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Parental Involvement in Selected PISA Countries and Economies

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PARENTAL INVOLVEMENT IN SELECTED PISA COUNTRIES AND ECONOMIES

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ABSTRACT

Studies have highlighted the beneficial effects of parental involvement in children's educational lives. Few studies, however, analyse parental involvement in a cross-national perspective and few evaluate a wide array of forms of involvement. In 2009, 14 countries and economies implemented the parental questionnaire option in the PISA 2009 cycle. This working paper evaluates the levels of parental involvement across countries and sub-groups within countries, as well as the relationship of involvement with both cognitive (reading performance) and non-cognitive outcomes (enjoyment of reading and awareness of effective summarising strategies). Findings suggest that some forms of parental involvement are more strongly related to cognitive and non-cognitive outcomes than others. These include reading to children when they are young, engaging in discussions that promote critical thinking and setting a good example. Findings also show that levels of parental involvement vary across countries and economies. Inequalities in parental involvement exist in practically all countries and economies. Policy implications signal the possibility that promoting higher levels of parental involvement may increase students' both cognitive and non-cognitive outcomes, and that high-quality parental involvement may help reduce performance differences across socio-economic groups.

RÉSUMÉ

Nombreuses sont les études à avoir mis en évidence les effets bénéfiques de l'engagement des parents dans l'éducation de leur enfant. Rares sont celles, en revanche, à avoir analysé cette question sous l'angle de la comparaison internationale ou à avoir évalué différentes formes de cet engagement. En 2009, 14 pays et économies ont choisi d'administrer le questionnaire facultatif destiné aux parents dans le cadre du cycle PISA 2009. Le présent document de travail analyse le degré de l'engagement parental dans ifférents pays et sous-groupes de population au sein même de ces pays, ainsi que la relation entre cet engagement et certains processus cognitifs (performance en compréhension de l'écrit), mais aussi non cognitifs (plaisir de la lecture et connaissance de stratégies efficaces de synthèse). Les résultats laissent penser que certaines formes d'engagement parental sont plus fortement corrélées que d'autres à ces processus cognitifs et non cognitifs, notamment faire la lecture à son enfant dès son plus jeune âge, avoir des discussions favorisant l'esprit critique avec son enfant et montrer soi-même le bon exemple. Les résultats indiquent également que le degré d'engagement des parents varie entre les différents pays et économies, et au sein de la quasi-totalité de ces derniers, entre les différents sous-groupes de population. En termes de conséquences pour l'action publique, il ressort de la présente étude que le renforcement de l'engagement parental peut améliorer les résultats à la fois cognitifs et non cognitifs des élèves, et qu'un engagement de qualité de la part des parents peut aider à la réduction des écarts de performance entre les différents groupes socio-économiques.

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CHAPTER 1
INTRODUCTION TO PISA AND THE PARENTAL QUESTIONNAIRE

Introduction to PISA

1. The Programme for International Student Assessment (PISA), conducted by the Organisation for Economic Co-operation and Development (OECD), offers an opportunity to study patterns of parental involvement across many countries and economies. The assessment examines how well 15-year-old students are able to use the knowledge and skills they have gained to solve standardised tasks in reading, mathematics and science as they approach the end of secondary school. It also collects contextual information about the students, their families and their schools, as well as a host of information gathered directly from the parents. In 2009, 65 countries and economies and more than 400 000 students participated in PISA. However only 14 countries and economies administered the parental questionnaire and therefore can be used to study parental involvement – whether it matters for student success, whether it varies across school systems and across different groups, and whether it can help address disparities in student outcomes.

1. The 14 countries and economies that administered the parental questionnaire in PISA 2009 were:

- Croatia
- Denmark
- Germany
- Hong Kong-China
- Hungary
- Italy
- Korea
- Lithuania
- Macao-China
- New Zealand
- Panama
- Poland
- Portugal
- Qatar

2. The PISA surveys and assessments are specifically designed and tested to ensure comparability across countries and economies. The assessment component of the PISA survey evaluates students' ability to apply their knowledge and skills to real-life situations. It covers three domain areas: reading, mathematics and science. In 2009, the PISA assessment focused on reading and gathered a rich set of information on factors potentially related to academic success in this particular subject, and the parental questionnaire also examined levels of interest, engagement and involvement in areas related to reading.

3. The working paper examines the extent to which parental involvement matters not only in terms of cognitive skills – as measured by reading proficiency at age 15, but also whether students who have parents with higher levels of involvement are better equipped to continue learning throughout their lives. The working paper focuses on reading because reading is the key competency that enables students to understand and make sense of problems, situations, opportunities and challenges in all spheres of their lives. Reading is also the main focus of the PISA 2009 study and is more sensitive to out-of-school influences like parental involvement when compared to other literacy domains (Bryk and Raudenbush, 1988). Parental involvement in the area of reading and word recognition is also a relatively widespread

experience, as all new parents experience speech development and world recognition with their newborns and toddlers. Thanks to the rich data gathered in the PISA 2009 study, the working paper also illustrates whether parental involvement matters for other outcomes, namely students' awareness of what strategies are best when they have to deal with a difficult task. It does so by examining students' awareness of which strategies are best when having to summarise long and complex texts. Volume III of the PISA 2009 Initial Report shows that such awareness is highly associated not only with students' proficiency, but also with other learning strategies, such as awareness of what are effective strategies to understand and remember information and control strategies. Although this working paper focuses on one metacognition strategy, PISA results show that students who are aware of effective summarising strategies are also aware of effective understanding and remembering strategies (OECD, 2010a). Many students read and practice their reading skills only because these are school requirements; once they leave school, their reading skills may deteriorate. Consequently, another indicator examined in the working paper is whether parental involvement can help students develop a habit of reading and stimulate them to read for enjoyment. These two non-cognitive skills, awareness of effective summarising strategies and enjoyment of reading, are key skills for students to not only improve their reading and school performance, but also to become life-long learners.

Parental questionnaire

4. In addition to the student and school questionnaires that are distributed in every country and economy that participates in PISA, in 2009, PISA offered three optional questionnaires. Countries and economies could voluntarily disseminate a questionnaire on students' educational careers, a questionnaire on access and use of information technology, and/or a questionnaire that students could take home that would be filled by their parents. The parental questionnaire seeks information on: ***parents' background*** – such as educational attainment, occupation and income levels; ***household environment*** – number of siblings who live with the student taking the PISA test, availability of reading resources, expenditure on educational services, parental perceptions of their child's school and priorities when choosing a school; and ***parental involvement and reading habits*** – whether parents were actively involved with their children when they entered primary school, their present levels of involvement, as well as parental engagement and attitudes towards reading. This working paper focuses on whether different forms of parental involvement are associated with their children's reading skills and habits.[1] Students were asked to return the parental questionnaire to school the following day.

5. Fourteen countries and economies distributed the parental questionnaire: eight OECD countries (Denmark, Germany, Hungary, Italy, Korea, New Zealand and Portugal) and six partner countries and economies (Croatia, Hong Kong-China, Lithuania, Macao-China, Panama and Qatar). Poland did not administer the section of the questionnaire that asked about parental involvement, so results for Poland are not included in this working paper.

6. Because only 13 countries and economies provided information on parental involvement, the results in this working paper cannot be easily generalised to other countries in the OECD area or countries and economies that have participated in the parental questionnaire. Caution must be taken when using the results for this limited set of countries and economies to make decisions regarding parental involvement in other countries and economies in the broader sample of countries that have participated in the PISA assessment.

1 . The parental questionnaire for PISA 2009 can be downloaded at: http://pisa2009.acer.edu.au/downloads.php and is available in Annex A2.

Structure of the working paper

7. In Chapter 2 the working paper defines what forms of parental involvement can be examined using PISA data, and explores what is currently known about such forms of parental involvement and whether they matter for schools' success. Chapter 3 then exploits PISA 2009 data to assess the extent to which parental involvement matters for student outcomes and takes a broad perspective assessing the association between different forms of parental involvement and both cognitive and non-cognitive outcomes. It also assesses what forms of involvement are particularly widespread and which are less prevalent. Chapter 4 illustrates different patterns of involvement across different households. It also links parental involvement to different school characteristics in an attempt to identify factors and strategies that schools can put in place to foster parental involvement. Chapter 5 explores whether parental involvement helps to explain why some students that face challenging socio-economic conditions nevertheless succeed in school. It does this by disentangling two key factors that, on average, may lead to the lower performance of socio-economically disadvantaged students: the lower rates of parental involvement in socio-economically disadvantaged households and the fact that the benefit students derive from parental involvement varies greatly, in part because the quality of such involvement may differ and in part because some students are better equipped to make the most of such involvement.

CHAPTER 2
INTRODUCTION TO PARENTAL INVOLVEMENT

8. In the periods of the expansion of schooling, ***efficiency*** and ***equity*** concerns were the basis of widespread support for the public provision of education, the establishment of government-funded "basic" education, and parallel legislation mandating compulsory schooling for all children. The concern about efficiency aimed to guarantee an educated labour force that would be an engine for economic growth and to ensure that politicians in modern democracies would be elected by, and be accountable to, informed and competent citizens. The concern about equity aimed to ensure equality of opportunities, and that family background would not unduly influence the realisation of one's potential.

9. Recently, teachers and educators have been increasingly encouraging parents to play a direct role in their children's schooling and academic development. Because of financial strains on education budgets, as well as the mounting evidence on the benefits of parental involvement for children's overall well-being, individual teachers, schools and education systems in some countries are asking parents to increase their levels of involvement in their children's education and to be more present in their children's lives. For example, in the United States, increasing parental involvement is one of six key areas of reform, an explicit policy effort that follows reforms initiated during the Clinton administration. In Chile, at the beginning of the 2011 school year, the Education Minister promoted the signing of a contract of honour between parents, schools and the state, committing parents to a series of tasks that increase parental involvement in their children's learning, and some countries have promoted these partnership by specifying legal frameworks that require schools to offer parents forms of involvement (Eurydice, 2005; BCN, 2008). These policy efforts recognise that parents are key actors in children's educational upbringing, and acknowledge that students benefit when parents are involved and form partnerships with schools and teachers.

The benefits of parental involvement

10. Academic research highlights the benefits of parental involvement for cognitive and non-cognitive skills. Parental involvement is defined as parents' active commitment to spend time to assist in the academic and general development of their children. The positive effects of greater parental involvement on student outcomes are observed in the United States and Great Britain – where the bulk of the evidence lies –, as well as in other OECD and PISA-participating countries and economies (Ho and Willms, 1996; Park, 2008; Ho, 2006; Melhuish, Sylva *et al*., 2001; Desforges and Abouchaar, 2003). In 13 PISA countries and economies, students who have parents who talk more to them about specific issues in school, about books, films or television programmes and/or about more general and broader issues show higher levels of achievement in reading or mathematics. In all countries and economies analysed, students whose parents talk with them more frequently are expected to have higher levels of achievement compared with students who talk less frequently with their parents (Park, 2008). Research from Great Britain reveals that for students in primary school, differences in parental involvement are associated with greater differences in student performance than any variations in the quality of schools. This study also identifies involvement in the form of positive forms of parenting as the most important effect on children's achievement of all forms of involvement (Desforges and Abouchaar, 2003). In general, those children who have parents who are more actively involved are more likely to have better scores at school, be more engaged with and be more motivated in school, have better mental health outcomes, and show more sociable behaviour.

11. Increased parental involvement produces beneficial outcomes by improving students' cognitive and non-cognitive skills and motivational development. Children of involved parents develop cognitive

skills (receptive language and phonetic awareness), as well as metacognitive skills (planning, monitoring and regulating the learning process), by having more access to relevant information, by parents' greater awareness of their children's abilities, by having more opportunities to practice, and because teachers may pay more attention to those children who have more involved parents. Children of involved parents also show a higher likelihood of intrinsic motivation, a better sense of control over academic performance, and positive perceptions of academic competence. Greater motivational development arises because children of involved parents internalise their parents' positive attitudes towards school, can tap directly into their parents' strategies to deal with school and the challenges it entails, and are more familiar with school tasks because their parents share such information with them (Desforges and Abouchaar, 2003; Pomerantz, Moorman *et al*., 2007).

Forms of direct parental involvement

12. This working paper examines different forms of direct involvement when students are aged 15 and when those students assessed in PISA were in their first year of primary school. Parents' choice of school, if they are given the opportunity to choose their child's school, has important implications for their child's educational experience. However, this working paper does not consider such parental choices and decisions. School choice – and parental decision-making in response – is a broad and complex topic, and the policy responses differ markedly from those that are related to the direct forms of involvement that are featured in this working paper.

13. Broadly speaking, parental involvement can be ***school-based*** and ***home-based***. ***School-based involvement*** considers practices that require contact between the parent and the school, such as school meetings, talking with teachers, attending school events and volunteering in school. ***Home-based parental involvement***, in contrast, takes place outside the school and considers both activities that have to do with students' academic progression – like helping with homework, discussing school projects, talking generally about school events, choosing classes – as well as other intellectually-engaging activities – like going to plays, libraries or museums (Pomerantz, Moorman *et al*., 2007). Home-based parental involvement also considers parents providing good models of social and educational values through their own behaviour, for example (Desforges and Abouchaar, 2003).

14. Home-based parental involvement can be divided into three forms of involvement: involvement that is directly associated with students' academic lives, involvement in children's lives more generally, and parents' attitudes towards reading. Academically-oriented home-based parental involvement includes activities such as helping with homework, choosing a topic for a school project, or talking about students' school experiences. Non-academic home-based parental involvement includes activities such as talking with children about their lives and the world around them, or participating in intellectually-engaging activities not directly related to school, like going to a play, concert, library or museum. Parents' reading habits influence their children's: as a species, human are quick to pick up social cues and follow the norms of those groups and individuals they choose as a reference (Pinker, 1999; Harris, 1998; Steinberg, Brown *et al*., 1997). Parents are key to fostering positive attitudes towards school and academic activities, not only through active involvement, but also by what they do and what they value – their own reading habits and engagement.

15. The benefits of parental involvement depend largely on the quality of that involvement (Ho and Willms, 1996). When the involvement includes support for autonomous decisions, a focus on process, and positive beliefs about the child's potential, it nurtures students' skills and motivational development. However, it can have a negative effect on children's outcomes if it takes the form of control, is person-focused and includes negative beliefs about the child's potential (Pomerantz, Moorman *et al*., 2007).

16. This distinction between high- and low-quality involvement is important because it helps explain why research shows consistently positive associations between school-based parental involvement and student outcomes, but less consistent results about home-based involvement. School-based parental involvement is usually structured – teachers guide parents, for example – and it is easier for parents to be autonomy-supportive, have a focus on process and have positive beliefs about their child's potential. Home-based involvement, in contrast, may be less structured, which may be why it has a weaker overall relationship to student outcomes (Pomerantz, Moorman *et al*., 2007).

17. Box 1 shows examples of different forms of involvement according to when, in the child's life, parents engaged in these activities and whether they are home- or school-based. It shows the forms of involvement measured in PISA and the parental involvement indicators used in this working paper. The specific questions used to capture these forms of involvement can be found in Annex A2.

Box 1. Forms of parental involvement, as measured by the PISA parental questionnaire

Early involvement in children's school lives:

- Read books
- Tell stories
- Sing songs
- Play with alphabet toys
- Talk about things the parent had done
- Talk about things the parent had read
- Play word games
- Write letters or words
- Read aloud signs and labels

School-based involvement:

- Discuss the child's behaviour or progress with a teacher at the parent's initiative
- Discuss the child's behaviour or progress at the teacher's initiative
- Volunteer in physical activities (*e.g.,* building maintenance, carpentry, gardening, yard work)
- Volunteer in extra-curricular activities (*e.g.,* book club, school play, sports, field trip)
- Volunteer in the school library or media centre
- Assist a teacher in the school
- Appear as a guest speaker
- Participate in local school government (*e.g.,* parent counsel or school management committee)

Home-based involvement (academically related):

- Discuss with the child how well he/she is doing at school
- Help the child with his/her homework

Home-based involvement (non-academic):

- Discuss political or social issues
- Discuss books, films or television programmes
- Eat the main meal with the child around a table
- Spend time just talking to the child
- Go to a bookstore or library with the child
- Talk with the child about what he/she is reading on her own

Parents' own reading habits and engagement:

- Parent spends time reading for own enjoyment at home
- Parent considers reading a favourite hobby
- Parent feels happy if he/she receives a book as a present
- Parent does not consider reading to be a waste of time
- Parent enjoys going to a bookstore or library

Who benefits from parental involvement and where?

18. Not all children are equally sensitive to parental involvement. Children with negative competence experiences, children at risk of low achievement, younger children, and boys are more sensitive to parent involvement. Students with these characteristics benefit most from the high-quality involvement that provides support for autonomy, has a process focus and involves positive beliefs about children's potential. Children with these characteristics are also more likely to be hurt by parental involvement that is oriented towards control, has a person focus and negative beliefs about children's potential (Pomerantz, Moorman *et al*., 2007).

19. Children who have positive competence experiences, such as high-achieving children, girls and older children are less affected by the levels and quality of parental involvement, mainly because they already have the tools to succeed in school (as the case of students with positive competence experiences or girls) or have begun to find other persons or groups as a reference for behaviour and role models. This is the case, for example, among older children, who may reap fewer benefits from parental involvement as they begin to use peers as their relevant reference group (Harris, 1998; Steinberg, Brown *et al*., 1997).

20. Parental involvement can be thought of as a resource for children to improve their skills and motivational development; indeed, it is a source of social capital for children (McNeal, 1999). Like other forms of social capital, its value and eventual benefit to educational outcomes depends on the availability of economic, human and cultural capital. Parental involvement only benefits children when something of value to children's education is transferred. Thus, theoretically, children from more socio-economically advantaged backgrounds are likely to accrue more benefits from involved parents, because more resources can be transferred through this relationship. However, this is not observed in the United States: advantaged children benefit relatively equally from similar forms of parental involvement as disadvantaged children do (Lee and Bowen, 2006).

21. The strength of the effect of parental involvement, and its interaction with socio-economic background, is contingent on the social and institutional context of the school. Parental involvement is a better predictor of student outcomes in schools with a general orientation (as opposed to programme-specific schools) because students' success depends more on parents' participation in course selection, homework and discussions with teachers in comprehensive schools as compared with charter-specific schools like academic, magnet or vocational schools (Oswald, Baker *et al*., 1988; Useem, 1992). Parental influences are also more important in comprehensive rather than stratified school systems, particularly when predicting college aspirations, because reliable information about future opportunities is more readily available in stratified school systems (Buchmann and Dalton, 2002; Buchmann and Park, 2009; Mateju, Smith *et al*., 2007). Parental involvement also provides greater returns in terms of educational achievement to socio-economically advantaged students when compared with disadvantaged students in school systems with low levels of standardisation (with no uniform curriculum, textbooks and testing, for example) because it is difficult for disadvantaged parents to gain a clear picture of the educational process (Hyunjoon Park, 2008).

This working paper

22. This working paper analyses the relationship between different forms of parental involvement and several student outcomes. Although the academic literature on parental involvement is rich, it seldom explores country-level differences in the extent of involvement and its relationship to student outcomes. This working paper provides a thorough overview of parental involvement across the 13 countries and economies that implemented the parental questionnaire in 2009 and included questions on parental involvement, and analyses its relationship to students' reading performance, enjoyment of reading, and awareness of which learning strategies work best to summarise information when students are reading long and complex texts.

23. As the literature on parental involvement highlights different patterns in home- and school-based involvement and its effects on student outcomes, this working paper distinguishes between these two forms of involvement. It considers school-based involvement through teacher-parent meetings and parents' participation in school activities, such as extra-curricular activities. The working paper also focuses on three forms of home-based involvement: academically-oriented, non-academically oriented, and parents' own reading habits and engagement.

24. Given these distinctions, this working paper explores the benefits of parental involvement across the participating countries and economies[2] by analysing the relationship between the different forms of parental involvement and several student outcomes: reading performance, enjoyment of reading, and the awareness of which learning strategies work best to summarise information when students are reading long and complex texts. This working paper also evaluates which parents are more likely to be involved by examining differences in involvement with respect to whether their children are boys or girls, whether parental involvement differs across households of different socio-economic backgrounds, households with a recent history of migration, the gender of the parent, as well as school characteristics. The final analyses explore parental involvement as one of the channels through which inequities in student outcomes come into being and therefore one of the ways through which policy making may narrow gaps in cognitive and non-cognitive outcomes. Inequities examined within the working paper include differences between boys and girls, between students from different socio-economic backgrounds, and between students who have an immigrant background and those who do not.

[2] "Participating countries and economies" refers to the 13 countries and economies that implemented the Parental Questionnaire with questions on parental involvement. These countries and economies are: Denmark, Germany, Hungary, Italy, Korea, New Zealand and Portugal in the OECD and Croatia, Hong Kong-China, Lithuania, Macao-China, Panama and Qatar among partner countries and economies.

CHAPTER 3
PARENTAL INVOLVEMENT AND STUDENT OUTCOMES

25. Analyses of PISA data indicate that what parents do matters for their child's success. However, while parental involvement is generally related to student outcomes, the strength of such an association differs greatly according to what exactly parents are doing – their form of involvement – as well as how success is measured – whether students are assessed in terms of cognitive outcomes (reading proficiency) or non-cognitive outcomes (whether they read for enjoyment, whether they enjoy reading, and whether they know which learning strategies they can use when asked to solve a difficult task in school).

26. Students whose parents were involved early in their school career generally perform better and enjoy reading more when they are 15 years old. Involvement in the early years is especially related to these outcomes when parents engaged in such activities as using words in a broad context (*e.g.,* when they talk, read and tell stories) rather than when they play with their children with alphabet toys or write words or letters with them. Fifteen-year-old students whose parents discuss complex social issues and books with them not only enjoy reading more, but perform better in reading and are aware of which learning strategies are effective. Parents' own reading habits and engagement – whether parents value books and reading, and whether they read at home for enjoyment – is also related to students' reading performance and levels of reading enjoyment. Parental involvement in school-based activities or in school affairs at home is negatively associated with students' performance and enjoyment of reading, most likely because it is these students who struggle in school who require help with homework and have parents or teachers schedule meetings to discuss the child's progress. Annex A1 of this paper provides important information regarding the characteristics of the data and the limitations it entails in making causal arguments.

Cognitive outcomes: Reading performance

27. Parental involvement that occurs early in children's lives, and that is directed to children's adoption and application of words and reading habits, appears to be particularly beneficial, underscoring the importance of presenting children with knowledge that they find useful and can relate to in their daily lives. Playing with alphabet toys does not show an explicit cognitive benefit, most likely because children may not find a direct language application to these toys. Early childhood involvement is important because it signals involvement throughout students' lives, especially when children need it the most (Table 3.1a; Ho and Willms, 1996).

28. Parental involvement can benefit student performance as children age even though it is neither school-based nor directly related to academic issues (*i.e.*, non-academic involvement). In general, non-academic parental involvement is positively related to student performance, even when other household circumstances have been accounted for. Parents who discuss political or social issues, books, films or television programmes, who eat with their children around a table and who talk with each other more broadly show better reading performance. These forms of involvement are considered high-quality parental involvement because they engage the child in language and with activities related to reading (Table 3.1c).

29. Children of parents who value and spend time reading are more likely to have better reading performance. This is true also after accounting for socio-economic status: parents who are more inclined to read themselves tend to be socio-economically advantaged; but there is a clear and independent relationship between parents who value reading and children who perform well in reading (Table 3.1d).

30. The positive relationship between the different forms of parental involvement and performance remain, in most cases, after adjusting for the socio-economic background of parents. This means that parental involvement is not reflecting the more and better resources of advantaged parents, but that

parental involvement is independently related to better performance, and constitutes a way for all parents to help their children achieve their full potential.

31. PISA results also show that the distinction between academically and non-academically oriented parental involvement matters for our understanding of how parental involvement is related to student performance. Academically-oriented home-based parental involvement can take the form of parents helping their children with homework, or talking more broadly about how the child is doing in school. In PISA, students whose parents help them with homework have poorer reading performance. This is not because parents are not effective helpers, but because parents tend to help low-achieving children, who need help the most; children who succeed in school do not need their parents' help with homework (Ho and Willms, 1996). Parents who talk to their children about school and discuss how they are doing in school not only supervise their children's school lives, but also signal the importance of succeeding in school. In Italy, Korea and Qatar, children whose parents discuss school issues with them perform better in reading, after taking socio-economic background into account (Table 3.1c).

32. The children of parents who are more involved in school activities, like parent-teacher meetings or volunteering in the school, also show poorer reading performance. This is probably because parents of children who are having behavioural difficulties or who are progressing slowly in school are more likely to call the teacher to seek ways to improve their child's performance, or to receive a call from the teacher to discuss the child's school work. Similarly, parents of low-achieving students are more likely to seek further engagement with the school to find ways to improve their child's progress or behaviour. This is indeed a good strategy: other research with longitudinal data highlights how more parental involvement in the school improves children's performance because teachers may pay more attention to children of involved parents, and school may become more important to children if they see that their parents are also invested in their progress (Pomerantz *et al.*, 2007) (Table 3.1b).

33. The section on "The details of parental involvement on student outcomes" discusses the different forms parental involvement can take and their relationship to both cognitive and non-cognitive outcomes. It also provides information on the strength of estimated relationships and illustrates in which countries and economies these relationships are particularly apparent.

Non-cognitive outcomes: Students' motivation and learning strategies

Motivation: Enjoyment of reading

34. Learning requires motivation. No matter the abundance of resources and opportunities to learn, students who do not enjoy learning will not capitalise on these opportunities. Unmotivated students do not internalise the learning experience, do not relate the content to their own experience and, lacking the connections between new and prior knowledge, will be unable to retrieve information when it is needed. One key component of motivation to learn is enjoying intellectual activities, one of which is enjoyment of reading. PISA asks students whether they agree to 11 statements related to reading enjoyment and combines these responses into an *index of enjoyment of reading activities* (for a description of the index and the items used, see Annex A1 in OECD, 2010a).

35. PISA results show that, through active engagement, parents can foster their child's enjoyment of reading. Parental involvement in early childhood is related to students' reading enjoyment. In particular, parental involvement with small children that highlights the relevance of words in a broader context is associated with more enjoyment of reading. Activities that treat letters and words in isolation (*e.g.,* playing with alphabet toys or writing words) are not consistently associated with students' reading enjoyment; these activities may help children recognise and understand those specific words and letters, but may not convey the importance of words or of the oral and written language. Activities that engage children with

words and their relevance in a broader context (*e.g.,* talking about what the parent has done and read, reading books and telling stories) predict students' enjoyment of reading. Parental involvement in early childhood predicts students' reading enjoyment because it may signal patterns of involvement that persist throughout children's lives, particularly when children are young and are more likely to benefit from parental involvement (Table 3.2a).

36. Parental involvement when children are adolescents is also related to students' enjoyment of reading.

37. Parental involvement in non-academically oriented activities outside the school promotes students' reading enjoyment. Discussing social or political issues, talking about what the student is reading, discussing books, films or television programmes, and going to the library all predict students' enjoyment of reading. Parental involvement in intellectually engaging activities is associated with students' reading enjoyment. Similarly, parents who read and value reading themselves are more likely to have children who enjoy reading. These relationships are seen in more countries and economies than the relationship between parental involvement and reading performance, and are less sensitive to differences in students' socio-economic backgrounds (Table 3.2c).

38. Discussing how the child is doing in school is positively related to students' reading enjoyment in nine countries and economies (in seven after accounting for socio-economic background). Helping with homework is negatively related to students' enjoyment of reading, most likely because the students who do not enjoy reading are those that most need help from parents; and those students who do enjoy reading do not need their parents' help with homework (Table 3.2c).[3]

39. Parental involvement in school activities involves a direct interaction between the parent and the school. Parents who discuss their child's progress or behaviour with a teacher at the teacher's initiative are more likely to have children who enjoy reading less. This is likely the case because it is these students who need the most help with engaging in school and may require – in the opinion of teachers – more active involvement and collaboration from their parents. Less consistent associations between parents' school-based involvement and students' enjoyment of reading are observed when parent-teacher meetings initiated by the parents or when voluntary participation in school activities are considered (Table 3.2b).

40. The section "The details of parental involvement on student outcomes" discusses the forms of parental involvement and its relationship to both cognitive and non-cognitive outcomes. It also provides information on the magnitude of the relationships and the countries and economies where these relationships are especially salient.

Learning strategies: Awareness of effective summarising strategies

41. An effective learner is one who practices assiduously and enjoys this practice. An effective learner is also one who knows how to process information efficiently. This requires, in part, the ability to relate new material to existing knowledge and to determine how knowledge can be applied in the real world. A good understanding of the strategies that are effective in promoting learning strengthens students' capacity to organise their own learning and to be ready for lifelong learning. Good learners, for example, are aware of effective summarising strategies. In PISA 2009, students were presented with a long and difficult text and were asked to rank a series of strategies that can be used when summarising complex

3 . Because PISA does not measure causality, the strong positive association between parental involvement and enjoyment of reading could equally be due to parental behaviour having an effect on their children's attitudes towards reading or parents becoming more involved when they have children who enjoy reading.

texts, from the most useful strategy to the least useful. Student responses were then compared to the responses given by a pool of experts to determine students' awareness of which strategies are best suited and which strategies are less useful for summarising written texts. Although this working paper focuses on one metacognition strategy, PISA results show that students who are aware of effective summarising strategies are also aware of effective understanding and remembering strategies (OECD, 2010a).

42. Parental involvement can provide the grounds for the development of effective learning strategies. As shown below in the more detailed results from PISA 2009, an awareness of effective learning strategies can be developed by active parental involvement. In general, effective learning strategies are developed by the application of knowledge and the communication of complex issues – either through presentations, essays or conversation. Talking requires summarising knowledge and opinions; thus parents who actively engage with their children in unstructured conversations foster a good knowledge and an appropriate use of learning strategies. This involves discussing social or political issues, the book the child is currently reading or broader conversations. Academically-oriented, home-based parental involvement or early childhood parental involvement is not evidently related to students' awareness of effective learning strategies, possibly because these strategies are developed later on in a child's life or because such awareness cannot be developed through the structured interactions that characterise academically-oriented, home-based parental involvement.

43. The relationship between the different forms of parental involvement and students' awareness of effective learning strategies is less evident than that with reading performance or the enjoyment of reading. Parental involvement in early childhood is weakly related to their children's future awareness of effective learning strategies: after accounting for socio-economic background, only in five countries does reading books to children relate to the child's future awareness of which learning strategies are effective (Table 3.3a). This is expected because a good understanding of the pros and cons of using different learning strategies may generally be achieved at a later stage in children's development and is more sensitive to forms of parental involvement that require children to communicate about complex issues. In fact, in all countries and economies (in seven countries, after accounting for socio-economic background) forms of parental involvement that engage children in discussions about social or political issues are related to students' awareness of effective learning strategies. Just spending time talking with the child is also somewhat positively related to knowledge about effective learning strategies – yet is only apparent in four countries and economies after accounting for socio-economic background (Table 3.3c). There is likely a positive feedback cycle in place: children with a good understanding of which learning strategies are effective are better able to communicate about complex issues, and that, in turn, facilitates the parental involvement that benefits the development of these strategies.

44. Parental attitudes, values and time spent reading are significantly related to students' knowledge of effective learning strategies, largely because these are related to socio-economic background. After accounting for socio-economic background, in only five countries and economies is it apparent that children of parents who have positive attitudes towards reading (*e.g.,* do not think that reading is a waste of time) are more aware of effective summarising strategies. This signals that effective summarising strategies are not adopted by means of role-modelling, examples and norm-setting, but by being exposed to complex issues and having the opportunity to communicate about them (Table 3.3d).

45. The relationship between parental involvement in school-based activities and students' identification of effective learning strategies follows a similar pattern as enjoyment of reading and reading performance. The children of parents who are actively involved in the school through voluntary activities or appearing as a guest speaker do not have a greater understanding of which learning strategies are effective. This is expected because, as mentioned above, these strategies are developed through exposure to, and use of, complex texts and complex issues. Students whose parents discuss their behaviour with their teachers at the teacher's initiative have, in general, a poorer understanding of effective learning strategies.

This is likely due to the fact that students who lack such an understanding are more likely to need special assistance from, and collaboration with, parents to improve their progress in school (Table 3.3b).

The details of parental involvement on student outcomes

46. This section goes into detail and explores the relationship between parental involvement and each outcome. It is divided by forms of involvement, so in addition to providing more detail on the coefficients and the specific countries and economies that show statistically significant relationships, it frames the issue in terms of what parents do where and how that benefits different outcomes.

Early childhood involvement

47. Positive forms of involvement when children enter school help create habits that may follow children throughout their school lives and learning experiences. Studies that follow young students as they develop show that increased levels of parental involvement are associated with increased cognitive development before and after they enter school (Melhuish, Sylva *et al*., 2001). Parental involvement early on can help smooth the transition to primary school, which is important in developing early childhood literacy, and which, in turn, predicts later reading performance (Corsaro and Fingerson, 2006; Cheadle, 2008; Farkas, 2004). Young children are not only sensitive to parental influences, but also – and perhaps more strongly – to peer influences, making one key component of parental involvement steering children to peers who provide positive normative environments (Harris, 1998; Steinberg, Brown *et al*., 1997; Corsaro and Fingerson, 2006).

48. PISA asks parents about the type and frequency of activities they undertook with their child when the child was in the first year of primary school (ISCED 1). Activities include: reading books, telling stories, singing songs, playing with alphabet toys, talking about things the parent had done, talking about things the parent had read, playing word games, writing letters or words, or reading aloud signs and labels. Some of these activities involve actively engaging the child with words in a broader context (*e.g.,* reading books, talking about what the parent had done) or treating words and letters as independent elements (*e.g.,* playing with alphabet toys). Involvement when the child is entering primary school signals the likelihood that parents are also involved during early childhood and as the child continues school.

49. As discussed below, effective forms of parental involvement when children are entering primary school are strongly associated with reading performance and even more with enjoyment of reading. Effective forms of parental involvement include those that underscore the value of reading and place words into contexts rather than treating words and letters as isolated units. Parental involvement early in students' educational careers is only weakly related to students' awareness of effective summarising strategies.

Reading performance

50. Most forms of parental involvement as the child enters primary school are positively related to reading performance when the child is 15 years old. Students whose parents read books to them as they entered primary school are more likely to have higher reading performance at age 15 in all countries and economies except Lithuania. The relationship is particularly strong in New Zealand and Germany, where students who were read to in their early school years show higher reading performance on the order of 63 and 51 score points when compared to students that were not read to. Talking about what the parent had done during the day has a similarly consistent, positive relationship among countries and economies. In Panama, Denmark, Germany, Italy and New Zealand, students whose parents talked to them about what the parent had done score, on average, more than 40 points higher in reading performance than their peers whose parents did not talk to them about what the parent had done during the day. Other forms of involvement that place words in contexts and highlight the importance of literacy in a broader arena (*e.g.,*

reading signs out loud, singing songs, telling stories) are also strongly related to performance in most countries and economies. Forms of parental involvement that treat words in isolation from their context (*e.g.,* playing word games or writing letters or words) show less consistent results, and involvement in activities that highlight the presence of letters instead of words (*e.g.,* playing with alphabet toys) are positively related to performance in six countries and economies, yet negatively related to 15-year-olds' performance in four countries (Figure 3.1, Table 3.1a).

51. Many of these relationships capture the different socio-economic status of families and children, and the different levels of resources that are available to children from different backgrounds. Yet after accounting for differences in socio-economic status, those forms of involvement that treat words as part of a broader context are still significantly related to 15-year-olds' performance in many countries and economies. In particular, reading books is positively related to performance in seven countries after accounting for socio-economic status, and this relationship remains strong in New Zealand (44 score points), Germany (29 score points) and Qatar (27 score points). Talking about what the parent had done during the day remains significant after accounting for socio-economic status in seven countries and economies, and the relationship remains particularly strong in Panama, Denmark, Italy and New Zealand, where students whose parents talked to them about what the parent had done during the day when the student was in early primary school score, on average, more than 25 points higher on the PISA reading scale. After accounting for the socio-economic status of children, singing songs and forms of involvement that treat words in isolation from the broader context are no longer statistically significantly related to performance in most countries and economies. Forms of involvement that treat letters as independent units (instead of words or words-in-context) are negatively associated to performance after accounting for socio-economic status in Germany, Denmark, Croatia and Lithuania, and positively associated to performance in only Panama and Qatar (Figure 3.1, Table 3.1a).

Enjoyment of reading

52. A similar story relates parental involvement in early primary grades with students' enjoyment of reading. Forms of parental involvement that underscore the role of literacy and words in a broader context are better predictors of students' future enjoyment of reading than involvement that treat words in isolation from the context (*e.g.,* playing word games or writing letters and words) or that focus on letters instead of words (*e.g.,* playing with alphabet toys). Students of parents who read books and sang songs to them in early primary school have significantly higher levels of reading enjoyment in all countries and economies. These relationships are particularly strong in Germany, Hungary, Denmark and New Zealand, where students with parents who read books with them have indices of reading enjoyment at least 0.3 unit higher. Students of parents who told stories to them are more likely to enjoy reading at age 15 in all but one country (Panama) and this relationship is particularly strong in Hungary, Italy, Portugal, Germany and New Zealand. Students of parents who talked to them about what the parent had read are more likely to enjoy reading at age 15 in all but two countries and economies (Panama and Lithuania). Parental involvement that treats words and letters without a broader context shows a weaker relationship to students' reading enjoyment at age 15, both in terms of the strength of the relationship, as well as in the number of countries and economies where this relationship is significant (Figure 3.1, Table 3.2a).

53. Parental involvement at the first year of students' primary school may reflect the family's socio-economic background; thus the relationship with students' reading enjoyment may not represent the relationship between involvement and enjoyment, but that between socio-economic status and enjoyment. Yet after accounting for students' socio-economic background the observed relationships stand: parental involvement in early schooling is related to students' enjoyment of reading, particularly when involvement takes the form of talking to the child about what the parent had read (significant in all countries and economies after accounting for socio-economic background), reading books or singing songs (significant in all countries and economies, except in Macao-China, after accounting for socio-economic background).

After accounting for socio-economic status, reading books is strongly related to students' reading enjoyment in Germany, Hungary, Portugal and Korea, where students whose parents read books with them in the first grade are more than 0.2 unit higher in the *index of enjoyment of reading* (Figure 3.1, Table 3.2a).

Effective summarising strategies

54. Parental involvement when children are entering primary school is weakly related to students' awareness of effective summarising strategies. These findings are expected because effective summarising strategies involve abilities that may develop later in a child's educational career. After accounting for socio-economic differences, the relationship between parents' early involvement and students' awareness of effective summarising strategies is generally not statistically significant. Important exceptions are Germany, where students with greater awareness of better summarising strategies and similar socio-economic status are also more likely to have had parents who read books, sang songs and talked to them about what the parent had done during the day. These relationships are also evident in Denmark (with parents who played with alphabet toys, read books, sang songs, told stories, talked about what the parent had read, and played word games). In Italy, the relationship is weak, although statistically significant, with many forms of parental involvement (Figure 3.1, Table 3.3a).

[FIGURE 3.1 ABOUT HERE]

Home-based, academically oriented involvement

55. Although the influence of parents decreases as children enter adolescence, adolescents still report high levels of attachment to their parents (Eder and Kawecka Nenga, 2006). Not all forms of parental involvement – or parenting styles more generally – show the same relationship to student outcomes. Democratic parenting, which promotes autonomy and joint decision-making, is linked to better educational and social outcomes (Ho and Willms, 1996; Steinberg, Brown *et al*., 1997; Eder and Kawecka Nenga, 2006), as is parental involvement that focuses on process and includes positive beliefs about students' potential (Pomerantz, Moorman *et al.*, 2007).

56. Parental involvement in adolescents' educational lives can take many forms, one of which is helping students with homework and/or monitoring and guiding their children by discussing how well the child is doing in school. PISA asks parents about the frequency with which they help their child with his/her homework and the frequency with which they discuss how well their child is doing at school.

Reading performance

57. As observed in other studies, in all PISA-participating countries and economies, except Korea, students whose parents help them with their homework have poorer academic outcomes. This does not mean that parents have a negative impact on students' performance when they help their children with homework; rather, parents tend to help children who require that help the most (Ho and Willms, 1996). Students with poor reading performance and minimal engagement with academic activities are most likely to need help with their homework. In contrast, high-achieving students are less likely to need help with their homework and, for that reason, their parents are least likely to help them with their homework. The children of parents who discuss how the child is doing in school are more likely to show better reading performance in six countries and economies, yet this is mostly a reflection of the fact that more socio-economically advantaged parents are more likely to discuss these issues. After accounting for differences in socio-economic status, the children of parents who monitor and guide their academic lives by discussing how they are doing in school perform better in Qatar (26 score points), Italy (16 score points) and Korea (9 score points) than children whose parents do not do so (Figure 3.2, Table 3.1c).

Enjoyment of reading

58. The children of parents who help them with homework are more likely to enjoy reading less. This is most likely because students who are not engaged with academic work are often those who need help with their homework and, consequently, are more likely to get that help from their parents. In nine countries and economies, children whose parents talk with them about how well they are doing in school are more likely to enjoy reading. This relationship holds in seven of those nine countries and economies after accounting for socio-economic status. Parents who guide and monitor children by discussing how the child is doing promote academically-oriented norms and, as a result, enjoyment of reading. This relationship is especially apparent, after accounting for socio-economic status, in Qatar, Korea, Portugal, New Zealand and Hong Kong-China (Figure 3.2, Table 3.2c).

Effective summarising strategies

59. Consistent with the findings for enjoyment of reading and reading performance, students whose parents help them with their homework are also less likely to know which strategies are most effective for summarising long and complex texts. In general, students who lack these learning skills are most likely to be those who require more help with their homework. Only in Italy, Korea and Qatar are children whose parents discuss how they are doing in school more aware of effective summarising strategies after accounting for students' socio-economic status (Figure 3.2, Table 3.3c).

[FIGURE 3.2 AROUND HERE]

Home-based, non-academic involvement

60. Other forms of parental involvement that foster academic engagement and achievement are not linked neither to the particular school a child attends nor to his or her teachers. These non-academic forms of involvement include participating in intellectually engaging activities and discussions that rely on skills that are also useful in, but not directly related to, the school setting. These kinds of activities may also promote the adoption of academically-oriented norms that foster students' performance and engagement in school.

61. PISA asked parents about the frequency with which they discussed political or social issues, as well as books, films or television programmes with their children. Parents were also asked: whether they eat the main meal with their child around a table; whether they go to a bookstore or library with their child; whether they talk with their child about what he/she is reading on his/her own; and whether they spend time just talking with their child.

Reading performance

62. In general, the children of parents who are more involved in their children's non-academic lives show better performance in reading. Parental involvement in the form of discussions with their children is more strongly related to reading performance than going to the library or eating together, for example. Students may benefit especially from discussions with their parents about political or social issues. In all countries and economies, students whose parents discuss social or political issues perform better than students whose parents do not report this kind of involvement. This relationship is strong in Italy (42 score points), Panama (38 score points), Portugal (37 score points), New Zealand and Qatar (32 score points). In all but two countries (Hungary and Lithuania), students who discuss books, films and television programmes with their parents show better reading performance. This relationship is especially strong in Qatar, Portugal, New Zealand and Italy, where students who discuss books, films and televisions with their parents score over 25 score points higher, on average, than students whose parents do not engage in this activity, according to the parents' reports. Similarly, students whose parents spend time talking with them

also perform better in reading in all countries and economies, except Croatia and Denmark. Results are less consistent for parental involvement that does not necessarily include engaging the child in conversation, such as eating the main meal around a table or going to a bookstore or library (Figure 3.3, Table 3.1c).

63. These relationships are evident even after accounting for differences in students' socio-economic backgrounds. However, the relationship is weaker when accounting for socio-economic background, signalling that more advantaged students have more involved parents and/or that involvement is one of the ways in which socio-economic background influences reading performance. Still, students from similar backgrounds who discuss political or social issues with their parents achieve higher reading scores in all countries and economies, except Hungary. In Qatar, Panama, New Zealand and Portugal, this difference in performance is greater than 15 score points. Similarly, the relationship between student reading performance and parents discussing books, films or television programmes with their child is statistically significant in 10 countries and economies after accounting for socio-economic background. After accounting for the socio-economic background of students, parents spending time just talking with their children is not consistently associated with students' reading performance, signalling that parental involvement ought to take forms that actively engage children intellectually in order for students to benefit fully from it (Figure 3.3, Table 3.1c).

Enjoyment of reading

64. The relationship between parental involvement and students' enjoyment of reading follows a similar pattern as that observed in reading performance. In all countries and economies, students whose parents discuss social or political issues with them are more likely to enjoy reading. Similarly, children whose parents discuss books, films or television programmes with them are more likely to enjoy reading in all but one country (Panama); but part of this relationship may indicate that students who inherently enjoy reading are more likely to engage in these types of discussions with their parents. The same can be said for children whose parents go to the library or bookstore with them. These children are more likely to enjoy reading, but probably because students who enjoy reading are more likely to go to libraries and bookstores in the first place. These relationships are particularly robust after accounting for socio-economic status. In all countries and economies, students from similar backgrounds whose parents discuss political or social issues with them also enjoy reading more. This relationship is particularly strong in Korea, New Zealand, Lithuania, Germany and Italy. Eating the main meal together around the table is not consistently related to higher degrees of reading enjoyment. This may result from the fact that the activity is not necessarily intellectually engaging (Figure 3.3, Table 3.2c).

Effective summarising strategies

65. The forms of non-academic parental involvement that are most strongly related to students' awareness of effective summarising strategies are those that engage students in discussions about complex issues, including social and political topics. Activities of this type require managing and communicating complex sets of information. In all countries and economies, students whose parents discuss social or political issues are more aware of effective summarising strategies. This relationship is particularly strong in Denmark, Portugal, Panama, Italy and Korea. The strength of this relationship only partly reflects the likelihood that more advantaged students are more aware of effective summarising strategies. After accounting for socio-economic background, parental involvement in the form of discussing social and political issues is associated with greater awareness of effective summarising strategies in Denmark, Korea, Italy, Panama, Portugal, New Zealand and Lithuania. Discussing books, films or television programmes, and talking about what the child is reading, is more weakly associated with students' awareness of effective summarising strategies. This relationship is significant in only six countries (Figure 3.3, Table 3.3c).

Parents' own reading habits and engagement

66. As children get older, the influence of parents diminishes and that of peers and other reference groups increases; yet adolescents still report high levels of attachment to their parents (Eder and Kawecka Nenga, 2006). Parents can be involved in their children's academic lives actively, through monitoring and guiding the educational decisions and tasks of their children and engaging with them intellectually, or more implicitly by setting patterns of behaviour through their own reading habits and engagement, as role models (Desforges and Abouchaar, 2003).

67. A particular attribute of the human species is our ability to identify behaviour and imitate; it is one of the pillars of socialisation into the adult world (Pinker, 1999; Harris, 1998; Steinberg, Brown *et al*., 1997). Parents' habits and attitudes towards intellectually engaging activities, and towards books and academic norms, are important in shaping students' attitudes towards reading, school and learning, and may ultimately be related to school performance, as well.

Reading performance

68. The children of parents who are more inclined to read and hold positive attitudes towards reading perform better in reading. In all countries and economies, the children of parents who do not think reading is a waste of time or who spend more time reading at home for enjoyment have significantly higher scores in reading. In Qatar, Hungary, Italy, New Zealand, Panama and Portugal, children whose parents think that reading is a waste of time score more than 50 points lower in reading than children whose parents do not think reading is a waste of time. Similarly, in these countries, children whose parents spend time reading for enjoyment at home score more than 30 points higher in reading than children whose parents do not do so (in New Zealand, the difference is 23 points). A positive relationship to students' reading performance is also observed when parents reported that they are happy to receive a book as a present and that they consider reading a favourite hobby (Figure 3.4, Table 3.1d).

69. Socio-economically advantaged parents are more likely than other parents to hold such attitudes (see Chapter 4 for a detailed description of socio-economic differences in parental attitudes towards reading). This means that parental attitudes and habits towards reading may mask other reasons that explain the better performance among advantaged students. Yet even after accounting for socio-economic status, attitudes and habits towards reading are still strongly associated with reading performance. Since the strength of the association is similar (albeit weaker) to the unadjusted relationship, parental habits and attitudes towards reading appear to be associated with student reading performance, independently of the family's socio-economic background.

Enjoyment of reading

70. Consistent with other forms of involvement, the patterns that explain the relationship between parental attitudes towards reading and students' reading enjoyment are similar to those between parents' attitudes towards reading and reading performance. In all countries and economies, children of parents who consider reading a hobby, enjoy going to the library or bookstore and spend time reading for enjoyment at home are more likely to enjoy reading themselves. This is true after accounting for socio-economic background, signalling that children are more likely to enjoy reading when their home environment is favourable to reading habits. The relationship between parental habits and attitudes towards reading are particularly strong in Germany, Qatar, Hungary, Italy and Lithuania (Figure 3.4, Table 2.2d).

Effective summarising strategies

71. Although children whose parents have positive attitudes towards reading and read more themselves are more likely to know which summarising strategies are most effective, much of this

relationship is linked to students' socio-economic background. Before accounting for socio-economic background, for example, in 11 countries and economies, children whose parents read at home for enjoyment are more aware of effective summarising strategies; but after accounting for socio-economic background, this relationship only holds in Panama, Hungary, Italy and Qatar. This indicates that parental reading habits are related to socio-economic status (more advantaged parents are more likely to read at home for enjoyment, for example), and that, in most countries and economies, any relationship between parental habits and students' awareness of effective summarising strategies reflects the socio-economic backgrounds of parents who read for enjoyment. This is likely because students' awareness of effective summarising strategies requires practice and is not necessarily transmitted through parents' reading habits and attitudes (Figure 3.4, Table 3.3d).

[FIGURE 3.4 ABOUT HERE]

School-based involvement

72. Parents can also be involved in their children's educational lives by participating in school-based activities, such as meeting with teachers or school principals, or volunteering in school activities. School-based involvement depends not only on the parents' interest and volition, but also on the school's ability to provide opportunities for involvement, and also on whether the school system requires schools to provide instances for participation. These opportunities for involvement vary across countries (Eurydice, 2005).

73. Research has shown that this form of involvement has a positive impact on students, primarily because it is structured involvement. School-based parental involvement enhances students' engagement with school; and since it is a sign that parents care about their children's education, teachers may direct more attention to the children of involved parents (Pomerantz, Moorman *et al*., 2007).

74. PISA asked parents whether, in the previous academic year, they had discussed their child's behaviour with a teacher at the parent's or teacher's initiative, whether the parent had volunteered in physical or extra-curricular activities or in the library, or whether the parent assisted a teacher in the school, appeared as a guest speaker or participated in the local school government.

Reading performance

75. Research generally finds that parental involvement in school-based activities benefits student performance, particularly in reading (Ho and Willms, 1996; Pomerantz, Moorman *et al*., 2007). However, according to PISA results, the children of parents who are involved in school-based activities are more likely to achieve lower scores, possibly because students who need help get their parents involved in school-based activities. In 10 countries and economies, children whose parents discussed their child's behaviour or progress with a teacher (at either the teacher's or the parents' initiative) show poorer performance in reading than children whose parents did not have such discussions. In seven countries and economies, children whose parents volunteered in extra-curricular activities are more likely have lower reading scores. Research suggests that these forms of involvement are beneficial: in all likelihood, these students' reading scores might be even lower if their parents were not actively involved in school activities. The findings are similar after taking students' socio-economic background into account (Figure 3.5, Table 3.1b).

Enjoyment of reading

76. There seems to be no consistent pattern regarding students' enjoyment of reading and parental involvement in school activities (*e.g.,* assisting a teacher in the school or volunteering in school activities). There is, however, a negative relationship between students' enjoyment of reading and whether their parents discussed the student's progress or behaviour with a teacher. In nine countries and economies,

children whose parents discussed their child's progress or behaviour with a teacher at the teacher's initiative enjoy reading less (an exception is the positive and significant relationship in Korea). In six countries and economies, children whose parents discussed their child's progress at their own initiative enjoy reading less, yet there is a positive and significant relationship between this form of parental involvement and students' reading enjoyment in Korea, Qatar and Hong Kong-China. These associations are largely unrelated to students' socio-economic background as they remain relatively stable after accounting for socio-economic background (Figure 3.5, Table 3.2b).

Effective summarising strategies

77. The association between school-based parental involvement and awareness of effective summarising strategies is weaker than that observed between such parental involvement and students' reading performance or enjoyment of reading. Following a similar pattern to the reading outcomes, whenever present, the relationship between parental involvement and students' awareness of effective summarising strategies is negative. This indicates that parents of students who are less aware of effective summarising strategies are more likely to be involved in school activities. Such students are more likely to struggle in school, and the parents of these children are more likely to participate in school activities as they seek ways to help their children succeed in school. This is particularly true among parents who met with teachers at the teacher's or parents' initiative. In ten countries and economies, children whose parents met with teachers at the teacher's initiative were less aware of effective summarising strategies. These associations are largely unrelated to students' socio-economic background (Figure 3.5, Table 3.3b).

[FIGURE 3.5 ABOUT HERE]

CHAPTER 4
WHO IS INVOLVED AND HOW

78. Most parents want the best for their children and seek the best education for them. However, for many different reasons, not all parents are involved in their children's development in the same way. In the United States, Canada, Hong Kong-China, Ireland, Great Britain and other school systems, for example, parents with higher socio-economic status are more likely to participate in both school-based activities (*e.g.,* parent-teacher meetings, volunteering at school) and home-based activities (*e.g.,* taking children to plays, museums or historical sites, visiting the library, or engaging in parent-child discussions). However, socio-economically advantaged parents are no more likely to help their children with homework than disadvantaged parents (Ho and Willms, 1996; Ho, 2006; Desforges and Abouchaar, 2003; Lee and Bowen, 2006; US Department of Education, 2006; OECD, 1997; O'Neill, 1992). After accounting for socio-economic differences, there are small or no differences in the levels of parental involvement by ethnic group in the United States (Cheadle, 2008; US Department of Education, 2006). There is limited research on parental involvement by the child's gender. In France, parental involvement tends to favour boys: parents are more likely to be involved in their sons' school work and to participate in career and course choices, even though parents help both their sons and their daughters equally with their homework (Guérin and Gouyon, 2006).

79. Also, parents' involvement in students' education, particularly as related to schools, depends on the schools' offering of opportunities for parents to be involved. Parental involvement in school is thus amenable to school policy inasmuch it depends, in part, on the schools' offering of opportunities for involvement (Eurydice, 2005). To promote involvement, schools ought to offer diverse and frequent forms of involvement in order to cater to the wide array of parents of the school, considering the needs, expectations and habits of the different types of parents (Smit, Driessen *et al*., 2007; Zenhas, 2008). Certain school systems require schools to offer opportunities for involvement, but others do not, so countries differ on the opportunities for parents to be formally involved in school-based forms of involvement. Some countries, like Ireland, specify in their education laws that parents are partners in the education of the country's students and, as a result, almost all schools have parent representatives on their boards of management (Byrne and Smyth, 2010). Also, in Chile, as a result of the *Ley de Subvención Escolar Preferencial*, schools that subscribe to the extra subsidy must provide official forms of parental voice in the school structure (BCN, 2008).

80. No studies systematically review the extent and forms of parental involvement in children's education according to gender, socio-economic and ethnic background; much less do they examine the validity of these patterns across countries. This chapter draws on data from the countries and economies that distributed the PISA parental questionnaire to analyse the different forms of parental involvement according to gender, socio-economic and immigrant backgrounds to examine whether students from different kinds of home environments experience different kinds of parental involvement. This chapter also analyses parental involvement according to whether their child is a girl or a boy. These results set the stage for the analysis in Chapter 5 on whether parental involvement helps to explain the differences in PISA performance observed according to socio-economic status, immigrant background and gender. Annex 1 of this paper provides important information regarding the characteristics of the data and the limitations it entails in making causal arguments.

How parents are involved

81. As discussed earlier, parents can be involved in their children's education in many ways, either at school or outside the school, either through explicit participation in activities, or by setting an example

with their own habits and engagement. Parents are usually more involved early in their children's lives, and active involvement decreases as children age (Pomerantz, Moorman *et al*., 2007). Involvement when children enter primary school may be especially helpful in providing a smooth transition into formal education, which is important for developing early childhood literacy. In turn, early childhood literacy predicts later reading performance (Corsaro and Fingerson, 2006; Cheadle, 2008; Farkas, 2004).

Involvement when children enter primary school

82. The majority of parents who responded to the parental questionnaire reported being involved in all the activities asked. On average, 81% of parents reported writing words and numbers with their children; 79% reported talking with their child about what the parent had done during the day; 74% reported reading books with their children; 68% reported telling stories; 68% reported reading signs out loud; and 62% reported talking about what the parent had read. A relatively lower percentage of parents, although still the majority, reported singing songs (58%) or playing word games (56%) with their child.

83. There are cross-country differences in these reports. Parental involvement during their child's first year in school is consistently low in Macao-China and Hong Kong-China: these two economies rank the lowest among all countries and economies regarding the proportion of parents involved in their child's early education. In Macao-China, for example, 40% of parents reported talking to their children about what the parents had done that day; the average across all countries and economies is 79%. Similarly, in Hong Kong-China, 26% of parents talked to their children about what they had read, while the average across all countries and economies is 62%. Parental involvement in the form of talking to children and reading books when children entered primary school is also low in Korea. Parental involvement in all measured forms is widespread in New Zealand, where more than 90% of parents read books or talk about what they had done during the day with their young children. It is also common in Denmark, when considering reading books, singing songs and talking with their children, yet less common when considering such activities as playing word games or having an alphabet toy (Figure 4.1, Tables 4.1a to 4.1i).

[FIGURE 4.1 AROUND HERE]

Home-based involvement

84. Parents can also be involved in their children's education as they get older, without necessarily participating in school. They can be involved by helping with homework and discussing with their child how the child is doing in school. These types of activities may directly help in the development of students' skills and motivation. Across the countries and economies that distributed the parent questionnaire, an average of 85% of parents discussed with their child how he/she was doing in school and 40% helped their child with homework. The level of parent's participation in these activities varies across countries and economies. In Macao-China, Korea and Hong Kong-China, for example, discussing how the child is doing in school and helping children with homework is comparatively uncommon: fewer than 70% of parents discuss these issues with their children and less than a third of parents help their children with homework. In the remaining countries and economies, at least 80% of parents reported talking with their children about school. This activity is practically universal in Hungary, Italy, Lithuania and Croatia, where more than 95% of parents engage in such discussions with their children. In Croatia, however, parents are comparatively less likely to help their children with homework. Helping with homework is especially common in Panama, where 73% of parents reported helping their children with homework; in the remaining countries and economies, around half or less than half of all parents help their children with homework (Figure 4.2, Tables 4.2c and 4.2h).

[FIGURE 4.2 AROUND HERE]

85. Only a part of home-based parental involvement consists in activities that are related to school. Parental involvement in non-academic activities is important, as activities such as discussing political or social issues, discussing books, films or television programmes, spending time just talking, talking about what the child is reading, going to a library or bookstore, or eating the main meal together around a table can affect children's motivation and academic skills. Practically all parents eat the main meal with their children: on average across the participating countries and economies, 94% of parents do so. This percentage is lowest in New Zealand and Panama, where around 84% of parents eat the main meal with their child around a table. The great majority of parents in the participating countries and economies also spend time just talking with their children: on average across the participating countries and economies, 90% of parents spend time just talking with their children. This percentage is lower than average in Macao-China (68%), Korea (80%), Panama (85%) and Qatar (87%). All parents in Germany and Denmark reported spending time talking with their children. As seen in the previous chapter, these forms of involvement are not strongly associated with performance or other student outcomes, mostly because a lack of variation in parental behaviour means that it is difficult, from a methodological point of view, to see the effects of these forms of involvement.

86. Earlier analyses showed that students in practically all countries and economies who discussed political or social issues with their parents were more likely to score higher in reading, enjoy reading more and know about effective summarising strategies; the same was true for children whose parents discussed books, films or television programmes with them, or whose parents talked with them about a book the child has read. However, these forms of involvement are less common. On average across the participating countries and economies, 71% of parents reported discussing books, films or television programmes, 51% reported discussing social or political issues, and 40% reported talking with their child about the books the child was reading. These forms of involvement are comparatively more common in Denmark, Italy and New Zealand, and relatively uncommon in Korea and Macao-China (Figure 4.3, Tables 4.2a, 4.2b and 4.2d to 4.2g).

[FIGURE 4.3 AROUND HERE]

87. Another form of home-based parental involvement has less to do with explicit interaction between the parent and the child, and more to do with the kind of role model parents are for their children. Parental reading habits and enjoyment of reading are obvious and clear statements of what parents really value. PISA measures this more subtle form of parental involvement by identifying parents who spend time reading for enjoyment at home, who feel happy when they receive a book as a present, who believe that reading is one of their favourite hobbies, or who do not think that reading is a waste of time. On average across the participating countries and economies, the great majority of parents value reading since 94% of them believe that reading is not a waste of time. This percentage is largest in New Zealand and Denmark (over 96%), and lowest in Qatar and Macao-China (89%). The majority of parents across the participating countries and economies also value reading as a hobby, are happy when they receive a book, and enjoy going to the library. Although the great majority of parents recognises the importance of reading and reported valuing reading, few actually read for enjoyment at home. On average across the participating countries and economies, 39% of parents spend time reading for enjoyment at home. The percentage of parents who read at home is highest in New Zealand, Germany and Denmark, where more than half of parents read at home for enjoyment. By contrast, in Korea, Panama, Portugal, Macao-China and Hong Kong-China, less than a third of parents reported reading for enjoyment at home (Figure 4.4, Tables 4.4a to 4.4e).

[FIGURE 4.4 AROUND HERE]

School-based involvement

88. PISA also asked parents about their involvement in their adolescent children's educational school lives. Parents can be involved in their children's academic lives in direct contact with the school (school-based involvement) or with no contact with the school or teachers (home-based involvement). Regarding school-based involvement, PISA asked parents about their participation in meetings with teachers and participation in voluntary activities.

89. On average across the countries and economies that considered these questions in the parental questionnaires, the majority of parents participated in discussions with their child's teacher, either at the initiative of the parent (58%) or the teacher (53%). In countries and economies where most discussions are held at the parents' initiative, there are fewer teacher-initiated discussions, and in countries/economies where most discussions are held at the teachers' initiative, there are fewer parent-initiated discussions. In Croatia, for example, 82% of parents reported discussing their child's progress with a teacher at their own initiative, while only 32% reported that these discussions were held at the teacher's initiative. Similarly, in Germany, 68% of parents discussed their child's progress or behaviour with a teacher at their own initiative, and 37% of parents did so at the teacher's initiative. The inverse is true in Korea and Denmark: in these countries, parent-teacher meetings are mostly initiated by teachers (78% in both countries) and less commonly by parents (35% in Korea and 45% in Denmark). There are, however, countries and economies where discussions are often initiated by both parents and teachers (*e.g.,* Portugal and Panama), or where relatively few parents meet with teachers (*e.g.,* Hungary and Macao-China) (Figure 4.5, Tables 4.3a and 4.3b).

90. Parents are less likely to participate in activities in the school than to discuss their child's progress or behaviour with a teacher. A minority of parents reported active involvement in school activities like volunteering in physical activities (on average across all countries and economies, 9% of parents reported this type of involvement), volunteering in extra-curricular activities (17%), volunteering in the school library (4%), assisting a teacher (14%), coming to the school as a speaker (4%) or participating in the school government (15%). In no country the majority of parents are involved in these school-based activities. Nonetheless, active involvement is relatively more common in Panama, Qatar and Korea. In Panama, for example, 30% of parents reported having participated in school government; in Qatar, 29% of parents reported assisting a teacher; and in Korea, 25% of parents reported that they had volunteered in physical activities. In these three countries, parents often participate in other types of active school-based activities, too. In general, active school-based involvement is relatively uncommon among parents in New Zealand, yet 33% of parents reported volunteering in extra-curricular activities such as field trips (Figure 4.5, Tables 4.3c to 4.3h).

[FIGURE 4.5 AROUND HERE]

Socio-economic differences in parental involvement

91. The previous section highlights how parental involvement differs across and within countries and economies. Prior research suggests that more socio-economically advantaged parents are more involved in their children's educational lives. These differences in parental involvement are consistent with prior within-country research on parental involvement. In the United States, for example, advantaged parents are more likely to be engaged in home-based and school-based activities, becoming the primary channel for the intergenerational transmission of educational advantage (Cheadle, 2008; Lareau, 2000; Lareau, 2003; Cheadle, 2009).

92. In this working paper, advantaged parents are those who are in the top third of the distribution of socio-economic status within each country. Disadvantaged parents are those in the bottom third. In PISA

and in the participating countries and economies, advantaged parents are also more likely to be involved in students' lives outside the school, by engaging with their children in academic and non-academic activities, and through their own reading habits and engagement, by being more likely to hold positive attitudes towards reading and books. These patterns hold in most, if not all, of the 13 countries and economies that distributed the PISA questionnaire and included questions on parents' involvement; they also hold for patterns of parental involvement as children entered primary school. There are smaller differences observed between advantaged and disadvantaged parents when it comes to school-based parental involvement.

Involvement when children enter primary school

93. In most countries and economies that participated in the PISA parental questionnaire, parents with a socio-economically advantaged background are more likely to report being involved in their children's education as they entered primary school. In particular, in all countries and economies, advantaged parents were more likely to talk about what the parent had done during the day, and read signs out loud. Reading books, telling stories, singing songs and playing word games were more common among advantaged parents in 12 of the 13 countries and economies. Activities like talking about what the parent had read and writing letters or words were more common among advantaged parents in 11 of the 13 countries and economies. Playing with alphabet toys was also more common among this group of parents, but only in 9 of the 13 countries and economies. The socio-economic differences in the forms of parental involvement are strongest for activities like reading books and singing songs: in the average country, advantaged parents are 14 percentage points more likely to have read books and sung songs, and 17 percentage points more likely to have told stories than disadvantaged parents (Figure 4.6, Tables 4.1a to 4.1i).

94. Differences in parental involvement that are related to socio-economic background are strongest in Hong Kong-China, Portugal and Macao-China. In Hong Kong-China, for example, advantaged parents are 38 percentage points more likely to have told stories to their children; in Portugal and Macao-China, this group of parents is at least 26 percentage points more likely to have read books with their children. These differences are weakest in Lithuania, Denmark and Hungary. In Lithuania, for example, there are no statistical differences in the likelihood that disadvantaged or advantaged parents sang songs, talked about what the parent had read, or played word games. Similarly, in Hungary, there are no differences with respect to writing letters or words; and in Denmark, there are no differences with respect to telling stories. Differences in parental involvement that are related to socio-economic background are also comparatively small in Panama and New Zealand (Figure 4.6, Tables 4.1a to 4.1i).

[FIGURE 4.6 AROUND HERE]

Home-based involvement

95. Parents can also be involved at home, either by engaging in activities directly related to school matters, engaging in other intellectually motivating or monitoring activities, or implicitly, by communicating their attitudes towards reading and school through their habits and values. There are important differences in involvement in these activities based on socio-economic status, particularly those in the activities that are not directly related to school affairs.

96. On average across the participating countries and economies, advantaged parents are 21 percentage points more likely to discuss political or social issues with their children than disadvantaged parents. This form of involvement is shown to be consistently associated with all student reading outcomes – reading performance, enjoyment of reading, and awareness of effective summarising strategies – even after accounting for students' socio-economic status. These differences are especially large in Portugal,

Italy and Germany, where they are larger than 25 percentage points. Differences are smaller in Korea, even though Korea has the lowest levels of involvement in this indicator. Other forms of parental involvement not directly related to school affairs also show differences related to socio-economic background in the degree to which parents are involved. Discussing books, films or television programmes with children is also more likely among advantaged families than among disadvantaged families in 11 participating countries and economies. The largest such differences are seen in Macao-China, Portugal and Hong Kong-China, while small differences are observed in Hungary, Denmark and Panama (Figure 4.7, Tables 4.2a, 4.2b, and 4.2d to 4.2g).

[FIGURE 4.7 AROUND HERE]

97. Parents' own reading habits and engagement, is also related to socio-economic status. In all countries and economies the majority of parents value reading, that is, parents do not consider reading a waste of time, they consider reading to be a hobby, and they report feeling happy when they receive a book as a present. Yet in all countries and economies except Panama, advantaged parents are more likely to hold these attitudes. On average across all countries and economies, advantaged parents are 20 percentage points more likely to enjoy going to a library or bookstore, 16 percentage points more likely to consider reading a hobby, 14 percentage points more likely to feel happy when receiving a book as a present, and 7 percentage points less likely to consider reading a waste of time. Advantaged parents are especially more likely to spend time reading for enjoyment at home: on average in the participating countries and economies, this group of parents is 23 percentage points more likely to read for enjoyment at home than disadvantaged parents are. Differences in parental attitudes and habits towards reading based on socio-economic status are particularly marked in Hong Kong-China, Germany, Portugal and Macao-China. In Hong Kong-China, for example, disadvantaged parents are 23 percentage points more likely to feel happy when receiving a book as a present; in Germany advantaged parents are 24 percentage points more likely to consider reading a favourite hobby; in Portugal, advantaged parents are 36 percentage points more likely to spend time reading for enjoyment; and in Macao-China, advantaged parents are 25 percentage points more likely to enjoy going to a library or bookstore (Figure 4.8, Tables 4.4a to 4.4e).

[FIGURE 4.8 AROUND HERE]

98. Parental involvement outside the school can also take the form of activities directly related to school affairs: discussing how the child is doing in school and helping with homework. Across the participating countries and economies, advantaged parents are more likely to help their child with homework in seven countries and economies, but less likely to do so in four. The greater likelihood that advantaged parents will help with homework is notable in Italy (13 percentage points more likely than disadvantaged parents) and Hong Kong-China (11 percentage points more likely). Advantaged parents in Panama, Hungary, Lithuania and Germany are less likely to help with homework. In nine countries and economies advantaged parents are more likely to discuss with their child how the child is doing in school. This difference is largest in Hong Kong-China (22 percentage-point difference between advantaged and disadvantaged parents), Macao-China (18 percentage-point difference) and Korea (16 percentage-point difference) (Figure 4.9, Tables 4.2c and 4.2h).

[FIGURE 4.9 AROUND HERE]

School-based involvement

99. Differences in the likelihood of parental school-based involvement that are related to socio-economic background are smaller than those observed for other forms of involvement. On average across the participating countries and economies, advantaged parents are six percentage points more likely than disadvantaged parents to discuss their child's progress or behaviour with a teacher at their own initiative,

yet they are no more likely to do so at the teacher's initiative. Differences in this kind of involvement that are attributable to socio-economic background are especially great in Korea, where advantaged parents are 24 percentage points more likely to discuss the child's progress and behaviour at their own initiative and 19 percentage points more likely to do so at the teachers initiative than disadvantaged parents are. In Italy and Hong Kong-China, advantaged parents are 18 percentage points more likely than disadvantaged parents to attend school meetings at their own initiative. Differences in this form of involvement based on socio-economic background are small in Croatia and Lithuania (Tables 4.3a and 4.3b).

100. Other forms of school-based involvement relate to parents' participation in school activities such as volunteering in extra-curricular activities or in physical activities. As discussed above, parental involvement in these activities is less common than meetings with teachers, but there are still differences in participation related to parents' socio-economic status. In Korea and Germany, advantaged parents are more likely to volunteer for these activities. In Korea, for example, advantaged parents are 19 percentage points more likely to volunteer for physical activities and 10 percentage points more likely to assist a teacher in the school. In Germany, advantaged parents are nine percentage points more likely to volunteer for extra-curricular activities and eight percentage points more likely to participate in school government when compared to disadvantaged parents. In New Zealand, participation in school-based activities is less influenced by socio-economic status, yet advantaged parents are 17 percentage points more likely than disadvantaged parents to volunteer in extra-curricular activities. Differences in involvement in school activities based on socio-economic background are small in Portugal; and in Panama, disadvantaged parents are more likely to be involved in these types of activities. In this Central American country, disadvantaged parents are 15 percentage points more likely to assist a teacher, 12 percentage points more likely to be part of the school government, and 12 percentage points more likely to volunteer for physical activities than advantaged parents (Figure 4.10, Tables 4.3c to 4.3h).

[FIGURE 4.10 AROUND HERE]

Differences in parental involvement by the child's gender

101. Parents from socio-economically advantaged backgrounds are more likely to be involved in their child's education than disadvantaged parents. Are parents involved in their child's schooling in different ways, depending on whether that child is a girl or a boy? Prior evidence in France suggests that parents tend to be more involved in their sons' education than in their daughters'. Parents are more likely to be involved in their sons' school work and participate in career and course choices, even though parents help both their sons and their daughters equally with their homework (Guérin and Gouyon, 2006). In contrast to these results for France, throughout the countries and economies that implemented the PISA parental questionnaires, there are only small differences between parents' involvement in their sons' education and involvement in their daughters' education. In general, whenever statistically significant, these differences amount to less than five percentage points, signalling that parents are involved in their children's school lives in similar ways, regardless of whether those children are boys or girls.

102. However, differences in parental involvement related to the child's gender are consistently seen for certain forms of involvement and in certain contexts. For example, parents in all countries and economies are more likely to sing songs to girls than to boys during their child's first year of primary school; and this difference is equal to, or greater than, five percentage points in 12 of the 13 countries and economies. Parents are 10 percentage points more likely to sing songs to girls than to boys in Lithuania, Qatar and Germany. Early parental involvement is more likely to be directed to girls in Qatar and Panama. In Qatar, parents of girls are also at least five percentage points more likely to tell stories, talk about what the parent had done during the day, play word games, write letters and words, and read signs out loud. In Panama, parents are also more likely to talk about what the parent had done during the day and what the parent had read, and to read signs out loud to their daughters than to engage in those activities with their

sons. In the remaining countries and economies, there are practically no differences in such parental involvement related to the gender of the child (Figure 4.6, Tables 4.1a to 4.1i).

103. Patterns of home-based parental involvement are inconsistent across the types of activities and across countries and economies. Parents in Hungary, Germany, Portugal and Croatia are more likely to discuss political or social issues with their sons than with their daughters; but for other activities, there are practically no differences in parental involvement related to the child's gender. In Qatar, Hong Kong-China and Italy, parents are at least five percentage points more likely to discuss books, films or television programmes with their daughters than with their sons; and in Lithuania, Denmark, Italy, New Zealand and Germany, parents are at least five percentage points more likely to talk with their daughters than with their sons about the book the child is reading (Figure 4.7, Tables 4.2a, 4.2b and 4.2d to 4.2g).

104. There are rarely any substantial differences in parents' own reading habits and engagement, such as reading habits and attitudes towards reading, that are linked to the child's gender. In New Zealand and Hong Kong-China, parents of boys are more likely to spend time reading for enjoyment, while in Macao-China, parents of boys are also at least five percentage points more likely to value reading as a hobby, be happy when receiving a book as a present, or enjoy going to the library or bookstore (Figure 4.8, Tables 3.4a to 3.4e). Involvement at home can also be directly oriented towards school affairs. Parents in Croatia, Hungary, Italy and Lithuania are at least five percentage points more likely to help their son with homework than to help their daughter; while parents in Denmark are seven percentage points more likely to help their daughter with homework than to help their son. Only in Hong Kong-China and Korea are parents at least five percentage points more likely to discuss how their child is doing in school when that child is a girl (Figure 4.8, Tables 4.2c and 4.2h).

105. In practically all countries and economies, parents are more likely to discuss their son's, rather than their daughter's progress or behaviour with a teacher at either the teacher's or the parents' initiative. Except in Denmark, Hong Kong-China and Korea, parents are at least five percentage points more likely to engage in these types of discussions with teachers about their sons than about their daughters. Differences in the likelihood that parents discuss these issues with teachers at the parents' initiative are particularly great in Qatar, where the parents of boys are 14 percentage points more likely to initiate these discussions than the parents of girls. Differences in the likelihood that parents discuss their son's, rather than their daughter's progress or behaviour at the initiative of a teacher are marked in Lithuania, Qatar, Hungary, Portugal, Italy, Croatia and Germany, where parents of girls are at least 10 percentage points less likely to engage in these teacher-initiated discussions. These findings should not be surprising because boys are usually more likely than girls to be low achievers and have behavioural problems. Parental participation in voluntary activities does not differ greatly by the child's gender. However, parents of boys are more likely to volunteer for school activities in Qatar and Panama. In the remaining countries and economies, differences in parental involvement related to the child's gender generally do not exceed five percentage points (Figure 4.10, Tables 4.3a and 4.3b).

Differences in parental involvement related to immigrant background

106. Non-immigrant parents are more likely to be involved in their children's educational lives, especially when children enter primary school in most countries and economies that implemented the parent questionnaire. These relationships do not take into account the socio-economic background of immigrant and non-immigrant students. The only exception to this pattern is found in Qatar and, to some extent in non-academic home-based involvement in New Zealand.

107. Immigrant parents are less likely than non-immigrant parents to engage in educational activities with their child during the child's first year in primary school. On average across the participating countries and economies, immigrant parents are more than five percentage points less likely than non-

immigrant parents to report reading signs out loud, talking to their children about what they had done during the day, playing word games, talking about what the parent had read, reading books, telling stories, singing songs or writing letters and words. These differences are notable in Italy and Panama. In Italy, for example, immigrant parents are 20 percentage points less likely to have sung songs or told stories to their children; in Panama, immigrant parents are 26 percentage points less likely to have talked about what the parent had done during the day and 22 percentage points less likely to play word games than native parents. Only in Qatar did immigrant parents report greater levels of involvement with their primary school-age children than non-immigrant parents. In Lithuania, there are practically no differences in parental involvement in early childhood education between immigrant and non-immigrant parents (Figure 4.6, Tables 4.1a to 4.1i).

108. Non-immigrant parents are more likely to be involved in home-based activities. On average across the participating countries and economies, immigrant parents are nine percentage points less likely than non-immigrant parents to discuss political or social issues with their children. This difference is significantly negative in eight countries and economies, and is especially large in Italy (29 percentage points), Germany (19 percentage points) and Denmark and Hungary (16 percentage points); and in Qatar, the reverse is true. In eight countries and economies, immigrant parents are less likely than non-immigrant parents to discuss books, films or television programmes with their children, or just spend time talking with their children (Figure 4.7). In five countries and economies, immigrant parents are also less likely to discuss how the child is doing in school; while in Qatar, this group of parents is more likely to discuss these issues. In four countries and economies, immigrant parents are less likely than non-immigrant parents to help their children with homework; but they are more likely to do so in New Zealand, Germany and Croatia. In Lithuania, there are no statistically significant differences in these forms of involvement between immigrant and non-immigrant parents (Figure 4.9, Tables 4.2a to 4.2h).

109. Positive attitudes towards reading are more likely among non-immigrant parents than among immigrant parents in all countries and economies except Qatar and Lithuania. In six countries and economies, immigrant parents are less likely to spend time reading for enjoyment at home, with especially large differences in Germany and Denmark (17 percentage-point difference) and Italy (13 percentage-point difference). Non-immigrant parents are more likely to hold favourable attitudes towards reading, to consider reading a hobby, and to feel happy when receiving a book as a present (in four countries and economies). The consistent exception to this pattern is Qatar, where immigrant parents are more likely to spend time reading for enjoyment and hold favourable attitudes towards reading. In Lithuania and Hungary, there are only small differences in reading habits and attitudes between immigrant and non-immigrant parents (Figure 4.8, Tables 4.4a to 4.4e).

110. There are no consistent differences in the patterns of school-based involvement between immigrant and non-immigrant parents. Immigrant parents are no more likely than non-immigrant parents to attend meetings with teachers at either the teacher's or the parents' initiative in all but five countries and economies. Except for volunteering for extra-curricular activities, non-immigrant parents are equally likely as immigrant parents to volunteer for physical activities (except in Croatia, Italy, Portugal and Qatar), to volunteer in the library (except in six countries) or to be a guest speaker (except in Italy, Lithuania and Qatar). Non-immigrant parents are less likely than immigrant parents to volunteer for extra-curricular activities in six countries and economies (with more than a ten percentage-point difference in New Zealand), although they are more likely to volunteer for these activities in Italy and Qatar. In Italy, in general, immigrant parents are more likely than native parents to be involved in school-based activities (Figure 4.10, Tables 4.3a and 4.3b).

Differences in parental involvement by parent's gender

111. Most of the respondents to the parental questionnaire are mothers. Across countries and economies that administered the parental questionnaire in PISA 2009, mothers represent 71% of respondents while fathers represent only 19% of respondents (mothers and fathers completed the questionnaire together in 7% of cases, and in the rest, another household adult did). This finding alone reflects the higher level of involvement mothers have, whether this is due to looser time constrains for mothers, socialisation of mother and fathers into different gender roles within the family, or personal taste and preferences for different forms of involvement. Given that the majority of questionnaires were responded by mothers or fathers, the following analyses describe the differences in involvement between mothers and fathers.

112. Differences in the underlying propensity to respond to the parental questionnaire of mothers and fathers should be considered when exploring differences in involvement patters of mothers and fathers as fathers who chose to respond to the questionnaire may be particularly engaged fathers.[4] Mothers are more likely to report being involved in their children's education as they entered primary school in most countries and economies, and across different forms of involvement. On average, around 76% of mothers read books to their child, but only 67% of fathers do so, and mothers are more likely to be involved than fathers in all countries and economies that participated in the parental questionnaire, excluding Macao-China. Differences in the percentage of mothers and fathers that read a book with their child are largest in Korea, Italy and Portugal (where this difference is 17 percentage points in Korea and 14 percentage points in Italy and Portugal) while differences are around 9 percentage points, on average, across countries and economies. Differences in involvement are largest when examining whether mothers and fathers sing songs to their child and smallest when examining whether parents tell stories to their children where only in 9 out of 13 countries and economies maternal involvement is larger than paternal involvement (Figure 4.6, Table 4.5a).

113. Mothers are marginally more likely to have positive attitudes towards reading than fathers: across participating countries and economies, 78% of them consider reading a favourite hobby (against 70% of men), 83% feel happy when receiving a book as a present (against 78% of men) and 76% enjoy going to a library or a bookstore (for men this is 67%). Differences in attitudes between mothers and fathers are significant in many countries and economies, and in some countries and economies they are large: in Germany, 75% of mothers, but only 53% of fathers, consider reading a favourite hobby and 72% of mothers, but only 54% of fathers, enjoy going to a bookstore or a library. Differences are also large in New Zealand, where, for example, 84% of mothers, but only 67% of fathers, consider reading a favourite hobby. Mothers and fathers are not avid readers in most countries and economies: only in Germany, Denmark and New Zealand, over 50% of mothers read for enjoyment, while in most countries and economies only about a third of mothers and of fathers does the same (Figure 4.8, Table 4.5b).

114. On average, around half of mothers and fathers discuss political and social issues with their children, and few differences in this form of involvement emerge when comparing mothers and fathers: mothers are more involved than fathers in five countries and economies, fathers are more involved in Macao-China, and no differences emerge when comparing mothers and fathers' involvement in seven countries and economies. This form of engagement is shown to be consistently associated with all student

4 . The self-selection of fathers into the group that responded to the parental questionnaire whereby more involved fathers are observed in the data while less involved fathers are not, has the consequence of ***inflating paternal involvement rates***. Because of this, any differences we may observe between maternal and paternal involvement patterns represent a ***lower bound*** of actual differences in how involved mothers and fathers are.

reading outcomes – reading performance, enjoyment of reading, and awareness of effective summarising strategies (Figure 4.7).

115. Mothers are marginally, but consistently, more likely to be more involved than fathers in some forms of home-based involvement like discussing books, films or television programmes, talking with their children about what they are reading on their own, discussing how well their children are doing at school, and just spending time talking with their children (Figure 4.7, Table 4.5c). On the other hand, in eight countries and economies fathers are more likely to help their children with their homework than mothers, an activity that, in most countries and economies, and in most families, concerns help given to struggling students who have low levels of proficiency in reading. Finally, parent-gender differences in school-based involvement are few and quantitatively small. Figure 4.10 illustrates how mothers are more involved than fathers in some activities and in some countries and economies, while fathers are more involved in other activities in other countries and economies. One area where involvement patterns differ is discussing the child progress or behaviour with a teacher under the parent's own initiative or under teacher's initiative. In six countries and economies mothers are more likely to discuss the child's progress or behaviour under their own initiative, while the reverse is true only in Denmark and Qatar. On the other hand, mothers are more likely than fathers to discuss their child's behaviour under teachers' initiative in Hong Kong-China, Korea and Lithuania, while the opposite is true in Croatia, Italy, Macao-China, Panama and Qatar (Tables 4.5c and 4.5d).

Differences in parental involvement by family structure

116. Students that live in single-parent households are less likely to be proficient readers than students who live in other types of families (OECD, 2010b). While such differences stem from the fact that single-parent households are socio-economically disadvantaged compared to other families, even when the socio-economic condition is considered, students from single-parent households have lower performance in reading. Single-parent households are a growing reality: in PISA 2009, around 17% of students reported living in single-parent households across the OECD and in Trinidad and Tobago, the United States, Liechtenstein, Panama, Mexico, Argentina, Brazil, Finland, Colombia, Lithuania, New Zealand, Uruguay, Hungary, United Kingdom, Chile, Latvia, Russian Federation, Estonia, Kyrgyzstan, Peru and Kazakhstan, over 20% of students live in single-parent households (OECD, 2010b). One of the reasons why parents may be unable to be actively involved is because of lack of time and resources, and single parents are at a higher risk than other parents of facing problems to reconcile family and work.

117. Results presented in Figure 4.6 suggest that early childhood involvement does not vary much by family structure, possibly because PISA observes family structure when students are 15 and not in early childhood. On the other hand, single parents, who may have to face even more competing demands than dual family households to reconcile family and work, are less likely to discuss political and social issues than dual family parents in 11 out of 13 countries and economies, are less likely to eat the main meal with their children around the table in all countries and economies but Croatia, are less likely to spend time just talking with their children in eight countries and economies, and are less likely to discuss how well their children are doing at school in 10 countries and economies (Figures 4.7 and 4.9). In almost all countries and economies, the differences in home-based parental involvement are quantitatively small (only in Korea the difference is 11 percentage points for parents who discuss how well their children are doing at school). However, the pervasiveness of differences that can be observed between dual and single-parent household suggest that single parents struggle to find the time and the opportunities to have meaningful involvement with their children at home (Tables 4.6a and 4.6b).

118. Few differences are observed in school-based involvement between dual and single-parent households. In several countries and economies, students who live in single-parent households are more likely to have parents who discuss the students' progress or behaviour with their teacher, whether through

the parent's or the teacher's initiative. Such levels of involvement among single parents may be due to the fact that students who live in single-parent households tend to have lower performance in reading (OECD, 2010b). Discussing the child's progress or behaviour with teachers may be a way for parents and teachers to act upon poor academic results (Figure 4.10).

Differences in parental involvement by school characteristics

119. PISA has long documented that student performance not only depends on the socio-economic background of the family of origin, but also on the average socio-economic intake of the school students attend (OECD, 2010b; OECD, 2010c). Because of the strong association between socio-economic background and student performance, students who are in schools with a socio-economically advantaged intake may have positive peer influences and, as teachers are less likely to have students that lag behind, students attending socio-economically advantaged schools may have more opportunities to advance at a faster pace and to receive help when they need it. Previous sections of this chapter indicate that socio-economically advantaged parents are, in general, more likely to have high levels of involvement. Therefore, students who attend socio-economically advantaged schools may be part of a culture that contributes to high levels of involvement, as parents face greater pressure from other parents and teachers to be involved (Ho and Willms, 1996). As advantaged schools have, on average, fewer academic achievement related problems and have parents that are generally keen to involvement, they may also be the schools that make the most efforts to support greater parental involvement.

120. When controlling for the socio-economic background of individual students, the parents of students who attend socio-economically advantaged schools tend to have lower levels of school-based involvement than parents of students that attend socio-economically disadvantaged schools. They have fewer meetings with the student's teacher, whether such meeting was organised by the parent or by the teacher; they are less likely to volunteer in physical activities, to assist a teacher in school, to appear as a guest speaker and to participate in local school governments (Figure 4.10, Table 4.7a).

121. However, students who attend socio-economically advantaged schools have parents that have much higher rates of home-based involvement, even after accounting for the socio-economic background of their own family (Figure 4.7, Table 4.7b). The parents of students who attend socio-economically advantaged schools are more likely than comparable parents who have children who attend socio-economically disadvantaged schools to discuss political and social issues with them in all countries and economies that administered the parental questionnaire, except for New Zealand and Panama. The association is not only common, but it is also quantitatively important: in four countries, such association equals at least ten percentage points. The parents of students that attend socio-economically advantaged schools are also more likely to discuss books, films or television programmes than other parents in seven countries and economies, although the association is quantitatively small in most countries and economies. Possibly because of the lower overall performance of students in socio-economically disadvantaged schools, parents who have children in those schools are more likely to be involved in ways that directly relate to school performance by helping their children with homework. This is in fact the case in all countries and economies except for Panama and Macao-China. Interestingly, another factor that is negatively associated with school level socio-economic condition is whether parents talk with their children about what they are reading on their own: only in Italy, Qatar, Denmark and Hong-Kong China is there a positive or no difference between levels of this form of involvement by school's socio-economic background.

122. Table 4.7c illustrates differences by selected school characteristics in the extent to which parents of students attending different types of schools discuss political or social issues with them, or discuss books, films or television programmes with them – two key forms of home-based involvement. In eight countries and economies, parents who have students attending schools that face constant level of pressure

from many parents to set very high academic standards and to have students achieve them, are more likely than parents of students who do not attend those schools to discuss political or social issues with their children. However, such differences are exclusively due to the fact that such parents and such schools are more likely to be socio-economically advantaged. Most importantly, as shown in Table 4.7c, school characteristics that were measured in PISA 2009 do not help to explain different rates of involvement among parents. These characteristics include whether one of the admission criteria is parental endorsement of the instructional and religious philosophy of the school, or whether parent groups have a direct influence on decision making about instructional content. While Table 4.7c presents a range of results, calculations were made on all indicators of home based involvement and a wide range of school characteristics, and no interesting patterns emerged from such analyses, indicating that parents' levels of parental involvement are not related to school's characteristics other than the school's socio-economic background.

CHAPTER 5
PARENTAL INVOLVEMENT AND GAPS IN COGNITIVE AND NON-COGNITIVE SKILLS

123. PISA studies find that students from socio-economically advantaged backgrounds have, on average, better scores in reading, higher levels of enjoyment of reading, and are more likely to identify effective summarising strategies. This relationship between socio-economic status and performance and non-cognitive outcomes is observed in practically all countries and economies. PISA also finds that girls outperform boys in reading in all countries and economies, and that students with an immigrant background usually do not perform as well as students without an immigrant background. In most countries and economies, girls and native students are more likely to enjoy reading and are more likely to identify effective reading strategies than boys and immigrant students, respectively (OECD, 2010b; OECD, 2001; OECD, 2004; OECD, 2007; OECD, 2010d).

124. These background characteristics can be the source of inequities in cognitive and non-cognitive skills. On average among PISA-participating OECD countries, students from advantaged backgrounds outperform their disadvantaged peers by 30 score points. In New Zealand and Hungary, for example, disadvantaged students are expected to perform over 34 score points lower in reading than advantaged students.[5] On average in OECD countries, girls score 39 points higher in reading than boys, the equivalent of around one full year of schooling. In Qatar and Italy, girls are expected to outperform boys by over 45 score points in reading. On average across OECD countries, immigrant students are expected to score 43 points lower than non-immigrant students and these differences are greater than 50 score points in Italy, Germany and Denmark – the equivalent of well over one year of schooling (OECD, 2010b; OECD, 2010d).

125. Previous research suggests that not all parents are equally involved in their children's school lives, and that these differences are related to socio-economic background and the gender of the child (Ho and Willms, 1996; Ho, 2006; Pomerantz, Moorman *et al*., 2007; Lee and Bowen, 2006; US Department of Education, 2006; Guérin and Gouyon, 2006). Consistent with these findings, Chapter 4 notes that patterns of parental involvement differ mostly according to the socio-economic status of parents, but that to some extent, they also differ according to immigrant background. For certain types of activities, parental involvement also differs according to the students' gender. For example, socio-economically advantaged parents are more likely to be involved when children are entering primary school, more likely to hold positive attitudes towards books and reading, and more likely to be involved in non-academic activities that are, in turn, related to better performance and better non-cognitive skills, as seen in Chapter 3. Similarly, non-immigrant parents are more likely to have been involved in their child's early education, and all parents are more likely to have sung to their young daughters than to their young sons.

126. Does parental involvement mediate the differences in performance and non-cognitive outcomes related to socio-economic status, gender or immigrant background? In other words, do advantaged students perform better because their parents are, on average, more involved? Do girls outperform boys in reading performance because they are more receptive to their parents' involvement and are better able to take

5. The slopes of the socio-economic gradient for the OECD average, New Zealand, Hungary and Germany are 38, 52, 48 and 44 score points, respectively. In this report, advantaged and disadvantaged students are those at the top and bottom thirds of the within-country distribution of the *PISA index of economic, social and cultural status* (ESCS). Assuming a normal distribution of ESCS in each country, with the standard deviations reported in Table II.3.2 of Volume II in the PISA 2009 Report, the difference between the top and bottom thirds of ESCS is equivalent to 0.78, 0.68, 0.84 and 0.77 points in the ESCS scale for the OECD average, New Zealand, Hungary and Germany, respectively.

advantage of it? Do immigrant students have lower reading scores because their parents are less involved in their education?

127. This chapter seeks to answer these questions by examining the relationship between differences in cognitive and non-cognitive skills and parental involvement. It recognises that these differences can be related to parental involvement in two ways: *composition* and *differential strength*.

128. Parental involvement can contribute to performance gaps through *composition* if parental involvement is positively associated with performance and the parents of students in the groups with better performance are more likely to be involved than other parents. That is, for example, if high socio-economic status parents are more likely to be involved and involvement is beneficial to performance, parental involvement will explain the performance advantage of high socio-economic status students because of *composition.* The important thing to bear in mind is that if involvement works through composition, all students can benefit equally from parental involvement.

129. Parental involvement can also contribute to gaps in performance and non-cognitive skills through *differential strength* if parental involvement is more beneficial to certain groups of students. Thus, for example, even though the parents of boys and girls may be equally involved, girls can benefit more than boys from equal amounts of parental involvement. In this example, *differential strength* of parental involvement would explain the gender gap in reading performance in favour of girls, even though the levels of involvement for boys and girls are equal.

130. Parental involvement may lead to inequalities in performance through *differential strength* because of two mechanisms. First, certain children (*e.g.,* girls) may be more receptive to their parents' involvement and/or are better able to translate their parents' involvement into improved cognitive and non-cognitive outcomes. Second, some parents may be more effective in their involvement, such as parents who read to their children in the language of the PISA test, as opposed to another language.

131. This framework for understanding the relationship between parental involvement and differences in performance and non-cognitive outcomes has important policy implications. If differences in performance and non-cognitive outcomes are related to parental involvement through *composition*, then policies that seek to improve student outcomes should focus on increasing the forms of parental involvement that matter most, across the board, but especially among those parents who are least involved. If, on the other hand, parental involvement is a source of performance differences because of *differential strength*, then getting all parents involved will not necessarily narrow performance gaps and will not necessarily improve the performance of all students because some students will still benefit more from equal amounts of involvement than others. In the context of *differential strength*, policies should not only increase the level of parental involvement, but also focus on how involvement is manifested and on the environment in which such involvement takes place so that those conditions that are most beneficial can be supported.

132. The mediating effects of parental involvement are evaluated by examining the degree to which the observed total difference in student outcomes by group (*e.g.,* gender, socio-economic status or immigrant background) changes when parental involvement and the interaction between background variable and parental involvement are entered into the regression model. More specifically, three models are specified:

$$read_{ijk} = \beta_{0k} + \beta_{1k}\, group_{ijk} + \varepsilon_{ijk} \quad (1)$$

$$read_{ijk} = \beta_{0k} + \beta_{1k}\, group_{ijk} + \beta_{2k}\, invol_{ijk} + \varepsilon_{ijk} \quad (2)$$

$$read_{ijk} = \beta_{0k} + \beta_{1k}\ group_{ijk} + \beta_{2k}\ invol_{ijk} + \beta_{2k}\ invol_{ijk}*group_{ijk} + \varepsilon_{ijk} \quad (3)$$

133. Where *ijk* is the identifier for student *i* in school *j* in country or economy *k*; *group* is a dichotomous variable indicating whether the student is a high- or low- socioeconomic status student, a girl or boy, or has or does not have an immigrant background, depending on the analysis; and *invol* is a dichotomous variable indicating whether the parents of the respective student are involved. Models for students with an immigrant background additionally control for students' socio-economic background.

134. The difference between the estimate for β_{1k} in model (1) and model (2) measures the mediation through *composition*. The estimate for β_{1k} in model (1) is the gross difference in reading achievement across student background characteristics (high- and low socio-economic students, or girls and boys, or students with and without an immigrant background). The estimate for β_{1k} in model (2) is the difference in reading achievement between the groups after adjusting for parental involvement. Thus, the difference between the estimate for β_{1k} in model (1) and model (2) signals the mediation of *composition* because the adjusted difference is the average difference between students of high- and low-socio-economic status that have similar levels of parental involvement. Similarly, the difference between the estimate for β_{1k} in model (2) and model (3) measures the mediation through *differential strength* because model (3) adjusts for differences in the strength of the background characteristics by whether parents are involved or not.

135. This chapter focuses on three forms of parental involvement that showed the strongest relationship to student outcomes in Chapter 3: reading books to a child when the child was in the first year of primary school; discussing political or social issues with their 15-year-old child; and reading for enjoyment at home.

Parental involvement and differences in performance and non-cognitive skills related to students' socio-economic background

136. The academic literature has long recognised that parenting and forms of involvement may be one of the channels through which performance gaps related to socio-economic background develop. Although parents from all socio-economic levels recognise the importance of education, parents in advantaged families are more likely to be actively involved in their children's education, forming the successful partnerships with schools and teachers that mostly benefit student performance. Advantaged parents are also more likely to be involved in those forms of involvement that are most beneficial for students. Studies on parental involvement in the United States do not generally find that involvement is more beneficial for a particular socio-economic status group. The specialised literature thus finds that any mediating effect of parental involvement on performance differences related to socio-economic inequities is related to *composition*, not to *differential strength*. Moreover, studies in the United States suggest that between 20% and 30% of the performance gap attributed to socio-economic background can be explained by the mediation of concerted cultivation, a form of parenting and parental involvement that is more prevalent among advantaged parents (Ho and Willms, 1996; Ho, 2006; Jr., 1999; Lee and Bowen, 2006; Cheadle, 2008; Lareau, 2000; Lareau, 2003; Cheadle, 2009). The limited cross-national research on parental involvement suggests that the relationship between parental involvement and student outcomes varies in strength across school systems (Hyunjoon Park, 2008; Oswald, Baker *et al*.; 1988).

137. Most studies that assess whether and how parental involvement influences differences in cognitive and non-cognitive skills attributed to socio-economic background focus on specific national contexts. Using data from the PISA parent and student questionnaires, this section analyses parental involvement and whether (and how) it shapes differences in student outcomes in diverse contexts. Parental involvement – or the lack of it – is one of the reasons why socio-economically disadvantaged students have poorer outcomes. However, the degree to which parental involvement mediates socio-economic inequities

varies across countries and economies. In Macao-China, Qatar, New Zealand and Portugal, socio-economic inequities are largely explained by the composition and differential strength of parental involvement. In these countries and economies, the three forms of involvement explain over 15% of the relationship between socio-economic status and reading performance. In Qatar and Portugal, parental involvement also explains a relatively large share of the differences in enjoyment of reading and students' awareness of effective summarising strategies that are related to socio-economic background. Relatively little of the performance difference between advantaged and disadvantaged students is explained by the composition and differential strength of parental involvement in Korea, Hungary, Germany and Lithuania. In Korea and Lithuania, these forms of parental involvement are also weakly associated with differences in enjoyment of reading and awareness of effective summarising strategies that are related to socio-economic background.

138. Only in a few countries and economies is the mediating effect of parental involvement on differences in reading performance related to socio-economic background attributable to the level of parental involvement (*i.e.* composition). In most countries and economies, this mediating effect seems to occur because advantaged students reap greater benefits from parental involvement than disadvantaged students (*i.e.* differential strength). Thus, the type and degree of mediation varies by national contexts, consistent with the small, cross-context evidence on the subject.

139. In the countries and economies where composition of parental involvement is most associated with mediating inequalities, improving the levels of the most beneficial forms of parental involvement among less-involved parents is an effective way of improving the socio-economic equity of a school system. In contrast, in the countries and economies where differential strength is the determinant, greater involvement by disadvantaged parents will only reduce gaps in performance and outcomes if involvement is effective and if students are as receptive to such involvement as their advantaged peers. In some particular cases (notably Panama), parental involvement already helps to reduce socio-economic disparities in student outcomes.

140. Better-educated parents and parents who have more control in their working lives are generally more likely to be receptive to initiatives aimed at increasing direct parental involvement in their children's lives. Therefore, policies that do not make special efforts to increase awareness of the importance of parental involvement among all parents, and policies that do not put in place the conditions necessary so that all parents can become involved, and are involved in those activities that are most beneficial, may inadvertently increase disparities in student outcomes related to socio-economic background by increasing involvement among those who are already highly involved.

141. As seen in Chapter 4, advantaged parents are more likely to be involved in all five forms of involvement analysed in that chapter. In particular, these parents are more likely to have read to their children when they were entering primary school (in 12 of 13 countries and economies); they are also more likely to have talked with their children about what they had done during the day when their child was entering primary school; and they are more likely to discuss political or social issues with their 15-year-old child, just spend time talking to the child, and spend time reading for enjoyment at home (in all 13 countries and economies). These forms of involvement are related to performance and non-cognitive outcomes in the majority of countries and economies, signalling that they may explain the relationship between differences in student outcomes related to socio-economic background by composition. That is, if advantaged parents are more likely to be involved, and these forms of involvement are related to student outcomes, part of advantaged students' better performance will be attributable to the fact that their parents are more involved in their educational lives.

142. This is, in fact, observed in Figure 5.1 and Table 5.1a. In most countries and economies, a relevant (albeit not the most important) part of the gaps in reading performance related to socio-economic

background is explained by the fact that advantaged parents are more likely to be involved. In Portugal and Italy, for example, 10% of the observed difference in performance between advantaged and disadvantaged students is accounted for by the fact that advantaged parents are more likely to discuss social or political issues with their children. Also in Portugal and Italy, as well as in Macao-China, more than 8% of the observed performance difference between advantaged and disadvantaged students is accounted for by the fact that advantaged parents are more likely to read at home for enjoyment. In Portugal and Italy, the composition of involvement in home-based activities and parents' own reading habits and engagement also accounts for a relatively large part of the gaps in enjoyment of reading and students' awareness of effective summarising strategies that are related to socio-economic status.

143. Yet another – and in most cases, more important – part of the performance gap related to socio-economic background is explained by the fact that advantaged students benefit more from parental involvement. The differential strength of parental involvement across socio-economic backgrounds may also be because advantaged parents are better able to be involved in ways that are meaningful and effective for their children, even in the same broad forms of involvement discussed in this working paper. Unfortunately, PISA data cannot disentangle the reasons behind the observed differential strength in involvement.

144. Around 12% of the observed difference in reading performance between advantaged and disadvantaged students is accounted for by the fact that advantaged students benefit more than disadvantaged students from having their parents read to them when they entered primary school, even if the level of involvement was the same. Advantaged students in Macao-China, Qatar, New Zealand, Portugal and Denmark, for example, are particularly more likely to have higher reading scores associated with this form of involvement than disadvantaged students, even if both groups of parents are similarly involved. Other findings support the notion that the differential strength of parental involvement accounts for part of the differences in enjoyment of reading and students' awareness of effective summarising strategies that are related to socio-economic background.

145. In specific contexts and for particular forms of involvement, the estimates in Figure 5.1 and in Tables 5.1a to 5.1c signal that composition and differential strength of parental involvement account for a *negative* portion of the gaps in reading performance and non-cognitive outcomes related to socio-economic background. This finding is observed in Panama for reading performance, enjoyment of reading and awareness of effective summarising strategies. It suggests that parental involvement in Panama (especially reading books to children in the first year of primary school) is actually compensating for the expected differences in performance and non-cognitive skills linked to socio-economic background. In Panama, certain forms of parental involvement are more common among disadvantaged students (as observed in Chapter 4), and these students may be more likely to reap the benefits of parental involvement. A similar compensatory trend is observed in Croatia for enjoyment of reading among students whose parents read books to them during their first year of primary school.

146. This cross-national evidence suggests that countries and economies vary in terms of the degree to which parental involvement mediates the gaps in performance and non-cognitive outcomes related to socio-economic background. In all countries and economies, a large part of the observed differences in reading performance related to socio-economic background is accounted for by different forms of parental involvement; but this mediating effect is stronger in Qatar, Portugal and Macao-China, and relatively weak in Korea and Lithuania. Countries and economies vary, however, with respect to the relative importance of composition or differential strength in explaining this variation, while differential strength seems to drive a larger portion of the mediation in most countries and economies.

147. This information signals that in some contexts, parental involvement may be a useful policy lever to reduce gaps in performance and non-cognitive outcomes related to socio-economic background. In

countries and economies where a large part of the observed difference in student outcomes by socio-economic status is accounted for by different forms of parental involvement, encouraging parental involvement among disadvantaged families may reduce these gaps. Yet simply promoting involvement among disadvantaged families will reap greater benefits if policies also aim to improve students' receptivity to these forms of parental involvement.

Parental involvement and gender gaps in performance and non-cognitive skills

148. In every PISA-participating country and economy, girls outperform boys in reading (OECD, 2010d). Girls are also more likely to enjoy reading and, in all but three countries, girls are also more likely to identify effective summarising strategies (OECD, 2010a). Chapter 3 showed that many of these outcomes are related to forms of parental involvement that help children recognise the value of language and engage in complex conversations, and that create an environment of personal interest that also values reading. In Chapter 4, results showed that except for a few forms of involvement in a few countries and economies, parents show the same level of involvement, regardless of whether their child is a girl or boy. In general, any differences in parental involvement according to the child's gender do not exceed five percentage points. Parents of girls and boys tend to be equally involved in their children's educational lives so parental involvement cannot mediate gender differences in reading performance by composition (*i.e.*, because parents are more involved with girls than boys). Yet parental involvement may still mediate the observed difference in performance and non-cognitive outcomes through differential strengths; that is, mediation may occur because girls benefit more from parental involvement than boys.

149. PISA data shows that in some cases, girls and boys benefit from parental involvement in different ways. Depending on the country or economy, boys may actually benefit more from parental involvement than girls. In these countries, parental involvement actually compensates for differences in performance between boys and girls. In Qatar, Lithuania and Hungary, boys seem to benefit more than girls from early childhood involvement. In Hungary, for example, the gender gap in performance would increase by more than four score points if girls and boys benefitted equally from their parents' involvement in their early childhood. Similarly, in Denmark, Portugal and Qatar, discussing political or social issues with their parents actually helps to improve reading scores among 15-year-old boys (Figure 5.1, Table 5.2a).

150. On the other hand, in Germany and Panama, for example, girls seem to benefit more from equal forms of parental involvement. In these two countries, around 20% of the gender gap in reading performance is accounted for by the fact that girls benefitted more than boys from having been read to by their parents during their first year in primary school. The observed gender gap in reading performance in Germany is 39 score points; however it would be 31 score points if girls and boys reaped the same benefits from parental involvement (Figure 5.1, Table 5.2a).

151. For enjoyment of reading and students' awareness of reading strategies, there is some evidence that the differential strength of parental involvement accounts for part of the gender gap in non-cognitive outcomes, and there is also evidence in some countries that parental involvement may, in fact, help to narrow those gender gaps (Tables 5.2b and Table 5.2c).

152. As a result, policies that promote overall improvements in parental involvement will, depending on the school system, reduce gender gaps in reading performance and non-cognitive skills when boys reap more benefits from that involvement – and if that greater involvement is targeted specifically at boys.

Parental involvement and performance gaps related to immigrant background

153. Chapter 4 noted that parents of immigrant students are less likely to be involved in their child's education. In eight countries and economies, for example, immigrant parents are less likely to have talked

with their young children about what they had done during the day. In seven countries and economies, immigrant parents are less likely to discuss political or social issues with their 15-year-old children, and in six countries and economies, immigrant parents are less likely to spend time at home reading for enjoyment. Findings in Chapter 4 also suggest that more advantaged parents were more likely to be involved in the child's education; and findings from PISA suggest that in many countries and economies, immigrant parents are also more likely to be socio-economically disadvantaged (OECD, 2010b). Do the differences in parental involvement related to immigrant background solely reflect differences in the socio-economic backgrounds of immigrant students? Does parental involvement mediate gaps in performance and non-cognitive outcomes related to immigrant background after accounting for the family's socio-economic status?

154. In 6 of the 13 countries and economies that implemented the parental questionnaire, immigrant students had lower scores than native students.[6] This disadvantage is moderated after accounting for socio-economic background, signalling that part of the difference in performance is related to the fact that immigrant students tend to be socio-economically disadvantaged; but immigrant students still show poorer performance even after accounting for socio-economic background. This is the case in Germany, Denmark and Italy. Only in Croatia do students from similar socio-economic backgrounds attain similar scores in reading, regardless of whether or not they have an immigrant background. In Germany, Denmark, Italy, Lithuania and Portugal, students with an immigrant background still have lower scores than native students, even if both groups are from similar socio-economic backgrounds. Moreover, in Germany and Italy, students with an immigrant background are also less aware of effective summarising strategies after accounting for socio-economic background. In no country or economy do students with an immigrant background show lower levels of enjoyment of reading after accounting for socio-economic status (Figure 5.1, Tables 5.3a to 5.3c).

155. Given that disadvantages in reading performance associated with immigrant background after accounting for socio-economic status are observed in Germany, Denmark, Italy, Lithuania and Portugal, the following analyses focus on the potential mediating effects of parental involvement in these countries.

156. Parental involvement when children are entering primary school accounts for a large part of the gap in reading performance between students with and without an immigrant background. This mediation is mainly in the form of differential effects, meaning that even if parents from both groups were equally involved, students with an immigrant background would still be at a disadvantage because they seem to benefit less from their parents' involvement than non-immigrant students. Such is the case in Germany and Denmark. In Portugal, reading books to children during their first year of primary school seems to have compensatory effects: immigrant students who were expected to perform poorly because of that background in fact had scores similar to non-immigrant students because of their parents' involvement.

[FIGURE 5.1 AROUND HERE]

6. In Qatar and Macao-China, students with an immigrant background show better reading performance than students with no immigrant background. In New Zealand, students with an immigrant background have statistically significantly lower reading scores than students with no immigrant background (OECD, 2010b). The tables in this report show that there is no statistically significant difference in performance between students with and without an immigrant background in New Zealand (Table 5.3a). For a more detailed comparison of the whole PISA sample and that of students who have valid answers on the parental involvement questions, see Annex 1 and Table A2.1.

CONCLUSIONS AND POLICY IMPLICATIONS

157. Most parents know, instinctively, that spending more time with their children and being actively involved in their education will give their children a good head-start in life. But since most parents have to juggle competing demands at work and at home, there never seems to be enough time. Sometimes, too, parents are reluctant to offer to help their children with school work because they feel ill-equipped to do so or believe that they should not interfere with what the school should do. They may fear that they've forgotten what they had learned as students; or they worry that they had never studied the subjects their children are now studying and so can be of no real help.

158. PISA results show that it does not require a PhD or unlimited hours for parents to make a difference in their children's education. In fact, many parent-child activities that are associated with better reading performance among students involve relatively little time and no specialised knowledge. What these activities do demand, though, is genuine interest and active engagement.

159. In 2009, countries that participated in PISA were offered a questionnaire to be filled out by the parents of students who took the PISA test. Fourteen countries and economies disseminated the parental questionnaire, although one, Poland, did not ask the questions related to parental involvement. The questionnaire was distributed in Denmark, Germany, Hungary, Italy, Korea, New Zealand and Portugal, among OECD countries, and in Croatia, Hong Kong-China, Lithuania, Macao-China, Panama and Qatar. It was also distributed in Poland, but the Polish version did not include the questions on parental involvement.

160. After examining information about parental involvement that occurs on school premises – such as participating in school meetings, talking with teachers, attending school events and volunteering in school – and involvement that occurs at home – such as helping with homework, discussing school projects, talking generally about school events, and taking children to libraries –, PISA found that certain activities were more strongly related than others to better student performance, greater enjoyment of reading and greater awareness of effective summarising strategies. These forms of involvement include reading books to children when they are beginning primary school, and discussing political or social issues with adolescents. Even just reading at home benefits children, because it shows them that reading is something that their parents value.

161. The academic literature on parental involvement shows that children whose parents are involved in their education in these ways are more receptive to language; they are also more adept at planning, setting goals, initiating and following-through in their studies and individual projects. Children who have mastered these metacognitive skills have, essentially, learned how to learn – and that will help them not only during their years in education, but throughout the rest of their lives.

Which types of involvement matter most?

162. Children benefit from their parents' involvement and their parents' engagement with reading at any age: when they are adolescents, when they enter schooling and even before as they acquire language and learn how to speak. Moreover, many of the benefits of involvement do not fade out with time because early involvement sets the stage for further parental involvement, and the skills and values that involvement confers to children last a lifetime. While *it is never too early for parents to be involved*, it is also true that *it is never too late*, as children benefit from involvement at each and every stage of their lives.

163. Given that children's educational lives involve events that take place both in school and beyond, parents can be involved in many ways in their children's education. Certain involved parents may focus on the relationship with school events and attend parent-teacher meetings, volunteer in extra-curricular activities or help their children with homework. But children's educational lives go beyond what happens in school and parents can also be involved in their children's education by highlighting the value of learning, reading and education, and motivating their children's reading, language and thinking skills. More concretely, as evaluated by PISA studies, these activities include parents reading to children when they are young, talking to them about complex issues, or by setting the example and reading themselves at home.

164. Notwithstanding the many ways in which parents can be involved, not all types of involvement are equally beneficial for students. Understanding which types of involvement are the most beneficial for students allows parents, teachers, schools and governments to promote those forms of involvement that show a stronger link to student learning. PISA studies find that the forms of involvement that are most beneficial are not necessarily those that require the most time or money by the part of parents; they are those that make salient the value of school and reading, as well as those that highlight the value of words and language in contexts, motivating children to chunk information and communicate about complex issues.

Reading books to young children

165. At any age, children's reading abilities and enjoyment of reading benefit from parental involvement, particularly those forms that underscore the value of reading and highlight the role of language and motivating children to think and communicate about complex issues. Studies show that parents who speak more to their children before their first birthday are more likely to have a better vocabulary when they grow up and are, consequently, better prepared when they enter school (Corsaro and Fingerson, 2006; Hart and Risley, 1995). PISA results show that 15-year-old students with parents who read to them when they entered primary school show better educational standing when compared to children that were not read to. The benefits of parental involvement at an early age endure as children grow and advance in their educational career because of the valuable skills it confers to children, but also because it creates a habit and a partnership of involvement between parents, children and schools. More concretely, in many of the PISA countries and economies where PISA evaluated parental involvement when children were in their first year of primary school, these children show better reading performance, greater enjoyment of reading and, to a lesser extent, greater awareness of how to summarise complex texts nine years later, when they are 15 years old. Reading books to children when they are young is an effective way – and not overly time-consuming or resource-demanding – for parents to be involved in their children's education because it helps children understand words in context and highlights the value of reading from an early age.

Discussing complex issues with children

166. As children become adolescents, parental involvement is still beneficial for students, especially when this involvement motivates students to think and talk about complex issues, or when they highlight the value of reading and schools, and engage what they learn in school with what happens in life. In practically all countries and economies, children of parents who talk to them about complex social or political issues have better reading performance, show greater enjoyment of reading and awareness of effective summarising strategies when compared to children of parents who do not discuss these issues with their parents. This is because discussing social or political issues motivates students to draw on information, make connections, summarise and communicate ideas effectively.

Setting the example: Parents that read themselves for enjoyment

167. Parents' own engagement with reading, even though it is not a form of direct involvement in their children's educational lives, sets the example for their children. It shows that parents value and enjoy reading and, as a result, children are more likely to value and enjoy reading, have better reading performance, and read themselves. PISA results show that, in most countries and economies, children of parents who value reading and read themselves at home are more likely to have higher performance in reading and are more likely to enjoy reading when compared to children of parents who do not read at home for enjoyment or do not value reading.

Meeting with teachers, volunteering at school and helping with homework

168. Parents can also promote their children's educational progress by participating in school-related activities. These activities include meeting with teachers, volunteering in school activities, helping children with homework and just talking about how the child is doing in school. By participating in this way, parents send the signal to their children that school is important, gather important information about how the child is doing in school to guide opportunities for progress, signal teachers that they care about how their child is doing in school and provide important knowledge to the children themselves. Studies in the field signal that involvement in school-related activities – just like other forms of involvement – benefit students' achievement and engagement in school (Pomerantz, Moorman *et al*., 2007; Hill and Tyson, 2009). Yet other studies also find that students whose parents go to parent-teacher meetings and help them with homework have *lower* performance, only because parents are helping those students that need it most (Ho and Willms, 1996). In the same way, PISA results show that in practically all countries and economies, parents of low-performing students are more likely to meet with teachers and volunteer in extra-curricular school activities. This means, most likely, that schools are waiting until students begin to struggle to meet with the parents, and parents are waiting until their children are struggling to take an active role in their schooling. These *reactive* forms of involvement are probably successful (unless they stigmatise the struggling students), but would be more successful had they begun *before* children struggle and if they engage all parents alike. Teachers and schools can take the initiative to engage parents in school activities and in smooth communication by offering diverse and frequent avenues for communication and activities.

Who is involved?

169. Most parents want the best for their children and seek the best education for them. As a result, practically all parents in the PISA countries and economies that measured parental involvement are involved in some way in their children's educational lives. Almost all parents, for example, eat dinner around a table with their children, simply spend time talking to their children or ask them about how they are doing in school. The great majority of parents engaged in activities involving words with their children when they were young. Also, the great majority of parents recognise the value and importance of reading, even though fewer than half read regularly at home for enjoyment.

170. For other forms of involvement and for many different reasons, not all parents are involved in their children's educational lives. Moreover, only some parents engage in their children's education in the ways that show the greatest benefits.

171. Just at it is important to know which forms of involvement promote students' reading performance, reading enjoyment and knowledge of which strategies are most effective, teachers, schools and governments ought to take into account which parents are involved in order to cater efforts to increase the involvement of parents who are not involved. In general, different parents have different expectations,

different needs and are involved in different ways, so efforts to improve parental involvement should take into account parents' diversity (Smit, Driessen *et al*., 2007; Zenhas, 2008).

172. For those forms of involvement that show the strongest association with children's performance at 15 years of age, socio-economically disadvantaged parents are less likely to be involved. On average, three quarters of parents reported reading books to their children. However, within each country and economy, socio-economically advantaged parents are more likely to have read to their children when they were entering primary school, partly explaining socio-economic differences in reading performance. PISA results also show that socio-economic differences in reading performance related to parental involvement also result from the fact that high-status students may benefit *more* from *equal* forms and amount of involvement.

173. Children who discuss complex topics – like social or political issues – with their parents are better readers, enjoy reading more and are better able to identify successful strategies to summarise complex information. If this is the case, as PISA studies suggest, then teachers, schools and governments should reflect on how to motivate parents to find ways to discuss these issues with their children, particularly among those parents that do not engage in these kinds of discussions. On average across the countries that measured parental involvement, about half of the parents reported that they discuss social or political issues with their children. Within each country and economy, advantaged parents are more likely to engage in these discussions with their children. Similarly, parents of students in advantaged *schools* are more likely to discuss these issues than parents in disadvantaged *schools* even if these parents have similar backgrounds themselves. The fact that socio-economically advantaged parents are more likely to engage in these conversations partly explains the fact that socio-economically advantaged students have better scores in reading when compared to less advantaged students. But because most of the difference in reading performance between advantaged and disadvantaged students remains among advantaged and disadvantaged parents who *do* discuss these issues, it seems that advantaged students benefit *more* from these types of discussions than disadvantaged students.

174. What parents do can benefit students even if they are not voluntarily doing anything directly related to their child's education. This is because what parents do sets an example for what is valued in the household. Thus, if parents themselves value reading, children are more likely to think that reading is important themselves. Y*et al*though practically all parents find reading important, few parents actually read for enjoyment at home. On average across the PISA countries and economies that measured parental involvement, only 4 out of 10 parents regularly read at home for enjoyment. In all countries and economies, the parents that read at home for enjoyment are more likely to be socio-economically advantaged, and this explains, in part, the differences in reading performance of students with and advantaged and disadvantaged background.

175. Parental involvement in school – whether meeting with teachers, volunteering in school activities or helping their children with homework – benefits students (Pomerantz, Moorman *et al*., 2007; Hill and Tyson 2009). Yet because in the PISA countries and economies that measured parental involvement, parents tend to attend (or schools tend to call parents to attend) when children are struggling, it is the parents of the struggling students that are more likely to attend meetings with teachers, volunteer in extra-curricular activities and help children with homework. As a result, in many countries, socio-economically disadvantaged parents and parents of boys are more likely to be involved in school-related activities.

Policy implications

176. As PISA and many other studies indicate, students show a better ability to read and learn when their parents are involved in their education and when the parents themselves value reading. In this sense,

student learning is most effective when it is the result of a partnership between the school, teachers, parents and the community (Epstein, 1995).

177. Teachers, schools and governments can improve the performance of their students by motivating all parents to read to their children when they are young, especially socio-economically disadvantaged parents who are less likely to engage in these activities. This involves, in a first stage, ensuring that households – particularly those of disadvantaged students – have books in the house that are suitable for children to read with their parents. Ensuring that there are books that are interesting for adults can also promote positive student outcomes, as students also respond to the examples set by adults. Thus, teachers, schools and governments have an opportunity to increase parental involvement by promoting that parents read to children, and also to promote parents reading themselves for enjoyment. This is true for all parents but applies especially to fathers, as they are less likely than mothers to have read to children when they were young or read at home for enjoyment.

178. In promoting the discussion of complex topics – like political or social issues –, teachers, schools and governments have an opportunity to increase parental involvement in ways that improve students' reading performance, their enjoyment of reading and their ability to summarise information. Because around half of parents do not engage in these discussions, teachers, schools and governments have an opportunity to motivate parents to take part in these conversations with their children, allow them to form an informed opinion and probably to enjoy reading, read better and process information in ways that are more conducive to learning. Most importantly, though, teachers, schools and governments have the opportunity to motivate disadvantaged parents – and parents in disadvantaged schools – to engage in these conversation (because they are the least likely to do so) and to do it in ways that are most effective for students' learning and reading enjoyment.

179. Given the different needs, expectations and conditions of different parents, schools, teachers and governments can improve schools' linkages with parents – and forge effective partnerships – by diversifying the activities for parents to be engaged in and making them independent of children's performance. By doing so, schools can create an environment of co-operation and partnerships, and teachers can have better tools and more fluid communication to enlist parent's partnerships when problems arise. Similarly, if fluid communication and a relationship based on trust emerge between parents and teachers, parents can also rely on the teacher – as well as the school and other parents – if problems arise.

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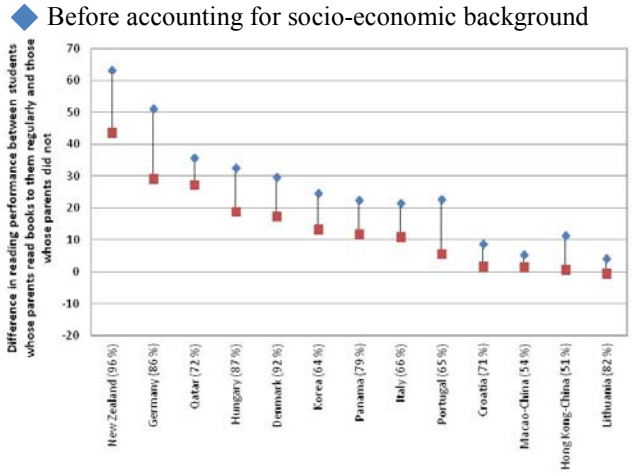
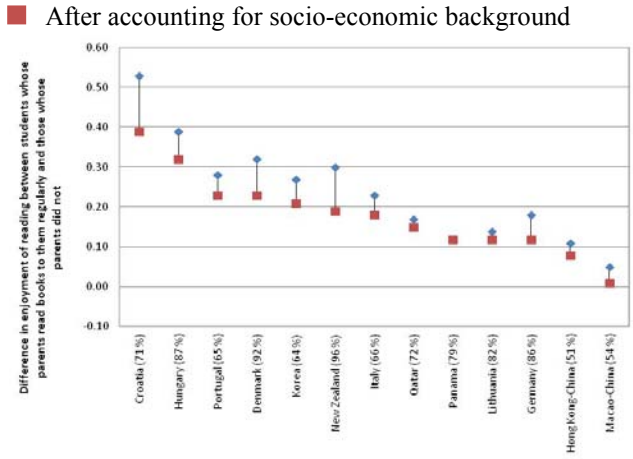
FIGURES FOR CHAPTER 3

Figure 3.1 - Relationship between parental involvement during their child's first year in primary school and student reading performance, enjoyment of reading, and awareness of effective summarising strategies

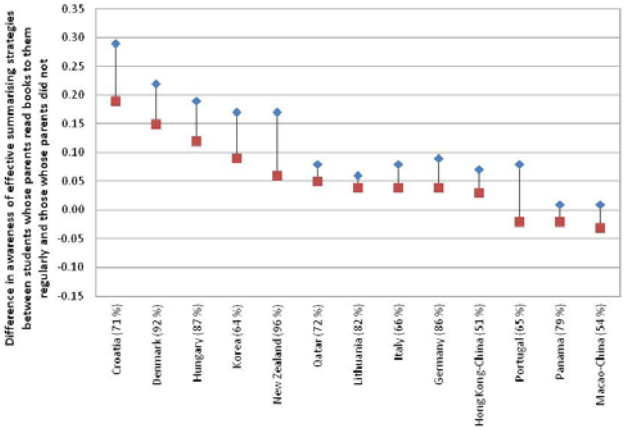
a) Read books to their child at least once a week



Source: Tables 3.1a and 4.1a.



Source: Tables 3.2a and 4.1a.

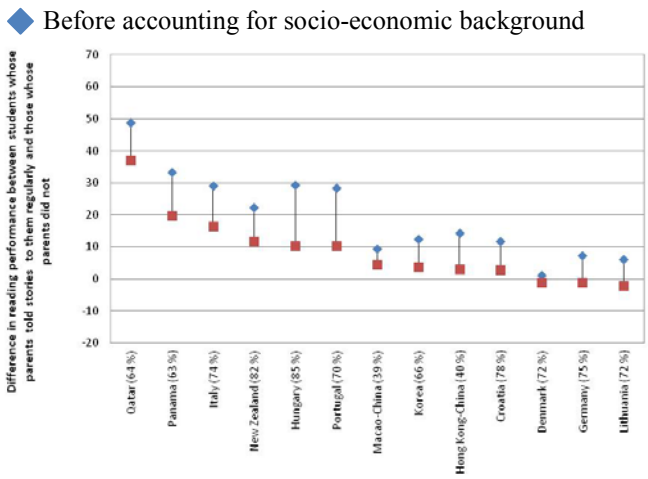


Source: Tables 3.3a and 4.1a.

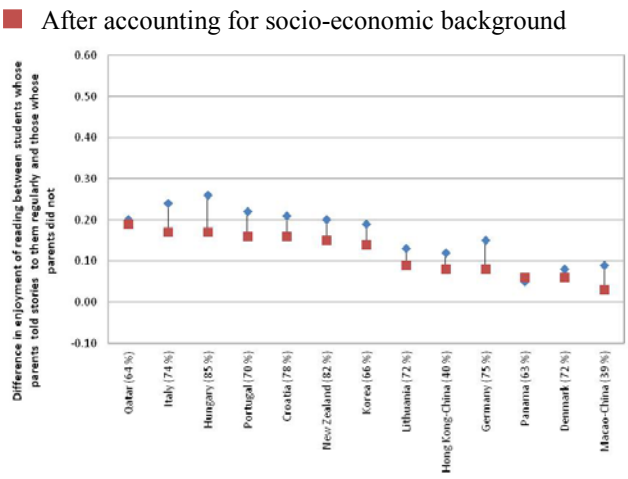
Note: In parenthesis, percentage of parents who read books to their child when the child was entering primary education.

Countries are ranked in descending order of the difference in the vertical axis after accounting for the PISA index of economic, social and cultural status.

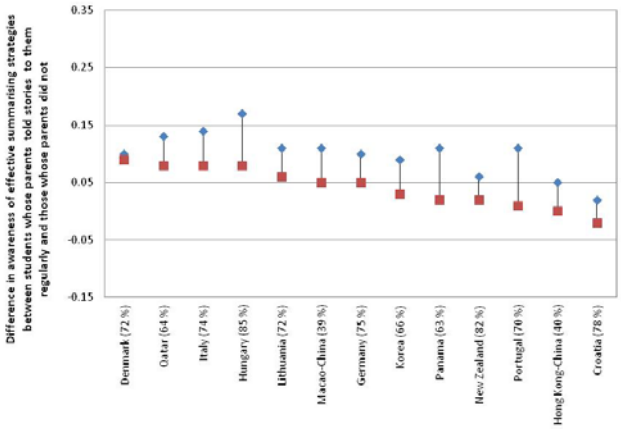
b) Told stories to their children



Source: Tables 3.1a and 4.1b.



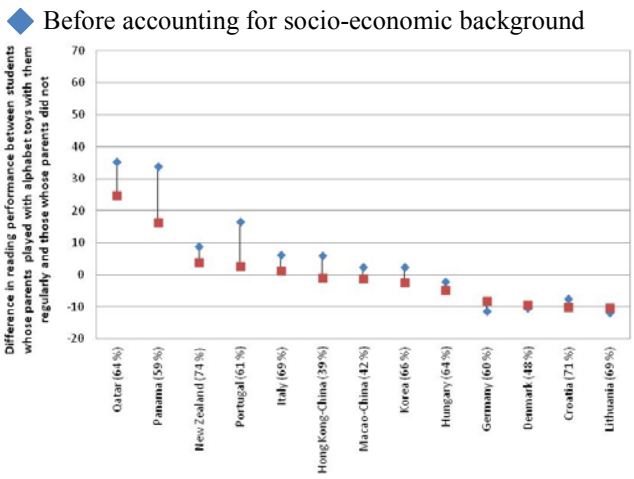
Source: Tables 3.2a and 4.1b.



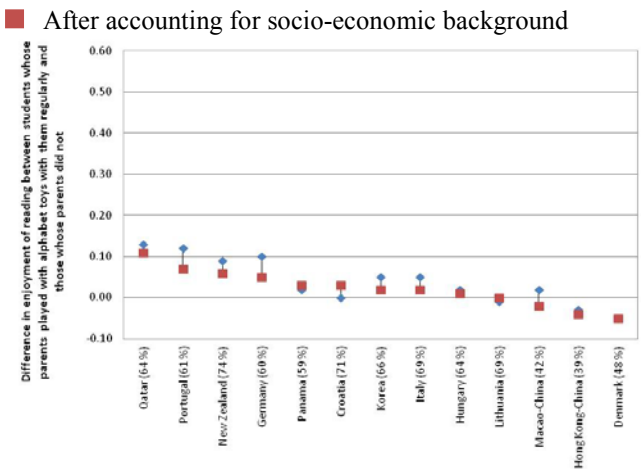
Source: Tables 3.3a and 4.1b.

Note: In parenthesis, percentage of parents who told stories to their child when the child was entering primary education. *Countries are ranked in descending order of the difference in the vertical axis after accounting for the* PISA index of economic, social and cultural status.

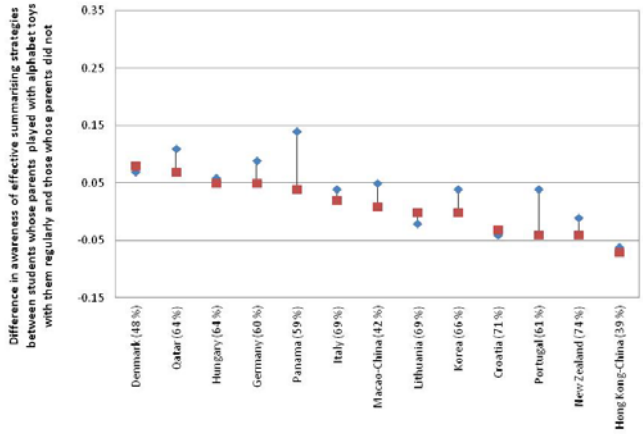
c) Playing with alphabet toys



Source: Tables 3.1a and 4.1d.



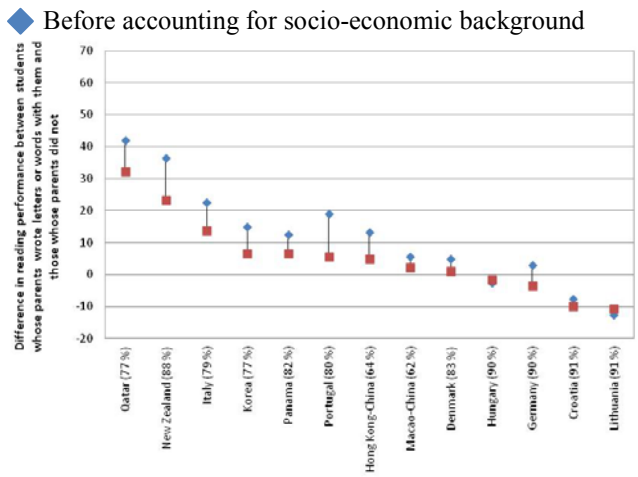
Source: Tables 3.2a and 4.1d.



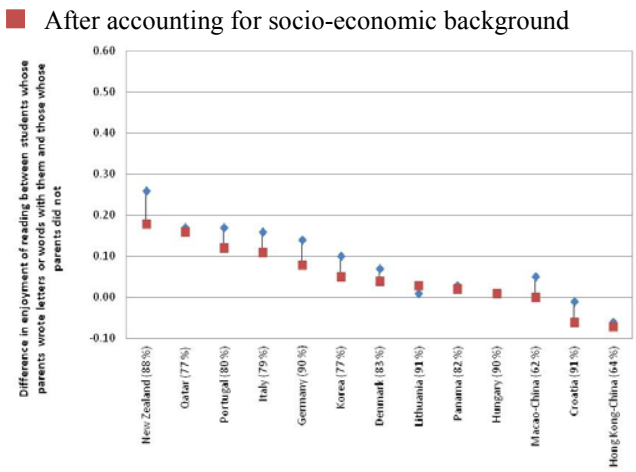
Source: Tables 3.3a and 4.1d.

Note: In parenthesis, percentage of parents who played with alphabet toys when the child was entering primary education. *Countries are ranked in descending order of the difference in the vertical axis after accounting for the* PISA index of economic, social and cultural status.

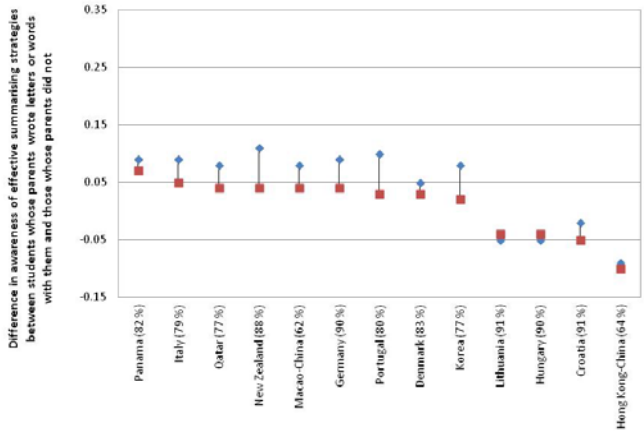
180. d) Writing letters or words



Source: Tables 3.1a and 4.1h.



Source: Tables 3.2a and 4.1h.

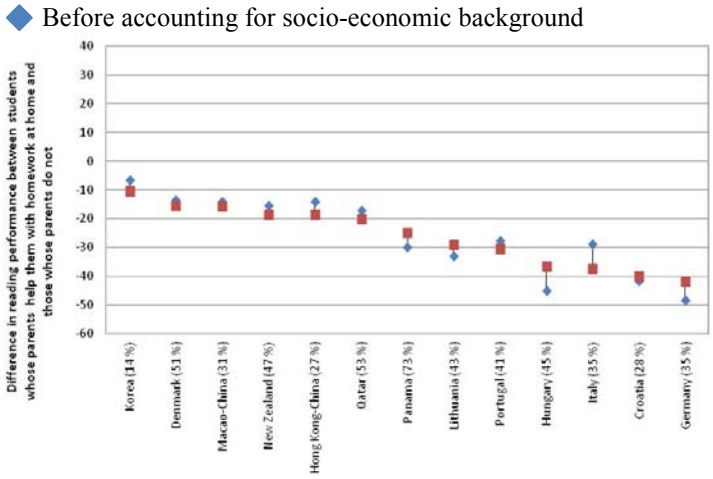


Source: Tables 3.3a and 4.1h.

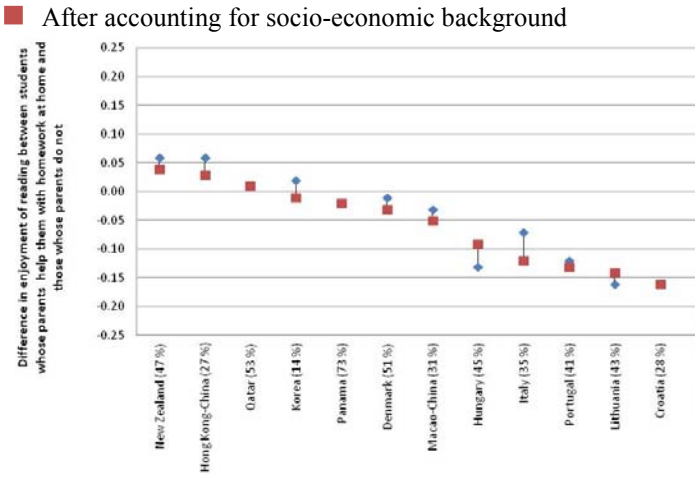
Note: In parenthesis, percentage of parents who wrote letters or words when the child was entering primary education. *Countries are ranked in descending order of the difference in the vertical axis after accounting for the* PISA index of economic, social and cultural status.

Figure 3.2 - Relationship between parental involvement in home-based academic activities and student reading performance, enjoyment of reading, and awareness of effective summarising strategies at age 15

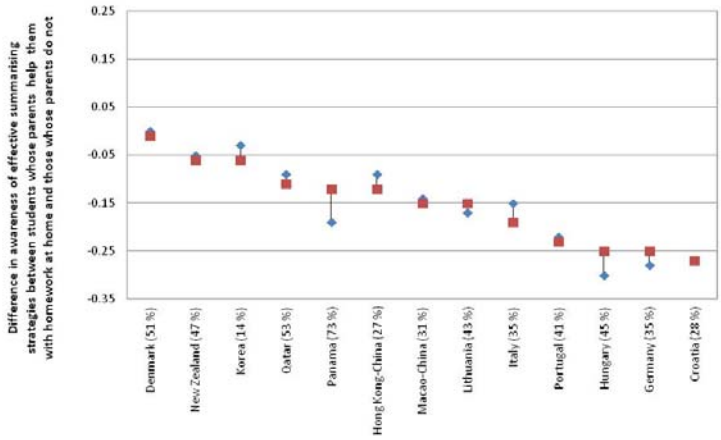
a) Help the child with his/her homework



Source: Tables 3.1c and 4.2h.



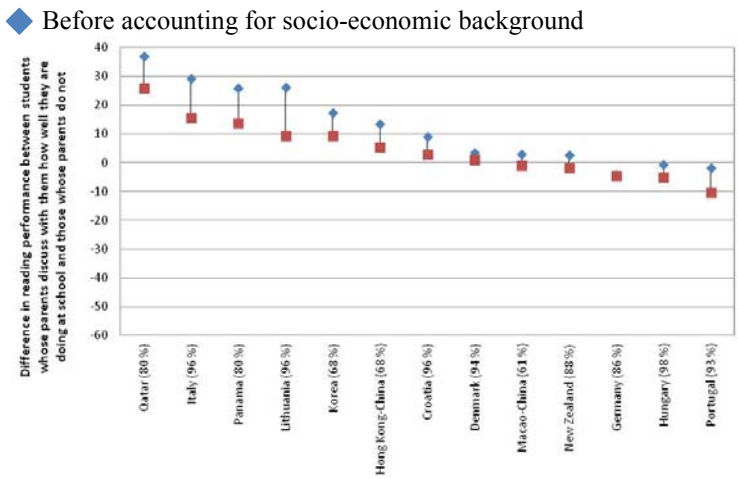
Source: Tables 3.2c and 4.2h.



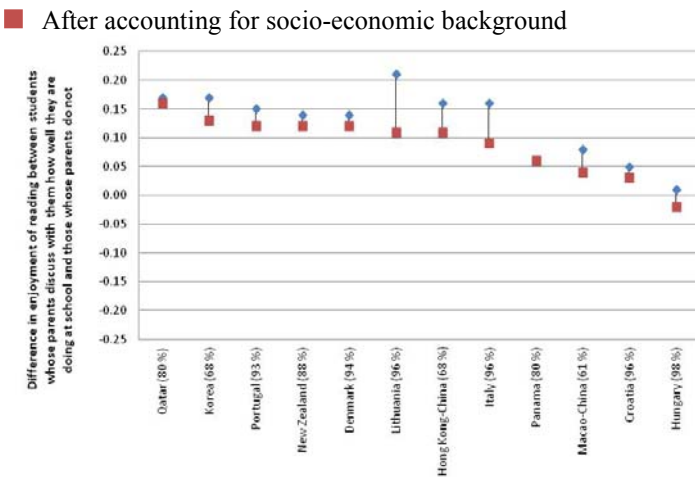
Source: Tables 3.3c and 4.2h.

Note: The percentage of parents who help their child with his/her homework is shown in parentheses after the country/economy name. *Countries are ranked in descending order of the difference in the vertical axis after accounting for the* PISA index of economic, social a cultural status.

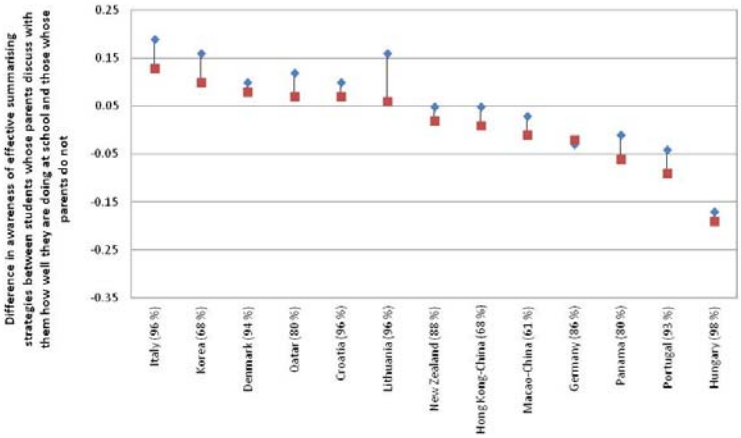
b) Discuss how well the child is doing at school



Source: Tables 3.1c and 4.2c.



Source: Tables 3.2c and 4.2c.



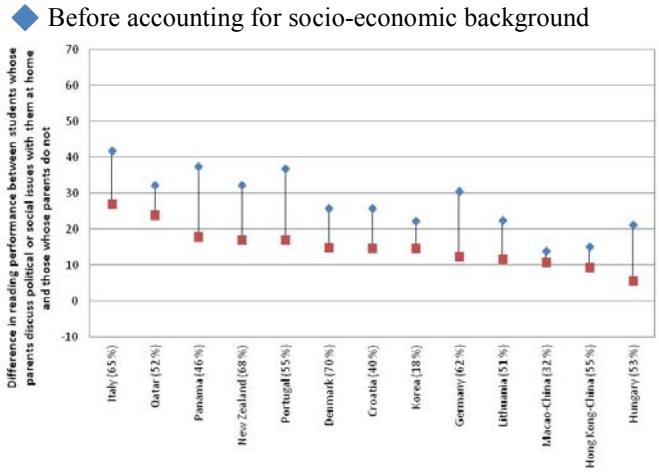
Source: Tables 3.3c and 4.2c.

Note: The percentage of parents who discussed with their child how well he/she is doing at school is shown in parentheses after the country/economy name.

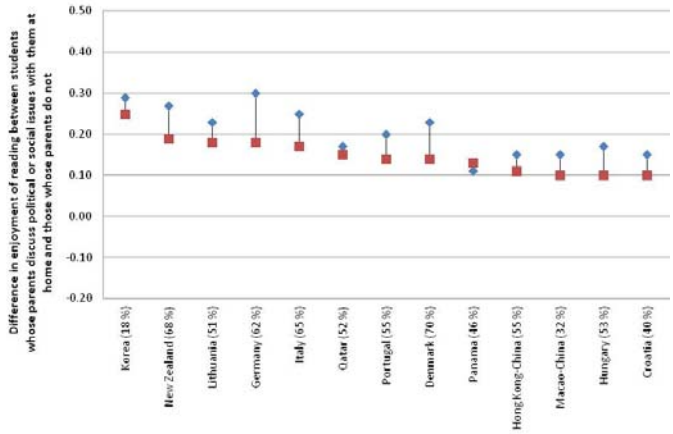
Countries are ranked in descending order of the difference in the vertical axis after accounting for the PISA index of economic, social a cultural status.

Figure 3.3 - Relationship between parental involvement in home-based, non-academic activities and student reading performance, enjoyment of reading, and awareness of effective summarising strategies at age 15

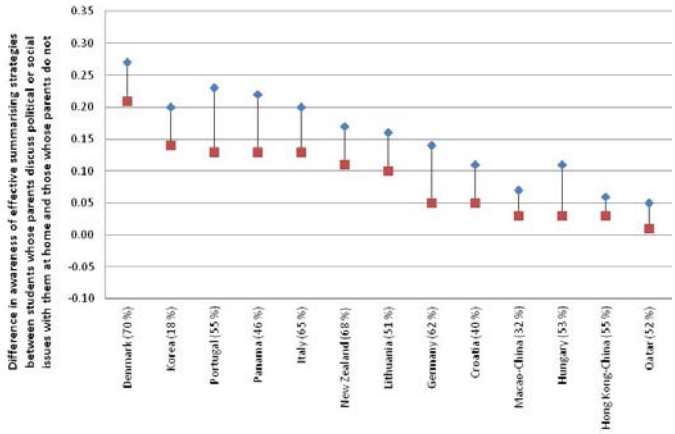
a) Discuss social or political issues



Source: Tables 3.1c and 4.2a.



Source: Tables 3.2c and 4.2a.

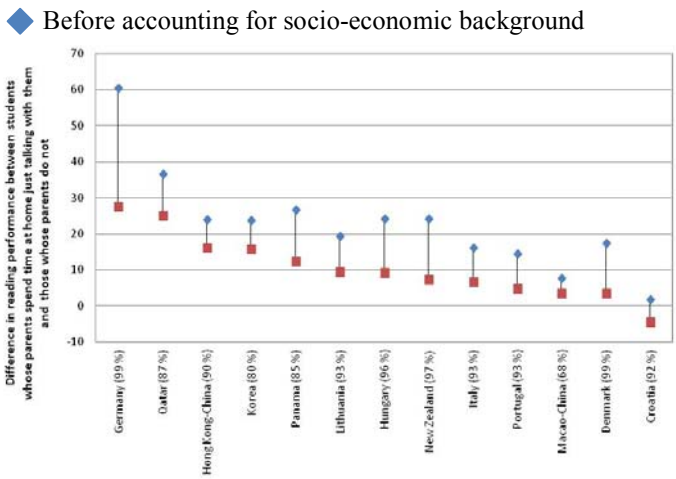


Source: Tables 3.3c and 4.2a.

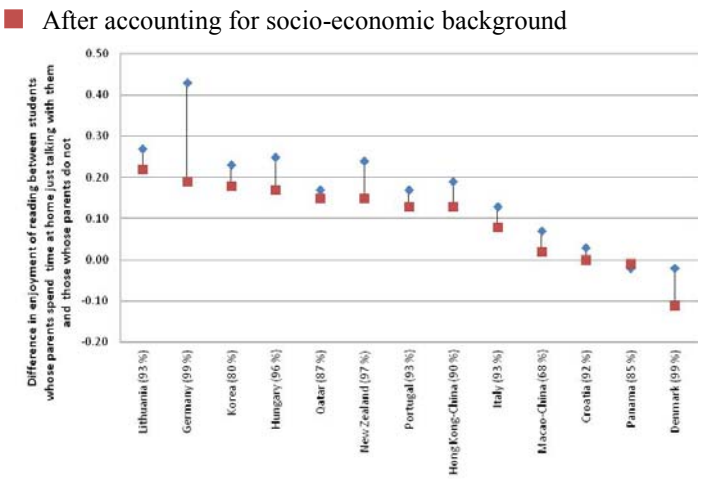
Note: The percentage of parents who discuss social or political issues with their child is shown in parentheses after the country/economy name.

Countries are ranked in descending order of the difference in the vertical axis after accounting for the PISA index of economic, social and cultural status.

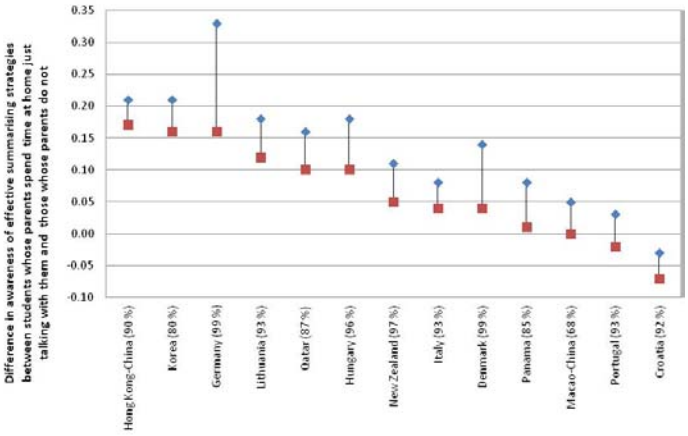
b) Spend time just talking with their child



Source: Tables 3.1c and 4.2e.



Source: Tables 3.2c and 4.2e.



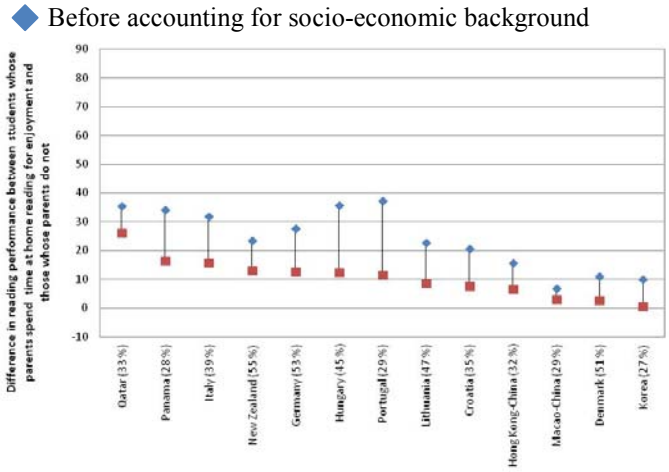
Source: Tables 3.3c and 4.2e.

Note: The percentage of parents who spend time just talking with their child is shown in parentheses after the country/economy name.

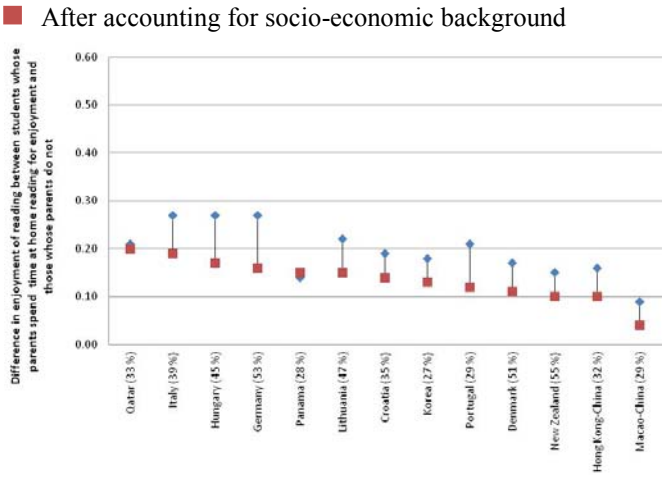
Countries are ranked in descending order of the difference in the vertical axis after accounting for the PISA index of economic, social and cultural status.

Figure 3.4 - Relationship between parents' attitudes/behaviours towards reading and reading performance, enjoyment of reading, and awareness of effective summarising strategies at age 15

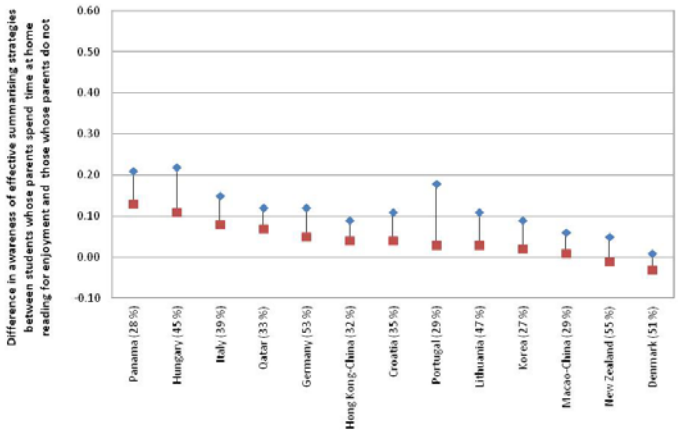
a) Parent spends time at home reading for enjoyment



Source: Tables 3.1d and 4.4a.



Source: Tables 3.2d and 4.4a.



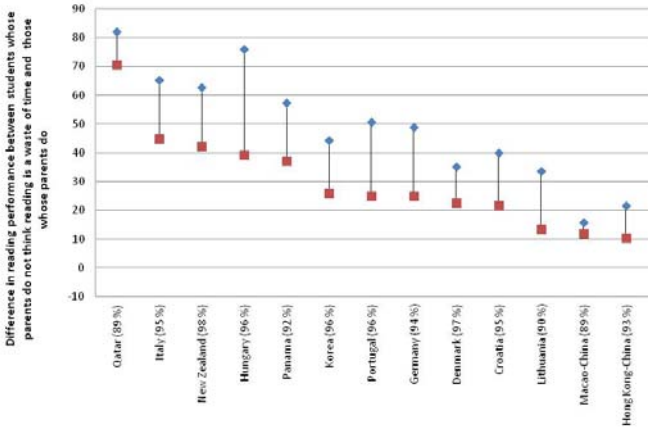
Source: Tables 3.3d and 4.4a.

Note: The percentage of parents who spend time at home reading for enjoyment is shown in parentheses after the country/economy name.

Countries are ranked in descending order of the difference in the vertical axis after accounting for the PISA index of economic, social and cultural status.

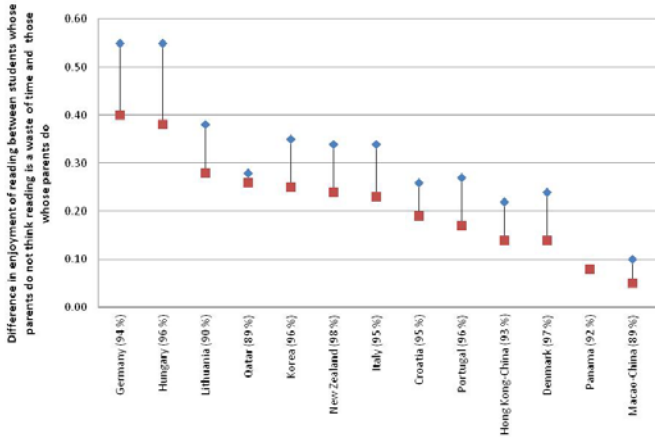
b) Parent does not think reading is a waste of time

◆ Before accounting for socio-economic background

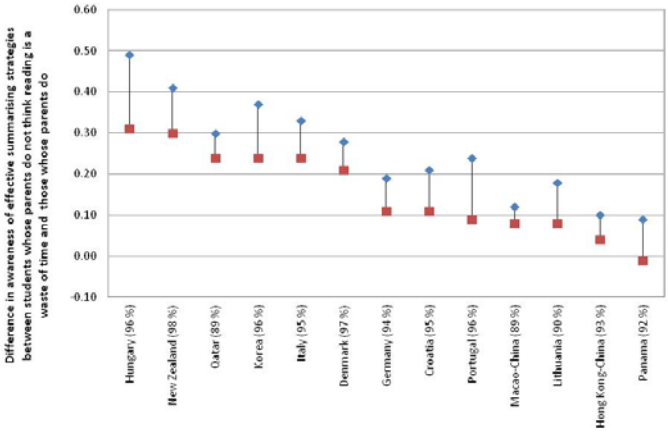


Source: Tables 3.1d and 4.4e.

■ After accounting for socio-economic background



Source: Tables 3.2d and 4.4e.



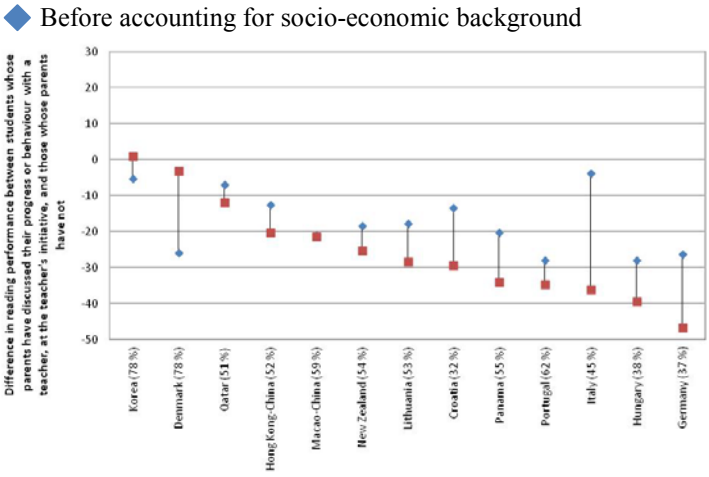
Source: Tables 3.3d and 4.4e.

Note: The percentage of parents who do not think reading is a waste of time is shown in parentheses after the country/economy name.

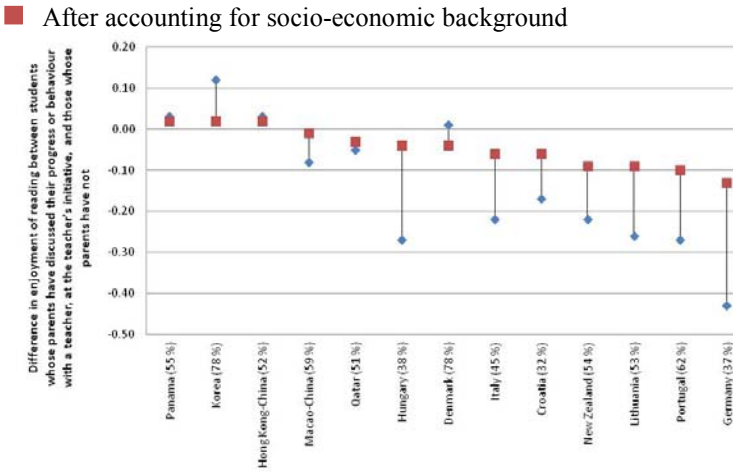
Countries are ranked in descending order of the difference in the vertical axis after accounting for the PISA index of economic, social and cultural status.

Figure 3.5 - Relationship between parental involvement at school and student reading performance, enjoyment of reading, and awareness of effective summarising strategies at age 15

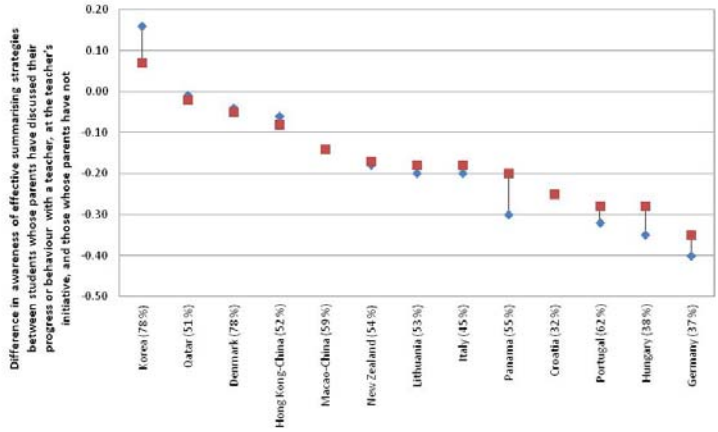
a) Discussed the child's progress or behaviour with teacher, initiated by the teacher



Source: Tables 3.1b and 4.3b.



Source: Tables 3.2b and 4.3b.

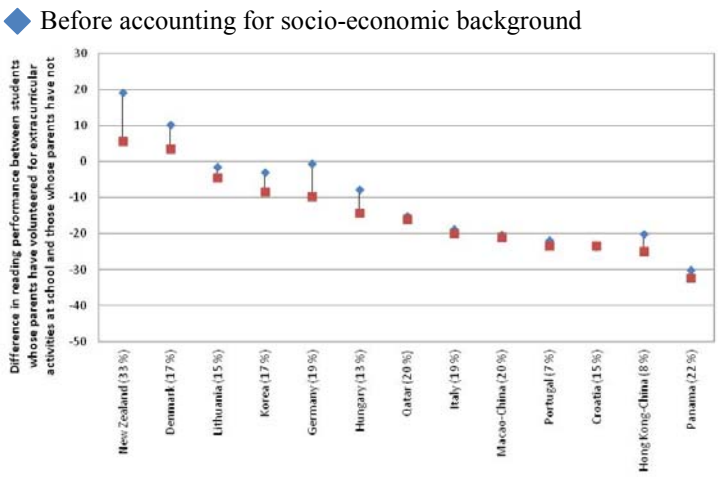


Source: Tables 3.3b and 4.3b.

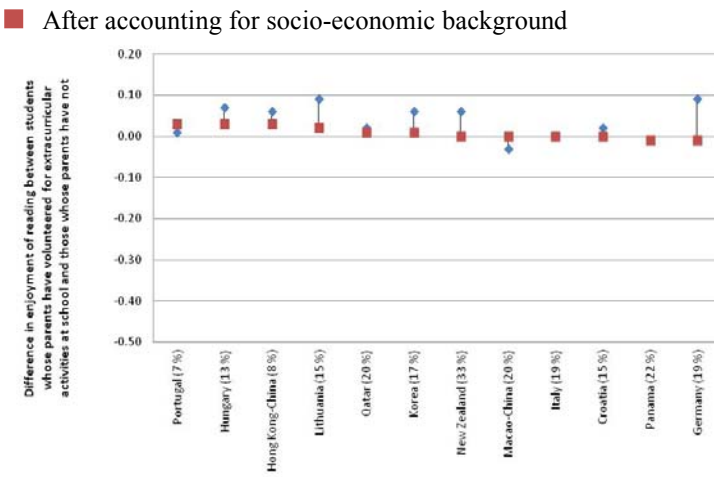
Note: The percentage of parents who have discussed their child's behaviour or progress with a teacher, at the teacher's initiative, is showr in parentheses after the country/economy name.

Countries are ranked in descending order of the difference in the vertical axis after accounting for the PISA index of economic, social an cultural status.

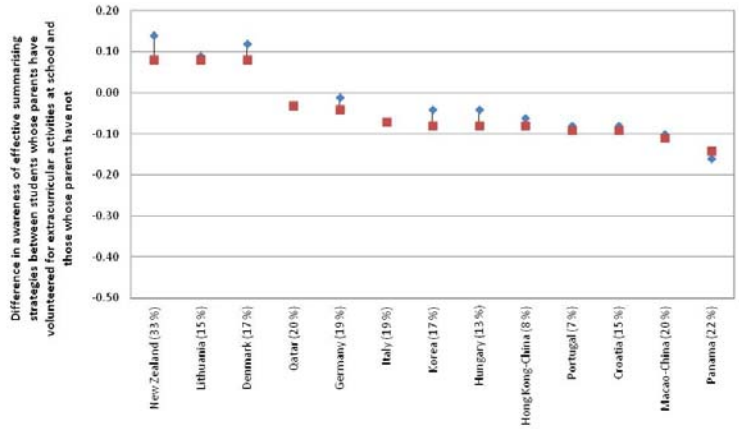
b) Volunteered in extra-curricular activities



Source: Tables 3.1b and 4.3d.



Source: Tables 3.2b and 4.3d.



Source: Tables 3.3b and 4.3d.

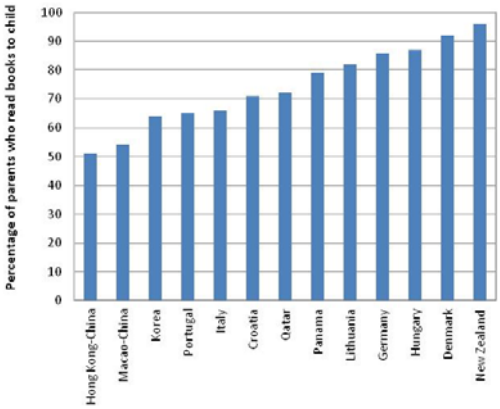
Note: The percentage of parents who have volunteered in extra-curricular activities is shown in parentheses after the country/economy name.

Countries are ranked in descending order of the difference in the vertical axis after accounting for the PISA index of economic, social an cultural status.

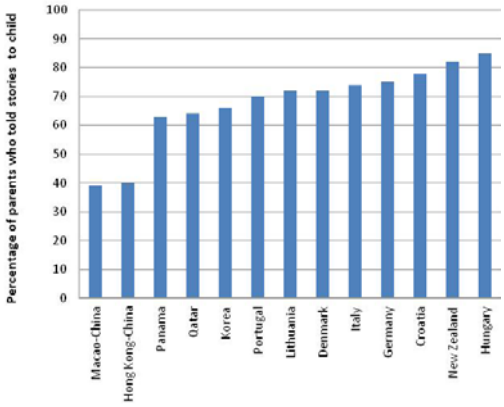
FIGURES FOR CHAPTER 4

Figure 4.1 - Percentage of parents involved during their child's first year in primary school

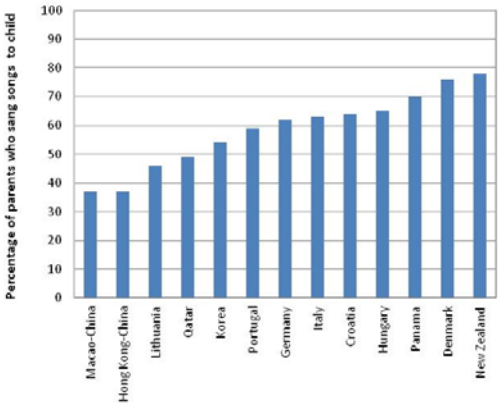
a) Read books to child at least once a week



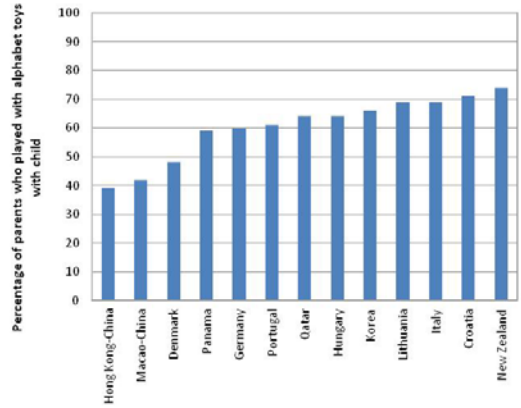
b) Told stories



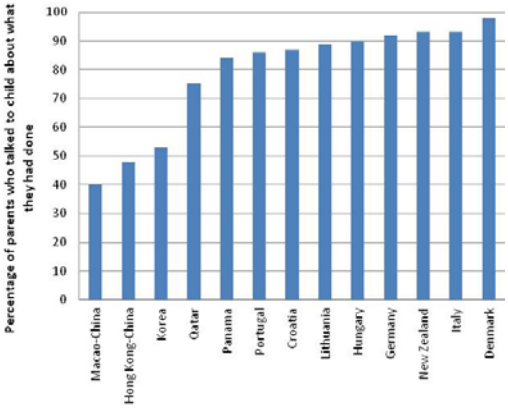
c) Sang songs



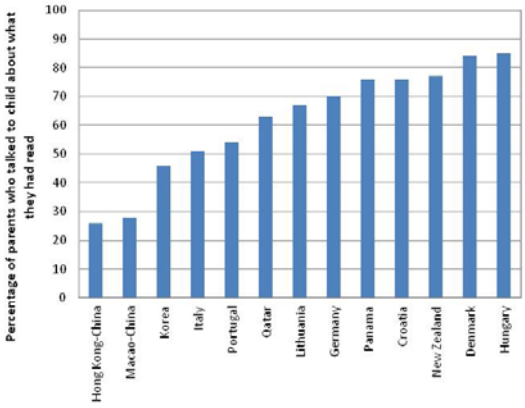
d) Played with alphabet toys



d) Talked about what the parent had done during the day



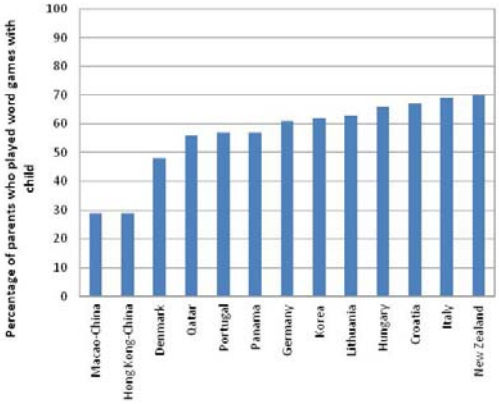
f) Talked about what the parent had read



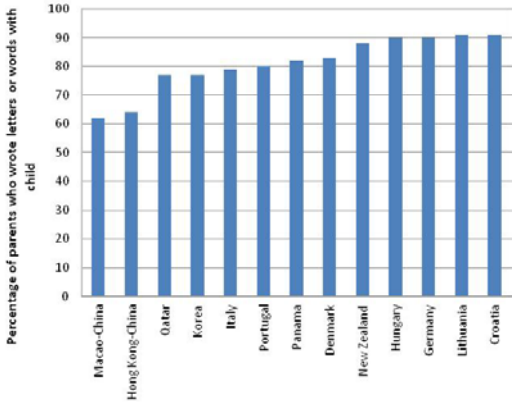
Countries/Economies are ranked in ascending order of the percentage of parents who played word games with their child during their child's first year in primary school.

Source: Tables 4.1a to 4.1h.

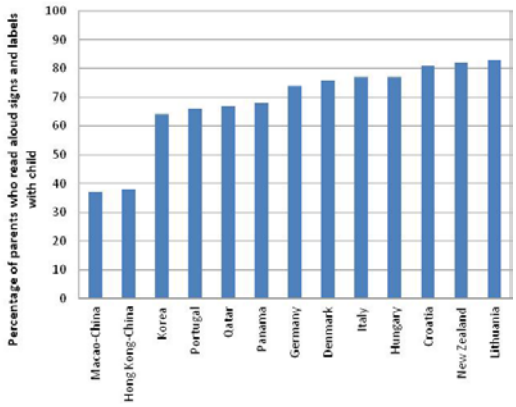
g) Played word games



h) Wrote letters or words



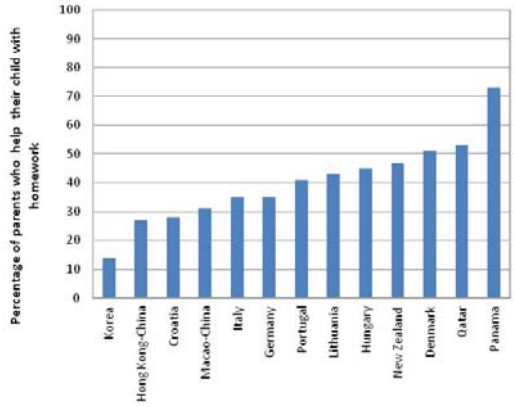
i) Read signs and labels aloud



Countries/Economies are ranked in ascending order of the percentage of parents involved during their child's first year in primary school.
Source: Tables 4.1a to 4.1i.

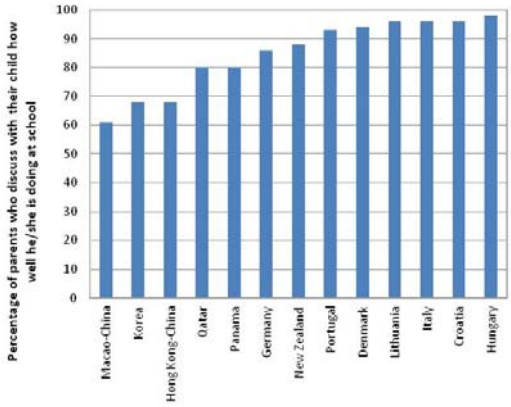
Figure 4.2 - Percentage of parents involved in home-based academic activities

a) Help their child with his/her homework



Source: Tables 4.2h.

b) Discuss with their child how well he/she is doing at school

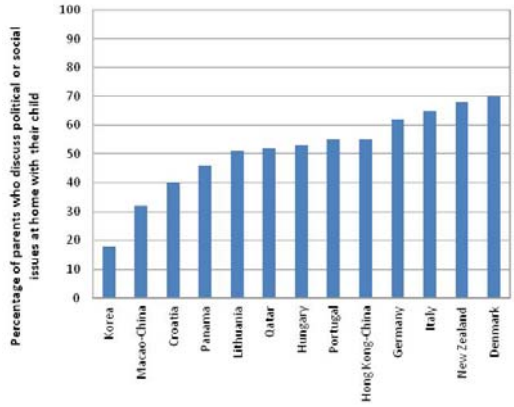


Source: Tables 4.2c.

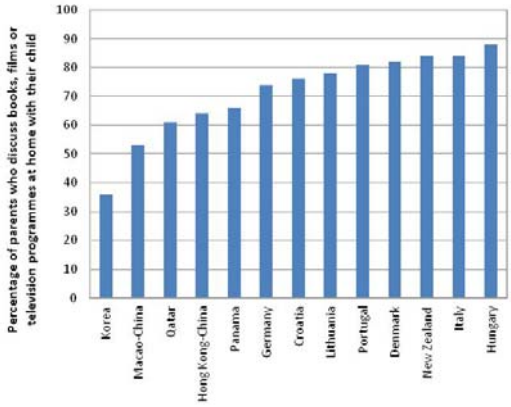
Countries/Economies are ranked in ascending order of the percentage of parents involved in home-based academic activities.

Figure 4.3 - Percentage of parents involved in home-based, non-academic activities

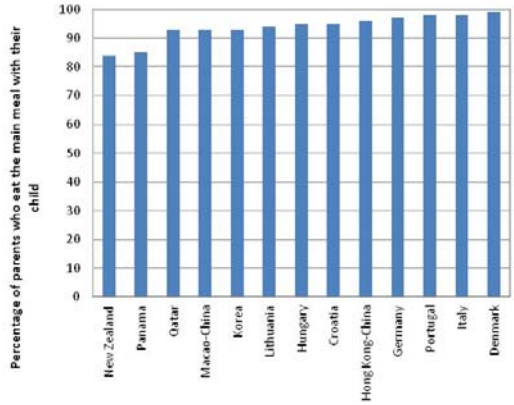
a) Discuss social or political issues



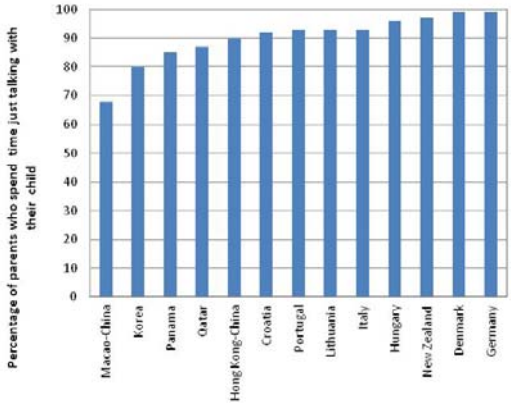
b) Discuss books, films or television programmes



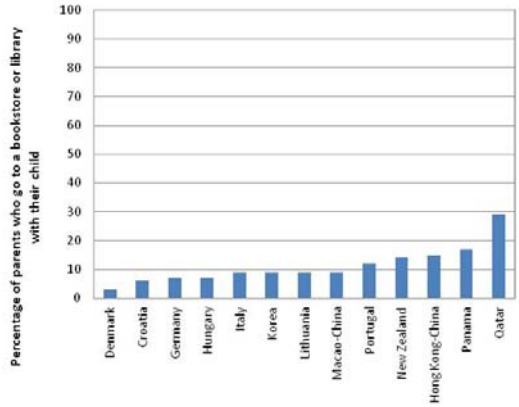
c) Eat the main meal with their child around a table



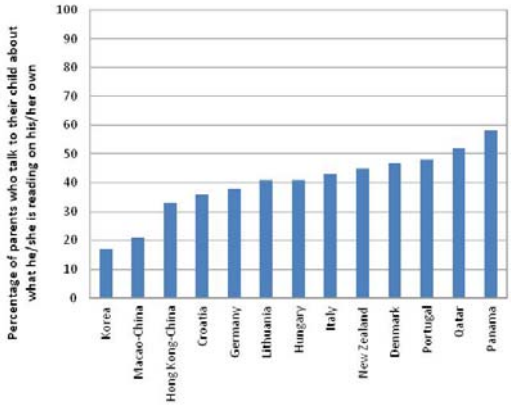
d) Spend time just talking with their child



e) Go to a bookstore or library with their child



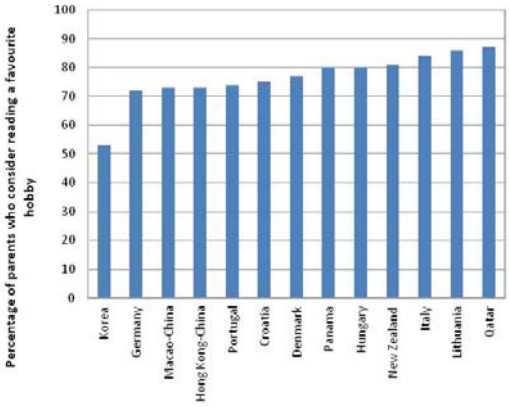
f) Talk with their child about what he/she is reading on his/her own



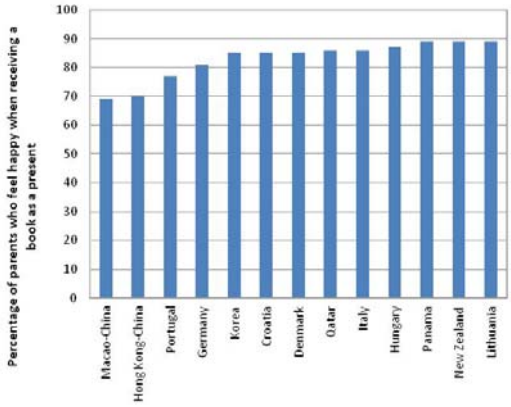
Countries/Economies are ranked in ascending order of the percentage of parents involved in home-based non-academic activities.
Source: Tables 4.2a, 4.2b, 4.2d, 4.2e, 4.2f, 4.2g.

Figure 4.4 - Percentage of parents with positive attitudes towards reading

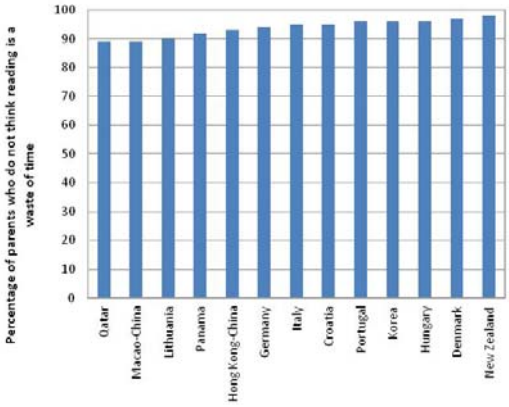
a) Parent considers reading a favourite hobby



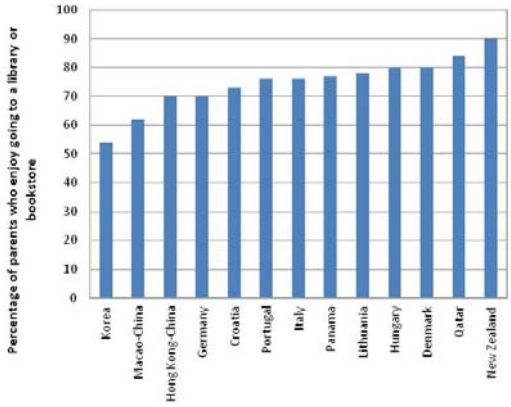
b) Parent is happy when receiving a book as a present



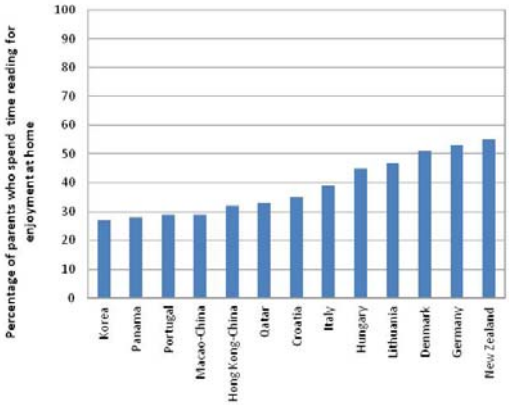
c) Parent does not believe reading is a waste of time



d) Parent enjoys going to a bookstore or library



e) Parent spends time reading at home for enjoyment

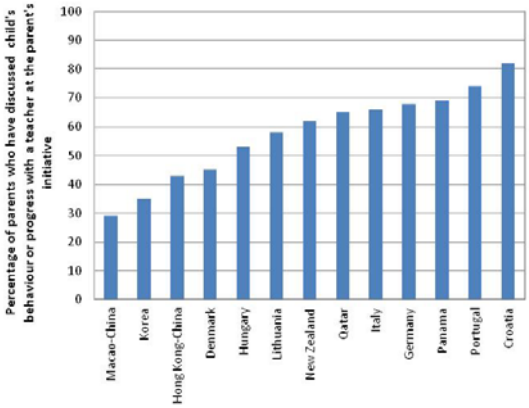


Countries/Economies are ranked in ascending order of the percentage of parents with positive attitudes towards reading.

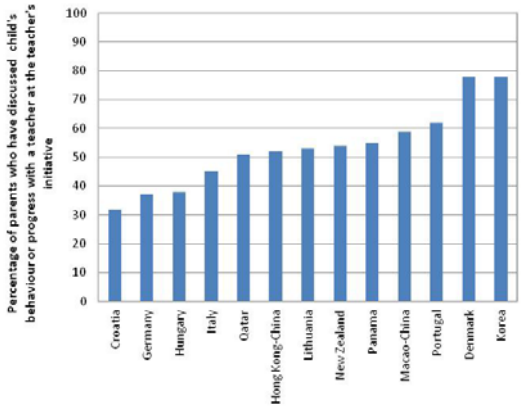
Source: Tables 4.4a, 4.4b, 4.4d, 4.4e, 4.4f, 4.4g.

Figure 4.5 - Percentage of parents involved in school-based activities

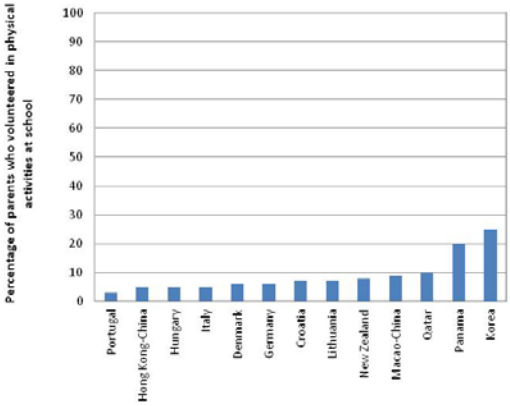
a) Discussed child's progress or behaviour with a teacher at the parent's initiative



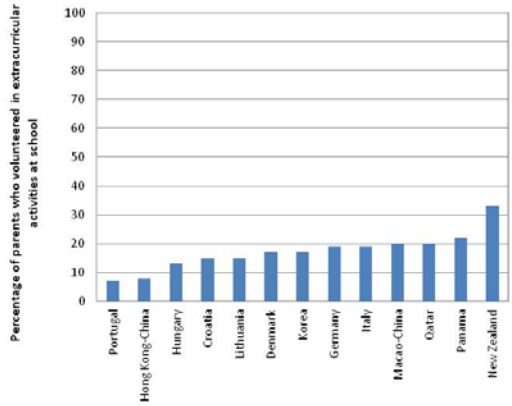
b) Discussed child's progress or behaviour with a teacher at the teacher's initiative



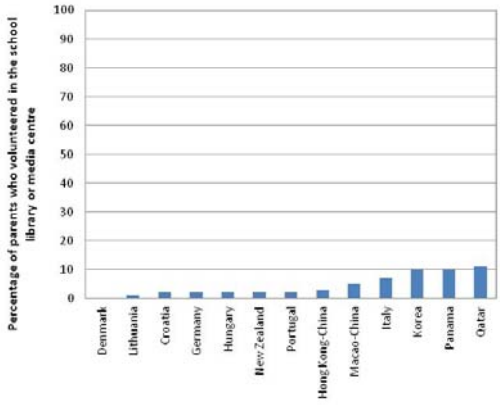
c) Volunteered in physical activities



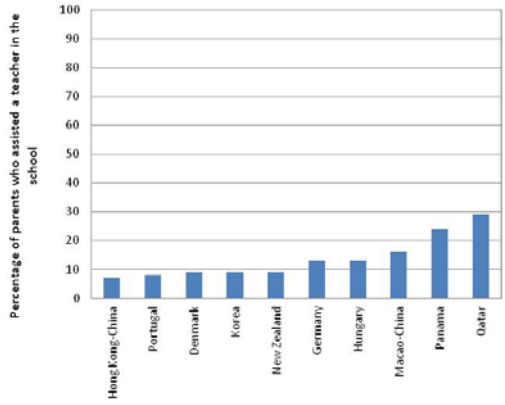
d) Volunteered in extra-curricular activities



e) Volunteered in the school library or media centre

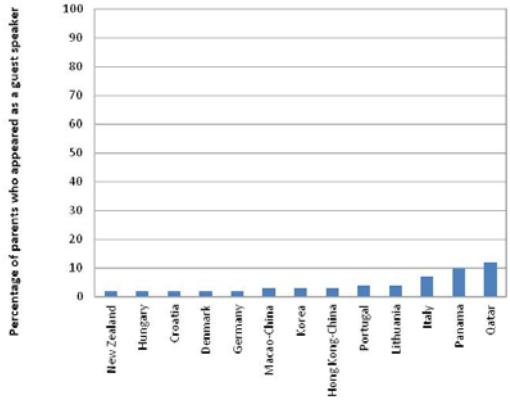


f) Assisted a teacher in the school

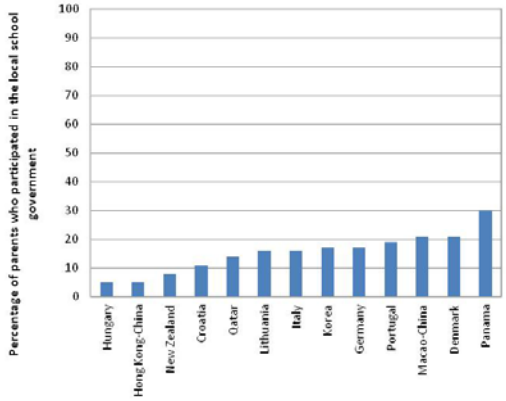


Countries/Economies are ranked in ascending order of the percentage of parents involved in school-based activities.
Source: Tables 4.3a to 4.3h.

g) Appeared as a guest speaker



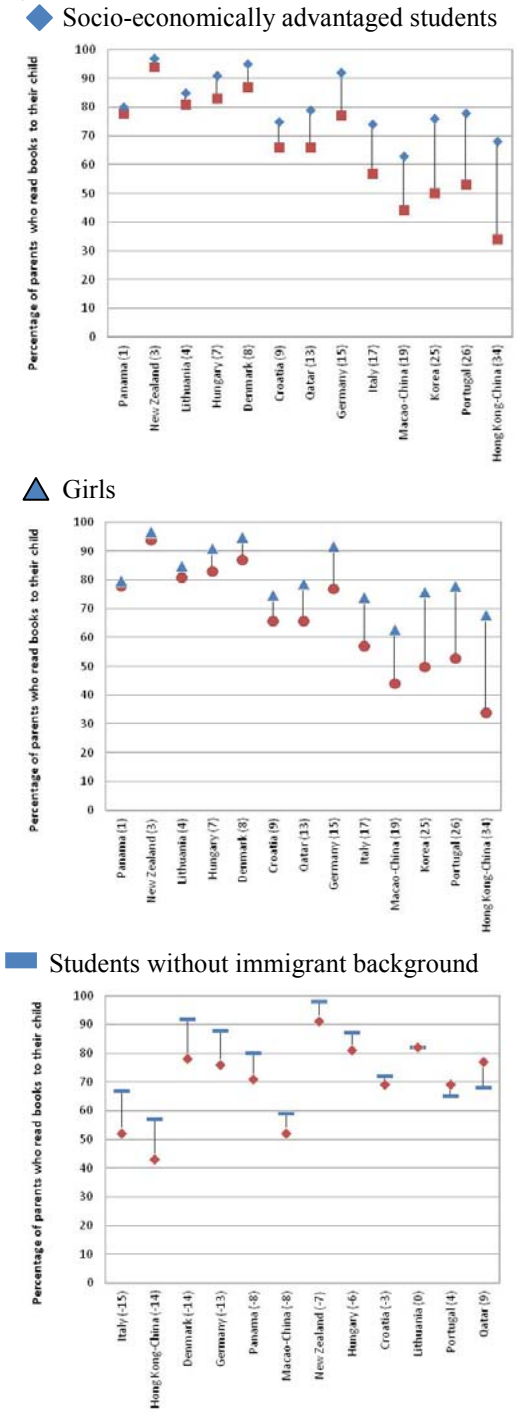
h) Participated in school government



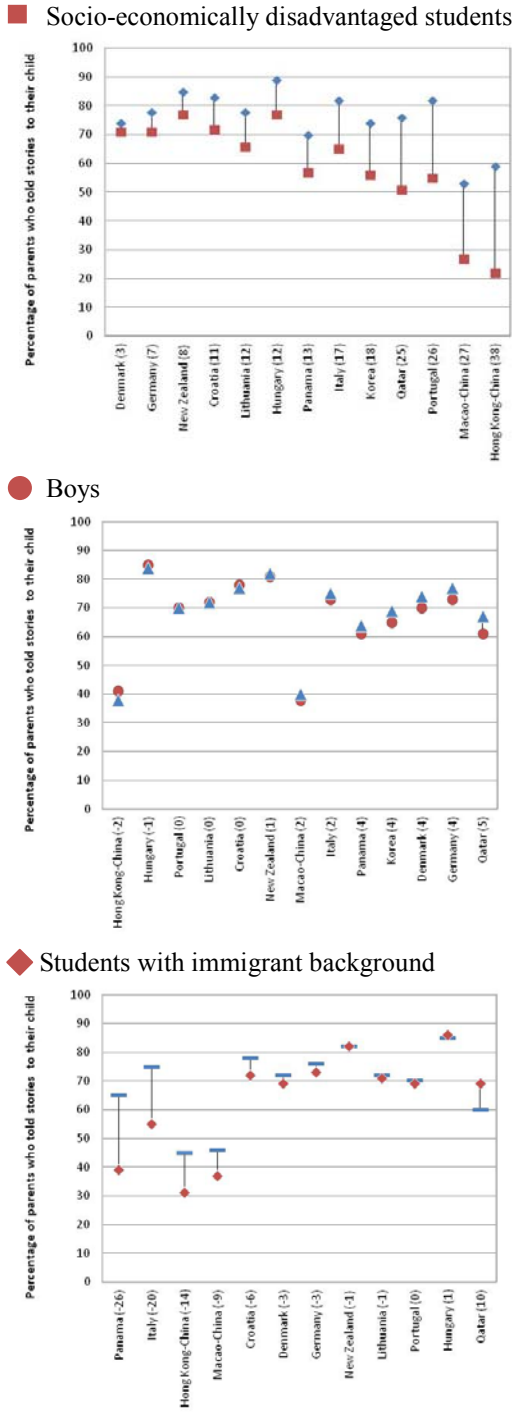
Countries/Economies are ranked in ascending order of the percentage of parents involved in school-based activities.
Source: Tables 4.3a to 4.3h.

Figure 4.6 - Percentage of parents involved during their child's first year in primary school, by *PISA index of economic, social and cultural status,* gender, immigrant background, respondent's gender and family structure

a) Read books to child at least once a week



b) Told stories

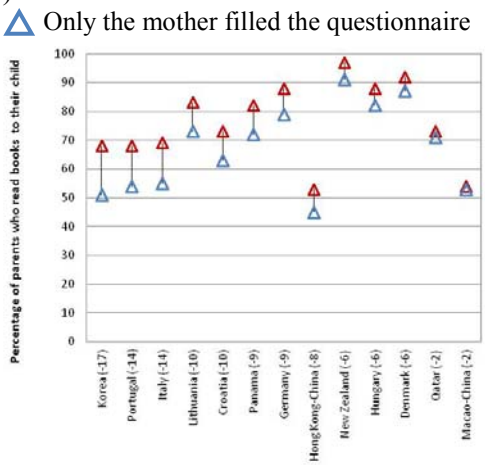


Source: Table 4.1a. Source: Table 4.1b.

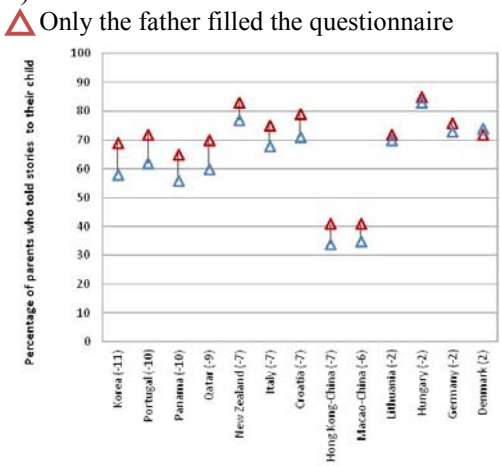
Note: The group difference in involvement appears in parentheses after the country/economy name.

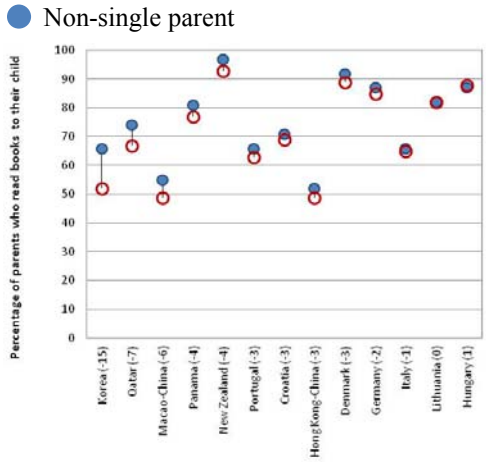
Countries/Economies are ranked in ascending order of the group difference in involvement.

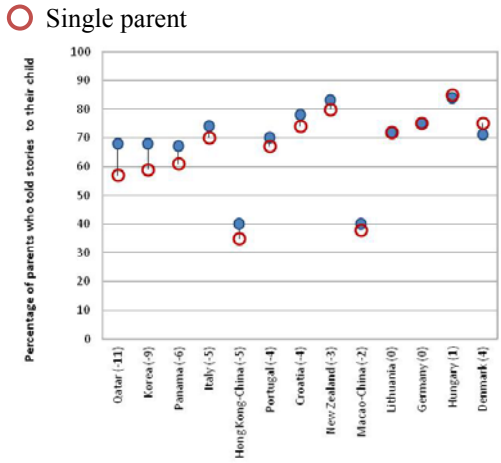
a) Read books to child at least once a week



b) Told stories







Source: Tables 4.5a and 4.6a.

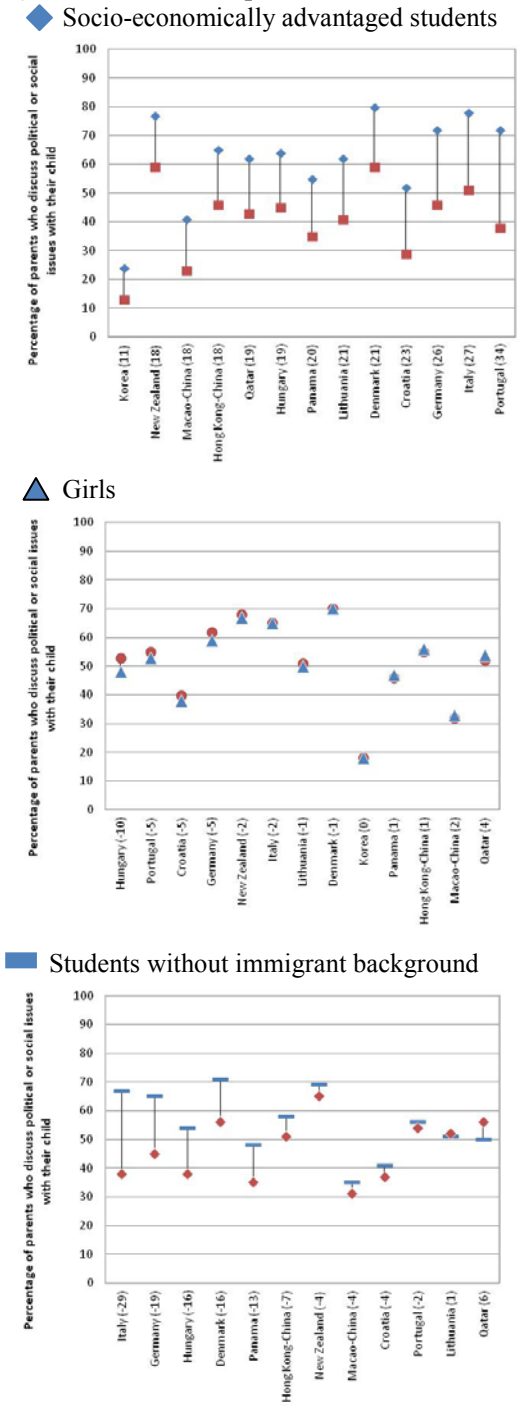
Source: Tables 4.5a and 4.6a.

Note: The group difference in involvement appears in parentheses after the country/economy name.

Countries/Economies are ranked in ascending order of the group difference in involvement.

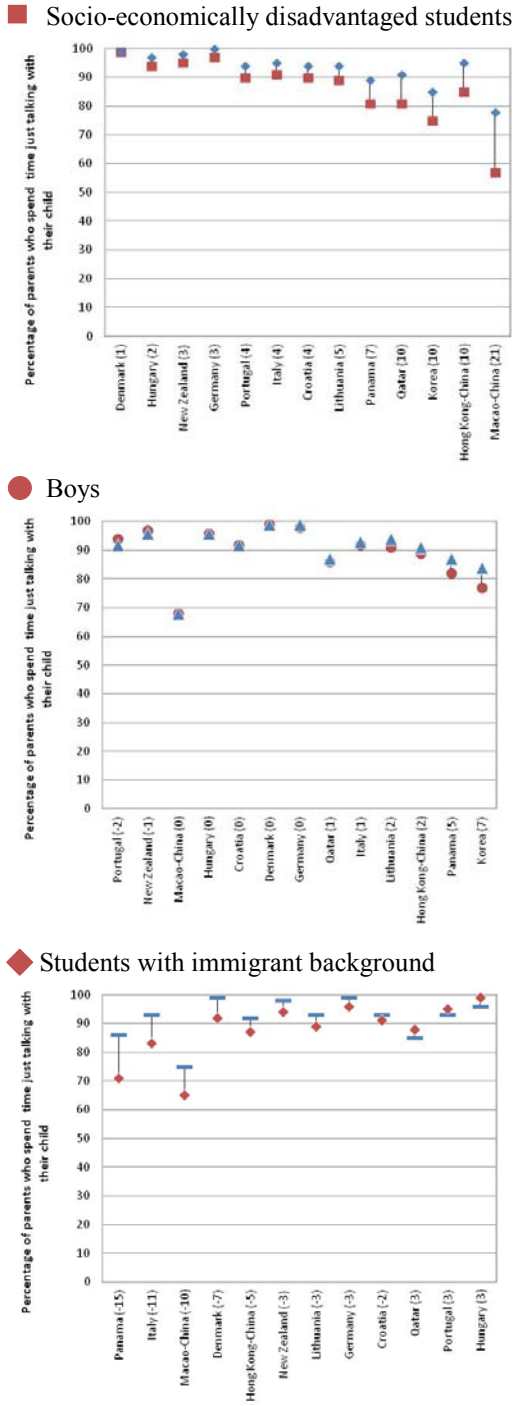
Figure 4.7 - Percentage of parents involved in home-based, non-academic activities, by *PISA index of economic, social and cultural status,* gender, immigrant background, respondent's gender and family structure

a) Discuss social or political issues



Source: Table 4.2a.

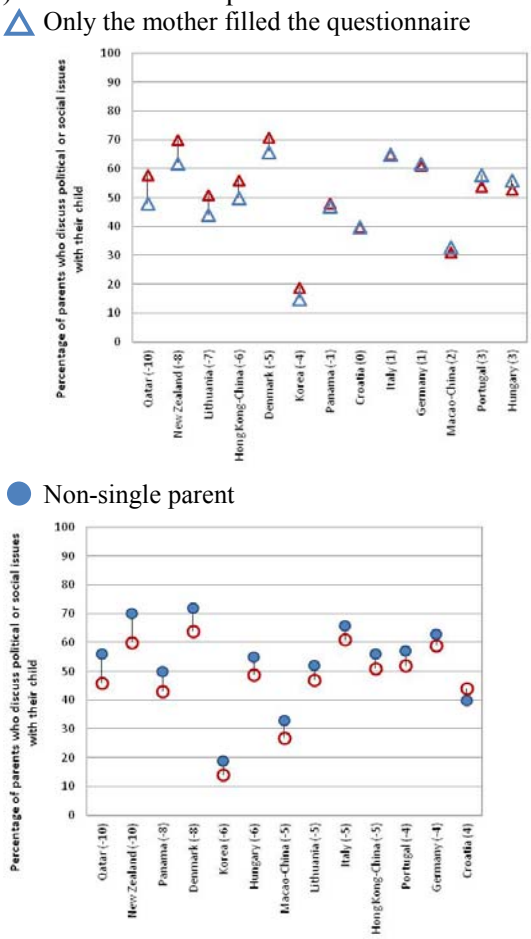
b) Spend time just talking with their child



Source: Table 4.2b.

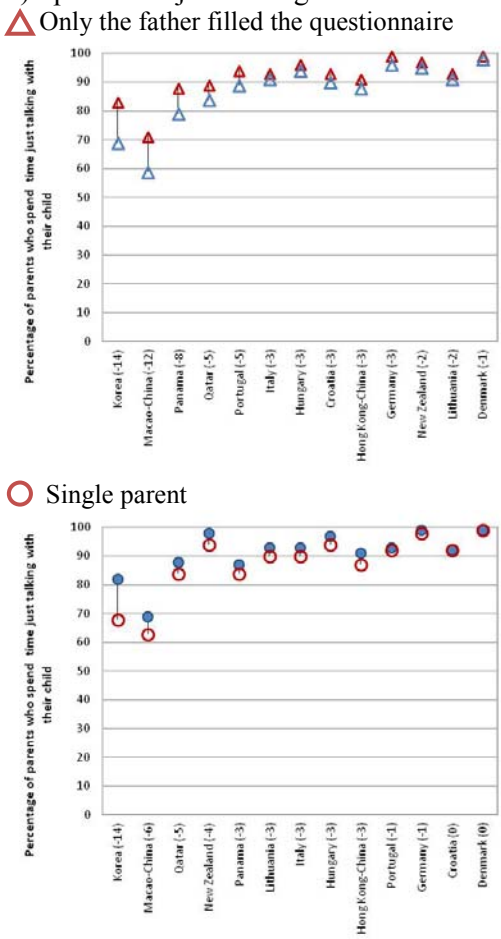
Note: The group difference in involvement appears in parentheses after the country/economy name.
Countries/Economies are ranked in ascending order of the group difference in involvement.

a) Discuss social or political issues



Source: Tables 4.6b and 4.7b.

b) Spend time just talking with their child

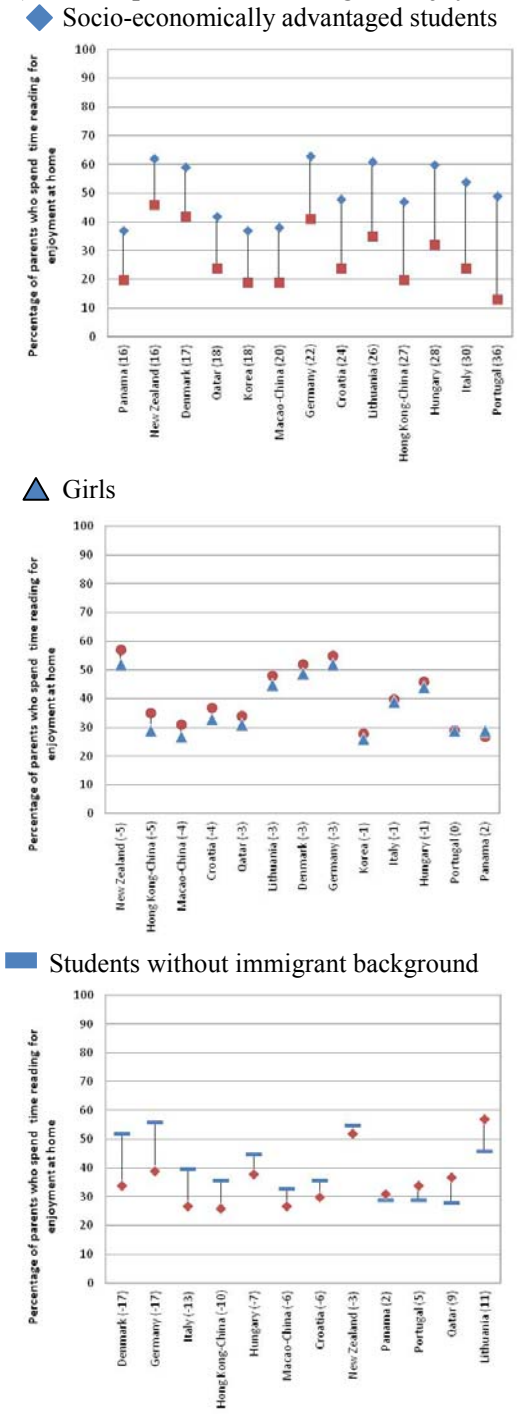


Source: Tables 4.6b and 4.7b.

Note: The group difference in involvement appears in parentheses after the country/economy name.
Countries/Economies are ranked in ascending order of the group difference in involvement.

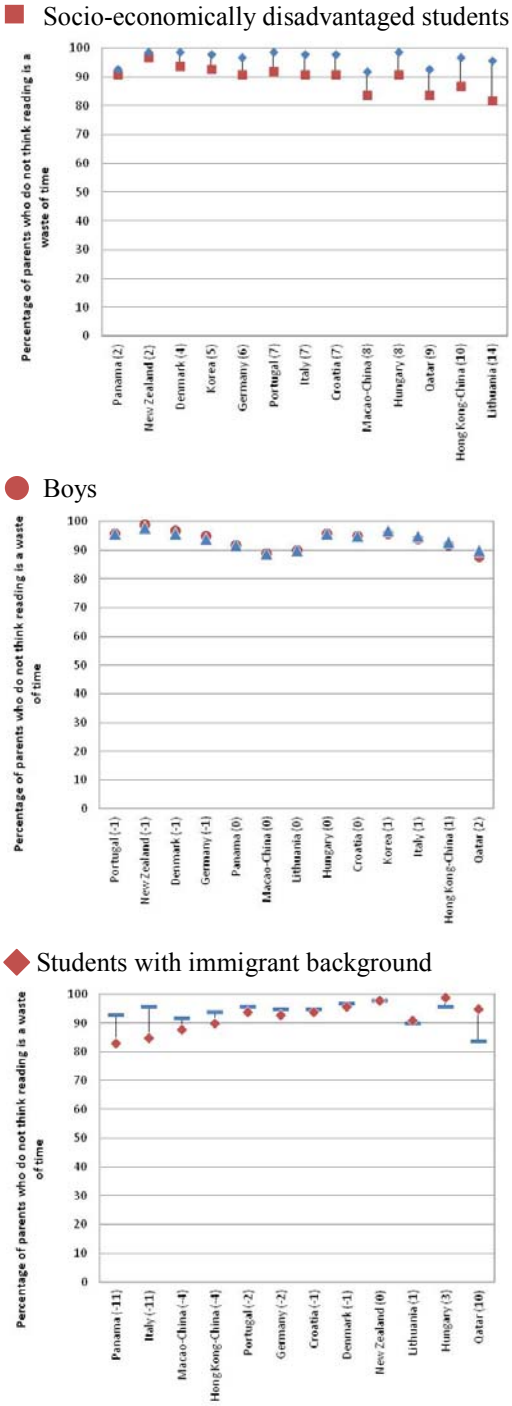
Figure 4.8 - Percentage of parents with positive attitudes towards reading, by *PISA index of economic, social and cultural status,* gender, immigrant background, respondent's gender and family structure

a) Parent spends time reading for enjoyment



Source: Table 4.4a.

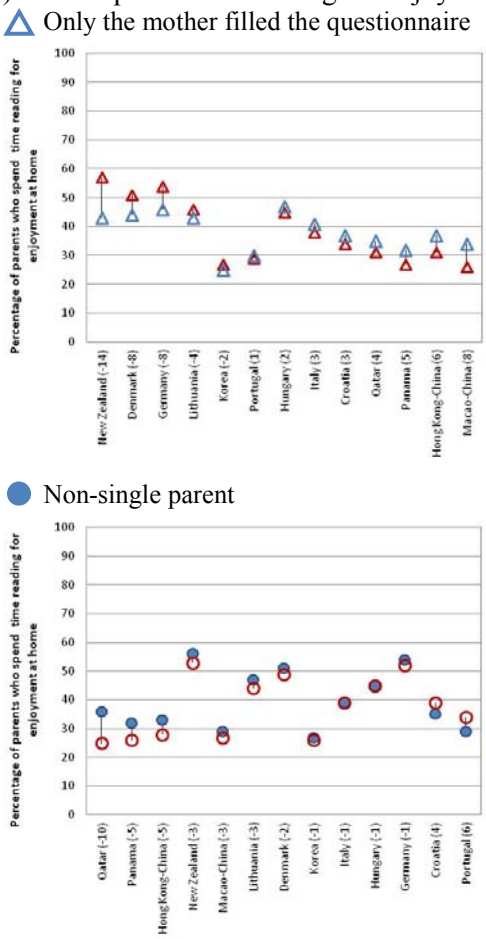
b) Parent does not think reading is a waste of time



Source: Table 4.4e.

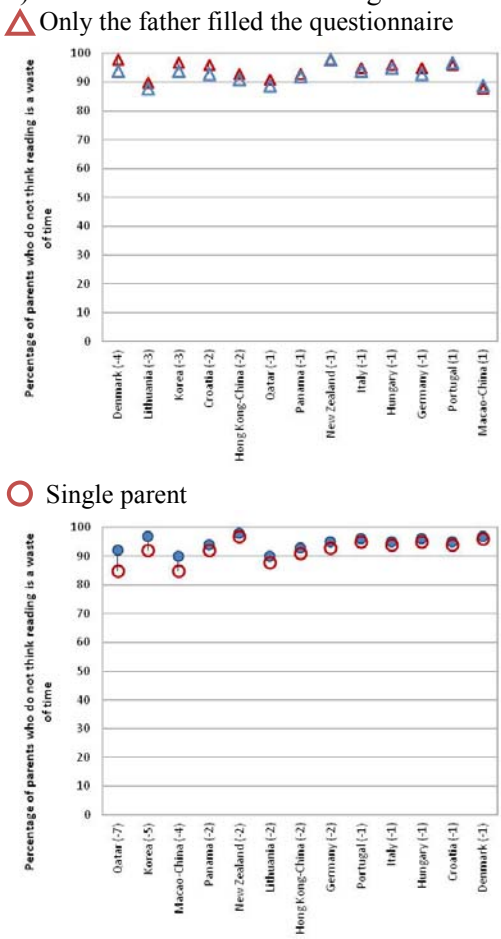
Note: The group difference in involvement appears in parentheses after the country/economy name.
Countries/Economies are ranked in ascending order of the group difference in involvement.

a) Parent spends time reading for enjoyment



Source: Tables 4.5b and 4.6d.

b) Parent does not think reading is a waste of time

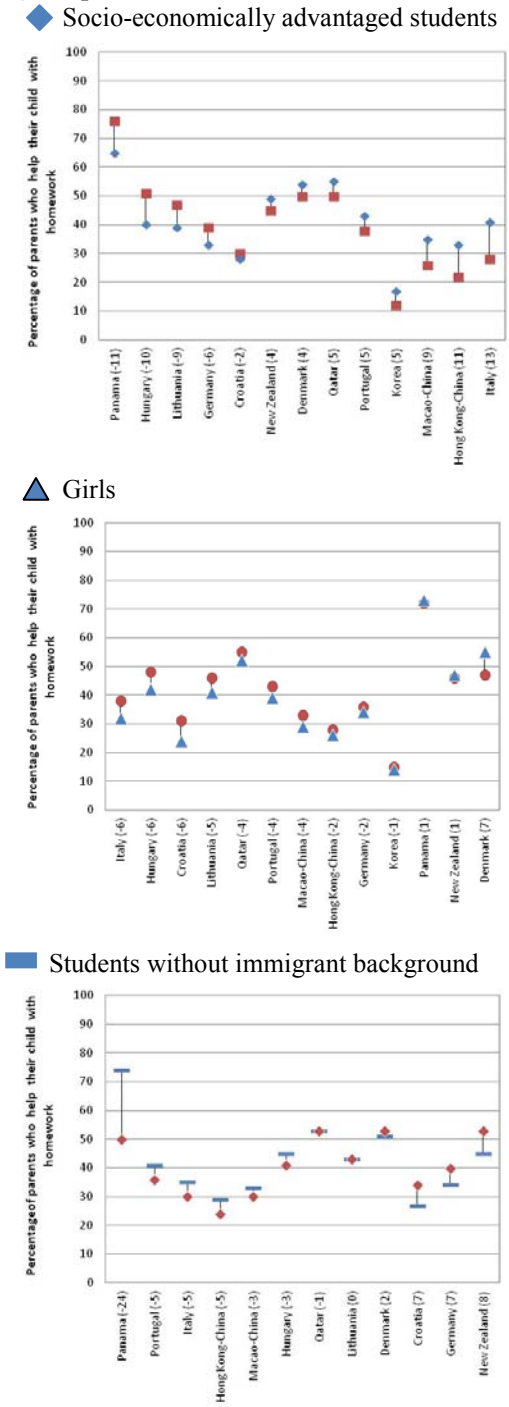


Source: Tables 4.5b and 4.6d.

Note: The group difference in involvement appears in parentheses after the country/economy name.
Countries/Economies are ranked in ascending order of the group difference in involvement.

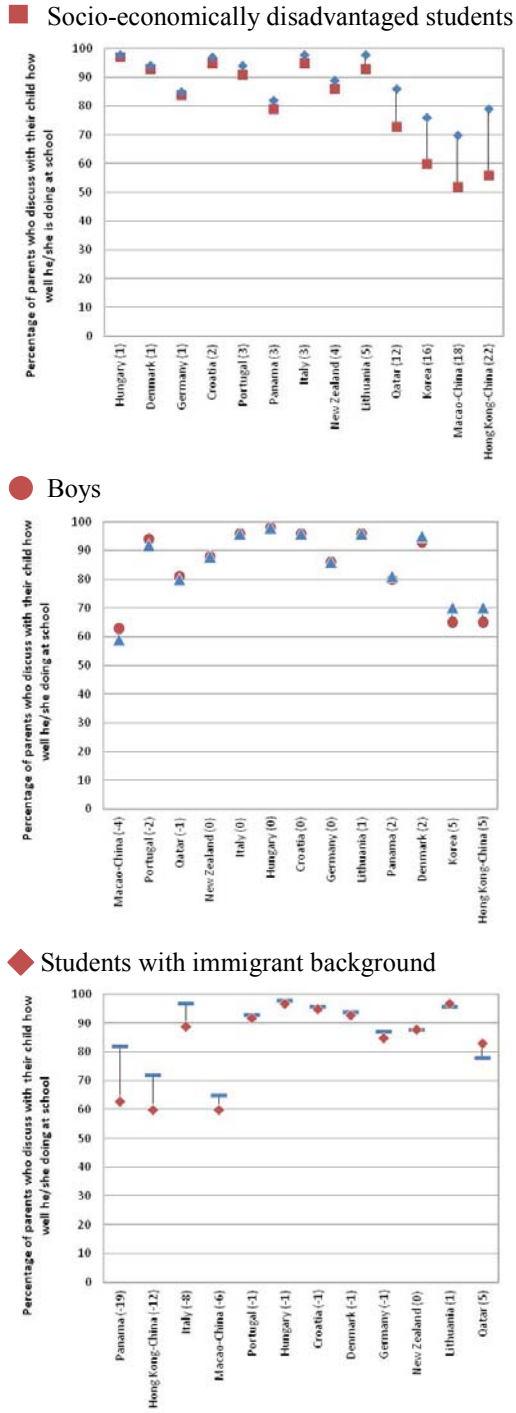
Figure 4.9 - Percentage of parents involved in home-based academic activities, by *PISA index of economic, social and cultural status,* gender, immigrant background, respondent's gender and family structure

a) Help the child with his/her homework



Source: Table 4.2h.

b) Discuss how well the child is doing at school

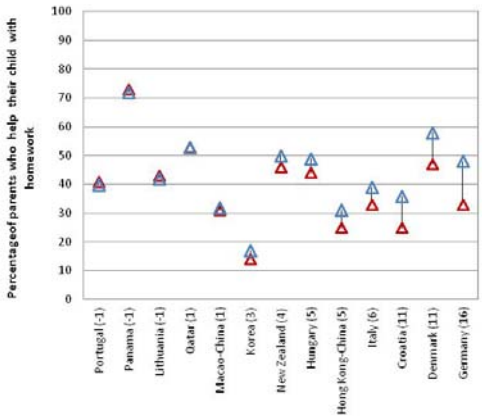


Source: Table 4.2c.

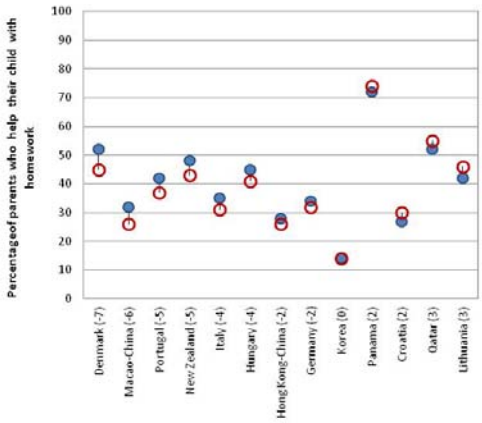
Note: The group difference in involvement appears in parentheses after the country/economy name.
Countries/Economies are ranked in ascending order of the group difference in involvement.

a) Help the child with his/her homework

△ Only the mother filled the questionnaire



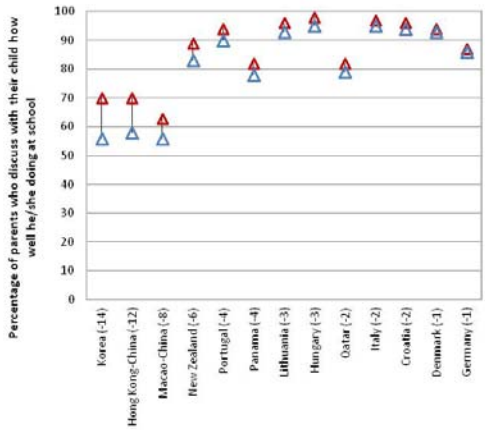
● Non-single parent



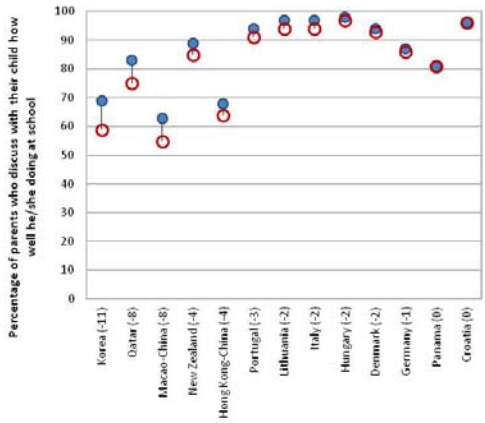
Source: Tables 4.5c and 4.6b.

b) Discuss how well the child is doing at school

△ Only the father filled the questionnaire



○ Single parent



Source: Tables 4.5c and 4.6b.

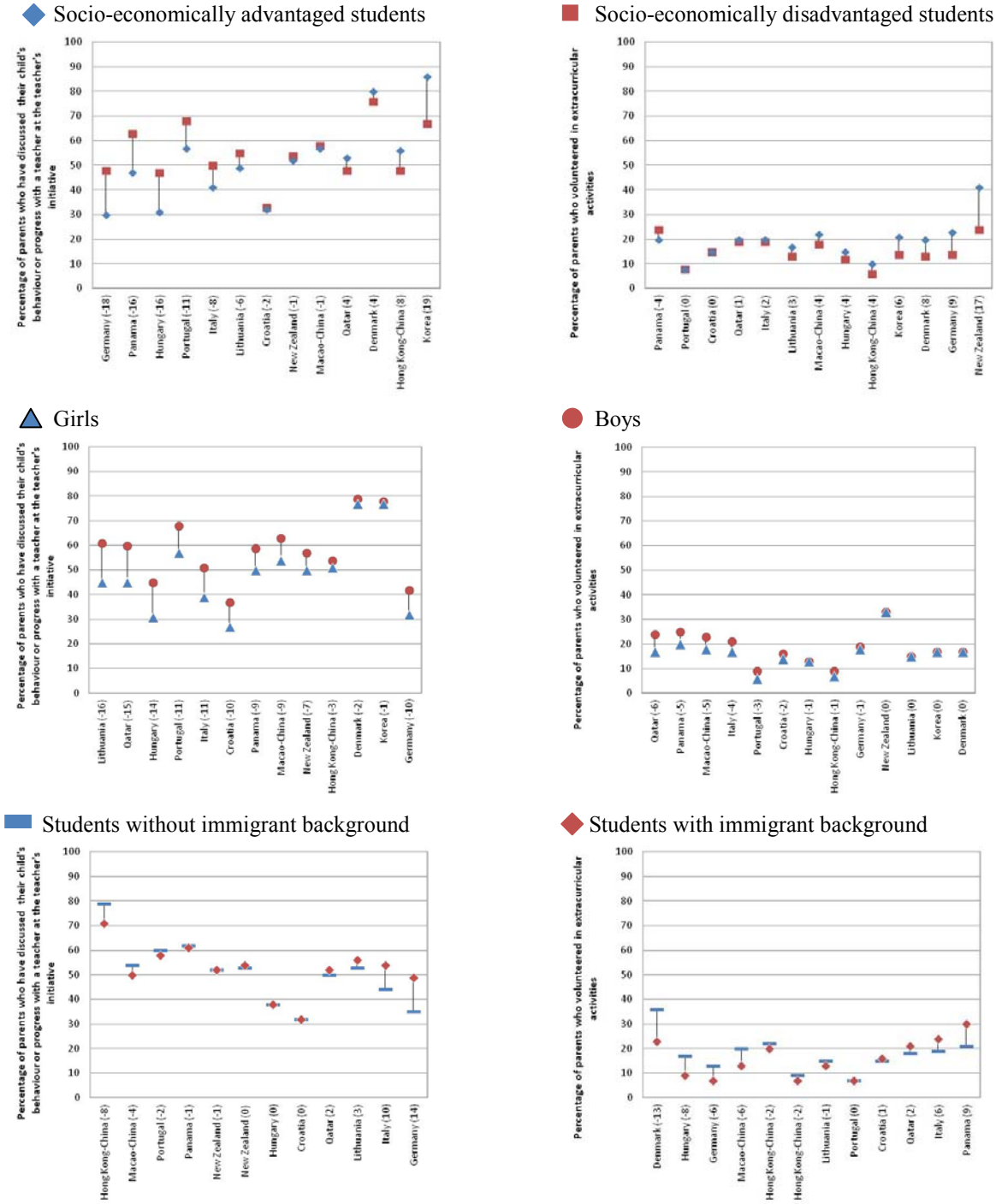
Note: The group difference in involvement appears in parentheses after the country/economy name.

Countries/Economies are ranked in ascending order of the group difference in involvement.

Figure 4.10 - Percentage of parents involved in school-based activities, by *PISA index of economic, social and cultural status,* gender, immigrant background, respondent's gender and family structure

a) Discussed child's progress or behaviour with teacher at the teacher's initiative

b) Volunteered in extra-curricular activities

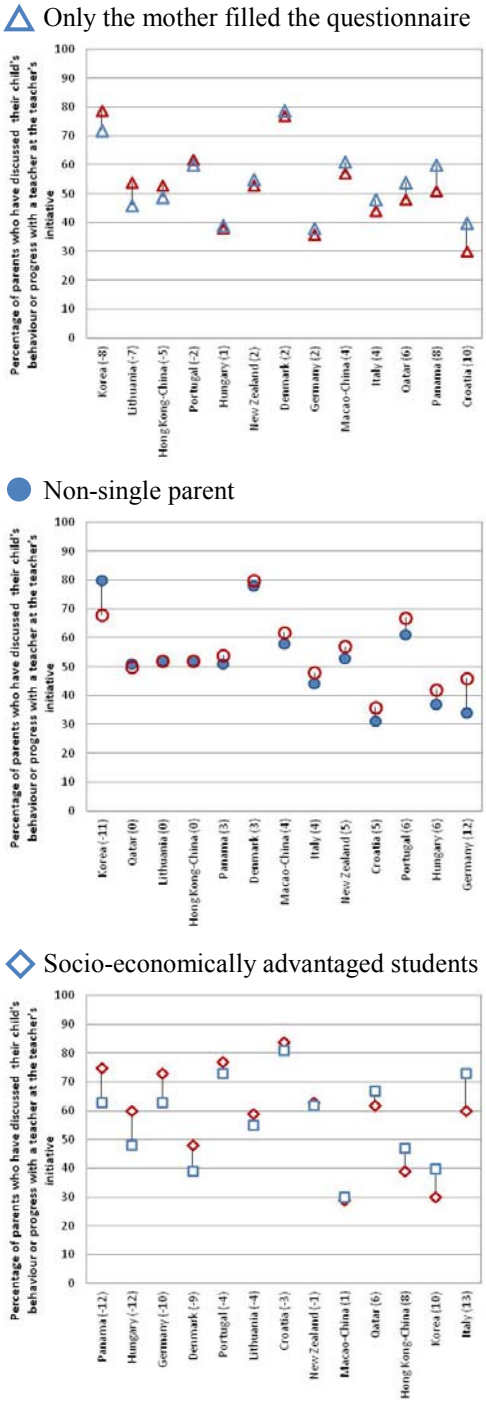


Source: Table 4.3b.

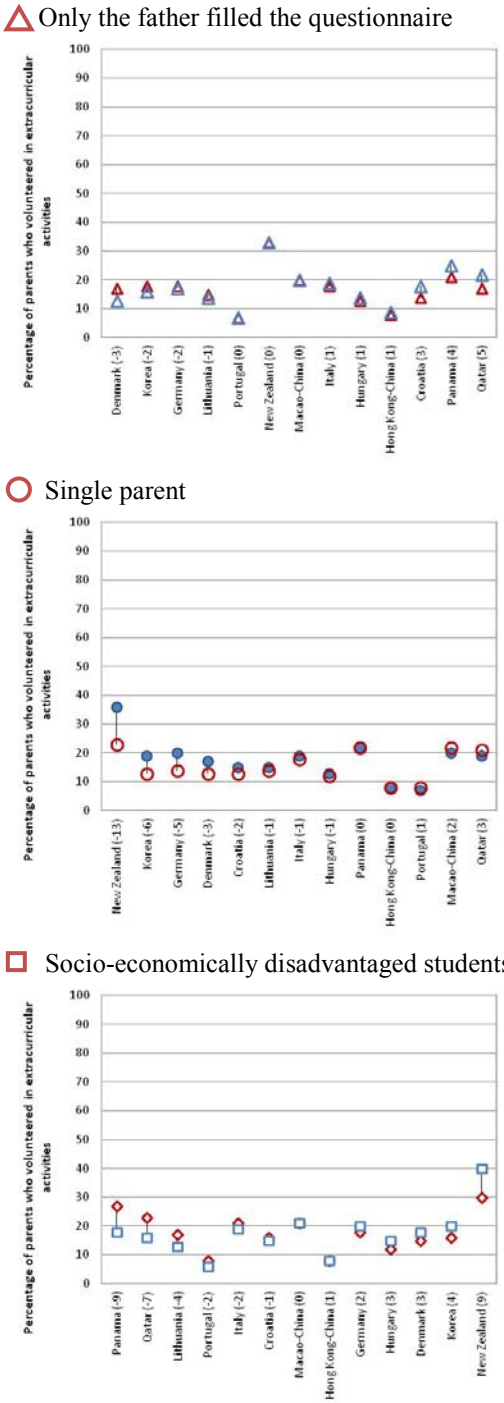
Source: Table 4.3d.

Note: The group difference in involvement appears in parentheses after the country/economy name.
Countries/Economies are ranked in ascending order of the group difference in involvement.

a) Discussed child's progress or behaviour with teacher at the teacher's initiative



b) Volunteered in extra-curricular activities



Source: Tables 4.5d, 4.6c and 4.7d.

Source: Tables 4.5d, 4.6c and 4.7d.

Note: The group difference in involvement appears in parentheses after the country/economy name.
Countries/Economies are ranked in ascending order of the group difference in involvement.

FIGURES FOR CHAPTER 5

Figure 5.1 - Percentage of parents involved during their child's first year in primary school

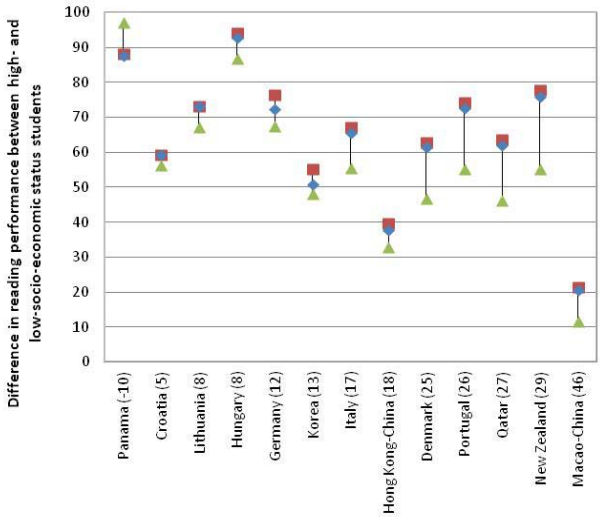
a) Read books to child at least once a week when child was in first year of primary school

b) Discusses social or political issues with child

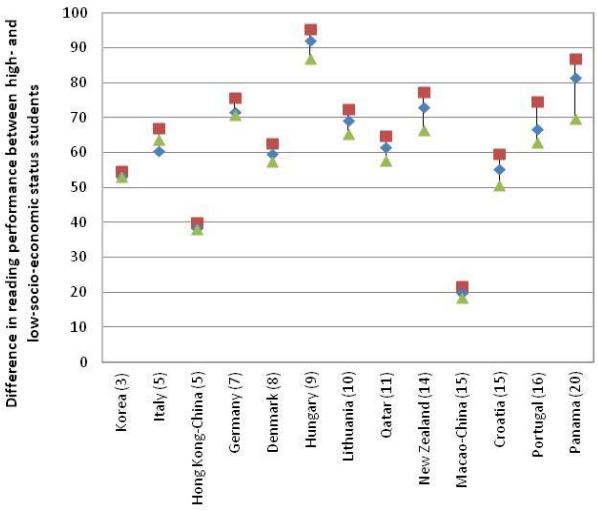
◆ Observed difference in reading performance between high- and low-socio-economic status students

■ Difference in reading performance after accounting for different levels of parental involvement (difference to observed difference signals composition)

▲ Difference in reading performance after accounting for different levels of parental involvement (difference to observed difference signals composition and differential strength)



Source: Table 5.1a.



Source: Table 5.1a.

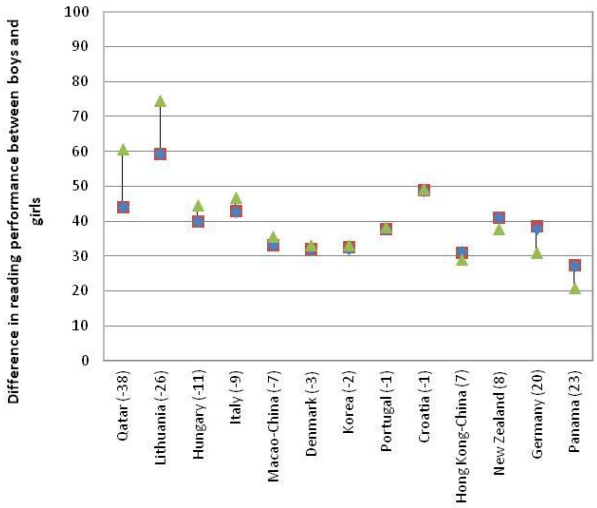
a) Read books to child at least once a week when child was in first year of primary school

b) Discusses social or political issues with child

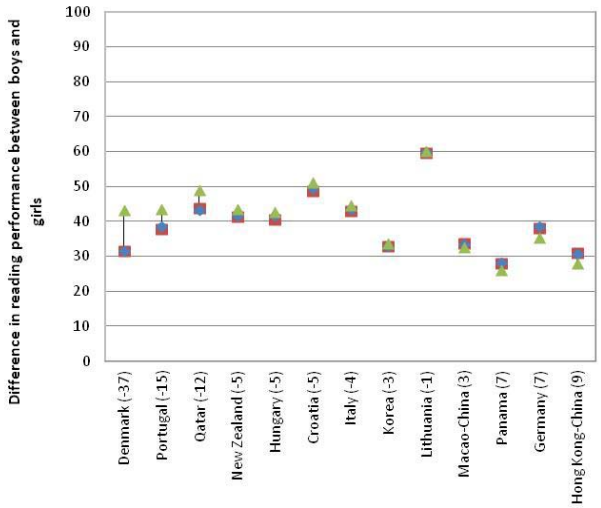
◆ Observed difference in reading performance between girls and boys

■ Difference in reading performance after accounting for different levels of parental involvement (difference to observed difference signals composition)

▲ Difference in reading performance after accounting for different levels of parental involvement (difference to observed difference signals composition and differential strength)



Source: Table 5.2a.



Source: Table 5.2a.

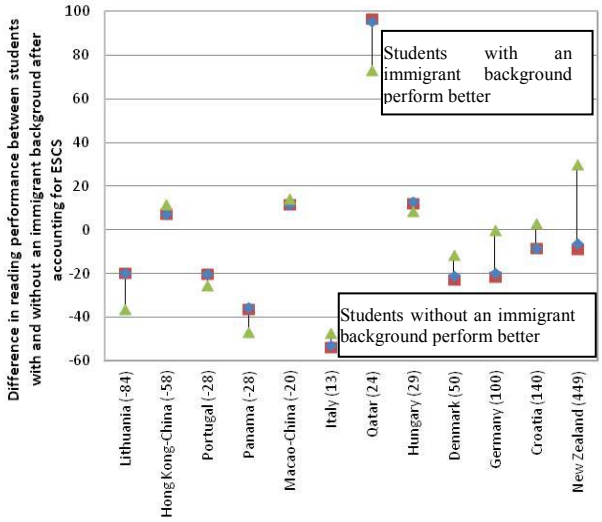
a) Read books to child at least once a week when child was in first year of primary school

b) Discusses social or political issues with child

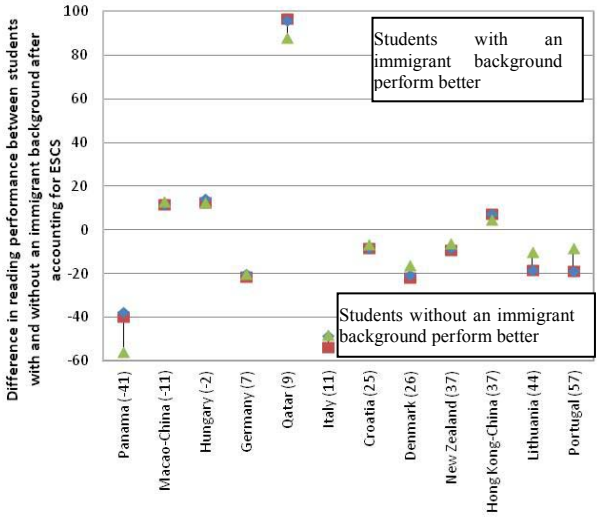
◆ Observed difference in reading performance between students with and without an immigrant background after accounting for the *PISA index of economic, social and cultural status*

■ Difference in reading performance after accounting for different levels of parental involvement (difference to observed difference signals composition)

▲ Difference in reading performance after accounting for different levels of parental involvement (difference to observed difference signals composition and differential strength)



Source: Table 5.2a.



Source: Table 5.2a.

ANNEX 1
SAMPLING AND ANALYTICAL LIMITATIONS

181. This annex discusses some of the limitations of the current analysis in elaborating causal claims between forms of parental involvement and student outcomes from PISA data. Several issues limit the ability of the relationships in this working paper to be interpreted as causal relationships. These include the cross-sectional nature of the PISA survey, potential cases of reverse causality and non-recursiveness, omitted variable bias, general limitations of retrospective questions and the response rates of the parental questionnaire. While the latter issue affects the external validity of the relationships in this working paper, the former affect the internal validity, that is, the report's ability to treat these relationships as causal.

182. PISA is a cross-sectional study and is thus limited in its ability to assess causal relationships. PISA can identify relationships between, for example, parental involvement and increased reading performance across countries and economies, and effectively state that the children of involved parents have higher performance than children of less involved parents. It is unable, however, to isolate the causal nature of this relationship and say that children of involved parents have higher performance *because of* the benefits of parental involvement. In some cases the analyses may miss important mediating variables that may explain the observed relationships.

183. The observed relationships are also sensitive to reverse causality, meaning that parents are more likely to be involved because of their children's performance. Students who have problems in school, for example, are more likely to have their parents help them with homework (Ho and Willms, 1996). This is also likely the case for instances of involvement in which parents discuss their children's progress or behaviour with teachers. In these particular cases, the performance of students is driving the involvement of parents.

184. Some of the observed relationships may in turn be subject to feedback loops, meaning that parents that are more involved do in fact help their children's outcomes, which in turn makes it easier for parents to be involved. This is likely the case for forms of parental involvement that both help students' outcomes and facilitate the interaction between students and parents. Parents who talk to children about their school lives signal the importance of school and students may put forth more effort and interest in school. This, in turn, makes it more likely for students to share their experience in school, making it more likely that parents talk about these issues with their children. Similarly, it is also possible that parents who discuss social and political issues with their children help their children develop cognitive abilities to discuss and communicate complex themes, which in turn facilitates further conversations of this type.

185. The PISA parental questionnaire asks parents about whether an adult was involved in certain activities when the child was entering primary school. For most parents this means evaluating a behaviour that occurred approximately ten years before the parent is answering the questionnaire. Survey design research has generally found that individuals may sometimes recall the past in inaccurate ways, producing recall bias in retrospective questions (Pearson, Ross *et al*., 1992).

186. Despite these potential issues with the internal validity of the parental involvement measures and the measurement of causal relationships with reading performance, the relationships found in this working paper are generally consistent with the prior literature on the effects of parental involvement on

achievement, signalling that if any bias is present, it is unlikely to affect the overall trends and results discussed in this working paper.

187. As described in Chapter 1, the PISA parental questionnaire is a pencil-and-paper questionnaire that students take home and return to school the day after. In this process, response rates may decrease if students forget to bring the questionnaire home, forget to show it to their parents and/or forget to bring it to school once the questionnaire has been answered. This reduction in response rates may introduce bias in the estimates if certain kinds of students (those with more involved parents, those with higher achievement, etc.) are more likely to return the answered questionnaire than others. Table A2.1 shows the number and characteristics of students who answered the parental questionnaire as compared to those who answered the main PISA surveys.

188. In no country or economy that implemented the parental questionnaire did all students come back with the completed questionnaire; in every country and economy, the response rate for the parental questionnaire is lower than that of the PISA questionnaire as a whole. In most countries and economies, there is no statistically significant difference between the reading performance, the socio-economic status, the percentage of girls and the percentage of students with an immigrant background in the sample of students that brought back the parental questionnaire as compared to the complete sample of students that participated in the PISA study. Only in Germany, Denmark, New Zealand and Qatar are there statistically significant differences either in performance, socio-economic status, gender or immigrant background. In Germany and New Zealand, the sample of students that have at least one valid answer in the parental questionnaire have significantly higher reading performance but are not different in socio-economic status or immigrant background. In Denmark and Qatar, students who answered the parental questionnaire have higher reading performance, a higher socio-economic status and have a different likelihood of having an immigrant background. In Germany and Qatar, students who answered the parental questionnaire are more likely to be girls when compared to students who participated in the PISA assessment.

ANNEX 2
THE 2009 PARENTAL QUESTIONNAIRE

Parents were asked to answer the following questions.

1. Who will complete this questionnaire?

a. Mother or other female guardian

b. Father or other male guardian

c. Other (specify)

2. Did your child participate in <child care> before <ISCED 0>?

a. Yes

b. No

3. When your child attended the first year of <ISCED 1>, how often did you or someone else in your home undertake the following activities with her or him?

*Select one of the following options for each response: "*Never or hardly ever*", "*Once or twice a month*", "*Once or twice a week*", "*Every day or almost every day*".*

a. Read books

b. Tell stories

c. Sing songs

d. Play with alphabet toys (for example: blocks with letters of the alphabet)

e. Talk about things you had done

f. Talk about what you had read

g. Play word games

h. Write letters or words

i. Read aloud signs and labels

4. In what language did most of the activities in Question 3 take place?

a. <test language>

b. Another language

5. When you are at home, how much time do you spend reading for your own enjoyment (*e.g.*, magazines, comics, novels, fiction, non-fiction)?

a. More than 10 hours a week

b. 6-10 hours a week

c. 1-5 hours a week

d. Less than one hour a week

6. How much do you agree or disagree with these statements about reading?

*Select one of the following options for each response: "*Strongly agree*", "*Agree*", "*Disagree*", "*Strongly disagree*".*

a. Reading is one of my favourite hobbies

b. I feel happy if I receive a book as a present

c. For me, reading is a waste of time

d. I enjoy going to a bookstore or a library

7. Which of the following are available to your child in your home?

Select "Yes" *or* "No" *for each response.*

a. Email

b. <Chat on line> / <MSN®>

c. Internet connection

d. Daily newspaper

e. A subscription to a journal or magazine

f. Books of his/her very own (do not count school books)

8. How often do you or someone else in your home do the following things with your child?

*Select one of the following options for each response: "*Never or hardly ever*", "*Once or twice a month*", "*Once or twice a week*", "*Every day or almost every day*".*

a. Discuss political or social issues

b. Discuss books, films or television programmes

c. Discuss how well your child is doing at school

d. Eat <the main meal> with your child around a table

e. Spend time just talking to your child

f. Go to a bookstore or library with your child

g. Talk with your child about what he/she is reading on his/her own

h. Help your child with his/her homework

9. Does the child's father have any of the following qualifications?

Select "Yes" *or* "No" *for each response.*

a. <ISCED level 5A, 6>

b. <ISCED level 5B>

c. <ISCED level 4>

d. <ISCED level 3A>

10. Does the child's mother have any of the following qualifications?

Select "Yes" *or* "No" *for each response.*

a. <ISCED level 5A, 6>

b. <ISCED level 5B>

c. <ISCED level 4>

d. <ISCED level 3A>

11. What is your annual household income?

Please add together the total income, before tax, from all members of your household.

a. Less than <$A>

b. <$A> or more but less than <$B>

c. <$B> or more but less than <$C>

d. <$C> or more but less than <$D>

e. <$D> or more but less than <$E>

f. <$E> or more

12. Please answer the following question thinking just of expenses related to <the student who brought this questionnaire home>.

In the last twelve months, about how much would you have paid to educational providers for services?

In determining this, please include any tuition fees you pay to your child's school, any other fees paid to individual teachers in the school or to other teachers for any tutoring your child receives, as well as any fees for cram school.

Do not include the costs of goods like sports equipment, school uniforms, computers or textbooks if they are not included in a general fee (that is, if you have to buy these things separately).

a. Nothing

b. <More than $0 but less than $W>

c. <$W or more but less than $X>

d. <$X or more but less than $Y>

e. <$Y or more but less than $Z>

f. <$Z> or more

13. How many children are there in your household (including <the student who brought this questionnaire home>)?

a. One (*i.e.* <the student who brought this questionnaire home>)

b. Two

c. Three

d. Four

e. Five

f. Six or more

14. How much do you agree or disagree with the following statements?

*Select one of the following options for each response: "*Never or hardly ever*", "*Once or twice a month*", "*Once or twice a week*", "*Every day or almost every day*".*

a. Most of my child's school teachers seem competent and dedicated

b. Standards of achievement are high in my child's school

c. I am happy with the content taught and the instructional methods used in my child's school

d. I am satisfied with the disciplinary atmosphere in my child's school

e. My child's progress is carefully monitored by the school

f. My child's school provides regular and useful information on my child's progress

g. My child's school does a good job in educating students

15. The last <academic year>, have you participated in any of the following school-related activities?

Select "Yes" *or* "No" *for each response.*

a. Discuss your child's behaviour or progress with a teacher on your own initiative

b. Discuss your child's behaviour or progress on the initiative of one of your child's teachers

c. Volunteer in physical activities, *e.g.,* building maintenance, carpentry, gardening or yard work

d. Volunteer in extra-curricular activities, *e.g.,* book club, school play, sports, field trip

e. Volunteer in the school library or media centre

f. <Assist a teacher in the school>

g. Appear as a guest speaker

h. Participate in local school <government>, *e.g.,* parent counsel or school management committee

16. Which of the following statements best describes the schooling available to students in your location?

a. There are two more other schools in this area that compete with the school my child is currently attending

b. There is one other school in this area that competes with the school my child is currently attending

c. There are no other schools in this area that compete with the school my child is currently attending

17. How important are the following reasons for choosing a school for your child?

*Select one of the following options for each response: "*Not important*", "*Somewhat important*", "*Important*", "*Very important*".*

a. The school is at a short distance to home

b. The school has a good reputation

c. The school offers particular courses or school subjects

d. The school adheres to a particular <religious philosophy>

e. The school has a particular pedagogical-didactical approach, *e.g.,* <example>

f. Other family members attended the school

g. <Expenses are low> (*e.g.,* tuition, books, room and board)

h. The school has < financial aid> available, such as a school loan, scholarship, or grant

i. The school has an active and pleasant school climate

j. The academic achievements of students in the school are high

k. There is a safe school environment

DATA TABLES

Table 3.1a - Relationship between parental involvement and reading performance: Involvement when children enter primary school

	Read books				Tell stories				Sing songs				Play with alphabet toys				Talk about what the parent had done			
	Before accounting for ESCS		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**51.07**	5.20	**29.22**	4.83	7.23	4.11	-1.17	3.78	**20.10**	4.02	**9.55**	3.36	**-11.23**	3.83	**-8.19**	3.37	**45.55**	6.86	**22.38**	6.40
Denmark	**29.73**	5.40	**17.47**	5.62	1.14	3.60	-1.14	3.55	**13.71**	3.56	**7.96**	3.57	**-10.25**	3.24	**-9.21**	3.23	**48.47**	8.18	**32.17**	9.72
Hong Kong-China	**11.42**	3.10	0.86	2.95	**14.35**	3.27	3.05	3.07	**6.60**	2.60	-1.35	2.38	**6.17**	2.79	-0.86	2.61	**8.63**	2.58	2.77	2.56
Croatia	**8.60**	3.48	1.81	3.19	**11.82**	3.34	2.73	3.07	5.33	3.20	-0.11	2.97	**-7.44**	3.51	**-9.96**	3.30	**9.35**	3.96	2.06	4.02
Hungary	**32.59**	5.49	**18.80**	4.78	**29.36**	5.08	**10.42**	3.58	**10.16**	3.39	2.45	2.86	-2.18	3.70	-4.71	2.63	**15.27**	4.58	-2.74	4.24
Italy	**21.36**	1.88	**10.94**	1.77	**29.21**	2.10	**16.54**	1.91	**16.41**	1.79	**9.00**	1.66	**6.24**	2.04	1.41	1.94	**44.71**	3.99	**31.65**	3.85
Korea	**24.60**	3.63	**13.20**	3.32	**12.58**	3.18	3.85	3.01	**11.31**	2.48	4.33	2.29	2.44	2.57	-2.42	2.53	**8.51**	2.70	2.72	2.59
Lithuania	4.24	3.72	-0.45	3.48	6.10	3.32	-2.10	3.45	-0.07	2.78	-1.80	2.49	**-11.61**	3.56	**-10.15**	3.07	**12.63**	4.42	4.62	4.00
Macao-China	**5.26**	2.05	1.54	2.04	**9.31**	2.32	4.56	2.45	**5.46**	2.03	2.05	2.18	2.54	2.09	-1.04	2.21	**8.57**	2.29	**6.35**	2.25
New Zealand	**63.06**	8.74	**43.56**	8.36	**22.45**	5.25	**11.73**	4.61	**19.76**	4.58	**10.85**	4.60	**9.10**	4.50	4.02	4.21	**44.25**	8.07	**27.63**	7.24
Panama	**22.39**	8.71	11.89	8.04	**33.36**	7.56	**19.85**	7.12	**17.98**	6.90	2.10	5.49	**34.00**	8.06	**16.40**	6.43	**57.74**	10.23	**34.82**	8.34
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	**22.77**	3.38	5.57	2.97	**28.48**	3.37	**10.31**	3.05	**21.57**	3.19	**8.59**	2.88	**16.73**	3.16	2.74	2.76	**16.22**	4.21	1.16	3.99
Qatar	**35.79**	2.93	**27.26**	2.95	**48.90**	2.78	**37.18**	2.86	**45.46**	2.72	**35.54**	2.74	**35.45**	3.08	**24.85**	3.13	**30.05**	3.70	**21.42**	3.68

	Talk about what the parent had read				Play word games				Write words and letters				Read signs out loud			
	Before accounting for ESCS		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**17.11**	(3.82)	6.31	(3.25)	7.07	(3.74)	-0.61	(3.51)	3.02	(6.59)	-3.41	(5.38)	**22.08**	(4.31)	**10.33**	(4.07)
Denmark	**11.09**	(4.48)	6.63	(4.47)	**10.11**	(3.52)	6.01	(3.30)	5.08	(4.00)	1.14	(3.67)	**8.82**	(4.12)	3.06	(3.79)
Hong Kong-China	-1.21	(3.54)	-6.42	(3.49)	3.13	(3.00)	-5.10	(2.81)	**13.40**	(2.76)	4.89	(2.59)	**8.32**	(2.90)	0.35	(2.95)
Croatia	5.35	(3.50)	-0.53	(3.29)	**9.95**	(3.07)	1.04	(2.87)	-7.40	(6.45)	-9.82	(5.62)	5.92	(3.83)	-1.46	(3.28)
Hungary	**17.58**	(4.20)	**8.15**	(3.67)	**8.02**	(3.74)	3.36	(2.78)	-2.41	(5.67)	-1.41	(4.91)	**11.12**	(4.46)	1.53	(3.16)
Italy	**19.95**	(1.79)	**10.84**	(1.66)	**19.77**	(2.08)	**12.16**	(1.92)	**22.65**	(2.15)	**13.79**	(1.98)	**22.42**	(2.13)	**13.64**	(1.89)
Korea	**11.94**	(2.75)	3.50	(2.65)	**9.55**	(2.81)	2.67	(2.58)	**15.04**	(3.28)	**6.56**	(2.98)	**8.39**	(2.75)	1.03	(2.52)
Lithuania	3.20	(3.25)	1.40	(2.97)	-1.89	(3.00)	-3.09	(2.72)	**-12.47**	(4.91)	**-10.52**	(4.13)	-0.65	(3.63)	-5.14	(3.32)
Macao-China	1.94	(2.69)	-1.32	(2.69)	3.44	(2.57)	-0.42	(2.70)	**5.72**	(2.51)	2.24	(2.62)	0.07	(2.02)	-2.80	(2.06)
New Zealand	**22.47**	(4.09)	**16.14**	(3.81)	**22.42**	(4.13)	**12.01**	(3.75)	**36.54**	(6.13)	**23.49**	(5.84)	**39.44**	(4.53)	**21.54**	(4.10)
Panama	**29.12**	(9.73)	16.30	(8.50)	**13.64**	(6.25)	6.56	(6.38)	12.53	(9.24)	6.55	(8.79)	**20.54**	(7.41)	10.90	(6.67)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	**16.11**	(2.90)	3.87	(2.73)	**15.41**	(2.57)	3.20	(2.51)	**19.09**	(3.38)	5.71	(3.19)	**14.06**	(3.51)	2.95	(3.15)
Qatar	**20.56**	(3.19)	**14.35**	(3.12)	**23.58**	(3.29)	**16.01**	(3.21)	**41.99**	(3.54)	**32.25**	(3.55)	**36.82**	(3.44)	**26.37**	(3.46)

Note: Estimates from regression models. Models "Before accounting for ESCS" include only the respective indicator of parental involvement. Models "After accounting for ESCS" include the indicator of parental involvement and the student's *PISA index of economic, social and cultural status* as covariates in the regression model.

Table 3.1b - Relationship between parental involvement and reading performance: School-based involvement

	Discuss the child's progress or behaviour with a teacher on the parent's initiative				Discuss the child's progress or behaviour with a teacher on the teacher's initiative				Volunteer in physical activities				Volunteer in extra-curricular activities				Volunteer in the school library or media centre			
	Before accounting for ESCS		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**-25.43**	4.13	**-58.01**	4.09	**-26.17**	3.74	**-46.55**	3.68	**-20.83**	8.36	**-19.40**	6.55	-0.57	4.49	**-9.68**	3.90	-16.06	13.05	-19.02	11.18
Denmark	**-32.72**	2.79	-0.97	3.93	**-25.75**	2.47	-3.15	3.61	-7.47	6.95	-11.85	6.69	**10.44**	4.15	3.70	3.86	-2.94	30.77	6.43	23.32
Hong Kong-China	**-6.58**	2.63	**-16.89**	2.87	**-12.53**	2.46	**-20.07**	2.91	**-34.67**	6.67	**-35.11**	6.63	**-20.11**	6.24	**-24.71**	6.06	**-43.39**	7.56	**-46.01**	7.14
Croatia	**-11.00**	4.43	**-30.67**	3.34	**-13.33**	4.08	**-29.37**	2.95	**-44.74**	6.36	**-39.91**	6.11	**-23.44**	4.23	**-23.31**	3.84	**-74.82**	13.19	**-66.18**	12.28
Hungary	**-31.53**	4.03	**-53.69**	4.84	**-27.85**	2.89	**-39.33**	3.57	**-31.66**	9.32	**-25.81**	7.07	-7.67	5.70	**-14.14**	4.67	**-75.31**	11.47	**-51.87**	9.08
Italy	**6.88**	2.15	**-40.74**	1.85	-3.69	1.99	**-35.91**	1.69	**-74.93**	4.56	**-64.64**	4.18	**-18.64**	2.47	**-19.73**	2.20	**-46.56**	3.79	**-42.09**	3.68
Korea	**7.37**	3.06	**14.49**	3.95	**-5.27**	2.54	1.11	3.32	**10.03**	4.80	-1.00	4.47	-2.87	4.40	**-8.21**	4.03	-0.67	4.98	-6.32	4.80
Lithuania	**-15.38**	2.92	**-31.89**	2.98	**-17.61**	2.89	**-28.34**	2.82	**-30.35**	5.52	**-30.10**	4.69	-1.41	4.27	-4.45	4.16	**-43.89**	14.36	**-39.36**	12.35
Macao-China	**-17.91**	2.21	**-21.31**	2.04	**-20.70**	2.19	**-21.19**	2.02	**-24.91**	3.24	**-24.14**	3.32	**-20.14**	2.54	**-20.96**	2.57	**-30.49**	5.28	**-28.58**	5.42
New Zealand	**-12.93**	3.49	**-27.85**	3.82	**-18.39**	3.18	**-25.25**	3.31	-0.31	8.64	-10.73	7.62	**19.29**	4.22	5.83	3.87	-24.04	18.00	-17.96	16.54
Panama	**-26.64**	5.06	**-49.87**	6.75	**-20.13**	4.60	**-33.93**	4.88	**-56.18**	9.88	**-38.40**	7.54	**-30.02**	6.69	**-32.13**	5.42	**-65.72**	8.95	**-51.08**	8.26
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	**-23.71**	3.39	**-41.12**	3.74	**-27.83**	3.04	**-34.48**	2.82	**-43.05**	9.32	**-32.33**	8.46	**-21.67**	6.45	**-23.19**	5.43	**-51.19**	11.05	**-43.33**	10.41
Qatar	0.58	3.18	**-9.03**	3.02	**-6.83**	3.12	**-11.75**	2.94	**-31.80**	5.10	**-31.97**	5.10	**-14.99**	4.34	**-15.83**	4.05	**-56.63**	4.80	**-52.43**	4.79

	Assist a teacher in the school				Appear as a guest speaker				Participate in local school government			
	Before accounting for ESCS		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	-9.12	(5.96)	**-16.29**	(5.03)	**-32.27**	(15.82)	**-34.84**	(12.92)	-4.87	(4.86)	**-14.39**	(4.26)
Denmark	1.18	(5.79)	-7.65	(5.65)	7.01	(12.47)	-0.65	(11.55)	**8.53**	(3.99)	4.04	(3.66)
Hong Kong-China	**-37.42**	(5.52)	**-37.61**	(5.31)	**-33.51**	(8.46)	**-36.62**	(8.14)	**-21.58**	(6.62)	**-25.48**	(6.54)
Croatia	m	m	m	m	-22.83	(12.49)	**-32.12**	(9.64)	-1.52	(5.20)	**-12.16**	(4.82)
Hungary	**-35.39**	(6.63)	**-26.5**	(4.36)	-28.81	(20.02)	**-34.01**	(12.53)	-12.33	(9.18)	**-20**	(7.72)
Italy	m	m	m	m	**-64.64**	(3.99)	**-57.21**	(3.35)	**-10.91**	(2.47)	**-16.39**	(2.34)
Korea	**9.05**	(4.55)	-3.84	(4.35)	**-19.34**	(9.45)	**-30.29**	(9.20)	6.43	(3.88)	-3.32	(3.75)
Lithuania	m	m	m	m	**-34.25**	(6.78)	**-26.13**	(6.16)	-3.36	(3.80)	-5.87	(3.29)
Macao-China	**-23.11**	(3.01)	**-22.99**	(3.07)	**-27.96**	(6.44)	**-28.76**	(6.30)	**-5.39**	(2.71)	**-5.81**	(2.75)
New Zealand	-4.54	(8.19)	-12.79	(6.78)	13.8	(18.81)	-11.26	(16.18)	11.19	(7.90)	0.38	(6.91)
Panama	**-56.25**	(9.65)	**-45.84**	(8.12)	**-55.55**	(9.84)	**-43.93**	(8.37)	**-34.42**	(6.75)	**-25.95**	(4.46)
Poland	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	**-22.86**	(6.27)	**-26.28**	(5.08)	**-23.58**	(8.77)	**-27.73**	(6.59)	**-11.86**	(3.55)	**-11.06**	(3.33)
Qatar	**-51.13**	(3.53)	**-48.47**	(3.46)	**-57.01**	(4.39)	**-54.41**	(4.15)	**-44.12**	(4.95)	**-40.66**	(4.67)

Note: Estimates from regression models. Models "Before accounting for ESCS" include only the respective indicator of parental involvement. Models "After accounting for ESCS" include the indicator of parental involvement and the student's *PISA index of economic, social and cultural status* as covariates in the regression model.

Table 3.1c - Relationship between parental involvement and reading performance: Home-based involvement

	Discuss political or social issues				Discuss books, films or television programmes				Eat the main meal with the child around a table				Spend time just talking to the child				Go to a bookstore or library with the child			
	Before accounting for ESCS		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**30.62**	3.54	**12.55**	3.14	**17.30**	3.86	**8.23**	3.41	**36.29**	10.36	**18.38**	9.20	**60.51**	15.35	27.63	15.74	1.22	6.82	5.31	6.05
Denmark	**25.74**	4.13	**14.86**	3.89	**21.99**	3.95	**14.84**	3.94	1.86	9.13	-13.52	8.80	17.55	12.73	3.48	12.59	-2.98	8.98	1.30	8.36
Hong Kong-China	**15.12**	3.10	**9.31**	2.93	**10.25**	2.87	**6.16**	2.76	**26.81**	7.08	**21.07**	7.07	**24.08**	4.46	**16.21**	4.21	6.50	4.38	2.69	4.38
Croatia	**25.71**	2.86	**14.78**	2.65	**17.52**	3.51	**10.46**	3.35	**-22.74**	6.05	**-17.92**	5.88	1.98	6.19	-4.50	6.07	-1.07	6.15	-5.05	5.92
Hungary	**21.30**	4.08	5.62	3.41	6.85	5.72	6.07	4.48	-2.23	6.68	-5.53	5.79	**24.28**	8.36	9.28	7.37	-4.25	7.74	-3.72	5.71
Italy	**41.86**	2.12	**27.00**	1.97	**26.67**	2.51	**19.53**	2.39	**30.43**	6.91	**20.99**	6.06	**16.32**	3.95	6.83	3.63	3.11	2.90	-1.42	2.61
Korea	**22.25**	3.63	**14.68**	3.23	**8.75**	2.54	**5.51**	2.42	**26.89**	7.44	**19.21**	6.50	**23.76**	4.62	**15.80**	4.25	**16.61**	5.89	10.03	5.13
Lithuania	**22.39**	2.62	**11.58**	2.38	4.11	3.26	0.07	3.11	4.63	7.08	-3.99	6.15	**19.50**	5.32	**9.53**	4.46	-3.00	4.34	-4.06	4.02
Macao-China	**13.98**	2.05	**10.72**	2.04	**8.95**	2.02	**6.07**	2.11	**27.58**	3.91	**25.74**	3.96	**7.78**	2.42	3.55	2.38	0.07	3.81	-3.74	3.75
New Zealand	**32.26**	3.91	**17.03**	3.21	**27.12**	5.04	**16.20**	4.09	0.58	4.91	-6.25	4.45	**24.26**	9.72	7.35	9.09	8.37	5.24	**11.10**	4.80
Panama	**37.50**	6.79	**17.84**	4.74	**23.37**	10.42	4.99	8.10	7.14	7.59	6.64	7.91	**26.84**	9.06	12.45	7.24	**-25.23**	6.61	**-17.21**	7.26
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	**36.77**	3.48	**16.95**	2.88	**27.18**	3.61	**12.81**	3.27	**38.13**	11.10	**26.03**	10.10	**14.45**	5.68	4.78	5.75	-0.18	3.68	-6.02	3.65
Qatar	**32.24**	3.12	**23.82**	3.14	**29.22**	3.56	**22.87**	3.37	**53.00**	5.40	**42.66**	4.93	**36.64**	4.68	**25.20**	4.43	**-31.07**	3.31	**-30.38**	3.05

	Talk with the child about what he/she is reading on his/her own				Help the child with his/her homework				Discuss how well the child is doing at school			
	Before accounting for ESCS		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**13.2**	(3.65)	**6.63**	(2.95)	**-48.28**	(4.26)	**-41.93**	(3.49)	-4.37	(5.58)	-4.61	(5.10)
Denmark	5.58	(3.17)	3.6	(3.02)	**-13.46**	(2.91)	**-15.4**	(2.74)	3.3	(6.45)	0.96	(6.46)
Hong Kong-China	1.99	(2.93)	-3.05	(2.81)	**-13.99**	(2.99)	**-18.5**	(2.93)	**13.52**	(3.28)	5.34	(2.92)
Croatia	**-5.37**	(2.72)	**-8.33**	(2.66)	**-41.71**	(3.38)	**-40.03**	(3.00)	9.09	(7.92)	2.9	(7.62)
Hungary	-2.47	(4.03)	-0.57	(2.88)	**-45.07**	(3.76)	**-36.64**	(2.82)	-0.79	(11.57)	-5.15	(9.94)
Italy	**17.7**	(1.90)	**10.29**	(1.68)	**-28.89**	(1.89)	**-37.53**	(1.77)	**29.21**	(4.83)	**15.56**	(4.64)
Korea	**15.73**	(3.56)	**7.65**	(3.21)	-6.55	(4.78)	**-10.55**	(4.45)	**17.18**	(2.99)	**9.13**	(2.60)
Lithuania	4.9	(2.77)	2.31	(2.55)	**-32.98**	(3.12)	**-29.17**	(2.79)	**26.02**	(8.42)	9.13	(7.86)
Macao-China	**-4.68**	(2.25)	**-7.09**	(2.23)	**-14.07**	(2.32)	**-15.72**	(2.34)	2.89	(2.54)	-0.89	(2.52)
New Zealand	**7.85**	(3.61)	4.11	(3.01)	**-15.45**	(4.00)	**-18.4**	(3.49)	2.47	(5.31)	-1.89	(4.98)
Panama	**-14.37**	(6.56)	-5.8	(5.64)	**-30.01**	(9.10)	**-24.82**	(7.99)	**25.9**	(10.29)	13.6	(8.85)
Poland	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	**6.78**	(3.21)	1.14	(3.03)	**-27.78**	(2.93)	**-30.6**	(2.65)	-1.9	(5.87)	-10.51	(5.54)
Qatar	4.04	(3.51)	2.19	(3.42)	**-17.12**	(2.85)	**-20.07**	(2.81)	**36.98**	(3.91)	**25.76**	(3.90)

Note: Estimates from regression models. Models "Before accounting for ESCS" include only the respective indicator of parental involvement. Models "After accounting for ESCS" include the indicator of parental involvement and the student's *PISA index of economic, social and cultural status* as covariates in the regression model.

Table 3.1d - Relationship between parental involvement and reading performance: Implicit involvement

	Spend time reading for enjoyment at home				Consider reading a favourite hobby				Feel happy when receiving a book as a present				Enjoy going to a library or bookstore				Do not think reading is a waste of time			
	Before accounting for ESCS		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**27.68**	3.52	**12.51**	3.29	**42.85**	3.78	**24.80**	3.37	**55.33**	4.83	**31.48**	4.22	**55.49**	4.03	**31.71**	3.58	**48.92**	10.01	**24.81**	8.19
Denmark	**11.04**	3.42	2.65	3.46	**24.13**	3.09	**12.28**	2.95	**28.97**	4.41	**13.00**	4.48	**27.44**	4.20	**15.26**	4.07	**35.13**	9.18	**22.57**	8.68
Hong Kong-China	**15.68**	2.88	**6.58**	2.75	**11.10**	3.07	2.71	2.96	**6.53**	2.52	-1.22	2.70	**9.36**	3.01	-1.09	2.88	**21.66**	5.39	10.31	5.28
Croatia	**20.57**	3.44	**7.60**	2.98	**10.61**	3.00	-1.32	2.98	**17.43**	3.61	4.48	3.50	**15.87**	3.24	2.56	3.02	**40.01**	6.71	**21.67**	6.49
Hungary	**35.89**	3.76	**12.23**	2.77	**35.00**	4.20	**14.07**	3.39	**46.64**	4.24	**17.80**	3.92	**34.78**	4.80	**8.72**	3.66	**75.85**	8.74	**39.29**	7.47
Italy	**31.86**	2.00	**15.80**	1.94	**27.85**	2.34	**10.32**	2.13	**36.22**	2.82	**17.58**	2.84	**32.49**	2.23	**14.85**	2.00	**65.26**	4.42	**44.92**	4.21
Korea	**10.02**	3.27	0.53	2.90	**10.44**	2.82	2.37	2.52	**29.25**	4.26	**15.26**	3.46	**13.91**	3.10	3.23	2.84	**44.24**	11.00	**25.92**	9.69
Lithuania	**22.70**	3.01	**8.68**	2.63	**14.57**	3.50	0.87	3.54	**31.05**	4.06	**15.49**	3.54	**24.75**	3.00	**10.24**	2.82	**33.66**	4.54	**13.42**	4.16
Macao-China	**6.77**	2.39	2.87	2.41	0.04	2.18	**-4.71**	2.11	0.27	2.59	-3.49	2.59	-0.47	2.20	**-5.41**	2.30	**15.73**	3.08	**11.93**	3.16
New Zealand	**23.43**	3.70	**13.26**	3.33	**30.07**	4.82	**18.32**	4.77	**31.57**	5.66	**15.55**	4.94	**45.08**	6.56	**25.76**	6.03	**62.63**	15.60	**42.22**	14.79
Panama	**34.25**	7.74	**16.52**	6.01	-3.07	7.56	-4.51	6.63	2.71	10.63	2.86	9.50	10.77	7.47	3.24	5.63	**57.23**	10.71	**37.22**	9.74
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	**37.22**	3.81	**11.58**	3.25	**25.17**	3.84	**7.50**	3.45	**23.78**	3.80	3.91	3.58	**25.57**	3.56	5.49	3.45	**50.61**	7.53	**24.89**	7.33
Qatar	**35.48**	3.33	**26.14**	3.30	**14.31**	4.00	7.03	3.87	**29.69**	4.56	**22.07**	4.56	**29.81**	4.20	**20.03**	4.06	**81.96**	4.42	**70.66**	4.42

Note: Estimates from regression models. Models "Before accounting for ESCS" include only the respective indicator of parental involvement. Models "After accounting for ESCS" include the indicator of parental involvement and the student's *PISA index of economic, social and cultural status* as covariates in the regression model.

Table 3.2a - Relationship between parental involvement and enjoyment of reading: Involvement when children enter primary school

	Read books				Tell stories				Sing songs				Play with alphabet toys				Talk about what the parent had done			
	Before accounting for ESCS		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**0.53**	0.05	**0.39**	0.06	**0.21**	0.05	**0.16**	0.05	**0.28**	0.05	**0.21**	0.05	0.00	0.05	0.03	0.04	**0.28**	0.08	0.13	0.08
Denmark	**0.32**	0.05	**0.23**	0.05	**0.08**	0.04	0.06	0.04	**0.14**	0.04	**0.10**	0.04	-0.05	0.03	-0.05	0.03	**0.16**	0.08	0.03	0.09
Hong Kong-China	**0.18**	0.02	**0.12**	0.02	**0.15**	0.02	**0.08**	0.02	**0.11**	0.02	**0.06**	0.02	**0.10**	0.02	**0.05**	0.02	**0.13**	0.02	**0.09**	0.02
Croatia	**0.11**	0.03	**0.08**	0.03	**0.12**	0.04	**0.08**	0.03	**0.12**	0.03	**0.09**	0.03	-0.03	0.03	-0.04	0.03	**0.12**	0.04	**0.09**	0.04
Hungary	**0.39**	0.05	**0.32**	0.05	**0.26**	0.04	**0.17**	0.04	**0.20**	0.03	**0.16**	0.03	0.02	0.03	0.01	0.03	**0.14**	0.04	0.05	0.04
Italy	**0.23**	0.02	**0.18**	0.02	**0.24**	0.01	**0.17**	0.01	**0.19**	0.02	**0.15**	0.02	**0.05**	0.02	0.02	0.02	**0.21**	0.03	**0.14**	0.03
Korea	**0.27**	0.02	**0.21**	0.02	**0.19**	0.02	**0.14**	0.02	**0.14**	0.03	**0.10**	0.03	0.05	0.03	0.02	0.03	**0.15**	0.03	**0.11**	0.03
Lithuania	**0.14**	0.04	**0.12**	0.04	**0.13**	0.04	**0.09**	0.04	**0.15**	0.03	**0.13**	0.03	-0.01	0.04	0.00	0.04	0.08	0.05	0.03	0.05
Macao-China	**0.05**	0.02	0.01	0.02	**0.09**	0.02	0.03	0.02	**0.07**	0.02	0.03	0.02	0.02	0.02	-0.02	0.02	**0.10**	0.02	**0.07**	0.02
New Zealand	**0.30**	0.09	**0.19**	0.09	**0.20**	0.04	**0.15**	0.04	**0.21**	0.04	**0.16**	0.05	**0.09**	0.04	0.06	0.04	**0.20**	0.06	**0.12**	0.06
Panama	**0.12**	0.05	**0.12**	0.05	0.05	0.03	0.06	0.04	**0.08**	0.04	**0.08**	0.04	0.02	0.04	0.03	0.04	0.07	0.05	0.09	0.05
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	**0.28**	0.03	**0.23**	0.03	**0.22**	0.03	**0.16**	0.03	**0.21**	0.03	**0.17**	0.03	**0.12**	0.04	0.07	0.04	**0.15**	0.05	**0.10**	0.04
Qatar	**0.17**	0.02	**0.15**	0.02	**0.20**	0.02	**0.19**	0.02	**0.11**	0.02	**0.10**	0.02	**0.13**	0.02	**0.11**	0.02	**0.13**	0.02	**0.11**	0.02

	Talk about what the parent had read				Play word games				Write words and letters				Read signs out loud			
	Before accounting for ESCS		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**0.19**	(0.05)	**0.12**	(0.04)	0.08	(0.05)	0.02	(0.05)	-0.01	(0.07)	-0.06	(0.06)	**0.22**	(0.05)	**0.13**	(0.04)
Denmark	**0.19**	(0.05)	**0.15**	(0.05)	**0.09**	(0.04)	0.05	(0.04)	0.07	(0.05)	0.04	(0.05)	0.08	(0.05)	0.03	(0.04)
Hong Kong-China	**0.12**	(0.02)	**0.08**	(0.02)	**0.1**	(0.02)	**0.05**	(0.02)	**0.14**	(0.02)	**0.08**	(0.02)	**0.14**	(0.02)	**0.08**	(0.02)
Croatia	**0.12**	(0.03)	**0.1**	(0.03)	**0.09**	(0.03)	0.05	(0.03)	-0.06	(0.05)	-0.07	(0.05)	0.07	(0.04)	0.04	(0.03)
Hungary	**0.3**	(0.04)	**0.25**	(0.04)	**0.12**	(0.03)	**0.09**	(0.03)	0.01	(0.04)	0.01	(0.04)	**0.08**	(0.03)	0.03	(0.03)
Italy	**0.27**	(0.02)	**0.22**	(0.02)	**0.13**	(0.02)	**0.08**	(0.02)	**0.16**	(0.02)	**0.11**	(0.02)	**0.16**	(0.02)	**0.11**	(0.02)
Korea	**0.17**	(0.03)	**0.13**	(0.03)	**0.1**	(0.03)	0.05	(0.03)	**0.1**	(0.03)	0.05	(0.03)	**0.07**	(0.03)	0.02	(0.03)
Lithuania	**0.13**	(0.04)	**0.12**	(0.03)	0.07	(0.04)	0.07	(0.04)	0.01	(0.06)	0.03	(0.06)	0.07	(0.04)	0.05	(0.04)
Macao-China	**0.08**	(0.02)	**0.05**	(0.02)	0.03	(0.02)	-0.02	(0.02)	**0.05**	(0.02)	0.00	(0.02)	**0.04**	(0.02)	0.01	(0.02)
New Zealand	**0.18**	(0.04)	**0.15**	(0.04)	**0.15**	(0.04)	**0.1**	(0.04)	**0.26**	(0.06)	**0.18**	(0.05)	**0.22**	(0.04)	**0.12**	(0.04)
Panama	0.09	(0.05)	**0.1**	(0.04)	**0.11**	(0.04)	**0.1**	(0.04)	0.03	(0.05)	0.02	(0.05)	0.05	(0.04)	0.05	(0.04)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	**0.18**	(0.03)	**0.13**	(0.03)	**0.14**	(0.03)	**0.09**	(0.03)	**0.17**	(0.03)	**0.12**	(0.03)	**0.12**	(0.03)	**0.08**	(0.03)
Qatar	**0.16**	(0.02)	**0.15**	(0.02)	**0.16**	(0.02)	**0.14**	(0.03)	**0.17**	(0.03)	**0.16**	(0.03)	**0.18**	(0.02)	**0.16**	(0.02)

Note: Estimates from regression models. Models "Before accounting for ESCS" include only the respective indicator of parental involvement. Models "After accounting for ESCS" include the indicator of parental involvement and the student's *PISA index of economic, social and cultural status* as covariates in the regression model.

Table 3.2b - Relationship between parental involvement and enjoyment of reading: School-based involvement

	Discuss the child's progress or behaviour with a teacher on the parent's initiative				Discuss the child's progress or behaviour with a teacher on the teacher's initiative				Volunteer in physical activities				Volunteer in extra-curricular activities				Volunteer in the school library or media centre			
	Before accounting for ESCS		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**-0.14**	0.05	**-0.06**	0.02	**-0.43**	0.05	**-0.13**	0.02	-0.03	0.10	0.02	0.03	0.09	0.05	-0.01	0.02	0.09	0.20	0.08	0.05
Denmark	**-0.18**	0.03	-0.02	0.02	0.01	0.04	**-0.04**	0.02	-0.10	0.06	-0.06	0.04	0.02	0.04	-0.01	0.03	0.28	0.33	0.19	0.11
Hong Kong-China	**0.04**	0.02	**0.02**	0.01	0.03	0.02	**0.02**	0.01	-0.06	0.05	0.01	0.03	0.06	0.04	0.03	0.02	**-0.12**	0.05	-0.05	0.03
Croatia	-0.02	0.04	0.00	0.02	**-0.17**	0.03	**-0.06**	0.01	**-0.13**	0.05	0.00	0.03	0.02	0.04	0.00	0.02	-0.14	0.08	-0.05	0.04
Hungary	**-0.10**	0.03	-0.01	0.02	**-0.27**	0.03	**-0.04**	0.02	-0.04	0.05	-0.07	0.04	0.07	0.04	0.03	0.02	**-0.20**	0.10	-0.09	0.07
Italy	0.02	0.02	-0.01	0.01	**-0.22**	0.02	**-0.06**	0.01	**-0.30**	0.03	**-0.11**	0.02	0.00	0.02	0.00	0.01	-0.02	0.03	0.00	0.02
Korea	**0.13**	0.03	**0.03**	0.01	**0.12**	0.03	0.02	0.02	**0.11**	0.04	**0.06**	0.02	**0.06**	0.03	0.01	0.02	0.06	0.04	0.02	0.02
Lithuania	**-0.08**	0.03	**-0.03**	0.01	**-0.26**	0.03	**-0.09**	0.01	-0.11	0.06	-0.05	0.03	0.09	0.05	0.02	0.02	**-0.25**	0.10	0.00	0.07
Macao-China	**-0.04**	0.02	-0.01	0.01	**-0.08**	0.02	-0.01	0.01	-0.01	0.03	0.02	0.02	-0.03	0.02	0.00	0.01	-0.04	0.04	0.00	0.02
New Zealand	-0.06	0.04	**-0.04**	0.02	**-0.22**	0.04	**-0.09**	0.01	-0.02	0.07	-0.04	0.03	0.06	0.04	0.00	0.02	**0.33**	0.13	**0.10**	0.05
Panama	0.06	0.04	0.02	0.03	0.03	0.04	0.02	0.02	0.06	0.05	0.03	0.04	-0.01	0.05	-0.01	0.04	0.04	0.06	0.00	0.05
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	**-0.11**	0.03	-0.03	0.02	**-0.27**	0.03	**-0.10**	0.01	-0.04	0.08	0.00	0.04	0.01	0.05	0.03	0.03	**-0.26**	0.07	-0.05	0.06
Qatar	**0.06**	0.03	0.00	0.01	**-0.05**	0.02	**-0.03**	0.01	-0.04	0.04	-0.01	0.02	0.02	0.03	0.01	0.01	-0.03	0.04	0.02	0.02

	Assist a teacher in the school				Appear as a guest speaker				Participate in local school government			
	Before accounting for ESCS		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	0.06	(0.07)	-0.01	(0.02)	-0.31	(0.19)	**-0.12**	(0.06)	0.06	(0.06)	0.02	(0.03)
Denmark	0.08	(0.07)	0.02	(0.03)	0.24	(0.14)	0	(0.07)	**0.11**	(0.04)	-0.06	(0.04)
Hong Kong-China	-0.06	(0.04)	0.01	(0.02)	-0.09	(0.05)	0	(0.02)	0.01	(0.04)	0.01	(0.03)
Croatia	m	m	m	m	-0.06	(0.11)	0.02	(0.05)	-0.02	(0.04)	0	(0.03)
Hungary	-0.06	(0.04)	0.02	(0.02)	0.03	(0.10)	0.03	(0.04)	-0.04	(0.07)	-0.07	(0.04)
Italy	m	m	m	m	**-0.1**	(0.03)	0	(0.02)	-0.01	(0.02)	**-0.11**	(0.02)
Korea	**0.1**	(0.04)	0.02	(0.03)	-0.05	(0.08)	-0.02	(0.05)	**0.11**	(0.03)	**0.06**	(0.02)
Lithuania	m	m	m	m	-0.11	(0.08)	0	(0.04)	-0.03	(0.04)	-0.05	(0.03)
Macao-China	-0.03	(0.03)	-0.01	(0.01)	-0.01	(0.06)	-0.05	(0.03)	0.03	(0.02)	0.02	(0.02)
New Zealand	0.08	(0.06)	0.01	(0.03)	**0.29**	(0.13)	0.06	(0.05)	**0.22**	(0.07)	-0.04	(0.03)
Panama	0.03	(0.05)	0.03	(0.03)	-0.01	(0.05)	0.02	(0.04)	0.07	(0.05)	0.03	(0.04)
Poland	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	-0.09	(0.05)	-0.05	(0.03)	-0.1	(0.07)	-0.03	(0.03)	-0.05	(0.04)	0	(0.04)
Qatar	0	(0.03)	**0.03**	(0.01)	**-0.08**	(0.04)	0	(0.02)	-0.05	(0.03)	-0.01	(0.02)

Note: Estimates from regression models. Models "Before accounting for ESCS" include only the respective indicator of parental involvement. Models "After accounting for ESCS" include the indicator of parental involvement and the student's *PISA index of economic, social and cultural status* as covariates in the regression model.

Table 3.2c - Relationship between parental involvement and enjoyment of reading: Home-based involvement

	Discuss political or social issues				Discuss books, films or television programmes				Eat the main meal with the child around a table				Spend time just talking to the child				Go to a bookstore or library with the child			
	Before accounting for ESCS		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**0.30**	0.04	**0.18**	0.04	**0.33**	0.05	**0.27**	0.05	**0.25**	0.11	0.13	0.10	**0.43**	0.20	0.19	0.19	**0.56**	0.10	**0.58**	0.10
Denmark	**0.23**	0.04	**0.14**	0.04	**0.28**	0.04	**0.22**	0.04	0.11	0.15	0.00	0.14	-0.02	0.12	-0.11	0.13	**0.35**	0.08	**0.37**	0.08
Hong Kong-China	**0.15**	0.02	**0.11**	0.02	**0.16**	0.02	**0.13**	0.02	0.11	0.07	0.08	0.07	**0.19**	0.03	**0.13**	0.03	**0.26**	0.03	**0.23**	0.03
Croatia	**0.15**	0.03	**0.10**	0.03	**0.17**	0.03	**0.14**	0.03	-0.06	0.07	-0.04	0.07	0.03	0.05	0.00	0.05	**0.26**	0.06	**0.24**	0.06
Hungary	**0.17**	0.03	**0.10**	0.03	**0.19**	0.04	**0.19**	0.04	**0.18**	0.08	**0.16**	0.08	**0.25**	0.05	**0.17**	0.06	**0.34**	0.06	**0.34**	0.06
Italy	**0.25**	0.02	**0.17**	0.02	**0.29**	0.02	**0.26**	0.02	0.07	0.07	0.02	0.08	**0.13**	0.03	**0.08**	0.03	**0.38**	0.03	**0.35**	0.03
Korea	**0.29**	0.03	**0.25**	0.03	**0.13**	0.02	**0.12**	0.02	**0.17**	0.05	**0.13**	0.05	**0.23**	0.03	**0.18**	0.03	**0.28**	0.05	**0.24**	0.05
Lithuania	**0.23**	0.03	**0.18**	0.03	**0.20**	0.04	**0.18**	0.04	0.08	0.08	0.03	0.07	**0.27**	0.07	**0.22**	0.07	**0.31**	0.07	**0.30**	0.06
Macao-China	**0.15**	0.02	**0.10**	0.02	**0.10**	0.02	**0.06**	0.02	**0.20**	0.04	**0.18**	0.04	**0.07**	0.02	0.02	0.02	**0.18**	0.04	**0.14**	0.04
New Zealand	**0.27**	0.04	**0.19**	0.04	**0.25**	0.04	**0.21**	0.05	0.11	0.06	0.07	0.06	**0.24**	0.10	0.15	0.10	**0.47**	0.06	**0.49**	0.06
Panama	**0.11**	0.03	**0.13**	0.03	0.07	0.04	**0.08**	0.04	**0.11**	0.05	**0.11**	0.05	-0.02	0.05	-0.01	0.05	**0.12**	0.05	**0.13**	0.05
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	**0.20**	0.03	**0.14**	0.04	**0.17**	0.03	**0.12**	0.03	0.16	0.13	0.10	0.14	**0.17**	0.07	0.13	0.07	**0.31**	0.04	**0.29**	0.04
Qatar	**0.17**	0.02	**0.15**	0.02	**0.11**	0.02	**0.10**	0.02	**0.24**	0.04	**0.22**	0.04	**0.17**	0.03	**0.15**	0.03	**0.14**	0.02	**0.14**	0.02

	Talk with the child about what he/she is reading on his/her own				Help the child with his/her homework				Discuss how well the child is doing at school			
	Before accounting for ESCS		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**0.53**	(0.05)	**0.5**	(0.05)	**-0.23**	(0.05)	**-0.19**	(0.05)	-0.09	(0.06)	-0.09	(0.05)
Denmark	**0.29**	(0.03)	**0.28**	(0.03)	-0.01	(0.04)	-0.03	(0.04)	**0.14**	(0.07)	0.12	(0.07)
Hong Kong-China	**0.18**	(0.02)	**0.15**	(0.02)	**0.06**	(0.03)	0.03	(0.03)	**0.16**	(0.02)	**0.11**	(0.02)
Croatia	**0.15**	(0.03)	**0.13**	(0.03)	**-0.16**	(0.03)	**-0.16**	(0.03)	0.05	(0.08)	0.03	(0.08)
Hungary	**0.27**	(0.03)	**0.28**	(0.03)	**-0.13**	(0.03)	**-0.09**	(0.03)	0.01	(0.10)	-0.02	(0.09)
Italy	**0.41**	(0.02)	**0.38**	(0.01)	**-0.07**	(0.02)	**-0.12**	(0.02)	**0.16**	(0.04)	**0.09**	(0.04)
Korea	**0.32**	(0.03)	**0.27**	(0.03)	0.02	(0.04)	-0.01	(0.04)	**0.17**	(0.03)	**0.13**	(0.03)
Lithuania	**0.35**	(0.04)	**0.33**	(0.04)	**-0.16**	(0.04)	**-0.14**	(0.04)	**0.21**	(0.09)	0.11	(0.09)
Macao-China	**0.04**	(0.02)	0.01	(0.02)	-0.03	(0.02)	**-0.05**	(0.02)	**0.08**	(0.02)	**0.04**	(0.02)
New Zealand	**0.39**	(0.04)	**0.36**	(0.04)	0.06	(0.04)	0.04	(0.04)	**0.14**	(0.05)	**0.12**	(0.05)
Panama	**0.15**	(0.04)	**0.15**	(0.04)	-0.02	(0.04)	-0.02	(0.04)	0.06	(0.04)	0.06	(0.04)
Poland	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	**0.28**	(0.03)	**0.26**	(0.03)	**-0.12**	(0.03)	**-0.13**	(0.03)	**0.15**	(0.05)	**0.12**	(0.05)
Qatar	**0.26**	(0.02)	**0.25**	(0.02)	0.01	(0.02)	0.01	(0.02)	**0.17**	(0.02)	**0.16**	(0.02)

Note: Estimates from regression models. Models "Before accounting for ESCS" include only the respective indicator of parental involvement. Models "After accounting for ESCS" include the indicator of parental involvement and the student's *PISA index of economic, social and cultural status* as covariates in the regression model.

Table 3.2d - Relationship between parental involvement and enjoyment of reading: Implicit involvement

	Spend time reading for enjoyment at home				Consider reading a favourite hobby				Feel happy when receiving a book as a present				Enjoy going to a library or bookstore				Do not think reading is a waste of time			
	Before accounting for ESCS		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**0.27**	0.04	**0.16**	0.04	**0.48**	0.05	**0.37**	0.05	**0.50**	0.06	**0.34**	0.06	**0.57**	0.05	**0.42**	0.05	**0.55**	0.09	**0.40**	0.09
Denmark	**0.17**	0.03	**0.11**	0.03	**0.30**	0.03	**0.21**	0.03	**0.25**	0.05	**0.13**	0.06	**0.32**	0.04	**0.23**	0.04	**0.24**	0.10	0.14	0.10
Hong Kong-China	**0.16**	0.02	**0.10**	0.02	**0.20**	0.02	**0.15**	0.02	**0.19**	0.02	**0.15**	0.02	**0.21**	0.02	**0.15**	0.03	**0.22**	0.05	**0.14**	0.04
Croatia	**0.19**	0.03	**0.14**	0.03	**0.19**	0.03	**0.14**	0.03	**0.23**	0.03	**0.17**	0.03	**0.20**	0.03	**0.15**	0.03	**0.26**	0.05	**0.19**	0.05
Hungary	**0.27**	0.03	**0.17**	0.03	**0.41**	0.03	**0.31**	0.03	**0.46**	0.04	**0.34**	0.04	**0.38**	0.03	**0.27**	0.03	**0.55**	0.07	**0.38**	0.07
Italy	**0.27**	0.02	**0.19**	0.02	**0.30**	0.02	**0.21**	0.02	**0.31**	0.03	**0.21**	0.03	**0.32**	0.02	**0.23**	0.02	**0.34**	0.04	**0.23**	0.04
Korea	**0.18**	0.03	**0.13**	0.03	**0.21**	0.02	**0.17**	0.02	**0.31**	0.03	**0.23**	0.03	**0.24**	0.03	**0.18**	0.03	**0.35**	0.05	**0.25**	0.05
Lithuania	**0.22**	0.03	**0.15**	0.03	**0.33**	0.04	**0.26**	0.04	**0.40**	0.05	**0.32**	0.04	**0.35**	0.04	**0.28**	0.03	**0.38**	0.06	**0.28**	0.06
Macao-China	**0.09**	0.02	**0.04**	0.02	**0.13**	0.02	**0.08**	0.02	**0.13**	0.02	**0.09**	0.02	**0.09**	0.02	**0.04**	0.02	**0.10**	0.03	0.05	0.03
New Zealand	**0.15**	0.03	**0.10**	0.03	**0.24**	0.05	**0.18**	0.04	**0.20**	0.06	**0.13**	0.06	**0.28**	0.06	**0.18**	0.05	**0.34**	0.14	0.24	0.14
Panama	**0.14**	0.03	**0.15**	0.04	**0.16**	0.05	**0.16**	0.05	0.10	0.06	0.10	0.06	**0.13**	0.05	**0.14**	0.05	0.08	0.06	0.08	0.06
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	**0.21**	0.03	**0.12**	0.04	**0.23**	0.03	**0.16**	0.03	**0.21**	0.03	**0.14**	0.04	**0.23**	0.03	**0.17**	0.03	**0.27**	0.07	**0.17**	0.07
Qatar	**0.21**	0.02	**0.20**	0.02	**0.36**	0.03	**0.36**	0.03	**0.39**	0.03	**0.38**	0.03	**0.34**	0.03	**0.33**	0.03	**0.28**	0.03	**0.26**	0.03

Note: Estimates from regression models. Models "Before accounting for ESCS" include only the respective indicator of parental involvement. Models "After accounting for ESCS" include the indicator of parental involvement and the student's *PISA index of economic, social and cultural status* as covariates in the regression model.

Table 3.3a - Relationship between parental involvement and awareness of effective summarising strategies: Involvement when children enter primary school

	Read books				Tell stories				Sing songs				Play with alphabet toys				Talk about what the parent had done			
	Before accounting for ESCS		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**0.29**	(0.05)	**0.19**	(0.05)	0.02	(0.04)	-0.02	(0.04)	**0.15**	(0.04)	**0.10**	(0.04)	-0.04	(0.04)	-0.03	(0.04)	**0.28**	(0.07)	**0.16**	(0.07)
Denmark	**0.22**	(0.06)	**0.15**	(0.06)	**0.10**	(0.04)	**0.09**	(0.04)	**0.18**	(0.05)	**0.15**	(0.05)	0.07	(0.04)	**0.08**	(0.04)	0.17	(0.11)	0.05	(0.11)
Hong Kong-China	**0.09**	(0.03)	0.04	(0.03)	**0.10**	(0.03)	0.05	(0.03)	**0.06**	(0.03)	0.02	(0.03)	**0.09**	(0.03)	0.05	(0.04)	**0.07**	(0.03)	0.04	(0.03)
Croatia	0.07	(0.04)	0.03	(0.04)	0.05	(0.04)	0.00	(0.04)	0.05	(0.03)	0.02	(0.03)	**-0.06**	(0.03)	**-0.07**	(0.03)	0.05	(0.04)	0.01	(0.04)
Hungary	**0.19**	(0.05)	**0.12**	(0.05)	**0.17**	(0.05)	0.08	(0.05)	0.07	(0.04)	0.02	(0.04)	0.06	(0.04)	0.05	(0.03)	0.06	(0.05)	-0.03	(0.05)
Italy	**0.08**	(0.02)	**0.04**	(0.02)	**0.14**	(0.02)	**0.08**	(0.02)	**0.08**	(0.02)	**0.05**	(0.02)	**0.04**	(0.02)	0.02	(0.02)	**0.25**	(0.04)	**0.19**	(0.04)
Korea	**0.17**	(0.04)	**0.09**	(0.04)	**0.09**	(0.04)	0.03	(0.04)	0.07	(0.04)	0.02	(0.03)	0.04	(0.03)	0.00	(0.03)	**0.08**	(0.03)	0.04	(0.03)
Lithuania	0.06	(0.04)	0.04	(0.04)	**0.11**	(0.04)	0.06	(0.04)	0.05	(0.03)	0.04	(0.03)	-0.02	(0.04)	0.00	(0.04)	0.05	(0.04)	0.00	(0.04)
Macao-China	0.01	(0.02)	-0.03	(0.02)	**0.11**	(0.03)	0.05	(0.03)	**0.07**	(0.03)	0.02	(0.03)	0.05	(0.03)	0.01	(0.03)	**0.08**	(0.03)	0.05	(0.03)
New Zealand	**0.17**	(0.08)	0.06	(0.08)	0.06	(0.05)	0.02	(0.05)	0.04	(0.04)	0.01	(0.04)	-0.01	(0.04)	-0.04	(0.04)	0.10	(0.07)	0.03	(0.07)
Panama	0.01	(0.05)	-0.02	(0.05)	0.11	(0.06)	0.02	(0.05)	0.05	(0.05)	-0.02	(0.05)	**0.14**	(0.05)	0.04	(0.05)	**0.30**	(0.08)	**0.19**	(0.08)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	**0.08**	(0.03)	-0.02	(0.03)	**0.11**	(0.04)	0.01	(0.04)	**0.12**	(0.03)	0.05	(0.03)	0.04	(0.04)	-0.04	(0.04)	0.09	(0.05)	0.00	(0.05)
Qatar	**0.08**	(0.03)	0.05	(0.03)	**0.13**	(0.03)	**0.08**	(0.03)	**0.16**	(0.03)	**0.11**	(0.03)	**0.11**	(0.02)	**0.07**	(0.02)	0.00	(0.03)	-0.03	(0.03)

	Talk about what the parent had read				Play word games				Write words and letters				Read signs out loud			
	Before accounting for ESCS		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**0.11**	(0.04)	0.05	(0.04)	0.01	(0.04)	-0.03	(0.04)	-0.02	(0.06)	-0.05	(0.06)	**0.11**	(0.04)	0.06	(0.04)
Denmark	**0.15**	(0.05)	**0.12**	(0.05)	**0.13**	(0.04)	**0.1**	(0.04)	0.05	(0.05)	0.03	(0.05)	0.07	(0.05)	0.04	(0.05)
Hong Kong-China	0.05	(0.03)	0.02	(0.03)	**0.07**	(0.03)	0.03	(0.03)	**0.09**	(0.03)	0.04	(0.03)	**0.1**	(0.03)	**0.06**	(0.03)
Croatia	**0.08**	(0.04)	0.05	(0.04)	0.02	(0.03)	-0.03	(0.03)	-0.09	(0.06)	-0.1	(0.06)	-0.03	(0.04)	-0.07	(0.04)
Hungary	**0.12**	(0.05)	0.07	(0.05)	0.07	(0.04)	0.05	(0.04)	-0.05	(0.05)	-0.04	(0.05)	0.05	(0.04)	0.01	(0.04)
Italy	**0.07**	(0.02)	0.03	(0.02)	**0.08**	(0.02)	**0.05**	(0.02)	**0.09**	(0.02)	**0.05**	(0.02)	**0.11**	(0.02)	**0.08**	(0.02)
Korea	**0.09**	(0.03)	0.03	(0.03)	0.04	(0.03)	-0.01	(0.03)	**0.08**	(0.03)	0.02	(0.03)	**0.07**	(0.03)	0.02	(0.03)
Lithuania	0.04	(0.03)	0.03	(0.03)	0.02	(0.03)	0.02	(0.03)	-0.05	(0.05)	-0.04	(0.05)	**0.09**	(0.04)	0.06	(0.04)
Macao-China	0.03	(0.03)	-0.01	(0.03)	0.05	(0.03)	0	(0.03)	**0.08**	(0.02)	**0.04**	(0.02)	0.03	(0.03)	0	(0.03)
New Zealand	**0.11**	(0.04)	**0.08**	(0.04)	0.05	(0.03)	0	(0.04)	0.11	(0.06)	0.04	(0.05)	**0.14**	(0.04)	0.06	(0.04)
Panama	0.08	(0.06)	0.03	(0.06)	-0.05	(0.06)	-0.06	(0.06)	0.09	(0.08)	0.07	(0.08)	**0.18**	(0.05)	**0.11**	(0.05)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	**0.08**	(0.03)	0.02	(0.03)	0.04	(0.03)	-0.03	(0.03)	**0.1**	(0.05)	0.03	(0.05)	0.04	(0.03)	-0.02	(0.03)
Qatar	0	(0.03)	-0.03	(0.03)	0.02	(0.03)	-0.02	(0.03)	**0.08**	(0.03)	0.04	(0.03)	**0.1**	(0.03)	0.05	(0.03)

Note: Estimates from regression models. Models "Before accounting for ESCS" include only the respective indicator of parental involvement. Models "After accounting for ESCS" include the indicator of parental involvement and the student's *PISA index of economic, social and cultural status* as covariates in the regression model.

Table 3.3b - Relationship between parental involvement and awareness of effective summarising strategies: School-based involvement

	Discuss the child's progress or behaviour with a teacher on the parent's initiative				Discuss the child's progress or behaviour with a teacher on the teacher's initiative				Volunteer in physical activities				Volunteer in extra-curricular activities				Volunteer in the school library or media centre			
	Before accounting for ESCS		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**-0.15**	(0.03)	**-0.15**	(0.03)	**-0.40**	(0.04)	**-0.35**	(0.04)	**-0.20**	(0.09)	**-0.20**	(0.08)	-0.01	(0.05)	-0.04	(0.05)	**-0.35**	(0.15)	**-0.35**	(0.14)
Denmark	**-0.19**	(0.03)	**-0.15**	(0.04)	-0.04	(0.05)	-0.05	(0.04)	-0.06	(0.09)	-0.09	(0.09)	**0.12**	(0.05)	0.08	(0.05)	0.50	(0.29)	**0.56**	(0.26)
Hong Kong-China	**-0.06**	(0.03)	**-0.09**	(0.03)	**-0.06**	(0.03)	**-0.08**	(0.03)	**-0.14**	(0.06)	**-0.14**	(0.06)	-0.06	(0.06)	-0.08	(0.06)	-0.14	(0.10)	-0.14	(0.10)
Croatia	**-0.10**	(0.04)	**-0.11**	(0.04)	**-0.25**	(0.03)	**-0.25**	(0.03)	**-0.27**	(0.06)	**-0.24**	(0.06)	-0.08	(0.05)	**-0.09**	(0.04)	**-0.32**	(0.13)	**-0.28**	(0.12)
Hungary	**-0.21**	(0.04)	**-0.19**	(0.04)	**-0.35**	(0.04)	**-0.28**	(0.03)	-0.12	(0.07)	-0.10	(0.06)	-0.04	(0.05)	-0.08	(0.05)	**-0.54**	(0.11)	**-0.43**	(0.11)
Italy	0.03	(0.02)	-0.02	(0.02)	**-0.20**	(0.01)	**-0.18**	(0.01)	**-0.39**	(0.04)	**-0.35**	(0.04)	**-0.07**	(0.02)	**-0.07**	(0.02)	**-0.23**	(0.03)	**-0.21**	(0.03)
Korea	0.03	(0.03)	-0.06	(0.04)	**0.16**	(0.04)	0.07	(0.04)	0.09	(0.05)	0.01	(0.05)	-0.04	(0.06)	-0.08	(0.06)	-0.04	(0.06)	-0.08	(0.06)
Lithuania	**-0.06**	(0.03)	**-0.07**	(0.03)	**-0.20**	(0.03)	**-0.18**	(0.03)	**-0.15**	(0.05)	**-0.14**	(0.05)	**0.09**	(0.04)	**0.08**	(0.04)	-0.21	(0.14)	-0.18	(0.13)
Macao-China	**-0.10**	(0.03)	**-0.13**	(0.03)	**-0.14**	(0.02)	**-0.14**	(0.02)	**-0.11**	(0.04)	**-0.10**	(0.04)	**-0.10**	(0.03)	**-0.11**	(0.03)	**-0.22**	(0.06)	**-0.21**	(0.06)
New Zealand	**-0.10**	(0.03)	**-0.14**	(0.03)	**-0.18**	(0.04)	**-0.17**	(0.04)	0.11	(0.06)	0.06	(0.06)	**0.14**	(0.03)	**0.08**	(0.03)	-0.19	(0.13)	-0.16	(0.13)
Panama	**-0.15**	(0.06)	**-0.12**	(0.05)	**-0.30**	(0.06)	**-0.20**	(0.06)	**-0.31**	(0.07)	**-0.21**	(0.06)	**-0.16**	(0.07)	**-0.14**	(0.07)	**-0.35**	(0.10)	**-0.21**	(0.09)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	**-0.23**	(0.03)	**-0.25**	(0.03)	**-0.32**	(0.03)	**-0.28**	(0.03)	**-0.21**	(0.09)	-0.15	(0.09)	-0.08	(0.07)	-0.09	(0.06)	**-0.25**	(0.10)	**-0.20**	(0.10)
Qatar	**0.08**	(0.03)	0.04	(0.03)	-0.01	(0.03)	-0.02	(0.03)	**-0.10**	(0.04)	**-0.10**	(0.04)	-0.03	(0.03)	-0.03	(0.03)	**-0.19**	(0.04)	**-0.18**	(0.05)

	Assist a teacher in the school				Appear as a guest speaker				Participate in local school government			
	Before accounting for ESCS		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	-0.04	(0.06)	-0.09	(0.06)	**-0.53**	(0.19)	**-0.52**	(0.18)	-0.1	(0.06)	**-0.15**	(0.06)
Denmark	0.07	(0.07)	0.02	(0.07)	0.03	(0.15)	-0.01	(0.15)	**0.1**	(0.05)	0.07	(0.04)
Hong Kong-China	**-0.14**	(0.06)	**-0.14**	(0.06)	**-0.27**	(0.10)	**-0.29**	(0.10)	-0.08	(0.07)	-0.1	(0.07)
Croatia	m	m	m	m	-0.12	(0.14)	-0.17	(0.13)	0.06	(0.06)	0	(0.06)
Hungary	**-0.2**	(0.06)	**-0.15**	(0.05)	0.15	(0.15)	0.09	(0.14)	-0.06	(0.08)	-0.1	(0.07)
Italy	m	m	m	m	**-0.33**	(0.04)	**-0.3**	(0.04)	**-0.05**	(0.02)	**-0.08**	(0.02)
Korea	0.03	(0.05)	-0.06	(0.05)	-0.2	(0.12)	**-0.28**	(0.12)	0	(0.04)	-0.07	(0.04)
Lithuania	m	m	m	m	-0.05	(0.07)	-0.01	(0.07)	0.02	(0.04)	0.01	(0.04)
Macao-China	**-0.11**	(0.04)	**-0.11**	(0.04)	-0.15	(0.08)	**-0.17**	(0.08)	-0.04	(0.03)	-0.04	(0.03)
New Zealand	0.06	(0.06)	0.02	(0.06)	0.22	(0.15)	0.08	(0.14)	0	(0.07)	-0.06	(0.07)
Panama	**-0.21**	(0.06)	**-0.12**	(0.06)	**-0.36**	(0.09)	**-0.25**	(0.09)	**-0.2**	(0.08)	-0.12	(0.07)
Poland	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	-0.06	(0.07)	-0.08	(0.07)	-0.13	(0.08)	-0.15	(0.08)	**-0.1**	(0.04)	**-0.09**	(0.04)
Qatar	**-0.18**	(0.03)	**-0.17**	(0.03)	**-0.2**	(0.04)	**-0.19**	(0.04)	**-0.1**	(0.04)	**-0.09**	(0.04)

Note: Estimates from regression models. Models "Before accounting for ESCS" include only the respective indicator of parental involvement. Models "After accounting for ESCS" include the indicator of parental involvement and the student's *PISA index of economic, social and cultural status* as covariates in the regression model.

Table 3.3c - Relationship between parental involvement and awareness of effective summarising strategies: Home-based involvement

	Discuss political or social issues				Discuss books, films or television programmes				Eat the main meal with the child around a table				Spend time just talking to the child				Go to a bookstore or library with the child			
	Before accounting for ESCS		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**0.14**	(0.03)	0.05	(0.03)	0.04	(0.04)	-0.01	(0.04)	**0.29**	(0.11)	0.17	(0.11)	0.33	(0.22)	0.16	(0.22)	0.03	(0.07)	0.05	0.07
Denmark	**0.27**	(0.04)	**0.21**	(0.04)	**0.25**	(0.05)	**0.21**	(0.05)	0.06	(0.15)	-0.02	(0.14)	0.14	(0.12)	0.04	(0.13)	-0.04	(0.10)	-0.03	0.10
Hong Kong-China	**0.06**	(0.03)	0.03	(0.03)	0.05	(0.04)	0.03	(0.04)	0.10	(0.08)	0.08	(0.08)	**0.21**	(0.05)	**0.17**	(0.05)	0.01	(0.05)	-0.01	0.04
Croatia	**0.11**	(0.03)	0.05	(0.03)	0.07	(0.04)	0.03	(0.04)	**-0.20**	(0.06)	**-0.17**	(0.06)	-0.03	(0.07)	-0.07	(0.07)	0.08	(0.06)	0.06	0.06
Hungary	**0.11**	(0.04)	0.03	(0.03)	0.11	(0.06)	0.10	(0.06)	-0.02	(0.07)	-0.05	(0.06)	**0.18**	(0.07)	0.10	(0.07)	0.05	(0.06)	0.04	0.05
Italy	**0.20**	(0.02)	**0.13**	(0.02)	**0.14**	(0.02)	**0.11**	(0.02)	**0.21**	(0.06)	**0.17**	(0.06)	**0.08**	(0.03)	0.04	(0.03)	-0.02	(0.03)	-0.04	0.03
Korea	**0.20**	(0.04)	**0.14**	(0.04)	**0.10**	(0.03)	**0.07**	(0.03)	**0.28**	(0.08)	**0.23**	(0.07)	**0.21**	(0.05)	**0.16**	(0.05)	**0.10**	(0.05)	0.06	0.05
Lithuania	**0.16**	(0.03)	**0.10**	(0.03)	0.03	(0.04)	0.00	(0.04)	0.06	(0.07)	0.02	(0.06)	**0.18**	(0.05)	**0.12**	(0.05)	-0.02	(0.05)	-0.03	0.05
Macao-China	**0.07**	(0.03)	0.03	(0.03)	0.05	(0.03)	0.01	(0.03)	**0.18**	(0.06)	**0.16**	(0.06)	0.05	(0.03)	0.00	(0.03)	-0.03	(0.05)	-0.08	0.05
New Zealand	**0.17**	(0.04)	**0.11**	(0.04)	**0.16**	(0.05)	**0.11**	(0.05)	0.01	(0.05)	-0.02	(0.05)	0.11	(0.09)	0.05	(0.09)	**0.10**	(0.05)	**0.12**	0.04
Panama	**0.22**	(0.06)	**0.13**	(0.06)	**0.13**	(0.06)	0.05	(0.05)	0.00	(0.06)	-0.02	(0.06)	0.08	(0.08)	0.01	(0.08)	-0.16	(0.09)	-0.11	0.08
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	**0.23**	(0.05)	**0.13**	(0.05)	**0.15**	(0.05)	0.07	(0.04)	0.17	(0.14)	0.11	(0.14)	0.03	(0.07)	-0.02	(0.07)	**-0.13**	(0.05)	**-0.16**	0.05
Qatar	**0.05**	(0.02)	0.01	(0.03)	0.05	(0.03)	0.02	(0.03)	**0.23**	(0.05)	**0.18**	(0.05)	**0.16**	(0.04)	**0.10**	(0.04)	**-0.20**	(0.03)	**-0.20**	0.03

	Talk with the child about what he/she is reading on his/her own				Help the child with his/her homework				Discuss how well the child is doing at school			
	Before accounting for ESCS		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**0.06**	(0.03)	0.03	(0.03)	**-0.28**	(0.05)	**-0.25**	(0.05)	-0.03	(0.06)	-0.02	(0.05)
Denmark	**0.11**	(0.04)	**0.09**	(0.04)	0	(0.03)	-0.01	(0.03)	0.1	(0.08)	0.08	(0.08)
Hong Kong-China	0	(0.03)	-0.03	(0.03)	**-0.09**	(0.04)	**-0.12**	(0.04)	0.05	(0.03)	0.01	(0.03)
Croatia	0.01	(0.03)	-0.01	(0.03)	**-0.27**	(0.04)	**-0.27**	(0.04)	0.1	(0.07)	0.07	(0.07)
Hungary	-0.02	(0.03)	-0.01	(0.03)	**-0.3**	(0.03)	**-0.25**	(0.03)	-0.17	(0.12)	-0.19	(0.12)
Italy	**0.09**	(0.02)	**0.06**	(0.02)	**-0.15**	(0.02)	**-0.19**	(0.02)	**0.19**	(0.04)	**0.13**	(0.04)
Korea	**0.08**	(0.04)	0.02	(0.04)	-0.03	(0.04)	-0.06	(0.05)	**0.16**	(0.04)	**0.1**	(0.04)
Lithuania	**0.06**	(0.03)	0.04	(0.03)	**-0.17**	(0.03)	**-0.15**	(0.03)	**0.16**	(0.08)	0.06	(0.07)
Macao-China	-0.02	(0.03)	-0.05	(0.03)	**-0.14**	(0.03)	**-0.15**	(0.03)	0.03	(0.03)	-0.01	(0.03)
New Zealand	**0.08**	(0.04)	0.06	(0.04)	-0.05	(0.03)	**-0.06**	(0.03)	0.05	(0.06)	0.02	(0.06)
Panama	-0.09	(0.05)	-0.04	(0.05)	**-0.19**	(0.05)	**-0.12**	(0.05)	-0.01	(0.07)	-0.06	(0.07)
Poland	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.02	(0.03)	-0.01	(0.03)	**-0.22**	(0.04)	**-0.23**	(0.04)	-0.04	(0.06)	-0.09	(0.06)
Qatar	**-0.07**	(0.03)	**-0.08**	(0.03)	**-0.09**	(0.03)	**-0.11**	(0.03)	**0.12**	(0.03)	**0.07**	(0.03)

Note: Estimates from regression models. Models "Before accounting for ESCS" include only the respective indicator of parental involvement. Models "After accounting for ESCS" include the indicator of parental involvement and the student's *PISA index of economic, social and cultural status* as covariates in the regression model.

Table 3.3d - Relationship between parental involvement and awareness of effective summarising strategies: Implicit involvement

	Spend time reading for enjoyment at home				Consider reading a favourite hobby				Feel happy when receiving a book as a present				Enjoy going to a library or bookstore				Do not think reading is a waste of time			
	Before accounting for ESCS		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*		*Before accounting for ESCS*		*After accounting for ESCS*	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**0.12**	(0.03)	0.05	(0.03)	**0.21**	(0.05)	**0.12**	(0.05)	**0.30**	(0.06)	**0.18**	(0.06)	**0.27**	(0.04)	**0.15**	(0.05)	**0.19**	(0.08)	0.11	(0.08)
Denmark	0.01	(0.04)	-0.03	(0.04)	**0.15**	(0.04)	**0.08**	(0.04)	**0.15**	(0.05)	0.06	(0.05)	**0.17**	(0.05)	**0.10**	(0.05)	**0.28**	(0.11)	0.21	(0.11)
Hong Kong-China	**0.09**	(0.03)	0.04	(0.03)	**0.12**	(0.04)	**0.08**	(0.04)	**0.10**	(0.03)	0.06	(0.04)	**0.09**	(0.03)	0.05	(0.03)	**0.10**	(0.05)	0.04	(0.05)
Croatia	**0.11**	(0.04)	0.04	(0.04)	**0.08**	(0.04)	0.02	(0.04)	**0.13**	(0.05)	0.06	(0.05)	**0.15**	(0.04)	0.07	(0.04)	**0.21**	(0.07)	0.11	(0.07)
Hungary	**0.22**	(0.03)	**0.11**	(0.03)	**0.24**	(0.04)	**0.13**	(0.04)	**0.28**	(0.04)	**0.13**	(0.04)	**0.23**	(0.04)	**0.10**	(0.04)	**0.49**	(0.09)	**0.31**	(0.09)
Italy	**0.15**	(0.02)	**0.08**	(0.02)	**0.12**	(0.02)	**0.04**	(0.02)	**0.18**	(0.03)	**0.09**	(0.03)	**0.17**	(0.02)	**0.09**	(0.02)	**0.33**	(0.05)	**0.24**	(0.05)
Korea	**0.09**	(0.04)	0.02	(0.04)	**0.08**	(0.03)	0.02	(0.03)	**0.21**	(0.05)	**0.11**	(0.05)	**0.11**	(0.03)	0.04	(0.03)	**0.37**	(0.11)	**0.24**	(0.11)
Lithuania	**0.11**	(0.03)	0.03	(0.03)	0.07	(0.04)	0.00	(0.05)	**0.21**	(0.04)	**0.13**	(0.04)	**0.11**	(0.04)	0.03	(0.04)	**0.18**	(0.05)	0.08	(0.05)
Macao-China	**0.06**	(0.03)	0.01	(0.03)	0.02	(0.03)	-0.04	(0.03)	0.01	(0.03)	-0.03	(0.03)	0.01	(0.02)	**-0.04**	(0.02)	**0.12**	(0.04)	**0.08**	(0.04)
New Zealand	0.05	(0.04)	-0.01	(0.04)	**0.14**	(0.05)	0.08	(0.05)	0.12	(0.07)	0.05	(0.07)	**0.19**	(0.07)	0.09	(0.07)	**0.41**	(0.15)	0.30	(0.16)
Panama	**0.21**	(0.05)	**0.13**	(0.06)	**-0.12**	(0.06)	**-0.12**	(0.06)	0.05	(0.08)	0.08	(0.08)	0.04	(0.06)	0.02	(0.06)	0.09	(0.12)	-0.01	(0.12)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	**0.18**	(0.04)	0.03	(0.04)	**0.10**	(0.04)	0.00	(0.04)	0.05	(0.05)	-0.07	(0.05)	**0.09**	(0.04)	-0.03	(0.03)	**0.24**	(0.09)	0.09	(0.09)
Qatar	**0.12**	(0.03)	**0.07**	(0.03)	0.00	(0.04)	-0.03	(0.04)	**0.07**	(0.03)	0.04	(0.03)	**0.08**	(0.04)	0.03	(0.04)	**0.30**	(0.04)	**0.24**	(0.04)

Note: Estimates from regression models. Models "Before accounting for ESCS" include only the respective indicator of parental involvement. Models "After accounting for ESCS" include the indicator of parental involvement and the student's *PISA index of economic, social and cultural status* as covariates in the regression model.

Table 4.1a - Proportion of parents who read books to their young children, by students' gender, socio-economic status and immigrant background

	All		Gender						Socio-economic status						Immigrant background					
			Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.86	(0.01)	0.85	(0.01)	0.88	(0.01)	**0.03**	(0.01)	0.77	(0.01)	0.92	(0.01)	**0.15**	(0.02)	0.88	(0.01)	0.76	(0.02)	**-0.13**	(0.02)
Denmark	0.92	(0.00)	0.91	(0.01)	0.92	(0.01)	0.01	(0.01)	0.87	(0.01)	0.95	(0.01)	**0.08**	(0.01)	0.92	(0.01)	0.78	(0.03)	**-0.14**	(0.03)
Hong Kong-China	0.51	(0.01)	0.53	(0.01)	0.49	(0.01)	**-0.04**	(0.02)	0.34	(0.01)	0.68	(0.01)	**0.34**	(0.02)	0.57	(0.01)	0.43	(0.01)	**-0.14**	(0.02)
Croatia	0.71	(0.01)	0.71	(0.01)	0.71	(0.01)	0.00	(0.01)	0.66	(0.01)	0.75	(0.01)	**0.09**	(0.02)	0.72	(0.01)	0.69	(0.02)	-0.03	(0.02)
Hungary	0.87	(0.01)	0.87	(0.01)	0.88	(0.01)	0.01	(0.01)	0.83	(0.01)	0.91	(0.01)	**0.07**	(0.01)	0.87	(0.01)	0.81	(0.05)	-0.06	(0.05)
Italy	0.66	(0.01)	0.65	(0.01)	0.67	(0.01)	**0.02**	(0.01)	0.57	(0.01)	0.74	(0.01)	**0.17**	(0.01)	0.67	(0.01)	0.52	(0.02)	**-0.15**	(0.02)
Korea	0.64	(0.01)	0.62	(0.02)	0.67	(0.01)	**0.04**	(0.02)	0.50	(0.01)	0.76	(0.01)	**0.25**	(0.02)	0.64	(0.01)	c	c	c	c
Lithuania	0.82	(0.01)	0.82	(0.01)	0.82	(0.01)	0.00	(0.01)	0.81	(0.01)	0.85	(0.01)	**0.04**	(0.01)	0.82	(0.01)	0.82	(0.05)	0.00	(0.05)
Macao-China	0.54	(0.01)	0.54	(0.01)	0.53	(0.01)	-0.01	(0.01)	0.44	(0.01)	0.63	(0.01)	**0.19**	(0.01)	0.59	(0.01)	0.52	(0.01)	**-0.08**	(0.01)
New Zealand	0.96	(0.00)	0.96	(0.00)	0.96	(0.00)	0.00	(0.01)	0.94	(0.01)	0.97	(0.00)	**0.03**	(0.01)	0.98	(0.00)	0.91	(0.01)	**-0.07**	(0.01)
Panama	0.79	(0.01)	0.76	(0.02)	0.80	(0.01)	**0.04**	(0.02)	0.78	(0.02)	0.80	(0.03)	0.01	(0.04)	0.80	(0.01)	0.71	(0.05)	-0.08	(0.05)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.65	(0.01)	0.66	(0.01)	0.65	(0.01)	-0.01	(0.02)	0.53	(0.01)	0.78	(0.01)	**0.26**	(0.02)	0.65	(0.01)	0.69	(0.04)	0.04	(0.04)
Qatar	0.72	(0.01)	0.72	(0.01)	0.72	(0.01)	-0.01	(0.01)	0.66	(0.01)	0.79	(0.01)	**0.13**	(0.01)	0.68	(0.01)	0.77	(0.01)	**0.09**	(0.01)

Table 4.1b - Proportion of parents who told stories to their young children, by students' gender, socio-economic status and immigrant background

	All		Gender						Socio-economic status						Immigrant background					
			Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.75	(0.01)	0.73	(0.01)	0.77	(0.01)	**0.04**	(0.02)	0.71	(0.02)	0.78	(0.01)	**0.07**	(0.02)	0.76	(0.01)	0.73	(0.02)	-0.03	(0.02)
Denmark	0.72	(0.01)	0.70	(0.01)	0.74	(0.01)	**0.04**	(0.02)	0.71	(0.02)	0.74	(0.01)	0.03	(0.02)	0.72	(0.01)	0.69	(0.03)	-0.03	(0.04)
Hong Kong-China	0.40	(0.01)	0.41	(0.01)	0.38	(0.02)	-0.02	(0.02)	0.22	(0.01)	0.59	(0.02)	**0.38**	(0.02)	0.45	(0.02)	0.31	(0.01)	**-0.14**	(0.02)
Croatia	0.78	(0.01)	0.78	(0.01)	0.77	(0.01)	0.00	(0.01)	0.72	(0.01)	0.83	(0.01)	**0.11**	(0.02)	0.78	(0.01)	0.72	(0.02)	**-0.06**	(0.02)
Hungary	0.85	(0.01)	0.85	(0.01)	0.84	(0.01)	-0.01	(0.01)	0.77	(0.01)	0.89	(0.01)	**0.12**	(0.02)	0.85	(0.01)	0.86	(0.04)	0.01	(0.04)
Italy	0.74	(0.00)	0.73	(0.01)	0.75	(0.01)	**0.02**	(0.01)	0.65	(0.01)	0.82	(0.01)	**0.17**	(0.01)	0.75	(0.00)	0.55	(0.02)	**-0.20**	(0.02)
Korea	0.66	(0.01)	0.65	(0.01)	0.69	(0.01)	**0.04**	(0.02)	0.56	(0.01)	0.74	(0.01)	**0.18**	(0.02)	0.67	(0.01)	c	c	c	c
Lithuania	0.72	(0.01)	0.72	(0.01)	0.72	(0.01)	0.00	(0.02)	0.66	(0.01)	0.78	(0.01)	**0.12**	(0.02)	0.72	(0.01)	0.71	(0.05)	-0.01	(0.05)
Macao-China	0.39	(0.01)	0.38	(0.01)	0.40	(0.01)	**0.02**	(0.01)	0.27	(0.01)	0.53	(0.01)	**0.27**	(0.01)	0.46	(0.01)	0.37	(0.01)	**-0.09**	(0.01)
New Zealand	0.82	(0.01)	0.81	(0.01)	0.82	(0.01)	0.01	(0.01)	0.77	(0.02)	0.85	(0.01)	**0.08**	(0.02)	0.82	(0.01)	0.82	(0.02)	-0.01	(0.02)
Panama	0.63	(0.02)	0.61	(0.02)	0.64	(0.02)	**0.04**	(0.02)	0.57	(0.03)	0.70	(0.03)	**0.13**	(0.04)	0.65	(0.02)	0.39	(0.09)	**-0.26**	(0.08)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.70	(0.01)	0.70	(0.01)	0.70	(0.01)	0.00	(0.02)	0.55	(0.01)	0.82	(0.01)	**0.26**	(0.02)	0.70	(0.01)	0.69	(0.04)	0.00	(0.04)
Qatar	0.64	(0.01)	0.61	(0.01)	0.67	(0.01)	**0.05**	(0.01)	0.51	(0.01)	0.76	(0.01)	**0.25**	(0.01)	0.60	(0.01)	0.69	(0.01)	**0.10**	(0.01)

Table 4.1c - Proportion of parents who sang songs to their young children, by students' gender, socio-economic status and immigrant background

	All		Gender						Socio-economic status						Immigrant background					
			Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.62	(0.01)	0.57	(0.02)	0.67	(0.01)	**0.10**	(0.02)	0.55	(0.02)	0.68	(0.01)	**0.13**	(0.02)	0.65	(0.01)	0.48	(0.03)	**-0.17**	(0.03)
Denmark	0.76	(0.01)	0.73	(0.01)	0.79	(0.01)	**0.06**	(0.01)	0.71	(0.01)	0.79	(0.01)	**0.08**	(0.02)	0.77	(0.01)	0.57	(0.04)	**-0.20**	(0.04)
Hong Kong-China	0.37	(0.01)	0.34	(0.01)	0.41	(0.01)	**0.06**	(0.02)	0.26	(0.01)	0.50	(0.01)	**0.25**	(0.02)	0.42	(0.01)	0.29	(0.01)	**-0.13**	(0.01)
Croatia	0.64	(0.01)	0.62	(0.01)	0.67	(0.01)	**0.06**	(0.02)	0.59	(0.02)	0.69	(0.01)	**0.10**	(0.02)	0.65	(0.01)	0.62	(0.02)	-0.03	(0.02)
Hungary	0.65	(0.01)	0.62	(0.01)	0.68	(0.01)	**0.06**	(0.02)	0.60	(0.01)	0.69	(0.01)	**0.09**	(0.02)	0.65	(0.01)	0.66	(0.05)	0.01	(0.05)
Italy	0.63	(0.00)	0.60	(0.01)	0.67	(0.01)	**0.08**	(0.01)	0.56	(0.01)	0.69	(0.01)	**0.12**	(0.01)	0.64	(0.00)	0.44	(0.03)	**-0.20**	(0.03)
Korea	0.54	(0.01)	0.50	(0.01)	0.58	(0.01)	**0.08**	(0.02)	0.45	(0.01)	0.61	(0.01)	**0.16**	(0.02)	0.54	(0.01)	c	c	c	c
Lithuania	0.46	(0.01)	0.40	(0.01)	0.51	(0.01)	**0.12**	(0.01)	0.45	(0.02)	0.48	(0.01)	0.03	(0.02)	0.45	(0.01)	0.54	(0.06)	**0.09**	(0.06)
Macao-China	0.37	(0.01)	0.34	(0.01)	0.40	(0.01)	**0.05**	(0.01)	0.28	(0.01)	0.47	(0.01)	**0.19**	(0.01)	0.44	(0.01)	0.34	(0.01)	**-0.10**	(0.02)
New Zealand	0.78	(0.01)	0.75	(0.01)	0.80	(0.01)	**0.04**	(0.02)	0.73	(0.01)	0.80	(0.01)	**0.07**	(0.02)	0.79	(0.01)	0.75	(0.01)	**-0.04**	(0.02)
Panama	0.70	(0.01)	0.66	(0.02)	0.74	(0.01)	**0.08**	(0.02)	0.63	(0.02)	0.75	(0.03)	**0.12**	(0.03)	0.71	(0.01)	0.59	(0.06)	**-0.12**	(0.05)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.59	(0.01)	0.56	(0.01)	0.62	(0.01)	**0.06**	(0.02)	0.48	(0.02)	0.69	(0.01)	**0.21**	(0.02)	0.59	(0.01)	0.65	(0.03)	**0.07**	(0.03)
Qatar	0.49	(0.01)	0.42	(0.01)	0.54	(0.01)	**0.12**	(0.01)	0.38	(0.01)	0.59	(0.01)	**0.22**	(0.02)	0.45	(0.01)	0.53	(0.01)	**0.08**	(0.01)

Table 4.1d - Proportion of parents who played with alphabet toys with their young children, by students' gender, socio-economic status and immigrant background

	All		Gender						Socio-economic status						Immigrant background					
			Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.60	(0.01)	0.59	(0.01)	0.61	(0.01)	0.02	(0.02)	0.61	(0.02)	0.58	(0.01)	-0.03	(0.02)	0.58	(0.01)	0.71	(0.02)	**0.12**	(0.02)
Denmark	0.48	(0.01)	0.46	(0.01)	0.49	(0.01)	0.03	(0.02)	0.50	(0.02)	0.49	(0.01)	0.00	(0.02)	0.47	(0.01)	0.63	(0.04)	**0.17**	(0.04)
Hong Kong-China	0.39	(0.01)	0.40	(0.01)	0.38	(0.01)	-0.02	(0.02)	0.26	(0.01)	0.49	(0.01)	**0.24**	(0.02)	0.44	(0.01)	0.32	(0.01)	**-0.12**	(0.01)
Croatia	0.71	(0.01)	0.73	(0.01)	0.69	(0.01)	**-0.04**	(0.01)	0.68	(0.01)	0.72	(0.01)	**0.04**	(0.02)	0.72	(0.01)	0.68	(0.02)	**-0.04**	(0.02)
Hungary	0.64	(0.01)	0.66	(0.01)	0.62	(0.01)	**-0.04**	(0.01)	0.63	(0.02)	0.64	(0.01)	0.01	(0.02)	0.64	(0.01)	0.57	(0.06)	-0.07	(0.06)
Italy	0.69	(0.00)	0.68	(0.01)	0.70	(0.01)	**0.02**	(0.01)	0.65	(0.01)	0.72	(0.01)	**0.07**	(0.01)	0.70	(0.00)	0.55	(0.02)	**-0.15**	(0.02)
Korea	0.66	(0.01)	0.66	(0.01)	0.65	(0.01)	-0.01	(0.01)	0.58	(0.01)	0.70	(0.01)	**0.11**	(0.02)	0.66	(0.01)	c	c	c	c
Lithuania	0.69	(0.01)	0.70	(0.01)	0.69	(0.01)	-0.01	(0.02)	0.71	(0.01)	0.68	(0.02)	-0.03	(0.02)	0.69	(0.01)	0.72	(0.06)	0.03	(0.06)
Macao-China	0.42	(0.01)	0.42	(0.01)	0.42	(0.01)	-0.01	(0.01)	0.32	(0.01)	0.52	(0.01)	**0.20**	(0.01)	0.47	(0.01)	0.40	(0.01)	**-0.07**	(0.01)
New Zealand	0.74	(0.01)	0.74	(0.01)	0.74	(0.01)	0.01	(0.02)	0.70	(0.02)	0.76	(0.01)	**0.06**	(0.02)	0.74	(0.01)	0.72	(0.02)	-0.02	(0.02)
Panama	0.59	(0.02)	0.57	(0.02)	0.61	(0.02)	**0.04**	(0.02)	0.51	(0.03)	0.66	(0.04)	**0.15**	(0.04)	0.61	(0.01)	0.42	(0.07)	**-0.19**	(0.07)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.61	(0.01)	0.63	(0.01)	0.59	(0.01)	-0.03	(0.02)	0.48	(0.01)	0.72	(0.01)	**0.23**	(0.02)	0.61	(0.01)	0.63	(0.03)	0.02	(0.03)
Qatar	0.64	(0.01)	0.62	(0.01)	0.66	(0.01)	**0.04**	(0.01)	0.55	(0.01)	0.74	(0.01)	**0.19**	(0.02)	0.60	(0.01)	0.69	(0.01)	**0.10**	(0.01)

Table 4.1e - Proportion of parents who talked about what they had done with their young children, by students' gender, socio-economic status and immigrant background

	All		Gender						Socio-economic status						Immigrant background					
			Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.92	(0.00)	0.92	(0.01)	0.93	(0.01)	0.01	(0.01)	0.87	(0.01)	0.96	(0.01)	**0.09**	(0.01)	0.94	(0.00)	0.83	(0.02)	**-0.11**	(0.02)
Denmark	0.98	(0.00)	0.98	(0.00)	0.98	(0.00)	**0.00**	(0.00)	0.97	(0.01)	0.99	(0.00)	**0.02**	(0.01)	0.99	(0.00)	0.88	(0.02)	**-0.10**	(0.02)
Hong Kong-China	0.48	(0.01)	0.47	(0.01)	0.50	(0.01)	0.02	(0.02)	0.40	(0.01)	0.58	(0.01)	**0.18**	(0.02)	0.52	(0.01)	0.43	(0.01)	**-0.08**	(0.02)
Croatia	0.87	(0.01)	0.87	(0.01)	0.87	(0.01)	0.00	(0.01)	0.83	(0.01)	0.90	(0.01)	**0.07**	(0.01)	0.88	(0.01)	0.83	(0.02)	**-0.05**	(0.02)
Hungary	0.90	(0.00)	0.91	(0.01)	0.89	(0.01)	**-0.02**	(0.01)	0.86	(0.01)	0.93	(0.01)	**0.07**	(0.01)	0.90	(0.00)	0.88	(0.04)	-0.02	(0.04)
Italy	0.93	(0.00)	0.92	(0.00)	0.93	(0.00)	**0.01**	(0.00)	0.89	(0.01)	0.95	(0.00)	**0.06**	(0.01)	0.93	(0.00)	0.80	(0.02)	**-0.14**	(0.02)
Korea	0.53	(0.01)	0.52	(0.01)	0.55	(0.01)	0.03	(0.02)	0.46	(0.01)	0.60	(0.01)	**0.14**	(0.02)	0.54	(0.01)	c	c	c	c
Lithuania	0.89	(0.01)	0.89	(0.01)	0.90	(0.01)	0.00	(0.01)	0.87	(0.01)	0.91	(0.01)	**0.05**	(0.01)	0.89	(0.01)	0.89	(0.04)	-0.01	(0.03)
Macao-China	0.40	(0.01)	0.39	(0.01)	0.41	(0.01)	**0.02**	(0.01)	0.34	(0.01)	0.46	(0.01)	**0.12**	(0.02)	0.43	(0.01)	0.39	(0.01)	**-0.04**	(0.01)
New Zealand	0.93	(0.00)	0.93	(0.01)	0.93	(0.01)	-0.01	(0.01)	0.89	(0.01)	0.95	(0.01)	**0.06**	(0.01)	0.95	(0.00)	0.85	(0.01)	**-0.10**	(0.01)
Panama	0.84	(0.02)	0.82	(0.02)	0.87	(0.01)	**0.05**	(0.02)	0.78	(0.03)	0.88	(0.03)	**0.09**	(0.04)	0.87	(0.01)	0.61	(0.07)	**-0.26**	(0.07)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.86	(0.01)	0.88	(0.01)	0.85	(0.01)	**-0.03**	(0.01)	0.80	(0.01)	0.92	(0.01)	**0.12**	(0.01)	0.87	(0.01)	0.83	(0.03)	-0.04	(0.03)
Qatar	0.75	(0.01)	0.71	(0.01)	0.78	(0.01)	**0.07**	(0.01)	0.68	(0.01)	0.83	(0.01)	**0.15**	(0.01)	0.74	(0.01)	0.76	(0.01)	**0.02**	(0.01)

Table 4.1f - Proportion of parents who talked about what they had read with their young children, by students' gender, socio-economic status and immigrant background

	All		Gender						Socio-economic status						Immigrant background					
			Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.70	(0.01)	0.69	(0.01)	0.71	(0.01)	0.03	(0.02)	0.61	(0.02)	0.74	(0.01)	**0.13**	(0.02)	0.72	(0.01)	0.62	(0.02)	**-0.10**	(0.03)
Denmark	0.84	(0.01)	0.84	(0.01)	0.84	(0.01)	0.01	(0.02)	0.81	(0.01)	0.86	(0.01)	**0.05**	(0.02)	0.84	(0.01)	0.74	(0.03)	**-0.10**	(0.03)
Hong Kong-China	0.26	(0.01)	0.27	(0.01)	0.26	(0.01)	0.00	(0.01)	0.20	(0.01)	0.33	(0.01)	**0.14**	(0.02)	0.28	(0.01)	0.24	(0.01)	**-0.04**	(0.01)
Croatia	0.76	(0.01)	0.76	(0.01)	0.76	(0.01)	0.00	(0.01)	0.72	(0.01)	0.80	(0.01)	**0.08**	(0.02)	0.77	(0.01)	0.74	(0.02)	-0.03	(0.02)
Hungary	0.85	(0.01)	0.85	(0.01)	0.85	(0.01)	0.00	(0.01)	0.82	(0.01)	0.87	(0.01)	**0.05**	(0.01)	0.86	(0.01)	0.80	(0.05)	-0.06	(0.05)
Italy	0.51	(0.00)	0.50	(0.01)	0.51	(0.01)	**0.02**	(0.01)	0.42	(0.01)	0.58	(0.01)	**0.16**	(0.01)	0.51	(0.00)	0.38	(0.02)	**-0.13**	(0.02)
Korea	0.46	(0.01)	0.45	(0.01)	0.47	(0.01)	0.02	(0.02)	0.36	(0.01)	0.55	(0.01)	**0.19**	(0.02)	0.46	(0.01)	c	c	c	c
Lithuania	0.67	(0.01)	0.66	(0.01)	0.69	(0.01)	**0.04**	(0.01)	0.66	(0.01)	0.68	(0.01)	0.02	(0.02)	0.67	(0.01)	0.64	(0.05)	-0.03	(0.05)
Macao-China	0.28	(0.01)	0.29	(0.01)	0.27	(0.01)	**-0.02**	(0.01)	0.20	(0.01)	0.35	(0.01)	**0.15**	(0.01)	0.29	(0.01)	0.27	(0.01)	**-0.02**	(0.01)
New Zealand	0.77	(0.01)	0.76	(0.01)	0.77	(0.01)	0.01	(0.02)	0.73	(0.02)	0.80	(0.01)	**0.07**	(0.02)	0.79	(0.01)	0.70	(0.02)	**-0.09**	(0.02)
Panama	0.76	(0.01)	0.73	(0.03)	0.78	(0.01)	**0.06**	(0.03)	0.72	(0.02)	0.77	(0.03)	0.05	(0.04)	0.77	(0.01)	0.53	(0.07)	**-0.24**	(0.07)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.54	(0.01)	0.55	(0.02)	0.53	(0.01)	-0.02	(0.02)	0.45	(0.01)	0.64	(0.02)	**0.19**	(0.02)	0.54	(0.01)	0.47	(0.04)	-0.07	(0.04)
Qatar	0.63	(0.01)	0.62	(0.01)	0.65	(0.01)	**0.03**	(0.01)	0.58	(0.01)	0.69	(0.01)	**0.11**	(0.02)	0.62	(0.01)	0.65	(0.01)	**0.03**	(0.01)

Table 4.1g - Proportion of parents who played word games with their young children, by students' gender, socio-economic status and immigrant background

	All		Gender						Socio-economic status						Immigrant background					
			Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.61	(0.01)	0.60	(0.01)	0.63	(0.01)	0.03	(0.02)	0.55	(0.02)	0.65	(0.01)	**0.11**	(0.02)	0.62	(0.01)	0.56	(0.03)	**-0.06**	(0.03)
Denmark	0.48	(0.01)	0.47	(0.01)	0.48	(0.01)	0.01	(0.02)	0.44	(0.01)	0.53	(0.01)	**0.09**	(0.02)	0.48	(0.01)	0.40	(0.04)	**-0.09**	(0.04)
Hong Kong-China	0.29	(0.01)	0.30	(0.01)	0.28	(0.01)	**-0.02**	(0.01)	0.18	(0.01)	0.40	(0.01)	**0.22**	(0.01)	0.33	(0.01)	0.23	(0.01)	**-0.09**	(0.01)
Croatia	0.67	(0.01)	0.67	(0.01)	0.67	(0.01)	0.00	(0.02)	0.59	(0.01)	0.73	(0.01)	**0.14**	(0.02)	0.68	(0.01)	0.61	(0.03)	**-0.07**	(0.03)
Hungary	0.66	(0.01)	0.65	(0.01)	0.67	(0.01)	**0.02**	(0.01)	0.63	(0.02)	0.67	(0.01)	**0.04**	(0.02)	0.66	(0.01)	0.63	(0.06)	-0.03	(0.06)
Italy	0.69	(0.00)	0.67	(0.01)	0.71	(0.01)	**0.04**	(0.01)	0.63	(0.01)	0.74	(0.01)	**0.11**	(0.01)	0.70	(0.00)	0.48	(0.03)	**-0.23**	(0.03)
Korea	0.62	(0.01)	0.61	(0.01)	0.62	(0.01)	0.01	(0.02)	0.54	(0.01)	0.68	(0.01)	**0.14**	(0.02)	0.62	(0.01)	c	c	c	c
Lithuania	0.63	(0.01)	0.62	(0.01)	0.63	(0.01)	0.01	(0.02)	0.61	(0.01)	0.63	(0.01)	0.02	(0.02)	0.62	(0.01)	0.67	(0.08)	0.04	(0.07)
Macao-China	0.29	(0.01)	0.29	(0.01)	0.28	(0.01)	-0.01	(0.01)	0.20	(0.01)	0.38	(0.01)	**0.19**	(0.01)	0.34	(0.01)	0.26	(0.01)	**-0.08**	(0.01)
New Zealand	0.70	(0.01)	0.67	(0.01)	0.73	(0.01)	**0.06**	(0.02)	0.63	(0.02)	0.75	(0.01)	**0.11**	(0.02)	0.72	(0.01)	0.64	(0.02)	**-0.08**	(0.02)
Panama	0.57	(0.01)	0.55	(0.02)	0.58	(0.02)	0.03	(0.02)	0.54	(0.02)	0.60	(0.02)	**0.07**	(0.03)	0.58	(0.01)	0.37	(0.07)	**-0.22**	(0.07)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.57	(0.01)	0.57	(0.01)	0.57	(0.01)	-0.01	(0.02)	0.46	(0.01)	0.66	(0.01)	**0.20**	(0.02)	0.57	(0.01)	0.59	(0.04)	0.02	(0.04)
Qatar	0.56	(0.01)	0.52	(0.01)	0.58	(0.01)	**0.06**	(0.01)	0.48	(0.01)	0.63	(0.01)	**0.14**	(0.01)	0.54	(0.01)	0.58	(0.01)	**0.04**	(0.01)

Table 4.1h - Proportion of parents who wrote letters or words with their young children, by students' gender, socio-economic status and immigrant background

	All		Gender						Socio-economic status						Immigrant background					
			Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.90	(0.01)	0.89	(0.01)	0.90	(0.01)	0.01	(0.01)	0.87	(0.01)	0.91	(0.01)	**0.04**	(0.01)	0.90	(0.01)	0.86	(0.02)	**-0.04**	(0.02)
Denmark	0.83	(0.01)	0.80	(0.01)	0.86	(0.01)	**0.06**	(0.02)	0.80	(0.01)	0.85	(0.01)	**0.05**	(0.02)	0.84	(0.01)	0.74	(0.03)	**-0.09**	(0.02)
Hong Kong-China	0.64	(0.01)	0.64	(0.01)	0.64	(0.01)	0.01	(0.02)	0.50	(0.01)	0.77	(0.01)	**0.27**	(0.02)	0.69	(0.01)	0.57	(0.01)	**-0.11**	(0.01)
Croatia	0.91	(0.00)	0.92	(0.01)	0.91	(0.01)	-0.01	(0.01)	0.89	(0.01)	0.92	(0.01)	**0.02**	(0.01)	0.92	(0.00)	0.89	(0.01)	**-0.02**	(0.01)
Hungary	0.90	(0.01)	0.91	(0.01)	0.90	(0.01)	-0.01	(0.01)	0.90	(0.01)	0.89	(0.01)	-0.01	(0.01)	0.90	(0.01)	0.83	(0.05)	-0.08	(0.05)
Italy	0.79	(0.00)	0.77	(0.01)	0.81	(0.00)	**0.04**	(0.01)	0.73	(0.01)	0.84	(0.01)	**0.11**	(0.01)	0.80	(0.00)	0.60	(0.03)	**-0.20**	(0.03)
Korea	0.77	(0.01)	0.75	(0.01)	0.79	(0.01)	**0.04**	(0.02)	0.69	(0.01)	0.83	(0.01)	**0.13**	(0.01)	0.77	(0.01)	c	c	c	c
Lithuania	0.91	(0.00)	0.91	(0.01)	0.91	(0.01)	0.00	(0.01)	0.91	(0.01)	0.89	(0.01)	**-0.02**	(0.01)	0.91	(0.00)	0.91	(0.04)	0.00	(0.03)
Macao-China	0.62	(0.01)	0.61	(0.01)	0.63	(0.01)	**0.02**	(0.01)	0.51	(0.01)	0.71	(0.01)	**0.20**	(0.01)	0.67	(0.01)	0.60	(0.01)	**-0.07**	(0.01)
New Zealand	0.88	(0.01)	0.86	(0.01)	0.90	(0.01)	**0.04**	(0.01)	0.84	(0.01)	0.89	(0.01)	**0.06**	(0.01)	0.89	(0.01)	0.84	(0.01)	**-0.05**	(0.01)
Panama	0.82	(0.01)	0.80	(0.02)	0.84	(0.01)	**0.04**	(0.02)	0.81	(0.02)	0.82	(0.02)	0.01	(0.03)	0.83	(0.01)	0.70	(0.05)	**-0.13**	(0.05)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.80	(0.01)	0.81	(0.01)	0.80	(0.01)	-0.01	(0.01)	0.72	(0.01)	0.87	(0.01)	**0.15**	(0.02)	0.80	(0.01)	0.78	(0.03)	-0.02	(0.03)

Qatar	0.77	(0.01)	0.74	(0.01)	0.79	(0.01)	**0.05**	(0.01)	0.70	(0.01)	0.84	(0.01)	**0.14**	(0.01)	0.74	(0.01)	0.81	(0.01)	**0.07**	(0.01)

Table 4.1i - Proportion of parents who read signs out loud with their young children, by students' gender, socio-economic status and immigrant background

			Gender						Socio-economic status						Immigrant background					
	All		Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.74	(0.01)	0.72	(0.01)	0.75	(0.01)	0.02	(0.02)	0.65	(0.02)	0.79	(0.01)	**0.14**	(0.02)	0.75	(0.01)	0.64	(0.02)	**-0.11**	(0.03)
Denmark	0.76	(0.01)	0.75	(0.01)	0.76	(0.01)	0.01	(0.02)	0.69	(0.02)	0.79	(0.01)	**0.09**	(0.02)	0.76	(0.01)	0.63	(0.03)	**-0.13**	(0.03)
Hong Kong-China	0.38	(0.01)	0.39	(0.01)	0.38	(0.01)	-0.01	(0.02)	0.26	(0.01)	0.51	(0.01)	**0.25**	(0.02)	0.42	(0.01)	0.32	(0.01)	**-0.10**	(0.02)
Croatia	0.81	(0.01)	0.81	(0.01)	0.81	(0.01)	0.00	(0.01)	0.75	(0.01)	0.85	(0.01)	**0.10**	(0.01)	0.81	(0.01)	0.77	(0.02)	**-0.04**	(0.02)
Hungary	0.77	(0.01)	0.78	(0.01)	0.77	(0.01)	**-0.02**	(0.01)	0.73	(0.01)	0.81	(0.01)	**0.08**	(0.02)	0.78	(0.01)	0.62	(0.06)	**-0.16**	(0.06)
Italy	0.77	(0.00)	0.75	(0.01)	0.79	(0.00)	**0.03**	(0.01)	0.71	(0.01)	0.82	(0.01)	**0.11**	(0.01)	0.78	(0.00)	0.55	(0.03)	**-0.24**	(0.03)
Korea	0.64	(0.01)	0.63	(0.01)	0.65	(0.01)	**0.02**	(0.01)	0.56	(0.01)	0.70	(0.01)	**0.14**	(0.02)	0.64	(0.01)	c	c	c	c
Lithuania	0.83	(0.00)	0.83	(0.01)	0.83	(0.01)	-0.01	(0.01)	0.80	(0.01)	0.84	(0.01)	**0.04**	(0.01)	0.83	(0.00)	0.77	(0.05)	-0.06	(0.05)
Macao-China	0.37	(0.01)	0.37	(0.01)	0.37	(0.01)	0.00	(0.01)	0.29	(0.01)	0.44	(0.01)	**0.16**	(0.02)	0.37	(0.01)	0.37	(0.01)	0.00	(0.01)
New Zealand	0.82	(0.01)	0.81	(0.01)	0.83	(0.01)	**0.02**	(0.01)	0.73	(0.01)	0.87	(0.01)	**0.14**	(0.02)	0.84	(0.01)	0.74	(0.01)	**-0.10**	(0.01)
Panama	0.68	(0.02)	0.65	(0.02)	0.71	(0.02)	**0.06**	(0.03)	0.63	(0.03)	0.72	(0.02)	**0.09**	(0.03)	0.69	(0.02)	0.52	(0.07)	**-0.17**	(0.07)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.66	(0.01)	0.67	(0.01)	0.65	(0.01)	**-0.02**	(0.01)	0.58	(0.01)	0.74	(0.01)	**0.16**	(0.02)	0.66	(0.01)	0.67	(0.03)	0.01	(0.03)
Qatar	0.67	(0.01)	0.65	(0.01)	0.69	(0.01)	**0.05**	(0.01)	0.57	(0.01)	0.77	(0.01)	**0.19**	(0.01)	0.64	(0.01)	0.71	(0.01)	**0.06**	(0.01)

Table 4.2a - Proportion of parents who discuss political or social issues at home with their child, by students' gender, socio-economic status and immigrant background

			Gender						Socio-economic status						Immigrant background					
	All		Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.62	(0.01)	0.64	(0.01)	0.59	(0.01)	**-0.05**	(0.02)	0.46	(0.02)	0.72	(0.01)	**0.26**	(0.03)	0.65	(0.01)	0.45	(0.03)	**-0.19**	(0.03)
Denmark	0.70	(0.01)	0.71	(0.01)	0.70	(0.01)	-0.01	(0.01)	0.59	(0.02)	0.80	(0.01)	**0.21**	(0.02)	0.71	(0.01)	0.56	(0.04)	**-0.16**	(0.04)
Hong Kong-China	0.55	(0.01)	0.55	(0.01)	0.56	(0.01)	0.01	(0.02)	0.46	(0.01)	0.65	(0.01)	**0.18**	(0.02)	0.58	(0.01)	0.51	(0.01)	**-0.07**	(0.02)
Croatia	0.40	(0.01)	0.43	(0.01)	0.38	(0.01)	**-0.05**	(0.02)	0.29	(0.01)	0.52	(0.01)	**0.23**	(0.02)	0.41	(0.01)	0.37	(0.02)	**-0.04**	(0.02)
Hungary	0.53	(0.01)	0.59	(0.01)	0.48	(0.01)	**-0.10**	(0.02)	0.45	(0.02)	0.64	(0.01)	**0.19**	(0.02)	0.54	(0.01)	0.38	(0.06)	**-0.16**	(0.06)
Italy	0.65	(0.00)	0.66	(0.01)	0.65	(0.01)	**-0.02**	(0.01)	0.51	(0.01)	0.78	(0.01)	**0.27**	(0.01)	0.67	(0.00)	0.38	(0.02)	**-0.29**	(0.02)
Korea	0.18	(0.01)	0.18	(0.01)	0.18	(0.01)	0.00	(0.01)	0.13	(0.01)	0.24	(0.01)	**0.11**	(0.02)	0.18	(0.01)	c	c	c	c
Lithuania	0.51	(0.01)	0.52	(0.01)	0.50	(0.01)	-0.01	(0.02)	0.41	(0.01)	0.62	(0.01)	**0.21**	(0.02)	0.51	(0.01)	0.52	(0.06)	0.01	(0.06)
Macao-China	0.32	(0.01)	0.31	(0.01)	0.33	(0.01)	**0.02**	(0.01)	0.23	(0.01)	0.41	(0.01)	**0.18**	(0.01)	0.35	(0.01)	0.31	(0.01)	**-0.04**	(0.01)
New Zealand	0.68	(0.01)	0.69	(0.01)	0.67	(0.01)	-0.02	(0.02)	0.59	(0.01)	0.77	(0.01)	**0.18**	(0.02)	0.69	(0.01)	0.65	(0.02)	**-0.04**	(0.02)

Panama	0.46	(0.01)	0.46	(0.02)	0.47	(0.02)	0.01	(0.02)	0.35	(0.02)	0.55	(0.03)	**0.20**	(0.04)	0.48	(0.01)	0.35	(0.06)	-0.13	(0.07)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.55	(0.01)	0.58	(0.01)	0.53	(0.01)	**-0.05**	(0.02)	0.38	(0.01)	0.72	(0.01)	**0.34**	(0.02)	0.56	(0.01)	0.54	(0.03)	-0.02	(0.04)
Qatar	0.52	(0.01)	0.50	(0.01)	0.54	(0.01)	**0.04**	(0.01)	0.43	(0.01)	0.62	(0.01)	**0.19**	(0.02)	0.50	(0.01)	0.56	(0.01)	**0.06**	(0.02)

Table 4.2b - Proportion of parents who discuss books, films or television programmes at home with their child, by students' gender, socio-economic status and immigrant background

			Gender						Socio-economic status						Immigrant background					
	All		Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.74	(0.01)	0.72	(0.01)	0.75	(0.01)	0.03	(0.02)	0.68	(0.02)	0.77	(0.01)	**0.09**	(0.02)	0.75	(0.01)	0.68	(0.02)	**-0.07**	(0.03)
Denmark	0.82	(0.01)	0.82	(0.01)	0.83	(0.01)	0.01	(0.01)	0.76	(0.02)	0.86	(0.01)	**0.10**	(0.02)	0.83	(0.01)	0.71	(0.03)	**-0.12**	(0.03)
Hong Kong-China	0.64	(0.01)	0.61	(0.01)	0.67	(0.01)	**0.06**	(0.01)	0.57	(0.01)	0.69	(0.01)	**0.12**	(0.02)	0.66	(0.01)	0.61	(0.01)	**-0.05**	(0.01)
Croatia	0.76	(0.01)	0.76	(0.01)	0.76	(0.01)	0.00	(0.01)	0.70	(0.01)	0.82	(0.01)	**0.11**	(0.02)	0.77	(0.01)	0.71	(0.02)	**-0.06**	(0.02)
Hungary	0.88	(0.01)	0.87	(0.01)	0.89	(0.01)	**0.03**	(0.01)	0.88	(0.01)	0.89	(0.01)	0.01	(0.02)	0.88	(0.01)	0.85	(0.04)	-0.03	(0.04)
Italy	0.84	(0.00)	0.81	(0.00)	0.86	(0.00)	**0.05**	(0.01)	0.80	(0.01)	0.87	(0.00)	**0.07**	(0.01)	0.84	(0.00)	0.69	(0.02)	**-0.15**	(0.03)
Korea	0.36	(0.01)	0.34	(0.01)	0.38	(0.01)	**0.04**	(0.01)	0.33	(0.01)	0.40	(0.01)	**0.06**	(0.02)	0.36	(0.01)	c	c	c	c
Lithuania	0.78	(0.01)	0.77	(0.01)	0.79	(0.01)	**0.02**	(0.01)	0.76	(0.01)	0.80	(0.01)	**0.05**	(0.01)	0.78	(0.01)	0.78	(0.05)	0.00	(0.05)
Macao-China	0.53	(0.01)	0.52	(0.01)	0.54	(0.01)	**0.02**	(0.01)	0.44	(0.01)	0.61	(0.01)	**0.17**	(0.01)	0.58	(0.01)	0.51	(0.01)	**-0.06**	(0.01)
New Zealand	0.84	(0.01)	0.83	(0.01)	0.85	(0.01)	0.01	(0.01)	0.82	(0.01)	0.87	(0.01)	**0.06**	(0.02)	0.86	(0.01)	0.78	(0.02)	**-0.08**	(0.02)
Panama	0.66	(0.02)	0.65	(0.03)	0.68	(0.02)	0.03	(0.02)	0.59	(0.03)	0.69	(0.04)	0.09	(0.05)	0.69	(0.02)	0.42	(0.08)	**-0.27**	(0.08)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.81	(0.01)	0.81	(0.01)	0.81	(0.01)	0.00	(0.01)	0.72	(0.01)	0.87	(0.01)	**0.15**	(0.02)	0.81	(0.01)	0.83	(0.03)	0.03	(0.03)
Qatar	0.61	(0.01)	0.57	(0.01)	0.65	(0.01)	**0.08**	(0.01)	0.55	(0.01)	0.67	(0.01)	**0.12**	(0.02)	0.60	(0.01)	0.63	(0.01)	**0.03**	(0.01)

Table 4.2c - Proportion of parents who discuss with their child how well he/she is doing at school, by students' gender, socio-economic status and immigrant background

			Gender						Socio-economic status						Immigrant background					
	All		Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.86	(0.01)	0.86	(0.01)	0.86	(0.01)	0.00	(0.01)	0.84	(0.01)	0.85	(0.01)	0.01	(0.02)	0.87	(0.01)	0.85	(0.02)	-0.01	(0.02)
Denmark	0.94	(0.00)	0.93	(0.01)	0.95	(0.01)	**0.02**	(0.01)	0.93	(0.01)	0.94	(0.01)	0.01	(0.01)	0.94	(0.00)	0.93	(0.01)	-0.01	(0.01)
Hong Kong-China	0.68	(0.01)	0.65	(0.01)	0.70	(0.01)	**0.05**	(0.02)	0.56	(0.01)	0.79	(0.01)	**0.22**	(0.02)	0.72	(0.01)	0.60	(0.01)	**-0.12**	(0.02)
Croatia	0.96	(0.00)	0.96	(0.00)	0.96	(0.00)	0.00	(0.01)	0.95	(0.01)	0.97	(0.01)	**0.02**	(0.01)	0.96	(0.00)	0.95	(0.01)	-0.01	(0.01)
Hungary	0.98	(0.00)	0.98	(0.00)	0.98	(0.00)	0.00	(0.01)	0.97	(0.00)	0.98	(0.00)	0.01	(0.01)	0.98	(0.00)	0.97	(0.02)	-0.01	(0.02)
Italy	0.96	(0.00)	0.96	(0.00)	0.96	(0.00)	**0.00**	(0.00)	0.95	(0.00)	0.98	(0.00)	**0.03**	(0.00)	0.97	(0.00)	0.89	(0.01)	**-0.08**	(0.01)
Korea	0.68	(0.01)	0.65	(0.01)	0.70	(0.01)	**0.05**	(0.01)	0.60	(0.01)	0.76	(0.01)	**0.16**	(0.02)	0.68	(0.01)	c	c	c	c

Lithuania	0.96	(0.00)	0.96	(0.00)	0.96	(0.00)	0.01	(0.01)	0.93	(0.01)	0.98	(0.00)	**0.05**	(0.01)	0.96	(0.00)	0.97	(0.02)	0.01	(0.02)
Macao-China	0.61	(0.01)	0.63	(0.01)	0.59	(0.01)	**-0.04**	(0.01)	0.52	(0.01)	0.70	(0.01)	**0.18**	(0.01)	0.65	(0.01)	0.60	(0.01)	**-0.06**	(0.01)
New Zealand	0.88	(0.01)	0.88	(0.01)	0.88	(0.01)	0.00	(0.01)	0.86	(0.01)	0.89	(0.01)	**0.04**	(0.01)	0.88	(0.01)	0.88	(0.01)	0.00	(0.01)
Panama	0.80	(0.01)	0.80	(0.02)	0.81	(0.02)	0.02	(0.02)	0.79	(0.02)	0.82	(0.03)	0.03	(0.03)	0.82	(0.01)	0.63	(0.07)	**-0.19**	(0.06)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.93	(0.00)	0.94	(0.00)	0.92	(0.01)	**-0.02**	(0.01)	0.91	(0.01)	0.94	(0.01)	**0.03**	(0.01)	0.93	(0.00)	0.92	(0.02)	-0.01	(0.02)
Qatar	0.80	(0.01)	0.81	(0.01)	0.80	(0.01)	-0.01	(0.01)	0.73	(0.01)	0.86	(0.01)	**0.12**	(0.01)	0.78	(0.01)	0.83	(0.01)	**0.05**	(0.01)

Table 4.2d - Proportion of parents who eat the main meal around a table with their child, by students' gender, socio-economic status and immigrant background

			Gender						Socio-economic status						Immigrant background					
	All		Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.97	(0.00)	0.97	(0.00)	0.97	(0.00)	0.00	(0.01)	0.94	(0.01)	0.97	(0.00)	**0.03**	(0.01)	0.97	(0.00)	0.93	(0.01)	**-0.04**	(0.01)
Denmark	0.99	(0.00)	0.99	(0.00)	0.99	(0.00)	**0.00**	(0.00)	0.98	(0.00)	1.00	(0.00)	**0.02**	(0.01)	0.99	(0.00)	0.95	(0.01)	**-0.03**	(0.01)
Hong Kong-China	0.96	(0.00)	0.96	(0.00)	0.97	(0.00)	0.01	(0.01)	0.95	(0.01)	0.98	(0.00)	**0.03**	(0.01)	0.97	(0.00)	0.96	(0.00)	-0.01	(0.01)
Croatia	0.95	(0.00)	0.95	(0.00)	0.94	(0.01)	-0.01	(0.01)	0.96	(0.01)	0.94	(0.01)	**-0.02**	(0.01)	0.94	(0.00)	0.97	(0.01)	**0.03**	(0.01)
Hungary	0.95	(0.00)	0.96	(0.00)	0.95	(0.01)	-0.01	(0.01)	0.95	(0.01)	0.96	(0.01)	0.01	(0.01)	0.95	(0.00)	0.96	(0.02)	0.01	(0.02)
Italy	0.98	(0.00)	0.98	(0.00)	0.98	(0.00)	**0.00**	(0.00)	0.98	(0.00)	0.99	(0.00)	**0.01**	(0.00)	0.98	(0.00)	0.93	(0.01)	**-0.06**	(0.01)
Korea	0.93	(0.01)	0.92	(0.01)	0.94	(0.01)	**0.02**	(0.01)	0.91	(0.01)	0.95	(0.01)	**0.04**	(0.01)	0.93	(0.01)	c	c	c	c
Lithuania	0.94	(0.00)	0.94	(0.01)	0.94	(0.01)	0.00	(0.01)	0.91	(0.01)	0.95	(0.00)	**0.04**	(0.01)	0.94	(0.00)	0.87	(0.04)	-0.07	(0.04)
Macao-China	0.93	(0.00)	0.92	(0.01)	0.94	(0.00)	0.01	(0.01)	0.92	(0.01)	0.94	(0.01)	**0.03**	(0.01)	0.93	(0.01)	0.93	(0.00)	0.00	(0.01)
New Zealand	0.84	(0.01)	0.85	(0.01)	0.83	(0.01)	**-0.02**	(0.01)	0.80	(0.01)	0.87	(0.01)	**0.06**	(0.02)	0.81	(0.01)	0.92	(0.01)	**0.11**	(0.01)
Panama	0.85	(0.01)	0.83	(0.01)	0.86	(0.01)	0.03	(0.02)	0.85	(0.01)	0.84	(0.01)	0.00	(0.02)	0.85	(0.01)	0.79	(0.07)	-0.06	(0.07)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.98	(0.00)	0.98	(0.00)	0.98	(0.00)	**0.00**	(0.00)	0.98	(0.00)	0.99	(0.00)	0.01	(0.01)	0.98	(0.00)	0.93	(0.02)	**-0.06**	(0.02)
Qatar	0.93	(0.00)	0.92	(0.01)	0.94	(0.00)	**0.02**	(0.01)	0.90	(0.01)	0.96	(0.00)	**0.05**	(0.01)	0.91	(0.01)	0.95	(0.00)	**0.04**	(0.01)

Table 4.2e - Proportion of parents who spend time just talking to their child at home, by students' gender, socio-economic status and immigrant background

			Gender						Socio-economic status						Immigrant background					
	All		Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.99	(0.00)	0.98	(0.00)	0.99	(0.00)	**0.00**	(0.00)	0.97	(0.01)	1.00	(0.00)	**0.03**	(0.01)	0.99	(0.00)	0.96	(0.01)	**-0.03**	(0.01)
Denmark	0.99	(0.00)	0.99	(0.00)	0.99	(0.00)	**0.00**	(0.00)	0.99	(0.00)	0.99	(0.00)	**0.01**	(0.00)	0.99	(0.00)	0.92	(0.02)	**-0.07**	(0.02)
Hong Kong-China	0.90	(0.00)	0.89	(0.01)	0.91	(0.01)	**0.02**	(0.01)	0.85	(0.01)	0.95	(0.01)	**0.10**	(0.01)	0.92	(0.01)	0.87	(0.01)	**-0.05**	(0.01)
Croatia	0.92	(0.00)	0.92	(0.01)	0.92	(0.01)	0.00	(0.01)	0.90	(0.01)	0.94	(0.01)	**0.04**	(0.01)	0.93	(0.00)	0.91	(0.01)	**-0.02**	(0.01)

Hungary	0.96	(0.00)	0.96	(0.00)	0.96	(0.00)	0.00	(0.01)	0.94	(0.01)	0.97	(0.01)	**0.02**	(0.01)	0.96	(0.00)	0.99	(0.01)	**0.03**	(0.01)
Italy	0.93	(0.00)	0.92	(0.00)	0.93	(0.00)	**0.01**	(0.00)	0.91	(0.00)	0.95	(0.00)	**0.04**	(0.01)	0.93	(0.00)	0.83	(0.02)	**-0.11**	(0.02)
Korea	0.80	(0.01)	0.77	(0.01)	0.84	(0.01)	**0.07**	(0.01)	0.75	(0.01)	0.85	(0.01)	**0.10**	(0.01)	0.80	(0.01)	c	c	c	c
Lithuania	0.93	(0.00)	0.91	(0.01)	0.94	(0.00)	**0.02**	(0.01)	0.89	(0.01)	0.94	(0.01)	**0.05**	(0.01)	0.93	(0.00)	0.89	(0.03)	-0.03	(0.03)
Macao-China	0.68	(0.01)	0.68	(0.01)	0.68	(0.01)	0.00	(0.01)	0.57	(0.01)	0.78	(0.01)	**0.21**	(0.01)	0.75	(0.01)	0.65	(0.01)	**-0.10**	(0.01)
New Zealand	0.97	(0.00)	0.97	(0.00)	0.96	(0.00)	-0.01	(0.01)	0.95	(0.01)	0.98	(0.00)	**0.03**	(0.01)	0.98	(0.00)	0.94	(0.01)	**-0.03**	(0.01)
Panama	0.85	(0.01)	0.82	(0.02)	0.87	(0.01)	**0.05**	(0.02)	0.81	(0.02)	0.89	(0.02)	**0.07**	(0.03)	0.86	(0.01)	0.71	(0.06)	**-0.15**	(0.05)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.93	(0.00)	0.94	(0.01)	0.92	(0.01)	**-0.02**	(0.01)	0.90	(0.01)	0.94	(0.01)	**0.04**	(0.01)	0.93	(0.00)	0.95	(0.02)	0.03	(0.02)
Qatar	0.87	(0.00)	0.86	(0.01)	0.87	(0.01)	0.01	(0.01)	0.81	(0.01)	0.91	(0.01)	**0.10**	(0.01)	0.85	(0.01)	0.88	(0.01)	**0.03**	(0.01)

Table 4.2f - Proportion of parents who go to a bookstore or library with their child, by students' gender, socio-economic status and immigrant background

			Gender						Socio-economic status						Immigrant background					
	All		Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.07	(0.00)	0.05	(0.00)	0.09	(0.01)	**0.04**	(0.01)	0.08	(0.01)	0.07	(0.01)	-0.01	(0.01)	0.06	(0.01)	0.11	(0.01)	**0.04**	(0.01)
Denmark	0.03	(0.00)	0.02	(0.00)	0.04	(0.00)	**0.02**	(0.01)	0.03	(0.01)	0.03	(0.01)	0.00	(0.01)	0.03	(0.00)	0.11	(0.02)	**0.09**	(0.02)
Hong Kong-China	0.15	(0.01)	0.14	(0.01)	0.17	(0.01)	**0.03**	(0.01)	0.11	(0.01)	0.19	(0.01)	**0.08**	(0.01)	0.17	(0.01)	0.13	(0.01)	**-0.04**	(0.01)
Croatia	0.06	(0.00)	0.05	(0.00)	0.07	(0.01)	**0.02**	(0.01)	0.05	(0.01)	0.07	(0.01)	**0.02**	(0.01)	0.06	(0.00)	0.06	(0.01)	0.01	(0.01)
Hungary	0.07	(0.01)	0.06	(0.01)	0.08	(0.01)	**0.02**	(0.01)	0.07	(0.01)	0.08	(0.01)	0.00	(0.01)	0.07	(0.00)	0.10	(0.04)	0.03	(0.04)
Italy	0.09	(0.00)	0.07	(0.00)	0.10	(0.00)	**0.03**	(0.00)	0.07	(0.00)	0.09	(0.00)	**0.02**	(0.01)	0.09	(0.00)	0.08	(0.01)	0.00	(0.01)
Korea	0.09	(0.00)	0.08	(0.01)	0.10	(0.01)	**0.02**	(0.01)	0.07	(0.01)	0.12	(0.01)	**0.05**	(0.01)	0.09	(0.00)	c	c	c	c
Lithuania	0.09	(0.00)	0.07	(0.01)	0.11	(0.01)	**0.03**	(0.01)	0.09	(0.01)	0.09	(0.01)	0.00	(0.01)	0.09	(0.00)	0.08	(0.03)	-0.01	(0.03)
Macao-China	0.09	(0.00)	0.09	(0.01)	0.09	(0.01)	0.00	(0.01)	0.05	(0.01)	0.12	(0.01)	**0.07**	(0.01)	0.11	(0.01)	0.08	(0.00)	**-0.03**	(0.01)
New Zealand	0.14	(0.01)	0.11	(0.01)	0.17	(0.01)	**0.06**	(0.01)	0.15	(0.01)	0.15	(0.01)	0.00	(0.02)	0.11	(0.01)	0.23	(0.01)	**0.12**	(0.01)
Panama	0.17	(0.01)	0.17	(0.01)	0.18	(0.02)	0.00	(0.02)	0.20	(0.02)	0.16	(0.02)	-0.04	(0.03)	0.17	(0.01)	0.09	(0.04)	-0.08	(0.05)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.12	(0.01)	0.11	(0.01)	0.14	(0.01)	**0.03**	(0.01)	0.11	(0.01)	0.15	(0.01)	**0.04**	(0.01)	0.13	(0.01)	0.11	(0.02)	-0.02	(0.02)
Qatar	0.29	(0.01)	0.27	(0.01)	0.30	(0.01)	**0.03**	(0.01)	0.30	(0.01)	0.29	(0.01)	-0.02	(0.02)	0.35	(0.01)	0.23	(0.01)	**-0.11**	(0.01)

Table 4.2g - Proportion of parents who talk with their child about what he/she is reading on his/her own at home, by students' gender, socio-economic status and immigrant background

			Gender						Socio-economic status						Immigrant background					
	All		Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.38	(0.01)	0.36	(0.01)	0.41	(0.01)	**0.05**	(0.02)	0.34	(0.01)	0.42	(0.01)	**0.08**	(0.02)	0.39	(0.01)	0.39	(0.02)	0.01	(0.02)

Denmark	0.47	(0.01)	0.43	(0.01)	0.50	(0.01)	**0.07**	(0.02)	0.46	(0.02)	0.50	(0.01)	0.03	(0.02)	0.46	(0.01)	0.58	(0.03)	**0.12**	(0.03)
Hong Kong-China	0.33	(0.01)	0.33	(0.01)	0.34	(0.01)	0.01	(0.01)	0.26	(0.01)	0.40	(0.01)	**0.15**	(0.02)	0.36	(0.01)	0.30	(0.01)	**-0.06**	(0.01)
Croatia	0.36	(0.01)	0.37	(0.01)	0.36	(0.01)	-0.01	(0.02)	0.33	(0.01)	0.39	(0.01)	**0.06**	(0.02)	0.36	(0.01)	0.35	(0.02)	-0.02	(0.02)
Hungary	0.41	(0.01)	0.40	(0.01)	0.41	(0.01)	0.00	(0.01)	0.43	(0.02)	0.40	(0.01)	-0.03	(0.02)	0.41	(0.01)	0.41	(0.05)	0.00	(0.06)
Italy	0.43	(0.00)	0.40	(0.01)	0.46	(0.01)	**0.06**	(0.01)	0.36	(0.01)	0.49	(0.01)	**0.13**	(0.01)	0.43	(0.00)	0.31	(0.02)	**-0.12**	(0.02)
Korea	0.17	(0.01)	0.16	(0.01)	0.18	(0.01)	**0.02**	(0.01)	0.12	(0.01)	0.22	(0.01)	**0.10**	(0.02)	0.17	(0.01)	c	c	c	c
Lithuania	0.41	(0.01)	0.38	(0.01)	0.44	(0.01)	**0.07**	(0.02)	0.40	(0.01)	0.43	(0.01)	0.03	(0.02)	0.41	(0.01)	0.47	(0.06)	0.06	(0.06)
Macao-China	0.21	(0.01)	0.22	(0.01)	0.20	(0.01)	**-0.02**	(0.01)	0.16	(0.01)	0.26	(0.01)	**0.10**	(0.01)	0.23	(0.01)	0.20	(0.01)	**-0.03**	(0.01)
New Zealand	0.45	(0.01)	0.43	(0.01)	0.48	(0.01)	**0.05**	(0.02)	0.42	(0.02)	0.49	(0.01)	**0.07**	(0.02)	0.43	(0.01)	0.52	(0.02)	**0.09**	(0.02)
Panama	0.58	(0.01)	0.56	(0.02)	0.60	(0.02)	0.04	(0.03)	0.62	(0.02)	0.54	(0.02)	**-0.07**	(0.03)	0.57	(0.01)	0.44	(0.07)	-0.13	(0.07)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.48	(0.01)	0.48	(0.01)	0.49	(0.01)	0.01	(0.02)	0.45	(0.01)	0.54	(0.01)	**0.09**	(0.02)	0.48	(0.01)	0.50	(0.04)	0.02	(0.04)
Qatar	0.52	(0.01)	0.51	(0.01)	0.52	(0.01)	0.01	(0.01)	0.50	(0.01)	0.53	(0.01)	0.03	(0.02)	0.51	(0.01)	0.53	(0.01)	0.01	(0.01)

Table 4.2h - Proportion of parents who help their child with homework at home, by students' gender, socio-economic status and immigrant background

			Gender						Socio-economic status						Immigrant background					
	All		Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.35	(0.01)	0.36	(0.01)	0.34	(0.02)	-0.02	(0.02)	0.39	(0.02)	0.33	(0.01)	**-0.06**	(0.02)	0.34	(0.01)	0.40	(0.03)	**0.07**	(0.03)
Denmark	0.51	(0.01)	0.47	(0.02)	0.55	(0.02)	**0.07**	(0.02)	0.50	(0.02)	0.54	(0.02)	0.04	(0.03)	0.51	(0.01)	0.53	(0.03)	0.02	(0.03)
Hong Kong-China	0.27	(0.01)	0.28	(0.01)	0.26	(0.01)	**-0.02**	(0.01)	0.22	(0.01)	0.33	(0.01)	**0.11**	(0.02)	0.29	(0.01)	0.24	(0.01)	**-0.05**	(0.01)
Croatia	0.28	(0.01)	0.31	(0.01)	0.24	(0.01)	**-0.06**	(0.01)	0.30	(0.01)	0.28	(0.01)	-0.02	(0.02)	0.27	(0.01)	0.34	(0.02)	**0.07**	(0.02)
Hungary	0.45	(0.01)	0.48	(0.01)	0.42	(0.01)	**-0.06**	(0.02)	0.51	(0.02)	0.40	(0.02)	**-0.10**	(0.02)	0.45	(0.01)	0.41	(0.05)	-0.03	(0.05)
Italy	0.35	(0.00)	0.38	(0.01)	0.32	(0.00)	**-0.06**	(0.01)	0.28	(0.01)	0.41	(0.01)	**0.13**	(0.01)	0.35	(0.00)	0.30	(0.02)	**-0.05**	(0.02)
Korea	0.14	(0.00)	0.15	(0.01)	0.14	(0.01)	-0.01	(0.01)	0.12	(0.01)	0.17	(0.01)	**0.05**	(0.01)	0.14	(0.00)	c	c	c	c
Lithuania	0.43	(0.01)	0.46	(0.01)	0.41	(0.01)	**-0.05**	(0.02)	0.47	(0.02)	0.39	(0.01)	**-0.09**	(0.02)	0.43	(0.01)	0.43	(0.06)	0.00	(0.06)
Macao-China	0.31	(0.01)	0.33	(0.01)	0.29	(0.01)	**-0.04**	(0.01)	0.26	(0.01)	0.35	(0.01)	**0.09**	(0.01)	0.33	(0.01)	0.30	(0.01)	**-0.03**	(0.01)
New Zealand	0.47	(0.01)	0.46	(0.01)	0.47	(0.01)	0.01	(0.02)	0.45	(0.02)	0.49	(0.01)	**0.04**	(0.02)	0.45	(0.01)	0.53	(0.02)	**0.08**	(0.02)
Panama	0.73	(0.01)	0.72	(0.02)	0.73	(0.02)	0.01	(0.02)	0.76	(0.02)	0.65	(0.02)	**-0.11**	(0.03)	0.74	(0.01)	0.50	(0.05)	**-0.24**	(0.06)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.41	(0.01)	0.43	(0.01)	0.39	(0.01)	**-0.04**	(0.02)	0.38	(0.01)	0.43	(0.01)	**0.05**	(0.02)	0.41	(0.01)	0.36	(0.03)	-0.05	(0.03)
Qatar	0.53	(0.01)	0.55	(0.01)	0.52	(0.01)	**-0.04**	(0.01)	0.50	(0.01)	0.55	(0.01)	**0.05**	(0.02)	0.53	(0.01)	0.53	(0.01)	-0.01	(0.01)

Table 4.3a - Proportion of parents who have discussed their child's behaviour or progress with a teacher on the parent's initiative, by students' gender, socio-economic status and immigrant background

			Gender						Socio-economic status						Immigrant background					
	All		Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.

Germany	0.68	(0.01)	0.72	(0.02)	0.65	(0.01)	**-0.08**	(0.02)	0.68	(0.02)	0.69	(0.02)	0.01	(0.02)	0.69	(0.01)	0.63	(0.03)	**-0.06**	(0.03)
Denmark	0.45	(0.01)	0.45	(0.01)	0.44	(0.02)	-0.01	(0.02)	0.54	(0.02)	0.38	(0.02)	**-0.16**	(0.02)	0.43	(0.01)	0.62	(0.04)	**0.19**	(0.04)
Hong Kong-China	0.43	(0.01)	0.45	(0.01)	0.41	(0.01)	**-0.04**	(0.02)	0.33	(0.01)	0.51	(0.01)	**0.18**	(0.02)	0.46	(0.01)	0.39	(0.01)	**-0.06**	(0.02)
Croatia	0.82	(0.01)	0.83	(0.01)	0.81	(0.01)	**-0.02**	(0.01)	0.80	(0.01)	0.83	(0.01)	**0.02**	(0.01)	0.82	(0.01)	0.82	(0.02)	-0.01	(0.02)
Hungary	0.53	(0.01)	0.56	(0.01)	0.49	(0.02)	**-0.07**	(0.02)	0.56	(0.02)	0.52	(0.02)	**-0.04**	(0.02)	0.52	(0.01)	0.47	(0.06)	-0.05	(0.06)
Italy	0.66	(0.01)	0.70	(0.01)	0.62	(0.01)	**-0.08**	(0.01)	0.58	(0.01)	0.75	(0.01)	**0.18**	(0.01)	0.67	(0.01)	0.62	(0.02)	**-0.05**	(0.02)
Korea	0.35	(0.01)	0.36	(0.01)	0.33	(0.01)	-0.03	(0.02)	0.23	(0.01)	0.47	(0.01)	**0.24**	(0.02)	0.35	(0.01)	c	c	c	c
Lithuania	0.58	(0.01)	0.63	(0.01)	0.53	(0.01)	**-0.09**	(0.02)	0.56	(0.01)	0.60	(0.01)	**0.04**	(0.02)	0.58	(0.01)	0.58	(0.07)	0.01	(0.07)
Macao-China	0.29	(0.01)	0.33	(0.01)	0.26	(0.01)	**-0.07**	(0.01)	0.23	(0.01)	0.36	(0.01)	**0.13**	(0.01)	0.29	(0.01)	0.29	(0.01)	0.00	(0.01)
New Zealand	0.62	(0.01)	0.66	(0.01)	0.58	(0.01)	**-0.08**	(0.02)	0.55	(0.02)	0.65	(0.01)	**0.10**	(0.02)	0.63	(0.01)	0.60	(0.02)	-0.03	(0.02)
Panama	0.69	(0.01)	0.72	(0.02)	0.66	(0.02)	**-0.06**	(0.03)	0.70	(0.02)	0.65	(0.02)	-0.05	(0.03)	0.68	(0.01)	0.68	(0.05)	0.00	(0.05)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.74	(0.01)	0.80	(0.01)	0.70	(0.01)	**-0.10**	(0.02)	0.71	(0.01)	0.77	(0.01)	**0.06**	(0.02)	0.75	(0.01)	0.66	(0.04)	**-0.09**	(0.04)
Qatar	0.65	(0.01)	0.73	(0.01)	0.59	(0.01)	**-0.14**	(0.01)	0.58	(0.01)	0.71	(0.01)	**0.13**	(0.02)	0.64	(0.01)	0.66	(0.01)	**0.02**	(0.01)

Table 4.3b - Proportion of parents who have discussed their child's behaviour or progress with a teacher on the teacher's initiative, by students' gender, socio-economic status and immigrant background

	All		Gender						Socio-economic status						Immigrant background					
			Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.37	(0.01)	0.42	(0.01)	0.32	(0.01)	**-0.10**	(0.02)	0.48	(0.02)	0.30	(0.01)	**-0.18**	(0.02)	0.35	(0.01)	0.49	(0.03)	**0.14**	(0.03)
Denmark	0.78	(0.01)	0.79	(0.01)	0.77	(0.01)	-0.02	(0.02)	0.76	(0.01)	0.80	(0.02)	**0.04**	(0.02)	0.79	(0.01)	0.71	(0.03)	**-0.08**	(0.04)
Hong Kong-China	0.52	(0.01)	0.54	(0.01)	0.51	(0.01)	-0.03	(0.02)	0.48	(0.01)	0.56	(0.02)	**0.08**	(0.02)	0.54	(0.01)	0.50	(0.01)	**-0.04**	(0.02)
Croatia	0.32	(0.01)	0.37	(0.01)	0.27	(0.01)	**-0.10**	(0.02)	0.33	(0.01)	0.32	(0.02)	-0.02	(0.02)	0.32	(0.01)	0.32	(0.02)	0.00	(0.03)
Hungary	0.38	(0.01)	0.45	(0.02)	0.31	(0.01)	**-0.14**	(0.02)	0.47	(0.02)	0.31	(0.01)	**-0.16**	(0.02)	0.38	(0.01)	0.38	(0.05)	0.00	(0.05)
Italy	0.45	(0.01)	0.51	(0.01)	0.39	(0.01)	**-0.11**	(0.01)	0.50	(0.01)	0.41	(0.01)	**-0.08**	(0.01)	0.44	(0.01)	0.54	(0.01)	**0.10**	(0.02)
Korea	0.78	(0.01)	0.78	(0.01)	0.77	(0.01)	-0.01	(0.02)	0.67	(0.01)	0.86	(0.01)	**0.19**	(0.02)	0.78	(0.01)	c	c	c	c
Lithuania	0.53	(0.01)	0.61	(0.01)	0.45	(0.01)	**-0.16**	(0.01)	0.55	(0.01)	0.49	(0.02)	**-0.06**	(0.02)	0.53	(0.01)	0.56	(0.06)	0.03	(0.06)
Macao-China	0.59	(0.01)	0.63	(0.01)	0.54	(0.01)	**-0.09**	(0.01)	0.58	(0.01)	0.57	(0.01)	-0.01	(0.02)	0.60	(0.01)	0.58	(0.01)	**-0.02**	(0.01)
New Zealand	0.54	(0.01)	0.57	(0.01)	0.50	(0.02)	**-0.07**	(0.02)	0.54	(0.02)	0.52	(0.02)	-0.01	(0.03)	0.53	(0.01)	0.54	(0.02)	0.00	(0.02)
Panama	0.55	(0.02)	0.59	(0.02)	0.50	(0.02)	**-0.09**	(0.02)	0.63	(0.02)	0.47	(0.04)	**-0.16**	(0.05)	0.52	(0.01)	0.52	(0.08)	-0.01	(0.08)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.62	(0.01)	0.68	(0.02)	0.57	(0.01)	**-0.11**	(0.01)	0.68	(0.02)	0.57	(0.02)	**-0.11**	(0.02)	0.62	(0.01)	0.61	(0.04)	-0.01	(0.04)
Qatar	0.51	(0.01)	0.60	(0.01)	0.45	(0.01)	**-0.15**	(0.01)	0.48	(0.01)	0.53	(0.01)	**0.04**	(0.02)	0.50	(0.01)	0.52	(0.01)	**0.02**	(0.01)

Table 4.3c - Proportion of parents who volunteered in physical activities at the school, by students' gender, socio-economic status and immigrant background

	All		Gender						Socio-economic status						Immigrant background					
			Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.06	(0.01)	0.06	(0.01)	0.06	(0.01)	0.00	(0.01)	0.06	(0.01)	0.07	(0.01)	0.01	(0.01)	0.06	(0.01)	0.08	(0.01)	0.02	(0.02)
Denmark	0.06	(0.01)	0.06	(0.01)	0.06	(0.01)	0.00	(0.01)	0.05	(0.01)	0.07	(0.01)	**0.02**	(0.01)	0.06	(0.01)	0.05	(0.02)	-0.01	(0.02)
Hong Kong-China	0.05	(0.00)	0.05	(0.00)	0.04	(0.00)	-0.01	(0.01)	0.05	(0.01)	0.04	(0.01)	0.00	(0.01)	0.05	(0.00)	0.05	(0.01)	0.00	(0.01)
Croatia	0.07	(0.00)	0.09	(0.01)	0.06	(0.00)	**-0.03**	(0.01)	0.09	(0.01)	0.06	(0.01)	**-0.02**	(0.01)	0.07	(0.00)	0.11	(0.01)	**0.04**	(0.01)
Hungary	0.05	(0.00)	0.06	(0.01)	0.05	(0.01)	**-0.02**	(0.01)	0.06	(0.01)	0.05	(0.01)	-0.01	(0.01)	0.06	(0.00)	0.03	(0.02)	-0.02	(0.02)
Italy	0.05	(0.00)	0.07	(0.00)	0.04	(0.00)	**-0.04**	(0.00)	0.08	(0.00)	0.04	(0.00)	**-0.04**	(0.01)	0.05	(0.00)	0.12	(0.02)	**0.07**	(0.02)
Korea	0.25	(0.01)	0.26	(0.01)	0.23	(0.01)	-0.03	(0.02)	0.16	(0.01)	0.35	(0.02)	**0.19**	(0.02)	0.25	(0.01)	c	c	c	c
Lithuania	0.07	(0.00)	0.07	(0.01)	0.06	(0.01)	-0.01	(0.01)	0.07	(0.01)	0.07	(0.01)	0.00	(0.01)	0.07	(0.00)	0.09	(0.03)	0.02	(0.03)
Macao-China	0.09	(0.00)	0.10	(0.01)	0.09	(0.00)	-0.01	(0.01)	0.09	(0.01)	0.09	(0.01)	0.00	(0.01)	0.09	(0.01)	0.09	(0.00)	0.01	(0.01)
New Zealand	0.08	(0.01)	0.08	(0.01)	0.07	(0.01)	0.00	(0.01)	0.05	(0.01)	0.09	(0.01)	**0.04**	(0.01)	0.08	(0.01)	0.07	(0.01)	-0.01	(0.01)
Panama	0.20	(0.02)	0.23	(0.02)	0.18	(0.02)	**-0.05**	(0.02)	0.25	(0.03)	0.14	(0.03)	**-0.12**	(0.04)	0.18	(0.02)	0.30	(0.07)	0.11	(0.07)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.03	(0.00)	0.04	(0.00)	0.03	(0.00)	-0.01	(0.01)	0.05	(0.01)	0.02	(0.00)	**-0.03**	(0.01)	0.03	(0.00)	0.02	(0.01)	**-0.02**	(0.01)
Qatar	0.10	(0.00)	0.13	(0.01)	0.07	(0.00)	**-0.05**	(0.01)	0.09	(0.01)	0.09	(0.01)	0.00	(0.01)	0.10	(0.01)	0.09	(0.01)	**-0.02**	(0.01)

Table 4.3d - Proportion of parents who volunteered in extra-curricular activities at the school, by students' gender, socio-economic status and immigrant background

	All		Gender						Socio-economic status						Immigrant background					
			Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.19	(0.01)	0.19	(0.01)	0.18	(0.01)	-0.01	(0.02)	0.14	(0.01)	0.23	(0.01)	**0.09**	(0.02)	0.20	(0.01)	0.13	(0.02)	**-0.06**	(0.02)
Denmark	0.17	(0.01)	0.17	(0.01)	0.17	(0.01)	0.00	(0.01)	0.13	(0.01)	0.20	(0.01)	**0.08**	(0.01)	0.17	(0.01)	0.09	(0.02)	**-0.08**	(0.02)
Hong Kong-China	0.08	(0.00)	0.09	(0.01)	0.07	(0.01)	-0.01	(0.01)	0.06	(0.01)	0.10	(0.01)	**0.04**	(0.01)	0.09	(0.01)	0.07	(0.01)	**-0.02**	(0.01)
Croatia	0.15	(0.01)	0.16	(0.01)	0.14	(0.01)	**-0.02**	(0.01)	0.15	(0.01)	0.15	(0.01)	0.00	(0.01)	0.15	(0.01)	0.16	(0.02)	0.01	(0.02)
Hungary	0.13	(0.01)	0.13	(0.01)	0.13	(0.01)	-0.01	(0.01)	0.12	(0.01)	0.15	(0.01)	**0.04**	(0.01)	0.13	(0.01)	0.07	(0.03)	**-0.06**	(0.03)
Italy	0.19	(0.00)	0.21	(0.00)	0.17	(0.00)	**-0.04**	(0.01)	0.19	(0.01)	0.20	(0.01)	**0.02**	(0.01)	0.19	(0.00)	0.24	(0.02)	**0.06**	(0.02)
Korea	0.17	(0.01)	0.17	(0.01)	0.17	(0.01)	0.00	(0.01)	0.14	(0.01)	0.21	(0.01)	**0.06**	(0.01)	0.18	(0.01)	c	c	c	c
Lithuania	0.15	(0.01)	0.15	(0.01)	0.15	(0.01)	0.00	(0.01)	0.13	(0.01)	0.17	(0.01)	0.03	(0.02)	0.15	(0.01)	0.13	(0.04)	-0.01	(0.04)
Macao-China	0.20	(0.01)	0.23	(0.01)	0.18	(0.01)	**-0.05**	(0.01)	0.18	(0.01)	0.22	(0.01)	**0.04**	(0.01)	0.22	(0.01)	0.20	(0.01)	**-0.02**	(0.01)
New Zealand	0.33	(0.01)	0.33	(0.01)	0.33	(0.01)	0.00	(0.02)	0.24	(0.01)	0.41	(0.02)	**0.17**	(0.02)	0.36	(0.01)	0.23	(0.02)	**-0.13**	(0.02)
Panama	0.22	(0.01)	0.25	(0.01)	0.20	(0.01)	**-0.05**	(0.02)	0.24	(0.02)	0.20	(0.01)	-0.04	(0.03)	0.21	(0.01)	0.30	(0.06)	0.09	(0.06)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.07	(0.01)	0.09	(0.01)	0.06	(0.01)	**-0.03**	(0.01)	0.08	(0.01)	0.08	(0.01)	0.00	(0.01)	0.07	(0.01)	0.07	(0.02)	0.00	(0.02)
Qatar	0.20	(0.01)	0.24	(0.01)	0.17	(0.01)	**-0.06**	(0.01)	0.19	(0.01)	0.20	(0.01)	0.01	(0.01)	0.18	(0.01)	0.21	(0.01)	**0.02**	(0.01)

Table 4.3e - Proportion of parents who volunteered in the school library or media centre, by students' gender, socio-economic status and immigrant background

	All		Gender						Socio-economic status						Immigrant background					
			Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.02	(0.00)	0.02	(0.00)	0.02	(0.00)	**0.00**	(0.00)	0.02	(0.01)	0.02	(0.00)	0.00	(0.01)	0.02	(0.00)	0.03	(0.01)	**0.02**	(0.01)
Denmark	0.00	(0.00)	0.00	(0.00)	0.00	(0.00)	**0.00**	(0.00)	0.00	(0.00)	0.00	(0.00)	**0.00**	(0.00)	0.00	(0.00)	0.01	(0.00)	**0.01**	(0.00)
Hong Kong-China	0.03	(0.00)	0.03	(0.00)	0.03	(0.00)	**-0.01**	(0.00)	0.03	(0.00)	0.03	(0.00)	0.01	(0.01)	0.03	(0.00)	0.03	(0.00)	0.00	(0.01)
Croatia	0.02	(0.00)	0.03	(0.00)	0.02	(0.00)	**-0.01**	(0.00)	0.03	(0.00)	0.02	(0.00)	**-0.02**	(0.01)	0.02	(0.00)	0.03	(0.01)	0.01	(0.01)
Hungary	0.02	(0.00)	0.02	(0.00)	0.02	(0.00)	0.00	(0.01)	0.04	(0.01)	0.02	(0.00)	**-0.03**	(0.01)	0.02	(0.00)	0.00	(0.00)	**-0.02**	(0.00)
Italy	0.07	(0.00)	0.08	(0.00)	0.06	(0.00)	**-0.02**	(0.00)	0.08	(0.00)	0.06	(0.00)	-0.01	(0.01)	0.07	(0.00)	0.12	(0.01)	**0.06**	(0.01)
Korea	0.10	(0.01)	0.10	(0.01)	0.10	(0.01)	0.00	(0.01)	0.08	(0.01)	0.13	(0.01)	**0.05**	(0.01)	0.10	(0.01)	c	c	c	c
Lithuania	0.01	(0.00)	0.01	(0.00)	0.01	(0.00)	**0.00**	(0.00)	0.02	(0.00)	0.01	(0.00)	**0.00**	(0.00)	0.01	(0.00)	0.03	(0.02)	0.02	(0.02)
Macao-China	0.05	(0.00)	0.06	(0.00)	0.05	(0.00)	-0.01	(0.01)	0.06	(0.01)	0.05	(0.00)	**-0.02**	(0.01)	0.05	(0.01)	0.05	(0.00)	0.00	(0.01)
New Zealand	0.02	(0.00)	0.01	(0.00)	0.02	(0.00)	**0.01**	(0.00)	0.02	(0.00)	0.01	(0.00)	0.00	(0.01)	0.01	(0.00)	0.03	(0.01)	**0.02**	(0.01)
Panama	0.10	(0.01)	0.12	(0.01)	0.09	(0.01)	**-0.03**	(0.01)	0.15	(0.02)	0.05	(0.01)	**-0.10**	(0.02)	0.09	(0.01)	0.21	(0.04)	**0.12**	(0.04)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

Portugal	0.02	(0.00)	0.03	(0.00)	0.02	(0.00)	**-0.01**	(0.00)	0.03	(0.01)	0.02	(0.00)	-0.01	(0.01)	0.02	(0.00)	0.03	(0.01)	0.01	(0.01)
Qatar	0.11	(0.00)	0.14	(0.01)	0.08	(0.01)	**-0.06**	(0.01)	0.12	(0.01)	0.09	(0.01)	**-0.03**	(0.01)	0.12	(0.01)	0.08	(0.01)	**-0.04**	(0.01)

Table 4.3f - Proportion of parents who assisted a teacher, by students' gender, socio-economic status and immigrant background

			Gender						Socio-economic status						Immigrant background					
	All		Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.13	(0.01)	0.13	(0.01)	0.13	(0.01)	0.00	(0.01)	0.12	(0.01)	0.15	(0.01)	0.03	(0.02)	0.13	(0.01)	0.12	(0.02)	-0.01	(0.02)
Denmark	0.09	(0.01)	0.09	(0.01)	0.08	(0.01)	-0.01	(0.01)	0.06	(0.01)	0.12	(0.01)	**0.06**	(0.01)	0.09	(0.01)	0.06	(0.01)	-0.03	(0.02)
Hong Kong-China	0.07	(0.00)	0.08	(0.01)	0.06	(0.00)	**-0.03**	(0.01)	0.07	(0.01)	0.07	(0.01)	0.00	(0.01)	0.08	(0.01)	0.06	(0.01)	**-0.02**	(0.01)
Croatia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Hungary	0.13	(0.01)	0.13	(0.01)	0.12	(0.01)	-0.01	(0.01)	0.16	(0.02)	0.11	(0.01)	**-0.04**	(0.02)	0.13	(0.01)	0.06	(0.02)	**-0.07**	(0.02)
Italy	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Korea	0.09	(0.01)	0.10	(0.01)	0.09	(0.01)	-0.01	(0.01)	0.04	(0.01)	0.14	(0.01)	**0.10**	(0.01)	0.09	(0.01)	c	c	c	c
Lithuania	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Macao-China	0.16	(0.01)	0.18	(0.01)	0.15	(0.01)	**-0.04**	(0.01)	0.16	(0.01)	0.16	(0.01)	0.00	(0.01)	0.18	(0.01)	0.16	(0.01)	**-0.02**	(0.01)
New Zealand	0.09	(0.01)	0.09	(0.01)	0.09	(0.01)	0.00	(0.01)	0.07	(0.01)	0.12	(0.01)	**0.04**	(0.02)	0.09	(0.01)	0.09	(0.01)	0.00	(0.01)
Panama	0.24	(0.01)	0.26	(0.02)	0.21	(0.02)	**-0.04**	(0.02)	0.31	(0.03)	0.17	(0.01)	**-0.15**	(0.03)	0.22	(0.01)	0.37	(0.08)	**0.14**	(0.07)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.08	(0.00)	0.09	(0.01)	0.06	(0.01)	**-0.03**	(0.01)	0.07	(0.01)	0.09	(0.01)	**0.02**	(0.01)	0.07	(0.00)	0.10	(0.02)	0.03	(0.02)
Qatar	0.29	(0.00)	0.34	(0.01)	0.25	(0.01)	**-0.08**	(0.01)	0.32	(0.01)	0.27	(0.01)	**-0.06**	(0.01)	0.33	(0.01)	0.25	(0.01)	**-0.08**	(0.01)

Table 4.3g - Proportion of parents who appeared as a guest speaker, by students' gender, socio-economic status and immigrant background

			Gender						Socio-economic status						Immigrant background					
	All		Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.02	(0.00)	0.02	(0.00)	0.01	(0.00)	**-0.01**	(0.00)	0.02	(0.00)	0.02	(0.00)	0.00	(0.01)	0.01	(0.00)	0.03	(0.01)	0.01	(0.01)
Denmark	0.02	(0.00)	0.02	(0.00)	0.02	(0.00)	0.00	(0.01)	0.02	(0.00)	0.02	(0.00)	0.01	(0.01)	0.02	(0.00)	0.03	(0.01)	0.01	(0.01)
Hong Kong-China	0.03	(0.00)	0.04	(0.00)	0.03	(0.00)	**-0.01**	(0.00)	0.03	(0.00)	0.04	(0.01)	0.01	(0.01)	0.03	(0.00)	0.03	(0.00)	0.00	(0.01)
Croatia	0.02	(0.00)	0.02	(0.00)	0.02	(0.00)	0.00	(0.01)	0.02	(0.00)	0.03	(0.01)	0.01	(0.01)	0.02	(0.00)	0.02	(0.01)	0.00	(0.01)
Hungary	0.02	(0.00)	0.02	(0.00)	0.01	(0.00)	**-0.01**	(0.00)	0.02	(0.00)	0.02	(0.00)	0.01	(0.01)	0.02	(0.00)	0.01	(0.01)	-0.01	(0.01)
Italy	0.07	(0.00)	0.08	(0.00)	0.06	(0.00)	**-0.02**	(0.00)	0.09	(0.01)	0.05	(0.00)	**-0.04**	(0.01)	0.06	(0.00)	0.15	(0.02)	**0.09**	(0.02)
Korea	0.03	(0.00)	0.03	(0.00)	0.02	(0.00)	-0.01	(0.01)	0.02	(0.00)	0.04	(0.01)	**0.03**	(0.01)	0.03	(0.00)	c	c	c	c
Lithuania	0.04	(0.00)	0.04	(0.00)	0.04	(0.00)	0.00	(0.01)	0.06	(0.01)	0.03	(0.00)	**-0.03**	(0.01)	0.04	(0.00)	0.13	(0.04)	**0.09**	(0.04)
Macao-China	0.03	(0.00)	0.04	(0.00)	0.02	(0.00)	**-0.02**	(0.00)	0.03	(0.00)	0.03	(0.00)	0.00	(0.01)	0.03	(0.00)	0.03	(0.00)	**0.01**	(0.00)
New Zealand	0.02	(0.00)	0.02	(0.00)	0.02	(0.00)	**0.00**	(0.00)	0.01	(0.00)	0.03	(0.01)	**0.02**	(0.01)	0.02	(0.00)	0.01	(0.00)	0.00	(0.01)
Panama	0.10	(0.01)	0.10	(0.01)	0.09	(0.01)	**-0.02**	(0.01)	0.14	(0.02)	0.06	(0.01)	**-0.08**	(0.02)	0.08	(0.01)	0.17	(0.05)	0.09	(0.05)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.04	(0.00)	0.05	(0.01)	0.04	(0.00)	-0.01	(0.01)	0.04	(0.01)	0.05	(0.01)	0.01	(0.01)	0.04	(0.00)	0.04	(0.01)	0.00	(0.01)
Qatar	0.12	(0.00)	0.14	(0.01)	0.10	(0.00)	**-0.04**	(0.01)	0.13	(0.01)	0.11	(0.01)	**-0.02**	(0.01)	0.15	(0.01)	0.09	(0.01)	**-0.06**	(0.01)

Table 4.3h - Proportion of parents who participated in the local school government, by students' gender, socio-economic status and immigrant background

	All		Gender						Socio-economic status						Immigrant background					
			Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.17	(0.01)	0.19	(0.01)	0.15	(0.01)	**-0.04**	(0.01)	0.13	(0.01)	0.21	(0.01)	**0.08**	(0.02)	0.18	(0.01)	0.10	(0.02)	**-0.08**	(0.02)
Denmark	0.21	(0.01)	0.22	(0.01)	0.20	(0.01)	**-0.02**	(0.01)	0.16	(0.01)	0.23	(0.02)	**0.07**	(0.02)	0.21	(0.01)	0.14	(0.02)	**-0.08**	(0.03)
Hong Kong-China	0.05	(0.00)	0.06	(0.01)	0.05	(0.00)	-0.01	(0.01)	0.04	(0.01)	0.07	(0.01)	**0.03**	(0.01)	0.06	(0.01)	0.05	(0.01)	-0.01	(0.01)
Croatia	0.11	(0.00)	0.11	(0.01)	0.10	(0.01)	-0.01	(0.01)	0.08	(0.01)	0.15	(0.01)	**0.07**	(0.01)	0.11	(0.00)	0.08	(0.01)	-0.03	(0.02)
Hungary	0.05	(0.00)	0.05	(0.00)	0.04	(0.00)	-0.01	(0.01)	0.04	(0.01)	0.06	(0.01)	**0.02**	(0.01)	0.05	(0.00)	0.06	(0.02)	0.01	(0.02)
Italy	0.16	(0.00)	0.18	(0.00)	0.14	(0.00)	**-0.03**	(0.01)	0.13	(0.01)	0.19	(0.01)	**0.06**	(0.01)	0.16	(0.00)	0.12	(0.02)	**-0.04**	(0.02)
Korea	0.17	(0.01)	0.18	(0.01)	0.17	(0.01)	-0.01	(0.02)	0.12	(0.01)	0.24	(0.01)	**0.12**	(0.02)	0.17	(0.01)	c	c	c	c
Lithuania	0.16	(0.01)	0.17	(0.01)	0.15	(0.01)	-0.01	(0.01)	0.15	(0.01)	0.17	(0.01)	**0.02**	(0.01)	0.16	(0.01)	0.24	(0.05)	0.09	(0.05)
Macao-China	0.21	(0.01)	0.22	(0.01)	0.20	(0.01)	**-0.02**	(0.01)	0.19	(0.01)	0.21	(0.01)	0.01	(0.01)	0.19	(0.01)	0.22	(0.01)	**0.03**	(0.01)
New Zealand	0.08	(0.00)	0.08	(0.01)	0.08	(0.01)	0.00	(0.01)	0.06	(0.01)	0.10	(0.01)	**0.05**	(0.01)	0.08	(0.01)	0.07	(0.01)	-0.01	(0.01)
Panama	0.30	(0.01)	0.28	(0.02)	0.32	(0.02)	**0.04**	(0.02)	0.35	(0.03)	0.22	(0.02)	**-0.12**	(0.03)	0.29	(0.02)	0.35	(0.08)	0.06	(0.08)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.19	(0.01)	0.21	(0.01)	0.16	(0.01)	**-0.05**	(0.01)	0.19	(0.01)	0.18	(0.01)	-0.01	(0.02)	0.19	(0.01)	0.19	(0.02)	0.00	(0.02)
Qatar	0.14	(0.00)	0.16	(0.01)	0.12	(0.01)	**-0.04**	(0.01)	0.16	(0.01)	0.12	(0.01)	**-0.04**	(0.01)	0.16	(0.01)	0.11	(0.01)	**-0.05**	(0.01)

Table 4.4a - Proportion of parents who spend time reading for enjoyment at home, by students' gender, socio-economic status and immigrant background

	All		Gender						Socio-economic status						Immigrant background					
			Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.53	(0.01)	0.55	(0.01)	0.52	(0.01)	-0.03	(0.02)	0.41	(0.02)	0.63	(0.02)	**0.22**	(0.02)	0.56	(0.01)	0.39	(0.03)	**-0.17**	(0.03)
Denmark	0.51	(0.01)	0.52	(0.02)	0.49	(0.01)	-0.03	(0.02)	0.42	(0.02)	0.59	(0.01)	**0.17**	(0.02)	0.52	(0.01)	0.34	(0.04)	**-0.17**	(0.04)
Hong Kong-China	0.32	(0.01)	0.35	(0.01)	0.29	(0.01)	**-0.05**	(0.02)	0.20	(0.01)	0.47	(0.01)	**0.27**	(0.02)	0.36	(0.01)	0.26	(0.01)	**-0.10**	(0.02)
Croatia	0.35	(0.01)	0.37	(0.01)	0.33	(0.02)	**-0.04**	(0.02)	0.24	(0.01)	0.48	(0.02)	**0.24**	(0.02)	0.36	(0.01)	0.30	(0.02)	**-0.06**	(0.02)
Hungary	0.45	(0.01)	0.46	(0.01)	0.44	(0.01)	-0.01	(0.02)	0.32	(0.01)	0.60	(0.01)	**0.28**	(0.02)	0.45	(0.01)	0.38	(0.05)	-0.07	(0.05)
Italy	0.39	(0.00)	0.40	(0.01)	0.39	(0.01)	-0.01	(0.01)	0.24	(0.01)	0.54	(0.01)	**0.30**	(0.01)	0.40	(0.00)	0.27	(0.02)	**-0.13**	(0.02)
Korea	0.27	(0.01)	0.28	(0.01)	0.26	(0.01)	-0.01	(0.01)	0.19	(0.01)	0.37	(0.01)	**0.18**	(0.01)	0.27	(0.01)	c	c	c	c
Lithuania	0.47	(0.01)	0.48	(0.01)	0.45	(0.01)	**-0.03**	(0.01)	0.35	(0.01)	0.61	(0.01)	**0.26**	(0.02)	0.46	(0.01)	0.57	(0.05)	**0.11**	(0.05)
Macao-China	0.29	(0.01)	0.31	(0.01)	0.27	(0.01)	**-0.04**	(0.01)	0.19	(0.01)	0.38	(0.01)	**0.20**	(0.01)	0.33	(0.01)	0.27	(0.01)	**-0.06**	(0.01)
New Zealand	0.55	(0.01)	0.57	(0.01)	0.52	(0.01)	**-0.05**	(0.02)	0.46	(0.02)	0.62	(0.01)	**0.16**	(0.02)	0.55	(0.01)	0.52	(0.02)	-0.03	(0.02)

Panama	0.28	(0.01)	0.27	(0.02)	0.29	(0.02)	0.02	(0.02)	0.20	(0.02)	0.37	(0.02)	**0.16**	(0.03)	0.29	(0.02)	0.31	(0.06)	0.02	(0.06)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.29	(0.01)	0.29	(0.02)	0.29	(0.01)	0.00	(0.02)	0.13	(0.01)	0.49	(0.01)	**0.36**	(0.02)	0.29	(0.01)	0.34	(0.04)	0.05	(0.04)
Qatar	0.33	(0.01)	0.34	(0.01)	0.31	(0.01)	**-0.03**	(0.01)	0.24	(0.01)	0.42	(0.01)	**0.18**	(0.01)	0.28	(0.01)	0.37	(0.01)	**0.09**	(0.01)

Table 4.4b - Proportion of parents who consider reading a favourite hobby, by students' gender, socio-economic status and immigrant background

	All		Gender						Socio-economic status						Immigrant background					
			Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.72	(0.01)	0.72	(0.01)	0.72	(0.01)	0.00	(0.02)	0.59	(0.02)	0.83	(0.01)	**0.24**	(0.02)	0.74	(0.01)	0.60	(0.03)	**-0.14**	(0.03)
Denmark	0.77	(0.01)	0.77	(0.01)	0.77	(0.01)	-0.01	(0.01)	0.67	(0.02)	0.85	(0.01)	**0.18**	(0.02)	0.77	(0.01)	0.75	(0.03)	-0.02	(0.03)
Hong Kong-China	0.73	(0.01)	0.75	(0.01)	0.71	(0.01)	**-0.04**	(0.01)	0.62	(0.01)	0.84	(0.01)	**0.22**	(0.02)	0.76	(0.01)	0.70	(0.01)	**-0.06**	(0.02)
Croatia	0.75	(0.01)	0.75	(0.01)	0.75	(0.01)	0.00	(0.01)	0.66	(0.01)	0.84	(0.01)	**0.18**	(0.02)	0.75	(0.01)	0.73	(0.02)	-0.02	(0.02)
Hungary	0.80	(0.01)	0.81	(0.01)	0.79	(0.01)	**-0.02**	(0.01)	0.71	(0.02)	0.88	(0.01)	**0.17**	(0.02)	0.80	(0.01)	0.90	(0.03)	**0.10**	(0.03)
Italy	0.84	(0.00)	0.84	(0.00)	0.83	(0.00)	-0.01	(0.01)	0.74	(0.01)	0.91	(0.00)	**0.17**	(0.01)	0.84	(0.00)	0.69	(0.02)	**-0.16**	(0.02)
Korea	0.53	(0.01)	0.53	(0.01)	0.53	(0.01)	0.00	(0.01)	0.44	(0.02)	0.61	(0.01)	**0.17**	(0.02)	0.53	(0.01)	c	c	c	c
Lithuania	0.86	(0.01)	0.87	(0.01)	0.85	(0.01)	**-0.02**	(0.01)	0.80	(0.01)	0.92	(0.01)	**0.12**	(0.01)	0.86	(0.01)	0.85	(0.03)	-0.01	(0.03)
Macao-China	0.73	(0.01)	0.75	(0.01)	0.70	(0.01)	**-0.05**	(0.01)	0.62	(0.01)	0.82	(0.01)	**0.21**	(0.02)	0.75	(0.01)	0.71	(0.01)	**-0.04**	(0.01)
New Zealand	0.81	(0.01)	0.82	(0.01)	0.80	(0.01)	**-0.03**	(0.01)	0.74	(0.02)	0.86	(0.01)	**0.13**	(0.02)	0.80	(0.01)	0.85	(0.01)	**0.05**	(0.02)
Panama	0.80	(0.01)	0.79	(0.02)	0.80	(0.01)	0.01	(0.02)	0.80	(0.02)	0.79	(0.02)	-0.01	(0.03)	0.80	(0.01)	0.77	(0.07)	-0.02	(0.07)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.74	(0.01)	0.76	(0.01)	0.72	(0.01)	**-0.04**	(0.02)	0.63	(0.02)	0.85	(0.01)	**0.22**	(0.02)	0.74	(0.01)	0.72	(0.04)	-0.02	(0.04)
Qatar	0.87	(0.00)	0.87	(0.01)	0.87	(0.01)	0.00	(0.01)	0.85	(0.01)	0.90	(0.01)	**0.05**	(0.01)	0.86	(0.01)	0.89	(0.01)	**0.03**	(0.01)

Table 4.4c - Proportion of parents who feel happy when receiving a book as a present, by students' gender, socio-economic status and immigrant background

	All		Gender						Socio-economic status						Immigrant background					
			Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.81	(0.01)	0.81	(0.01)	0.80	(0.01)	-0.02	(0.02)	0.67	(0.02)	0.89	(0.01)	**0.22**	(0.02)	0.82	(0.01)	0.72	(0.02)	**-0.10**	(0.03)
Denmark	0.85	(0.01)	0.86	(0.01)	0.84	(0.01)	**-0.02**	(0.01)	0.75	(0.02)	0.93	(0.01)	**0.18**	(0.02)	0.85	(0.01)	0.83	(0.02)	-0.01	(0.02)
Hong Kong-China	0.70	(0.01)	0.72	(0.01)	0.68	(0.01)	-0.03	(0.02)	0.58	(0.01)	0.81	(0.01)	**0.23**	(0.02)	0.73	(0.01)	0.66	(0.01)	**-0.06**	(0.02)
Croatia	0.85	(0.01)	0.85	(0.01)	0.84	(0.01)	-0.01	(0.01)	0.78	(0.01)	0.91	(0.01)	**0.12**	(0.01)	0.85	(0.01)	0.83	(0.02)	-0.02	(0.02)
Hungary	0.87	(0.01)	0.88	(0.01)	0.87	(0.01)	-0.01	(0.01)	0.78	(0.01)	0.95	(0.01)	**0.17**	(0.01)	0.87	(0.01)	0.87	(0.04)	0.00	(0.04)
Italy	0.86	(0.00)	0.87	(0.00)	0.86	(0.00)	-0.01	(0.01)	0.77	(0.01)	0.94	(0.00)	**0.16**	(0.01)	0.87	(0.00)	0.75	(0.02)	**-0.12**	(0.02)
Korea	0.85	(0.01)	0.84	(0.01)	0.87	(0.01)	**0.03**	(0.01)	0.77	(0.01)	0.92	(0.01)	**0.15**	(0.01)	0.85	(0.01)	c	c	c	c
Lithuania	0.89	(0.01)	0.88	(0.01)	0.89	(0.01)	0.01	(0.01)	0.83	(0.01)	0.94	(0.01)	**0.11**	(0.01)	0.89	(0.01)	0.82	(0.05)	-0.07	(0.05)
Macao-China	0.69	(0.01)	0.71	(0.01)	0.67	(0.01)	**-0.05**	(0.01)	0.60	(0.01)	0.77	(0.01)	**0.17**	(0.02)	0.71	(0.01)	0.68	(0.01)	**-0.02**	(0.01)
New Zealand	0.89	(0.01)	0.90	(0.01)	0.88	(0.01)	**-0.02**	(0.01)	0.83	(0.01)	0.93	(0.01)	**0.10**	(0.01)	0.89	(0.01)	0.88	(0.01)	-0.01	(0.01)
Panama	0.89	(0.01)	0.89	(0.01)	0.89	(0.01)	0.00	(0.02)	0.90	(0.01)	0.88	(0.02)	-0.02	(0.02)	0.90	(0.01)	0.85	(0.04)	-0.05	(0.04)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.77	(0.01)	0.79	(0.01)	0.75	(0.01)	**-0.04**	(0.02)	0.66	(0.01)	0.90	(0.01)	**0.23**	(0.02)	0.77	(0.01)	0.79	(0.03)	0.02	(0.03)
Qatar	0.86	(0.01)	0.87	(0.01)	0.85	(0.01)	**-0.02**	(0.01)	0.82	(0.01)	0.87	(0.01)	**0.05**	(0.01)	0.82	(0.01)	0.89	(0.01)	**0.08**	(0.01)

Table 4.4d - Proportion of parents who enjoy going to a library or bookstore, by students' gender, socio-economic status and immigrant background

	All		Gender						Socio-economic status						Immigrant background					
			Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.70	(0.01)	0.70	(0.01)	0.70	(0.01)	0.00	(0.02)	0.53	(0.02)	0.83	(0.01)	**0.30**	(0.02)	0.74	(0.01)	0.48	(0.03)	**-0.26**	(0.03)
Denmark	0.80	(0.01)	0.81	(0.01)	0.80	(0.01)	-0.01	(0.02)	0.71	(0.02)	0.88	(0.01)	**0.17**	(0.02)	0.81	(0.01)	0.80	(0.03)	-0.01	(0.03)
Hong Kong-China	0.70	(0.01)	0.71	(0.01)	0.69	(0.01)	-0.02	(0.02)	0.54	(0.02)	0.83	(0.01)	**0.29**	(0.02)	0.74	(0.01)	0.63	(0.01)	**-0.10**	(0.02)
Croatia	0.73	(0.01)	0.73	(0.01)	0.73	(0.01)	0.00	(0.01)	0.62	(0.02)	0.84	(0.01)	**0.21**	(0.02)	0.74	(0.01)	0.70	(0.02)	-0.03	(0.02)
Hungary	0.80	(0.01)	0.81	(0.01)	0.79	(0.01)	**-0.02**	(0.01)	0.68	(0.01)	0.90	(0.01)	**0.22**	(0.02)	0.80	(0.01)	0.80	(0.05)	0.00	(0.05)
Italy	0.76	(0.00)	0.76	(0.01)	0.76	(0.01)	-0.01	(0.01)	0.63	(0.01)	0.87	(0.00)	**0.25**	(0.01)	0.77	(0.00)	0.61	(0.02)	**-0.16**	(0.02)
Korea	0.54	(0.01)	0.53	(0.01)	0.56	(0.01)	**0.03**	(0.01)	0.43	(0.01)	0.66	(0.01)	**0.23**	(0.02)	0.54	(0.01)	c	c	c	c
Lithuania	0.78	(0.01)	0.78	(0.01)	0.78	(0.01)	0.00	(0.01)	0.68	(0.01)	0.87	(0.01)	**0.19**	(0.02)	0.78	(0.01)	0.76	(0.05)	-0.02	(0.05)
Macao-China	0.62	(0.01)	0.66	(0.01)	0.59	(0.01)	**-0.07**	(0.01)	0.50	(0.01)	0.75	(0.01)	**0.25**	(0.02)	0.70	(0.01)	0.59	(0.01)	**-0.11**	(0.01)
New Zealand	0.90	(0.01)	0.91	(0.01)	0.89	(0.01)	**-0.02**	(0.01)	0.83	(0.01)	0.94	(0.01)	**0.11**	(0.01)	0.90	(0.01)	0.91	(0.01)	0.01	(0.01)
Panama	0.77	(0.01)	0.77	(0.02)	0.76	(0.02)	-0.01	(0.02)	0.73	(0.02)	0.77	(0.02)	0.04	(0.03)	0.78	(0.01)	0.67	(0.06)	-0.10	(0.06)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.76	(0.01)	0.78	(0.01)	0.75	(0.01)	-0.03	(0.02)	0.65	(0.02)	0.88	(0.01)	**0.24**	(0.02)	0.76	(0.01)	0.78	(0.03)	0.01	(0.03)
Qatar	0.84	(0.00)	0.84	(0.01)	0.84	(0.01)	-0.01	(0.01)	0.79	(0.01)	0.88	(0.01)	**0.09**	(0.01)	0.81	(0.01)	0.88	(0.01)	**0.07**	(0.01)

Table 4.4e - Proportion of parents who do not think reading is a waste of time, by students' gender, socio-economic status and immigrant background

	All		Gender						Socio-economic status						Immigrant background					
			Boys		Girls		Difference (Girls - Boys)		Socio-economically disadvantaged students		Socio-economically advantaged students		Difference (Advantaged - Disadvantaged)		Without immigrant background		With immigrant background		Difference (With - Without immigrant background)	
	Prop.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.	Prop.	S.E.	Prop.	S.E.	Diff.	S.E.
Germany	0.94	(0.00)	0.95	(0.01)	0.94	(0.01)	-0.01	(0.01)	0.91	(0.01)	0.97	(0.01)	**0.06**	(0.01)	0.95	(0.00)	0.93	(0.01)	-0.02	(0.02)
Denmark	0.97	(0.00)	0.97	(0.00)	0.96	(0.01)	-0.01	(0.01)	0.94	(0.01)	0.99	(0.00)	**0.04**	(0.01)	0.97	(0.00)	0.96	(0.01)	-0.01	(0.01)
Hong Kong-China	0.93	(0.00)	0.92	(0.01)	0.93	(0.01)	0.01	(0.01)	0.87	(0.01)	0.97	(0.00)	**0.10**	(0.01)	0.94	(0.01)	0.90	(0.01)	**-0.04**	(0.01)
Croatia	0.95	(0.00)	0.95	(0.00)	0.95	(0.00)	0.00	(0.01)	0.91	(0.01)	0.98	(0.00)	**0.07**	(0.01)	0.95	(0.00)	0.94	(0.01)	-0.01	(0.01)
Hungary	0.96	(0.00)	0.96	(0.01)	0.96	(0.01)	0.00	(0.01)	0.91	(0.01)	0.99	(0.00)	**0.08**	(0.01)	0.96	(0.00)	0.99	(0.01)	**0.03**	(0.01)
Italy	0.95	(0.00)	0.94	(0.00)	0.95	(0.00)	**0.01**	(0.00)	0.91	(0.01)	0.98	(0.00)	**0.07**	(0.01)	0.96	(0.00)	0.85	(0.01)	**-0.11**	(0.01)
Korea	0.96	(0.00)	0.96	(0.01)	0.97	(0.00)	0.01	(0.01)	0.93	(0.01)	0.98	(0.00)	**0.05**	(0.01)	0.96	(0.00)	c	c	c	c
Lithuania	0.90	(0.00)	0.90	(0.01)	0.90	(0.01)	0.00	(0.01)	0.82	(0.01)	0.96	(0.00)	**0.14**	(0.01)	0.90	(0.00)	0.91	(0.03)	0.01	(0.03)
Macao-China	0.89	(0.00)	0.89	(0.01)	0.89	(0.00)	0.00	(0.01)	0.84	(0.01)	0.92	(0.01)	**0.08**	(0.01)	0.92	(0.01)	0.88	(0.01)	**-0.04**	(0.01)
New Zealand	0.98	(0.00)	0.99	(0.00)	0.98	(0.00)	**-0.01**	(0.00)	0.97	(0.01)	0.99	(0.00)	**0.02**	(0.01)	0.98	(0.00)	0.98	(0.00)	0.00	(0.01)
Panama	0.92	(0.01)	0.92	(0.01)	0.92	(0.01)	0.00	(0.01)	0.91	(0.01)	0.93	(0.02)	0.02	(0.02)	0.93	(0.01)	0.83	(0.03)	**-0.11**	(0.03)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.96	(0.00)	0.96	(0.00)	0.96	(0.01)	-0.01	(0.01)	0.92	(0.01)	0.99	(0.00)	**0.07**	(0.01)	0.96	(0.00)	0.94	(0.01)	**-0.02**	(0.01)
Qatar	0.89	(0.00)	0.88	(0.01)	0.90	(0.01)	**0.02**	(0.01)	0.84	(0.01)	0.93	(0.01)	**0.09**	(0.01)	0.84	(0.01)	0.95	(0.00)	**0.10**	(0.01)

Table 4.5a – Early childhood involvement and who filled the parental questionnaire

	Read books to the child										Tell stories									
	Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)		Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.88	(0.01)	0.79	(0.02)	0.87	(0.02)	0.82	(0.04)	**-0.09**	(0.02)	0.76	(0.01)	0.73	(0.02)	0.76	(0.03)	0.68	(0.05)	-0.02	(0.02)
Denmark	0.92	(0.01)	0.87	(0.02)	0.94	(0.01)	0.87	(0.05)	**-0.06**	(0.02)	0.72	(0.01)	0.74	(0.02)	0.67	(0.02)	0.79	(0.06)	0.02	(0.02)
Hong Kong-China	0.53	(0.01)	0.45	(0.02)	0.6	(0.04)	0.53	(0.06)	**-0.08**	(0.02)	0.41	(0.01)	0.34	(0.02)	0.47	(0.04)	0.37	(0.06)	**-0.07**	(0.02)
Croatia	0.73	(0.01)	0.63	(0.02)	0.77	(0.02)	0.51	(0.07)	**-0.1**	(0.02)	0.79	(0.01)	0.71	(0.02)	0.84	(0.01)	0.57	(0.07)	**-0.07**	(0.02)
Hungary	0.88	(0.01)	0.82	(0.02)	0.87	(0.03)	0.79	(0.06)	**-0.06**	(0.02)	0.85	(0.01)	0.83	(0.02)	0.96	(0.02)	0.77	(0.06)	-0.02	(0.02)
Italy	0.69	(0.01)	0.55	(0.01)	0.73	(0.01)	0.49	(0.03)	**-0.14**	(0.01)	0.75	(0.00)	0.68	(0.01)	0.8	(0.01)	0.55	(0.03)	**-0.07**	(0.01)
Korea	0.68	(0.01)	0.51	(0.02)	0.65	(0.05)	0.39	(0.06)	**-0.17**	(0.02)	0.69	(0.01)	0.58	(0.02)	0.71	(0.05)	0.44	(0.07)	**-0.11**	(0.02)
Lithuania	0.83	(0.01)	0.73	(0.02)	0.88	(0.02)	0.78	(0.05)	**-0.1**	(0.03)	0.72	(0.01)	0.7	(0.02)	0.74	(0.03)	0.74	(0.05)	-0.02	(0.02)
Macao-China	0.54	(0.01)	0.53	(0.01)	0.64	(0.04)	0.49	(0.03)	-0.02	(0.02)	0.41	(0.01)	0.35	(0.01)	0.49	(0.04)	0.32	(0.03)	**-0.06**	(0.02)
New Zealand	0.97	(0.00)	0.91	(0.01)	0.97	(0.01)	c	c	**-0.06**	(0.01)	0.83	(0.01)	0.77	(0.02)	0.83	(0.03)	c	c	**-0.07**	(0.02)
Panama	0.82	(0.01)	0.72	(0.03)	0.75	(0.04)	0.67	(0.05)	**-0.09**	(0.03)	0.65	(0.02)	0.56	(0.04)	0.67	(0.05)	0.49	(0.05)	**-0.1**	(0.04)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.68	(0.01)	0.54	(0.02)	0.76	(0.03)	0.52	(0.05)	**-0.14**	(0.02)	0.72	(0.01)	0.62	(0.02)	0.74	(0.03)	0.53	(0.05)	**-0.1**	(0.02)
Qatar	0.73	(0.01)	0.71	(0.01)	0.8	(0.03)	0.63	(0.03)	**-0.02**	(0.01)	0.7	(0.01)	0.6	(0.01)	0.72	(0.04)	0.52	(0.03)	**-0.09**	(0.01)

	Sing songs										Play with alphabet toys									
	Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)		Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.65	(0.01)	0.49	(0.02)	0.63	(0.03)	0.57	(0.06)	**-0.16**	(0.02)	0.61	(0.01)	0.6	(0.02)	0.58	(0.03)	0.57	(0.05)	0	(0.02)
Denmark	0.78	(0.01)	0.68	(0.02)	0.76	(0.02)	0.69	(0.07)	**-0.1**	(0.02)	0.48	(0.01)	0.5	(0.02)	0.44	(0.02)	0.52	(0.08)	0.02	(0.03)
Hong Kong-China	0.39	(0.01)	0.29	(0.02)	0.41	(0.03)	0.36	(0.05)	**-0.1**	(0.02)	0.41	(0.01)	0.32	(0.02)	0.42	(0.04)	0.31	(0.06)	**-0.09**	(0.02)
Croatia	0.66	(0.01)	0.56	(0.02)	0.7	(0.02)	0.59	(0.07)	**-0.1**	(0.02)	0.71	(0.01)	0.67	(0.02)	0.75	(0.02)	0.73	(0.07)	**-0.05**	(0.02)
Hungary	0.67	(0.01)	0.54	(0.02)	0.67	(0.06)	0.61	(0.07)	**-0.13**	(0.02)	0.65	(0.01)	0.59	(0.02)	0.66	(0.06)	0.6	(0.06)	**-0.06**	(0.02)
Italy	0.66	(0.01)	0.53	(0.01)	0.69	(0.01)	0.53	(0.03)	**-0.13**	(0.01)	0.7	(0.01)	0.64	(0.01)	0.73	(0.01)	0.54	(0.03)	**-0.05**	(0.01)
Korea	0.57	(0.01)	0.4	(0.02)	0.56	(0.06)	0.31	(0.06)	**-0.17**	(0.02)	0.68	(0.01)	0.59	(0.02)	0.68	(0.05)	0.49	(0.06)	**-0.09**	(0.02)
Lithuania	0.47	(0.01)	0.36	(0.02)	0.48	(0.04)	0.49	(0.05)	**-0.11**	(0.03)	0.7	(0.01)	0.58	(0.02)	0.74	(0.04)	0.71	(0.05)	**-0.12**	(0.02)
Macao-China	0.39	(0.01)	0.31	(0.01)	0.49	(0.04)	0.38	(0.03)	**-0.08**	(0.02)	0.43	(0.01)	0.4	(0.01)	0.47	(0.05)	0.42	(0.03)	-0.02	(0.02)
New Zealand	0.82	(0.01)	0.61	(0.02)	0.8	(0.03)	c	c	**-0.2**	(0.02)	0.76	(0.01)	0.64	(0.02)	0.78	(0.03)	c	c	**-0.12**	(0.02)
Panama	0.75	(0.01)	0.6	(0.03)	0.71	(0.04)	0.59	(0.05)	**-0.15**	(0.03)	0.64	(0.02)	0.48	(0.04)	0.6	(0.04)	0.46	(0.05)	**-0.17**	(0.04)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

Portugal	0.63	(0.01)	0.43	(0.02)	0.65	(0.04)	0.5	(0.05)	**-0.2**	(0.02)	0.62	(0.01)	0.56	(0.02)	0.62	(0.04)	0.51	(0.05)	**-0.06**	(0.02)
Qatar	0.56	(0.01)	0.41	(0.01)	0.61	(0.04)	0.42	(0.03)	**-0.15**	(0.01)	0.69	(0.01)	0.6	(0.01)	0.73	(0.04)	0.5	(0.03)	**-0.09**	(0.01)

	Talk about what the parent had done										Write words and letters									
	Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)		Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.93	(0.00)	0.86	(0.02)	0.93	(0.02)	0.93	(0.02)	**-0.08**	(0.02)	0.62	(0.01)	0.57	(0.02)	0.61	(0.03)	0.64	(0.05)	**-0.06**	(0.03)
Denmark	0.98	(0.00)	0.97	(0.01)	0.99	(0.00)	0.94	(0.04)	**-0.02**	(0.01)	0.49	(0.01)	0.45	(0.02)	0.45	(0.02)	0.52	(0.08)	-0.04	(0.03)
Hong Kong-China	0.5	(0.01)	0.41	(0.01)	0.51	(0.04)	0.47	(0.06)	**-0.1**	(0.02)	0.31	(0.01)	0.23	(0.01)	0.31	(0.04)	0.25	(0.05)	**-0.08**	(0.01)
Croatia	0.88	(0.01)	0.82	(0.01)	0.89	(0.01)	0.89	(0.04)	**-0.07**	(0.01)	0.67	(0.01)	0.63	(0.02)	0.75	(0.02)	0.59	(0.07)	**-0.04**	(0.02)
Hungary	0.9	(0.01)	0.87	(0.02)	0.88	(0.04)	0.81	(0.06)	-0.03	(0.02)	0.67	(0.01)	0.58	(0.02)	0.62	(0.06)	0.54	(0.07)	**-0.09**	(0.02)
Italy	0.94	(0.00)	0.88	(0.01)	0.95	(0.01)	0.82	(0.03)	**-0.06**	(0.01)	0.71	(0.01)	0.61	(0.01)	0.75	(0.01)	0.52	(0.04)	**-0.09**	(0.01)
Korea	0.57	(0.01)	0.39	(0.02)	0.63	(0.06)	0.48	(0.07)	**-0.17**	(0.02)	0.65	(0.01)	0.5	(0.02)	0.6	(0.07)	0.38	(0.06)	**-0.15**	(0.02)
Lithuania	0.9	(0.01)	0.82	(0.02)	0.91	(0.02)	0.84	(0.04)	**-0.08**	(0.02)	0.63	(0.01)	0.51	(0.02)	0.75	(0.03)	0.57	(0.05)	**-0.12**	(0.03)
Macao-China	0.42	(0.01)	0.35	(0.01)	0.49	(0.05)	0.42	(0.03)	**-0.07**	(0.01)	0.29	(0.01)	0.26	(0.01)	0.41	(0.04)	0.27	(0.03)	-0.03	(0.02)
New Zealand	0.95	(0.00)	0.85	(0.02)	0.95	(0.01)	c	c	**-0.1**	(0.02)	0.73	(0.01)	0.57	(0.02)	0.72	(0.03)	c	c	**-0.16**	(0.02)
Panama	0.89	(0.01)	0.77	(0.02)	0.84	(0.04)	0.78	(0.03)	**-0.12**	(0.02)	0.61	(0.01)	0.47	(0.03)	0.59	(0.05)	0.51	(0.05)	**-0.13**	(0.04)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.88	(0.01)	0.8	(0.01)	0.93	(0.02)	0.83	(0.03)	**-0.07**	(0.01)	0.6	(0.01)	0.46	(0.02)	0.61	(0.04)	0.53	(0.05)	**-0.14**	(0.02)
Qatar	0.81	(0.01)	0.69	(0.01)	0.77	(0.03)	0.65	(0.03)	**-0.12**	(0.01)	0.61	(0.01)	0.51	(0.01)	0.62	(0.04)	0.45	(0.02)	**-0.1**	(0.02)

	Read signs out loud									
	Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.75	(0.01)	0.65	(0.02)	0.76	(0.02)	0.62	(0.06)	**-0.1**	(0.03)
Denmark	0.77	(0.01)	0.72	(0.02)	0.75	(0.02)	0.77	(0.06)	**-0.05**	(0.02)
Hong Kong-China	0.4	(0.01)	0.34	(0.01)	0.4	(0.04)	0.38	(0.06)	**-0.06**	(0.02)
Croatia	0.82	(0.01)	0.77	(0.02)	0.85	(0.02)	0.73	(0.07)	**-0.05**	(0.02)
Hungary	0.79	(0.01)	0.72	(0.02)	0.79	(0.04)	0.68	(0.06)	**-0.07**	(0.02)
Italy	0.79	(0.00)	0.7	(0.01)	0.81	(0.01)	0.6	(0.03)	**-0.09**	(0.01)
Korea	0.67	(0.01)	0.51	(0.02)	0.62	(0.05)	0.42	(0.06)	**-0.17**	(0.02)
Lithuania	0.84	(0.00)	0.79	(0.02)	0.84	(0.02)	0.73	(0.04)	**-0.04**	(0.02)
Macao-China	0.38	(0.01)	0.32	(0.01)	0.43	(0.04)	0.39	(0.04)	**-0.06**	(0.01)
New Zealand	0.85	(0.01)	0.7	(0.02)	0.84	(0.03)	c	c	**-0.15**	(0.02)
Panama	0.71	(0.02)	0.64	(0.03)	0.72	(0.04)	0.57	(0.05)	**-0.08**	(0.03)
Poland	m	m	m	m	m	m	m	m	m	m
Portugal	0.69	(0.01)	0.55	(0.02)	0.74	(0.03)	0.6	(0.05)	**-0.14**	(0.02)

Qatar	0.74	(0.01)	0.61	(0.01)	0.74	(0.03)	0.57	(0.02)	**-0.13**	(0.01)

Table 4.5b – Implicit involvement and who filled the parental questionnaire

	Spend time reading for enjoyment at home										Considers reading a favourite hobby									
	Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)		Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.54	(0.01)	0.46	(0.03)	0.58	(0.03)	0.47	(0.05)	**-0.08**	(0.03)	0.75	(0.01)	0.53	(0.03)	0.77	(0.02)	0.68	(0.05)	**-0.22**	(0.03)
Denmark	0.51	(0.01)	0.44	(0.03)	0.54	(0.02)	0.46	(0.09)	**-0.08**	(0.03)	0.79	(0.01)	0.64	(0.02)	0.79	(0.02)	0.8	(0.06)	**-0.16**	(0.03)
Hong Kong-China	0.31	(0.01)	0.37	(0.02)	0.37	(0.03)	0.25	(0.05)	**0.06**	(0.02)	0.73	(0.01)	0.73	(0.01)	0.78	(0.03)	0.82	(0.05)	0	(0.01)
Croatia	0.34	(0.01)	0.37	(0.02)	0.39	(0.02)	0.43	(0.07)	0.03	(0.02)	0.77	(0.01)	0.66	(0.02)	0.75	(0.02)	0.75	(0.06)	**-0.11**	(0.02)
Hungary	0.45	(0.01)	0.47	(0.02)	0.47	(0.06)	0.37	(0.05)	0.02	(0.02)	0.82	(0.01)	0.7	(0.02)	0.8	(0.05)	0.82	(0.05)	**-0.12**	(0.02)
Italy	0.38	(0.01)	0.41	(0.01)	0.48	(0.01)	0.32	(0.03)	**0.03**	(0.01)	0.85	(0.00)	0.79	(0.01)	0.87	(0.01)	0.74	(0.03)	**-0.06**	(0.01)
Korea	0.27	(0.01)	0.25	(0.02)	0.42	(0.05)	0.26	(0.07)	-0.02	(0.02)	0.54	(0.01)	0.45	(0.02)	0.65	(0.05)	0.53	(0.07)	**-0.1**	(0.02)
Lithuania	0.46	(0.01)	0.43	(0.03)	0.51	(0.03)	0.55	(0.06)	-0.04	(0.03)	0.87	(0.01)	0.79	(0.02)	0.9	(0.02)	0.86	(0.04)	**-0.07**	(0.02)
Macao-China	0.26	(0.01)	0.34	(0.01)	0.43	(0.04)	0.3	(0.03)	**0.08**	(0.02)	0.71	(0.01)	0.76	(0.01)	0.87	(0.03)	0.73	(0.03)	**0.06**	(0.01)
New Zealand	0.57	(0.01)	0.43	(0.02)	0.6	(0.03)	c	c	**-0.14**	(0.02)	0.84	(0.01)	0.67	(0.02)	0.83	(0.03)	c	c	**-0.17**	(0.02)
Panama	0.27	(0.02)	0.32	(0.03)	0.31	(0.04)	0.28	(0.05)	0.05	(0.04)	0.79	(0.01)	0.82	(0.02)	0.84	(0.03)	0.78	(0.04)	0.03	(0.03)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.29	(0.01)	0.3	(0.02)	0.34	(0.04)	0.29	(0.05)	0.01	(0.02)	0.76	(0.01)	0.65	(0.02)	0.73	(0.03)	0.72	(0.04)	**-0.1**	(0.02)
Qatar	0.31	(0.01)	0.35	(0.01)	0.42	(0.04)	0.28	(0.02)	**0.04**	(0.01)	0.88	(0.01)	0.87	(0.01)	0.92	(0.02)	0.85	(0.02)	-0.01	(0.01)

	Feel happy when receiving a book as a present										Enjoy going to a library or bookstore									
	Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)		Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.83	(0.01)	0.67	(0.02)	0.84	(0.02)	0.73	(0.05)	**-0.16**	(0.02)	0.72	(0.01)	0.54	(0.03)	0.75	(0.03)	0.72	(0.04)	**-0.19**	(0.03)
Denmark	0.85	(0.01)	0.78	(0.02)	0.88	(0.02)	0.91	(0.04)	**-0.08**	(0.02)	0.83	(0.01)	0.68	(0.02)	0.82	(0.02)	0.89	(0.05)	**-0.15**	(0.03)
Hong Kong-China	0.7	(0.01)	0.68	(0.02)	0.72	(0.03)	0.82	(0.04)	-0.03	(0.02)	0.71	(0.01)	0.63	(0.02)	0.76	(0.03)	0.78	(0.05)	**-0.07**	(0.02)
Croatia	0.87	(0.01)	0.76	(0.02)	0.87	(0.02)	0.7	(0.06)	**-0.1**	(0.02)	0.76	(0.01)	0.61	(0.02)	0.76	(0.02)	0.67	(0.07)	**-0.16**	(0.02)
Hungary	0.88	(0.01)	0.83	(0.01)	0.88	(0.04)	0.82	(0.05)	**-0.05**	(0.02)	0.82	(0.01)	0.7	(0.02)	0.83	(0.05)	0.76	(0.05)	**-0.12**	(0.02)
Italy	0.87	(0.00)	0.82	(0.01)	0.89	(0.01)	0.82	(0.03)	**-0.05**	(0.01)	0.77	(0.00)	0.71	(0.01)	0.79	(0.01)	0.66	(0.03)	**-0.06**	(0.01)
Korea	0.87	(0.01)	0.78	(0.02)	0.91	(0.03)	0.63	(0.06)	**-0.09**	(0.02)	0.57	(0.01)	0.44	(0.02)	0.72	(0.05)	0.34	(0.07)	**-0.12**	(0.02)
Lithuania	0.89	(0.01)	0.81	(0.02)	0.9	(0.02)	0.83	(0.04)	**-0.08**	(0.02)	0.8	(0.01)	0.65	(0.02)	0.77	(0.03)	0.77	(0.05)	**-0.14**	(0.02)

Macao-China	0.68	(0.01)	0.7	(0.01)	0.81	(0.03)	0.73	(0.03)	**0.03**	(0.01)	0.61	(0.01)	0.65	(0.01)	0.8	(0.03)	0.62	(0.03)	**0.04**	(0.02)
New Zealand	0.9	(0.01)	0.82	(0.02)	0.94	(0.02)	c	c	**-0.09**	(0.02)	0.92	(0.01)	0.81	(0.02)	0.94	(0.02)	c	c	**-0.1**	(0.02)
Panama	0.89	(0.01)	0.91	(0.01)	0.92	(0.02)	0.86	(0.03)	0.02	(0.02)	0.77	(0.02)	0.78	(0.02)	0.75	(0.03)	0.75	(0.05)	0.02	(0.03)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.79	(0.01)	0.7	(0.02)	0.76	(0.03)	0.75	(0.04)	**-0.1**	(0.02)	0.78	(0.01)	0.71	(0.02)	0.77	(0.03)	0.71	(0.04)	**-0.07**	(0.02)
Qatar	0.85	(0.01)	0.86	(0.01)	0.93	(0.02)	0.77	(0.02)	0.01	(0.01)	0.85	(0.01)	0.83	(0.01)	0.92	(0.02)	0.78	(0.03)	**-0.02**	(0.01)

	Do not think reading is a waste of time									
	Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.95	(0.00)	0.93	(0.01)	0.96	(0.01)	0.86	(0.04)	-0.01	(0.01)
Denmark	0.98	(0.00)	0.94	(0.01)	0.96	(0.01)	0.92	(0.04)	**-0.04**	(0.01)
Hong Kong-China	0.93	(0.00)	0.91	(0.01)	0.92	(0.02)	0.93	(0.02)	**-0.02**	(0.01)
Croatia	0.96	(0.00)	0.93	(0.01)	0.95	(0.01)	0.91	(0.03)	**-0.02**	(0.01)
Hungary	0.96	(0.00)	0.95	(0.01)	0.95	(0.03)	0.95	(0.03)	-0.01	(0.01)
Italy	0.95	(0.00)	0.94	(0.00)	0.95	(0.01)	0.87	(0.02)	-0.01	(0.01)
Korea	0.97	(0.00)	0.94	(0.01)	0.97	(0.02)	0.92	(0.05)	**-0.03**	(0.01)
Lithuania	0.9	(0.01)	0.88	(0.01)	0.92	(0.02)	0.87	(0.04)	**-0.03**	(0.01)
Macao-China	0.88	(0.00)	0.89	(0.01)	0.93	(0.02)	0.91	(0.02)	0.01	(0.01)
New Zealand	0.98	(0.00)	0.98	(0.01)	0.98	(0.01)	c	c	-0.01	(0.01)
Panama	0.93	(0.01)	0.92	(0.02)	0.93	(0.02)	0.92	(0.02)	-0.01	(0.02)
Poland	m	m	m	m	m	m	m	m	m	m
Portugal	0.96	(0.00)	0.97	(0.01)	0.98	(0.01)	0.95	(0.02)	0.01	(0.01)
Qatar	0.91	(0.01)	0.89	(0.01)	0.92	(0.02)	0.78	(0.02)	-0.01	(0.01)

Table 4.5c – Home-based involvement and who filled the parental questionnaire

	Discuss political or social issues										Discuss books, films or television programmes									
	Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)		Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.61	(0.01)	0.62	(0.02)	0.65	(0.03)	0.56	(0.06)	0.01	(0.02)	0.74	(0.01)	0.72	(0.02)	0.77	(0.02)	0.67	(0.05)	-0.02	(0.02)
Denmark	0.71	(0.01)	0.66	(0.02)	0.73	(0.02)	0.7	(0.07)	-0.05	(0.03)	0.82	(0.01)	0.79	(0.02)	0.84	(0.02)	0.76	(0.06)	-0.03	(0.02)
Hong Kong-China	0.56	(0.01)	0.5	(0.02)	0.68	(0.03)	0.5	(0.06)	**-0.06**	(0.02)	0.65	(0.01)	0.58	(0.01)	0.71	(0.03)	0.58	(0.05)	**-0.07**	(0.02)
Croatia	0.4	(0.01)	0.4	(0.02)	0.44	(0.02)	0.37	(0.07)	0	(0.02)	0.77	(0.01)	0.73	(0.02)	0.79	(0.02)	0.78	(0.06)	-0.03	(0.02)
Hungary	0.53	(0.01)	0.56	(0.02)	0.66	(0.05)	0.57	(0.06)	0.03	(0.02)	0.88	(0.01)	0.88	(0.01)	0.93	(0.03)	0.87	(0.04)	0	(0.01)
Italy	0.65	(0.01)	0.65	(0.01)	0.75	(0.01)	0.5	(0.03)	0.01	(0.01)	0.85	(0.00)	0.8	(0.01)	0.87	(0.01)	0.73	(0.03)	**-0.05**	(0.01)
Korea	0.19	(0.01)	0.15	(0.01)	0.25	(0.04)	0.16	(0.05)	**-0.04**	(0.02)	0.37	(0.01)	0.32	(0.02)	0.46	(0.05)	0.29	(0.06)	**-0.05**	(0.02)
Lithuania	0.51	(0.01)	0.44	(0.03)	0.63	(0.04)	0.51	(0.05)	**-0.07**	(0.03)	0.78	(0.01)	0.74	(0.02)	0.8	(0.03)	0.78	(0.04)	**-0.05**	(0.02)
Macao-China	0.31	(0.01)	0.33	(0.01)	0.41	(0.04)	0.32	(0.03)	**0.02**	(0.01)	0.55	(0.01)	0.48	(0.01)	0.62	(0.04)	0.55	(0.03)	**-0.06**	(0.01)
New Zealand	0.7	(0.01)	0.62	(0.02)	0.7	(0.03)	c	c	**-0.08**	(0.02)	0.85	(0.01)	0.8	(0.02)	0.89	(0.02)	c	c	**-0.05**	(0.02)
Panama	0.48	(0.02)	0.47	(0.03)	0.49	(0.04)	0.34	(0.04)	-0.01	(0.03)	0.72	(0.01)	0.59	(0.03)	0.61	(0.05)	0.63	(0.05)	**-0.12**	(0.03)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.54	(0.01)	0.58	(0.02)	0.66	(0.04)	0.46	(0.05)	0.03	(0.02)	0.82	(0.01)	0.75	(0.02)	0.85	(0.03)	0.78	(0.03)	**-0.07**	(0.02)
Qatar	0.58	(0.01)	0.48	(0.01)	0.55	(0.04)	0.41	(0.02)	**-0.1**	(0.01)	0.68	(0.01)	0.54	(0.01)	0.69	(0.04)	0.55	(0.03)	**-0.13**	(0.01)

	Eat the main meal with the child around a table										Spend time just talking to the child									
	Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)		Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.97	(0.00)	0.94	(0.01)	0.99	(0.01)	0.9	(0.03)	**-0.03**	(0.01)	0.99	(0.00)	0.96	(0.01)	0.99	(0.00)	0.97	(0.02)	**-0.03**	(0.01)
Denmark	0.99	(0.00)	0.99	(0.00)	0.99	(0.01)	0.99	(0.01)	0	(0.01)	0.99	(0.00)	0.98	(0.01)	0.99	(0.00)	0.99	(0.01)	-0.01	(0.01)
Hong Kong-China	0.97	(0.00)	0.95	(0.01)	0.97	(0.01)	0.95	(0.02)	-0.01	(0.01)	0.91	(0.00)	0.88	(0.01)	0.91	(0.02)	0.79	(0.05)	**-0.03**	(0.01)
Croatia	0.95	(0.00)	0.93	(0.01)	0.97	(0.01)	0.93	(0.03)	**-0.02**	(0.01)	0.93	(0.01)	0.9	(0.01)	0.94	(0.01)	0.89	(0.04)	**-0.03**	(0.01)
Hungary	0.96	(0.00)	0.94	(0.01)	0.98	(0.01)	0.85	(0.05)	**-0.02**	(0.01)	0.96	(0.00)	0.94	(0.01)	0.97	(0.02)	0.89	(0.03)	**-0.03**	(0.01)
Italy	0.98	(0.00)	0.98	(0.00)	0.99	(0.00)	0.95	(0.01)	**-0.01**	(0.00)	0.93	(0.00)	0.91	(0.01)	0.94	(0.01)	0.89	(0.02)	**-0.03**	(0.01)
Korea	0.94	(0.01)	0.9	(0.01)	0.91	(0.04)	0.81	(0.06)	**-0.03**	(0.01)	0.83	(0.01)	0.69	(0.02)	0.81	(0.05)	0.59	(0.07)	**-0.14**	(0.02)
Lithuania	0.94	(0.00)	0.91	(0.01)	0.94	(0.02)	0.91	(0.03)	**-0.03**	(0.01)	0.93	(0.00)	0.91	(0.01)	0.95	(0.02)	0.92	(0.03)	**-0.02**	(0.01)
Macao-China	0.94	(0.00)	0.92	(0.01)	0.95	(0.02)	0.92	(0.02)	-0.01	(0.01)	0.71	(0.01)	0.59	(0.01)	0.72	(0.04)	0.68	(0.03)	**-0.12**	(0.01)
New Zealand	0.83	(0.01)	0.84	(0.02)	0.91	(0.02)	c	c	0.01	(0.02)	0.97	(0.00)	0.95	(0.01)	0.98	(0.01)	c	c	**-0.02**	(0.01)
Panama	0.85	(0.01)	0.86	(0.02)	0.85	(0.03)	0.75	(0.05)	0	(0.03)	0.88	(0.01)	0.79	(0.03)	0.83	(0.02)	0.74	(0.04)	**-0.08**	(0.03)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.98	(0.00)	0.99	(0.00)	1	(0.00)	0.93	(0.02)	**0**	(0.00)	0.94	(0.00)	0.89	(0.01)	0.94	(0.02)	0.92	(0.03)	**-0.05**	(0.01)

Qatar	0.95	(0.00)	0.92	(0.01)	0.94	(0.02)	0.87	(0.02)	**-0.02**	(0.01)	0.89	(0.01)	0.84	(0.01)	0.92	(0.02)	0.78	(0.02)	**-0.05**	(0.01)

	Go to a bookstore or library with the child										Talk with the child about what he/she is reading on his/her own									
	Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)		Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.07	(0.01)	0.06	(0.01)	0.06	(0.01)	0.06	(0.02)	-0.01	(0.01)	0.38	0.01	0.36	0.02	0.44	0.02	0.33	0.06	-0.03	0.03
Denmark	0.03	(0.00)	0.03	(0.01)	0.02	(0.01)	0.05	(0.04)	0	(0.01)	0.46	0.01	0.47	0.02	0.49	0.02	0.53	0.07	0.01	0.03
Hong Kong-China	0.16	(0.01)	0.13	(0.01)	0.18	(0.03)	0.18	(0.05)	**-0.04**	(0.01)	0.34	0.01	0.31	0.01	0.39	0.04	0.38	0.06	-0.02	0.02
Croatia	0.06	(0.00)	0.05	(0.01)	0.06	(0.01)	0.09	(0.04)	-0.01	(0.01)	0.36	0.01	0.35	0.02	0.4	0.02	0.39	0.07	-0.02	0.02
Hungary	0.07	(0.01)	0.06	(0.01)	0.07	(0.03)	0.11	(0.04)	-0.01	(0.01)	0.41	0.01	0.37	0.02	0.4	0.06	0.39	0.06	**-0.04**	0.02
Italy	0.09	(0.00)	0.08	(0.01)	0.08	(0.01)	0.06	(0.02)	-0.01	(0.01)	0.43	0.01	0.39	0.01	0.47	0.01	0.39	0.03	**-0.04**	0.01
Korea	0.09	(0.01)	0.07	(0.01)	0.17	(0.04)	0.12	(0.04)	**-0.02**	(0.01)	0.17	0.01	0.16	0.01	0.21	0.04	0.18	0.05	**-0.02**	0.01
Lithuania	0.09	(0.00)	0.06	(0.01)	0.12	(0.02)	0.16	(0.04)	**-0.03**	(0.01)	0.42	0.01	0.31	0.03	0.49	0.03	0.47	0.05	**-0.1**	0.03
Macao-China	0.09	(0.01)	0.07	(0.01)	0.07	(0.02)	0.09	(0.02)	**-0.02**	(0.01)	0.21	0.01	0.19	0.01	0.28	0.04	0.25	0.03	**-0.02**	0.01
New Zealand	0.15	(0.01)	0.1	(0.01)	0.18	(0.03)	c	c	**-0.04**	(0.01)	0.46	0.01	0.4	0.02	0.51	0.04	c	c	**-0.05**	0.02
Panama	0.17	(0.01)	0.13	(0.02)	0.23	(0.03)	0.2	(0.04)	**-0.04**	(0.02)	0.6	0.02	0.49	0.03	0.63	0.03	0.5	0.04	**-0.1**	0.04
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.13	(0.01)	0.1	(0.01)	0.15	(0.03)	0.12	(0.03)	-0.03	(0.02)	0.5	0.01	0.4	0.02	0.58	0.03	0.44	0.04	**-0.11**	0.02
Qatar	0.3	(0.01)	0.28	(0.01)	0.2	(0.03)	0.32	(0.02)	**-0.02**	(0.01)	0.53	0.01	0.51	0.01	0.55	0.04	0.52	0.03	**-0.02**	0.01

	Help the child with his/her homework										Discuss how well the child is doing in school									
	Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)		Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.33	0.01	0.48	0.02	0.31	0.02	0.42	0.05	**0.16**	0.02	0.87	0.01	0.86	0.02	0.89	0.02	0.76	0.05	-0.01	0.02
Denmark	0.47	0.01	0.58	0.03	0.6	0.03	0.5	0.09	**0.11**	0.03	0.94	0	0.93	0.01	0.95	0.01	0.95	0.04	-0.01	0.01
Hong Kong-China	0.25	0.01	0.31	0.01	0.36	0.04	0.35	0.06	**0.05**	0.01	0.7	0.01	0.58	0.02	0.71	0.03	0.67	0.05	**-0.12**	0.02
Croatia	0.25	0.01	0.36	0.02	0.29	0.02	0.36	0.06	**0.11**	0.02	0.96	0	0.94	0.01	0.98	0.01	0.86	0.04	**-0.02**	0.01
Hungary	0.44	0.01	0.49	0.02	0.49	0.06	0.56	0.07	**0.05**	0.02	0.98	0	0.95	0.01	0.99	0.01	0.95	0.02	**-0.03**	0.01
Italy	0.33	0.01	0.39	0.01	0.36	0.01	0.35	0.03	**0.06**	0.01	0.97	0	0.95	0	0.97	0	0.93	0.01	**-0.02**	0
Korea	0.14	0.01	0.17	0.01	0.17	0.04	0.13	0.05	**0.03**	0.01	0.7	0.01	0.56	0.02	0.77	0.05	0.42	0.07	**-0.14**	0.02
Lithuania	0.43	0.01	0.42	0.03	0.53	0.04	0.44	0.06	-0.01	0.03	0.96	0	0.93	0.01	0.97	0.01	0.94	0.02	**-0.03**	0.01
Macao-China	0.31	0.01	0.32	0.01	0.42	0.04	0.32	0.03	0.01	0.01	0.63	0.01	0.56	0.01	0.69	0.04	0.6	0.03	**-0.08**	0.02
New Zealand	0.46	0.01	0.5	0.02	0.49	0.03	c	c	**0.04**	0.02	0.89	0.01	0.83	0.02	0.89	0.02	c	c	**-0.06**	0.02
Panama	0.73	0.02	0.72	0.03	0.81	0.03	0.68	0.05	-0.01	0.03	0.82	0.01	0.78	0.03	0.83	0.03	0.72	0.04	-0.04	0.03
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.41	0.01	0.4	0.02	0.46	0.04	0.53	0.05	-0.01	0.02	0.94	0	0.9	0.01	0.96	0.01	0.9	0.03	**-0.04**	0.01
Qatar	0.53	0.01	0.53	0.01	0.51	0.04	0.54	0.03	0.01	0.02	0.82	0.01	0.79	0.01	0.82	0.03	0.73	0.03	**-0.02**	0.01

Table 4.5d – School-based involvement and who filled the parental questionnaire

	Discuss the child's progress or behaviour with a teacher on the parent's initiative										Discuss the child's progress or behaviour with a teacher on the teacher's initiative									
	Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)		Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.68	(0.01)	0.68	(0.02)	0.65	(0.03)	0.79	(0.05)	0	(0.03)	0.36	(0.01)	0.38	(0.02)	0.35	(0.03)	0.48	(0.04)	0.02	(0.03)
Denmark	0.45	(0.01)	0.51	(0.03)	0.36	(0.03)	0.45	(0.09)	**0.06**	(0.03)	0.77	(0.01)	0.79	(0.02)	0.81	(0.02)	0.8	(0.06)	0.02	(0.02)
Hong Kong-China	0.45	(0.01)	0.38	(0.02)	0.46	(0.04)	0.44	(0.05)	**-0.07**	(0.02)	0.53	(0.01)	0.49	(0.02)	0.53	(0.04)	0.49	(0.05)	**-0.05**	(0.02)
Croatia	0.82	(0.01)	0.8	(0.02)	0.86	(0.02)	0.83	(0.05)	-0.02	(0.02)	0.3	(0.01)	0.4	(0.02)	0.32	(0.02)	0.44	(0.07)	**0.1**	(0.02)
Hungary	0.52	(0.01)	0.51	(0.02)	0.66	(0.06)	0.57	(0.07)	-0.02	(0.02)	0.38	(0.01)	0.39	(0.02)	0.4	(0.06)	0.36	(0.06)	0.01	(0.02)
Italy	0.65	(0.01)	0.66	(0.01)	0.73	(0.01)	0.64	(0.03)	0.01	(0.01)	0.44	(0.01)	0.48	(0.01)	0.43	(0.01)	0.52	(0.03)	**0.04**	(0.01)
Korea	0.37	(0.01)	0.25	(0.02)	0.4	(0.05)	0.28	(0.05)	**-0.12**	(0.02)	0.79	(0.01)	0.72	(0.02)	0.78	(0.05)	0.67	(0.08)	**-0.08**	(0.02)
Lithuania	0.59	(0.01)	0.47	(0.03)	0.62	(0.04)	0.69	(0.05)	**-0.12**	(0.02)	0.54	(0.01)	0.46	(0.03)	0.57	(0.03)	0.51	(0.05)	**-0.07**	(0.03)
Macao-China	0.3	(0.01)	0.25	(0.01)	0.43	(0.04)	0.34	(0.03)	**-0.04**	(0.01)	0.57	(0.01)	0.61	(0.01)	0.65	(0.04)	0.63	(0.03)	**0.04**	(0.02)
New Zealand	0.63	(0.01)	0.57	(0.02)	0.62	(0.04)	c	c	**-0.06**	(0.02)	0.53	(0.01)	0.55	(0.02)	0.55	(0.03)	c	c	0.02	(0.02)
Panama	0.69	(0.01)	0.68	(0.03)	0.8	(0.03)	0.58	(0.05)	-0.01	(0.03)	0.51	(0.02)	0.6	(0.03)	0.64	(0.04)	0.54	(0.06)	**0.08**	(0.03)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.75	(0.01)	0.7	(0.02)	0.8	(0.03)	0.64	(0.05)	**-0.05**	(0.02)	0.62	(0.01)	0.6	(0.03)	0.63	(0.04)	0.77	(0.04)	-0.02	(0.02)
Qatar	0.64	(0.01)	0.67	(0.01)	0.7	(0.03)	0.59	(0.03)	**0.03**	(0.01)	0.48	(0.01)	0.54	(0.01)	0.59	(0.04)	0.5	(0.02)	**0.06**	(0.01)

	Volunteer in physical activities										Volunteer in extra-curricular activities									
	Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)		Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.06	(0.01)	0.07	(0.01)	0.07	(0.01)	0.1	(0.04)	0.01	(0.01)	0.18	(0.01)	0.17	(0.02)	0.23	(0.02)	0.16	(0.04)	-0.02	(0.02)
Denmark	0.06	(0.01)	0.06	(0.01)	0.06	(0.01)	0	(0.00)	0	(0.01)	0.17	(0.01)	0.13	(0.02)	0.2	(0.02)	0.17	(0.06)	-0.03	(0.02)
Hong Kong-China	0.04	(0.00)	0.05	(0.01)	0.09	(0.02)	0.04	(0.02)	0.01	(0.01)	0.08	(0.00)	0.09	(0.01)	0.11	(0.02)	0.05	(0.02)	0.01	(0.01)
Croatia	0.07	(0.00)	0.09	(0.01)	0.06	(0.01)	0.19	(0.06)	**0.03**	(0.01)	0.14	(0.01)	0.18	(0.01)	0.14	(0.02)	0.22	(0.06)	0.03	(0.02)
Hungary	0.05	(0.00)	0.06	(0.01)	0.06	(0.03)	0.07	(0.04)	0	(0.01)	0.13	(0.01)	0.14	(0.02)	0.22	(0.05)	0.17	(0.05)	0.01	(0.02)
Italy	0.05	(0.00)	0.07	(0.01)	0.04	(0.01)	0.13	(0.03)	**0.02**	(0.01)	0.18	(0.00)	0.19	(0.01)	0.21	(0.01)	0.22	(0.03)	0.01	(0.01)
Korea	0.27	(0.01)	0.17	(0.01)	0.33	(0.05)	0.23	(0.05)	**-0.1**	(0.02)	0.18	(0.01)	0.16	(0.01)	0.27	(0.05)	0.1	(0.04)	**-0.02**	(0.01)
Lithuania	0.07	(0.00)	0.08	(0.01)	0.07	(0.02)	0.11	(0.03)	**0.02**	(0.01)	0.15	(0.01)	0.14	(0.02)	0.22	(0.03)	0.13	(0.04)	-0.01	(0.02)
Macao-China	0.09	(0.00)	0.11	(0.01)	0.08	(0.02)	0.13	(0.02)	**0.02**	(0.01)	0.2	(0.01)	0.2	(0.01)	0.28	(0.04)	0.22	(0.03)	0	(0.01)

New Zealand	0.07	(0.01)	0.08	(0.01)	0.08	(0.02)	c	c	0.01	(0.01)	0.33	(0.01)	0.33	(0.02)	0.36	(0.03)	c	c	0	(0.02)
Panama	0.17	(0.02)	0.29	(0.04)	0.28	(0.04)	0.16	(0.03)	**0.13**	(0.03)	0.21	(0.01)	0.25	(0.03)	0.33	(0.04)	0.2	(0.04)	0.04	(0.03)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.03	(0.00)	0.04	(0.01)	0.02	(0.01)	0.08	(0.04)	0.01	(0.01)	0.07	(0.01)	0.07	(0.01)	0.1	(0.02)	0.1	(0.05)	0	(0.01)
Qatar	0.07	(0.00)	0.11	(0.01)	0.11	(0.03)	0.17	(0.02)	**0.04**	(0.01)	0.17	(0.01)	0.22	(0.01)	0.21	(0.03)	0.28	(0.02)	**0.05**	(0.01)

	Volunteer in the school library or media centre										Assist a teacher in the school									
	Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)		Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.02	(0.00)	0.02	(0.01)	0.02	(0.01)	0.06	(0.03)	0.01	(0.01)	0.12	(0.01)	0.15	(0.02)	0.14	(0.02)	0.19	(0.05)	0.03	(0.02)
Denmark	0	(0.00)	0	(0.00)	0	(0.00)	0	(0.00)	**0**	(0.00)	0.08	(0.01)	0.09	(0.01)	0.11	(0.01)	0.08	(0.04)	0.01	(0.02)
Hong Kong-China	0.03	(0.00)	0.03	(0.01)	0.04	(0.01)	0.02	(0.02)	0.01	(0.01)	0.07	(0.00)	0.07	(0.01)	0.09	(0.02)	0.08	(0.04)	0	(0.01)
Croatia	0.02	(0.00)	0.04	(0.01)	0.02	(0.01)	0.03	(0.02)	**0.02**	(0.01)	m	m	m	m	m	m	m	m	m	m
Hungary	0.02	(0.00)	0.03	(0.01)	0.02	(0.02)	0.05	(0.03)	0.01	(0.01)	0.13	(0.01)	0.12	(0.02)	0.2	(0.05)	0.16	(0.05)	-0.01	(0.02)
Italy	0.07	(0.00)	0.08	(0.00)	0.06	(0.01)	0.1	(0.02)	0.01	(0.01)	m	m	m	m	m	m	m	m	m	m
Korea	0.11	(0.01)	0.08	(0.01)	0.19	(0.04)	0.14	(0.06)	**-0.02**	(0.01)	0.1	(0.01)	0.06	(0.01)	0.1	(0.03)	0.1	(0.04)	**-0.04**	(0.01)
Lithuania	0.01	(0.00)	0.01	(0.00)	0.01	(0.01)	0.03	(0.02)	**0**	(0.00)	m	m	m	m	m	m	m	m	m	m
Macao-China	0.05	(0.00)	0.05	(0.01)	0.04	(0.02)	0.07	(0.02)	0	(0.01)	0.16	(0.01)	0.16	(0.01)	0.18	(0.03)	0.19	(0.03)	-0.01	(0.01)
New Zealand	0.02	(0.00)	0.02	(0.00)	0.02	(0.01)	c	c	**0**	(0.00)	0.09	(0.01)	0.08	(0.01)	0.1	(0.02)	c	c	**-0.02**	(0.01)
Panama	0.09	(0.01)	0.12	(0.02)	0.18	(0.03)	0.1	(0.03)	0.03	(0.02)	0.2	(0.02)	0.28	(0.04)	0.36	(0.04)	0.23	(0.03)	**0.08**	(0.03)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.02	(0.00)	0.02	(0.01)	0.02	(0.01)	0.04	(0.02)	0	(0.01)	0.07	(0.00)	0.07	(0.01)	0.12	(0.03)	0.15	(0.05)	0	(0.01)
Qatar	0.07	(0.01)	0.13	(0.01)	0.06	(0.02)	0.22	(0.02)	**0.05**	(0.01)	0.26	(0.01)	0.32	(0.01)	0.2	(0.03)	0.37	(0.03)	**0.06**	(0.01)

	Appear as a guest speaker										Participate in local school government									
	Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)		Mother only		Father only		Mother and father		Neither mother nor father		Difference in involvement between mothers who filled the questionnaire and fathers who filled the questionnaire (Fathers - Mothers)	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.01	(0.00)	0.03	(0.01)	0.02	(0.01)	0.03	(0.02)	**0.02**	(0.01)	0.17	(0.01)	0.14	(0.02)	0.18	(0.02)	0.25	(0.04)	-0.03	(0.02)
Denmark	0.01	(0.00)	0.04	(0.01)	0.03	(0.01)	0	(0.00)	**0.02**	(0.01)	0.21	(0.01)	0.16	(0.02)	0.25	(0.02)	0.14	(0.05)	**-0.05**	(0.02)
Hong Kong-China	0.03	(0.00)	0.03	(0.01)	0.07	(0.02)	0.02	(0.02)	0	(0.01)	0.06	(0.00)	0.05	(0.01)	0.05	(0.01)	0.04	(0.03)	0	(0.01)
Croatia	0.02	(0.00)	0.03	(0.01)	0.01	(0.01)	0.02	(0.01)	0.01	(0.01)	0.1	(0.01)	0.11	(0.01)	0.12	(0.01)	0.08	(0.05)	0.01	(0.01)
Hungary	0.01	(0.00)	0.02	(0.01)	0.05	(0.03)	0.09	(0.04)	0.01	(0.01)	0.05	(0.00)	0.04	(0.01)	0.08	(0.03)	0.1	(0.04)	0	(0.01)
Italy	0.06	(0.00)	0.08	(0.01)	0.05	(0.01)	0.12	(0.02)	0.01	(0.01)	0.15	(0.00)	0.17	(0.01)	0.19	(0.01)	0.09	(0.02)	0.01	(0.01)
Korea	0.03	(0.00)	0.04	(0.01)	0.05	(0.02)	0.02	(0.02)	0.01	(0.01)	0.18	(0.01)	0.13	(0.01)	0.22	(0.04)	0.14	(0.05)	**-0.05**	(0.01)
Lithuania	0.04	(0.00)	0.05	(0.01)	0.02	(0.01)	0.04	(0.02)	0	(0.01)	0.16	(0.01)	0.13	(0.02)	0.22	(0.03)	0.17	(0.03)	-0.02	(0.02)
Macao-China	0.03	(0.00)	0.03	(0.00)	0.04	(0.02)	0.05	(0.02)	**0**	(0.00)	0.22	(0.01)	0.17	(0.01)	0.32	(0.04)	0.18	(0.03)	**-0.05**	(0.01)
New Zealand	0.01	(0.00)	0.03	(0.01)	0.04	(0.01)	c	c	0.01	(0.01)	0.08	(0.01)	0.06	(0.01)	0.14	(0.03)	c	c	**-0.02**	(0.01)
Panama	0.07	(0.01)	0.12	(0.02)	0.19	(0.02)	0.18	(0.04)	**0.05**	(0.02)	0.26	(0.02)	0.35	(0.04)	0.45	(0.04)	0.3	(0.05)	**0.08**	(0.04)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

Portugal	0.04	(0.00)	0.06	(0.01)	0.05	(0.02)	0.1	(0.04)	**0.02**	(0.01)	0.18	(0.01)	0.2	(0.02)	0.2	(0.03)	0.22	(0.05)	0.02	(0.02)
Qatar	0.1	(0.01)	0.13	(0.01)	0.09	(0.02)	0.21	(0.02)	**0.03**	(0.01)	0.12	(0.01)	0.14	(0.01)	0.11	(0.02)	0.22	(0.02)	**0.02**	(0.01)

Table 4.6a – Early childhood involvement and family structure

	Read books to the child						Tell stories						Sing Songs					
	Non-single		Single		Difference in involvement (Non-single - Single)		Non-single		Single		Difference in involvement (Non-single - Single)		Non-single		Single		Difference in involvement (Non-single - Single)	
	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.87	(0.01)	0.85	(0.02)	-0.02	(0.02)	0.75	(0.01)	0.75	(0.02)	0	(0.03)	0.63	(0.01)	0.64	(0.02)	0.01	(0.03)
Denmark	0.92	(0.01)	0.89	(0.01)	-0.03	(0.02)	0.71	(0.01)	0.75	(0.02)	**0.04**	(0.02)	0.76	(0.01)	0.77	(0.02)	0.01	(0.02)
Hong Kong-China	0.52	(0.01)	0.49	(0.02)	-0.03	(0.02)	0.4	(0.01)	0.35	(0.02)	**-0.05**	(0.02)	0.38	(0.01)	0.36	(0.02)	-0.02	(0.02)
Croatia	0.71	(0.01)	0.69	(0.03)	-0.03	(0.03)	0.78	(0.01)	0.74	(0.02)	**-0.04**	(0.02)	0.65	(0.01)	0.63	(0.02)	-0.02	(0.02)
Hungary	0.87	(0.01)	0.88	(0.01)	0.01	(0.01)	0.84	(0.01)	0.85	(0.01)	0.01	(0.02)	0.65	(0.01)	0.63	(0.02)	-0.02	(0.02)
Italy	0.66	(0.01)	0.65	(0.02)	-0.01	(0.01)	0.74	(0.00)	0.7	(0.01)	**-0.05**	(0.01)	0.63	(0.00)	0.65	(0.01)	**0.02**	(0.01)
Korea	0.66	(0.01)	0.52	(0.02)	**-0.15**	(0.03)	0.68	(0.01)	0.59	(0.02)	**-0.09**	(0.03)	0.55	(0.01)	0.45	(0.02)	**-0.1**	(0.02)
Lithuania	0.82	(0.01)	0.82	(0.01)	0	(0.01)	0.72	(0.01)	0.72	(0.02)	0	(0.02)	0.45	(0.01)	0.46	(0.02)	0.01	(0.02)
Macao-China	0.55	(0.01)	0.49	(0.02)	**-0.06**	(0.02)	0.4	(0.01)	0.38	(0.02)	-0.02	(0.02)	0.37	(0.01)	0.37	(0.02)	0	(0.02)
New Zealand	0.97	(0.00)	0.93	(0.01)	**-0.04**	(0.01)	0.83	(0.01)	0.8	(0.02)	-0.03	(0.02)	0.78	(0.01)	0.76	(0.02)	-0.02	(0.02)
Panama	0.81	(0.01)	0.77	(0.02)	**-0.04**	(0.02)	0.67	(0.02)	0.61	(0.03)	**-0.06**	(0.03)	0.73	(0.02)	0.68	(0.02)	-0.05	(0.03)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.66	(0.01)	0.63	(0.02)	-0.03	(0.02)	0.7	(0.01)	0.67	(0.02)	**-0.04**	(0.02)	0.6	(0.01)	0.57	(0.02)	-0.03	(0.02)
Qatar	0.74	(0.01)	0.67	(0.01)	**-0.07**	(0.01)	0.68	(0.01)	0.57	(0.01)	**-0.11**	(0.01)	0.52	(0.01)	0.44	(0.01)	**-0.09**	(0.02)

	Play with alphabet toys						Talk about what the parent had done						Write letters or words					
	Non-single		Single		Difference in involvement (Non-single - Single)		Non-single		Single		Difference in involvement (Non-single - Single)		Non-single		Single		Difference in involvement (Non-single - Single)	
	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.6	(0.01)	0.59	(0.03)	-0.01	(0.03)	0.93	(0.00)	0.91	(0.01)	**-0.02**	(0.01)	0.9	(0.01)	0.87	(0.02)	**-0.04**	(0.02)
Denmark	0.47	(0.01)	0.51	(0.03)	0.04	(0.03)	0.98	(0.00)	0.96	(0.01)	**-0.02**	(0.01)	0.83	(0.01)	0.81	(0.02)	-0.02	(0.02)
Hong Kong-China	0.39	(0.01)	0.38	(0.02)	-0.01	(0.02)	0.49	(0.01)	0.42	(0.02)	**-0.08**	(0.02)	0.65	(0.01)	0.62	(0.02)	-0.03	(0.02)
Croatia	0.72	(0.01)	0.66	(0.02)	**-0.06**	(0.02)	0.87	(0.01)	0.86	(0.02)	-0.01	(0.02)	0.92	(0.00)	0.89	(0.02)	-0.03	(0.02)
Hungary	0.64	(0.01)	0.62	(0.02)	-0.02	(0.02)	0.9	(0.01)	0.88	(0.01)	**-0.03**	(0.01)	0.91	(0.01)	0.87	(0.01)	**-0.04**	(0.01)
Italy	0.69	(0.00)	0.65	(0.01)	**-0.04**	(0.02)	0.93	(0.00)	0.91	(0.01)	-0.01	(0.01)	0.79	(0.00)	0.75	(0.01)	**-0.04**	(0.01)
Korea	0.67	(0.01)	0.59	(0.03)	**-0.08**	(0.03)	0.54	(0.01)	0.5	(0.02)	**-0.04**	(0.02)	0.78	(0.01)	0.67	(0.02)	**-0.12**	(0.03)
Lithuania	0.69	(0.01)	0.7	(0.02)	0	(0.02)	0.89	(0.01)	0.9	(0.01)	0	(0.01)	0.91	(0.01)	0.9	(0.01)	0	(0.01)
Macao-China	0.42	(0.01)	0.41	(0.02)	-0.02	(0.02)	0.41	(0.01)	0.37	(0.02)	**-0.04**	(0.02)	0.63	(0.01)	0.59	(0.02)	**-0.04**	(0.02)
New Zealand	0.75	(0.01)	0.7	(0.02)	**-0.05**	(0.02)	0.94	(0.01)	0.9	(0.01)	**-0.04**	(0.01)	0.89	(0.01)	0.83	(0.02)	**-0.05**	(0.02)
Panama	0.63	(0.02)	0.57	(0.02)	**-0.06**	(0.03)	0.88	(0.01)	0.83	(0.02)	**-0.06**	(0.02)	0.84	(0.02)	0.81	(0.02)	-0.03	(0.02)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.61	(0.01)	0.61	(0.02)	0	(0.02)	0.87	(0.01)	0.86	(0.02)	0	(0.02)	0.81	(0.01)	0.76	(0.02)	**-0.05**	(0.02)
Qatar	0.67	(0.01)	0.59	(0.01)	**-0.09**	(0.01)	0.77	(0.01)	0.71	(0.01)	**-0.06**	(0.01)	0.79	(0.01)	0.73	(0.01)	**-0.06**	(0.01)

	Read signs out loud					
	Non-single		Single		Difference in involvement (Non-single - Single)	
	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.75	(0.01)	0.71	(0.02)	**-0.04**	(0.02)
Denmark	0.75	(0.01)	0.77	(0.02)	0.02	(0.02)
Hong Kong-China	0.39	(0.01)	0.36	(0.02)	-0.03	(0.02)
Croatia	0.81	(0.01)	0.79	(0.02)	-0.02	(0.02)
Hungary	0.78	(0.01)	0.75	(0.02)	**-0.04**	(0.02)
Italy	0.78	(0.00)	0.72	(0.01)	**-0.06**	(0.01)
Korea	0.66	(0.01)	0.51	(0.02)	**-0.15**	(0.02)
Lithuania	0.83	(0.01)	0.82	(0.01)	-0.01	(0.01)
Macao-China	0.37	(0.01)	0.34	(0.02)	-0.03	(0.02)
New Zealand	0.84	(0.01)	0.76	(0.02)	**-0.08**	(0.02)
Panama	0.72	(0.02)	0.62	(0.03)	**-0.11**	(0.03)
Poland	m	m	m	m	m	m
Portugal	0.67	(0.01)	0.62	(0.02)	**-0.05**	(0.02)
Qatar	0.7	(0.01)	0.63	(0.01)	**-0.07**	(0.01)

Table 4.6b – Home-based involvement and family structure

	Discuss political or social issues						Discuss books, films or television programmes						Eat the main meal with the child around a table					
	Non-single		Single		Difference in involvement (Non-single - Single)		Non-single		Single		Difference in involvement (Non-single - Single)		Non-single		Single		Difference in involvement (Non-single - Single)	
	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.63	(0.01)	0.59	(0.03)	-0.04	(0.03)	0.75	(0.01)	0.75	(0.02)	0.01	(0.03)	0.98	(0.00)	0.91	(0.01)	**-0.07**	(0.02)
Denmark	0.72	(0.01)	0.64	(0.02)	**-0.08**	(0.02)	0.83	(0.01)	0.79	(0.02)	**-0.04**	(0.02)	0.99	(0.00)	0.97	(0.01)	**-0.02**	(0.01)
Hong Kong-China	0.56	(0.01)	0.51	(0.02)	**-0.05**	(0.02)	0.65	(0.01)	0.58	(0.02)	**-0.07**	(0.02)	0.97	(0.00)	0.95	(0.01)	**-0.02**	(0.01)
Croatia	0.4	(0.01)	0.44	(0.03)	0.04	(0.03)	0.76	(0.01)	0.78	(0.02)	0.03	(0.02)	0.95	(0.00)	0.94	(0.01)	-0.01	(0.01)
Hungary	0.55	(0.01)	0.49	(0.02)	**-0.06**	(0.02)	0.88	(0.01)	0.86	(0.01)	**-0.02**	(0.01)	0.96	(0.00)	0.92	(0.01)	**-0.04**	(0.01)
Italy	0.66	(0.00)	0.61	(0.01)	**-0.05**	(0.01)	0.84	(0.00)	0.84	(0.01)	0	(0.01)	0.99	(0.00)	0.96	(0.00)	**-0.02**	(0.00)
Korea	0.19	(0.01)	0.14	(0.02)	**-0.06**	(0.02)	0.37	(0.01)	0.33	(0.02)	**-0.04**	(0.02)	0.94	(0.01)	0.87	(0.02)	**-0.07**	(0.02)
Lithuania	0.52	(0.01)	0.47	(0.02)	**-0.05**	(0.02)	0.78	(0.01)	0.77	(0.02)	-0.02	(0.02)	0.94	(0.00)	0.92	(0.01)	**-0.02**	(0.01)
Macao-China	0.33	(0.01)	0.27	(0.02)	**-0.05**	(0.02)	0.55	(0.01)	0.47	(0.02)	**-0.07**	(0.02)	0.94	(0.00)	0.87	(0.01)	**-0.07**	(0.01)
New Zealand	0.7	(0.01)	0.6	(0.02)	**-0.1**	(0.02)	0.84	(0.01)	0.84	(0.01)	0	(0.02)	0.86	(0.01)	0.77	(0.02)	**-0.08**	(0.02)
Panama	0.5	(0.02)	0.43	(0.02)	**-0.08**	(0.03)	0.69	(0.02)	0.67	(0.02)	-0.02	(0.02)	0.87	(0.01)	0.81	(0.02)	**-0.06**	(0.02)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.57	(0.01)	0.52	(0.02)	**-0.04**	(0.02)	0.81	(0.01)	0.81	(0.02)	0	(0.02)	0.99	(0.00)	0.96	(0.01)	**-0.03**	(0.01)
Qatar	0.56	(0.01)	0.46	(0.01)	**-0.1**	(0.02)	0.63	(0.01)	0.58	(0.01)	**-0.06**	(0.02)	0.95	(0.00)	0.91	(0.01)	**-0.03**	(0.01)

	Spend time just talking to the child						Go to a bookstore or library with the child						Talk with the child about what he/she is reading on his/her own					
	Non-single		Single		Difference in involvement (Non-single - Single)		Non-single		Single		Difference in involvement (Non-single - Single)		Non-single		Single		Difference in involvement (Non-single - Single)	
	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.99	(0.00)	0.98	(0.01)	-0.01	(0.01)	0.07	(0.01)	0.06	(0.01)	-0.01	(0.01)	0.39	(0.01)	0.38	(0.03)	-0.01	(0.03)
Denmark	0.99	(0.00)	0.99	(0.01)	0	(0.01)	0.03	(0.00)	0.03	(0.01)	0	(0.01)	0.47	(0.01)	0.47	(0.03)	0	(0.02)
Hong Kong-China	0.91	(0.00)	0.87	(0.01)	**-0.03**	(0.01)	0.16	(0.01)	0.14	(0.01)	**-0.02**	(0.01)	0.34	(0.01)	0.3	(0.02)	**-0.04**	(0.02)
Croatia	0.92	(0.00)	0.92	(0.01)	0	(0.01)	0.06	(0.00)	0.06	(0.01)	0.01	(0.01)	0.36	(0.01)	0.39	(0.02)	**0.04**	(0.02)
Hungary	0.97	(0.00)	0.94	(0.01)	**-0.03**	(0.01)	0.07	(0.01)	0.08	(0.01)	0	(0.01)	0.41	(0.01)	0.39	(0.02)	-0.02	(0.02)
Italy	0.93	(0.00)	0.9	(0.01)	**-0.03**	(0.01)	0.08	(0.00)	0.09	(0.01)	0.01	(0.01)	0.43	(0.00)	0.4	(0.01)	**-0.03**	(0.01)
Korea	0.82	(0.01)	0.68	(0.02)	**-0.14**	(0.02)	0.1	(0.01)	0.06	(0.01)	-0.03	(0.02)	0.18	(0.01)	0.15	(0.02)	-0.03	(0.02)
Lithuania	0.93	(0.00)	0.9	(0.01)	**-0.03**	(0.01)	0.09	(0.00)	0.1	(0.01)	0.01	(0.01)	0.41	(0.01)	0.41	(0.02)	0	(0.02)
Macao-China	0.69	(0.01)	0.63	(0.01)	**-0.06**	(0.02)	0.09	(0.00)	0.07	(0.01)	-0.01	(0.01)	0.22	(0.01)	0.18	(0.01)	**-0.04**	(0.01)
New Zealand	0.98	(0.00)	0.94	(0.01)	**-0.04**	(0.01)	0.14	(0.01)	0.13	(0.01)	-0.01	(0.02)	0.46	(0.01)	0.42	(0.02)	**-0.04**	(0.02)
Panama	0.87	(0.01)	0.84	(0.02)	-0.03	(0.02)	0.17	(0.01)	0.15	(0.02)	-0.02	(0.02)	0.57	(0.02)	0.58	(0.02)	0.01	(0.02)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.93	(0.00)	0.92	(0.02)	-0.01	(0.02)	0.12	(0.01)	0.13	(0.01)	0.01	(0.02)	0.49	(0.01)	0.46	(0.02)	-0.03	(0.02)
Qatar	0.88	(0.01)	0.84	(0.01)	**-0.05**	(0.01)	0.27	(0.01)	0.33	(0.01)	**0.06**	(0.01)	0.52	(0.01)	0.5	(0.01)	**-0.02**	(0.01)

	Help the child with his/her homework						Discuss how well the child is doing in school					
	Non-single		Single		Difference in involvement (Non-single - Single)		Non-single		Single		Difference in involvement (Non-single - Single)	
	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.34	(0.01)	0.32	(0.02)	-0.02	(0.03)	0.87	(0.01)	0.86	(0.02)	-0.01	(0.02)
Denmark	0.52	(0.01)	0.45	(0.03)	**-0.07**	(0.03)	0.94	(0.00)	0.93	(0.01)	**-0.02**	(0.01)
Hong Kong-China	0.28	(0.01)	0.26	(0.02)	-0.02	(0.02)	0.68	(0.01)	0.64	(0.02)	**-0.04**	(0.02)
Croatia	0.27	(0.01)	0.3	(0.02)	0.02	(0.02)	0.96	(0.00)	0.96	(0.01)	0	(0.01)
Hungary	0.45	(0.01)	0.41	(0.02)	**-0.04**	(0.02)	0.98	(0.00)	0.97	(0.01)	**-0.02**	(0.01)
Italy	0.35	(0.00)	0.31	(0.02)	**-0.04**	(0.02)	0.97	(0.00)	0.94	(0.01)	**-0.02**	(0.01)
Korea	0.14	(0.01)	0.14	(0.02)	0	(0.02)	0.69	(0.01)	0.59	(0.02)	**-0.11**	(0.03)
Lithuania	0.42	(0.01)	0.46	(0.02)	0.03	(0.02)	0.97	(0.00)	0.94	(0.01)	**-0.02**	(0.01)
Macao-China	0.32	(0.01)	0.26	(0.02)	**-0.06**	(0.02)	0.63	(0.01)	0.55	(0.02)	**-0.08**	(0.02)
New Zealand	0.48	(0.01)	0.43	(0.02)	**-0.05**	(0.02)	0.89	(0.01)	0.85	(0.02)	**-0.04**	(0.02)
Panama	0.72	(0.02)	0.74	(0.02)	0.02	(0.02)	0.81	(0.01)	0.81	(0.02)	0	(0.02)
Poland	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.42	(0.01)	0.37	(0.02)	**-0.05**	(0.02)	0.94	(0.00)	0.91	(0.01)	**-0.03**	(0.01)
Qatar	0.52	(0.01)	0.55	(0.01)	0.03	(0.02)	0.83	(0.01)	0.75	(0.01)	**-0.08**	(0.01)

Table 4.6c – Home-based involvement and family structure

	Discuss the child's progress or behaviour with a teacher on the parent's initiative						Discuss the child's progress or behaviour with a teacher on the teacher's initiative						Volunteer in physical activities					
	Non-single		Single		Difference in involvement (Non-single - Single)		Non-single		Single		Difference in involvement (Non-single - Single)		Non-single		Single		Difference in involvement (Non-single - Single)	
	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.67	(0.01)	0.72	(0.03)	0.05	(0.03)	0.34	(0.01)	0.46	(0.03)	**0.12**	(0.02)	0.06	(0.01)	0.06	(0.01)	0	(0.01)
Denmark	0.42	(0.01)	0.55	(0.02)	**0.12**	(0.02)	0.78	(0.01)	0.8	(0.02)	0.03	(0.03)	0.06	(0.01)	0.05	(0.01)	**-0.02**	(0.01)
Hong Kong-China	0.44	(0.01)	0.4	(0.02)	-0.03	(0.02)	0.52	(0.01)	0.52	(0.02)	0	(0.02)	0.04	(0.00)	0.05	(0.01)	0.01	(0.01)
Croatia	0.81	(0.01)	0.88	(0.02)	**0.06**	(0.02)	0.31	(0.01)	0.36	(0.02)	0.05	(0.03)	0.07	(0.00)	0.08	(0.01)	0	(0.01)
Hungary	0.51	(0.01)	0.55	(0.02)	**0.04**	(0.02)	0.37	(0.01)	0.42	(0.02)	**0.06**	(0.02)	0.06	(0.01)	0.05	(0.01)	-0.01	(0.01)
Italy	0.66	(0.01)	0.67	(0.01)	0.01	(0.01)	0.44	(0.01)	0.48	(0.01)	**0.04**	(0.01)	0.05	(0.00)	0.07	(0.01)	**0.02**	(0.01)
Korea	0.36	(0.01)	0.27	(0.02)	**-0.09**	(0.02)	0.8	(0.01)	0.68	(0.03)	**-0.11**	(0.03)	0.27	(0.01)	0.12	(0.01)	**-0.15**	(0.02)
Lithuania	0.57	(0.01)	0.6	(0.02)	0.02	(0.02)	0.52	(0.01)	0.52	(0.02)	0	(0.02)	0.06	(0.00)	0.08	(0.01)	**0.02**	(0.01)
Macao-China	0.29	(0.01)	0.29	(0.01)	0.01	(0.02)	0.58	(0.01)	0.62	(0.02)	**0.04**	(0.02)	0.09	(0.00)	0.1	(0.01)	0.01	(0.01)
New Zealand	0.63	(0.01)	0.59	(0.02)	**-0.04**	(0.02)	0.53	(0.01)	0.57	(0.02)	**0.05**	(0.02)	0.08	(0.01)	0.05	(0.01)	**-0.03**	(0.01)
Panama	0.67	(0.01)	0.7	(0.02)	0.03	(0.02)	0.51	(0.02)	0.54	(0.02)	0.03	(0.03)	0.18	(0.02)	0.21	(0.02)	**0.04**	(0.02)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.75	(0.01)	0.73	(0.02)	-0.02	(0.02)	0.61	(0.01)	0.67	(0.02)	**0.06**	(0.02)	0.03	(0.00)	0.03	(0.01)	0	(0.01)
Qatar	0.65	(0.01)	0.63	(0.01)	**-0.02**	(0.01)	0.51	(0.01)	0.5	(0.01)	0	(0.02)	0.08	(0.00)	0.11	(0.01)	**0.03**	(0.01)

	Volunteer in extra-curricular activities						Volunteer in the school library or media centre						Assist a teacher in the school					
	Non-single		Single		Difference in involvement (Non-single - Single)		Non-single		Single		Difference in involvement (Non-single - Single)		Non-single		Single		Difference in involvement (Non-single - Single)	
	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.2	(0.01)	0.14	(0.02)	**-0.05**	(0.02)	0.02	(0.00)	0.01	(0.01)	-0.01	(0.01)	0.13	(0.01)	0.1	(0.02)	-0.02	(0.02)
Denmark	0.17	(0.01)	0.13	(0.02)	-0.03	(0.02)	0	(0.00)	0	(0.00)	**0**	(0.00)	0.09	(0.01)	0.06	(0.01)	**-0.03**	(0.01)
Hong Kong-China	0.08	(0.00)	0.08	(0.01)	0	(0.01)	0.03	(0.00)	0.03	(0.01)	0	(0.01)	0.07	(0.00)	0.07	(0.01)	0	(0.01)
Croatia	0.15	(0.01)	0.13	(0.02)	-0.02	(0.02)	0.02	(0.00)	0.03	(0.01)	0.01	(0.01)	m	m	m	m	m	m
Hungary	0.13	(0.01)	0.12	(0.01)	-0.01	(0.01)	0.02	(0.00)	0.02	(0.01)	0	(0.01)	0.13	(0.01)	0.13	(0.02)	0.01	(0.02)
Italy	0.19	(0.00)	0.18	(0.01)	-0.01	(0.01)	0.07	(0.00)	0.07	(0.01)	0	(0.01)	m	m	m	m	m	m
Korea	0.19	(0.01)	0.13	(0.01)	**-0.06**	(0.01)	0.11	(0.01)	0.07	(0.01)	**-0.03**	(0.01)	0.1	(0.01)	0.05	(0.01)	**-0.05**	(0.01)
Lithuania	0.15	(0.01)	0.14	(0.01)	-0.01	(0.01)	0.01	(0.00)	0.01	(0.00)	**0**	(0.00)	m	m	m	m	m	m
Macao-China	0.2	(0.01)	0.22	(0.01)	**0.02**	(0.01)	0.05	(0.00)	0.06	(0.01)	0.01	(0.01)	0.16	(0.01)	0.17	(0.01)	0.01	(0.01)
New Zealand	0.36	(0.01)	0.23	(0.02)	**-0.13**	(0.02)	0.02	(0.00)	0.02	(0.01)	0	(0.01)	0.1	(0.01)	0.07	(0.01)	**-0.03**	(0.01)
Panama	0.22	(0.01)	0.22	(0.02)	0	(0.03)	0.08	(0.01)	0.11	(0.02)	0.02	(0.02)	0.22	(0.02)	0.21	(0.02)	-0.01	(0.02)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.07	(0.01)	0.08	(0.01)	0.01	(0.01)	0.02	(0.00)	0.02	(0.01)	0	(0.01)	0.07	(0.01)	0.09	(0.01)	0.02	(0.02)
Qatar	0.19	(0.01)	0.21	(0.01)	**0.03**	(0.01)	0.09	(0.00)	0.14	(0.01)	**0.05**	(0.01)	0.26	(0.01)	0.34	(0.01)	**0.08**	(0.01)

	Appear as a guest speaker						Participate in local school government					
	Non-single		Single		Difference in involvement (Non-single - Single)		Non-single		Single		Difference in involvement (Non-single - Single)	
	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.02	(0.00)	0.01	(0.00)	**-0.01**	(0.00)	0.16	(0.01)	0.19	(0.02)	**-0.05**	(0.02)
Denmark	0.02	(0.00)	0.01	(0.00)	-0.01	(0.01)	0.21	(0.01)	0.09	(0.05)	**-0.05**	(0.02)
Hong Kong-China	0.03	(0.00)	0.03	(0.01)	-0.01	(0.01)	0.06	(0.00)	0.05	(0.01)	-0.01	(0.01)
Croatia	0.02	(0.00)	0.02	(0.01)	0	(0.01)	0.11	(0.01)	0.11	(0.01)	-0.01	(0.02)
Hungary	0.01	(0.00)	0.02	(0.01)	0	(0.01)	0.04	(0.00)	0.06	(0.01)	0	(0.01)
Italy	0.06	(0.00)	0.07	(0.01)	0	(0.01)	0.16	(0.00)	0.17	(0.01)	**-0.02**	(0.01)
Korea	0.03	(0.00)	0.03	(0.01)	0	(0.01)	0.18	(0.01)	0.16	(0.02)	**-0.08**	(0.02)
Lithuania	0.04	(0.00)	0.05	(0.01)	0.01	(0.01)	0.15	(0.01)	0.18	(0.02)	**-0.03**	(0.01)
Macao-China	0.03	(0.00)	0.04	(0.01)	0.01	(0.01)	0.2	(0.01)	0.21	(0.02)	-0.01	(0.02)
New Zealand	0.02	(0.00)	0.01	(0.00)	-0.01	(0.01)	0.08	(0.00)	0.07	(0.02)	**-0.04**	(0.01)
Panama	0.08	(0.01)	0.1	(0.02)	0.03	(0.02)	0.28	(0.02)	0.34	(0.02)	0.01	(0.03)
Poland	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.04	(0.00)	0.06	(0.01)	0.01	(0.01)	0.18	(0.01)	0.18	(0.02)	**-0.04**	(0.02)
Qatar	0.1	(0.00)	0.15	(0.01)	**0.05**	(0.01)	0.12	(0.01)	0.17	(0.01)	**0.04**	(0.01)

Table 4.6d – Implicit involvement and family structure

	Spend time reading for enjoyment at home						Consider reading a favourite hobby						Feel happy when receiving a book as a present					
	Non-single		Single		Difference in involvement (Non-single - Single)		Non-single		Single		Difference in involvement (Non-single - Single)		Non-single		Single		Difference in involvement (Non-single - Single)	
	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.54	(0.01)	0.52	(0.03)	-0.01	(0.03)	0.74	(0.01)	0.69	(0.02)	-0.03	(0.03)	0.82	(0.01)	0.77	(0.02)	-0.05	(0.03)
Denmark	0.51	(0.01)	0.49	(0.03)	-0.02	(0.03)	0.77	(0.01)	0.79	(0.05)	-0.01	(0.02)	0.85	(0.01)	0.83	(0.02)	-0.03	(0.02)
Hong Kong-China	0.33	(0.01)	0.28	(0.02)	**-0.05**	(0.02)	0.73	(0.01)	0.74	(0.02)	-0.03	(0.02)	0.71	(0.01)	0.66	(0.02)	**-0.05**	(0.02)
Croatia	0.35	(0.01)	0.39	(0.03)	**0.04**	(0.02)	0.75	(0.01)	0.74	(0.01)	0.02	(0.02)	0.85	(0.01)	0.85	(0.02)	0	(0.02)
Hungary	0.45	(0.01)	0.45	(0.02)	-0.01	(0.02)	0.8	(0.01)	0.77	(0.02)	0.01	(0.02)	0.87	(0.01)	0.87	(0.01)	-0.01	(0.01)
Italy	0.39	(0.00)	0.39	(0.01)	-0.01	(0.01)	0.84	(0.00)	0.83	(0.01)	0	(0.01)	0.86	(0.00)	0.86	(0.01)	0	(0.01)
Korea	0.27	(0.01)	0.26	(0.02)	-0.01	(0.02)	0.54	(0.01)	0.5	(0.03)	**-0.07**	(0.02)	0.86	(0.01)	0.76	(0.02)	**-0.11**	(0.02)
Lithuania	0.47	(0.01)	0.44	(0.02)	-0.03	(0.02)	0.86	(0.01)	0.85	(0.01)	-0.01	(0.01)	0.89	(0.01)	0.87	(0.01)	**-0.02**	(0.01)
Macao-China	0.29	(0.01)	0.27	(0.01)	-0.03	(0.02)	0.72	(0.01)	0.72	(0.02)	**-0.07**	(0.02)	0.7	(0.01)	0.64	(0.02)	**-0.06**	(0.02)
New Zealand	0.56	(0.01)	0.53	(0.02)	-0.03	(0.02)	0.81	(0.01)	0.79	(0.02)	-0.03	(0.02)	0.9	(0.01)	0.86	(0.01)	-0.03	(0.02)
Panama	0.32	(0.02)	0.26	(0.02)	-0.05	(0.03)	0.79	(0.02)	0.81	(0.02)	-0.02	(0.02)	0.91	(0.01)	0.87	(0.02)	**-0.04**	(0.02)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.29	(0.01)	0.34	(0.02)	**0.06**	(0.02)	0.75	(0.01)	0.74	(0.02)	**0.06**	(0.02)	0.77	(0.01)	0.79	(0.02)	0.02	(0.02)
Qatar	0.36	(0.01)	0.25	(0.01)	**-0.1**	(0.01)	0.87	(0.01)	0.87	(0.01)	**-0.03**	(0.01)	0.87	(0.01)	0.83	(0.01)	**-0.03**	(0.01)

	Enjoy going to a library or bookstore						Do not think reading is a waste of time					
	Non-single		Single		Difference in involvement (Non-single - Single)		Non-single		Single		Difference in involvement (Non-single - Single)	
	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.
Germany	0.72	(0.01)	0.7	(0.03)	-0.01	(0.03)	0.95	(0.00)	0.93	(0.02)	-0.02	(0.02)
Denmark	0.81	(0.01)	0.8	(0.02)	-0.01	(0.02)	0.97	(0.00)	0.96	(0.01)	-0.01	(0.01)
Hong Kong-China	0.7	(0.01)	0.64	(0.02)	**-0.06**	(0.02)	0.93	(0.00)	0.91	(0.01)	**-0.02**	(0.01)
Croatia	0.73	(0.01)	0.72	(0.02)	-0.01	(0.02)	0.95	(0.00)	0.94	(0.01)	-0.01	(0.01)
Hungary	0.8	(0.01)	0.81	(0.02)	0.01	(0.02)	0.96	(0.01)	0.95	(0.01)	-0.01	(0.01)
Italy	0.76	(0.00)	0.76	(0.01)	0	(0.01)	0.95	(0.00)	0.94	(0.01)	-0.01	(0.01)
Korea	0.56	(0.01)	0.43	(0.02)	**-0.13**	(0.02)	0.97	(0.00)	0.92	(0.01)	**-0.05**	(0.01)
Lithuania	0.79	(0.01)	0.75	(0.02)	**-0.04**	(0.02)	0.9	(0.01)	0.88	(0.01)	**-0.02**	(0.01)
Macao-China	0.63	(0.01)	0.55	(0.02)	**-0.08**	(0.02)	0.9	(0.00)	0.85	(0.01)	**-0.04**	(0.01)
New Zealand	0.91	(0.01)	0.86	(0.01)	**-0.04**	(0.01)	0.98	(0.00)	0.97	(0.01)	**-0.02**	(0.01)
Panama	0.79	(0.02)	0.74	(0.03)	-0.05	(0.03)	0.94	(0.01)	0.92	(0.01)	-0.02	(0.02)
Poland	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.76	(0.01)	0.79	(0.02)	0.03	(0.02)	0.96	(0.00)	0.95	(0.01)	-0.01	(0.01)
Qatar	0.85	(0.01)	0.82	(0.01)	**-0.03**	(0.01)	0.92	(0.00)	0.85	(0.01)	**-0.07**	(0.01)

Table 4.7a – School-based involvement and school characteristics

	Discuss the child's progress or behaviour with a teacher on the parent's initiative								Discuss the child's progress or behaviour with a teacher on the teacher's initiative							
	Socio-economically disadvantaged schools		Socio-economically advantaged schools		Gross difference (Advantaged - Disadvantaged)		Net difference (Advantaged - Disadvantaged)		Socio-economically disadvantaged schools		Socio-economically advantaged schools		Gross difference (Advantaged - Disadvantaged)		Net difference (Advantaged - Disadvantaged)	
	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Diff.	S.E.
Germany	0.73	(0.02)	0.63	(0.02)	**-0.1**	(0.03)	**-0.13**	(0.03)	0.53	(0.02)	0.24	(0.01)	**-0.3**	(0.03)	**-0.27**	(0.03)
Denmark	0.48	(0.02)	0.39	(0.02)	**-0.09**	(0.03)	-0.03	(0.03)	0.79	(0.01)	0.77	(0.02)	-0.02	(0.02)	**-0.05**	(0.02)
Hong Kong-China	0.39	(0.02)	0.47	(0.02)	**0.08**	(0.02)	-0.02	(0.03)	0.53	(0.01)	0.52	(0.02)	-0.01	(0.02)	**-0.09**	(0.02)
Croatia	0.84	(0.01)	0.81	(0.01)	**-0.03**	(0.01)	**-0.06**	(0.01)	0.39	(0.02)	0.28	(0.01)	**-0.11**	(0.02)	**-0.13**	(0.02)
Hungary	0.6	(0.02)	0.48	(0.02)	**-0.12**	(0.03)	**-0.14**	(0.03)	0.53	(0.02)	0.24	(0.01)	**-0.29**	(0.03)	**-0.24**	(0.03)
Italy	0.6	(0.01)	0.73	(0.01)	**0.13**	(0.02)	**0.05**	(0.02)	0.54	(0.01)	0.37	(0.01)	**-0.17**	(0.02)	**-0.18**	(0.02)
Korea	0.3	(0.01)	0.4	(0.02)	**0.1**	(0.02)	**-0.04**	(0.02)	0.7	(0.01)	0.83	(0.01)	**0.12**	(0.02)	0.03	(0.02)
Lithuania	0.59	(0.01)	0.55	(0.01)	**-0.04**	(0.02)	**-0.09**	(0.02)	0.62	(0.01)	0.44	(0.02)	**-0.18**	(0.02)	**-0.18**	(0.02)
Macao-China	0.29	(0.01)	0.3	(0.01)	0.01	(0.01)	**-0.06**	(0.02)	0.64	(0.01)	0.54	(0.01)	**-0.11**	(0.01)	**-0.13**	(0.01)
New Zealand	0.63	(0.02)	0.62	(0.01)	-0.01	(0.02)	**-0.04**	(0.02)	0.59	(0.02)	0.5	(0.02)	**-0.09**	(0.03)	**-0.1**	(0.02)
Panama	0.75	(0.02)	0.63	(0.02)	**-0.12**	(0.03)	**-0.1**	(0.04)	0.64	(0.03)	0.46	(0.04)	**-0.17**	(0.05)	**-0.14**	(0.05)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.77	(0.01)	0.73	(0.01)	**-0.04**	(0.02)	**-0.09**	(0.02)	0.71	(0.02)	0.54	(0.02)	**-0.17**	(0.03)	**-0.15**	(0.03)
Qatar	0.62	(0.01)	0.67	(0.01)	**0.06**	(0.02)	-0.02	(0.02)	0.5	(0.01)	0.52	(0.01)	0.02	(0.02)	-0.02	(0.02)

	Volunteer in physical activities								Volunteer in extra-curricular activities							
	Socio-economically disadvantaged schools		Socio-economically advantaged schools		Gross difference (Advantaged - Disadvantaged)		Net difference (Advantaged - Disadvantaged)		Socio-economically disadvantaged schools		Socio-economically advantaged schools		Gross difference (Advantaged - Disadvantaged)		Net difference (Advantaged - Disadvantaged)	
	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Diff.	S.E.
Germany	0.06	(0.01)	0.06	(0.01)	-0.01	(0.01)	0	(0.01)	0.18	(0.01)	0.2	(0.02)	0.02	(0.02)	**-0.04**	(0.02)
Denmark	0.05	(0.01)	0.08	(0.02)	0.03	(0.02)	0.03	(0.02)	0.15	(0.01)	0.18	(0.01)	0.03	(0.02)	0	(0.02)
Hong Kong-China	0.05	(0.01)	0.04	(0.00)	**-0.02**	(0.01)	**-0.03**	(0.01)	0.08	(0.01)	0.08	(0.01)	0.01	(0.01)	-0.01	(0.01)
Croatia	0.09	(0.01)	0.06	(0.01)	**-0.03**	(0.01)	**-0.03**	(0.01)	0.16	(0.01)	0.15	(0.01)	-0.01	(0.01)	0	(0.01)
Hungary	0.07	(0.01)	0.05	(0.01)	**-0.02**	(0.01)	-0.01	(0.01)	0.12	(0.01)	0.15	(0.01)	0.03	(0.02)	0.02	(0.02)
Italy	0.09	(0.01)	0.02	(0.00)	**-0.07**	(0.01)	**-0.06**	(0.01)	0.21	(0.01)	0.19	(0.01)	**-0.02**	(0.01)	**-0.04**	(0.01)
Korea	0.19	(0.01)	0.33	(0.02)	**0.14**	(0.02)	**0.07**	(0.03)	0.16	(0.01)	0.2	(0.01)	**0.04**	(0.02)	0.01	(0.02)
Lithuania	0.07	(0.01)	0.05	(0.01)	**-0.02**	(0.01)	**-0.02**	(0.01)	0.17	(0.01)	0.13	(0.01)	**-0.04**	(0.02)	**-0.07**	(0.02)
Macao-China	0.1	(0.01)	0.09	(0.01)	**-0.02**	(0.01)	**-0.02**	(0.01)	0.21	(0.01)	0.21	(0.01)	0	(0.01)	-0.02	(0.02)
New Zealand	0.07	(0.01)	0.1	(0.01)	0.03	(0.02)	0.02	(0.02)	0.3	(0.02)	0.4	(0.02)	**0.09**	(0.03)	0.01	(0.03)
Panama	0.31	(0.03)	0.12	(0.03)	**-0.19**	(0.05)	**-0.21**	(0.04)	0.27	(0.02)	0.18	(0.02)	**-0.09**	(0.03)	**-0.15**	(0.04)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.04	(0.01)	0.03	(0.00)	**-0.02**	(0.01)	-0.01	(0.01)	0.08	(0.01)	0.06	(0.01)	**-0.02**	(0.01)	**-0.03**	(0.01)
Qatar	0.12	(0.01)	0.07	(0.01)	**-0.05**	(0.01)	**-0.07**	(0.01)	0.23	(0.01)	0.16	(0.01)	**-0.07**	(0.01)	**-0.11**	(0.01)

	Volunteer in the school library or media centre								Assist a teacher in the school							
	Socio-economically disadvantaged schools		Socio-economically advantaged schools		Gross difference (Advantaged - Disadvantaged)		Net difference (Advantaged - Disadvantaged)		Socio-economically disadvantaged schools		Socio-economically advantaged schools		Gross difference (Advantaged - Disadvantaged)		Net difference (Advantaged - Disadvantaged)	
	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Diff.	S.E.
Germany	0.03	(0.01)	0.02	(0.00)	-0.01	(0.01)	0	(0.01)	0.14	(0.01)	0.13	(0.01)	0	(0.02)	-0.03	(0.02)
Denmark	0	(0.00)	0	(0.00)	**0**	(0.00)	0	(0.01)	0.08	(0.01)	0.09	(0.01)	0.01	(0.01)	-0.01	(0.02)
Hong Kong-China	0.03	(0.01)	0.02	(0.00)	-0.01	(0.01)	-0.01	(0.02)	0.09	(0.01)	0.05	(0.01)	**-0.04**	(0.01)	**-0.05**	(0.01)
Croatia	0.04	(0.01)	0.01	(0.00)	**-0.02**	(0.01)	0.01	(0.01)	m	m	m	m	m	m	m	m
Hungary	0.04	(0.01)	0.01	(0.00)	**-0.03**	(0.01)	-0.01	(0.01)	0.17	(0.02)	0.11	(0.01)	**-0.06**	(0.02)	-0.03	(0.02)
Italy	0.1	(0.00)	0.05	(0.00)	**-0.06**	(0.01)	0.01	(0.01)	m	m	m	m	m	m	m	m
Korea	0.09	(0.01)	0.13	(0.01)	**0.04**	(0.01)	0.01	(0.01)	0.06	(0.01)	0.12	(0.01)	**0.06**	(0.01)	**0.02**	(0.01)
Lithuania	0.01	(0.00)	0	(0.00)	**-0.01**	(0.00)	-0.01	(0.01)	m	m	m	m	m	m	m	m
Macao-China	0.06	(0.01)	0.05	(0.00)	**-0.02**	(0.01)	0.01	(0.01)	0.19	(0.01)	0.15	(0.01)	**-0.03**	(0.01)	**-0.05**	(0.01)
New Zealand	0.03	(0.01)	0.02	(0.00)	-0.01	(0.01)	-0.03	(0.02)	0.11	(0.01)	0.1	(0.01)	-0.01	(0.02)	-0.03	(0.02)
Panama	0.15	(0.02)	0.04	(0.01)	**-0.11**	(0.02)	**-0.11**	(0.02)	0.32	(0.03)	0.16	(0.02)	**-0.16**	(0.04)	**-0.11**	(0.04)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.03	(0.00)	0.02	(0.00)	-0.01	(0.01)	**-0.02**	(0.01)	0.08	(0.01)	0.08	(0.01)	-0.01	(0.01)	**-0.03**	(0.01)
Qatar	0.16	(0.01)	0.05	(0.00)	**-0.11**	(0.01)	**-0.13**	(0.02)	0.35	(0.01)	0.2	(0.01)	**-0.15**	(0.01)	**-0.17**	(0.02)

	Appear as a guest speaker								Participate in local school government							
	Socio-economically disadvantaged schools		Socio-economically advantaged schools		Gross difference (Advantaged - Disadvantaged)		Net difference (Advantaged - Disadvantaged)		Socio-economically disadvantaged schools		Socio-economically advantaged schools		Gross difference (Advantaged - Disadvantaged)		Net difference (Advantaged - Disadvantaged)	
	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Diff.	S.E.
Germany	0.02	(0.01)	0.02	(0.00)	-0.01	(0.01)	-0.01	(0.01)	0.18	0.01	0.17	0.01	-0.01	0.02	**-0.08**	(0.02)
Denmark	0.02	(0.00)	0.02	(0.00)	0	(0.01)	-0.01	(0.01)	0.21	0.02	0.2	0.02	0	0.02	-0.02	(0.02)
Hong Kong-China	0.03	(0.00)	0.03	(0.01)	-0.01	(0.01)	-0.01	(0.01)	0.06	0.01	0.05	0.01	-0.01	0.01	**-0.03**	(0.01)
Croatia	0.02	(0.00)	0.03	(0.01)	0	(0.01)	0	(0.01)	0.11	0.01	0.12	0.01	0.01	0.01	-0.03	(0.02)
Hungary	0.02	(0.01)	0.02	(0.00)	0	(0.01)	0	(0.01)	0.04	0.01	0.05	0.01	0	0.01	0	(0.01)
Italy	0.11	(0.01)	0.04	(0.00)	**-0.07**	(0.01)	**-0.06**	(0.01)	0.18	0.01	0.15	0.01	**-0.03**	0.01	**-0.07**	(0.01)
Korea	0.03	(0.00)	0.03	(0.01)	0	(0.01)	**-0.02**	(0.01)	0.14	0.01	0.21	0.01	**0.07**	0.02	0	(0.02)
Lithuania	0.06	(0.01)	0.02	(0.00)	**-0.03**	(0.01)	**-0.02**	(0.01)	0.16	0.01	0.14	0.01	**-0.02**	0.01	**-0.05**	(0.02)
Macao-China	0.04	(0.00)	0.03	(0.00)	-0.01	(0.01)	**-0.02**	(0.01)	0.22	0.01	0.19	0.01	**-0.04**	0.01	**-0.06**	(0.01)
New Zealand	0.03	(0.01)	0.01	(0.00)	-0.01	(0.01)	**-0.03**	(0.01)	0.08	0.01	0.08	0.01	0	0.01	-0.02	(0.02)
Panama	0.13	(0.02)	0.05	(0.01)	**-0.08**	(0.02)	**-0.07**	(0.02)	0.4	0.03	0.19	0.02	**-0.22**	0.03	**-0.2**	(0.04)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.04	(0.00)	0.04	(0.01)	0	(0.01)	**-0.02**	(0.01)	0.22	0.01	0.16	0.01	**-0.06**	0.01	**-0.08**	(0.02)
Qatar	0.16	(0.01)	0.08	(0.01)	**-0.08**	(0.01)	**-0.09**	(0.01)	0.19	0.01	0.08	0.01	**-0.1**	0.01	**-0.11**	(0.01)

Note: Socio-economically disadvantaged schools are schools that are among the bottom third with respect to average ESCS. Socio-economically advantaged schools are schools that are among the top third with respect to average ESCS. Difference: the net difference represents the difference in involvement between socio-economically advantaged and socio-economically disadvantaged schools, while controlling for individual level ESCS.

Table 4.7b – School-based involvement and school characteristics

	Discuss political or social issues								Discuss books, films or television programmes							
	Socio-economically disadvantaged schools		Socio-economically advantaged schools		Gross difference (Advantaged - Disadvantaged)		Net difference (Advantaged - Disadvantaged)		Socio-economically disadvantaged schools		Socio-economically advantaged schools		Gross difference (Advantaged - Disadvantaged)		Net difference (Advantaged - Disadvantaged)	
	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Diff.	S.E.
Germany	0.49	(0.02)	0.72	(0.01)	**0.23**	(0.02)	**0.13**	(0.03)	0.7	(0.02)	0.79	(0.01)	**0.09**	(0.02)	**0.04**	(0.02)
Denmark	0.66	(0.01)	0.76	(0.01)	**0.1**	(0.02)	**0.04**	(0.02)	0.82	(0.01)	0.86	(0.01)	**0.04**	(0.02)	0.01	(0.02)
Hong Kong-China	0.49	(0.01)	0.63	(0.02)	**0.13**	(0.02)	**0.05**	(0.02)	0.59	(0.01)	0.69	(0.01)	**0.1**	(0.02)	**0.04**	(0.02)
Croatia	0.33	(0.01)	0.49	(0.02)	**0.15**	(0.02)	**0.06**	(0.02)	0.72	(0.01)	0.8	(0.01)	**0.08**	(0.02)	**0.05**	(0.02)
Hungary	0.46	(0.02)	0.62	(0.02)	**0.16**	(0.02)	**0.06**	(0.03)	0.88	(0.01)	0.9	(0.01)	0.01	(0.02)	0.02	(0.02)
Italy	0.52	(0.01)	0.77	(0.01)	**0.25**	(0.01)	**0.14**	(0.01)	0.8	(0.01)	0.87	(0.01)	**0.08**	(0.01)	**0.05**	(0.01)
Korea	0.13	(0.01)	0.23	(0.01)	**0.09**	(0.02)	**0.05**	(0.02)	0.33	(0.01)	0.38	(0.01)	**0.05**	(0.02)	0.02	(0.02)
Lithuania	0.44	(0.01)	0.57	(0.01)	**0.13**	(0.02)	**0.05**	(0.02)	0.77	(0.01)	0.8	(0.01)	**0.03**	(0.01)	0	(0.02)
Macao-China	0.25	(0.01)	0.41	(0.01)	**0.15**	(0.01)	**0.09**	(0.01)	0.48	(0.01)	0.6	(0.01)	**0.12**	(0.01)	**0.07**	(0.02)
New Zealand	0.66	(0.02)	0.72	(0.02)	**0.07**	(0.02)	-0.02	(0.02)	0.84	(0.01)	0.85	(0.01)	0.01	(0.02)	-0.03	(0.02)
Panama	0.4	(0.02)	0.54	(0.04)	**0.15**	(0.04)	0.06	(0.04)	0.59	(0.03)	0.69	(0.04)	0.09	(0.05)	0.09	(0.05)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.43	(0.02)	0.67	(0.01)	**0.24**	(0.02)	**0.1**	(0.02)	0.74	(0.01)	0.86	(0.01)	**0.12**	(0.01)	**0.05**	(0.02)
Qatar	0.45	(0.01)	0.63	(0.01)	**0.18**	(0.02)	**0.12**	(0.02)	0.55	(0.01)	0.69	(0.01)	**0.14**	(0.02)	**0.1**	(0.02)

	Eat the main meal with the child around a table								Spend time just talking with the child							
	Socio-economically disadvantaged schools		Socio-economically advantaged schools		Gross difference (Advantaged - Disadvantaged)		Net difference (Advantaged - Disadvantaged)		Socio-economically disadvantaged schools		Socio-economically advantaged schools		Gross difference (Advantaged - Disadvantaged)		Net difference (Advantaged - Disadvantaged)	
	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Diff.	S.E.
Germany	0.95	(0.01)	0.98	(0.01)	**0.03**	(0.01)	**0.02**	(0.01)	0.97	(0.01)	1	(0.00)	**0.03**	(0.01)	0.01	(0.01)
Denmark	0.99	(0.00)	0.99	(0.00)	**0**	(0.00)	0	(0.01)	0.99	(0.00)	0.99	(0.00)	**0.01**	(0.00)	**0**	(0.00)
Hong Kong-China	0.95	(0.01)	0.98	(0.00)	**0.04**	(0.01)	**0.03**	(0.01)	0.87	(0.01)	0.94	(0.01)	**0.08**	(0.01)	**0.04**	(0.01)
Croatia	0.94	(0.00)	0.94	(0.01)	0	(0.01)	0.01	(0.01)	0.91	(0.01)	0.94	(0.01)	**0.02**	(0.01)	0.01	(0.01)
Hungary	0.95	(0.01)	0.96	(0.01)	0.01	(0.01)	0.01	(0.01)	0.95	(0.01)	0.98	(0.00)	**0.03**	(0.01)	**0.02**	(0.01)
Italy	0.98	(0.00)	0.99	(0.00)	**0.01**	(0.00)	**0**	(0.00)	0.91	(0.00)	0.94	(0.00)	**0.04**	(0.01)	0.01	(0.01)
Korea	0.9	(0.01)	0.94	(0.01)	**0.04**	(0.02)	0.03	(0.02)	0.75	(0.02)	0.85	(0.01)	**0.1**	(0.02)	**0.06**	(0.03)
Lithuania	0.93	(0.01)	0.95	(0.01)	**0.02**	(0.01)	0	(0.01)	0.9	(0.01)	0.94	(0.01)	**0.05**	(0.01)	**0.02**	(0.01)
Macao-China	0.91	(0.01)	0.94	(0.01)	**0.02**	(0.01)	0.01	(0.01)	0.6	(0.01)	0.76	(0.01)	**0.16**	(0.01)	**0.08**	(0.02)
New Zealand	0.85	(0.01)	0.86	(0.01)	0.01	(0.02)	-0.03	(0.02)	0.96	(0.01)	0.97	(0.00)	0.01	(0.01)	**-0.02**	(0.01)
Panama	0.84	(0.01)	0.84	(0.01)	-0.01	(0.02)	-0.02	(0.03)	0.8	(0.02)	0.88	(0.02)	**0.07**	(0.03)	0.03	(0.04)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.98	(0.00)	0.98	(0.00)	0.01	(0.01)	0	(0.01)	0.91	(0.01)	0.94	(0.01)	**0.02**	(0.01)	0	(0.01)
Qatar	0.9	(0.01)	0.95	(0.01)	**0.05**	(0.01)	**0.04**	(0.01)	0.81	(0.01)	0.92	(0.01)	**0.11**	(0.01)	**0.07**	(0.01)

	Go to a bookstore or library with the child								Talk with the child about what he/she is reading on his/her own							
	Socio-economically disadvantaged schools		Socio-economically advantaged schools		Gross difference (Advantaged - Disadvantaged)		Net difference (Advantaged - Disadvantaged)		Socio-economically disadvantaged schools		Socio-economically advantaged schools		Gross difference (Advantaged - Disadvantaged)		Net difference (Advantaged - Disadvantaged)	
	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Diff.	S.E.
Germany	0.07	(0.01)	0.07	(0.01)	0	(0.01)	0	(0.01)	0.73	(0.02)	0.63	(0.02)	**0.08**	(0.02)	**-0.13**	(0.03)
Denmark	0.03	(0.01)	0.03	(0.01)	0	(0.01)	0	(0.01)	0.48	(0.02)	0.39	(0.02)	**0.04**	(0.02)	-0.03	(0.03)
Hong Kong-China	0.14	(0.01)	0.16	(0.01)	**0.02**	(0.01)	-0.01	(0.02)	0.39	(0.02)	0.47	(0.02)	**0.05**	(0.02)	-0.02	(0.03)
Croatia	0.05	(0.01)	0.07	(0.01)	0.01	(0.01)	0.01	(0.01)	0.84	(0.01)	0.81	(0.01)	0.02	(0.02)	**-0.06**	(0.01)
Hungary	0.08	(0.01)	0.07	(0.01)	-0.01	(0.01)	-0.01	(0.01)	0.6	(0.02)	0.48	(0.02)	-0.02	(0.02)	**-0.14**	(0.03)
Italy	0.08	(0.00)	0.1	(0.00)	**0.02**	(0.01)	0.01	(0.01)	0.6	(0.01)	0.73	(0.01)	**0.13**	(0.01)	**0.05**	(0.02)
Korea	0.08	(0.01)	0.11	(0.01)	**0.04**	(0.01)	0.01	(0.01)	0.3	(0.01)	0.4	(0.02)	**0.06**	(0.01)	**-0.04**	(0.02)
Lithuania	0.09	(0.01)	0.08	(0.01)	-0.01	(0.01)	-0.01	(0.01)	0.59	(0.01)	0.55	(0.01)	-0.03	(0.02)	**-0.09**	(0.02)
Macao-China	0.07	(0.01)	0.11	(0.01)	**0.04**	(0.01)	0.01	(0.01)	0.29	(0.01)	0.3	(0.01)	**0.06**	(0.01)	**-0.06**	(0.02)
New Zealand	0.17	(0.01)	0.14	(0.01)	-0.03	(0.02)	-0.03	(0.02)	0.63	(0.02)	0.62	(0.01)	0.01	(0.03)	**-0.04**	(0.02)
Panama	0.21	(0.02)	0.13	(0.02)	**-0.08**	(0.03)	**-0.11**	(0.02)	0.75	(0.02)	0.63	(0.02)	-0.07	(0.04)	**-0.1**	(0.04)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.12	(0.01)	0.13	(0.01)	0.01	(0.01)	**-0.02**	(0.01)	0.77	(0.01)	0.73	(0.01)	0.03	(0.02)	**-0.09**	(0.02)
Qatar	0.33	(0.01)	0.23	(0.01)	**-0.1**	(0.02)	**-0.13**	(0.02)	0.62	(0.01)	0.67	(0.01)	**-0.05**	(0.02)	-0.02	(0.02)

	Help the child with his/her homework								Discuss how well the child is doing at school							
	Socio-economically disadvantaged schools		Socio-economically advantaged schools		Gross difference (Advantaged - Disadvantaged)		Net difference (Advantaged - Disadvantaged)		Socio-economically disadvantaged schools		Socio-economically advantaged schools		Gross difference (Advantaged - Disadvantaged)		Net difference (Advantaged - Disadvantaged)	
	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Diff.	S.E.
Germany	0.47	(0.02)	0.24	(0.02)	**-0.23**	0.02	**-0.26**	(0.03)	0.85	(0.01)	0.85	(0.01)	0	(0.02)	-0.01	(0.02)
Denmark	0.47	(0.02)	0.56	(0.02)	**0.09**	0.03	**0.08**	(0.02)	0.94	(0.01)	0.95	(0.01)	0.01	(0.01)	0.01	(0.01)
Hong Kong-China	0.27	(0.01)	0.28	(0.01)	0.01	0.01	**-0.06**	(0.02)	0.6	(0.01)	0.78	(0.02)	**0.18**	(0.02)	**0.08**	(0.02)
Croatia	0.33	(0.02)	0.23	(0.01)	**-0.11**	0.02	**-0.13**	(0.02)	0.95	(0.01)	0.97	(0.00)	**0.02**	(0.01)	0.01	(0.01)
Hungary	0.56	(0.02)	0.36	(0.01)	**-0.2**	0.02	**-0.2**	(0.03)	0.97	(0.00)	0.98	(0.00)	0.01	(0.01)	0.01	(0.01)
Italy	0.36	(0.01)	0.35	(0.01)	-0.01	0.01	**-0.12**	(0.01)	0.95	(0.00)	0.98	(0.00)	**0.03**	(0.00)	**0.01**	(0.00)
Korea	0.15	(0.01)	0.14	(0.01)	-0.01	0.01	**-0.04**	(0.01)	0.61	(0.02)	0.73	(0.01)	**0.12**	(0.02)	**0.05**	(0.02)
Lithuania	0.5	(0.02)	0.36	(0.01)	**-0.14**	0.02	**-0.14**	(0.03)	0.94	(0.01)	0.97	(0.00)	**0.03**	(0.01)	0	(0.01)
Macao-China	0.3	(0.01)	0.32	(0.01)	**0.02**	0.01	-0.02	(0.02)	0.55	(0.01)	0.68	(0.01)	**0.13**	(0.02)	**0.05**	(0.02)
New Zealand	0.51	(0.02)	0.47	(0.01)	**-0.04**	0.02	**-0.08**	(0.02)	0.89	(0.01)	0.88	(0.01)	-0.01	(0.01)	**-0.04**	(0.02)
Panama	0.75	(0.02)	0.64	(0.02)	**-0.1**	0.03	-0.03	(0.04)	0.79	(0.02)	0.82	(0.03)	0.03	(0.04)	0.04	(0.05)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.43	(0.01)	0.39	(0.01)	**-0.05**	0.02	**-0.08**	(0.02)	0.92	(0.01)	0.94	(0.01)	**0.02**	(0.01)	0	(0.01)
Qatar	0.54	(0.01)	0.51	(0.01)	-0.03	0.02	**-0.08**	(0.02)	0.74	(0.01)	0.85	(0.01)	**0.11**	(0.02)	**0.05**	(0.02)

Note: Socio-economically disadvantaged schools are schools that are among the bottom third with respect to average ESCS. Socio-economically advantaged schools are schools that are among the top third with respect to average ESCS. Difference: the net difference represents the difference in involvement between socio-economically advantaged and socio-economically disadvantaged schools, while controlling for individual level ESCS.

Table 4.7c – Home-based involvement and selected school characteristics

	Discuss political or social issues								Discuss books, films or television programmes							
	Low level of school pressure from parents		High level of school pressure from parents		Difference		Difference accounting for individual and school socio-economic background		Low level of school pressure from parents		High level of school pressure from parents		Difference		Difference accounting for individual and school socio-economic background	
	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Diff.	S.E.
Germany	0.62	(0.01)	0.63	(0.08)	0.01	(0.08)	-0.01	(0.05)	0.74	(0.01)	0.79	(0.04)	0.05	(0.04)	0.05	(0.04)
Denmark	0.68	(0.01)	0.77	(0.01)	**0.08**	(0.02)	0.03	(0.02)	0.81	(0.01)	0.85	(0.01)	**0.04**	(0.02)	0.03	(0.02)
Hong Kong-China	0.55	(0.01)	c	c	c	c	c	c	0.64	(0.01)	c	c	c	c	c	c
Croatia	0.4	(0.01)	0.46	(0.04)	0.06	(0.04)	0.01	(0.03)	0.76	(0.01)	0.8	(0.03)	0.04	(0.03)	0.01	(0.03)
Hungary	0.51	(0.01)	0.63	(0.02)	**0.11**	(0.03)	0.04	(0.03)	0.88	(0.01)	0.88	(0.01)	-0.01	(0.01)	-0.01	(0.02)
Italy	0.64	(0.01)	0.74	(0.01)	**0.11**	(0.01)	0.01	(0.01)	0.83	(0.00)	0.87	(0.01)	**0.05**	(0.01)	**0.02**	(0.01)
Korea	0.18	(0.01)	0.23	(0.02)	**0.06**	(0.02)	0.03	(0.02)	0.36	(0.01)	0.38	(0.02)	0.03	(0.02)	0.01	(0.02)
Lithuania	0.51	(0.01)	0.49	(0.04)	-0.02	(0.04)	-0.03	(0.03)	0.78	(0.01)	0.78	(0.02)	0	(0.02)	0	(0.02)
Macao-China	0.32	(0.01)	c	c	c	c	c	c	0.53	(0.01)	c	c	c	c	c	c
New Zealand	0.66	(0.01)	0.7	(0.01)	**0.04**	(0.02)	0.01	(0.02)	0.84	(0.01)	0.84	(0.01)	0.01	(0.01)	0	(0.01)
Panama	0.44	(0.02)	0.53	(0.04)	**0.08**	(0.04)	-0.01	(0.04)	0.65	(0.03)	0.7	(0.02)	0.05	(0.03)	-0.02	(0.03)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.54	(0.01)	0.67	(0.03)	**0.13**	(0.03)	0.01	(0.03)	0.8	(0.01)	0.84	(0.02)	**0.04**	(0.02)	-0.02	(0.02)
Qatar	0.51	(0.01)	0.54	(0.01)	**0.03**	(0.01)	0.01	(0.01)	0.59	(0.01)	0.64	(0.01)	**0.05**	(0.01)	**0.03**	(0.01)

	Discuss political or social issues								Discuss books, films or television programmes							
	Parents' endorsement of the instructional or religious philosophy of the school is not considered in admission		Parents' endorsement of the instructional or religious philosophy of the school is considered in admission		Difference		Difference accounting for individual and school socio-economic background		Parents' endorsement of the instructional or religious philosophy of the school is not considered in admission		Parents' endorsement of the instructional or religious philosophy of the school is considered in admission		Difference		Difference accounting for individual and school socio-economic background	
	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Diff.	S.E.
Germany	0.61	(0.01)	0.69	(0.04)	0.07	(0.04)	0.04	(0.04)	0.74	(0.01)	0.83	(0.03)	**0.09**	(0.03)	0.07	(0.04)
Denmark	0.7	(0.01)	0.71	(0.03)	0.01	(0.03)	-0.01	(0.03)	0.82	(0.01)	0.8	(0.02)	-0.02	(0.02)	-0.03	(0.02)
Hong Kong-China	0.55	(0.01)	0.54	(0.02)	-0.01	(0.02)	-0.01	(0.02)	0.65	(0.01)	0.63	(0.01)	**-0.02**	(0.01)	**-0.02**	(0.01)
Croatia	0.4	(0.01)	0.43	(0.03)	0.02	(0.03)	-0.03	(0.03)	0.76	(0.01)	0.76	(0.02)	-0.01	(0.02)	-0.03	(0.02)
Hungary	0.54	(0.01)	0.53	(0.02)	-0.01	(0.03)	-0.02	(0.03)	0.89	(0.01)	0.86	(0.02)	-0.03	(0.02)	-0.03	(0.02)
Italy	0.65	(0.01)	0.66	(0.01)	0.01	(0.01)	0	(0.01)	0.84	(0.00)	0.84	(0.01)	0	(0.01)	0	(0.01)
Korea	0.18	(0.01)	0.15	(0.02)	-0.04	(0.03)	-0.01	(0.02)	0.36	(0.01)	0.36	(0.04)	0	(0.04)	0.01	(0.04)
Lithuania	0.52	(0.01)	0.49	(0.02)	-0.03	(0.02)	-0.02	(0.02)	0.78	(0.01)	0.78	(0.01)	0	(0.01)	0	(0.01)
Macao-China	0.32	(0.01)	0.32	(0.02)	0.01	(0.02)	-0.02	(0.02)	0.53	(0.01)	0.54	(0.02)	0.01	(0.03)	-0.01	(0.03)
New Zealand	0.67	(0.01)	0.71	(0.02)	0.04	(0.03)	0.02	(0.03)	0.84	(0.01)	0.84	(0.01)	0	(0.01)	-0.01	(0.02)
Panama	0.44	(0.02)	0.55	(0.03)	**0.11**	(0.03)	0	(0.05)	0.66	(0.03)	0.68	(0.02)	0.02	(0.03)	**-0.06**	(0.03)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.53	(0.01)	0.62	(0.02)	**0.09**	(0.02)	0.02	(0.02)	0.8	(0.01)	0.84	(0.01)	**0.04**	(0.01)	**0.02**	(0.01)
Qatar	0.52	(0.01)	0.53	(0.01)	0.01	(0.01)	0	(0.01)	0.62	(0.01)	0.6	(0.01)	**-0.02**	(0.01)	**-0.02**	(0.01)

	Discuss political or social issues								Discuss books, films or television programmes							
	Parents groups never or sometimes have a direct influence on decision making about instructional content		Parents groups always have a direct influence on decision making about instructional content		Difference		Difference accounting for individual and school socio-economic background		Parents groups never or sometimes have a direct influence on decision making about instructional content		Parents groups always have a direct influence on decision making about instructional content		Difference		Difference accounting for individual and school socio-economic background	
	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Diff.	S.E.	Mean	S.E.	Mean	S.E.	Diff.	S.E.	Diff.	S.E.
Germany	0.6	(0.03)	0.62	(0.01)	0.01	(0.03)	0	(0.02)	0.74	(0.02)	0.74	(0.01)	0.01	(0.02)	0	(0.02)
Denmark	0.71	(0.02)	0.7	(0.01)	-0.01	(0.02)	-0.02	(0.02)	0.84	(0.02)	0.82	(0.01)	-0.03	(0.02)	-0.03	(0.02)
Hong Kong-China	0.57	(0.02)	0.55	(0.01)	-0.02	(0.02)	-0.03	(0.02)	0.62	(0.01)	0.65	(0.01)	0.02	(0.02)	**0.02**	(0.01)
Croatia	0.41	(0.02)	0.4	(0.01)	0	(0.02)	0.01	(0.02)	0.76	(0.01)	0.76	(0.01)	0	(0.02)	0	(0.02)
Hungary	0.53	(0.03)	0.54	(0.01)	0.01	(0.03)	-0.01	(0.03)	0.88	(0.02)	0.88	(0.01)	0	(0.02)	0	(0.02)
Italy	0.65	(0.01)	0.65	(0.01)	0	(0.02)	-0.01	(0.01)	0.85	(0.01)	0.83	(0.00)	-0.01	(0.01)	**-0.02**	(0.01)
Korea	0.19	(0.02)	0.18	(0.01)	0	(0.02)	0	(0.01)	0.36	(0.01)	0.36	(0.01)	0	(0.02)	0	(0.02)
Lithuania	0.51	(0.01)	0.51	(0.01)	-0.01	(0.02)	-0.01	(0.02)	0.77	(0.01)	0.79	(0.01)	**0.02**	(0.01)	**0.02**	(0.01)
Macao-China	0.3	(0.01)	0.33	(0.01)	**0.02**	(0.01)	**0.02**	(0.01)	0.52	(0.01)	0.53	(0.01)	0.01	(0.01)	0.01	(0.01)
New Zealand	0.68	(0.02)	0.68	(0.01)	0	(0.02)	0	(0.02)	0.85	(0.01)	0.84	(0.01)	-0.01	(0.02)	-0.01	(0.02)
Panama	0.54	(0.03)	0.45	(0.02)	**-0.08**	(0.04)	-0.04	(0.04)	0.77	(0.03)	0.65	(0.02)	**-0.12**	(0.04)	**-0.08**	(0.04)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	c	c	0.55	(0.01)	c	c	c	c	c	c	0.8	(0.01)	c	c	c	c
Qatar	0.5	(0.01)	0.53	(0.01)	**0.04**	(0.01)	**0.02**	(0.01)	0.56	(0.01)	0.63	(0.01)	**0.06**	(0.02)	**0.05**	(0.02)

Note: Schools facing high level of pressure from parents are schools where the school principal reported that "There is constant pressure from many parents, who expect our school to set very high academic standards and to have our students achieve them". Schools facing low level of pressure from parents are schools where the school principal either reported that "Pressure on the school to achieve higher academic standards among students comes from a minority of parents" or reported that "Pressure from parents on the school to achieve higher academic standards among students is largely absent".

Table 5.1a – The relationship between socio-economic background, parental involvement and reading performance

	Early childhood involvement						Home-based involvement						Implicit involvement					
	Read books to the child						Discussed political or social issues						Parent spends time reading at home for enjoyment					
	Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students		Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students *after* accounting for composition of parental involvement		Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students *after* accounting for composition and differential strength of parental involvement		Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students		Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students *after* accounting for composition of parental involvement		Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students *after* accounting for composition and differential strength of parental involvement		Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students		Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students *after* accounting for composition of parental involvement		Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students *after* accounting for composition and differential strength of parental involvement	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**76.63**	(5.35)	**72.47**	(5.35)	**67.65**	(14.80)	**75.84**	(5.43)	**71.66**	(5.22)	**70.77**	(7.00)	**74.92**	(5.38)	**71.00**	(5.38)	**70.13**	(6.55)
Denmark	**62.80**	(3.36)	**61.56**	(3.39)	**46.81**	(13.03)	**62.63**	(3.27)	**59.77**	(3.16)	**57.60**	(6.19)	**62.63**	(3.21)	**61.91**	(3.23)	**58.88**	(5.21)
Hong Kong-China	**39.82**	(4.74)	**37.90**	(4.61)	**32.84**	(5.38)	**40.00**	(4.74)	**38.32**	(4.74)	**37.99**	(5.32)	**40.05**	(4.73)	**37.19**	(4.87)	**36.04**	(4.88)
Croatia	**59.44**	(4.69)	**59.39**	(4.67)	**56.42**	(7.25)	**59.67**	(4.69)	**55.29**	(4.66)	**50.70**	(5.33)	**59.50**	(4.66)	**56.05**	(4.60)	**52.33**	(5.53)
Hungary	**94.35**	(5.79)	**92.81**	(5.85)	**86.99**	(10.65)	**95.31**	(5.90)	**92.09**	(5.78)	**86.93**	(7.00)	**96.24**	(5.83)	**90.47**	(5.48)	**90.04**	(7.24)
Italy	**67.38**	(2.83)	**65.67**	(2.79)	**55.59**	(3.85)	**66.98**	(2.86)	**60.39**	(2.93)	**63.81**	(4.10)	**67.44**	(2.87)	**61.89**	(2.83)	**58.10**	(3.00)
Korea	**55.15**	(4.67)	**51.00**	(4.60)	**48.09**	(5.20)	**54.68**	(4.65)	**53.06**	(4.63)	**53.14**	(5.04)	**55.17**	(4.69)	**55.24**	(4.75)	**52.29**	(5.02)
Lithuania	**73.15**	(4.16)	**73.16**	(4.19)	**67.37**	(9.00)	**72.40**	(4.16)	**69.05**	(4.30)	**65.41**	(4.91)	**73.45**	(4.18)	**70.35**	(4.34)	**67.14**	(5.22)
Macao-China	**21.38**	(2.95)	**20.80**	(3.01)	**11.64**	(4.27)	**21.66**	(2.99)	**19.97**	(3.03)	**18.38**	(3.53)	**21.19**	(2.96)	**19.43**	(3.14)	**14.73**	(3.50)
New Zealand	**77.87**	(4.29)	**76.10**	(4.29)	**55.37**	(20.55)	**77.29**	(4.29)	**73.02**	(4.16)	**66.40**	(6.59)	**78.13**	(4.22)	**75.09**	(4.27)	**75.92**	(5.12)
Panama	**88.17**	(11.27)	**87.72**	(11.30)	**97.12**	(22.77)	**86.84**	(11.33)	**81.34**	(11.10)	**69.85**	(11.50)	**85.60**	(11.25)	**81.96**	(11.23)	**67.59**	(11.48)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	**74.42**	(5.02)	**72.60**	(4.99)	**55.34**	(7.58)	**74.62**	(5.08)	**66.84**	(4.83)	**62.85**	(6.09)	**74.47**	(4.98)	**68.02**	(5.05)	**67.63**	(5.35)
Qatar	**63.74**	(3.17)	**62.07**	(3.21)	**46.34**	(5.78)	**64.84**	(3.17)	**61.54**	(3.30)	**57.61**	(5.18)	**63.98**	(3.12)	**60.04**	(3.15)	**52.72**	(4.06)

Note: All models control for ESCS and immigration background, and are restricted to students with valid answers in the respective forms of parental involvement.

Table 5.1b – The relationship between socio-economic background, parental involvement and students' enjoyment of reading

	Early childhood involvement						Home-based involvement						Implicit involvement					
	Read books to the child						Discussed political or social issues						Parent spends time reading at home for enjoyment					
	Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students		Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students *after* accounting for composition of parental involvement		Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students *after* accounting for composition and differential strength of parental involvement		Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students		Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students *after* accounting for composition of parental involvement		Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students *after* accounting for composition and differential strength of parental involvement		Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students		Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students *after* accounting for composition of parental involvement		Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students *after* accounting for composition and differential strength of parental involvement	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**0.65**	(0.05)	**0.62**	(0.06)	**0.30**	0.13	**0.66**	0.06	**0.59**	0.06	**0.55**	0.08	**0.63**	0.05	**0.58**	0.06	**0.61**	0.08
Denmark	**0.52**	(0.04)	**0.50**	(0.04)	0.25	0.13	**0.51**	0.04	**0.48**	0.04	**0.38**	0.08	**0.51**	0.04	**0.48**	0.04	**0.45**	0.05
Hong Kong-China	**0.29**	(0.03)	**0.25**	(0.03)	**0.22**	0.04	**0.29**	0.03	**0.27**	0.03	**0.28**	0.04	**0.29**	0.03	**0.24**	0.03	**0.23**	0.03
Croatia	**0.28**	(0.04)	**0.27**	(0.03)	**0.35**	0.06	**0.28**	0.03	**0.25**	0.03	**0.21**	0.05	**0.28**	0.04	**0.24**	0.04	**0.20**	0.04
Hungary	**0.50**	(0.04)	**0.47**	(0.04)	**0.26**	0.11	**0.49**	0.04	**0.45**	0.05	**0.34**	0.05	**0.50**	0.04	**0.44**	0.04	**0.37**	0.06
Italy	**0.41**	(0.02)	**0.38**	(0.02)	**0.30**	0.03	**0.40**	0.02	**0.35**	0.02	**0.29**	0.03	**0.40**	0.02	**0.34**	0.02	**0.32**	0.02
Korea	**0.34**	(0.03)	**0.29**	(0.03)	**0.19**	0.05	**0.34**	0.03	**0.31**	0.03	**0.32**	0.04	**0.34**	0.03	**0.32**	0.03	**0.32**	0.04
Lithuania	**0.40**	(0.04)	**0.40**	(0.04)	**0.40**	0.1	**0.39**	0.04	**0.34**	0.04	**0.31**	0.05	**0.40**	0.04	**0.34**	0.04	**0.30**	0.05
Macao-China	**0.26**	(0.02)	**0.26**	(0.02)	**0.24**	0.04	**0.26**	0.02	**0.24**	0.02	**0.26**	0.03	**0.26**	0.02	**0.25**	0.02	**0.22**	0.03
New Zealand	**0.50**	(0.04)	**0.49**	(0.04)	0.19	0.2	**0.49**	0.04	**0.45**	0.04	**0.42**	0.07	**0.49**	0.05	**0.47**	0.05	**0.44**	0.06
Panama	-0.07	(0.05)	-0.07	(0.05)	-0.18	0.1	-0.08	0.05	**-0.12**	0.05	**-0.14**	0.06	-0.07	0.05	-0.10	0.06	-0.13	0.07
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	**0.31**	(0.04)	**0.25**	(0.04)	**0.13**	0.06	**0.32**	0.04	**0.24**	0.04	**0.25**	0.05	**0.32**	0.04	**0.27**	0.04	**0.26**	0.04
Qatar	**0.13**	(0.02)	**0.11**	(0.02)	0.07	0.05	**0.13**	0.02	**0.10**	0.02	**0.09**	0.04	**0.12**	0.02	**0.09**	0.02	**0.09**	0.03

Note: All models control for ESCS and immigration background, and are restricted to students with valid answers in the respective forms of parental involvement.

Table 5.1c – The relationship between socio-economic background, parental involvement and awareness of effective summarising strategies

	Early childhood involvement						Home-based involvement						Implicit involvement					
	Read books to the child						Discussed political or social issues						Parent spends time reading at home for enjoyment					
	Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students		Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students *after* accounting for composition of parental involvement		Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students *after* accounting for composition and differential strength of parental involvement		Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students		Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students *after* accounting for composition of parental involvement		Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students *after* accounting for composition and differential strength of parental involvement		Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students		Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students *after* accounting for composition of parental involvement		Difference in reading performance between socio-economically advantaged and socio-economically disadvantaged students *after* accounting for composition and differential strength of parental involvement	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**0.34**	(0.05)	**0.32**	(0.05)	0.19	(0.18)	**0.34**	(0.05)	**0.32**	(0.05)	**0.33**	(0.08)	**0.33**	(0.05)	**0.31**	(0.05)	**0.38**	(0.06)
Denmark	**0.39**	(0.04)	**0.38**	(0.04)	**0.38**	(0.15)	**0.38**	(0.04)	**0.34**	(0.05)	**0.32**	(0.08)	**0.38**	(0.04)	**0.38**	(0.04)	**0.38**	(0.06)
Hong Kong-China	**0.22**	(0.04)	**0.20**	(0.04)	0.10	(0.06)	**0.22**	(0.04)	**0.21**	(0.04)	**0.24**	(0.06)	**0.22**	(0.04)	**0.20**	(0.04)	**0.22**	(0.05)
Croatia	**0.35**	(0.04)	**0.35**	(0.04)	**0.28**	(0.08)	**0.35**	(0.04)	**0.32**	(0.05)	**0.28**	(0.06)	**0.35**	(0.04)	**0.32**	(0.05)	**0.34**	(0.05)
Hungary	**0.48**	(0.05)	**0.47**	(0.05)	**0.53**	(0.13)	**0.49**	(0.05)	**0.46**	(0.05)	**0.48**	(0.07)	**0.49**	(0.05)	**0.45**	(0.05)	**0.48**	(0.08)
Italy	**0.31**	(0.02)	**0.30**	(0.02)	**0.24**	(0.03)	**0.31**	(0.02)	**0.28**	(0.02)	**0.29**	(0.04)	**0.31**	(0.02)	**0.27**	(0.02)	**0.27**	(0.03)
Korea	**0.43**	(0.05)	**0.39**	(0.05)	**0.49**	(0.07)	**0.43**	(0.05)	**0.41**	(0.05)	**0.45**	(0.05)	**0.43**	(0.05)	**0.42**	(0.05)	**0.42**	(0.05)
Lithuania	**0.39**	(0.04)	**0.39**	(0.04)	**0.43**	(0.09)	**0.38**	(0.04)	**0.35**	(0.04)	**0.38**	(0.05)	**0.39**	(0.04)	**0.37**	(0.04)	**0.34**	(0.05)
Macao-China	**0.23**	(0.03)	**0.23**	(0.03)	**0.25**	(0.05)	**0.23**	(0.03)	**0.23**	(0.03)	**0.23**	(0.04)	**0.22**	(0.03)	**0.21**	(0.03)	**0.22**	(0.04)
New Zealand	**0.42**	(0.05)	**0.41**	(0.05)	0.06	(0.20)	**0.41**	(0.05)	**0.38**	(0.05)	**0.29**	(0.08)	**0.42**	(0.05)	**0.42**	(0.05)	**0.43**	(0.07)
Panama	**0.53**	(0.08)	**0.53**	(0.08)	**0.58**	(0.13)	**0.52**	(0.08)	**0.47**	(0.08)	**0.38**	(0.09)	**0.52**	(0.08)	**0.48**	(0.08)	**0.43**	(0.09)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	**0.41**	(0.05)	**0.42**	(0.05)	**0.17**	(0.08)	**0.42**	(0.05)	**0.37**	(0.05)	**0.30**	(0.08)	**0.41**	(0.05)	**0.37**	(0.05)	**0.34**	(0.06)
Qatar	**0.28**	(0.03)	**0.28**	(0.03)	**0.24**	(0.06)	**0.29**	(0.03)	**0.29**	(0.03)	**0.26**	(0.05)	**0.29**	(0.03)	**0.28**	(0.03)	**0.23**	(0.04)

Note: All models control for ESCS and immigration background, and are restricted to students with valid answers in the respective forms of parental involvement.

Table 5.2a – The relationship between gender, parental involvement and reading performance

	Early childhood involvement						Home-based involvement						Implicit involvement					
	Read books to the child						Discussed political or social issues						Parent spends time reading at home for enjoyment					
	Difference in reading performance between girls and boys		Difference in reading performance between girls and boys *after* accounting for composition of parental involvement		Difference in reading performance between girls and boys *after* accounting for composition and differential strength of parental involvement		Difference in reading performance between girls and boys		Difference in reading performance between girls and boys *after* accounting for composition of parental involvement		Difference in reading performance between girls and boys *after* accounting for composition and differential strength of parental involvement		Difference in reading performance between girls and boys		Difference in reading performance between girls and boys *after* accounting for composition of parental involvement		Difference in reading performance between girls and boys *after* accounting for composition and differential strength of parental involvement	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**38.76**	(3.62)	**37.77**	(3.62)	**31.11**	(9.46)	**38.10**	(3.65)	**38.60**	(3.67)	**35.46**	(4.87)	**38.78**	(3.58)	**39.05**	(3.55)	**35.24**	(4.37)
Denmark	**32.18**	(3.18)	**32.06**	(3.18)	**33.09**	(11.02)	**31.55**	(3.25)	**31.65**	(3.26)	**43.22**	(4.86)	**32.11**	(3.20)	**32.21**	(3.20)	**34.67**	(4.17)
Hong Kong-China	**31.15**	(3.63)	**31.23**	(3.62)	**29.07**	(4.18)	**31.02**	(3.60)	**30.90**	(3.57)	**28.08**	(4.30)	**31.19**	(3.64)	**31.63**	(3.66)	**30.39**	(3.82)
Croatia	**48.89**	(3.78)	**48.88**	(3.78)	**49.33**	(5.74)	**48.73**	(3.79)	**49.63**	(3.73)	**51.15**	(4.47)	**49.19**	(3.78)	**49.53**	(3.77)	**50.16**	(4.51)
Hungary	**40.16**	(3.17)	**40.00**	(3.14)	**44.62**	(6.67)	**40.56**	(3.25)	**41.57**	(3.19)	**42.65**	(4.39)	**41.09**	(3.23)	**41.14**	(3.21)	**41.34**	(4.23)
Italy	**43.00**	(2.38)	**42.80**	(2.38)	**46.82**	(3.48)	**43.03**	(2.37)	**43.49**	(2.34)	**44.68**	(3.24)	**43.05**	(2.41)	**43.16**	(2.40)	**45.66**	(2.67)
Korea	**32.55**	(4.92)	**32.12**	(4.85)	**33.35**	(6.64)	**32.84**	(4.90)	**32.89**	(4.85)	**33.87**	(5.19)	**32.54**	(4.87)	**32.55**	(4.86)	**33.27**	(5.09)
Lithuania	**59.36**	(2.65)	**59.37**	(2.65)	**74.56**	(6.49)	**59.74**	(2.70)	**59.88**	(2.71)	**60.19**	(3.17)	**59.52**	(2.67)	**59.79**	(2.69)	**61.45**	(3.74)
Macao-China	**33.28**	(1.73)	**33.32**	(1.72)	**35.69**	(3.06)	**33.70**	(1.67)	**33.58**	(1.66)	**32.60**	(2.12)	**33.23**	(1.72)	**33.44**	(1.71)	**32.48**	(2.26)
New Zealand	**41.17**	(3.39)	**40.99**	(3.32)	37.97	(19.71)	**41.41**	(3.40)	**41.71**	(3.40)	**43.64**	(5.24)	**41.59**	(3.38)	**42.37**	(3.37)	**45.17**	(4.77)
Panama	**27.55**	(6.46)	**27.22**	(6.50)	**21.09**	(10.36)	**28.04**	(6.51)	**28.34**	(6.45)	**26.21**	(7.77)	**29.19**	(6.49)	**29.19**	(6.44)	**28.55**	(6.69)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	**37.98**	(2.57)	**37.97**	(2.56)	**38.52**	(3.80)	**37.95**	(2.53)	**38.62**	(2.52)	**43.64**	(3.98)	**37.88**	(2.50)	**37.73**	(2.49)	**42.01**	(2.77)
Qatar	**44.04**	(2.43)	**44.19**	(2.42)	**60.62**	(4.65)	**43.83**	(2.35)	**43.24**	(2.30)	**48.96**	(3.50)	**44.16**	(2.35)	**44.61**	(2.34)	**46.83**	(3.09)

Note: All models control for ESCS and immigration background, and are restricted to students with valid answers in the respective forms of parental involvement.

Table 5.2b – The relationship between gender, parental involvement and students' enjoyment of reading

	Early childhood involvement						Home-based involvement						Implicit involvement					
	Read books to the child						Discussed political or social issues						Parent spends time reading at home for enjoyment					
	Difference in reading performance between girls and boys		Difference in reading performance between girls and boys *after* accounting for composition of parental involvement		Difference in reading performance between girls and boys *after* accounting for composition and differential strength of parental involvement		Difference in reading performance between girls and boys		Difference in reading performance between girls and boys *after* accounting for composition of parental involvement		Difference in reading performance between girls and boys *after* accounting for composition and differential strength of parental involvement		Difference in reading performance between girls and boys		Difference in reading performance between girls and boys *after* accounting for composition of parental involvement		Difference in reading performance between girls and boys *after* accounting for composition and differential strength of parental involvement	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**0.92**	(0.04)	**0.91**	(0.04)	**0.88**	(0.11)	**0.92**	(0.04)	**0.93**	(0.04)	**0.81**	(0.06)	**0.93**	(0.04)	**0.93**	(0.04)	**0.88**	(0.05)
Denmark	**0.54**	(0.03)	**0.54**	(0.03)	**0.43**	(0.10)	**0.53**	(0.03)	**0.53**	(0.03)	**0.51**	(0.06)	**0.54**	(0.03)	**0.54**	(0.03)	**0.52**	(0.05)
Hong Kong-China	**0.35**	(0.02)	**0.35**	(0.02)	**0.37**	(0.03)	**0.35**	(0.02)	**0.35**	(0.02)	**0.31**	(0.03)	**0.35**	(0.02)	**0.36**	(0.02)	**0.35**	(0.02)
Croatia	**0.66**	(0.03)	**0.66**	(0.03)	**0.62**	(0.04)	**0.67**	(0.03)	**0.67**	(0.03)	**0.65**	(0.03)	**0.66**	(0.03)	**0.67**	(0.03)	**0.65**	(0.03)
Hungary	**0.60**	(0.03)	**0.59**	(0.03)	**0.53**	(0.08)	**0.60**	(0.03)	**0.61**	(0.03)	**0.58**	(0.04)	**0.59**	(0.03)	**0.60**	(0.03)	**0.58**	(0.04)
Italy	**0.69**	(0.02)	**0.68**	(0.02)	**0.67**	(0.02)	**0.69**	(0.02)	**0.69**	(0.02)	**0.64**	(0.03)	**0.69**	(0.02)	**0.69**	(0.02)	**0.69**	(0.02)
Korea	**0.27**	(0.03)	**0.26**	(0.03)	**0.18**	(0.04)	**0.27**	(0.03)	**0.27**	(0.03)	**0.26**	(0.03)	**0.27**	(0.03)	**0.27**	(0.03)	**0.27**	(0.03)
Lithuania	**1.01**	(0.03)	**1.01**	(0.03)	**0.97**	(0.07)	**1.01**	(0.03)	**1.02**	(0.03)	**0.95**	(0.05)	**1.01**	(0.03)	**1.01**	(0.03)	**0.94**	(0.04)
Macao-China	**0.40**	(0.02)	**0.40**	(0.02)	**0.40**	(0.03)	**0.40**	(0.02)	**0.40**	(0.02)	**0.36**	(0.02)	**0.40**	(0.02)	**0.40**	(0.02)	**0.41**	(0.02)
New Zealand	**0.63**	(0.03)	**0.63**	(0.03)	**0.50**	(0.15)	**0.63**	(0.03)	**0.63**	(0.03)	**0.66**	(0.05)	**0.63**	(0.03)	**0.64**	(0.03)	**0.69**	(0.05)
Panama	**0.29**	(0.04)	**0.29**	(0.04)	**0.23**	(0.07)	**0.28**	(0.04)	**0.28**	(0.04)	**0.23**	(0.04)	**0.28**	(0.04)	**0.28**	(0.04)	**0.27**	(0.05)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	**0.69**	(0.03)	**0.69**	(0.03)	**0.70**	(0.04)	**0.69**	(0.03)	**0.69**	(0.03)	**0.63**	(0.03)	**0.69**	(0.03)	**0.69**	(0.03)	**0.68**	(0.03)
Qatar	**0.31**	(0.02)	**0.32**	(0.02)	**0.30**	(0.04)	**0.31**	(0.02)	**0.31**	(0.02)	**0.26**	(0.03)	**0.31**	(0.02)	**0.32**	(0.02)	**0.26**	(0.03)

Note: All models control for ESCS and immigration background, and are restricted to students with valid answers in the respective forms of parental involvement.

Table 5.2c – The relationship between gender, parental involvement and awareness of effective summarising strategies

	Early childhood involvement						Home-based involvement						Implicit involvement					
	Read books to the child						Discussed political or social issues						Parent spends time reading at home for enjoyment					
	Difference in reading performance between girls and boys		Difference in reading performance between girls and boys *after* accounting for composition of parental involvement		Difference in reading performance between girls and boys *after* accounting for composition and differential strength of parental involvement		Difference in reading performance between girls and boys		Difference in reading performance between girls and boys *after* accounting for composition of parental involvement		Difference in reading performance between girls and boys *after* accounting for composition and differential strength of parental involvement		Difference in reading performance between girls and boys		Difference in reading performance between girls and boys *after* accounting for composition of parental involvement		Difference in reading performance between girls and boys *after* accounting for composition and differential strength of parental involvement	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**0.35**	(0.04)	**0.34**	(0.04)	**0.30**	(0.11)	**0.34**	(0.04)	**0.35**	(0.04)	**0.36**	(0.06)	**0.35**	(0.04)	**0.35**	(0.04)	**0.35**	(0.05)
Denmark	**0.38**	(0.04)	**0.38**	(0.04)	**0.34**	(0.13)	**0.38**	(0.04)	**0.39**	(0.04)	**0.39**	(0.07)	**0.38**	(0.04)	**0.38**	(0.04)	**0.40**	(0.05)
Hong Kong-China	**0.22**	(0.04)	**0.22**	(0.04)	**0.19**	(0.04)	**0.22**	(0.04)	**0.22**	(0.04)	**0.14**	(0.04)	**0.22**	(0.04)	**0.22**	(0.04)	**0.23**	(0.04)
Croatia	**0.42**	(0.04)	**0.42**	(0.04)	**0.51**	(0.06)	**0.42**	(0.04)	**0.42**	(0.04)	**0.40**	(0.04)	**0.42**	(0.04)	**0.42**	(0.04)	**0.45**	(0.04)
Hungary	**0.38**	(0.04)	**0.38**	(0.04)	**0.40**	(0.10)	**0.38**	(0.04)	**0.39**	(0.04)	**0.37**	(0.06)	**0.38**	(0.04)	**0.38**	(0.04)	**0.39**	(0.06)
Italy	**0.26**	(0.02)	**0.26**	(0.02)	**0.31**	(0.03)	**0.26**	(0.02)	**0.26**	(0.02)	**0.28**	(0.03)	**0.26**	(0.02)	**0.26**	(0.02)	**0.28**	(0.02)
Korea	**0.27**	(0.04)	**0.27**	(0.04)	**0.29**	(0.07)	**0.28**	(0.04)	**0.28**	(0.04)	**0.28**	(0.05)	**0.27**	(0.04)	**0.27**	(0.04)	**0.29**	(0.05)
Lithuania	**0.38**	(0.03)	**0.38**	(0.03)	**0.43**	(0.06)	**0.38**	(0.03)	**0.38**	(0.03)	**0.34**	(0.04)	**0.38**	(0.03)	**0.38**	(0.03)	**0.39**	(0.04)
Macao-China	**0.21**	(0.03)	**0.21**	(0.03)	**0.23**	(0.04)	**0.21**	(0.02)	**0.21**	(0.02)	**0.20**	(0.03)	**0.21**	(0.03)	**0.21**	(0.03)	**0.20**	(0.03)
New Zealand	**0.41**	(0.03)	**0.41**	(0.03)	0.29	(0.15)	**0.41**	(0.04)	**0.42**	(0.04)	**0.43**	(0.07)	**0.41**	(0.03)	**0.41**	(0.03)	**0.39**	(0.06)
Panama	**0.19**	(0.07)	**0.19**	(0.07)	0.15	(0.10)	**0.20**	(0.07)	**0.20**	(0.07)	0.06	(0.07)	**0.21**	(0.07)	**0.21**	(0.07)	**0.20**	(0.07)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	**0.39**	(0.03)	**0.39**	(0.03)	**0.47**	(0.05)	**0.39**	(0.03)	**0.39**	(0.03)	**0.45**	(0.05)	**0.38**	(0.03)	**0.38**	(0.03)	**0.46**	(0.04)
Qatar	**0.11**	(0.03)	**0.11**	(0.03)	**0.14**	(0.05)	**0.11**	(0.03)	**0.11**	(0.03)	**0.13**	(0.04)	**0.12**	(0.03)	**0.12**	(0.03)	**0.11**	(0.03)

Note: All models control for ESCS and immigration background, and are restricted to students with valid answers in the respective forms of parental involvement.

Table 5.3a – The relationship between gender, parental involvement and reading performance

	Early childhood involvement								Home-based involvement							
	Read books to the child								Discussed political or social issues							
	Difference in reading performance between students who have and students who do not have an immigrant background, not controlling for socio-economic status		Difference in reading performance between students who have and students who do not have an immigrant background, when controlling for socio-economic status		Difference in reading performance between students who have and students who do not have an immigrant background *after* accounting for composition of parental involvement		Difference in reading performance between students who have and students who do not have an immigrant background *after* accounting for composition and differential strength of parental involvement		Difference in reading performance between students who have and students who do not have an immigrant background, not controlling for socio-economic status		Difference in reading performance between students who have and students who do not have an immigrant background, when controlling for socio-economic status		Difference in reading performance between students who have and students who do not have an immigrant background *after* accounting for composition of parental involvement		Difference in reading performance between students who have and students who do not have an immigrant background *after* accounting for composition and differential strength of parental involvement	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**-53.16**	(6.46)	**-21.38**	(5.92)	**-19.56**	(5.90)	0.00	(10.05)	**-53.07**	(6.30)	**-21.38**	(5.79)	**-20.07**	(5.68)	**-19.98**	(6.05)
Denmark	**-43.84**	(6.61)	**-22.55**	(5.91)	**-20.92**	(6.06)	-11.17	(11.83)	**-43.29**	(6.60	**-21.68**	(5.93)	**-20.34**	(6.04)	-16.15	(8.79)
Hong Kong-China	-5.45	(4.00)	**7.52**	(3.49)	**7.61**	(3.53)	**11.87**	(3.86)	-5.42	(3.99)	**7.56**	(3.49)	**7.72**	(3.47)	4.74	(4.93)
Croatia	**-16.05**	(4.94)	-8.07	(4.50)	-8.04	(4.50)	3.21	(6.23)	**-16.42**	(5.02)	-8.35	(4.58)	-8.13	(4.50)	-6.30	(5.68)
Hungary	12.99	(8.88)	12.36	(7.34)	13.41	(7.32)	8.72	(21.01)	13.31	(9.07)	12.69	(7.53)	14.33	(7.49)	12.89	(9.45)
Italy	**-73.19**	(5.19)	**-53.69**	(5.00)	**-52.81**	(5.08)	**-46.95**	(5.52)	**-73.19**	(5.23)	**-53.69**	(5.04)	**-48.15**	(4.88)	**-47.70**	(6.42)
Korea	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c
Lithuania	**-22.41**	(9.41)	**-19.51**	(8.93)	**-19.51**	(8.94)	-35.94	(19.40)	**-20.76**	(9.71)	-18.14	(9.26)	-18.26	(9.32)	-10.10	(15.81)
Macao-China	**7.41**	(2.32)	**11.99**	(2.56)	**12.10**	(2.56)	**14.34**	(4.34)	**7.07**	(2.35)	**11.71**	(2.63)	**11.80**	(2.64)	**12.99**	(3.21)
New Zealand	-7.44	(5.34)	-8.63	(4.57)	-5.94	(4.66)	**30.08**	(15.06)	-7.87	(5.43)	-9.14	(4.67)	-8.35	(4.74)	-5.79	(7.34)
Panama	-32.36	(23.53)	-36.17	(20.89)	-35.30	(20.29)	-46.41	(36.48)	-36.52	(924.4)	-39.56	(21.39)	-37.22	(20.93)	**-55.76**	(26.76)
Poland	m	m	m	m	m	m	m	m	m	M	m	m	m	m	m	m
Portugal	**-19.72**	(7.37)	**-19.81**	(6.49)	**-20.01**	(6.43)	**-25.33**	(9.57)	**-18.13**	(7.60)	**-18.73**	(6.64)	**-18.50**	(6.58)	-8.12	(9.67)
Qatar	**99.30**	(2.58)	**96.83**	(2.49)	**95.46**	(2.51)	**73.41**	(4.08)	**99.26**	(2.62)	**96.83**	(2.52)	**96.03**	(2.46)	**88.36**	(3.68)

	Implicit involvement							
	Parent spends time reading at home for enjoyment							
	Difference in reading performance between students who have and students who do not have an immigrant background, not controlling for socio-economic status		Difference in reading performance between students who have and students who do not have an immigrant background, when controlling for socio-economic status		Difference in reading performance between students who have and students who do not have an immigrant background *after* accounting for composition of parental involvement		Difference in reading performance between students who have and students who do not have an immigrant background *after* accounting for composition and differential strength of parental involvement	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**-52.71**	(6.27)	**-22.13**	(5.85)	**-21.05**	(5.83)	**-20.33**	(7.00)
Denmark	**-43.29**	(6.55)	**-21.98**	(5.90)	**-21.60**	(5.90)	**-23.49**	(6.72)
Hong Kong-China	-5.73	(3.99)	**7.32**	(3.48)	**7.48**	(3.47)	**7.90**	(3.92)
Croatia	**-16.38**	(4.96)	-8.26	(4.53)	-7.93	(4.51)	-9.11	(5.34)
Hungary	14.09	(8.90)	13.14	(7.36)	14.04	(7.35)	**20.27**	(9.43)
Italy	**-72.72**	(5.23)	**-53.10**	(5.02)	**-52.18**	(5.14)	**-45.89**	(5.35)
Korea	c	c	c	c	c	c	c	c
Lithuania	**-21.96**	(9.44)	**-19.20**	(8.96)	**-20.45**	(9.01)	-16.84	(14.12)
Macao-China	**6.95**	(2.23)	**11.47**	(2.50)	**11.58**	(2.50)	**14.40**	(3.15)
New Zealand	-6.91	(5.19)	-8.34	(4.51)	-7.89	(4.54)	-3.05	(5.56)
Panama	-31.13	(23.83)	-34.79	(21.25)	-35.12	(21.16)	**-54.10**	(19.21)
Poland	m	m	m	m	m	m	m	m
Portugal	**-16.06**	(7.37)	**-16.66**	(6.47)	**-17.14**	(6.43)	**-16.89**	(7.07)
Qatar	**99.27**	(2.60)	**96.91**	(2.50)	**95.43**	(2.54)	**85.99**	(3.10)

Note: All models control for ESCS and immigration background, and are restricted to students with valid answers in the respective forms of parental involvement.

Table 5.3b – The relationship between gender, parental involvement and students' enjoyment of reading

	Early childhood involvement								Home-based involvement							
	Read books to the child								Discussed political or social issues							
	Difference in reading performance between students who have and students who do not have an immigrant background, not controlling for socio-economic status		Difference in reading performance between students who have and students who do not have an immigrant background, when controlling for socio-economic status		Difference in reading performance between students who have and students who do not have an immigrant background *after* accounting for composition of parental involvement		Difference in reading performance between students who have and students who do not have an immigrant background *after* accounting for composition and differential strength of parental involvement		Difference in reading performance between students who have and students who do not have an immigrant background, not controlling for socio-economic status		Difference in reading performance between students who have and students who do not have an immigrant background, when controlling for socio-economic status		Difference in reading performance between students who have and students who do not have an immigrant background *after* accounting for composition of parental involvement		Difference in reading performance between students who have and students who do not have an immigrant background *after* accounting for composition and differential strength of parental involvement	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**-0.12**	(0.06)	**0.14**	(0.06)	**-0.17**	(0.05)	**0.48**	(0.11)	**-0.13**	(0.06)	**0.13**	(0.06)	**0.16**	(0.06)	**0.15**	(0.07)
Denmark	**0.13**	(0.05)	**0.29**	(0.05)	0.07	(0.07)	**0.67**	(0.10)	**0.12**	(0.05)	**0.30**	(0.05)	**0.31**	(0.05)	**0.34**	(0.07)
Hong Kong-China	**-0.04**	(0.02)	**0.06**	(0.02)	**0.11**	(0.04)	**0.09**	(0.03)	**-0.04**	(0.02)	**0.06**	(0.02)	**0.06**	(0.02)	**0.06**	(0.03)
Croatia	-0.04	(0.04)	-0.01	(0.04)	0.03	(0.05)	-0.06	(0.06)	-0.05	(0.04)	-0.01	(0.04)	-0.01	(0.04)	0.04	(0.05)
Hungary	0.14	(0.10)	0.13	(0.09)	0.06	(0.11)	-0.06	(0.13)	0.15	(0.10)	0.14	(0.09)	0.17	(0.09)	0.10	(0.09)
Italy	-0.05	(0.04)	0.07	(0.05)	**-0.26**	(0.04)	0.15	(0.08)	-0.05	(0.05)	0.06	(0.05)	**0.11**	(0.05)	**0.15**	(0.07)
Korea	**0.26**	(0.02)	**0.15**	(0.02)	**-1.45**	(0.04)	**0.30**	(0.03)	**0.26**	(0.02)	**0.15**	(0.02)	**0.21**	(0.03)	**0.21**	(0.03)
Lithuania	-0.13	(0.09)	-0.13	(0.10)	-0.02	(0.13)	-0.03	(0.23)	-0.13	(0.10)	-0.13	(0.10)	-0.13	(0.09)	-0.08	(0.13)
Macao-China	**0.05**	(0.02)	**0.10**	(0.02)	0.04	(0.03)	**0.11**	(0.03)	**0.04**	(0.02)	**0.10**	(0.02)	**0.10**	(0.02)	**0.09**	(0.03)
New Zealand	**0.17**	(0.04)	**0.16**	(0.04)	0.06	(0.05)	**0.29**	(0.13)	**0.18**	(0.04)	**0.16**	(0.04)	**0.17**	(0.04)	**0.18**	(0.07)
Panama	0.04	(0.08)	0.04	(0.08)	-0.14	(0.21)	0.08	(0.11)	0.03	(0.09)	0.03	(0.09)	0.05	(0.09)	0.16	(0.09)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	0.06	(0.08)	0.07	(0.08)	-0.13	(0.07)	0.08	(0.11)	0.08	(0.08)	0.08	(0.08)	0.08	(0.08)	0.09	(0.10)
Qatar	**0.23**	(0.02)	**0.23**	(0.02)	**0.34**	(0.03)	**0.17**	(0.03)	**0.24**	(0.02)	**0.24**	(0.02)	**0.23**	(0.02)	**0.18**	(0.03)

	Implicit involvement							
	Parent spends time reading at home for enjoyment							
	Difference in reading performance between students who have and students who do not have an immigrant background, not controlling for socio-economic status		Difference in reading performance between students who have and students who do not have an immigrant background, when controlling for socio-economic status		Difference in reading performance between students who have and students who do not have an immigrant background *after* accounting for composition of parental involvement		Difference in reading performance between students who have and students who do not have an immigrant background *after* accounting for composition and differential strength of parental involvement	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**-0.13**	(0.06)	**0.12**	(0.06)	**-0.19**	0.05	**-0.21**	(0.08)
Denmark	**0.11**	(0.05)	**0.29**	(0.05)	0.06	0.06	0.07	(0.07)
Hong Kong-China	**-0.04**	(0.02)	**0.05**	(0.02)	**0.11**	0.04	**0.10**	(0.05)
Croatia	-0.04	(0.04)	-0.01	(0.04)	0.04	0.05	0.04	(0.05)
Hungary	0.14	(0.10)	0.13	(0.09)	0.06	0.11	0.04	(0.15)
Italy	-0.05	(0.04)	0.06	(0.05)	**-0.26**	0.04	**-0.20**	(0.05)
Korea	**0.26**	(0.02)	**0.15**	(0.02)	**-1.50**	0.03	**-1.50**	(0.03)
Lithuania	-0.13	(0.09)	-0.13	(0.10)	-0.02	0.13	0.15	(0.19)
Macao-China	**0.04**	(0.02)	**0.10**	(0.02)	0.04	0.03	0.04	(0.04)
New Zealand	**0.18**	(0.04)	**0.16**	(0.04)	0.06	0.05	0.09	(0.06)
Panama	0.04	(0.08)	0.04	(0.09)	-0.14	0.21	-0.25	(0.23)
Poland	m	m	m	m	m	m	m	m
Portugal	0.08	(0.08)	0.08	(0.08)	-0.11	0.07	-0.13	(0.08)
Qatar	**0.23**	(0.02)	**0.23**	(0.02)	**0.33**	0.02	**0.30**	(0.03)

Note: All models control for ESCS and immigration background, and are restricted to students with valid answers in the respective forms of parental involvement.

Table 5.3c – The relationship between gender, parental involvement and awareness of effective summarising strategies

	Early childhood involvement								Home-based involvement							
	Read books to the child								Discussed political or social issues							
	Difference in reading performance between students who have and students who do not have an immigrant background, not controlling for socio-economic status		Difference in reading performance between students who have and students who do not have an immigrant background, when controlling for socio-economic status		Difference in reading performance between students who have and students who do not have an immigrant background *after* accounting for composition of parental involvement		Difference in reading performance between students who have and students who do not have an immigrant background *after* accounting for composition and differential strength of parental involvement		Difference in reading performance between students who have and students who do not have an immigrant background, not controlling for socio-economic status		Difference in reading performance between students who have and students who do not have an immigrant background, when controlling for socio-economic status		Difference in reading performance between students who have and students who do not have an immigrant background *after* accounting for composition of parental involvement		Difference in reading performance between students who have and students who do not have an immigrant background *after* accounting for composition and differential strength of parental involvement	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**-0.32**	(0.05)	**-0.18**	(0.05)	**-0.17**	(0.05)	0.05	(0.14)	**-0.32**	(0.05)	**-0.18**	(0.05)	**-0.17**	(0.05)	**-0.17**	(0.08)
Denmark	-0.07	(0.06)	0.06	(0.06)	0.07	(0.07)	0.21	(0.12)	-0.07	(0.06)	0.06	(0.06)	0.08	(0.07)	**0.22**	(0.09)
Hong Kong-China	0.04	(0.04)	**0.11**	(0.04)	**0.11**	(0.04)	**0.10**	(0.05)	0.03	(0.04)	**0.11**	(0.04)	**0.11**	(0.04)	0.04	(0.05)
Croatia	-0.01	(0.05)	0.03	(0.05)	0.03	(0.05)	0.09	(0.08)	-0.01	(0.05)	0.03	(0.05)	0.03	(0.05)	0.02	(0.05)
Hungary	0.06	(0.11)	0.05	(0.11)	0.06	(0.11)	0.11	(0.30)	0.07	(0.11)	0.06	(0.11)	0.07	(0.11)	-0.02	(0.15)
Italy	**-0.35**	(0.04)	**-0.27**	(0.04)	**-0.26**	(0.04)	**-0.21**	(0.05)	**-0.35**	(0.04)	**-0.27**	(0.04)	**-0.24**	(0.04)	**-0.27**	(0.06)
Korea	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c
Lithuania	0.00	(0.13)	-0.02	(0.13)	-0.02	(0.13)	-0.06	(0.29)	0.03	(0.13)	0.01	(0.13)	0.01	(0.13)	-0.11	(0.16)
Macao-China	-0.01	(0.03)	0.04	(0.03)	0.04	(0.03)	**0.09**	(0.04)	-0.01	(0.03)	0.04	(0.03)	0.04	(0.03)	0.04	(0.04)
New Zealand	0.06	(0.05)	0.05	(0.05)	0.06	(0.05)	0.00	(0.16)	0.06	(0.05)	0.05	(0.05)	0.06	(0.05)	0.07	(0.08)
Panama	-0.11	(0.22)	-0.14	(0.21)	-0.14	(0.21)	-0.20	(0.36)	-0.13	(0.23)	-0.15	(0.22)	-0.13	(0.22)	-0.12	(0.27)
Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Portugal	-0.12	(0.08)	-0.13	(0.07)	-0.13	(0.07)	**-0.24**	(0.12)	-0.11	(0.08)	-0.13	(0.07)	-0.13	(0.07)	-0.05	(0.10)
Qatar	**0.35**	(0.02)	**0.34**	(0.02)	**0.34**	(0.03)	**0.18**	(0.05)	**0.35**	(0.02)	**0.34**	(0.02)	**0.34**	(0.02)	**0.25**	(0.03)

	Implicit involvement							
	Parent spends time reading at home for enjoyment							
	Difference in reading performance between students who have and students who do not have an immigrant background, not controlling for socio-economic status		Difference in reading performance between students who have and students who do not have an immigrant background, when controlling for socio-economic status		Difference in reading performance between students who have and students who do not have an immigrant background *after* accounting for composition of parental involvement		Difference in reading performance between students who have and students who do not have an immigrant background *after* accounting for composition and differential strength of parental involvement	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Germany	**-0.33**	(0.05)	**-0.19**	(0.05)	**-0.19**	(0.05)	**-0.21**	(0.08)
Denmark	-0.06	(0.06)	0.06	(0.06)	0.06	(0.06)	0.07	(0.07)
Hong Kong-China	0.03	(0.04)	**0.11**	(0.04)	**0.11**	(0.04)	**0.10**	(0.05)
Croatia	-0.01	(0.05)	0.03	(0.05)	0.04	(0.05)	0.04	(0.05)
Hungary	0.06	(0.11)	0.06	(0.11)	0.06	(0.11)	0.04	(0.15)
Italy	**-0.35**	(0.04)	**-0.27**	(0.04)	**-0.26**	(0.04)	**-0.20**	(0.05)
Korea	c	c	c	c	c	c	c	c
Lithuania	0.00	(0.13)	-0.02	(0.13)	-0.02	(0.13)	0.15	(0.19)
Macao-China	-0.01	(0.03)	0.04	(0.03)	0.04	(0.03)	0.04	(0.04)
New Zealand	0.06	(0.05)	0.06	(0.05)	0.06	(0.05)	0.09	(0.06)
Panama	-0.11	(0.22)	-0.14	(0.21)	-0.14	(0.21)	-0.25	(0.23)
Poland	m	m	m	m	m	m	m	m
Portugal	-0.09	(0.08)	-0.11	(0.07)	-0.11	(0.07)	-0.13	(0.08)
Qatar	**0.34**	(0.02)	**0.33**	(0.02)	**0.33**	(0.02)	**0.30**	(0.03)

Note: All models control for ESCS and immigration background, and are restricted to students with valid answers in the respective forms of parental involvement.

Table A2.1 - Comparison of students answering the parental questionnaire and the main PISA surveys

	Whole PISA sample								
		Reading performance		PISA index of economic, social and cultural status		Student is a female		Student has an immigrant background	
	N	Mean	S.E.	Mean	S.E.	%	S.E.	%	S.E.
Germany	4979	497	(2.7)	0.18	(0.02)	48.91	(0.97)	17.6	(1.0)
Denmark	5924	495	(2.1)	0.30	(0.02)	50.50	(0.70)	8.6	(0.4)
Hong Kong-China	4837	533	(2.1)	-0.80	(0.04)	47.08	(1.76)	39.4	(1.5)
Croatia	4994	476	(2.9)	-0.18	(0.02)	47.02	(1.87)	10.7	(0.6)
Hungary	4605	494	(3.2)	-0.20	(0.03)	49.58	(1.51)	2.1	(0.3)
Italy	30905	486	(1.6)	-0.12	(0.01)	48.60	(0.93)	5.5	(0.3)
Korea	4989	539	(3.5)	-0.15	(0.03)	47.25	(1.81)	0.0	(0.0)
Lithuania	4528	468	(2.4)	-0.05	(0.02)	49.30	(0.50)	1.7	(0.3)
Macao-China	5952	487	(0.9)	-0.70	(0.01)	49.39	(0.09)	70.4	(0.6)
New Zealand	4643	521	(2.4)	0.09	(0.02)	48.97	(1.23)	24.7	(1.0)
Panama	3969	371	(6.5)	-0.81	(0.08)	50.35	(1.43)	3.9	(0.8)
Poland	4917	500	(2.6)	-0.28	(0.02)	49.97	(0.51)	0.0	(0.0)
Portugal	6298	489	(3.1)	-0.32	(0.04)	51.13	(0.62)	5.5	(0.5)
Qatar	9078	372	(0.8)	0.51	(0.01)	49.07	(0.11)	46.4	(0.4)

	Sample of students answering the parental questionnaire									
			Reading performance		Student is a female		PISA index of economic, social and cultural status		Student has an immigrant background	
	N	Response rate %	Mean	S.E.	%	S.E.	Mean	S.E.	%	S.E.
Germany	3178	63.8	**512**	(2.8)	**54.05**	(1.08)	0.24	(0.0)	13.9	(1.0)
Denmark	3536	59.7	**508**	(2.1)	51.76	(0.86)	**0.40**	(0.0)	4.5	(0.3)
Hong Kong-China	4751	98.2	535	(2.1)	47.46	(1.73)	-0.79	(0.0)	39.4	(1.5)
Croatia	4506	90.2	479	(2.8)	47.90	(1.89)	-0.17	(0.0)	10.6	(0.6)
Hungary	4450	96.6	495	(3.1)	49.83	(1.50)	-0.20	(0.0)	2.0	(0.3)
Italy	27511	89.0	492	(1.6)	49.60	(0.98)	-0.11	(0.0)	5.2	(0.3)
Korea	4936	98.9	540	(3.3)	47.38	(1.82)	-0.15	(0.0)	0.0	(0.0)
Lithuania	4476	98.9	469	(2.4)	49.41	(0.52)	-0.04	(0.0)	1.5	(0.2)
Macao-China	5929	99.6	487	(0.9)	49.45	(0.10)	-0.70	(0.0)	70.4	(0.6)
New Zealand	3481	75.0	**538**	(2.1)	50.76	(1.39)	**0.17**	(0.0)	22.3	(1.0)
Panama	3369	84.9	374	(6.3)	51.09	(1.57)	-0.84	(0.1)	4.0	(0.8)
Poland	0	0.0	m	m	m	m	m	m	m	m
Portugal	4902	77.8	496	(3.6)	53.27	(0.76)	-0.30	(0.0)	4.5	(0.4)
Qatar	6102	67.2	**385**	(1.1)	**56.16**	(0.36)	**0.43**	(0.0)	**51.3**	(0.6)

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