0.2)	4.0 (0.2)	5.0 (0.3)	10.2 (0.3)	6.5 (0.3)	10.2 (0.4)	14.8 (0.4)	13.6 (0.3)	26.4 (0.5)
	Brunei Darussalam	2.4 (0.2)	2.9 (0.2)	4.3 (0.3)	7.0 (0.3)	9.7 (0.4)	21.2 (0.5)	10.4 (0.4)	15.0 (0.4)	14.1 (0.4)	6.9 (0.3)	6.1 (0.3)
	B-S-J-Z (China)	2.4 (0.2)	2.3 (0.2)	3.2 (0.3)	4.5 (0.2)	6.4 (0.3)	11.6 (0.4)	10.5 (0.4)	15.5 (0.4)	18.7 (0.6)	12.6 (0.4)	12.4 (0.6)
	Bulgaria	3.6 (0.3)	2.7 (0.2)	2.8 (0.3)	4.7 (0.3)	4.8 (0.3)	8.6 (0.4)	7.6 (0.4)	10.1 (0.5)	12.1 (0.5)	12.5 (0.6)	30.5 (0.9)
	Costa Rica	0.9 (0.1)	1.1 (0.1)	1.4 (0.2)	2.3 (0.2)	3.5 (0.3)	6.9 (0.3)	5.1 (0.4)	10.0 (0.4)	15.8 (0.5)	19.7 (0.7)	33.2 (0.9)
	Croatia	2.1 (0.2)	1.6 (0.2)	1.8 (0.1)	2.4 (0.2)	3.4 (0.2)	6.4 (0.3)	6.1 (0.4)	11.3 (0.4)	17.4 (0.5)	20.5 (0.5)	27.2 (0.7)
	Cyprus	3.9 (0.3)	2.7 (0.2)	2.7 (0.2)	3.6 (0.3)	6.2 (0.4)	8.7 (0.4)	9.7 (0.4)	14.1 (0.5)	17.4 (0.6)	13.0 (0.4)	18.1 (0.5)
	Dominican Republic	3.3 (0.3) †	1.5 (0.2) †	1.6 (0.3) †	2.3 (0.2) †	2.8 (0.3) †	5.9 (0.4) †	4.0 (0.3) †	6.5 (0.5) †	9.9 (0.6) †	14.0 (0.6) †	48.2 (1.1) †
	Georgia	3.4 (0.3)	1.7 (0.2)	1.5 (0.2)	2.7 (0.2)	3.2 (0.2)	8.3 (0.4)	5.6 (0.3)	10.0 (0.5)	15.0 (0.5)	16.1 (0.6)	32.4 (0.8)
	Hong Kong (China)*	2.0 (0.2)	1.7 (0.2)	2.7 (0.2)	5.3 (0.3)	8.4 (0.4)	12.7 (0.4)	15.1 (0.5)	21.0 (0.5)	17.2 (0.5)	7.1 (0.3)	6.8 (0.4)
	Indonesia	1.7 (0.2)	1.7 (0.2)	2.1 (0.2)	3.1 (0.3)	4.4 (0.3)	10.2 (0.5)	6.4 (0.5)	10.3 (0.5)	17.6 (0.7)	12.5 (0.5)	29.9 (1.2)
	Jordan	8.2 (0.5)	2.5 (0.2)	2.4 (0.2)	3.2 (0.2)	4.3 (0.3)	11.4 (0.5)	6.4 (0.3)	9.3 (0.4)	10.8 (0.4)	9.1 (0.4)	32.5 (0.8)
	Kazakhstan	0.7 (0.1)	0.7 (0.1)	0.7 (0.1)	1.3 (0.1)	1.9 (0.1)	4.4 (0.2)	3.4 (0.2)	6.8 (0.3)	9.1 (0.3)	11.4 (0.3)	59.6 (0.6)
	Kosovo	1.5 (0.2)	1.6 (0.2)	1.3 (0.2)	1.8 (0.2)	2.4 (0.3)	5.4 (0.3)	4.1 (0.3)	6.9 (0.4)	11.6 (0.5)	15.3 (0.7)	48.1 (0.8)
	Lebanon	4.1 (0.5)	3.0 (0.3)	2.7 (0.3)	3.2 (0.3)	4.8 (0.4)	14.5 (0.7)	9.0 (0.4)	12.8 (0.6)	17.1 (0.7)	11.2 (0.6)	17.5 (0.7)
	Macao (China)	2.4 (0.2)	2.7 (0.3)	3.5 (0.3)	6.1 (0.4)	7.8 (0.4)	14.1 (0.6)	13.3 (0.6)	19.8 (0.6)	17.6 (0.5)	7.7 (0.5)	4.8 (0.3)
	Malaysia	1.2 (0.2)	1.7 (0.2)	1.9 (0.2)	3.8 (0.3)	5.6 (0.3)	13.8 (0.5)	8.8 (0.5)	13.5 (0.5)	17.0 (0.5)	14.8 (0.5)	17.9 (0.7)
	Malta	3.1 (0.3)	2.8 (0.3)	3.9 (0.3)	5.0 (0.4)	5.6 (0.4)	10.0 (0.5)	9.9 (0.5)	16.0 (0.7)	18.5 (0.7)	13.1 (0.6)	12.1 (0.6)
	Moldova	2.7 (0.3)	1.6 (0.2)	1.7 (0.2)	2.4 (0.3)	2.5 (0.2)	6.8 (0.4)	5.6 (0.3)	10.9 (0.4)	18.2 (0.7)	18.7 (0.6)	28.7 (0.9)
	Montenegro	3.5 (0.2)	2.6 (0.2)	2.4 (0.2)	2.6 (0.2)	3.5 (0.2)	6.6 (0.3)	4.2 (0.2)	9.1 (0.4)	12.2 (0.4)	13.6 (0.4)	39.8 (0.7)
	Morocco	5.0 (0.3)	3.7 (0.2)	3.1 (0.2)	3.4 (0.3)	4.8 (0.3)	11.1 (0.5)	6.5 (0.4)	8.4 (0.4)	11.6 (0.5)	13.2 (0.4)	29.0 (0.8)
	North Macedonia	1.9 (0.2)	0.9 (0.1)	1.1 (0.1)	1.6 (0.2)	1.7 (0.2)	7.1 (0.4)	4.6 (0.3)	9.4 (0.5)	15.2 (0.6)	14.3 (0.6)	42.2 (0.8)
	Panama	1.8 (0.2) †	1.4 (0.2) †	1.6 (0.2) †	2.6 (0.3) †	4.0 (0.3) †	6.9 (0.4) †	5.3 (0.4) †	9.1 (0.5) †	13.0 (0.5) †	14.6 (0.5) †	39.8 (1.1) †
	Peru	1.5 (0.2)	1.9 (0.2)	2.4 (0.2)	3.1 (0.2)	5.1 (0.3)	10.5 (0.4)	7.4 (0.4)	12.2 (0.4)	16.7 (0.6)	13.4 (0.5)	25.9 (0.8)
	Philippines	2.1 (0.2)	1.9 (0.2)	2.6 (0.2)	3.3 (0.3)	4.5 (0.3)	14.0 (0.5)	6.1 (0.3)	9.8 (0.4)	16.9 (0.5)	12.6 (0.4)	26.3 (0.8)
	Qatar	4.2 (0.2)	2.8 (0.2)	3.3 (0.1)	4.3 (0.2)	5.7 (0.2)	10.7 (0.3)	7.6 (0.2)	10.9 (0.3)	14.2 (0.3)	12.6 (0.3)	23.7 (0.3)
	Romania	1.9 (0.2)	1.1 (0.2)	1.3 (0.2)	2.2 (0.2)	2.4 (0.2)	6.5 (0.4)	5.0 (0.3)	11.4 (0.5)	19.1 (0.7)	19.8 (0.7)	29.4 (0.9)
	Russia	2.6 (0.2)	2.3 (0.2)	2.4 (0.2)	3.6 (0.2)	4.9 (0.3)	7.8 (0.4)	7.1 (0.3)	12.2 (0.4)	14.6 (0.4)	13.6 (0.5)	28.7 (0.8)
	Saudi Arabia	0.0 (0.0)	0.2 (0.1)	5.0 (0.3)	5.0 (0.3)	4.4 (0.3)	8.7 (0.4)	5.2 (0.3)	5.9 (0.3)	7.0 (0.4)	5.8 (0.3)	52.8 (0.8)
	Serbia	2.6 (0.2)	2.0 (0.2)	1.9 (0.2)	3.2 (0.2)	3.5 (0.2)	6.7 (0.4)	5.5 (0.3)	11.0 (0.4)	15.0 (0.5)	17.3 (0.5)	31.2 (0.8)
	Singapore	m m	m m	m m	m m	m m	m m	m m	m m	m m	m m	m m
	Chinese Taipei	1.7 (0.2)	2.2 (0.2)	2.6 (0.2)	4.8 (0.3)	7.2 (0.4)	14.5 (0.5)	11.1 (0.4)	16.9 (0.4)	17.9 (0.5)	9.8 (0.4)	11.2 (0.4)
	Thailand	0.8 (0.1)	0.9 (0.1)	1.2 (0.2)	2.2 (0.2)	3.7 (0.3)	11.8 (0.5)	6.1 (0.3)	11.8 (0.5)	19.0 (0.6)	16.0 (0.5)	26.5 (0.9)
	Ukraine	1.1 (0.2)	0.8 (0.1)	0.9 (0.1)	2.1 (0.2)	2.5 (0.2)	5.7 (0.3)	5.4 (0.3)	11.7 (0.5)	19.7 (0.6)	17.6 (0.5)	32.6 (0.7)
	United Arab Emirates	3.4 (0.2)	3.0 (0.2)	2.8 (0.2)	4.3 (0.2)	6.4 (0.3)	10.8 (0.4)	8.0 (0.2)	11.7 (0.3)	14.2 (0.3)	10.8 (0.3)	24.7 (0.5)
	Uruguay	2.3 (0.2)	1.5 (0.2)	2.1 (0.3)	2.4 (0.2)	4.4 (0.3)	6.9 (0.4)	7.0 (0.4)	10.8 (0.5)	18.2 (0.6)	18.3 (0.6)	26.1 (0.8)
	Viet Nam	1.3 (0.2)	0.7 (0.2)	1.1 (0.2)	1.4 (0.1)	2.7 (0.3)	10.7 (0.5)	8.8 (0.5)	17.3 (0.7)	22.3 (0.8)	14.3 (0.5)	19.4 (0.9)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.11.14 [1/4] **Students' sense of meaning in life**

Based on students' reports

		Index of meaning in life				Percentage of students who reported the following:							
						My life has clear meaning or purpose							
		Average		Variability		Strongly disagree		Disagree		Agree		Strongly agree	
		Mean index	S.E.	S.D.	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	-0.09	(0.01)	1.04	(0.01)	10.2	(0.4)	27.9	(0.4)	44.4	(0.6)	17.5	(0.4)
	Austria	0.16	(0.02)	1.08	(0.01)	9.7	(0.4)	21.1	(0.6)	39.3	(0.7)	29.8	(0.6)
	Belgium (Flemish)	0.00	(0.02)	0.91	(0.01)	5.4	(0.3)	24.0	(0.6)	54.4	(0.8)	16.2	(0.6)
	Canada	m	m	m	m	m	m	m	m	m	m	m	m
	Chile	0.18	(0.02)	1.06	(0.01)	7.1	(0.3)	18.3	(0.6)	46.6	(0.6)	27.9	(0.7)
	Colombia	0.47	(0.01)	0.93	(0.01)	4.0	(0.3)	8.3	(0.5)	51.5	(0.9)	36.2	(0.8)
	Czech Republic	-0.22	(0.01)	0.95	(0.01)	8.8	(0.4)	32.2	(0.8)	43.1	(0.7)	15.9	(0.5)
	Denmark	-0.02	(0.01)	0.96	(0.01)	8.1	(0.4)	29.9	(0.8)	44.5	(0.8)	17.5	(0.7)
	Estonia	-0.06	(0.01)	0.93	(0.01)	6.7	(0.4)	26.6	(0.6)	49.3	(0.7)	17.4	(0.5)
	Finland	0.06	(0.02)	0.94	(0.01)	7.3	(0.4)	26.5	(0.6)	48.5	(0.6)	17.7	(0.6)
	France	0.10	(0.01)	0.98	(0.01)	7.2	(0.4)	21.2	(0.6)	48.3	(0.7)	23.2	(0.7)
	Germany	0.11	(0.02) †	1.03	(0.01) †	8.3	(0.4)	24.1	(0.8)	41.1	(0.9)	26.4	(0.8)
	Greece	0.03	(0.01)	0.93	(0.01)	7.0	(0.4)	30.0	(0.7)	45.1	(0.7)	17.9	(0.6)
	Hungary	-0.17	(0.02)	0.97	(0.01)	4.8	(0.3)	21.2	(0.6)	48.8	(0.7)	25.2	(0.6)
	Iceland	-0.08	(0.02)	1.11	(0.01)	10.3	(0.5)	25.0	(0.7)	41.6	(0.8)	23.0	(0.7)
	Ireland	-0.18	(0.01)	0.94	(0.01)	8.3	(0.4)	31.7	(0.6)	44.3	(0.7)	15.7	(0.6)
	Israel	m	m	m	m	m	m	m	m	m	m	m	m
	Italy	-0.11	(0.01)	0.94	(0.01)	8.0	(0.3)	25.3	(0.6)	47.1	(0.7)	19.5	(0.6)
	Japan	-0.40	(0.02)	0.98	(0.01)	9.7	(0.5)	34.5	(0.7)	39.7	(0.7)	16.1	(0.6)
	Korea	0.09	(0.01)	0.97	(0.01)	4.5	(0.3)	28.6	(0.7)	46.1	(0.6)	20.7	(0.6)
	Latvia	-0.07	(0.01)	0.94	(0.01)	7.5	(0.4)	28.5	(0.7)	47.9	(0.8)	16.0	(0.6)
	Lithuania	0.12	(0.01)	1.09	(0.01)	8.6	(0.4)	19.7	(0.5)	44.9	(0.6)	26.8	(0.5)
	Luxembourg	0.09	(0.02)	1.03	(0.01)	8.7	(0.4)	22.7	(0.6)	44.1	(0.6)	24.5	(0.5)
	Mexico	0.49	(0.02)	0.95	(0.01)	4.0	(0.4)	10.3	(0.5)	50.4	(0.7)	35.3	(0.7)
	Netherlands*	-0.18	(0.02)	0.86	(0.01)	6.5	(0.4)	30.0	(0.9)	50.6	(1.0)	12.8	(0.6)
	New Zealand	m	m	m	m	m	m	m	m	m	m	m	m
	Norway	m	m	m	m	m	m	m	m	m	m	m	m
	Poland	-0.07	(0.02)	0.97	(0.01)	7.7	(0.3)	26.1	(0.6)	48.6	(0.7)	17.6	(0.6)
	Portugal*	0.09	(0.02)	0.93	(0.01)	5.7	(0.4)	24.4	(0.7)	50.7	(0.8)	19.2	(0.6)
	Slovak Republic	-0.04	(0.01)	0.94	(0.01)	7.7	(0.4)	26.0	(0.7)	47.7	(0.7)	18.6	(0.6)
	Slovenia	0.03	(0.02)	0.98	(0.01)	7.4	(0.4)	24.1	(0.7)	49.5	(0.8)	19.0	(0.6)
	Spain	0.10	(0.01)	0.97	(0.01)	6.1	(0.2)	23.6	(0.4)	48.0	(0.5)	22.4	(0.4)
	Sweden	-0.11	(0.02)	1.03	(0.01)	9.8	(0.4)	30.4	(0.8)	42.1	(0.8)	17.7	(0.6)
	Switzerland	0.22	(0.02)	1.01	(0.01)	7.6	(0.4)	19.7	(0.7)	44.5	(0.9)	28.2	(0.7)
	Turkey	0.15	(0.01)	1.01	(0.01)	6.9	(0.3)	12.3	(0.4)	49.2	(0.7)	31.6	(0.6)
	United Kingdom	-0.25	(0.02)	1.01	(0.01)	12.0	(0.5)	30.8	(0.8)	42.8	(0.7)	14.3	(0.5)
	United States*	0.12	(0.02)	1.04	(0.01)	7.0	(0.4)	21.8	(0.8)	45.9	(0.9)	25.4	(0.7)
	OECD average	0.02	(0.00)	0.98	(0.00)	7.5	(0.1)	24.5	(0.1)	46.4	(0.1)	21.6	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.11.14 [2/4] **Students' sense of meaning in life**

Based on students' reports

		Index of meaning in life				Percentage of students who reported the following:							
						My life has clear meaning or purpose							
		Average		Variability		Strongly disagree		Disagree		Agree		Strongly agree	
		Mean index	S.E.	S.D.	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	0.59	(0.01)	0.88	(0.01)	2.7	(0.3)	7.2	(0.4)	50.3	(0.9)	39.7	(0.9)
	Argentina	0.06	(0.02)	0.96	(0.01)	7.1	(0.3)	21.7	(0.7)	50.1	(0.6)	21.2	(0.6)
	Baku (Azerbaijan)	0.43	(0.02)	1.06	(0.01)	8.7	(0.5)	7.3	(0.4)	44.8	(0.9)	39.2	(0.9)
	Belarus	0.36	(0.01)	0.84	(0.01)	2.3	(0.2)	9.9	(0.4)	62.3	(0.7)	25.4	(0.6)
	Bosnia and Herzegovina	0.32	(0.01)	0.95	(0.01)	5.4	(0.3)	12.9	(0.5)	55.5	(0.7)	26.2	(0.6)
	Brazil	0.08	(0.01)	0.94	(0.01)	6.1	(0.3)	18.0	(0.5)	53.9	(0.7)	22.0	(0.6)
	Brunei Darussalam	0.08	(0.01)	0.82	(0.01)	4.5	(0.2)	19.8	(0.5)	58.7	(0.6)	17.0	(0.5)
	B-S-J-Z (China)	0.08	(0.02)	0.90	(0.01)	2.4	(0.2)	20.6	(0.7)	56.3	(0.7)	20.7	(0.6)
	Bulgaria	0.04	(0.02)	1.00	(0.01)	9.6	(0.5)	14.9	(0.5)	52.5	(0.9)	23.1	(0.8)
	Costa Rica	0.46	(0.02)	1.01	(0.01)	4.5	(0.3)	10.6	(0.4)	44.5	(0.7)	40.4	(0.8)
	Croatia	0.17	(0.02)	0.97	(0.01)	5.3	(0.3)	18.1	(0.5)	51.6	(0.7)	25.0	(0.7)
	Cyprus	-0.02	(0.01)	0.98	(0.01)	10.2	(0.5)	27.4	(0.7)	45.9	(0.6)	16.5	(0.5)
	Dominican Republic	0.51	(0.02) †	1.02	(0.01) †	7.8	(0.5) †	7.1	(0.5) †	46.4	(0.9) †	38.8	(0.9) †
	Georgia	0.09	(0.02)	0.89	(0.01)	7.2	(0.4)	14.7	(0.6)	58.1	(0.8)	19.9	(0.7)
	Hong Kong (China)*	-0.03	(0.02)	0.94	(0.01)	6.2	(0.3)	25.1	(0.7)	54.3	(0.7)	14.4	(0.5)
	Indonesia	0.54	(0.01)	0.78	(0.01)	2.8	(0.3)	4.1	(0.4)	58.0	(0.9)	35.1	(0.8)
	Jordan	0.39	(0.02)	0.97	(0.01)	9.1	(0.6)	9.0	(0.4)	43.7	(0.8)	38.1	(0.9)
	Kazakhstan	0.42	(0.01)	0.95	(0.01)	5.5	(0.2)	6.1	(0.2)	52.6	(0.5)	35.8	(0.5)
	Kosovo	0.47	(0.01)	0.83	(0.01)	3.7	(0.3)	6.9	(0.4)	61.1	(0.7)	28.3	(0.7)
	Lebanon	0.22	(0.03)	0.97	(0.01)	14.4	(0.9)	13.9	(0.7)	42.7	(1.1)	29.0	(1.1)
	Macao (China)	-0.23	(0.02)	0.89	(0.01)	5.7	(0.4)	34.7	(0.8)	47.4	(0.8)	12.2	(0.5)
	Malaysia	0.11	(0.01)	0.78	(0.01)	2.5	(0.2)	13.0	(0.6)	61.6	(0.8)	22.9	(0.7)
	Malta	-0.05	(0.02)	0.96	(0.01)	8.9	(0.6)	24.6	(0.9)	50.7	(0.9)	15.7	(0.6)
	Moldova	0.32	(0.01)	0.83	(0.01)	2.3	(0.2)	12.7	(0.4)	57.3	(0.7)	27.6	(0.7)
	Montenegro	0.32	(0.01)	1.00	(0.01)	5.4	(0.3)	13.9	(0.5)	48.5	(0.7)	32.2	(0.6)
	Morocco	0.36	(0.01) †	0.89	(0.01) †	5.5	(0.4) †	10.2	(0.5) †	51.6	(0.8) †	32.7	(0.8) †
	North Macedonia	0.53	(0.01)	0.93	(0.01)	4.3	(0.3)	10.3	(0.5)	50.0	(0.9)	35.4	(0.8)
	Panama	0.60	(0.02) †	0.98	(0.02) †	5.7	(0.4) †	8.1	(0.6) †	42.3	(0.9) †	44.0	(1.0) †
	Peru	0.50	(0.02) †	0.90	(0.01) †	3.1	(0.2)	9.8	(0.5)	53.6	(0.7)	33.5	(0.8)
	Philippines	0.39	(0.02)	0.87	(0.01)	5.0	(0.3)	11.2	(0.5)	55.9	(0.7)	28.0	(0.7)
	Qatar	0.25	(0.01)	1.00	(0.01)	8.2	(0.2)	15.7	(0.3)	49.6	(0.4)	26.5	(0.4)
	Romania	0.23	(0.01)	0.88	(0.01)	3.8	(0.3)	17.3	(0.6)	50.8	(0.8)	28.0	(0.7)
	Russia	0.11	(0.02)	0.96	(0.01)	6.8	(0.3)	19.7	(0.6)	52.2	(0.7)	21.2	(0.7)
	Saudi Arabia	0.35	(0.02)	0.92	(0.01)	6.6	(0.6)	8.7	(0.4)	46.6	(0.8)	38.1	(0.9)
	Serbia	0.17	(0.02)	1.00	(0.01)	6.9	(0.5)	17.4	(0.6)	51.0	(0.7)	24.7	(0.6)
	Singapore	m	m	m	m	m	m	m	m	m	m	m	m
	Chinese Taipei	-0.27	(0.01)	0.93	(0.01)	5.7	(0.3)	30.5	(0.7)	48.2	(0.8)	15.7	(0.4)
	Thailand	0.38	(0.01)	0.76	(0.01)	1.6	(0.2)	12.8	(0.5)	65.6	(0.8)	20.0	(0.8)
	Ukraine	0.01	(0.01)	0.89	(0.01)	4.2	(0.3)	20.2	(0.6)	52.9	(0.6)	22.7	(0.6)
	United Arab Emirates	0.36	(0.01)	1.02	(0.01)	6.4	(0.2)	14.1	(0.4)	46.5	(0.5)	33.0	(0.6)
	Uruguay	0.07	(0.02)	1.00	(0.01)	8.2	(0.5)	23.0	(0.7)	47.7	(0.8)	21.2	(0.6)
	Viet Nam	0.34	(0.01)	0.69	(0.01)	1.8	(0.2)	10.7	(0.6)	71.4	(0.9)	16.2	(0.8)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.11.14 [3/4] **Students' sense of meaning in life**

Based on students' reports

		Percentage of students who reported the following:															
		I have discovered a satisfactory meaning in life								I have a clear sense of what gives meaning to my life							
		Strongly disagree		Disagree		Agree		Strongly agree		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	9.8	(0.4)	31.5	(0.5)	44.3	(0.5)	14.4	(0.4)	9.8	(0.3)	26.3	(0.4)	45.7	(0.4)	18.1	(0.4)
	Austria	9.1	(0.5)	25.4	(0.7)	42.4	(0.8)	23.1	(0.7)	9.8	(0.4)	20.4	(0.6)	38.4	(0.8)	31.3	(0.7)
	Belgium (Flemish)	5.2	(0.3)	29.8	(0.7)	51.9	(0.9)	13.1	(0.5)	5.6	(0.3)	26.7	(0.7)	53.9	(0.8)	13.9	(0.5)
	Canada	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Chile	8.3	(0.4)	24.4	(0.7)	46.1	(0.6)	21.2	(0.6)	8.6	(0.4)	21.2	(0.6)	41.7	(0.6)	28.5	(0.7)
	Colombia	3.8	(0.3)	16.5	(0.5)	53.8	(0.7)	25.9	(0.6)	3.9	(0.4)	13.0	(0.5)	50.8	(0.9)	32.4	(0.7)
	Czech Republic	9.6	(0.4)	38.7	(0.7)	41.0	(0.7)	10.7	(0.3)	9.5	(0.4)	33.9	(0.8)	42.1	(0.7)	14.5	(0.5)
	Denmark	7.3	(0.4)	30.2	(0.7)	47.7	(0.8)	14.9	(0.6)	6.6	(0.4)	25.1	(0.6)	48.8	(0.8)	19.4	(0.6)
	Estonia	6.5	(0.3)	32.7	(0.7)	48.4	(0.8)	12.4	(0.5)	7.3	(0.4)	28.8	(0.7)	47.8	(0.7)	16.1	(0.5)
	Finland	6.0	(0.3)	23.7	(0.6)	54.5	(0.7)	15.8	(0.5)	6.0	(0.4)	23.4	(0.5)	50.9	(0.7)	19.7	(0.6)
	France	6.1	(0.3)	24.8	(0.5)	50.5	(0.7)	18.7	(0.6)	7.8	(0.3)	27.4	(0.6)	40.8	(0.7)	24.0	(0.6)
	Germany	7.9	(0.5)	27.5	(0.7)	45.2	(0.9)	19.4	(0.7)	8.9	(0.5)	22.8	(0.6)	39.3	(0.8)	29.0	(0.8)
	Greece	5.7	(0.3)	28.8	(0.6)	49.4	(0.7)	16.2	(0.5)	5.6	(0.4)	26.9	(0.6)	46.0	(0.6)	21.5	(0.6)
	Hungary	11.2	(0.4)	38.8	(0.8)	36.9	(0.7)	13.1	(0.5)	14.0	(0.4)	37.9	(0.9)	32.4	(0.6)	15.8	(0.6)
	Iceland	11.1	(0.6)	34.8	(0.8)	36.6	(1.0)	17.6	(0.7)	11.1	(0.6)	28.9	(0.8)	39.7	(1.0)	20.3	(0.7)
	Ireland	8.3	(0.3)	39.2	(0.7)	41.8	(0.8)	10.7	(0.4)	8.0	(0.4)	31.8	(0.7)	46.0	(0.7)	14.2	(0.4)
	Israel	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Italy	9.0	(0.4)	35.1	(0.7)	45.2	(0.7)	10.7	(0.5)	10.0	(0.4)	28.2	(0.6)	43.2	(0.7)	18.6	(0.5)
	Japan	12.1	(0.5)	46.7	(0.7)	30.1	(0.7)	11.1	(0.5)	14.5	(0.5)	45.9	(0.8)	27.8	(0.7)	11.8	(0.5)
	Korea	5.4	(0.3)	29.7	(0.6)	45.3	(0.6)	19.6	(0.5)	4.5	(0.3)	27.2	(0.6)	46.1	(0.6)	22.2	(0.5)
	Latvia	7.1	(0.4)	31.8	(0.8)	48.9	(0.8)	12.2	(0.5)	7.7	(0.4)	27.2	(0.7)	48.1	(0.7)	17.0	(0.5)
	Lithuania	11.2	(0.4)	26.0	(0.5)	42.1	(0.6)	20.7	(0.5)	9.7	(0.4)	19.4	(0.6)	42.6	(0.7)	28.3	(0.6)
	Luxembourg	8.0	(0.4)	25.6	(0.7)	47.2	(0.7)	19.2	(0.5)	8.7	(0.4)	23.8	(0.5)	42.8	(0.7)	24.7	(0.7)
	Mexico	3.8	(0.3)	15.3	(0.5)	52.9	(0.7)	28.0	(0.6)	4.2	(0.3)	12.5	(0.5)	48.4	(0.6)	34.9	(0.7)
	Netherlands*	7.0	(0.4)	39.8	(0.9)	45.7	(0.8)	7.5	(0.4)	6.1	(0.5)	30.0	(0.8)	52.8	(0.9)	11.1	(0.5)
	New Zealand	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Norway	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Poland	7.8	(0.4)	36.0	(0.6)	43.2	(0.6)	13.1	(0.5)	7.2	(0.4)	27.3	(0.7)	47.7	(0.8)	17.8	(0.6)
	Portugal*	5.2	(0.4)	26.6	(0.7)	51.7	(0.8)	16.5	(0.6)	5.2	(0.4)	24.3	(0.7)	50.2	(0.9)	20.3	(0.7)
	Slovak Republic	6.8	(0.4)	34.5	(0.8)	45.9	(0.7)	12.8	(0.4)	6.7	(0.3)	27.3	(0.7)	47.1	(0.8)	18.9	(0.5)
	Slovenia	6.7	(0.4)	28.5	(0.7)	48.9	(0.7)	15.9	(0.6)	7.1	(0.4)	26.0	(0.6)	48.0	(0.8)	18.9	(0.6)
	Spain	6.5	(0.2)	27.2	(0.3)	48.7	(0.4)	17.5	(0.3)	7.0	(0.2)	24.7	(0.3)	44.9	(0.4)	23.5	(0.4)
	Sweden	9.9	(0.4)	33.6	(0.6)	41.3	(0.7)	15.3	(0.6)	9.7	(0.5)	27.8	(0.7)	43.8	(0.7)	18.8	(0.7)
	Switzerland	5.9	(0.4)	22.8	(0.7)	48.4	(0.8)	22.8	(0.6)	7.1	(0.4)	21.6	(0.6)	42.7	(0.8)	28.6	(0.7)
	Turkey	8.1	(0.3)	27.7	(0.6)	43.2	(0.6)	20.9	(0.5)	8.3	(0.4)	25.7	(0.6)	41.6	(0.7)	24.4	(0.5)
	United Kingdom	12.4	(0.5)	36.0	(0.7)	40.9	(0.7)	10.8	(0.4)	11.9	(0.5)	30.2	(0.6)	43.4	(0.6)	14.5	(0.5)
	United States*	7.0	(0.4)	28.4	(0.9)	44.7	(0.9)	19.9	(0.7)	7.1	(0.4)	23.9	(0.7)	45.1	(0.8)	23.9	(0.8)
	OECD average	7.7	(0.1)	30.2	(0.1)	45.6	(0.1)	16.4	(0.1)	8.0	(0.1)	26.3	(0.1)	44.6	(0.1)	21.1	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.11.14 [4/4] **Students' sense of meaning in life**

Based on students' reports

		Percentage of students who reported the following:															
		I have discovered a satisfactory meaning in life								I have a clear sense of what gives meaning to my life							
		Strongly disagree		Disagree		Agree		Strongly agree		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	2.8	(0.3)	16.8	(0.6)	50.3	(0.8)	30.1	(0.8)	2.1	(0.2)	11.6	(0.5)	46.3	(0.8)	39.9	(0.8)
	Argentina	7.9	(0.4)	34.2	(0.8)	42.3	(0.7)	15.6	(0.5)	7.1	(0.4)	21.2	(0.5)	43.5	(0.7)	28.3	(0.7)
	Baku (Azerbaijan)	7.8	(0.4)	16.2	(0.6)	46.8	(0.8)	29.2	(0.7)	7.6	(0.4)	10.3	(0.5)	47.2	(0.8)	34.9	(0.8)
	Belarus	2.6	(0.2)	14.0	(0.6)	63.0	(0.7)	20.5	(0.7)	2.8	(0.3)	16.6	(0.5)	58.2	(0.7)	22.4	(0.7)
	Bosnia and Herzegovina	4.8	(0.3)	18.5	(0.6)	53.7	(0.7)	23.0	(0.6)	4.7	(0.3)	14.7	(0.5)	54.3	(0.8)	26.3	(0.6)
	Brazil	5.8	(0.3)	26.7	(0.6)	50.7	(0.6)	16.8	(0.5)	9.0	(0.4)	26.4	(0.5)	43.5	(0.6)	21.1	(0.6)
	Brunei Darussalam	4.8	(0.3)	28.3	(0.6)	55.5	(0.6)	11.4	(0.4)	4.1	(0.2)	20.2	(0.5)	59.8	(0.6)	15.9	(0.5)
	B-S-J-Z (China)	3.8	(0.2)	38.7	(0.9)	42.5	(0.7)	14.9	(0.6)	3.5	(0.2)	26.0	(0.8)	49.8	(0.8)	20.7	(0.6)
	Bulgaria	9.6	(0.6)	30.8	(0.7)	42.1	(0.8)	17.5	(0.7)	9.0	(0.6)	23.7	(0.7)	45.4	(0.8)	21.9	(0.7)
	Costa Rica	5.3	(0.3)	19.9	(0.6)	46.4	(0.7)	28.3	(0.8)	5.7	(0.3)	15.2	(0.6)	41.8	(0.6)	37.3	(0.8)
	Croatia	5.2	(0.3)	26.9	(0.6)	48.4	(0.7)	19.4	(0.6)	5.0	(0.3)	23.5	(0.6)	49.4	(0.7)	22.1	(0.6)
	Cyprus	8.5	(0.4)	27.5	(0.6)	48.0	(0.7)	16.0	(0.5)	8.1	(0.4)	23.9	(0.7)	48.2	(0.7)	19.7	(0.6)
	Dominican Republic	6.8	(0.5) †	14.5	(0.7) †	47.4	(1.0) †	31.3	(0.8) †	6.7	(0.4) †	11.0	(0.6) †	42.9	(1.0) †	39.5	(1.1) †
	Georgia	6.9	(0.4)	32.2	(0.8)	46.5	(0.8)	14.3	(0.6)	6.2	(0.5)	18.5	(0.5)	50.7	(0.7)	24.6	(0.7)
	Hong Kong (China)*	6.9	(0.4)	29.6	(0.8)	50.8	(0.7)	12.7	(0.5)	6.6	(0.4)	26.2	(0.7)	52.5	(0.7)	14.8	(0.6)
	Indonesia	2.0	(0.2)	8.4	(0.5)	65.0	(0.8)	24.7	(0.7)	2.5	(0.2)	8.6	(0.5)	62.9	(0.8)	26.0	(0.7)
	Jordan	6.2	(0.4)	20.4	(0.5)	48.5	(0.8)	25.0	(0.7)	6.2	(0.3)	12.2	(0.4)	48.7	(0.7)	32.9	(0.7)
	Kazakhstan	5.3	(0.2)	18.2	(0.4)	52.3	(0.5)	24.3	(0.4)	4.9	(0.2)	10.6	(0.3)	55.0	(0.5)	29.5	(0.5)
	Kosovo	3.2	(0.3)	16.8	(0.6)	57.2	(0.7)	22.9	(0.6)	2.6	(0.2)	10.5	(0.5)	53.1	(0.7)	33.8	(0.7)
	Lebanon	6.7	(0.5)	25.0	(0.9)	45.9	(0.9)	22.4	(0.9)	6.7	(0.5)	16.4	(0.7)	47.6	(0.9)	29.3	(0.9)
	Macao (China)	8.1	(0.4)	43.7	(0.8)	38.0	(0.8)	10.2	(0.5)	7.6	(0.4)	36.9	(0.8)	41.7	(0.8)	13.8	(0.6)
	Malaysia	3.8	(0.3)	35.9	(0.8)	50.2	(0.8)	10.1	(0.4)	3.0	(0.3)	21.3	(0.7)	58.1	(0.8)	17.6	(0.6)
	Malta	8.2	(0.5)	28.9	(1.0)	50.0	(0.9)	12.9	(0.7)	8.0	(0.6)	25.4	(0.7)	49.4	(0.8)	17.2	(0.7)
	Moldova	3.1	(0.3)	22.7	(0.6)	56.2	(0.7)	18.0	(0.6)	2.3	(0.2)	16.7	(0.5)	55.2	(0.8)	25.8	(0.7)
	Montenegro	5.2	(0.2)	21.5	(0.5)	49.4	(0.7)	23.9	(0.6)	6.0	(0.2)	17.7	(0.5)	45.7	(0.8)	30.7	(0.6)
	Morocco	6.2	(0.4) †	19.4	(0.6) †	51.6	(0.8) †	22.8	(0.6) †	4.9	(0.3) †	13.3	(0.5) †	51.6	(0.7) †	30.2	(0.7) †
	North Macedonia	3.6	(0.3)	15.8	(0.5)	51.1	(0.8)	29.6	(0.7)	3.6	(0.3)	10.2	(0.4)	48.8	(0.9)	37.3	(0.8)
	Panama	5.1	(0.5) †	13.0	(0.7) †	49.0	(1.0) †	33.0	(0.8) †	5.3	(0.5) †	9.8	(0.6) †	42.6	(0.9) †	42.2	(0.9) †
	Peru	2.9	(0.3) †	14.1	(0.7) †	56.1	(0.8) †	26.8	(0.7) †	3.0	(0.3) †	12.7	(0.6) †	50.2	(0.8) †	34.1	(0.8) †
	Philippines	4.1	(0.3)	12.9	(0.5)	61.3	(0.7)	21.7	(0.6)	4.3	(0.3)	10.3	(0.5)	58.8	(0.7)	26.6	(0.7)
	Qatar	6.9	(0.3)	20.8	(0.4)	48.6	(0.5)	23.7	(0.4)	6.7	(0.2)	16.5	(0.3)	48.9	(0.5)	27.9	(0.4)
	Romania	3.6	(0.3)	22.1	(0.7)	57.6	(0.8)	16.7	(0.7)	5.4	(0.3)	20.6	(0.7)	50.6	(0.8)	23.4	(0.6)
	Russia	5.8	(0.3)	26.7	(0.6)	50.0	(0.6)	17.5	(0.6)	6.2	(0.3)	20.9	(0.5)	52.9	(0.6)	20.0	(0.6)
	Saudi Arabia	9.7	(0.4)	25.3	(0.6)	43.6	(0.7)	21.4	(0.6)	5.0	(0.3)	9.3	(0.4)	49.5	(0.7)	36.2	(0.7)
	Serbia	6.6	(0.4)	24.9	(0.7)	48.7	(0.8)	19.8	(0.6)	6.6	(0.4)	20.3	(0.7)	49.4	(0.7)	23.7	(0.6)
	Singapore	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Chinese Taipei	9.8	(0.4)	47.0	(0.7)	34.0	(0.7)	9.1	(0.4)	9.1	(0.4)	38.5	(0.7)	39.9	(0.7)	12.5	(0.4)
	Thailand	1.7	(0.2)	14.8	(0.5)	65.2	(0.7)	18.2	(0.7)	1.7	(0.1)	9.3	(0.4)	64.7	(0.7)	24.3	(0.7)
	Ukraine	6.4	(0.4)	40.1	(0.7)	40.3	(0.6)	13.2	(0.5)	5.4	(0.3)	26.2	(0.5)	50.1	(0.6)	18.3	(0.5)
	United Arab Emirates	5.9	(0.2)	20.2	(0.7)	46.4	(0.5)	27.5	(0.5)	5.9	(0.2)	16.2	(0.5)	45.6	(0.4)	32.4	(0.5)
	Uruguay	7.5	(0.5)	27.9	(0.7)	47.0	(0.8)	17.6	(0.6)	7.8	(0.5)	22.1	(0.7)	46.0	(0.9)	24.1	(0.7)
	Viet Nam	1.7	(0.2)	17.9	(0.6)	64.8	(0.8)	15.6	(0.6)	1.6	(0.2)	8.8	(0.5)	66.0	(0.8)	23.7	(0.7)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.12.1 [1/6] **Students' positive feelings**

Based on students' reports

		Index of positive feelings[1]				Percentage of students who reported feeling the following:							
						Happy							
		Average		Variability		Never		Rarely		Sometimes		Always	
		Mean index	S.E.	S.D.	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	m	m	m	m	m	m	m	m	m	m	m	m
	Austria	0.11	(0.02)	1.00	(0.01)	1.5	(0.2)	7.0	(0.4)	48.8	(0.7)	42.6	(0.8)
	Belgium	m	m	m	m	m	m	m	m	m	m	m	m
	Canada	-0.06	(0.01)	1.02	(0.00)	1.3	(0.1)	5.5	(0.2)	46.0	(0.5)	47.2	(0.6)
	Chile	0.17	(0.02)	0.98	(0.01)	1.1	(0.2)	5.2	(0.3)	46.4	(0.7)	47.3	(0.7)
	Colombia	0.25	(0.01)	0.98	(0.01)	0.8	(0.1)	6.5	(0.3)	43.7	(0.6)	49.0	(0.6)
	Czech Republic	-0.13	(0.02)	1.00	(0.01)	2.2	(0.2)	11.3	(0.5)	53.7	(0.8)	32.8	(0.7)
	Denmark	0.24	(0.01)	0.88	(0.01)	1.4	(0.2)	7.4	(0.4)	56.5	(0.8)	34.6	(0.7)
	Estonia	-0.18	(0.02)	1.02	(0.01)	1.5	(0.2)	9.3	(0.5)	50.7	(0.8)	38.5	(0.8)
	Finland	-0.12	(0.01)	0.93	(0.01)	1.5	(0.2)	7.7	(0.4)	59.3	(0.6)	31.5	(0.6)
	France	0.27	(0.01)	0.95	(0.01)	1.2	(0.1)	5.2	(0.3)	43.6	(0.7)	49.9	(0.7)
	Germany	0.07	(0.02) †	0.96	(0.01) †	0.9	(0.2)	7.3	(0.5)	52.7	(0.9)	39.1	(0.8)
	Greece	-0.05	(0.01)	0.93	(0.01)	2.3	(0.2)	8.3	(0.4)	54.7	(0.7)	34.6	(0.7)
	Hungary	0.19	(0.02)	1.03	(0.01)	1.6	(0.2)	6.3	(0.4)	40.3	(0.8)	51.7	(0.8)
	Iceland	-0.09	(0.02)	1.00	(0.01)	2.0	(0.2)	7.0	(0.5)	52.1	(0.9)	38.8	(0.9)
	Ireland	-0.09	(0.01)	0.91	(0.01)	0.4	(0.1)	3.8	(0.3)	50.5	(0.7)	45.3	(0.8)
	Israel	m	m	m	m	m	m	m	m	m	m	m	m
	Italy	m	m	m	m	1.7	(0.2)	7.0	(0.4)	52.0	(0.7)	39.2	(0.8)
	Japan	-0.13	(0.02)	0.96	(0.01)	2.2	(0.2)	6.6	(0.3)	56.1	(0.7)	35.1	(0.8)
	Korea	0.03	(0.01)	1.05	(0.01)	1.6	(0.2)	11.6	(0.4)	42.8	(0.6)	43.9	(0.6)
	Latvia	0.03	(0.02)	1.00	(0.01)	1.7	(0.2)	11.2	(0.5)	50.4	(0.7)	36.7	(0.7)
	Lithuania	0.08	(0.01)	1.01	(0.01)	1.8	(0.2)	7.9	(0.4)	46.6	(0.7)	43.7	(0.7)
	Luxembourg	0.07	(0.01)	1.01	(0.01)	1.7	(0.2)	7.0	(0.3)	48.4	(0.7)	42.9	(0.7)
	Mexico	0.36	(0.01) †	0.92	(0.01) †	0.8	(0.2)	3.6	(0.2)	39.6	(0.6)	56.0	(0.7)
	Netherlands*	0.08	(0.02)	0.87	(0.01)	0.5	(0.1)	2.7	(0.3)	46.8	(1.1)	50.0	(1.1)
	New Zealand	m	m	m	m	m	m	m	m	m	m	m	m
	Norway	m	m	m	m	m	m	m	m	m	m	m	m
	Poland	-0.08	(0.02)	1.04	(0.01)	1.9	(0.2)	11.2	(0.5)	52.4	(0.8)	34.5	(0.7)
	Portugal*	0.22	(0.02)	0.92	(0.01)	0.8	(0.1)	3.4	(0.2)	48.5	(0.7)	47.3	(0.7)
	Slovak Republic	-0.02	(0.02)	1.05	(0.01)	2.3	(0.2)	10.7	(0.4)	47.0	(0.7)	39.9	(0.7)
	Slovenia	-0.61	(0.01)	0.90	(0.01)	1.7	(0.2)	15.6	(0.5)	64.5	(0.7)	18.3	(0.5)
	Spain	0.30	(0.01)	0.95	(0.01)	0.7	(0.1)	3.1	(0.1)	44.5	(0.5)	51.6	(0.5)
	Sweden	-0.05	(0.02)	0.98	(0.01)	2.1	(0.2)	9.5	(0.5)	55.2	(0.7)	33.2	(0.7)
	Switzerland	0.22	(0.02)	0.93	(0.01)	0.9	(0.2)	4.3	(0.4)	47.3	(0.8)	47.5	(0.8)
	Turkey	-0.26	(0.02)	1.12	(0.01)	3.9	(0.2)	14.7	(0.5)	49.1	(0.7)	32.3	(0.7)
	United Kingdom	-0.29	(0.01)	0.97	(0.01)	1.3	(0.1)	6.1	(0.4)	57.5	(0.6)	35.1	(0.6)
	United States*	-0.13	(0.02)	1.01	(0.01)	1.2	(0.2)	6.0	(0.4)	49.8	(0.8)	43.1	(0.8)
	OECD average	0.01	(0.00)	0.98	(0.00)	1.5	(0.0)	7.5	(0.1)	49.9	(0.1)	41.0	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of positive feelings is based on three items: "happy", "joyful" and "cheerful".

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.12.1 [2/6] **Students' positive feelings**

Based on students' reports

		Index of positive feelings[1]					Percentage of students who reported feeling the following:								
							Happy								
		Average		Variability			Never		Rarely		Sometimes		Always		
		Mean index	S.E.	S.D.	S.E.		%	S.E.	%	S.E.	%	S.E.	%	S.E.	
Partners	Albania	0.52	(0.01)	0.83	(0.01)		0.8	(0.1)	4.0	(0.3)	27.1	(0.7)	68.1	(0.7)	
	Argentina	0.08	(0.01)	0.99	(0.01)		2.3	(0.2)	5.8	(0.3)	51.3	(0.6)	40.6	(0.6)	
	Baku (Azerbaijan)	0.07	(0.02)	1.08	(0.01)		3.7	(0.3)	11.6	(0.5)	40.5	(0.7)	44.3	(0.8)	
	Belarus	0.18	(0.02)	0.93	(0.01)		0.7	(0.1)	7.3	(0.5)	42.9	(0.7)	49.1	(0.7)	
	Bosnia and Herzegovina	0.35	(0.02)	0.99	(0.01)		2.1	(0.2)	5.7	(0.3)	33.8	(0.7)	58.4	(0.7)	
	Brazil	0.06	(0.01)	1.00	(0.01)		2.2	(0.2)	7.6	(0.3)	39.6	(0.7)	50.6	(0.7)	
	Brunei Darussalam	-0.01	(0.01)	0.99	(0.01)		0.9	(0.1)	5.7	(0.3)	45.6	(0.6)	47.8	(0.6)	
	B-S-J-Z (China)	0.11	(0.01)	0.89	(0.01)		0.5	(0.1)	1.3	(0.2)	35.7	(0.7)	62.5	(0.7)	
	Bulgaria	0.16	(0.03)	1.13	(0.02)		4.7	(0.5)	8.7	(0.5)	36.7	(0.8)	49.9	(1.0)	
	Costa Rica	0.32	(0.02)	0.94	(0.01)		0.6	(0.1)	4.0	(0.3)	39.7	(0.8)	55.7	(0.8)	
	Croatia	0.26	(0.01)	0.99	(0.01)		1.1	(0.1)	4.7	(0.3)	37.8	(0.6)	56.4	(0.6)	
	Cyprus	-0.09	(0.02)	1.00	(0.01)		3.6	(0.3)	8.1	(0.4)	50.8	(0.8)	37.5	(0.7)	
	Dominican Republic	0.39	(0.02)	1.01	(0.02)	†	3.2	(0.3)	5.0	(0.5)	32.0	(1.0)	59.9	(1.0)	†
	Georgia	-0.13	(0.02)	1.02	(0.01)		5.8	(0.5)	20.2	(0.6)	49.4	(0.8)	24.6	(0.8)	
	Hong Kong (China)*	-0.06	(0.02)	0.94	(0.01)		1.4	(0.2)	3.0	(0.2)	54.3	(0.8)	41.3	(0.8)	
	Indonesia	0.33	(0.01)	0.94	(0.01)		0.8	(0.1)	8.0	(0.4)	37.9	(0.7)	53.3	(0.7)	
	Jordan	-0.22	(0.02)	1.15	(0.01)		9.1	(0.6)	10.3	(0.4)	42.1	(0.8)	38.5	(0.8)	
	Kazakhstan	0.57	(0.01)	0.90	(0.01)		1.0	(0.1)	6.3	(0.2)	26.7	(0.6)	66.0	(0.6)	
	Kosovo	0.46	(0.01)	0.88	(0.01)		1.5	(0.2)	4.3	(0.4)	28.5	(0.7)	65.6	(0.7)	
	Lebanon	-0.32	(0.03)	1.13	(0.02)		6.2	(0.6)	12.0	(0.7)	43.3	(1.0)	38.5	(0.9)	
	Macao (China)	-0.08	(0.02)	1.04	(0.01)		0.8	(0.1)	9.8	(0.5)	47.2	(0.9)	42.2	(1.0)	
	Malaysia	0.27	(0.02)	1.01	(0.01)		1.0	(0.2)	5.2	(0.4)	29.0	(0.7)	64.8	(0.9)	
	Malta	-0.04	(0.02)	0.99	(0.01)		1.6	(0.2)	4.8	(0.4)	51.0	(0.8)	42.6	(0.8)	
	Moldova	0.23	(0.02)	0.93	(0.01)		0.9	(0.2)	6.7	(0.3)	46.3	(0.7)	46.0	(0.8)	
	Montenegro	0.40	(0.01)	0.98	(0.01)		2.1	(0.2)	5.1	(0.3)	30.9	(0.7)	61.9	(0.7)	
	Morocco	m	m	m	m		3.3	(0.3)	8.3	(0.4)	47.7	(0.8)	40.7	(0.8)	†
	North Macedonia	0.37	(0.01)	0.93	(0.01)		1.6	(0.2)	4.1	(0.3)	30.8	(0.7)	63.5	(0.7)	
	Panama	0.39	(0.02)	0.92	(0.02)	†	1.6	(0.3)	3.6	(0.4)	38.1	(0.9)	56.7	(0.8)	†
	Peru	0.37	(0.02)	0.90	(0.01)	†	0.8	(0.1)	3.4	(0.3)	42.5	(0.9)	53.3	(0.9)	†
	Philippines	0.25	(0.02)	0.93	(0.01)		1.1	(0.2)	3.4	(0.3)	35.6	(0.7)	59.9	(0.9)	
	Qatar	0.01	(0.01)	1.10	(0.01)		4.4	(0.2)	8.1	(0.2)	40.1	(0.4)	47.4	(0.4)	
	Romania	0.19	(0.02)	0.95	(0.01)		1.5	(0.3)	5.2	(0.3)	46.4	(0.8)	46.9	(0.9)	
	Russia	-0.07	(0.02)	1.06	(0.01)		2.5	(0.2)	12.8	(0.5)	42.7	(0.7)	41.9	(0.8)	
	Saudi Arabia	0.03	(0.02)	1.10	(0.02)		7.5	(0.7)	7.1	(0.4)	39.4	(0.8)	45.9	(0.9)	
	Serbia	0.23	(0.02)	1.05	(0.01)		2.7	(0.3)	7.5	(0.4)	35.5	(0.7)	54.3	(0.7)	
	Singapore	m	m	m	m		m	m	m	m	m	m	m	m	
	Chinese Taipei	0.12	(0.01)	1.01	(0.01)		0.7	(0.1)	5.4	(0.3)	44.5	(0.6)	49.4	(0.7)	
	Thailand	0.32	(0.02)	0.98	(0.01)		0.9	(0.1)	7.0	(0.4)	33.1	(0.7)	59.0	(0.8)	
	Ukraine	0.31	(0.01)	0.94	(0.01)		1.1	(0.2)	8.0	(0.3)	44.0	(0.7)	46.8	(0.7)	
	United Arab Emirates	0.04	(0.01)	1.08	(0.01)		3.5	(0.2)	6.7	(0.3)	39.8	(0.6)	50.1	(0.6)	
	Uruguay	0.19	(0.02)	0.93	(0.01)		1.6	(0.2)	4.3	(0.3)	46.6	(0.9)	47.4	(0.9)	
	Viet Nam	m	m	m	m		1.3	(0.2)	14.0	(0.5)	46.2	(0.6)	38.5	(0.7)	

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of positive feelings is based on three items: "happy", "joyful" and "cheerful".

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.12.1 [3/6] **Students' positive feelings**

Based on students' reports

		Percentage of students who reported feeling the following:															
		Lively								Proud							
		Never		Rarely		Sometimes		Always		Never		Rarely		Sometimes		Always	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Austria	3.2	(0.3)	12.8	(0.5)	43.8	(0.6)	40.2	(0.7)	4.4	(0.3)	21.5	(0.6)	55.8	(0.6)	18.3	(0.5)
OECD	Belgium	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Canada	3.9	(0.2)	15.9	(0.4)	50.7	(0.5)	29.5	(0.5)	3.9	(0.2)	19.9	(0.4)	55.6	(0.4)	20.6	(0.4)
OECD	Chile	2.1	(0.2)	11.1	(0.5)	47.8	(0.8)	39.0	(0.8)	7.4	(0.4)	22.2	(0.5)	46.9	(0.8)	23.4	(0.6)
OECD	Colombia	1.2	(0.2)	8.3	(0.5)	44.5	(0.7)	46.1	(0.8)	8.4	(0.4)	19.3	(0.6)	42.2	(0.8)	30.2	(1.0)
OECD	Czech Republic	4.1	(0.3)	18.5	(0.6)	47.3	(0.8)	30.1	(0.7)	7.0	(0.4)	29.2	(0.7)	47.1	(0.9)	16.6	(0.6)
OECD	Denmark	1.6	(0.2)	8.2	(0.4)	56.3	(0.7)	34.0	(0.7)	2.2	(0.2)	13.9	(0.6)	66.9	(0.8)	16.9	(0.6)
OECD	Estonia	2.5	(0.2)	18.1	(0.6)	50.8	(0.7)	28.7	(0.8)	6.9	(0.4)	32.5	(0.8)	50.4	(0.8)	10.3	(0.5)
OECD	Finland	2.7	(0.2)	17.1	(0.5)	63.1	(0.7)	17.1	(0.5)	4.2	(0.3)	25.7	(0.6)	60.9	(0.7)	9.2	(0.4)
OECD	France	9.6	(0.4)	21.5	(0.7)	46.2	(0.8)	22.7	(0.7)	5.3	(0.3)	21.6	(0.5)	50.5	(0.7)	22.6	(0.6)
OECD	Germany	2.6	(0.3) †	14.1	(0.6) †	45.5	(1.0) †	37.8	(0.8) †	3.9	(0.3) †	23.9	(0.7) †	56.1	(0.8) †	16.1	(0.7) †
OECD	Greece	2.1	(0.2)	12.2	(0.4)	45.1	(0.7)	40.7	(0.7)	3.4	(0.2)	17.5	(0.6)	52.4	(0.7)	26.6	(0.7)
OECD	Hungary	3.2	(0.3)	14.5	(0.5)	42.3	(0.6)	40.0	(0.7)	5.9	(0.4)	21.8	(0.7)	50.9	(0.9)	21.5	(0.7)
OECD	Iceland	1.9	(0.2)	8.2	(0.5)	54.1	(0.9)	35.8	(0.9)	3.6	(0.3)	18.5	(0.7)	57.5	(0.9)	20.4	(0.8)
OECD	Ireland	1.1	(0.2)	10.0	(0.4)	53.1	(0.7)	35.8	(0.7)	3.7	(0.3)	22.7	(0.6)	58.4	(0.7)	15.2	(0.5)
OECD	Israel	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Italy	14.5	(0.5)	33.4	(0.6)	38.2	(0.7)	13.9	(0.6)	5.5	(0.3)	21.3	(0.5)	49.6	(0.8)	23.6	(0.7)
OECD	Japan	2.4	(0.2)	7.5	(0.4)	45.8	(0.7)	44.3	(0.8)	10.8	(0.4)	37.4	(0.8)	44.0	(0.8)	7.7	(0.4)
OECD	Korea	2.9	(0.2)	15.0	(0.4)	40.8	(0.6)	41.3	(0.6)	7.3	(0.4)	26.7	(0.6)	43.5	(0.6)	22.5	(0.5)
OECD	Latvia	3.2	(0.2)	19.4	(0.7)	48.2	(0.9)	29.1	(0.6)	8.9	(0.4)	35.0	(0.7)	45.6	(0.8)	10.6	(0.5)
OECD	Lithuania	2.7	(0.3)	15.1	(0.4)	49.1	(0.6)	33.0	(0.6)	4.4	(0.3)	22.7	(0.5)	53.7	(0.7)	19.2	(0.6)
OECD	Luxembourg	3.6	(0.3)	12.9	(0.5)	41.9	(0.8)	41.7	(0.7)	3.8	(0.3)	21.1	(0.6)	54.7	(0.7)	20.4	(0.6)
OECD	Mexico	1.4	(0.2)	6.4	(0.4)	47.0	(0.8)	45.2	(0.7)	4.9	(0.3)	15.7	(0.5)	47.1	(0.7)	32.3	(0.7)
OECD	Netherlands*	1.6	(0.3)	7.8	(0.5)	54.3	(0.8)	36.3	(0.9)	1.9	(0.2)	14.7	(0.5)	64.4	(0.8)	19.0	(0.7)
OECD	New Zealand	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Norway	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Poland	2.8	(0.2)	16.7	(0.5)	48.0	(0.6)	32.5	(0.7)	4.6	(0.3)	28.1	(0.6)	55.4	(0.8)	11.9	(0.5)
OECD	Portugal*	2.3	(0.2)	12.1	(0.5)	54.6	(0.7)	31.0	(0.7)	4.4	(0.3)	24.9	(0.7)	55.8	(0.7)	14.9	(0.6)
OECD	Slovak Republic	4.7	(0.3)	21.3	(0.6)	51.8	(0.8)	22.2	(0.6)	10.4	(0.4)	32.0	(0.8)	45.3	(0.8)	12.3	(0.5)
OECD	Slovenia	2.5	(0.3)	18.6	(0.6)	55.1	(0.7)	23.8	(0.5)	4.6	(0.3)	38.6	(0.8)	47.4	(0.8)	9.4	(0.4)
OECD	Spain	0.9	(0.1)	6.2	(0.2)	51.3	(0.4)	41.7	(0.4)	4.3	(0.1)	19.3	(0.4)	53.4	(0.5)	23.1	(0.4)
OECD	Sweden	3.1	(0.3)	16.1	(0.6)	55.8	(0.8)	25.0	(0.6)	4.1	(0.3)	21.6	(0.7)	56.8	(0.9)	17.5	(0.6)
OECD	Switzerland	3.8	(0.4)	13.1	(0.6)	45.9	(0.8)	37.1	(0.8)	3.3	(0.2)	19.5	(0.7)	58.5	(0.9)	18.7	(0.8)
OECD	Turkey	9.4	(0.4)	20.9	(0.5)	38.1	(0.7)	31.6	(0.7)	5.0	(0.3)	14.5	(0.4)	40.6	(0.7)	39.9	(0.7)
OECD	United Kingdom	2.1	(0.2)	15.3	(0.5)	53.4	(0.6)	29.2	(0.6)	5.8	(0.4)	29.3	(0.8)	53.0	(0.8)	11.9	(0.4)
OECD	United States*	3.1	(0.3)	15.6	(0.5)	50.4	(0.7)	31.0	(0.8)	3.3	(0.3)	18.5	(0.6)	53.9	(0.8)	24.3	(0.8)
	OECD average	3.4	(0.0)	14.5	(0.1)	48.8	(0.1)	33.3	(0.1)	5.2	(0.1)	23.5	(0.1)	52.3	(0.1)	19.0	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of positive feelings is based on three items: "happy", "joyful" and "cheerful".

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.12.1 [4/6] **Students' positive feelings**

Based on students' reports

		Percentage of students who reported feeling the following:															
		Lively								Proud							
		Never		Rarely		Sometimes		Always		Never		Rarely		Sometimes		Always	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	1.3	(0.2)	4.0	(0.3)	16.2	(0.5)	78.5	(0.6)	1.2	(0.1)	5.2	(0.3)	34.9	(0.8)	58.6	(0.8)
	Argentina	3.0	(0.2)	9.1	(0.4)	43.7	(0.7)	44.2	(0.6)	7.9	(0.3)	17.5	(0.6)	47.0	(0.8)	27.6	(0.7)
	Baku (Azerbaijan)	4.4	(0.3)	11.7	(0.4)	30.7	(0.7)	53.3	(0.8)	22.0	(0.7)	19.7	(0.6)	29.1	(0.7)	29.2	(0.6)
	Belarus	1.1	(0.2)	8.4	(0.4)	35.1	(0.6)	55.4	(0.8)	7.0	(0.4)	26.7	(0.6)	52.5	(0.6)	13.7	(0.4)
	Bosnia and Herzegovina	2.6	(0.2)	9.0	(0.4)	39.2	(0.7)	49.3	(0.6)	2.9	(0.2)	10.7	(0.4)	52.0	(0.6)	34.4	(0.6)
	Brazil	3.1	(0.2)	12.3	(0.4)	37.9	(0.7)	46.6	(0.7)	13.9	(0.4)	22.3	(0.5)	40.9	(0.7)	22.9	(0.5)
	Brunei Darussalam	2.9	(0.2)	16.3	(0.4)	50.0	(0.6)	30.8	(0.6)	4.1	(0.2)	25.3	(0.5)	57.0	(0.7)	13.6	(0.4)
	B-S-J-Z (China)	1.0	(0.1)	4.8	(0.2)	41.2	(0.9)	53.0	(0.9)	3.2	(0.2)	15.3	(0.4)	65.6	(0.5)	15.9	(0.5)
	Bulgaria	5.4	(0.4)	13.8	(0.6)	38.9	(0.8)	41.9	(0.7)	6.3	(0.5)	20.6	(0.5)	47.0	(0.9)	26.1	(0.7)
	Costa Rica	1.3	(0.1)	7.9	(0.3)	44.6	(0.8)	46.2	(0.8)	2.3	(0.2)	11.1	(0.4)	57.1	(0.8)	29.5	(0.8)
	Croatia	3.0	(0.2)	13.4	(0.5)	46.8	(0.6)	36.8	(0.6)	2.6	(0.2)	16.3	(0.5)	61.2	(0.6)	19.9	(0.6)
	Cyprus	3.9	(0.3)	11.6	(0.5)	48.0	(0.8)	36.4	(0.7)	4.5	(0.3)	17.5	(0.6)	53.7	(0.8)	24.3	(0.7)
	Dominican Republic	11.4	(0.7) †	13.5	(0.7) †	36.4	(0.9) †	38.6	(0.9) †	8.3	(0.5) †	13.7	(0.7) †	35.0	(1.1) †	43.0	(1.1) †
	Georgia	5.4	(0.5)	11.5	(0.5)	28.4	(0.8)	54.7	(0.9)	16.3	(0.7)	26.4	(0.7)	38.2	(0.8)	19.2	(0.7)
	Hong Kong (China)*	2.5	(0.3)	12.6	(0.5)	55.9	(0.8)	28.9	(0.8)	6.3	(0.3)	29.0	(0.7)	55.6	(0.7)	9.2	(0.5)
	Indonesia	0.8	(0.1)	7.5	(0.4)	35.9	(0.8)	55.8	(0.8)	1.8	(0.2)	12.6	(0.5)	49.9	(1.0)	35.7	(0.9)
	Jordan	5.9	(0.3)	12.4	(0.5)	44.2	(0.8)	37.5	(0.7)	5.5	(0.4)	9.8	(0.4)	33.9	(0.7)	50.8	(0.8)
	Kazakhstan	1.4	(0.1)	9.4	(0.3)	36.7	(0.5)	52.4	(0.6)	16.7	(0.4)	29.3	(0.4)	38.5	(0.5)	15.5	(0.4)
	Kosovo	1.8	(0.2)	5.9	(0.4)	30.6	(0.8)	61.7	(0.8)	1.3	(0.2)	6.1	(0.4)	34.6	(0.8)	58.0	(0.8)
	Lebanon	9.1	(0.6)	20.2	(0.7)	41.6	(0.9)	29.1	(0.8)	7.5	(0.5)	17.1	(0.7)	41.7	(0.9)	33.7	(0.9)
	Macao (China)	2.9	(0.3)	17.1	(0.5)	45.8	(0.8)	34.2	(0.8)	5.7	(0.3)	32.2	(0.8)	48.3	(0.8)	13.8	(0.5)
	Malaysia	2.4	(0.2)	16.2	(0.6)	45.5	(0.7)	35.9	(0.8)	4.1	(0.3)	22.3	(0.7)	54.6	(0.8)	18.9	(0.7)
	Malta	3.2	(0.3)	13.6	(0.7)	47.4	(0.9)	35.9	(0.9)	5.1	(0.4)	22.1	(0.7)	55.0	(0.9)	17.8	(0.7)
	Moldova	1.5	(0.2)	9.7	(0.5)	37.2	(0.8)	51.6	(0.8)	8.4	(0.4)	24.3	(0.7)	49.5	(0.7)	17.8	(0.6)
	Montenegro	23.1	(0.6)	25.5	(0.6)	33.9	(0.6)	17.5	(0.5)	2.8	(0.2)	9.0	(0.4)	49.1	(0.6)	39.1	(0.6)
	Morocco	4.5	(0.4) †	11.5	(0.5) †	40.2	(0.7) †	43.9	(0.8) †	6.2	(0.4) †	14.7	(0.5) †	50.0	(0.7) †	29.1	(0.7) †
	North Macedonia	2.1	(0.3)	6.0	(0.3)	32.3	(0.6)	59.6	(0.7)	3.5	(0.3)	9.3	(0.4)	46.4	(0.8)	40.8	(0.8)
	Panama	3.2	(0.4) †	7.5	(0.6) †	32.3	(0.8) †	57.0	(1.1) †	11.0	(0.7) †	13.4	(0.6) †	37.1	(0.9) †	38.5	(1.0) †
	Peru	1.2	(0.1) †	4.8	(0.3) †	42.7	(0.8) †	51.3	(0.9) †	6.7	(0.4) †	16.8	(0.5) †	44.2	(0.8) †	32.2	(0.7) †
	Philippines	1.4	(0.2)	6.7	(0.3)	45.4	(0.7)	46.5	(0.8)	2.5	(0.2)	9.6	(0.4)	47.2	(0.7)	40.7	(0.9)
	Qatar	5.1	(0.2)	14.4	(0.3)	45.3	(0.5)	35.2	(0.4)	6.2	(0.2)	15.9	(0.3)	40.9	(0.4)	37.0	(0.4)
	Romania	1.4	(0.2)	9.3	(0.5)	39.8	(0.7)	49.5	(0.8)	5.1	(0.4)	20.9	(0.6)	52.3	(0.8)	21.6	(0.8)
	Russia	3.9	(0.3)	17.1	(0.5)	45.5	(0.7)	33.6	(0.8)	12.4	(0.4)	30.8	(0.5)	39.8	(0.6)	17.0	(0.5)
	Saudi Arabia	4.3	(0.5)	8.2	(0.4)	38.3	(0.7)	49.2	(0.8)	6.1	(0.4)	10.4	(0.4)	31.1	(0.7)	52.4	(0.7)
	Serbia	6.3	(0.3)	14.1	(0.6)	40.7	(0.7)	38.9	(0.7)	3.2	(0.3)	11.5	(0.5)	50.6	(0.7)	34.7	(0.6)
	Singapore	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Chinese Taipei	1.8	(0.2)	11.6	(0.4)	43.1	(0.7)	43.6	(0.7)	13.2	(0.4)	43.6	(0.7)	37.1	(0.6)	6.2	(0.3)
	Thailand	1.3	(0.2)	8.0	(0.5)	34.9	(0.7)	55.8	(0.8)	1.2	(0.1)	16.5	(0.6)	56.4	(0.8)	25.9	(0.8)
	Ukraine	2.5	(0.2)	11.8	(0.4)	45.1	(0.6)	40.6	(0.7)	12.8	(0.5)	28.7	(0.7)	44.0	(0.8)	14.4	(0.5)
	United Arab Emirates	3.9	(0.2)	12.6	(0.4)	45.3	(0.5)	38.1	(0.4)	5.2	(0.2)	14.5	(0.4)	40.6	(0.6)	39.7	(0.7)
	Uruguay	2.2	(0.2)	9.4	(0.5)	47.1	(0.8)	41.2	(0.9)	5.6	(0.4)	16.5	(0.6)	52.4	(0.9)	25.5	(0.8)
	Viet Nam	1.9	(0.2)	16.9	(0.6)	48.5	(0.8)	32.8	(0.9)	2.9	(0.3)	23.3	(0.6)	57.0	(0.8)	16.7	(0.7)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of positive feelings is based on three items: "happy", "joyful" and "cheerful".

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.12.1 [5/6] **Students' positive feelings**

Based on students' reports

		Percentage of students who reported feeling the following:															
		Joyful								Cheerful							
		Never		Rarely		Sometimes		Always		Never		Rarely		Sometimes		Always	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Austria	1.5	(0.2)	7.7	(0.4)	46.3	(0.7)	44.4	(0.7)	1.4	(0.2)	7.0	(0.4)	43.7	(0.7)	48.0	(0.8)
OECD	Belgium	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Canada	2.2	(0.2)	11.6	(0.3)	52.1	(0.4)	34.1	(0.5)	2.6	(0.2)	12.6	(0.3)	49.8	(0.4)	35.0	(0.5)
OECD	Chile	1.3	(0.2)	6.3	(0.3)	41.1	(0.7)	51.2	(0.8)	2.0	(0.2)	9.3	(0.4)	44.9	(0.7)	43.8	(0.7)
OECD	Colombia	0.8	(0.1)	7.0	(0.4)	37.5	(0.7)	54.6	(0.8)	0.9	(0.1)	7.3	(0.4)	42.5	(0.8)	49.3	(0.7)
OECD	Czech Republic	1.7	(0.2)	9.7	(0.5)	54.7	(0.9)	33.9	(0.8)	2.0	(0.2)	9.7	(0.4)	50.7	(0.9)	37.6	(0.8)
OECD	Denmark	0.7	(0.1)	2.3	(0.2)	42.4	(0.9)	54.6	(0.9)	0.7	(0.1)	2.6	(0.3)	39.2	(0.8)	57.5	(0.8)
OECD	Estonia	4.2	(0.3)	17.8	(0.6)	48.7	(0.7)	29.2	(0.7)	1.8	(0.2)	9.3	(0.5)	46.3	(0.8)	42.7	(0.8)
OECD	Finland	1.2	(0.1)	6.7	(0.3)	60.2	(0.6)	31.9	(0.7)	1.4	(0.1)	8.1	(0.4)	56.9	(0.6)	33.7	(0.5)
OECD	France	1.4	(0.2)	6.2	(0.4)	41.0	(0.6)	51.5	(0.7)	1.2	(0.2)	5.3	(0.3)	38.2	(0.7)	55.4	(0.7)
OECD	Germany	1.2	(0.2) †	7.7	(0.4) †	49.5	(0.7) †	41.6	(0.7) †	1.0	(0.2) †	6.7	(0.4) †	44.8	(0.9) †	47.5	(1.0) †
OECD	Greece	1.4	(0.2)	5.8	(0.3)	47.8	(0.8)	45.0	(0.7)	3.5	(0.3)	13.8	(0.5)	48.8	(0.7)	33.9	(0.6)
OECD	Hungary	1.2	(0.2)	6.9	(0.4)	36.4	(0.7)	55.5	(0.8)	3.5	(0.3)	13.4	(0.4)	39.5	(0.8)	43.6	(0.8)
OECD	Iceland	1.9	(0.2)	10.3	(0.5)	57.1	(0.9)	30.7	(0.8)	1.7	(0.2)	6.5	(0.4)	53.2	(0.9)	38.7	(0.8)
OECD	Ireland	1.3	(0.2)	11.6	(0.5)	59.8	(0.7)	27.3	(0.7)	1.1	(0.2)	10.1	(0.4)	56.8	(0.8)	32.0	(0.8)
OECD	Israel	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Italy	1.7	(0.2)	7.4	(0.4)	46.7	(0.7)	44.2	(0.8)	10.3	(0.5)	23.6	(0.6)	43.2	(0.7)	22.8	(0.5)
OECD	Japan	1.7	(0.2)	4.1	(0.2)	56.4	(0.7)	37.8	(0.7)	5.5	(0.3)	15.6	(0.4)	49.0	(0.7)	29.9	(0.7)
OECD	Korea	1.3	(0.2)	8.4	(0.4)	45.4	(0.5)	44.9	(0.6)	1.9	(0.2)	11.5	(0.5)	46.1	(0.5)	40.6	(0.5)
OECD	Latvia	1.4	(0.2)	7.7	(0.4)	48.1	(0.8)	42.8	(0.8)	1.8	(0.2)	8.9	(0.4)	40.6	(0.8)	48.7	(0.8)
OECD	Lithuania	1.6	(0.2)	8.1	(0.4)	48.5	(0.6)	41.7	(0.7)	1.4	(0.2)	7.6	(0.4)	44.3	(0.6)	46.7	(0.7)
OECD	Luxembourg	1.9	(0.2)	8.0	(0.4)	48.3	(0.7)	41.8	(0.6)	1.7	(0.2)	7.5	(0.4)	44.3	(0.8)	46.5	(0.7)
OECD	Mexico	0.9	(0.2) †	4.9	(0.3) †	34.1	(0.7) †	60.1	(0.7) †	1.4	(0.2) †	6.2	(0.4) †	42.4	(0.7) †	50.0	(0.7) †
OECD	Netherlands*	0.6	(0.1)	3.3	(0.3)	44.8	(0.9)	51.3	(0.9)	3.5	(0.3)	15.5	(0.8)	58.7	(0.8)	22.4	(0.9)
OECD	New Zealand	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Norway	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Poland	2.0	(0.2)	10.8	(0.4)	49.1	(0.8)	38.1	(0.8)	1.6	(0.2)	9.7	(0.4)	47.7	(0.9)	41.0	(0.9)
OECD	Portugal*	0.7	(0.1)	4.7	(0.3)	46.2	(0.8)	48.4	(0.8)	0.7	(0.1)	5.1	(0.3)	46.5	(0.9)	47.7	(0.9)
OECD	Slovak Republic	1.9	(0.2)	11.0	(0.5)	48.1	(0.7)	39.0	(0.7)	1.9	(0.2)	9.2	(0.5)	44.7	(0.7)	44.2	(0.7)
OECD	Slovenia	4.7	(0.3)	31.4	(0.8)	51.4	(0.8)	12.6	(0.5)	1.3	(0.2)	11.7	(0.5)	55.8	(0.7)	31.2	(0.7)
OECD	Spain	1.2	(0.1)	5.1	(0.2)	41.9	(0.5)	51.8	(0.5)	0.7	(0.1)	4.1	(0.2)	42.4	(0.5)	52.8	(0.5)
OECD	Sweden	1.5	(0.2)	6.7	(0.4)	53.1	(0.8)	38.7	(0.7)	1.9	(0.3)	8.3	(0.4)	50.0	(0.8)	39.8	(0.7)
OECD	Switzerland	1.0	(0.1)	5.4	(0.4)	46.5	(0.8)	47.1	(0.8)	0.8	(0.1)	4.9	(0.4)	44.0	(0.8)	50.2	(0.8)
OECD	Turkey	4.9	(0.3)	14.4	(0.5)	48.5	(0.7)	32.2	(0.6)	4.6	(0.3)	13.1	(0.5)	43.8	(0.7)	38.5	(0.7)
OECD	United Kingdom	2.2	(0.2)	16.0	(0.6)	59.0	(0.7)	22.8	(0.6)	2.4	(0.2)	13.7	(0.4)	57.4	(0.7)	26.4	(0.6)
OECD	United States*	2.1	(0.2)	12.9	(0.5)	52.7	(0.8)	32.3	(0.8)	2.6	(0.2)	14.7	(0.5)	51.7	(0.8)	31.0	(0.8)
	OECD average	1.7	(0.0)	9.0	(0.1)	48.2	(0.1)	41.0	(0.1)	2.2	(0.0)	9.8	(0.1)	47.1	(0.1)	40.9	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of positive feelings is based on three items: "happy", "joyful" and "cheerful".

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.12.1 [6/6] **Students' positive feelings**

Based on students' reports

		Percentage of students who reported feeling the following:															
		Joyful								Cheerful							
		Never		Rarely		Sometimes		Always		Never		Rarely		Sometimes		Always	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	0.6	(0.1)	3.4	(0.3)	29.7	(0.7)	66.2	(0.7)	1.3	(0.1)	7.2	(0.4)	33.7	(0.7)	57.8	(0.8)
	Argentina	2.7	(0.2)	6.3	(0.4)	48.0	(0.6)	43.0	(0.6)	2.8	(0.2)	6.0	(0.3)	44.4	(0.7)	46.8	(0.7)
	Baku (Azerbaijan)	3.3	(0.3)	9.1	(0.4)	34.4	(0.7)	53.1	(0.8)	4.4	(0.4)	12.7	(0.5)	37.3	(0.8)	45.6	(0.6)
	Belarus	0.4	(0.1)	4.8	(0.3)	38.7	(0.8)	56.1	(0.8)	2.9	(0.2)	13.5	(0.5)	45.2	(0.7)	38.4	(0.7)
	Bosnia and Herzegovina	1.7	(0.2)	6.0	(0.3)	38.7	(0.8)	53.6	(0.8)	1.5	(0.2)	4.6	(0.3)	32.3	(0.7)	61.6	(0.8)
	Brazil	2.0	(0.2)	8.3	(0.3)	36.2	(0.7)	53.4	(0.7)	5.7	(0.3)	15.7	(0.4)	46.3	(0.6)	32.3	(0.7)
	Brunei Darussalam	2.5	(0.2)	11.9	(0.4)	47.6	(0.6)	38.0	(0.6)	2.5	(0.2)	11.9	(0.5)	46.9	(0.6)	38.7	(0.7)
	B-S-J-Z (China)	0.9	(0.1)	4.5	(0.3)	59.5	(0.7)	35.2	(0.8)	2.7	(0.2)	11.3	(0.4)	55.5	(0.6)	30.4	(0.6)
	Bulgaria	4.2	(0.4)	8.4	(0.5)	38.8	(0.8)	48.6	(1.0)	3.3	(0.4)	7.4	(0.4)	33.2	(0.8)	56.1	(0.9)
	Costa Rica	0.8	(0.1)	5.8	(0.3)	36.0	(0.8)	57.5	(0.8)	1.3	(0.2)	7.3	(0.4)	42.3	(0.8)	49.1	(0.8)
	Croatia	1.5	(0.2)	7.5	(0.4)	45.2	(0.6)	45.8	(0.7)	1.1	(0.2)	5.8	(0.3)	37.1	(0.6)	56.0	(0.7)
	Cyprus	2.7	(0.2)	7.0	(0.4)	47.9	(0.7)	42.4	(0.7)	5.6	(0.3)	14.4	(0.5)	47.0	(0.7)	33.0	(0.8)
	Dominican Republic	2.8	(0.3) †	6.0	(0.5) †	30.5	(0.9) †	60.6	(1.0) †	2.3	(0.3) †	6.9	(0.5) †	32.0	(0.8) †	58.8	(0.8) †
	Georgia	3.5	(0.3)	11.0	(0.4)	45.0	(0.7)	40.6	(0.7)	2.4	(0.3)	7.8	(0.4)	34.8	(0.8)	55.0	(0.8)
	Hong Kong (China)*	1.5	(0.2)	4.9	(0.3)	62.1	(0.8)	31.4	(0.8)	2.4	(0.3)	9.1	(0.4)	55.0	(0.8)	33.5	(0.7)
	Indonesia	0.8	(0.1)	6.6	(0.4)	37.3	(0.7)	55.3	(0.7)	0.8	(0.1)	6.1	(0.3)	33.3	(0.7)	59.8	(0.8)
	Jordan	7.4	(0.4)	14.5	(0.5)	39.0	(0.7)	39.1	(0.8)	8.9	(0.4)	13.3	(0.4)	30.9	(0.6)	46.9	(0.7)
	Kazakhstan	0.9	(0.1)	4.9	(0.2)	28.5	(0.5)	65.7	(0.5)	0.9	(0.1)	3.8	(0.2)	22.5	(0.4)	72.8	(0.5)
	Kosovo	1.3	(0.2)	6.8	(0.4)	34.6	(0.7)	57.3	(0.7)	0.8	(0.1)	3.3	(0.3)	30.8	(0.8)	65.1	(0.8)
	Lebanon	12.5	(0.9)	11.1	(0.6)	41.4	(1.1)	35.1	(1.0)	6.7	(0.5)	15.9	(0.7)	46.0	(0.9)	31.4	(1.0)
	Macao (China)	1.2	(0.2)	12.3	(0.5)	50.0	(0.8)	36.5	(0.8)	2.2	(0.3)	15.7	(0.5)	44.9	(0.7)	37.1	(0.7)
	Malaysia	3.0	(0.3)	13.6	(0.6)	36.5	(0.7)	46.9	(0.9)	1.5	(0.2)	7.3	(0.4)	29.0	(0.8)	62.3	(1.0)
	Malta	1.9	(0.2)	11.3	(0.5)	51.8	(0.9)	35.0	(0.8)	2.4	(0.3)	9.8	(0.5)	48.6	(0.8)	39.3	(0.9)
	Moldova	0.9	(0.1)	6.5	(0.4)	36.9	(0.7)	55.7	(0.8)	1.2	(0.2)	8.4	(0.4)	42.2	(0.8)	48.2	(0.8)
	Montenegro	1.8	(0.2)	6.1	(0.3)	36.4	(0.7)	55.7	(0.7)	1.8	(0.2)	5.6	(0.3)	28.1	(0.6)	64.6	(0.6)
	Morocco	19.9	(0.7) †	29.8	(0.8) †	36.7	(0.9) †	13.6	(0.6) †	19.6	(0.7) †	28.5	(0.7) †	37.4	(0.8) †	14.6	(0.6) †
	North Macedonia	2.3	(0.2)	3.7	(0.3)	36.7	(0.7)	57.3	(0.7)	3.4	(0.3)	7.0	(0.4)	36.8	(0.8)	52.8	(0.8)
	Panama	1.7	(0.3) †	4.6	(0.4) †	33.7	(0.9) †	60.1	(0.9) †	1.9	(0.3) †	4.6	(0.5) †	37.5	(1.0) †	56.0	(1.0) †
	Peru	0.7	(0.1) †	3.8	(0.4) †	36.2	(0.8) †	59.3	(0.8) †	1.1	(0.2) †	4.8	(0.3) †	40.8	(0.7) †	53.3	(0.7) †
	Philippines	1.7	(0.2)	6.8	(0.4)	38.9	(0.7)	52.6	(0.9)	2.3	(0.2)	9.3	(0.4)	46.5	(0.7)	41.8	(0.8)
	Qatar	3.7	(0.2)	10.3	(0.3)	43.3	(0.4)	42.7	(0.4)	4.1	(0.2)	11.1	(0.3)	41.4	(0.4)	43.4	(0.4)
	Romania	1.0	(0.2)	6.9	(0.4)	45.1	(0.8)	46.9	(0.8)	1.4	(0.2)	6.5	(0.3)	40.8	(0.8)	51.2	(0.8)
	Russia	2.2	(0.2)	8.8	(0.4)	41.2	(0.7)	47.8	(0.8)	5.7	(0.3)	18.5	(0.5)	43.0	(0.6)	32.8	(0.8)
	Saudi Arabia	5.6	(0.5)	8.9	(0.4)	34.4	(0.7)	51.1	(0.7)	6.6	(0.4)	10.5	(0.4)	36.2	(0.8)	46.7	(0.7)
	Serbia	2.7	(0.3)	7.8	(0.3)	40.3	(0.6)	49.2	(0.7)	2.3	(0.3)	6.8	(0.3)	34.0	(0.7)	56.9	(0.7)
	Singapore	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Chinese Taipei	1.3	(0.1)	7.5	(0.3)	47.8	(0.7)	43.4	(0.7)	1.4	(0.1)	9.6	(0.4)	44.3	(0.6)	44.7	(0.6)
	Thailand	1.4	(0.2)	9.3	(0.5)	40.8	(0.7)	48.5	(0.8)	1.1	(0.2)	5.5	(0.4)	28.6	(0.6)	64.8	(0.7)
	Ukraine	1.1	(0.2)	5.9	(0.3)	36.3	(0.7)	56.7	(0.7)	1.1	(0.2)	4.9	(0.3)	33.5	(0.8)	60.6	(0.8)
	United Arab Emirates	4.3	(0.2)	11.2	(0.3)	41.7	(0.6)	42.8	(0.6)	3.8	(0.2)	10.1	(0.5)	39.3	(0.5)	46.9	(0.6)
	Uruguay	1.8	(0.3)	5.2	(0.4)	44.0	(0.8)	49.1	(0.9)	1.6	(0.2)	6.4	(0.4)	47.3	(0.9)	44.7	(0.9)
	Viet Nam	6.4	(0.4)	29.5	(0.9)	49.8	(0.9)	14.3	(0.6)	0.5	(0.1)	9.0	(0.4)	45.7	(0.7)	44.9	(0.7)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. The index of positive feelings is based on three items: "happy", "joyful" and "cheerful".

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.12.2 [1/4] **Students' negative feelings**

Based on students' reports

		Percentage of students who reported feeling the following:															
		Scared								Miserable							
		Never		Rarely		Sometimes		Always		Never		Rarely		Sometimes		Always	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Austria	18.3	(0.6)	49.4	(0.9)	28.5	(0.8)	3.8	(0.3)	11.5	(0.5)	48.3	(0.8)	35.1	(0.8)	5.2	(0.3)
OECD	Belgium	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Canada	15.1	(0.4)	46.5	(0.5)	33.0	(0.5)	5.4	(0.2)	16.8	(0.4)	42.1	(0.5)	34.9	(0.5)	6.1	(0.3)
OECD	Chile	28.7	(0.7)	46.7	(0.9)	21.2	(0.6)	3.3	(0.3)	16.1	(0.5)	33.3	(0.6)	41.6	(0.7)	9.0	(0.4)
OECD	Colombia	11.6	(0.5)	50.6	(0.7)	33.9	(0.7)	3.9	(0.3)	34.1	(0.8)	40.7	(0.7)	21.8	(0.6)	3.4	(0.3)
OECD	Czech Republic	8.2	(0.4)	37.2	(0.7)	46.0	(0.7)	8.6	(0.5)	10.4	(0.5)	46.0	(0.6)	38.0	(0.7)	5.6	(0.4)
OECD	Denmark	13.5	(0.5)	52.0	(0.9)	32.2	(0.7)	2.3	(0.2)	20.8	(0.5)	50.6	(0.7)	26.5	(0.7)	2.2	(0.2)
OECD	Estonia	11.4	(0.5)	55.0	(0.8)	30.4	(0.8)	3.2	(0.3)	16.1	(0.6)	40.8	(0.7)	35.9	(0.7)	7.2	(0.4)
OECD	Finland	14.8	(0.4)	59.1	(0.6)	23.7	(0.5)	2.3	(0.2)	16.5	(0.5)	51.7	(0.7)	29.2	(0.6)	2.7	(0.2)
OECD	France	20.7	(0.5)	50.9	(0.8)	25.1	(0.7)	3.2	(0.2)	16.8	(0.5)	46.3	(0.7)	33.1	(0.6)	3.8	(0.3)
OECD	Germany	18.5	(0.7) †	53.3	(0.8) †	25.4	(0.7) †	2.9	(0.3) †	9.7	(0.5) †	49.3	(0.8) †	36.8	(0.9) †	4.3	(0.3) †
OECD	Greece	13.7	(0.5)	48.0	(0.8)	33.0	(0.6)	5.2	(0.3)	17.3	(0.5)	46.6	(0.7)	30.8	(0.6)	5.2	(0.3)
OECD	Hungary	20.9	(0.7)	49.5	(0.8)	26.2	(0.7)	3.4	(0.3)	13.5	(0.5)	45.0	(0.8)	34.7	(0.8)	6.7	(0.4)
OECD	Iceland	24.2	(0.8)	49.4	(1.0)	23.4	(0.8)	2.9	(0.3)	17.7	(0.6)	43.1	(0.9)	33.2	(0.8)	6.1	(0.4)
OECD	Ireland	12.1	(0.4)	51.7	(0.7)	33.8	(0.7)	2.4	(0.2)	16.2	(0.6)	47.7	(0.7)	33.3	(0.8)	2.9	(0.2)
OECD	Israel	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Italy	12.7	(0.5)	46.7	(0.7)	36.3	(0.6)	4.3	(0.3)	11.4	(0.4)	42.4	(0.6)	39.7	(0.7)	6.4	(0.4)
OECD	Japan	9.2	(0.4)	30.1	(0.7)	50.7	(0.8)	9.9	(0.4)	16.2	(0.5)	38.3	(0.7)	37.4	(0.6)	8.1	(0.4)
OECD	Korea	15.7	(0.5)	36.4	(0.7)	38.3	(0.7)	9.5	(0.4)	35.0	(0.6)	35.3	(0.5)	24.3	(0.6)	5.4	(0.3)
OECD	Latvia	9.9	(0.5)	53.5	(0.8)	32.3	(0.8)	4.3	(0.3)	17.9	(0.7)	44.1	(0.8)	31.3	(0.7)	6.7	(0.4)
OECD	Lithuania	17.2	(0.6)	52.1	(0.7)	27.7	(0.6)	3.0	(0.2)	31.9	(0.6)	38.6	(0.7)	24.1	(0.6)	5.4	(0.3)
OECD	Luxembourg	16.8	(0.5)	47.9	(0.7)	30.5	(0.6)	4.8	(0.3)	11.0	(0.4)	45.0	(0.7)	38.0	(0.7)	5.9	(0.4)
OECD	Mexico	23.0	(0.7) †	47.9	(0.6) †	26.4	(0.7) †	2.7	(0.3) †	19.4	(0.5)	37.2	(0.8)	37.0	(0.8)	6.4	(0.4)
OECD	Netherlands*	20.4	(0.7)	50.9	(0.8)	26.6	(0.8)	2.1	(0.2)	22.1	(0.8)	47.1	(0.9)	28.4	(0.8)	2.4	(0.3)
OECD	New Zealand	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Norway	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Poland	14.7	(0.5)	54.6	(0.7)	27.0	(0.6)	3.8	(0.3)	9.0	(0.4)	46.6	(0.7)	37.2	(0.7)	7.2	(0.4)
OECD	Portugal*	15.3	(0.6)	55.0	(0.7)	27.9	(0.7)	1.8	(0.2)	13.4	(0.5)	48.9	(0.8)	35.1	(0.8)	2.5	(0.3)
OECD	Slovak Republic	13.3	(0.5)	52.4	(0.6)	30.3	(0.7)	4.0	(0.3)	11.0	(0.5)	42.4	(0.8)	37.8	(0.7)	8.8	(0.5)
OECD	Slovenia	15.1	(0.6)	63.9	(0.8)	18.2	(0.6)	2.8	(0.2)	11.9	(0.6)	52.4	(0.8)	29.1	(0.8)	6.6	(0.4)
OECD	Spain	17.1	(0.3)	51.9	(0.3)	29.0	(0.3)	2.0	(0.1)	17.7	(0.4)	44.2	(0.4)	34.1	(0.4)	4.0	(0.2)
OECD	Sweden	16.7	(0.7)	50.0	(0.7)	30.0	(0.7)	3.3	(0.3)	15.4	(0.7)	44.9	(0.8)	34.6	(0.7)	5.1	(0.3)
OECD	Switzerland	17.8	(0.7)	52.4	(0.7)	27.1	(0.7)	2.6	(0.3)	10.7	(0.4)	51.1	(0.8)	35.0	(0.8)	3.2	(0.3)
OECD	Turkey	23.8	(0.7)	49.9	(0.7)	22.5	(0.6)	3.7	(0.2)	40.1	(0.6)	35.6	(0.6)	18.0	(0.5)	6.3	(0.4)
OECD	United Kingdom	13.6	(0.4)	47.6	(0.7)	33.8	(0.7)	5.0	(0.3)	10.2	(0.4)	37.4	(0.7)	44.7	(0.6)	7.7	(0.4)
OECD	United States*	14.3	(0.6)	41.1	(0.8)	39.0	(0.9)	5.6	(0.4)	20.1	(0.7)	39.6	(0.8)	34.2	(0.7)	6.1	(0.5)
	OECD average	16.2	(0.1)	49.5	(0.1)	30.3	(0.1)	4.0	(0.1)	17.4	(0.1)	43.8	(0.1)	33.3	(0.1)	5.5	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.12.2 [2/4] **Students' negative feelings**

Based on students' reports

		Percentage of students who reported feeling the following:															
		Scared								Miserable							
		Never		Rarely		Sometimes		Always		Never		Rarely		Sometimes		Always	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	19.6	(0.6)	42.7	(0.6)	33.0	(0.7)	4.7	(0.3)	73.7	(0.6)	15.8	(0.5)	7.4	(0.3)	3.0	(0.3)
	Argentina	18.6	(0.7)	41.7	(0.7)	33.9	(0.7)	5.8	(0.3)	28.2	(0.6)	35.8	(0.8)	30.1	(0.6)	5.9	(0.3)
	Baku (Azerbaijan)	22.6	(0.7)	42.7	(0.7)	29.4	(0.6)	5.2	(0.4)	51.7	(0.8)	24.6	(0.7)	17.4	(0.6)	6.3	(0.4)
	Belarus	11.8	(0.4)	59.3	(0.7)	26.8	(0.7)	2.1	(0.2)	20.0	(0.5)	53.3	(0.6)	23.8	(0.6)	2.9	(0.2)
	Bosnia and Herzegovina	20.0	(0.7)	44.2	(0.9)	30.8	(0.8)	5.0	(0.3)	17.8	(0.5)	46.9	(0.7)	29.5	(0.7)	5.8	(0.4)
	Brazil	15.5	(0.5)	43.2	(0.6)	35.7	(0.5)	5.5	(0.3)	26.5	(0.6)	33.3	(0.6)	31.0	(0.6)	9.2	(0.4)
	Brunei Darussalam	6.0	(0.3)	34.1	(0.6)	46.8	(0.6)	13.1	(0.4)	9.5	(0.4)	38.0	(0.7)	42.2	(0.7)	10.3	(0.4)
	B-S-J-Z (China)	6.4	(0.4)	35.0	(0.7)	53.1	(0.6)	5.6	(0.3)	8.1	(0.4)	33.7	(0.5)	51.2	(0.6)	7.1	(0.4)
	Bulgaria	17.9	(0.7)	49.2	(0.7)	27.1	(0.8)	5.8	(0.4)	16.0	(0.6)	44.4	(0.7)	30.0	(0.7)	9.5	(0.5)
	Costa Rica	22.2	(0.6)	53.4	(0.6)	22.1	(0.6)	2.2	(0.2)	21.5	(0.7)	47.8	(0.7)	27.1	(0.8)	3.6	(0.3)
	Croatia	15.2	(0.5)	47.6	(0.6)	33.5	(0.7)	3.8	(0.3)	11.5	(0.5)	48.2	(0.6)	34.7	(0.7)	5.5	(0.3)
	Cyprus	19.9	(0.6)	50.9	(0.7)	25.2	(0.6)	4.1	(0.3)	31.9	(0.7)	39.0	(0.7)	23.0	(0.6)	6.0	(0.4)
	Dominican Republic	30.5	(1.1) †	40.8	(1.1) †	23.5	(0.8) †	5.3	(0.5) †	35.3	(0.9) †	35.4	(0.9) †	22.6	(0.8) †	6.8	(0.5) †
	Georgia	23.6	(0.6)	49.2	(0.8)	21.6	(0.6)	5.6	(0.4)	41.5	(0.9)	34.4	(0.7)	16.5	(0.6)	7.5	(0.5)
	Hong Kong (China)*	6.3	(0.4)	28.3	(0.7)	55.9	(0.7)	9.5	(0.4)	6.9	(0.4)	31.6	(0.6)	51.4	(0.6)	10.1	(0.4)
	Indonesia	2.8	(0.3)	34.3	(0.8)	54.2	(0.9)	8.8	(0.7)	31.4	(0.9)	41.4	(0.8)	22.0	(0.6)	5.2	(0.5)
	Jordan	20.9	(0.6)	43.6	(0.7)	28.4	(0.6)	7.1	(0.3)	32.5	(0.7)	36.5	(0.8)	22.5	(0.6)	8.5	(0.4)
	Kazakhstan	23.0	(0.5)	44.8	(0.5)	28.9	(0.5)	3.2	(0.2)	47.2	(0.6)	35.5	(0.4)	14.5	(0.4)	2.7	(0.2)
	Kosovo	21.3	(0.7)	43.5	(1.0)	32.7	(0.8)	2.5	(0.3)	64.5	(0.7)	24.3	(0.7)	8.3	(0.4)	2.9	(0.3)
	Lebanon	17.5	(0.7)	40.8	(1.0)	33.9	(0.8)	7.9	(0.5)	25.5	(0.8)	33.7	(0.8)	30.3	(0.7)	10.5	(0.6)
	Macao (China)	8.6	(0.5)	53.4	(0.7)	31.7	(0.8)	6.3	(0.4)	7.7	(0.4)	45.4	(0.8)	36.2	(0.7)	10.7	(0.5)
	Malaysia	9.9	(0.5)	52.7	(0.7)	32.6	(0.7)	4.8	(0.3)	21.6	(0.7)	45.8	(0.6)	26.6	(0.8)	6.0	(0.3)
	Malta	10.3	(0.5)	41.5	(0.9)	41.6	(0.9)	6.5	(0.5)	17.2	(0.6)	42.1	(0.8)	34.0	(0.9)	6.7	(0.5)
	Moldova	17.1	(0.6)	58.9	(0.8)	22.0	(0.6)	1.9	(0.2)	24.3	(0.7)	48.2	(0.7)	24.7	(0.6)	2.8	(0.3)
	Montenegro	32.7	(0.7)	44.3	(0.6)	18.9	(0.5)	4.1	(0.2)	58.2	(0.5)	25.9	(0.5)	11.9	(0.4)	3.9	(0.3)
	Morocco	17.0	(0.6) †	40.3	(0.9) †	34.8	(0.8) †	7.9	(0.4) †	22.9	(0.7) †	37.2	(0.8) †	31.4	(0.8) †	8.5	(0.5) †
	North Macedonia	33.7	(0.7)	43.5	(0.7)	20.3	(0.7)	2.5	(0.3)	63.5	(0.6)	22.5	(0.6)	10.8	(0.4)	3.2	(0.3)
	Panama	25.4	(0.9) †	43.4	(0.9) †	27.1	(0.8) †	4.1	(0.4) †	20.2	(0.7) †	30.2	(0.9) †	42.1	(0.9) †	7.5	(0.5) †
	Peru	25.3	(0.7) †	47.3	(0.7) †	25.2	(0.7) †	2.2	(0.2) †	16.3	(0.7) †	37.5	(0.7) †	40.3	(0.7) †	5.9	(0.4) †
	Philippines	7.9	(0.4)	31.0	(0.7)	55.5	(0.7)	5.5	(0.4)	15.8	(0.5)	37.0	(0.6)	41.0	(0.6)	6.2	(0.3)
	Qatar	18.9	(0.4)	42.8	(0.5)	30.7	(0.5)	7.6	(0.2)	21.0	(0.4)	40.0	(0.4)	29.9	(0.4)	9.0	(0.2)
	Romania	14.5	(0.6)	52.2	(0.8)	30.3	(0.8)	3.0	(0.3)	14.4	(0.6)	50.7	(0.7)	30.8	(0.7)	4.1	(0.3)
	Russia	17.8	(0.5)	54.7	(0.7)	24.3	(0.5)	3.3	(0.2)	55.5	(1.1)	26.6	(0.7)	12.7	(0.4)	5.2	(0.4)
	Saudi Arabia	24.0	(0.8)	45.1	(0.8)	26.3	(0.7)	4.7	(0.3)	36.3	(0.7)	38.9	(0.7)	19.6	(0.6)	5.3	(0.4)
	Serbia	30.7	(0.7)	44.0	(0.7)	19.9	(0.5)	5.4	(0.4)	48.5	(0.8)	28.9	(0.8)	17.2	(0.6)	5.5	(0.3)
	Singapore	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Chinese Taipei	10.4	(0.4)	63.2	(0.7)	23.8	(0.5)	2.7	(0.2)	15.3	(0.5)	50.7	(0.6)	28.7	(0.5)	5.3	(0.3)
	Thailand	10.9	(0.5)	43.3	(0.7)	40.4	(0.7)	5.5	(0.4)	4.4	(0.4)	37.2	(0.6)	46.3	(0.7)	12.1	(0.5)
	Ukraine	19.1	(0.6)	54.1	(0.8)	24.8	(0.6)	1.9	(0.2)	53.9	(0.7)	31.9	(0.6)	11.9	(0.5)	2.3	(0.2)
	United Arab Emirates	23.4	(0.5)	39.8	(0.5)	28.7	(0.4)	8.1	(0.5)	27.6	(0.4)	36.9	(0.5)	27.3	(0.5)	8.2	(0.3)
	Uruguay	31.7	(0.8)	45.8	(0.9)	19.8	(0.6)	2.8	(0.3)	36.2	(0.8)	36.4	(0.7)	23.3	(0.7)	4.2	(0.3)
	Viet Nam	6.3	(0.4)	52.6	(0.6)	32.7	(0.7)	8.4	(0.5)	21.1	(0.6)	55.2	(0.7)	19.0	(0.6)	4.8	(0.3)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.12.2 [3/4] **Students' negative feelings**

Based on students' reports

		Percentage of students who reported feeling the following:															
		Afraid								Sad							
		Never		Rarely		Sometimes		Always		Never		Rarely		Sometimes		Always	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Austria	8.0	(0.4)	36.0	(0.8)	45.4	(0.7)	10.7	(0.5)	9.8	(0.5)	46.3	(0.8)	38.4	(0.9)	5.4	(0.3)
OECD	Belgium	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Canada	16.4	(0.4)	42.1	(0.5)	34.0	(0.5)	7.4	(0.2)	8.2	(0.3)	35.4	(0.4)	47.4	(0.5)	9.0	(0.3)
OECD	Chile	27.5	(0.8)	46.3	(0.8)	22.7	(0.6)	3.5	(0.3)	9.6	(0.4)	36.1	(0.6)	46.4	(0.7)	7.9	(0.4)
OECD	Colombia	5.2	(0.4)	35.8	(0.8)	48.4	(0.7)	10.6	(0.6)	7.3	(0.4)	42.7	(0.8)	44.2	(0.7)	5.7	(0.3)
OECD	Czech Republic	7.2	(0.4)	34.1	(0.8)	46.2	(0.7)	12.5	(0.6)	6.8	(0.4)	41.3	(0.7)	45.3	(0.7)	6.6	(0.4)
OECD	Denmark	44.4	(0.7)	32.5	(0.6)	18.9	(0.5)	4.2	(0.3)	9.1	(0.4)	43.3	(0.7)	44.4	(0.7)	3.2	(0.2)
OECD	Estonia	7.0	(0.4)	40.1	(0.7)	42.7	(0.8)	10.1	(0.5)	5.5	(0.4)	43.2	(0.7)	42.2	(0.8)	9.1	(0.4)
OECD	Finland	6.0	(0.3)	43.1	(0.6)	43.5	(0.6)	7.4	(0.4)	6.8	(0.4)	47.5	(0.6)	42.0	(0.5)	3.7	(0.3)
OECD	France	8.5	(0.4)	33.9	(0.6)	42.8	(0.6)	14.8	(0.5)	10.1	(0.4)	44.1	(0.7)	41.0	(0.7)	4.8	(0.3)
OECD	Germany	7.2	(0.5) †	38.3	(0.8) †	44.6	(0.8) †	10.0	(0.5) †	8.6	(0.5) †	48.3	(0.8) †	39.3	(0.9) †	3.8	(0.4) †
OECD	Greece	6.9	(0.4)	32.8	(0.6)	45.6	(0.7)	14.8	(0.4)	7.0	(0.3)	41.9	(0.7)	45.5	(0.7)	5.5	(0.3)
OECD	Hungary	17.1	(0.7)	41.9	(0.8)	30.4	(0.7)	10.6	(0.6)	10.2	(0.4)	44.9	(0.9)	39.5	(0.9)	5.3	(0.4)
OECD	Iceland	23.6	(0.8)	48.2	(0.8)	24.2	(0.7)	4.1	(0.3)	13.0	(0.5)	42.7	(1.0)	38.5	(1.0)	5.8	(0.4)
OECD	Ireland	14.3	(0.5)	51.7	(0.7)	31.0	(0.7)	2.9	(0.2)	4.4	(0.2)	37.5	(0.8)	53.1	(0.7)	5.0	(0.3)
OECD	Israel	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Italy	19.9	(0.6)	49.0	(0.7)	27.4	(0.7)	3.7	(0.3)	6.9	(0.4)	37.9	(0.7)	49.1	(0.8)	6.2	(0.4)
OECD	Japan	4.2	(0.3)	12.6	(0.5)	54.8	(0.6)	28.4	(0.6)	6.7	(0.4)	27.7	(0.6)	54.3	(0.7)	11.3	(0.5)
OECD	Korea	7.8	(0.4)	23.4	(0.6)	44.7	(0.6)	24.1	(0.7)	11.8	(0.5)	35.8	(0.6)	42.5	(0.6)	9.8	(0.5)
OECD	Latvia	9.1	(0.4)	46.1	(0.8)	36.6	(0.8)	8.1	(0.4)	6.2	(0.4)	43.4	(0.8)	42.5	(0.8)	7.9	(0.5)
OECD	Lithuania	22.1	(0.6)	46.5	(0.7)	26.6	(0.6)	4.8	(0.3)	12.8	(0.5)	42.5	(0.8)	38.6	(0.7)	6.0	(0.3)
OECD	Luxembourg	7.6	(0.4)	32.9	(0.6)	46.9	(0.7)	12.6	(0.5)	8.6	(0.4)	42.4	(0.7)	42.7	(0.7)	6.3	(0.4)
OECD	Mexico	22.3	(0.7) †	48.4	(0.8) †	26.4	(0.8) †	2.9	(0.2) †	11.7	(0.4) †	38.3	(0.7) †	43.8	(0.8) †	6.2	(0.3) †
OECD	Netherlands*	7.8	(0.5)	34.4	(0.8)	50.1	(0.9)	7.7	(0.5)	9.7	(0.6)	45.2	(0.8)	42.5	(0.8)	2.6	(0.3)
OECD	New Zealand	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Norway	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Poland	18.0	(0.5)	56.8	(0.7)	21.4	(0.6)	3.8	(0.3)	6.3	(0.3)	43.3	(0.7)	42.6	(0.8)	7.8	(0.4)
OECD	Portugal*	2.4	(0.2)	20.2	(0.6)	59.5	(0.7)	17.9	(0.5)	6.6	(0.4)	45.0	(0.8)	45.3	(0.8)	3.1	(0.3)
OECD	Slovak Republic	8.9	(0.4)	40.3	(0.7)	39.9	(0.7)	10.8	(0.5)	6.5	(0.3)	38.4	(0.8)	45.6	(0.8)	9.5	(0.5)
OECD	Slovenia	4.5	(0.3)	43.1	(0.7)	41.4	(0.7)	11.0	(0.5)	6.5	(0.4)	58.8	(0.7)	29.7	(0.7)	5.0	(0.3)
OECD	Spain	4.2	(0.2)	24.6	(0.4)	58.3	(0.5)	12.8	(0.3)	6.9	(0.2)	39.1	(0.4)	50.4	(0.4)	3.6	(0.2)
OECD	Sweden	8.6	(0.5)	37.9	(0.8)	43.7	(0.8)	9.8	(0.5)	10.3	(0.6)	39.7	(0.7)	44.6	(0.7)	5.4	(0.3)
OECD	Switzerland	8.0	(0.4)	38.3	(0.7)	44.8	(0.8)	8.8	(0.4)	8.9	(0.4)	47.3	(0.8)	40.3	(0.7)	3.5	(0.3)
OECD	Turkey	13.4	(0.5)	42.4	(0.7)	32.3	(0.6)	11.8	(0.4)	6.8	(0.4)	35.4	(0.6)	44.8	(0.6)	13.0	(0.5)
OECD	United Kingdom	6.8	(0.3)	27.3	(0.7)	45.9	(0.7)	19.9	(0.6)	6.9	(0.4)	33.3	(0.6)	51.1	(0.7)	8.7	(0.4)
OECD	United States*	17.9	(0.6)	39.6	(0.6)	36.4	(0.8)	6.1	(0.4)	7.5	(0.4)	29.2	(0.6)	52.4	(0.8)	11.0	(0.5)
	OECD average	12.3	(0.1)	38.2	(0.1)	39.3	(0.1)	10.3	(0.1)	8.3	(0.1)	41.2	(0.1)	44.1	(0.1)	6.5	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.12.2 [4/4] **Students' negative feelings**

Based on students' reports

		Percentage of students who reported feeling the following:															
		Afraid								Sad							
		Never		Rarely		Sometimes		Always		Never		Rarely		Sometimes		Always	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	24.4	(0.6)	36.6	(0.7)	29.3	(0.6)	9.7	(0.4)	14.3	(0.5)	43.1	(0.7)	38.8	(0.8)	3.8	(0.2)
	Argentina	25.4	(0.7)	37.3	(0.7)	30.5	(0.7)	6.8	(0.3)	11.4	(0.5)	28.5	(0.6)	48.9	(0.8)	11.2	(0.5)
	Baku (Azerbaijan)	13.8	(0.5)	32.0	(0.6)	39.8	(0.7)	14.3	(0.5)	12.5	(0.5)	36.7	(0.7)	40.3	(0.7)	10.5	(0.4)
	Belarus	18.5	(0.6)	52.6	(0.7)	26.0	(0.8)	2.9	(0.2)	7.7	(0.4)	47.3	(0.8)	39.3	(0.8)	5.7	(0.4)
	Bosnia and Herzegovina	13.7	(0.6)	39.3	(0.7)	38.8	(0.8)	8.2	(0.4)	12.8	(0.6)	44.3	(0.7)	37.6	(0.8)	5.3	(0.4)
	Brazil	19.5	(0.6)	32.5	(0.6)	36.1	(0.6)	12.0	(0.5)	7.7	(0.3)	28.4	(0.6)	50.6	(0.7)	13.3	(0.4)
	Brunei Darussalam	6.4	(0.3)	33.7	(0.6)	45.0	(0.6)	15.0	(0.4)	3.4	(0.2)	28.4	(0.6)	49.0	(0.6)	19.1	(0.5)
	B-S-J-Z (China)	2.1	(0.2)	11.3	(0.4)	70.3	(0.5)	16.2	(0.5)	2.2	(0.2)	14.7	(0.4)	71.7	(0.5)	11.4	(0.4)
	Bulgaria	10.5	(0.6)	33.8	(0.8)	41.0	(0.8)	14.7	(0.5)	11.3	(0.6)	43.9	(0.8)	36.9	(0.9)	7.9	(0.4)
	Costa Rica	14.7	(0.5)	54.5	(0.7)	27.6	(0.7)	3.2	(0.2)	7.2	(0.4)	39.0	(0.6)	47.3	(0.7)	6.5	(0.4)
	Croatia	5.3	(0.3)	36.5	(0.7)	47.4	(0.7)	10.8	(0.4)	8.4	(0.5)	45.9	(0.7)	40.4	(0.8)	5.4	(0.3)
	Cyprus	24.4	(0.6)	48.1	(0.8)	22.9	(0.5)	4.5	(0.3)	9.7	(0.4)	40.7	(0.8)	42.7	(0.8)	6.9	(0.4)
	Dominican Republic	20.7	(0.9) †	41.7	(0.9) †	31.0	(0.8) †	6.6	(0.5) †	11.5	(0.7) †	32.2	(1.1) †	46.2	(1.1) †	10.2	(0.6) †
	Georgia	32.0	(0.8)	43.6	(0.8)	19.5	(0.6)	5.0	(0.4)	13.3	(0.5)	45.3	(0.9)	32.9	(0.7)	8.6	(0.5)
	Hong Kong (China)*	3.8	(0.4)	13.6	(0.7)	60.6	(0.8)	21.9	(0.8)	3.5	(0.3)	19.3	(0.6)	64.1	(0.7)	13.1	(0.4)
	Indonesia	2.8	(0.3)	35.3	(0.7)	50.4	(0.8)	11.5	(0.7)	4.2	(0.3)	40.1	(0.9)	47.7	(0.9)	8.0	(0.5)
	Jordan	18.0	(0.5)	41.0	(0.6)	31.3	(0.5)	9.7	(0.5)	17.3	(0.5)	39.7	(0.9)	32.9	(0.6)	10.0	(0.5)
	Kazakhstan	19.4	(0.4)	43.3	(0.4)	31.1	(0.5)	6.2	(0.2)	21.0	(0.5)	43.7	(0.4)	30.4	(0.5)	4.9	(0.2)
	Kosovo	25.3	(0.7)	42.5	(0.9)	28.5	(0.8)	3.6	(0.3)	16.3	(0.6)	45.1	(0.8)	34.8	(0.8)	3.7	(0.3)
	Lebanon	12.6	(0.6)	35.6	(1.0)	42.4	(1.0)	9.4	(0.6)	12.0	(0.6)	37.1	(0.8)	42.4	(0.8)	8.5	(0.5)
	Macao (China)	7.4	(0.4)	45.5	(0.9)	37.9	(0.8)	9.2	(0.5)	5.1	(0.4)	35.0	(0.7)	44.2	(0.8)	15.8	(0.7)
	Malaysia	6.2	(0.4)	41.2	(0.7)	40.5	(0.7)	12.0	(0.4)	3.2	(0.2)	35.5	(0.7)	45.2	(0.8)	16.1	(0.6)
	Malta	12.4	(0.5)	43.0	(0.9)	37.0	(0.9)	7.6	(0.4)	4.8	(0.4)	32.6	(0.7)	53.3	(0.9)	9.3	(0.5)
	Moldova	10.8	(0.5)	45.8	(0.7)	35.9	(0.7)	7.5	(0.4)	7.7	(0.5)	47.6	(0.7)	39.7	(0.7)	5.1	(0.4)
	Montenegro	30.9	(0.6)	43.9	(0.7)	21.1	(0.5)	4.1	(0.2)	13.5	(0.5)	42.9	(0.7)	37.7	(0.6)	5.9	(0.3)
	Morocco	8.5	(0.5) †	33.0	(0.7) †	46.5	(0.7) †	12.1	(0.5) †	11.6	(0.5) †	34.8	(0.8) †	43.7	(0.8) †	9.9	(0.5) †
	North Macedonia	15.9	(0.5)	41.8	(0.8)	38.4	(0.8)	3.9	(0.3)	11.9	(0.5)	43.9	(0.8)	40.2	(0.8)	4.0	(0.3)
	Panama	21.3	(0.9) †	39.9	(0.9) †	34.3	(1.0) †	4.5	(0.4) †	12.1	(0.6) †	29.5	(0.9) †	51.4	(0.9) †	7.1	(0.5) †
	Peru	23.1	(0.7) †	47.0	(0.8) †	26.9	(0.7) †	2.9	(0.3) †	9.5	(0.4) †	37.0	(0.7) †	47.3	(0.7) †	6.1	(0.4) †
	Philippines	5.0	(0.4)	25.5	(0.6)	56.7	(0.7)	12.8	(0.6)	5.6	(0.3)	25.3	(0.5)	60.7	(0.6)	8.4	(0.5)
	Qatar	18.8	(0.3)	41.0	(0.4)	32.2	(0.4)	8.1	(0.2)	8.3	(0.2)	33.6	(0.4)	46.3	(0.4)	11.9	(0.3)
	Romania	22.9	(0.8)	47.0	(0.7)	25.7	(0.7)	4.5	(0.3)	11.0	(0.5)	49.3	(0.7)	35.3	(0.7)	4.3	(0.3)
	Russia	17.8	(0.6)	46.7	(0.7)	28.2	(0.5)	7.3	(0.3)	10.8	(0.4)	40.4	(0.7)	39.3	(0.6)	9.5	(0.4)
	Saudi Arabia	42.7	(0.8)	37.1	(0.7)	16.4	(0.6)	3.7	(0.3)	21.9	(0.6)	39.4	(0.7)	30.6	(0.7)	8.1	(0.4)
	Serbia	25.0	(0.7)	44.3	(0.7)	24.8	(0.6)	5.8	(0.3)	13.4	(0.6)	39.3	(0.7)	40.1	(0.7)	7.2	(0.4)
	Singapore	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Chinese Taipei	9.0	(0.3)	45.7	(0.7)	38.1	(0.6)	7.2	(0.3)	7.2	(0.4)	45.0	(0.6)	40.5	(0.7)	7.3	(0.3)
	Thailand	4.8	(0.4)	35.3	(0.7)	46.8	(0.7)	13.1	(0.5)	5.0	(0.4)	38.1	(0.8)	45.3	(0.8)	11.5	(0.5)
	Ukraine	13.7	(0.6)	51.6	(0.7)	30.2	(0.6)	4.5	(0.3)	8.7	(0.4)	43.7	(0.7)	41.2	(0.7)	6.4	(0.4)
	United Arab Emirates	25.3	(0.5)	38.4	(0.6)	28.4	(0.4)	7.8	(0.6)	14.5	(0.4)	33.4	(0.5)	42.0	(0.5)	10.1	(0.4)
	Uruguay	25.2	(0.6)	44.7	(0.7)	26.2	(0.6)	3.9	(0.3)	10.7	(0.6)	36.6	(0.9)	45.3	(0.8)	7.4	(0.4)
	Viet Nam	6.7	(0.3)	49.0	(0.8)	33.8	(0.7)	10.5	(0.5)	4.4	(0.4)	47.7	(0.9)	34.5	(0.9)	13.4	(0.6)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.13.1 [1/6] **Students' self-efficacy**

Based on students' reports

		Index of self-efficacy				Percentage of students who reported the following:							
						I usually manage one way or another							
		Average		Variability		Strongly disagree		Disagree		Agree		Strongly agree	
		Mean index	S.E.	S.D.	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	0.03	(0.01)	0.96	(0.01)	1.3	(0.1)	5.4	(0.3)	72.4	(0.5)	20.9	(0.4)
	Austria	0.08	(0.02)	1.04	(0.01)	3.4	(0.3)	12.1	(0.5)	64.2	(0.7)	20.3	(0.6)
	Belgium (Flemish)	-0.21	(0.02)	0.82	(0.01)	1.8	(0.2)	9.3	(0.4)	70.8	(0.6)	18.1	(0.6)
	Canada	0.13	(0.01)	1.01	(0.01)	1.5	(0.1)	5.5	(0.2)	66.8	(0.5)	26.3	(0.4)
	Chile	0.29	(0.02)	1.13	(0.01)	2.2	(0.3)	5.6	(0.3)	61.2	(0.7)	31.0	(0.7)
	Colombia	0.30	(0.02)	0.99	(0.01)	2.5	(0.3)	8.2	(0.4)	70.3	(0.8)	19.0	(0.7)
	Czech Republic	-0.28	(0.01)	0.88	(0.01)	2.1	(0.3)	6.6	(0.4)	75.0	(0.7)	16.2	(0.6)
	Denmark	0.05	(0.02)	0.92	(0.01)	1.6	(0.2)	7.5	(0.4)	69.2	(0.7)	21.7	(0.7)
	Estonia	-0.03	(0.02)	0.94	(0.01)	2.4	(0.2)	5.7	(0.3)	70.2	(0.7)	21.7	(0.6)
	Finland	-0.03	(0.02)	0.95	(0.01)	1.6	(0.2)	4.9	(0.3)	68.3	(0.7)	25.2	(0.7)
	France	-0.10	(0.01)	1.00	(0.01)	2.0	(0.2)	5.6	(0.4)	63.3	(0.7)	29.1	(0.7)
	Germany	-0.02	(0.02) †	0.95	(0.02) †	3.0	(0.3) †	12.2	(0.6) †	66.3	(0.9) †	18.5	(0.6) †
	Greece	0.05	(0.02)	0.95	(0.01)	3.4	(0.4)	8.1	(0.4)	70.9	(0.7)	17.5	(0.6)
	Hungary	0.17	(0.01)	0.95	(0.01)	2.1	(0.3)	6.7	(0.3)	71.4	(0.8)	19.8	(0.6)
	Iceland	0.10	(0.02)	1.17	(0.02)	2.5	(0.3)	6.3	(0.4)	60.2	(0.7)	31.0	(0.7)
	Ireland	-0.04	(0.01)	0.88	(0.01)	0.9	(0.1)	5.4	(0.2)	76.8	(0.6)	16.9	(0.5)
	Israel	0.17	(0.02)	1.14	(0.01)	6.4	(0.4)	9.5	(0.5)	58.8	(0.8)	25.4	(0.7)
	Italy	-0.03	(0.01)	0.94	(0.01)	4.2	(0.3)	11.2	(0.5)	66.8	(0.7)	17.7	(0.6)
	Japan	-0.61	(0.01)	0.95	(0.01)	5.1	(0.3)	30.1	(0.6)	52.0	(0.8)	12.9	(0.5)
	Korea	-0.04	(0.02)	1.00	(0.01)	1.4	(0.2)	13.0	(0.5)	69.7	(0.6)	15.9	(0.5)
	Latvia	-0.19	(0.01)	0.87	(0.01)	3.4	(0.3)	14.0	(0.5)	70.6	(0.7)	12.1	(0.4)
	Lithuania	0.23	(0.01)	1.05	(0.01)	3.2	(0.3)	7.2	(0.4)	64.5	(0.7)	25.1	(0.6)
	Luxembourg	-0.01	(0.02)	1.06	(0.01)	4.0	(0.3)	9.4	(0.4)	62.5	(0.8)	24.1	(0.6)
	Mexico	0.36	(0.01) †	1.02	(0.01) †	1.9	(0.3) †	6.9	(0.4) †	65.4	(0.8) †	25.8	(0.7) †
	Netherlands*	-0.11	(0.02)	0.84	(0.02)	1.2	(0.2)	8.7	(0.5)	73.6	(0.8)	16.5	(0.6)
	New Zealand	-0.02	(0.01)	0.91	(0.01)	1.0	(0.2)	5.4	(0.3)	74.6	(0.6)	19.0	(0.6)
	Norway	m	m	m	m	m	m	m	m	m	m	m	m
	Poland	-0.06	(0.01)	0.95	(0.01)	3.2	(0.3)	8.3	(0.4)	71.4	(0.7)	17.1	(0.5)
	Portugal*	-0.01	(0.01)	0.89	(0.01)	1.2	(0.2)	8.2	(0.4)	71.0	(0.6)	19.7	(0.6)
	Slovak Republic	-0.28	(0.01)	0.96	(0.01)	5.6	(0.4)	14.6	(0.5)	65.9	(0.8)	13.8	(0.5)
	Slovenia	-0.05	(0.02)	0.97	(0.01)	2.4	(0.2)	8.5	(0.5)	69.7	(0.7)	19.5	(0.6)
	Spain	0.17	(0.01)	1.01	(0.01)	2.9	(0.2)	12.3	(0.3)	62.0	(0.4)	22.7	(0.4)
	Sweden	-0.06	(0.02)	1.04	(0.02)	1.7	(0.2)	5.2	(0.4)	63.2	(0.8)	29.9	(0.7)
	Switzerland	0.02	(0.01)	0.95	(0.01)	2.8	(0.3)	9.6	(0.5)	65.7	(1.0)	21.9	(0.8)
	Turkey	0.36	(0.02)	1.14	(0.01)	3.7	(0.4)	9.2	(0.4)	62.5	(0.7)	24.6	(0.6)
	United Kingdom	-0.17	(0.01)	0.95	(0.01)	1.5	(0.1)	8.2	(0.3)	73.0	(0.6)	17.3	(0.6)
	United States*	0.17	(0.02)	1.00	(0.01)	1.4	(0.2)	5.0	(0.4)	70.4	(0.8)	23.3	(0.7)
	OECD average	0.01	(0.00)	0.98	(0.00)	2.6	(0.0)	8.9	(0.1)	67.5	(0.1)	21.0	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.13.1 [2/6] **Students' self-efficacy**

Based on students' reports

		Index of self-efficacy				Percentage of students who reported the following:									
						I usually manage one way or another									
		Average		Variability		Strongly disagree		Disagree		Agree		Strongly agree			
		Mean index	S.E.	S.D.	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.		
Partners	Albania	0.60	(0.02)	1.06	(0.01)	2.1	(0.2)	4.5	(0.3)	58.1	(0.8)	35.4	(0.8)		
	Argentina	0.01	(0.02)	1.03	(0.01)	5.1	(0.3)	7.5	(0.4)	66.9	(0.7)	20.6	(0.5)		
	Baku (Azerbaijan)	0.31	(0.02) †	1.29	(0.02) †	6.8	(0.5) †	8.7	(0.5) †	56.0	(0.8) †	28.4	(0.8) †		
	Belarus	-0.22	(0.01)	0.81	(0.01)	2.2	(0.2)	12.2	(0.5)	77.4	(0.6)	8.2	(0.5)		
	Bosnia and Herzegovina	0.25	(0.02)	1.07	(0.02)	5.2	(0.3)	8.8	(0.4)	63.1	(0.7)	22.9	(0.5)		
	Brazil	-0.16	(0.01)	0.98	(0.01)	4.5	(0.3)	19.0	(0.6)	61.4	(0.7)	15.0	(0.5)		
	Brunei Darussalam	-0.18	(0.01)	0.81	(0.01)	2.0	(0.2)	10.7	(0.4)	76.6	(0.5)	10.7	(0.4)		
	B-S-J-Z (China)	-0.12	(0.02)	0.94	(0.01)	1.3	(0.2)	16.7	(0.6)	69.2	(0.7)	12.8	(0.7)		
	Bulgaria	0.05	(0.02)	1.18	(0.02)	8.9	(0.6)	9.5	(0.5)	59.6	(0.9)	22.0	(0.7)		
	Costa Rica	0.47	(0.02)	1.06	(0.01)	2.1	(0.2)	6.4	(0.3)	61.3	(0.7)	30.1	(0.6)		
	Croatia	0.24	(0.01)	0.96	(0.01)	2.1	(0.3)	6.5	(0.3)	69.2	(0.6)	22.2	(0.6)		
	Cyprus	0.08	(0.02)	1.10	(0.01)	5.8	(0.4)	9.0	(0.4)	64.7	(0.7)	20.4	(0.6)		
	Dominican Republic	0.31	(0.03) †	1.22	(0.02) †	6.8	(0.6) †	7.8	(0.5) †	58.7	(0.9) †	26.7	(1.0) †		
	Georgia	-0.05	(0.02)	1.09	(0.02)	6.6	(0.4)	11.5	(0.5)	62.4	(0.9)	19.4	(0.7)		
	Hong Kong (China)*	-0.28	(0.02)	0.91	(0.01)	2.3	(0.2)	23.5	(0.7)	65.1	(0.7)	9.1	(0.4)		
	Indonesia	-0.02	(0.01)	0.87	(0.01)	3.2	(0.3)	24.8	(0.7)	63.3	(0.8)	8.8	(0.5)		
	Jordan	0.24	(0.02)	1.16	(0.01)	11.5	(0.7)	8.3	(0.4)	61.4	(0.8)	18.8	(0.7)		
	Kazakhstan	-0.02	(0.01)	1.01	(0.01)	5.5	(0.2)	16.5	(0.4)	64.7	(0.4)	13.3	(0.3)		
	Kosovo	0.33	(0.01)	1.01	(0.01)	4.5	(0.3)	7.7	(0.5)	68.6	(0.7)	19.2	(0.6)		
	Lebanon	-0.15	(0.03)	1.14	(0.02)	18.0	(1.0)	15.3	(0.9)	48.6	(1.4)	18.1	(0.8)		
	Macao (China)	-0.34	(0.01)	0.83	(0.01)	1.0	(0.2)	19.8	(0.6)	69.4	(0.8)	9.8	(0.4)		
	Malaysia	-0.22	(0.01)	0.73	(0.01)	2.8	(0.3)	34.6	(1.0)	56.6	(0.9)	5.9	(0.3)		
	Malta	0.09	(0.02)	1.02	(0.01)	3.0	(0.3)	6.4	(0.5)	66.2	(0.9)	24.3	(0.7)		
	Moldova	0.06	(0.01)	0.88	(0.01)	1.6	(0.2)	11.2	(0.5)	74.2	(0.6)	13.1	(0.5)		
	Montenegro	0.37	(0.01)	1.11	(0.01)	4.9	(0.3)	8.0	(0.4)	61.3	(0.7)	25.8	(0.6)		
	Morocco	0.02	(0.02) †	1.03	(0.01) †	7.6	(0.6) †	11.9	(0.5) †	66.2	(0.9) †	14.3	(0.5) †		
	North Macedonia	0.52	(0.02)	1.13	(0.01)	5.8	(0.3)	10.0	(0.5)	56.4	(0.7)	27.8	(0.7)		
	Panama	0.42	(0.02) †	1.08	(0.02) †	4.0	(0.4) †	9.0	(0.6) †	57.4	(1.0) †	29.5	(0.9) †		
	Peru	0.27	(0.02) †	0.95	(0.01) †	1.9	(0.2) †	9.3	(0.5) †	70.3	(0.7) †	18.5	(0.6) †		
	Philippines	0.02	(0.02)	0.92	(0.01)	3.3	(0.3)	12.4	(0.5)	73.1	(0.6)	11.2	(0.5)		
	Qatar	0.07	(0.01)	1.09	(0.01)	8.4	(0.3)	11.5	(0.3)	56.9	(0.5)	23.3	(0.4)		
	Romania	0.14	(0.02)	0.93	(0.01)	2.7	(0.4)	4.7	(0.4)	74.4	(0.8)	18.1	(0.6)		
	Russia	-0.30	(0.01)	0.92	(0.01)	4.3	(0.3)	28.8	(0.6)	58.2	(0.5)	8.6	(0.4)		
	Saudi Arabia	0.28	(0.02)	1.16	(0.02)	9.0	(0.6)	8.3	(0.4)	58.0	(0.8)	24.7	(0.6)		
	Serbia	0.36	(0.02)	1.15	(0.01)	4.6	(0.4)	10.9	(0.4)	56.6	(0.6)	27.9	(0.6)		
	Singapore	0.06	(0.01)	0.91	(0.01)	0.8	(0.1)	5.1	(0.3)	76.4	(0.5)	17.7	(0.5)		
	Chinese Taipei	-0.20	(0.01)	0.93	(0.01)	2.1	(0.2)	12.6	(0.4)	72.5	(0.6)	12.8	(0.5)		
	Thailand	0.03	(0.02)	0.83	(0.01)	2.0	(0.2)	9.5	(0.4)	76.9	(0.6)	11.7	(0.5)		
	Ukraine	-0.03	(0.02)	0.89	(0.01)	2.7	(0.2)	7.0	(0.5)	74.9	(0.7)	15.4	(0.5)		
	United Arab Emirates	0.31	(0.01)	1.15	(0.01)	4.7	(0.2)	7.6	(0.2)	61.7	(0.5)	26.0	(0.4)		
	Uruguay	0.14	(0.02)	1.06	(0.01)	3.8	(0.3)	6.2	(0.4)	67.2	(0.7)	22.9	(0.6)		
	Viet Nam	m	m	m	m	2.4	(0.2)	10.1	(0.6)	78.9	(0.7)	8.6	(0.7)		

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.13.1 [3/6] **Students' self-efficacy**

Based on students' reports

		Percentage of students who reported the following:															
		I feel proud that I have accomplished things								I feel that I can handle many things at a time							
		Strongly disagree		Disagree		Agree		Strongly agree		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	1.4	(0.1)	6.7	(0.3)	59.2	(0.5)	32.6	(0.5)	3.9	(0.2)	23.5	(0.4)	56.7	(0.5)	15.8	(0.4)
	Austria	2.6	(0.2)	12.5	(0.5)	47.2	(0.7)	37.7	(0.8)	4.0	(0.2)	25.1	(0.6)	52.4	(0.7)	18.5	(0.5)
	Belgium (Flemish)	1.0	(0.3)	7.9	(0.4)	64.4	(0.8)	26.7	(0.8)	2.8	(0.3)	33.6	(0.8)	54.2	(0.7)	9.4	(0.5)
	Canada	1.4	(0.1)	7.3	(0.3)	56.4	(0.5)	34.9	(0.5)	4.0	(0.2)	23.4	(0.4)	52.5	(0.5)	20.1	(0.4)
	Chile	2.1	(0.2)	7.0	(0.3)	50.4	(0.8)	40.6	(0.8)	2.7	(0.3)	18.9	(0.7)	55.1	(0.8)	23.3	(0.6)
	Colombia	1.6	(0.2)	5.1	(0.3)	56.4	(0.8)	37.0	(0.8)	2.0	(0.2)	23.4	(0.8)	56.2	(0.9)	18.5	(0.6)
	Czech Republic	4.1	(0.3)	25.5	(0.6)	56.3	(0.6)	14.0	(0.4)	3.7	(0.3)	28.1	(0.7)	57.6	(0.8)	10.6	(0.4)
	Denmark	1.3	(0.2)	11.4	(0.5)	65.2	(0.8)	22.0	(0.7)	2.4	(0.3)	19.9	(0.5)	60.0	(0.7)	17.7	(0.6)
	Estonia	1.9	(0.2)	13.2	(0.5)	61.6	(0.7)	23.3	(0.7)	2.3	(0.3)	26.2	(0.8)	58.2	(0.8)	13.2	(0.6)
	Finland	1.9	(0.2)	9.2	(0.4)	61.6	(0.7)	27.3	(0.7)	3.8	(0.2)	27.9	(0.7)	55.9	(0.7)	12.4	(0.5)
	France	2.2	(0.2)	11.1	(0.4)	57.9	(0.7)	28.7	(0.7)	4.0	(0.3)	29.0	(0.7)	49.8	(0.7)	17.3	(0.4)
	Germany	2.5	(0.3) †	15.2	(0.5) †	51.5	(1.0) †	30.8	(0.8) †	3.3	(0.3) †	27.4	(0.7) †	53.7	(0.9) †	15.6	(0.6) †
	Greece	2.5	(0.2)	13.3	(0.5)	57.9	(0.7)	26.3	(0.6)	2.4	(0.3)	22.7	(0.7)	55.8	(0.8)	19.1	(0.6)
	Hungary	1.6	(0.2)	7.6	(0.4)	56.5	(0.6)	34.4	(0.6)	2.8	(0.2)	23.3	(0.6)	55.6	(0.8)	18.3	(0.6)
	Iceland	2.7	(0.3)	14.0	(0.6)	55.4	(0.9)	27.8	(0.9)	3.7	(0.3)	20.8	(0.7)	54.5	(0.9)	21.1	(0.7)
	Ireland	1.0	(0.1)	9.0	(0.4)	62.4	(0.7)	27.7	(0.7)	3.0	(0.3)	24.7	(0.6)	58.7	(0.7)	13.6	(0.4)
	Israel	3.9	(0.3)	13.9	(0.6)	43.1	(0.7)	39.1	(0.8)	6.0	(0.4)	25.2	(0.6)	46.5	(0.8)	22.3	(0.6)
	Italy	2.5	(0.2)	11.3	(0.4)	58.1	(0.7)	28.0	(0.7)	3.5	(0.2)	28.7	(0.6)	53.8	(0.7)	14.0	(0.5)
	Japan	5.3	(0.3)	25.9	(0.6)	51.5	(0.7)	17.3	(0.6)	12.5	(0.4)	46.1	(0.7)	34.7	(0.6)	6.7	(0.3)
	Korea	0.9	(0.1)	7.7	(0.4)	55.4	(0.6)	36.0	(0.7)	5.3	(0.3)	39.8	(0.7)	42.7	(0.8)	12.2	(0.5)
	Latvia	3.1	(0.3)	17.6	(0.6)	59.6	(0.8)	19.6	(0.6)	3.2	(0.3)	27.3	(0.6)	59.0	(0.8)	10.5	(0.4)
	Lithuania	2.0	(0.2)	9.4	(0.4)	45.0	(0.6)	43.6	(0.6)	4.3	(0.3)	23.7	(0.6)	51.1	(0.6)	20.9	(0.6)
	Luxembourg	3.2	(0.3)	13.8	(0.5)	53.5	(0.7)	29.5	(0.6)	3.7	(0.3)	23.5	(0.6)	54.4	(0.7)	18.4	(0.6)
	Mexico	1.2	(0.2) †	4.1	(0.3) †	52.5	(0.8) †	42.2	(0.8) †	1.8	(0.2) †	20.5	(0.6) †	56.8	(0.8) †	20.8	(0.6) †
	Netherlands*	1.2	(0.2)	10.1	(0.5)	66.6	(1.0)	22.1	(0.9)	3.0	(0.3)	31.3	(0.8)	55.0	(1.0)	10.7	(0.7)
	New Zealand	0.9	(0.1)	6.2	(0.4)	59.0	(0.7)	33.9	(0.7)	4.3	(0.3)	28.1	(0.7)	53.4	(0.7)	14.1	(0.5)
	Norway	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Poland	2.1	(0.2)	8.3	(0.4)	58.6	(0.8)	31.0	(0.8)	2.8	(0.2)	24.4	(0.6)	59.2	(0.8)	13.7	(0.5)
	Portugal*	1.2	(0.2)	6.4	(0.4)	64.2	(0.8)	28.2	(0.6)	2.7	(0.2)	29.8	(0.7)	54.9	(0.8)	12.6	(0.6)
	Slovak Republic	3.8	(0.3)	19.7	(0.5)	59.5	(0.7)	17.0	(0.5)	4.2	(0.3)	30.4	(0.7)	54.5	(0.7)	10.9	(0.4)
	Slovenia	2.5	(0.3)	18.9	(0.6)	59.0	(0.7)	19.6	(0.7)	2.7	(0.3)	22.7	(0.7)	60.0	(0.8)	14.6	(0.6)
	Spain	1.5	(0.1)	6.0	(0.2)	52.5	(0.4)	40.0	(0.4)	2.2	(0.2)	16.0	(0.3)	58.0	(0.4)	23.8	(0.3)
	Sweden	4.4	(0.3)	21.5	(0.7)	56.9	(0.8)	17.3	(0.6)	3.9	(0.3)	21.6	(0.7)	57.6	(0.8)	16.9	(0.6)
	Switzerland	2.2	(0.2)	11.6	(0.6)	54.0	(0.8)	32.2	(0.8)	2.8	(0.2)	26.0	(0.7)	55.7	(0.8)	15.5	(0.6)
	Turkey	2.8	(0.3)	6.1	(0.3)	43.6	(0.7)	47.6	(0.8)	3.6	(0.2)	17.3	(0.5)	52.3	(0.7)	26.8	(0.6)
	United Kingdom	2.1	(0.2)	11.7	(0.4)	61.9	(0.7)	24.2	(0.6)	5.3	(0.3)	28.5	(0.6)	52.8	(0.6)	13.4	(0.5)
	United States*	1.1	(0.1)	6.6	(0.4)	56.7	(0.8)	35.5	(0.8)	3.5	(0.3)	22.9	(0.6)	53.8	(0.7)	19.9	(0.7)
	OECD average	2.2	(0.0)	11.5	(0.1)	56.4	(0.1)	29.9	(0.1)	3.7	(0.0)	25.9	(0.1)	54.3	(0.1)	16.2	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.13.1 [4/6] **Students' self-efficacy**

Based on students' reports

		Percentage of students who reported the following:															
		I feel proud that I have accomplished things								I feel that I can handle many things at a time							
		Strongly disagree		Disagree		Agree		Strongly agree		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	1.3	(0.2)	6.4	(0.4)	48.5	(0.9)	43.8	(0.9)	1.8	(0.2)	20.3	(0.6)	53.2	(0.6)	24.7	(0.7)
	Argentina	3.7	(0.3)	12.7	(0.5)	54.2	(0.7)	29.4	(0.7)	5.8	(0.3)	33.0	(0.6)	46.6	(0.8)	14.6	(0.5)
	Baku (Azerbaijan)	5.4	(0.3) †	7.7	(0.4) †	49.9	(0.8) †	36.9	(0.8) †	4.9	(0.3) †	12.7	(0.5) †	52.8	(0.9) †	29.5	(0.8) †
	Belarus	2.6	(0.2)	24.2	(0.7)	57.9	(0.8)	15.4	(0.6)	2.6	(0.2)	40.9	(0.8)	49.2	(0.7)	7.3	(0.4)
	Bosnia and Herzegovina	2.3	(0.2)	7.3	(0.4)	57.5	(0.7)	32.9	(0.7)	3.0	(0.3)	16.1	(0.6)	57.6	(0.8)	23.3	(0.6)
	Brazil	2.4	(0.2)	9.5	(0.4)	57.7	(0.7)	30.4	(0.6)	6.0	(0.3)	37.1	(0.6)	43.4	(0.6)	13.5	(0.4)
	Brunei Darussalam	1.4	(0.2)	12.1	(0.4)	61.7	(0.6)	24.9	(0.5)	5.1	(0.3)	38.5	(0.6)	47.1	(0.7)	9.4	(0.3)
	B-S-J-Z (China)	0.9	(0.1)	8.6	(0.4)	65.3	(0.7)	25.2	(0.7)	2.0	(0.2)	37.4	(0.9)	48.9	(0.9)	11.7	(0.5)
	Bulgaria	5.4	(0.4)	12.7	(0.6)	51.2	(0.9)	30.7	(0.9)	6.3	(0.4)	20.0	(0.7)	53.8	(0.8)	19.9	(0.7)
	Costa Rica	1.5	(0.2)	3.0	(0.2)	43.1	(0.7)	52.5	(0.7)	2.0	(0.2)	19.1	(0.6)	53.2	(0.7)	25.7	(0.6)
	Croatia	1.2	(0.1)	4.9	(0.3)	55.7	(0.6)	38.1	(0.7)	2.2	(0.2)	20.6	(0.5)	57.5	(0.6)	19.7	(0.5)
	Cyprus	3.4	(0.3)	11.0	(0.4)	54.1	(0.7)	31.4	(0.7)	3.6	(0.3)	21.0	(0.6)	55.6	(0.8)	19.8	(0.6)
	Dominican Republic	4.9	(0.4) †	7.9	(0.6) †	46.3	(1.1) †	40.9	(1.3) †	4.7	(0.4) †	18.2	(0.7) †	50.9	(0.9) †	26.3	(0.9) †
	Georgia	5.8	(0.4)	21.8	(0.7)	52.1	(0.8)	20.4	(0.6)	4.8	(0.3)	26.7	(0.7)	52.4	(0.8)	16.1	(0.6)
	Hong Kong (China)*	2.3	(0.2)	14.1	(0.5)	63.9	(0.6)	19.7	(0.7)	3.8	(0.2)	30.5	(0.7)	55.1	(0.7)	10.6	(0.4)
	Indonesia	1.4	(0.2)	8.6	(0.5)	69.2	(0.8)	20.8	(0.7)	1.9	(0.2)	27.5	(0.9)	59.2	(0.9)	11.4	(0.6)
	Jordan	3.6	(0.3)	10.7	(0.5)	43.5	(0.8)	42.2	(0.9)	4.5	(0.3)	16.7	(0.5)	51.3	(0.8)	27.6	(0.8)
	Kazakhstan	6.8	(0.2)	32.7	(0.5)	46.7	(0.4)	13.7	(0.3)	3.5	(0.2)	19.7	(0.4)	60.2	(0.4)	16.6	(0.3)
	Kosovo	2.0	(0.2)	7.7	(0.5)	57.9	(0.9)	32.4	(0.7)	2.4	(0.3)	22.0	(0.7)	55.7	(0.8)	19.9	(0.6)
	Lebanon	5.8	(0.5)	18.9	(0.9)	41.2	(1.0)	34.1	(1.1)	8.3	(0.6)	21.2	(0.9)	49.0	(1.0)	21.5	(0.7)
	Macao (China)	1.3	(0.2)	13.7	(0.5)	60.9	(0.7)	24.1	(0.7)	4.6	(0.3)	44.5	(0.8)	42.4	(0.9)	8.5	(0.4)
	Malaysia	1.7	(0.2)	12.8	(0.6)	66.5	(0.6)	18.9	(0.6)	3.5	(0.2)	41.0	(0.9)	48.1	(0.9)	7.4	(0.4)
	Malta	1.8	(0.2)	7.8	(0.5)	52.9	(0.9)	37.5	(0.8)	4.1	(0.4)	26.2	(0.8)	50.1	(0.9)	19.6	(0.8)
	Moldova	1.5	(0.2)	13.8	(0.6)	63.2	(0.8)	21.5	(0.7)	2.0	(0.2)	26.4	(0.6)	57.2	(0.7)	14.4	(0.5)
	Montenegro	2.4	(0.2)	6.3	(0.3)	51.4	(0.8)	39.9	(0.7)	2.9	(0.2)	14.3	(0.5)	54.8	(0.7)	28.0	(0.6)
	Morocco	3.5	(0.3) †	10.7	(0.6) †	49.4	(0.8) †	36.5	(1.0) †	4.2	(0.4) †	24.8	(0.7) †	52.0	(0.8) †	19.1	(0.6) †
	North Macedonia	2.7	(0.2)	5.3	(0.3)	47.5	(0.8)	44.5	(0.8)	2.9	(0.2)	12.1	(0.6)	55.0	(0.7)	30.1	(0.7)
	Panama	3.1	(0.4) †	5.2	(0.4) †	46.2	(0.9) †	45.5	(0.9) †	4.1	(0.3) †	21.4	(0.7) †	50.6	(0.9) †	23.8	(0.8) †
	Peru	1.4	(0.2) †	5.4	(0.4) †	54.9	(0.9) †	38.4	(0.8) †	1.6	(0.2) †	24.4	(0.8) †	56.9	(0.9) †	17.1	(0.7) †
	Philippines	2.9	(0.2)	7.7	(0.4)	56.3	(0.8)	33.2	(0.8)	3.1	(0.2)	20.7	(0.5)	61.5	(0.7)	14.6	(0.6)
	Qatar	3.6	(0.2)	9.8	(0.3)	45.0	(0.5)	41.6	(0.5)	4.9	(0.2)	20.7	(0.4)	50.0	(0.4)	24.4	(0.3)
	Romania	1.9	(0.2)	10.9	(0.5)	61.1	(0.9)	26.1	(0.8)	3.7	(0.3)	28.2	(0.8)	53.0	(0.9)	15.0	(0.6)
	Russia	3.7	(0.2)	20.1	(0.7)	61.6	(0.8)	14.6	(0.5)	3.8	(0.3)	35.0	(0.6)	52.1	(0.7)	9.2	(0.4)
	Saudi Arabia	3.9	(0.4)	8.7	(0.4)	42.4	(0.7)	45.1	(0.9)	6.2	(0.4)	19.5	(0.6)	47.7	(0.8)	26.6	(0.6)
	Serbia	2.5	(0.3)	6.4	(0.4)	43.9	(0.8)	47.1	(0.9)	3.4	(0.2)	17.1	(0.5)	51.4	(0.6)	28.1	(0.5)
	Singapore	0.9	(0.1)	4.4	(0.3)	56.1	(0.7)	38.6	(0.7)	5.5	(0.3)	32.6	(0.6)	49.3	(0.6)	12.6	(0.5)
	Chinese Taipei	2.2	(0.1)	12.2	(0.4)	62.1	(0.5)	23.5	(0.6)	4.9	(0.3)	38.2	(0.7)	46.2	(0.6)	10.7	(0.4)
	Thailand	1.2	(0.2)	5.2	(0.4)	61.9	(0.8)	31.6	(1.0)	2.2	(0.2)	30.4	(0.8)	57.8	(0.8)	9.6	(0.4)
	Ukraine	1.8	(0.2)	10.2	(0.4)	61.9	(0.7)	26.1	(0.8)	3.5	(0.3)	37.4	(0.7)	46.3	(0.6)	12.8	(0.5)
	United Arab Emirates	2.8	(0.2)	8.6	(0.3)	46.2	(0.5)	42.4	(0.5)	3.9	(0.2)	19.6	(0.4)	50.0	(0.5)	26.5	(0.4)
	Uruguay	2.9	(0.3)	7.1	(0.4)	55.3	(0.8)	34.7	(0.8)	3.9	(0.4)	22.8	(0.7)	54.9	(0.7)	18.4	(0.6)
	Viet Nam	1.3	(0.2)	5.5	(0.4)	64.2	(1.1)	29.0	(1.1)	5.5	(0.5)	64.3	(0.9)	26.6	(0.7)	3.5	(0.3)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.13.1 [5/6] **Students' self-efficacy**

Based on students' reports

		My belief in myself gets me through hard times															
		My belief in myself gets me through hard times								When I'm in a difficult situation, I can usually find my way out of it							
		Strongly disagree		Disagree		Agree		Strongly agree		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	7.0	(0.3)	26.1	(0.4)	50.1	(0.5)	16.8	(0.4)	2.6	(0.2)	11.6	(0.4)	64.7	(0.5)	21.2	(0.5)
	Austria	6.5	(0.3)	20.9	(0.6)	44.7	(0.7)	28.0	(0.8)	3.1	(0.3)	13.3	(0.5)	55.9	(0.7)	27.7	(0.8)
	Belgium (Flemish)	9.9	(0.5)	32.7	(0.8)	46.0	(0.9)	11.3	(0.4)	2.5	(0.4)	14.6	(0.5)	68.8	(0.7)	14.0	(0.5)
	Canada	6.1	(0.2)	23.3	(0.4)	50.3	(0.5)	20.3	(0.4)	2.0	(0.1)	10.6	(0.3)	61.9	(0.5)	25.5	(0.4)
	Chile	6.3	(0.4)	18.4	(0.5)	44.6	(0.6)	30.7	(0.6)	3.4	(0.3)	12.2	(0.5)	54.1	(0.7)	30.3	(0.6)
	Colombia	2.2	(0.2)	7.0	(0.4)	55.4	(0.9)	35.4	(0.8)	1.8	(0.2)	8.1	(0.5)	60.7	(0.7)	29.4	(0.7)
	Czech Republic	8.0	(0.3)	29.4	(0.7)	48.7	(0.7)	13.9	(0.5)	2.9	(0.2)	15.6	(0.5)	66.8	(0.7)	14.7	(0.6)
	Denmark	4.9	(0.3)	23.8	(0.6)	52.7	(0.7)	18.6	(0.6)	1.3	(0.2)	8.7	(0.5)	65.7	(0.7)	24.2	(0.7)
	Estonia	5.8	(0.4)	22.7	(0.7)	53.5	(0.8)	18.0	(0.6)	2.1	(0.2)	11.3	(0.5)	66.6	(0.7)	19.9	(0.6)
	Finland	5.3	(0.3)	24.1	(0.6)	56.4	(0.7)	14.2	(0.5)	2.5	(0.2)	13.4	(0.5)	66.4	(0.7)	17.7	(0.5)
	France	13.8	(0.5)	27.7	(0.6)	40.0	(0.8)	18.5	(0.5)	4.0	(0.3)	20.5	(0.6)	55.4	(0.7)	20.1	(0.5)
	Germany	6.7	(0.4) †	25.0	(0.7) †	44.9	(0.9) †	23.4	(0.7) †	2.5	(0.3) †	13.0	(0.6) †	58.4	(0.9) †	26.1	(0.8) †
	Greece	3.7	(0.2)	17.8	(0.5)	53.7	(0.6)	24.8	(0.6)	2.3	(0.2)	11.8	(0.5)	64.4	(0.7)	21.5	(0.7)
	Hungary	3.6	(0.3)	16.1	(0.6)	55.0	(0.7)	25.4	(0.6)	2.1	(0.2)	8.2	(0.3)	62.5	(0.8)	27.3	(0.7)
	Iceland	6.5	(0.4)	24.2	(0.8)	47.8	(1.0)	21.5	(0.8)	2.7	(0.3)	13.4	(0.6)	60.0	(0.8)	23.9	(0.7)
	Ireland	6.0	(0.4)	27.9	(0.6)	50.6	(0.7)	15.6	(0.6)	2.0	(0.2)	12.6	(0.4)	66.6	(0.7)	18.9	(0.6)
	Israel	5.1	(0.3)	15.4	(0.6)	45.1	(0.7)	34.5	(0.7)	3.9	(0.3)	11.5	(0.4)	54.8	(0.7)	29.8	(0.7)
	Italy	7.9	(0.4)	20.1	(0.5)	48.6	(0.8)	23.4	(0.7)	3.2	(0.2)	11.3	(0.4)	59.6	(0.7)	26.0	(0.7)
	Japan	9.1	(0.4)	34.7	(0.6)	44.0	(0.7)	12.3	(0.5)	6.4	(0.3)	35.1	(0.6)	48.6	(0.7)	9.9	(0.4)
	Korea	3.3	(0.2)	19.7	(0.6)	56.6	(0.7)	20.5	(0.6)	2.2	(0.2)	17.1	(0.6)	62.0	(0.7)	18.7	(0.5)
	Latvia	4.8	(0.3)	23.2	(0.7)	56.6	(0.7)	15.4	(0.5)	2.4	(0.2)	13.6	(0.5)	66.7	(0.8)	17.2	(0.5)
	Lithuania	4.5	(0.3)	14.5	(0.5)	49.0	(0.7)	32.1	(0.6)	2.5	(0.2)	12.3	(0.5)	57.7	(0.7)	27.5	(0.6)
	Luxembourg	7.6	(0.4)	23.9	(0.7)	47.1	(0.8)	21.4	(0.6)	3.9	(0.3)	15.4	(0.5)	56.2	(0.8)	24.5	(0.7)
	Mexico	2.7	(0.2) †	11.6	(0.4) †	53.0	(0.7) †	32.8	(0.7) †	1.9	(0.2) †	9.0	(0.5) †	56.9	(0.7) †	32.2	(0.7) †
	Netherlands*	5.1	(0.3)	25.8	(0.8)	55.4	(0.9)	13.7	(0.7)	1.8	(0.2)	10.6	(0.6)	70.0	(0.9)	17.6	(0.6)
	New Zealand	7.0	(0.4)	26.9	(0.7)	50.8	(0.7)	15.3	(0.6)	2.4	(0.2)	12.5	(0.4)	64.9	(0.8)	20.2	(0.5)
	Norway	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Poland	6.4	(0.3)	25.0	(0.6)	52.8	(0.7)	15.8	(0.6)	2.4	(0.2)	14.6	(0.5)	66.5	(0.7)	16.5	(0.6)
	Portugal*	5.3	(0.3)	22.0	(0.6)	51.8	(0.8)	20.9	(0.6)	2.1	(0.2)	12.8	(0.6)	67.2	(0.6)	17.9	(0.5)
	Slovak Republic	7.1	(0.4)	27.0	(0.7)	50.7	(0.8)	15.2	(0.6)	4.5	(0.3)	16.0	(0.5)	62.7	(0.7)	16.8	(0.6)
	Slovenia	4.2	(0.3)	19.0	(0.7)	58.5	(0.8)	18.3	(0.6)	2.7	(0.3)	12.7	(0.6)	65.4	(0.6)	19.1	(0.6)
	Spain	5.7	(0.2)	21.0	(0.3)	48.3	(0.4)	25.1	(0.4)	2.9	(0.2)	13.3	(0.3)	58.7	(0.4)	25.2	(0.3)
	Sweden	7.4	(0.5)	26.9	(0.7)	48.8	(0.8)	16.8	(0.7)	2.9	(0.3)	14.1	(0.5)	61.4	(0.8)	21.7	(0.7)
	Switzerland	6.0	(0.3)	22.8	(0.8)	48.6	(0.9)	22.7	(0.6)	2.4	(0.3)	12.6	(0.6)	61.8	(0.9)	23.1	(0.7)
	Turkey	3.8	(0.2)	12.0	(0.5)	51.5	(0.6)	32.7	(0.6)	3.0	(0.2)	11.4	(0.4)	53.7	(0.6)	31.9	(0.6)
	United Kingdom	9.6	(0.4)	31.7	(0.7)	44.4	(0.7)	14.3	(0.5)	3.5	(0.3)	16.2	(0.5)	62.2	(0.6)	18.1	(0.5)
	United States*	5.0	(0.3)	19.9	(0.7)	52.7	(0.8)	22.4	(0.7)	1.7	(0.2)	10.6	(0.4)	61.5	(0.7)	26.2	(0.6)
	OECD average	6.1	(0.1)	22.5	(0.1)	50.2	(0.1)	21.2	(0.1)	2.7	(0.0)	13.4	(0.1)	61.6	(0.1)	22.3	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.13.1 [6/6] **Students' self-efficacy**

Based on students' reports

		My belief in myself gets me through hard times															
		My belief in myself gets me through hard times								When I'm in a difficult situation, I can usually find my way out of it							
		Strongly disagree		Disagree		Agree		Strongly agree		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	1.6	(0.2)	6.1	(0.4)	43.8	(0.9)	48.5	(0.8)	1.0	(0.1)	3.7	(0.3)	54.0	(0.7)	41.3	(0.8)
	Argentina	6.3	(0.3)	15.5	(0.4)	48.0	(0.8)	30.2	(0.7)	5.3	(0.3)	12.3	(0.4)	53.6	(0.8)	28.7	(0.8)
	Baku (Azerbaijan)	5.3	(0.4) †	10.8	(0.4) †	52.2	(0.8) †	31.6	(0.8) †	4.7	(0.3) †	9.7	(0.4) †	54.4	(0.9) †	31.2	(0.8) †
	Belarus	2.7	(0.2)	18.2	(0.6)	63.4	(0.7)	15.7	(0.6)	1.6	(0.2)	8.3	(0.4)	70.5	(0.7)	19.6	(0.6)
	Bosnia and Herzegovina	3.3	(0.3)	10.1	(0.4)	56.3	(0.7)	30.3	(0.7)	2.9	(0.2)	9.7	(0.4)	58.6	(0.6)	28.7	(0.6)
	Brazil	5.6	(0.3)	19.7	(0.6)	55.0	(0.6)	19.7	(0.5)	4.7	(0.3)	18.0	(0.5)	58.8	(0.7)	18.5	(0.6)
	Brunei Darussalam	3.0	(0.2)	20.3	(0.5)	58.7	(0.6)	18.0	(0.5)	3.2	(0.2)	18.5	(0.4)	59.4	(0.6)	18.8	(0.5)
	B-S-J-Z (China)	1.5	(0.2)	17.3	(0.5)	63.4	(0.8)	17.8	(0.7)	1.4	(0.2)	24.2	(0.7)	60.5	(0.8)	13.9	(0.5)
	Bulgaria	6.1	(0.5)	16.4	(0.7)	53.0	(1.0)	24.5	(0.7)	5.4	(0.4)	11.1	(0.6)	56.9	(0.9)	26.6	(0.7)
	Costa Rica	3.6	(0.2)	12.1	(0.4)	47.1	(0.6)	37.2	(0.7)	2.4	(0.2)	8.9	(0.4)	53.7	(0.8)	34.9	(0.7)
	Croatia	3.5	(0.2)	14.0	(0.5)	54.6	(0.7)	27.9	(0.6)	1.7	(0.2)	9.7	(0.4)	64.0	(0.5)	24.6	(0.4)
	Cyprus	5.6	(0.3)	17.1	(0.6)	50.8	(0.7)	26.5	(0.6)	3.7	(0.3)	13.2	(0.5)	58.6	(0.8)	24.6	(0.7)
	Dominican Republic	5.7	(0.5) †	10.6	(0.6) †	45.8	(0.9) †	37.9	(1.0) †	4.7	(0.5) †	9.0	(0.6) †	53.2	(0.9) †	33.2	(1.0) †
	Georgia	4.5	(0.3)	11.9	(0.6)	54.9	(0.8)	28.6	(0.7)	3.7	(0.3)	13.6	(0.7)	59.6	(0.9)	23.1	(0.7)
	Hong Kong (China)*	3.7	(0.3)	24.6	(0.7)	60.2	(0.8)	11.5	(0.4)	2.7	(0.2)	24.3	(0.7)	61.3	(0.6)	11.7	(0.5)
	Indonesia	1.6	(0.2)	7.8	(0.4)	65.9	(0.8)	24.7	(0.7)	1.6	(0.2)	9.2	(0.5)	69.3	(0.9)	19.9	(0.7)
	Jordan	4.3	(0.3)	9.0	(0.4)	43.6	(0.7)	43.1	(0.8)	6.5	(0.4)	13.8	(0.6)	48.8	(0.8)	30.9	(0.8)
	Kazakhstan	3.6	(0.2)	11.2	(0.4)	62.0	(0.5)	23.2	(0.4)	3.1	(0.2)	9.0	(0.2)	65.0	(0.4)	22.9	(0.5)
	Kosovo	1.8	(0.2)	7.2	(0.5)	48.0	(0.8)	42.9	(0.7)	1.9	(0.2)	6.0	(0.4)	58.7	(0.7)	33.3	(0.7)
	Lebanon	7.4	(0.6)	22.4	(0.9)	42.2	(0.9)	28.0	(0.9)	10.7	(0.7)	16.8	(0.8)	47.0	(1.1)	25.5	(0.8)
	Macao (China)	4.3	(0.3)	30.3	(0.8)	53.2	(0.8)	12.2	(0.5)	2.5	(0.2)	25.8	(0.7)	59.7	(0.8)	12.0	(0.6)
	Malaysia	1.8	(0.2)	17.8	(0.5)	63.4	(0.7)	17.0	(0.6)	1.6	(0.2)	18.6	(0.6)	66.8	(0.6)	13.0	(0.4)
	Malta	5.5	(0.4)	20.2	(0.6)	51.2	(0.8)	23.0	(0.7)	3.0	(0.3)	14.1	(0.6)	61.0	(0.9)	21.9	(0.7)
	Moldova	2.2	(0.2)	11.6	(0.5)	57.6	(0.7)	28.6	(0.7)	1.7	(0.2)	10.5	(0.4)	62.3	(0.8)	25.5	(0.7)
	Montenegro	4.2	(0.3)	11.7	(0.4)	50.0	(0.7)	34.1	(0.6)	2.7	(0.3)	6.9	(0.4)	56.1	(0.6)	34.3	(0.6)
	Morocco	4.6	(0.4) †	15.5	(0.6) †	52.2	(0.7) †	27.7	(0.8) †	5.1	(0.4) †	14.7	(0.5) †	56.0	(0.9) †	24.3	(0.7) †
	North Macedonia	3.1	(0.2)	9.3	(0.5)	47.0	(0.8)	40.6	(0.8)	3.1	(0.3)	7.0	(0.4)	52.6	(0.8)	37.3	(0.8)
	Panama	3.7	(0.4) †	9.0	(0.6) †	44.5	(0.9) †	42.8	(1.0) †	3.2	(0.3) †	8.6	(0.6) †	50.0	(0.9) †	38.2	(0.8) †
	Peru	1.8	(0.2) †	10.4	(0.5) †	56.4	(0.8) †	31.4	(0.8) †	1.4	(0.2) †	8.3	(0.5) †	60.3	(0.8) †	30.0	(0.8) †
	Philippines	3.1	(0.2)	14.1	(0.5)	64.6	(0.6)	18.3	(0.7)	3.2	(0.2)	13.9	(0.5)	62.7	(0.6)	20.3	(0.6)
	Qatar	7.2	(0.3)	23.4	(0.4)	46.1	(0.4)	23.3	(0.3)	4.8	(0.2)	13.4	(0.3)	53.9	(0.4)	27.9	(0.4)
	Romania	2.7	(0.3)	11.9	(0.6)	55.8	(0.8)	29.6	(0.7)	2.3	(0.3)	6.4	(0.4)	60.5	(0.8)	30.8	(0.7)
	Russia	5.0	(0.3)	19.9	(0.7)	59.0	(0.9)	16.2	(0.4)	3.2	(0.3)	14.7	(0.6)	65.0	(0.6)	17.1	(0.5)
	Saudi Arabia	5.1	(0.4)	8.6	(0.5)	40.2	(0.7)	46.2	(0.8)	7.1	(0.5)	12.8	(0.5)	50.7	(0.7)	29.5	(0.6)
	Serbia	4.2	(0.3)	14.3	(0.5)	47.2	(0.7)	34.3	(0.6)	3.1	(0.3)	9.2	(0.4)	56.4	(0.8)	31.3	(0.7)
	Singapore	4.6	(0.3)	18.7	(0.5)	55.3	(0.6)	21.3	(0.5)	2.2	(0.2)	12.1	(0.4)	64.2	(0.7)	21.5	(0.6)
	Chinese Taipei	4.0	(0.2)	23.1	(0.6)	58.3	(0.7)	14.5	(0.4)	2.4	(0.2)	18.0	(0.5)	65.7	(0.6)	13.9	(0.4)
	Thailand	1.2	(0.2)	8.9	(0.4)	69.9	(0.7)	20.0	(0.7)	1.3	(0.2)	12.7	(0.6)	70.7	(0.7)	15.3	(0.6)
	Ukraine	3.2	(0.2)	16.3	(0.5)	58.3	(0.7)	22.1	(0.7)	2.1	(0.2)	11.6	(0.4)	63.8	(0.6)	22.4	(0.6)
	United Arab Emirates	3.8	(0.2)	13.8	(0.5)	48.1	(0.5)	34.2	(0.5)	3.2	(0.1)	11.5	(0.4)	53.6	(0.4)	31.7	(0.5)
	Uruguay	6.3	(0.5)	17.9	(0.7)	48.8	(0.8)	27.0	(0.7)	3.6	(0.3)	11.1	(0.5)	57.5	(0.8)	27.7	(0.7)
	Viet Nam	1.6	(0.2)	8.8	(0.5)	67.7	(0.7)	21.9	(0.8)	1.9	(0.2)	19.1	(0.6)	64.9	(0.8)	14.1	(0.6)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.13.2 [1/4] **Students' fear of failure**

Based on students' reports

		Index of fear of failure[1]				Percentage of students who reported the following:							
						When I am failing, I worry about what others think of me							
		Average		Variability		Strongly disagree		Disagree		Agree		Strongly agree	
		Mean index	S.E.	S.D.	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	0.23	(0.01)	1.00	(0.01)	11.8	(0.3)	26.6	(0.5)	41.4	(0.5)	20.2	(0.4)
	Austria	-0.26	(0.01)	1.05	(0.01)	18.9	(0.6)	29.6	(0.6)	33.6	(0.6)	17.8	(0.5)
	Belgium (Flemish)	-0.19	(0.02)	0.89	(0.01)	15.9	(0.6)	37.0	(0.7)	36.9	(0.8)	10.2	(0.5)
	Canada	0.27	(0.01)	1.04	(0.01)	13.5	(0.4)	24.7	(0.4)	39.6	(0.6)	22.2	(0.4)
	Chile	0.08	(0.01)	1.00	(0.01)	20.3	(0.6)	28.4	(0.6)	35.3	(0.7)	16.0	(0.6)
	Colombia	-0.19	(0.01)	0.94	(0.01)	17.1	(0.5)	34.5	(0.7)	38.2	(0.7)	10.1	(0.4)
	Czech Republic	-0.05	(0.01)	0.91	(0.01)	12.2	(0.5)	29.2	(0.7)	44.4	(0.8)	14.2	(0.6)
	Denmark	-0.02	(0.01)	0.91	(0.01)	10.7	(0.4)	31.0	(0.7)	44.2	(0.8)	14.1	(0.5)
	Estonia	-0.17	(0.01)	0.91	(0.01)	14.7	(0.6)	38.9	(0.8)	36.6	(0.7)	9.8	(0.5)
	Finland	-0.19	(0.01)	0.96	(0.01)	13.2	(0.5)	36.4	(0.7)	38.3	(0.7)	12.0	(0.5)
	France	0.06	(0.01)	1.06	(0.01)	25.9	(0.7)	26.7	(0.6)	31.2	(0.7)	16.3	(0.5)
	Germany	-0.37	(0.02)	1.02	(0.01)	20.1	(0.8)	32.3	(0.7)	33.0	(0.7)	14.6	(0.6)
	Greece	-0.09	(0.01)	0.94	(0.01)	16.2	(0.5)	29.1	(0.6)	41.2	(0.7)	13.5	(0.4)
	Hungary	-0.10	(0.02)	1.01	(0.01)	14.9	(0.5)	29.6	(0.8)	39.9	(0.8)	15.6	(0.6)
	Iceland	0.00	(0.02)	1.06	(0.01)	12.2	(0.5)	23.9	(0.9)	44.0	(0.8)	19.9	(0.7)
	Ireland	0.21	(0.01)	0.98	(0.01)	9.9	(0.4)	26.4	(0.6)	43.5	(0.7)	20.2	(0.6)
	Israel	m	m	m	m	m	m	m	m	m	m	m	m
	Italy	0.04	(0.02)	0.97	(0.01)	16.3	(0.5)	26.8	(0.7)	40.8	(0.7)	16.2	(0.5)
	Japan	0.38	(0.01)	0.96	(0.01)	7.0	(0.4)	16.4	(0.5)	47.6	(0.7)	29.1	(0.6)
	Korea	0.19	(0.01)	0.96	(0.01)	7.0	(0.3)	18.0	(0.5)	52.1	(0.7)	22.9	(0.7)
	Latvia	-0.10	(0.01)	0.89	(0.01)	11.9	(0.5)	33.3	(0.6)	42.7	(0.7)	12.1	(0.5)
	Lithuania	-0.07	(0.01)	1.03	(0.01)	16.9	(0.5)	21.4	(0.6)	40.1	(0.6)	21.5	(0.6)
	Luxembourg	-0.14	(0.02)	1.06	(0.01)	23.0	(0.6)	27.3	(0.6)	33.4	(0.6)	16.2	(0.6)
	Mexico	0.06	(0.02)	0.95	(0.01)	16.0	(0.6)	30.2	(0.8)	39.4	(0.7)	14.4	(0.5)
	Netherlands*	-0.39	(0.02)	0.91	(0.01)	18.8	(0.7)	36.3	(0.8)	34.4	(0.8)	10.5	(0.5)
	New Zealand	0.25	(0.01)	1.01	(0.01)	11.0	(0.4)	24.4	(0.6)	42.1	(0.6)	22.5	(0.5)
	Norway	m	m	m	m	m	m	m	m	m	m	m	m
	Poland	0.01	(0.02)	0.91	(0.01)	13.8	(0.5)	32.7	(0.7)	40.3	(0.7)	13.3	(0.5)
	Portugal*	-0.01	(0.01)	0.97	(0.01)	14.1	(0.5)	29.4	(0.6)	40.6	(0.8)	15.9	(0.5)
	Slovak Republic	0.01	(0.01)	0.89	(0.01)	12.7	(0.5)	28.2	(0.6)	46.1	(0.7)	13.0	(0.6)
	Slovenia	0.00	(0.01)	0.96	(0.01)	11.4	(0.5)	25.5	(0.8)	48.0	(0.8)	15.2	(0.5)
	Spain	-0.12	(0.01)	0.98	(0.01)	20.0	(0.4)	29.3	(0.4)	35.7	(0.4)	15.0	(0.3)
	Sweden	0.00	(0.01)	1.02	(0.01)	14.6	(0.5)	32.0	(0.8)	37.7	(0.7)	15.6	(0.6)
	Switzerland	-0.28	(0.02)	1.01	(0.01)	24.6	(0.8)	31.9	(0.7)	30.8	(0.8)	12.6	(0.6)
	Turkey	0.12	(0.01)	1.01	(0.01)	14.5	(0.4)	19.1	(0.5)	42.7	(0.6)	23.7	(0.6)
	United Kingdom	0.27	(0.02)	1.03	(0.01)	12.3	(0.5)	24.9	(0.6)	39.8	(0.7)	23.0	(0.6)
	United States*	0.17	(0.02)	1.08	(0.01)	15.7	(0.6)	25.9	(0.7)	36.8	(0.7)	21.6	(0.7)
	OECD average	-0.01	(0.00)	0.98	(0.00)	15.1	(0.1)	28.5	(0.1)	39.8	(0.1)	16.6	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. Higher values in the index indicate a greater fear of failure.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.13.2 [2/4] **Students' fear of failure**

Based on students' reports

		Index of fear of failure[1]					Percentage of students who reported the following:								
							When I am failing, I worry about what others think of me								
		Average			Variability		Strongly disagree			Disagree			Agree			Strongly agree		
		Mean index	S.E.		S.D.	S.E.	%	S.E.		%	S.E.		%	S.E.		%	S.E.	
Partners	Albania	-0.24	(0.01)		0.98	(0.01)	18.4	(0.6)		29.9	(0.7)		38.2	(0.8)		13.5	(0.6)	
	Argentina	-0.10	(0.01)		1.00	(0.01)	26.4	(0.7)		32.3	(0.6)		29.0	(0.6)		12.3	(0.4)	
	Baku (Azerbaijan)	0.04	(0.02)	†	1.07	(0.01) †	17.8	(0.5)		18.4	(0.6)		42.2	(0.8)		21.7	(0.6)	
	Belarus	-0.13	(0.01)		0.79	(0.01)	11.8	(0.4)		38.8	(0.6)		41.4	(0.7)		7.9	(0.4)	
	Bosnia and Herzegovina	-0.37	(0.02)		0.95	(0.01)	25.8	(0.6)		35.2	(0.7)		30.7	(0.6)		8.3	(0.4)	
	Brazil	0.04	(0.02)		1.01	(0.01)	17.7	(0.5)		27.0	(0.5)		38.4	(0.6)		16.8	(0.4)	
	Brunei Darussalam	0.41	(0.01)		0.97	(0.01)	8.5	(0.4)		17.6	(0.5)		45.1	(0.7)		28.8	(0.6)	
	B-S-J-Z (China)	0.00	(0.01)		0.86	(0.01)	6.0	(0.4)		16.0	(0.6)		58.3	(0.8)		19.7	(0.6)	
	Bulgaria	-0.13	(0.02)		1.01	(0.01)	21.0	(0.6)		25.0	(0.7)		40.2	(0.8)		13.7	(0.6)	
	Costa Rica	-0.23	(0.02)		1.01	(0.01)	21.1	(0.6)		31.6	(0.7)		32.4	(0.7)		14.9	(0.5)	
	Croatia	-0.22	(0.01)		0.95	(0.01)	17.9	(0.5)		34.9	(0.7)		37.3	(0.6)		9.9	(0.4)	
	Cyprus	-0.21	(0.01)		0.98	(0.01)	21.9	(0.7)		31.9	(0.7)		34.9	(0.7)		11.3	(0.5)	
	Dominican Republic	-0.01	(0.02)	†	1.05	(0.01) †	17.5	(0.7)	†	22.7	(0.7)	†	39.8	(1.0)	†	20.1	(0.9)	†
	Georgia	-0.32	(0.02)		0.87	(0.01)	21.6	(0.7)		30.2	(0.7)		39.8	(0.8)		8.4	(0.4)	
	Hong Kong (China)*	0.39	(0.01)		0.88	(0.01)	4.3	(0.4)		14.2	(0.5)		55.8	(0.7)		25.7	(0.6)	
	Indonesia	-0.19	(0.02)		0.88	(0.01)	11.2	(0.5)		29.5	(0.8)		46.0	(0.7)		13.3	(0.6)	
	Jordan	-0.21	(0.02)		1.03	(0.01)	25.0	(0.7)		27.8	(0.7)		31.1	(0.6)		16.2	(0.6)	
	Kazakhstan	-0.33	(0.01)		0.85	(0.01)	16.5	(0.4)		39.0	(0.4)		36.5	(0.4)		8.0	(0.2)	
	Kosovo	-0.07	(0.01)		0.92	(0.01)	19.5	(0.6)		27.9	(0.7)		41.8	(0.7)		10.8	(0.5)	
	Lebanon	-0.20	(0.02)		0.92	(0.01)	32.1	(0.9)		26.6	(0.8)		27.3	(0.7)		14.0	(0.7)	
	Macao (China)	0.44	(0.01)		0.87	(0.01)	4.6	(0.3)		15.3	(0.6)		53.4	(0.9)		26.7	(0.7)	
	Malaysia	0.34	(0.01)		0.90	(0.01)	6.0	(0.4)		19.0	(0.4)		49.4	(0.7)		25.6	(0.7)	
	Malta	0.24	(0.02)		1.01	(0.01)	16.0	(0.6)		25.6	(0.8)		39.4	(0.8)		19.0	(0.6)	
	Moldova	-0.04	(0.01)		0.82	(0.01)	8.6	(0.4)		26.9	(0.6)		51.7	(0.7)		12.8	(0.5)	
	Montenegro	-0.42	(0.01)		0.96	(0.01)	29.4	(0.7)		31.4	(0.6)		29.0	(0.5)		10.2	(0.4)	
	Morocco	-0.15	(0.01)	†	0.99	(0.01) †	26.2	(0.7)		29.5	(0.7)		31.9	(0.7)		12.4	(0.5)	
	North Macedonia	-0.11	(0.02)		0.99	(0.01)	20.2	(0.6)		28.8	(0.7)		35.8	(0.8)		15.3	(0.5)	
	Panama	-0.06	(0.02)	†	1.01	(0.01) †	20.0	(0.8)	†	27.0	(0.7)	†	35.2	(0.9)	†	17.8	(0.7)	†
	Peru	-0.20	(0.01)		0.90	(0.01)	16.0	(0.6)		34.5	(0.7)		39.0	(0.6)		10.5	(0.4)	
	Philippines	0.15	(0.02)		0.89	(0.01)	7.6	(0.4)		20.1	(0.6)		52.7	(0.8)		19.6	(0.7)	
	Qatar	-0.05	(0.01)		1.06	(0.01)	22.6	(0.4)		27.0	(0.4)		34.2	(0.4)		16.2	(0.3)	
	Romania	-0.27	(0.01)		0.89	(0.01)	20.6	(0.6)		33.7	(0.8)		36.2	(0.7)		9.5	(0.5)	
	Russia	-0.16	(0.01)		0.88	(0.01)	14.5	(0.6)		33.0	(0.7)		42.1	(0.6)		10.5	(0.3)	
	Saudi Arabia	-0.33	(0.02)		1.03	(0.01)	25.9	(0.7)		27.4	(0.6)		31.8	(0.7)		15.0	(0.5)	
	Serbia	-0.31	(0.01)		0.94	(0.01)	23.8	(0.6)		33.8	(0.7)		32.2	(0.8)		10.2	(0.5)	
	Singapore	0.50	(0.01)		0.99	(0.01)	8.1	(0.3)		20.1	(0.5)		43.9	(0.6)		27.9	(0.5)	
	Chinese Taipei	0.67	(0.01)		0.90	(0.01)	2.9	(0.2)		8.6	(0.3)		52.4	(0.6)		36.1	(0.6)	
	Thailand	0.16	(0.01)		0.84	(0.01)	7.3	(0.4)		26.9	(0.6)		54.1	(0.8)		11.6	(0.4)	
	Ukraine	-0.22	(0.01)		0.76	(0.01)	13.1	(0.6)		36.4	(0.6)		42.1	(0.7)		8.5	(0.4)	
	United Arab Emirates	0.07	(0.01)		1.03	(0.01)	18.7	(0.4)		26.2	(0.4)		37.5	(0.5)		17.6	(0.3)	
	Uruguay	-0.08	(0.01)		0.97	(0.01)	23.4	(0.7)		30.3	(0.8)		33.5	(0.8)		12.9	(0.5)	
	Viet Nam	-0.02	(0.02)		0.78	(0.01)	6.3	(0.4)		26.8	(0.8)		54.2	(0.8)		12.7	(0.5)	

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. Higher values in the index indicate a greater fear of failure.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.13.2 [3/4] **Students' fear of failure**

Based on students' reports

		Percentage of students who reported the following:															
		When I am failing, I am afraid that I might not have enough talent								When I am failing, this makes me doubt my plans for the future							
		Strongly disagree		Disagree		Agree		Strongly agree		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	9.6	(0.3)	26.6	(0.5)	42.4	(0.5)	21.3	(0.4)	9.5	(0.3)	22.6	(0.5)	40.7	(0.4)	27.2	(0.4)
	Austria	23.1	(0.6)	33.5	(0.7)	29.4	(0.7)	14.1	(0.4)	28.9	(0.6)	30.3	(0.6)	26.8	(0.7)	14.0	(0.4)
	Belgium (Flemish)	15.4	(0.6)	40.3	(0.9)	34.7	(0.8)	9.5	(0.6)	13.2	(0.6)	34.2	(0.7)	39.3	(0.8)	13.4	(0.6)
	Canada	10.8	(0.3)	23.8	(0.5)	40.9	(0.5)	24.5	(0.4)	10.9	(0.3)	20.7	(0.5)	37.3	(0.4)	31.2	(0.5)
	Chile	12.1	(0.5)	24.3	(0.5)	43.1	(0.7)	20.5	(0.6)	17.2	(0.5)	23.6	(0.6)	35.3	(0.6)	23.9	(0.7)
	Colombia	15.2	(0.5)	34.0	(0.8)	39.5	(0.7)	11.3	(0.4)	20.5	(0.7)	36.0	(0.9)	31.8	(0.8)	11.7	(0.4)
	Czech Republic	11.7	(0.4)	36.8	(0.7)	39.8	(0.7)	11.7	(0.4)	13.5	(0.5)	32.0	(0.7)	38.9	(0.7)	15.6	(0.6)
	Denmark	9.7	(0.4)	32.5	(0.7)	44.0	(0.9)	13.8	(0.5)	15.9	(0.6)	37.1	(0.8)	32.9	(0.7)	14.1	(0.5)
	Estonia	13.0	(0.5)	38.5	(0.8)	37.3	(0.8)	11.2	(0.5)	16.1	(0.6)	38.7	(0.8)	33.1	(0.8)	12.0	(0.5)
	Finland	14.7	(0.5)	40.4	(0.7)	33.2	(0.6)	11.7	(0.4)	17.5	(0.5)	41.1	(0.7)	29.5	(0.5)	11.9	(0.4)
	France	15.4	(0.5)	22.8	(0.6)	40.5	(0.6)	21.3	(0.6)	15.5	(0.5)	22.3	(0.6)	36.5	(0.6)	25.7	(0.6)
	Germany	27.0	(0.7)	35.3	(0.8)	26.7	(0.6)	11.0	(0.5)	29.1	(0.7)	33.4	(0.9)	24.9	(0.7)	12.6	(0.6)
	Greece	14.1	(0.5)	32.4	(0.5)	40.3	(0.7)	13.2	(0.4)	17.6	(0.5)	32.3	(0.6)	35.2	(0.6)	14.9	(0.4)
	Hungary	15.4	(0.5)	33.6	(0.8)	36.4	(0.8)	14.6	(0.6)	18.5	(0.6)	34.1	(0.8)	31.9	(0.6)	15.5	(0.6)
	Iceland	15.2	(0.7)	31.0	(0.8)	37.2	(0.8)	16.6	(0.7)	17.9	(0.6)	31.7	(0.9)	33.0	(0.9)	17.3	(0.6)
	Ireland	9.3	(0.4)	28.0	(0.7)	43.0	(0.6)	19.6	(0.5)	9.8	(0.4)	25.3	(0.6)	40.2	(0.6)	24.7	(0.6)
	Israel	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Italy	12.6	(0.4)	28.7	(0.7)	41.6	(0.7)	17.1	(0.6)	14.3	(0.5)	28.2	(0.6)	37.9	(0.7)	19.5	(0.6)
	Japan	7.2	(0.4)	18.8	(0.6)	46.5	(0.7)	27.5	(0.6)	11.0	(0.4)	28.1	(0.7)	39.2	(0.7)	21.7	(0.6)
	Korea	9.8	(0.4)	23.8	(0.5)	47.1	(0.7)	19.3	(0.6)	14.1	(0.5)	32.3	(0.6)	37.5	(0.7)	16.0	(0.5)
	Latvia	12.1	(0.5)	38.2	(0.8)	38.2	(0.7)	11.5	(0.5)	14.3	(0.5)	36.5	(0.8)	35.9	(0.6)	13.2	(0.5)
	Lithuania	18.0	(0.5)	29.3	(0.7)	37.4	(0.7)	15.4	(0.5)	23.3	(0.6)	26.8	(0.6)	32.5	(0.7)	17.4	(0.5)
	Luxembourg	21.0	(0.6)	30.0	(0.7)	33.0	(0.6)	16.0	(0.6)	20.4	(0.6)	25.9	(0.6)	34.7	(0.7)	19.0	(0.6)
	Mexico	10.3	(0.5)	26.9	(0.7)	45.3	(0.7)	17.5	(0.5)	15.5	(0.6)	27.3	(0.6)	38.5	(0.6)	18.6	(0.6)
	Netherlands*	21.4	(0.8)	43.2	(0.9)	27.4	(0.7)	8.0	(0.4)	22.4	(0.7)	41.9	(1.0)	27.1	(0.7)	8.6	(0.5)
	New Zealand	10.3	(0.5)	27.2	(0.6)	41.2	(0.7)	21.3	(0.5)	9.6	(0.4)	22.9	(0.7)	38.5	(0.7)	29.1	(0.7)
	Norway	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Poland	10.2	(0.4)	32.7	(0.7)	43.5	(0.7)	13.6	(0.6)	11.2	(0.4)	30.8	(0.7)	40.7	(0.7)	17.3	(0.6)
	Portugal*	12.8	(0.5)	31.2	(0.7)	41.5	(0.7)	14.5	(0.5)	15.2	(0.5)	30.6	(0.9)	36.3	(0.8)	17.8	(0.5)
	Slovak Republic	9.2	(0.4)	30.6	(0.7)	47.5	(0.7)	12.7	(0.5)	13.3	(0.5)	33.9	(0.7)	39.4	(0.8)	13.3	(0.5)
	Slovenia	12.1	(0.5)	33.1	(0.7)	40.4	(0.7)	14.4	(0.5)	14.3	(0.5)	32.0	(0.7)	37.9	(0.9)	15.9	(0.5)
	Spain	16.4	(0.3)	30.8	(0.4)	37.3	(0.5)	15.6	(0.3)	19.9	(0.4)	32.1	(0.3)	31.4	(0.4)	16.7	(0.3)
	Sweden	14.1	(0.5)	29.6	(0.8)	38.7	(0.7)	17.6	(0.6)	15.2	(0.5)	32.3	(0.7)	33.8	(0.7)	18.8	(0.6)
	Switzerland	23.0	(0.7)	33.1	(0.8)	30.9	(0.7)	13.0	(0.5)	23.1	(0.7)	31.7	(0.7)	30.1	(0.7)	15.1	(0.6)
	Turkey	14.9	(0.5)	28.3	(0.5)	38.2	(0.6)	18.5	(0.5)	13.9	(0.5)	21.7	(0.5)	41.0	(0.6)	23.5	(0.6)
	United Kingdom	10.2	(0.4)	26.6	(0.5)	40.2	(0.6)	23.0	(0.6)	9.3	(0.3)	20.3	(0.5)	38.4	(0.6)	32.1	(0.6)
	United States*	13.7	(0.6)	26.0	(0.7)	37.8	(0.7)	22.6	(0.8)	12.7	(0.5)	22.8	(0.6)	36.4	(0.7)	28.1	(0.9)
	OECD average	14.0	(0.1)	30.9	(0.1)	38.9	(0.1)	16.2	(0.1)	16.1	(0.1)	30.1	(0.1)	35.3	(0.1)	18.5	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. Higher values in the index indicate a greater fear of failure.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.13.2 [4/4] **Students' fear of failure**

Based on students' reports

		Percentage of students who reported the following:															
		When I am failing, I am afraid that I might not have enough talent								When I am failing, this makes me doubt my plans for the future							
		Strongly disagree		Disagree		Agree		Strongly agree		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	**Albania**	20.8	(0.6)	34.7	(0.7)	33.7	(0.7)	10.8	(0.5)	22.5	(0.7)	31.7	(0.7)	31.6	(0.7)	14.2	(0.5)
	Argentina	15.5	(0.5)	27.8	(0.6)	39.5	(0.6)	17.1	(0.5)	20.4	(0.5)	28.6	(0.6)	30.8	(0.6)	20.2	(0.5)
	Baku (Azerbaijan)	16.9	(0.5)	26.7	(0.6)	37.8	(0.7)	18.6	(0.5)	18.4	(0.6)	23.8	(0.7)	38.1	(0.8)	19.7	(0.6)
	Belarus	8.9	(0.4)	38.1	(0.7)	46.0	(0.7)	7.0	(0.4)	11.4	(0.4)	40.4	(0.8)	39.5	(0.6)	8.8	(0.4)
	Bosnia and Herzegovina	21.0	(0.5)	39.5	(0.7)	31.8	(0.7)	7.8	(0.4)	22.2	(0.6)	31.9	(0.7)	34.6	(0.6)	11.3	(0.5)
	Brazil	13.1	(0.4)	28.0	(0.6)	40.6	(0.5)	18.3	(0.5)	16.0	(0.5)	27.2	(0.5)	37.1	(0.6)	19.8	(0.5)
	Brunei Darussalam	8.6	(0.4)	21.5	(0.6)	43.5	(0.6)	26.4	(0.5)	8.5	(0.4)	18.6	(0.5)	39.3	(0.6)	33.6	(0.6)
	B-S-J-Z (China)	11.7	(0.5)	34.9	(0.6)	42.9	(0.6)	10.5	(0.5)	13.9	(0.5)	35.5	(0.6)	40.4	(0.6)	10.2	(0.5)
	Bulgaria	16.9	(0.5)	32.4	(0.7)	37.4	(0.7)	13.3	(0.5)	20.0	(0.7)	29.2	(0.8)	35.8	(0.8)	15.0	(0.6)
	Costa Rica	19.2	(0.5)	32.8	(0.6)	33.9	(0.6)	14.1	(0.5)	25.8	(0.6)	32.7	(0.5)	27.4	(0.6)	14.1	(0.5)
	Croatia	16.3	(0.5)	36.8	(0.8)	36.9	(0.7)	10.0	(0.4)	19.3	(0.5)	34.4	(0.7)	34.0	(0.7)	12.3	(0.5)
	Cyprus	18.3	(0.6)	35.5	(0.8)	34.1	(0.6)	12.2	(0.5)	19.6	(0.6)	31.7	(0.7)	33.4	(0.7)	15.3	(0.5)
	Dominican Republic	16.3	(0.8) †	28.0	(0.9) †	36.7	(0.9) †	19.0	(0.7) †	21.0	(0.8) †	28.5	(0.8) †	32.2	(0.9) †	18.3	(0.9) †
	Georgia	18.1	(0.6)	38.0	(0.8)	36.9	(0.8)	6.9	(0.4)	20.0	(0.6)	37.8	(0.8)	33.5	(0.7)	8.7	(0.5)
	Hong Kong (China)*	5.8	(0.3)	23.1	(0.7)	50.1	(0.6)	21.0	(0.6)	5.9	(0.4)	21.8	(0.7)	50.1	(0.7)	22.2	(0.6)
	Indonesia	13.3	(0.6)	40.8	(0.9)	36.5	(0.8)	9.5	(0.5)	18.6	(0.7)	42.7	(1.1)	30.0	(0.9)	8.8	(0.6)
	Jordan	20.1	(0.6)	33.5	(0.7)	32.8	(0.6)	13.6	(0.5)	24.6	(0.6)	26.9	(0.7)	31.1	(0.8)	17.5	(0.6)
	Kazakhstan	14.6	(0.4)	42.4	(0.5)	36.4	(0.5)	6.7	(0.2)	19.6	(0.4)	46.0	(0.4)	27.6	(0.4)	6.8	(0.2)
	Kosovo	14.9	(0.5)	30.0	(0.7)	43.7	(0.8)	11.5	(0.5)	15.0	(0.6)	24.2	(0.7)	43.3	(0.8)	17.5	(0.6)
	Lebanon	17.2	(0.7)	35.4	(0.9)	33.8	(0.9)	13.7	(0.7)	18.3	(0.7)	28.3	(0.9)	36.7	(0.9)	16.6	(0.7)
	Macao (China)	4.4	(0.3)	17.4	(0.7)	52.5	(0.9)	25.7	(0.7)	6.8	(0.4)	27.0	(0.8)	43.8	(0.9)	22.4	(0.7)
	Malaysia	6.0	(0.3)	24.9	(0.5)	48.1	(0.6)	21.0	(0.7)	8.4	(0.4)	24.5	(0.5)	43.2	(0.7)	23.9	(0.7)
	Malta	11.5	(0.5)	23.9	(0.7)	42.1	(0.9)	22.6	(0.8)	9.7	(0.5)	18.2	(0.6)	40.5	(0.8)	31.7	(0.8)
	Moldova	8.9	(0.4)	35.7	(0.7)	45.9	(0.8)	9.6	(0.4)	13.9	(0.4)	36.6	(0.7)	38.7	(0.7)	10.9	(0.5)
	Montenegro	23.6	(0.6)	37.2	(0.5)	31.3	(0.6)	7.9	(0.4)	26.8	(0.6)	33.0	(0.6)	29.1	(0.6)	11.1	(0.4)
	Morocco	18.0	(0.6) †	28.1	(0.7) †	40.1	(0.7) †	13.8	(0.5) †	19.6	(0.6) †	26.9	(0.7) †	36.0	(0.8) †	17.5	(0.6) †
	North Macedonia	16.8	(0.5)	35.2	(0.7)	34.2	(0.7)	13.8	(0.5)	16.1	(0.6)	29.3	(0.7)	37.1	(0.8)	17.5	(0.6)
	Panama	15.9	(0.7) †	28.1	(0.9) †	39.3	(0.9) †	16.8	(0.7) †	21.0	(0.8) †	29.2	(0.8) †	30.9	(0.7) †	19.0	(0.8) †
	Peru	13.9	(0.5)	36.8	(0.7)	38.6	(0.8)	10.7	(0.4)	20.0	(0.6)	37.9	(0.8)	31.5	(0.7)	10.7	(0.5)
	Philippines	9.1	(0.4)	30.6	(0.7)	44.7	(0.7)	15.6	(0.7)	10.3	(0.4)	26.3	(0.6)	45.9	(0.7)	17.5	(0.6)
	Qatar	18.2	(0.3)	28.4	(0.4)	36.3	(0.5)	17.2	(0.3)	18.5	(0.4)	23.2	(0.4)	34.8	(0.4)	23.5	(0.4)
	Romania	15.1	(0.6)	37.3	(0.8)	38.6	(0.7)	9.0	(0.4)	23.2	(0.7)	35.7	(0.8)	30.6	(0.7)	10.5	(0.5)
	Russia	12.6	(0.4)	38.9	(0.8)	39.3	(0.8)	9.2	(0.3)	14.8	(0.5)	36.2	(0.8)	38.3	(0.8)	10.7	(0.3)
	Saudi Arabia	25.5	(0.6)	31.2	(0.7)	30.6	(0.6)	12.7	(0.5)	31.4	(0.7)	27.6	(0.7)	26.5	(0.7)	14.5	(0.6)
	Serbia	20.0	(0.5)	38.6	(0.6)	32.6	(0.7)	8.7	(0.5)	20.4	(0.5)	31.5	(0.7)	35.0	(0.6)	13.1	(0.5)
	Singapore	8.1	(0.3)	18.8	(0.4)	41.8	(0.6)	31.3	(0.5)	6.7	(0.3)	15.8	(0.4)	40.5	(0.6)	37.0	(0.5)
	Chinese Taipei	3.7	(0.2)	12.3	(0.4)	50.5	(0.6)	33.5	(0.7)	5.1	(0.3)	18.1	(0.5)	47.8	(0.7)	28.9	(0.6)
	Thailand	6.4	(0.4)	25.4	(0.5)	54.4	(0.6)	13.8	(0.5)	8.9	(0.5)	27.1	(0.6)	50.5	(0.7)	13.5	(0.4)
	Ukraine	10.4	(0.4)	40.1	(0.7)	43.3	(0.7)	6.2	(0.3)	17.1	(0.6)	43.7	(0.7)	31.4	(0.7)	7.8	(0.4)
	United Arab Emirates	15.4	(0.5)	26.8	(0.4)	39.3	(0.4)	18.6	(0.4)	14.4	(0.4)	21.3	(0.4)	38.3	(0.3)	25.9	(0.5)
	Uruguay	14.8	(0.6)	27.9	(0.8)	42.6	(0.7)	14.7	(0.5)	18.0	(0.6)	27.7	(0.7)	36.6	(0.6)	17.8	(0.5)
	Viet Nam	8.3	(0.6)	38.3	(0.9)	44.5	(0.9)	8.9	(0.5)	10.6	(0.6)	36.9	(1.0)	41.4	(1.0)	11.1	(0.6)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

1. Higher values in the index indicate a greater fear of failure.

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.14.1 [1/2] **Growth mindset**

Based on students' reports

		Percentage of students who reported that "your intelligence is something about you that you can't change very much"							
		Strongly disagree		Disagree		Agree		Strongly agree	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	25.3	(0.4)	42.5	(0.5)	25.4	(0.5)	6.8	(0.3)
OECD	Austria	32.1	(0.7)	39.9	(0.7)	20.6	(0.6)	7.4	(0.3)
	Belgium (Flemish)	10.6	(0.5)	45.7	(0.7)	36.4	(0.7)	7.3	(0.4)
	Canada	25.0	(0.4)	42.6	(0.5)	23.5	(0.5)	8.8	(0.3)
	Chile	29.2	(0.7)	31.1	(0.7)	26.3	(0.7)	13.3	(0.5)
	Colombia	28.0	(0.9)	33.4	(0.8)	26.9	(0.9)	11.7	(0.6)
	Czech Republic	11.2	(0.4)	41.2	(0.7)	38.5	(0.7)	9.2	(0.4)
	Denmark	27.1	(0.6)	47.9	(0.7)	20.3	(0.6)	4.7	(0.3)
	Estonia	26.4	(0.6)	50.6	(0.6)	18.8	(0.6)	4.2	(0.3)
	Finland	16.2	(0.5)	50.5	(0.7)	27.0	(0.7)	6.4	(0.3)
	France	16.4	(0.5)	37.4	(0.7)	34.6	(0.7)	11.6	(0.4)
	Germany	30.6	(1.0)	43.4	(0.8)	19.7	(0.6)	6.3	(0.4)
	Greece	12.9	(0.4)	34.6	(0.8)	37.2	(0.6)	15.3	(0.6)
	Hungary	18.0	(0.6)	43.8	(0.7)	29.6	(0.7)	8.5	(0.5)
	Iceland	29.8	(0.8)	43.0	(0.9)	21.9	(0.7)	5.4	(0.4)
	Ireland	28.0	(0.6)	45.9	(0.7)	21.6	(0.6)	4.5	(0.3)
	Israel	24.4	(0.7)	38.1	(0.7)	26.1	(0.7)	11.4	(0.4)
	Italy	16.7	(0.5)	42.1	(0.8)	31.9	(0.6)	9.3	(0.6)
	Japan	17.7	(0.5)	49.3	(0.7)	24.7	(0.6)	8.3	(0.4)
	Korea	15.3	(0.5)	38.0	(0.7)	37.2	(0.6)	9.5	(0.4)
	Latvia	29.2	(0.6)	43.4	(0.6)	21.6	(0.6)	5.8	(0.3)
	Lithuania	39.4	(0.6)	33.0	(0.5)	22.1	(0.5)	5.4	(0.3)
	Luxembourg	22.6	(0.6)	39.8	(0.7)	27.6	(0.6)	10.0	(0.4)
	Mexico	16.2	(0.6)	28.8	(0.6)	40.9	(0.7)	14.1	(0.5)
	Netherlands*	10.7	(0.5)	40.0	(0.9)	39.6	(0.9)	9.6	(0.5)
	New Zealand	24.5	(0.7)	42.7	(0.7)	25.4	(0.6)	7.5	(0.4)
	Norway	m	m	m	m	m	m	m	m
	Poland	13.8	(0.5)	26.9	(0.7)	47.1	(0.7)	12.1	(0.5)
	Portugal*	23.1	(0.7)	43.1	(0.8)	26.9	(0.7)	7.0	(0.4)
	Slovak Republic	15.9	(0.5)	41.2	(0.8)	34.1	(0.7)	8.7	(0.4)
	Slovenia	12.5	(0.5)	39.0	(0.8)	37.3	(0.7)	11.2	(0.5)
	Spain	22.0	(0.3)	40.0	(0.4)	28.5	(0.3)	9.5	(0.3)
	Sweden	18.9	(0.8)	44.0	(0.8)	29.7	(0.7)	7.4	(0.4)
	Switzerland	22.1	(0.7)	41.3	(0.9)	27.3	(0.7)	9.3	(0.5)
	Turkey	25.9	(0.6)	33.7	(0.6)	26.8	(0.6)	13.6	(0.4)
	United Kingdom	27.9	(0.6)	42.2	(0.7)	22.4	(0.5)	7.6	(0.3)
	United States*	30.2	(0.7)	38.2	(0.9)	22.4	(0.6)	9.2	(0.5)
	OECD average	22.1	(0.1)	40.5	(0.1)	28.6	(0.1)	8.8	(0.1)

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Table III.B1.14.1 [2/2] **Growth mindset**

Based on students' reports

		Percentage of students who reported that "your intelligence is something about you that you can't change very much"									
		Strongly disagree			Disagree			Agree			Strongly agree		
		%	S.E.		%	S.E.		%	S.E.		%	S.E.	
Partners	Albania	15.9	(0.6)		25.0	(0.7)		34.5	(0.7)		24.7	(0.8)	
	Argentina	19.6	(0.6)		29.8	(0.6)		35.5	(0.7)		15.1	(0.7)	
	Baku (Azerbaijan)	27.8	(0.6)		24.2	(0.6)		29.2	(0.7)		18.8	(0.6)	
	Belarus	9.9	(0.5)		44.8	(0.7)		40.2	(0.6)		5.1	(0.3)	
	Bosnia and Herzegovina	17.8	(0.6)		33.2	(0.8)		36.6	(0.7)		12.4	(0.5)	
	Brazil	29.9	(0.6)		33.5	(0.6)		25.7	(0.7)		10.9	(0.4)	
	Brunei Darussalam	17.3	(0.4)		29.5	(0.6)		41.3	(0.6)		11.9	(0.4)	
	B-S-J-Z (China)	18.9	(0.6)		36.8	(0.7)		35.3	(0.6)		9.0	(0.4)	
	Bulgaria	27.3	(0.8)		32.0	(0.8)		28.7	(0.8)		11.9	(0.5)	
	Costa Rica	26.3	(0.7)		28.0	(0.8)		29.5	(0.7)		16.1	(0.6)	
	Croatia	16.3	(0.5)		40.2	(0.6)		34.0	(0.6)		9.6	(0.4)	
	Cyprus	15.9	(0.6)		38.7	(0.8)		33.9	(0.8)		11.5	(0.4)	
	Dominican Republic	16.5	(0.7)	†	18.2	(0.7)	†	38.6	(1.1)	†	26.8	(0.9)	†
	Georgia	17.4	(0.6)		32.2	(0.7)		40.8	(0.9)		9.7	(0.5)	
	Hong Kong (China)*	9.9	(0.5)		32.9	(0.7)		42.5	(0.7)		14.8	(0.6)	
	Indonesia	9.2	(0.5)		19.4	(0.7)		47.6	(0.9)		23.8	(0.7)	
	Jordan	18.8	(0.5)		28.2	(0.7)		35.0	(0.7)		18.0	(0.6)	
	Kazakhstan	17.9	(0.4)		37.1	(0.5)		32.8	(0.5)		12.2	(0.3)	
	Kosovo	6.9	(0.4)		20.7	(0.6)		52.0	(0.7)		20.4	(0.6)	
	Lebanon	14.4	(0.6)		26.2	(1.0)		38.7	(0.9)		20.7	(0.9)	
	Macao (China)	12.6	(0.5)		36.6	(0.8)		37.4	(0.8)		13.4	(0.5)	
	Malaysia	11.0	(0.6)		30.3	(0.6)		46.0	(0.8)		12.8	(0.4)	
	Malta	19.3	(0.7)		34.9	(0.9)		33.2	(0.7)		12.6	(0.6)	
	Moldova	10.8	(0.4)		32.6	(0.9)		45.3	(0.8)		11.4	(0.5)	
	Montenegro	17.6	(0.6)		27.9	(0.5)		35.2	(0.6)		19.3	(0.5)	
	Morocco	15.7	(0.7)		25.9	(0.8)		38.7	(1.0)		19.8	(0.6)	
	North Macedonia	7.3	(0.4)		16.7	(0.6)		45.5	(0.8)		30.5	(0.7)	
	Panama	12.9	(0.7)	†	15.8	(0.8)	†	32.1	(0.8)	†	39.2	(0.9)	†
	Peru	17.7	(0.7)		34.3	(0.9)		35.9	(0.9)		12.2	(0.6)	
	Philippines	10.4	(0.6)		20.9	(0.6)		50.6	(0.8)		18.1	(0.5)	
	Qatar	19.4	(0.4)		30.6	(0.4)		34.3	(0.4)		15.8	(0.3)	
	Romania	12.3	(0.5)		30.9	(1.0)		41.9	(0.9)		14.8	(0.7)	
	Russia	20.2	(0.7)		40.1	(0.8)		29.4	(0.7)		10.3	(0.4)	
	Saudi Arabia	20.1	(0.6)		23.0	(0.6)		35.3	(0.7)		21.7	(0.6)	
	Serbia	17.6	(0.6)		34.5	(0.7)		34.2	(0.6)		13.6	(0.4)	
	Singapore	21.0	(0.5)		38.9	(0.6)		28.5	(0.7)		11.5	(0.4)	
	Chinese Taipei	16.5	(0.5)		43.5	(0.6)		31.1	(0.6)		8.8	(0.4)	
	Thailand	12.9	(0.8)		29.9	(0.7)		43.7	(0.9)		13.5	(0.5)	
	Ukraine	21.1	(0.7)		45.3	(0.7)		26.7	(0.8)		6.9	(0.3)	
	United Arab Emirates	18.8	(0.4)		27.1	(0.5)		34.5	(0.5)		19.6	(0.4)	
	Uruguay	19.5	(0.7)		34.7	(0.8)		36.5	(0.9)		9.3	(0.5)	
	Viet Nam	11.8	(0.7)		41.2	(1.1)		40.0	(1.2)		7.0	(0.4)	

*Data did not meet the PISA technical standards but were accepted as largely comparable (see Annexes A2 and A4).

Note: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. For comparisons across cycles, the coverage information corresponds to the cycle with the lowest sample coverage.

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Chapter 14 **Growth mindset**

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WEB	**Table III.B1.14.3**	Growth mindset, by student characteristics
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ANNEX B2
Results for regions within countries

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https://doi.org/10.1787/888934031123

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ANNEX B3

PISA 2018 system-level indicators

System-level data that are not derived from the PISA 2018 student or school questionnaire are extracted from the OECD's annual publication *Education at a Glance* for those countries and economies that participate in that periodic data collection. For other countries and economies, a special system-level data collection was conducted in collaboration with PISA Governing Board members and National Project Managers.

For further information see: *System-level data collection for PISA 2018: Sources, comments and technical notes.pdf* at www.oecd.org/pisa/.

The following tables are available on line at https://doi.org/10.1787/888934029128.

1	**Expenditure**	**Table B3.1.1**	Cumulative expenditure by educational institutions per student aged 6 to 15 (2015)
		Table B3.1.2	Teachers' salaries (2017)
		Table B3.1.3	Teachers' salaries (2017)
		Table B3.1.4	GDP per capita (2015, 2016, 2017, 2018)
2	**Time and human resources**	**Table B3.2.1**	Teachers' actual teaching time (2018)
		Table B3.2.2	Intended instruction time in compulsory general education, by age (2018)
		Table B3.2.3	School support staff
3	**Education system characteristics**	**Table B3.3.1**	Theoretical starting age and theoretical duration (2015)
		Table B3.3.2	Cut-off birthdate for eligibility to school enrolment and first day of the school year (2018)
		Table B3.3.3	Selecting students for different programmes (2018)
4	**Accountability**	**Table B3.4.1**	School inspection at the primary level (2018)
		Table B3.4.2	School inspection at the lower secondary level (2018)
		Table B3.4.3	School inspection at the upper secondary level (2018)
		Table B3.4.4	School board
5	**Policies and curriculum**	**Table B3.5.1**	Bullying policies
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6	**School choice**	**Table B3.6.1**	Freedom for parents to choose a public school for their child(ren) (2018)
		Table B3.6.2	Financial incentives and disincentives for school choice (2018)
		Table B3.6.3	Government regulations that apply to schools at the primary and lower secondary levels (2018)
		Table B3.6.4	Criteria used by public and private schools when assigning and selecting students (2018)
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DISCUSSÃO

ANNEX C

The development and implementation of PISA: A collaborative effort

PISA is a collaborative effort, bringing together experts from the participating countries, steered jointly by their governments on the basis of shared, policy-driven interests.

A PISA Governing Board, on which each country is represented, determines the policy priorities for PISA, in the context of OECD objectives, and oversees adherence to these priorities during the implementation of the programme. This includes setting priorities for the development of indicators, for establishing the assessment instruments, and for reporting the results.

Experts from participating countries also serve on working groups that are charged with linking policy objectives with the best internationally available technical expertise. By participating in these expert groups, countries ensure that the instruments are internationally valid and take into account the cultural and educational contexts in OECD member and partner countries and economies, that the assessment materials have strong measurement properties, and that the instruments emphasise authenticity and educational validity.

Through National Project Managers, participating countries and economies implement PISA at the national level subject to the agreed administration procedures. National Project Managers play a vital role in ensuring that the implementation of the survey is of high quality, and verify and evaluate the survey results, analyses, reports and publications.

The design and implementation of the surveys, within the framework established by the PISA Governing Board, is the responsibility of external contractors. For PISA 2018, the overall management of contractors and implementation was carried out by the Educational Testing Service (ETS) in the United States as the Core A contractor. Tasks under Core A also included instrument development, development of the computer platform, survey operations and meetings, scaling, analysis and data products. These tasks were implemented in co-operation with the following subcontractors; i) the University of Luxembourg for support with test development; ii) the Unité d'analyse des systèmes et des pratiques d'enseignement (aSPe) at the University of Liège in Belgium for test development and coding training for open-response items; iii) the International Association for the Evaluation of Educational Achievement (IEA) in the Netherlands for the data management software; iv) Westat in the United States for survey operations; v) Deutsches Institut für Internationale Pädagogische Forschung (DIPF) in Germany, with co-operation from Statistics Canada, for the development of the questionnaires; and vi) HallStat SPRL in Belgium for the translation referee.

The remaining tasks related to the implementation of PISA 2018 were implemented through three additional contractors – Cores B to D. The development of the cognitive assessment frameworks for reading and global competence and of the framework for questionnaires was carried out by Pearson in the United Kingdom as the Core B contractor. Core C focused on sampling and was the responsibility of Westat in the United States in co-operation with the Australian Council for Educational Research (ACER) for the sampling software KeyQuest. Linguistic quality control and the development of the French source version for Core D were undertaken by cApStAn, who worked in collaboration with BranTra as a subcontractor.

The OECD Secretariat has overall managerial responsibility for the programme, monitors its implementation daily, acts as the secretariat for the PISA Governing Board, builds consensus among countries and serves as the interlocutor between the PISA Governing Board and the international Consortium charged with implementing the activities. The OECD Secretariat also produces the indicators and analyses and prepares the international reports and publications in co-operation with the PISA Consortium and in close consultation with member and partner countries and economies both at the policy level (PISA Governing Board) and at the level of implementation (National Project Managers).

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PISA 2018 Results (Volume III)
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