Survey on Social and Emotional Skills (SSES): Bogotá (Colombia)
The OECD’s Survey on Social and Emotional Skills

Research shows that both cognitive, and social and emotional skills improve life outcomes at a societal and an individual level. Considerable information exists on the development of cognitive skills but is lacking for social and emotional skills. The OECD's Survey on Social and Emotional Skills (SSES) was established to fill this important information gap.

The SSES aims to:

• Provide participating cities with information on their students' social and emotional skills.
• Identify factors in students' home, school and peer environments that promote or hinder the development of social and emotional skills.
• Explore how broader policy, cultural and socio-economic contexts influence these skills.
• Demonstrate that valid, reliable, comparable information on social and emotional skills can be produced across diverse populations and settings.

What are social and emotional skills?

Social and emotional skills are individual abilities, attributes and characteristics that are important for academic success, employability, active citizenship and well-being. They encompass behavioural dispositions, internal states, approaches to tasks, and management and control of behaviour and feelings. Beliefs about the self and the world that characterise an individual's relationships to others are also components of social and emotional skills.

Educators and policy makers are increasingly seeking to complement the focus on academic abilities such as mathematics, reading, or scientific literacy with attention to social and emotional capabilities in order to boost students' prospects as full participants in society and active citizens. Enhancing specific social and emotional skills boosts students' ability to develop their cognitive skills. But the benefits of developing children's social-emotional skills go beyond cognitive development and academic outcomes. They also improve mental health and other important life outcomes. Inconspicuous yet significantly impactful, social and emotional skills help shape individuals' behaviours and lifestyles, which, in turn, shape their socio-economic outcomes. Together, social, emotional and cognitive skills constitute a comprehensive toolbox, essential to students' success at school and beyond.

The OECD Survey on Social and Emotional Skills (SSES) focuses on 17 social and emotional skills ranging from curiosity and creativity through to emotional control (see Figure 1). These skills have been selected according to three main criteria. First, previous research shows that they are associated with individuals' educational attainment, labour market outcomes, health and well-being. Second, they can be improved through interventions and policy measures during the years a student spends in school. Third, they are suitable for comparability across countries and age cohorts.
Figure 1. Description of the skills included in the Survey on Social and Emotional Skills

<table>
<thead>
<tr>
<th>DOMAINS</th>
<th>SKILLS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPEN-MINDEDNESS (Openness to experience)</td>
<td>CURIOSITY</td>
<td>Interest in ideas and love of learning, understanding and intellectual exploration; an inquisitive mind-set.</td>
</tr>
<tr>
<td></td>
<td>TOLERANCE</td>
<td>Is open to different points of view, values diversity, is appreciative of foreign people and cultures.</td>
</tr>
<tr>
<td></td>
<td>CREATIVITY</td>
<td>Generating novel ways to do or think about things through exploring, learning from failure, insight and vision.</td>
</tr>
<tr>
<td>TASK PERFORMANCE (Conscientiousness)</td>
<td>RESPONSIBILITY</td>
<td>Able to honour commitments, and be punctual and reliable.</td>
</tr>
<tr>
<td></td>
<td>SELF-CONTROL</td>
<td>Able to avoid distractions and sudden impulses and focus attention on the current task in order to achieve personal goals.</td>
</tr>
<tr>
<td></td>
<td>PERSISTENCE</td>
<td>Persevering in tasks and activities until they get done.</td>
</tr>
<tr>
<td>ENGAGING WITH OTHERS (Extraversion)</td>
<td>SOCIABILITY</td>
<td>Able to approach others, both friends and strangers, initiating and maintaining social connections.</td>
</tr>
<tr>
<td></td>
<td>ASSERTIVENESS</td>
<td>Able to confidently voice opinions, needs, and feelings, and exert social influence.</td>
</tr>
<tr>
<td></td>
<td>ENERGY</td>
<td>Approaching daily life with energy, excitement and spontaneity.</td>
</tr>
<tr>
<td>EMOTION REGULATION (Emotional stability)</td>
<td>STRESS RESISTANCE</td>
<td>Effectiveness in modulating anxiety and able to calmly solve problems (is relaxed, handles stress well).</td>
</tr>
<tr>
<td></td>
<td>OPTIMISM</td>
<td>Positive and optimistic expectations for self and life in general.</td>
</tr>
<tr>
<td></td>
<td>EMOTIONAL CONTROL</td>
<td>Effective strategies for regulating temper, anger and irritation in the face of frustrations.</td>
</tr>
<tr>
<td>COLLABORATION (Agreeableness)</td>
<td>EMPATHY</td>
<td>Understanding and caring for others and their well-being that leads to valuing and investing in close relationships.</td>
</tr>
<tr>
<td></td>
<td>TRUST</td>
<td>Assuming that others generally have good intentions and forgiving those who have done wrong.</td>
</tr>
<tr>
<td></td>
<td>CO-OPERATION</td>
<td>Living in harmony with others and valuing interconnectedness among all people.</td>
</tr>
<tr>
<td>ADDITIONAL INDICES</td>
<td>ACHIEVEMENT MOTIVATION</td>
<td>Setting high standards for oneself and working hard to meet them.</td>
</tr>
<tr>
<td></td>
<td>SELF-EFFICACY</td>
<td>The strength of individuals’ beliefs in their ability to execute tasks and achieve goals.</td>
</tr>
</tbody>
</table>

Source: Assessment Framework of the Survey on Social and Emotional Skills (Kankaraš and Suarez-Alvarez, 2019[1])
In Bogotá, persistence, responsibility and intellectual curiosity are the social and emotional skills most positively related to school performance for 15-year-olds.

15-year-old boys exhibit higher skills in the domains of emotional regulation and engaging with others in Bogotá and in all participating cities. Likewise, 15-year-old girls exhibit higher levels of responsibility, empathy, co-operation, tolerance and achievement motivation.

In Bogotá and all participating cities, students who participate in after-school art activities reported higher levels of creativity, particularly among 15-year-olds.

Socio-economically advantaged students exhibit higher levels of every social and emotional skill measured by SSES. In Bogotá, socio-economic differences are important for the skills of responsibility, persistence, co-operation, sociability and achievement motivation.
In Bogotá and in all participating cities, highly intellectually curious students tend to have higher educational expectations.

88% of 15-year-olds in Bogotá reported that they expected to go on and complete a tertiary degree – one of the largest proportions observed across the 10 participating cities. This share is much larger than the estimated current share of tertiary-educated individuals in Colombia (30%).

15-year-olds exhibit lower social and emotional skills than 10-year-olds in Bogotá and on average across participating cities. The levels of skills in the domain of task performance as well as trust among students in Bogotá drop more substantially between the ages of 10 and 15 than in most of the other participating cities.

32% of 10-year-olds and 18% of 15-year-olds experienced bullying at least a few times a month or more. Students’ exposure to bullying is negatively related to almost all social and emotional skills.

The context of social and emotional learning in Bogotá (Colombia)

Bogotá, along with Manizales, are two Colombian cities among the 10 cities that took part in the OECD Survey on Social and Emotional Skills (SSES) in 2019 (see Box 1 for demographic information about the city of Bogotá). Bogotá is the capital city of Colombia. With more than 7 000 000 inhabitants, Bogotá is one of the most populous cities in SSES, behind only Istanbul (Turkey), Moscow (the Russian Federation) and Suzhou (China). In comparison to the rest of Colombia, Bogotá (Colombia) exhibits a lower rate of unemployment (6.5% versus 12.9% for the whole of Colombia). Education is a key area of investment for Colombia, with an estimated 6% of the gross domestic product (GDP) spent on education (from pre-primary to tertiary education programmes), which is above the OECD average of 5% in 2017 (OECD, 2020).

OECD surveys such as the Programme for International Student Assessment (PISA) have shed light on Colombian students' knowledge and cognitive skills in mathematics, science and reading, enabling cross-country comparisons and important trends over time to be observed. PISA 2018 showed that 15-year-old students in Colombia had lower cognitive skills than the OECD average in reading, mathematics and science despite a consistent improvement in student performance since 2006. Girls outperformed boys in reading by the smallest difference observed across participating countries. In contrast, the difference between boys’ and girls’ mathematics and science scores was the largest across all participating countries. In PISA 2018, differences in performance across subjects were also explained by socio-economic status. Socio-economically advantaged students outperformed disadvantaged students by a score gap that is slightly lower than the OECD average. PISA 2018 additionally revealed that, compared to the OECD average, students in Colombia were more satisfied with their lives. However, students reported being bullied more frequently, and felt lonely more frequently than on average across OECD countries (OECD, 2019).

However, little is known about students’ social and emotional skills and how these relate to their key outcomes despite attention paid to these skills in Colombia as well as in the city of Bogotá (Colombia). Bogotá’s participation in SSES in 2019 helps fill this important information gap. Schools in Bogotá (Colombia) follow policies and curricula that promote the overall social and emotional development of students. Additionally, schools in Manizales assess students’ social and emotional skills based on competencies defined by the national government (see Box 2 for an overview of the test). Compared to other cities participating in SSES, Bogotá has introduced policies covering a wide variety of social and emotional skills at different levels of the education system. Bogotá’s main reasons for investing in students’ social and emotional learning are manifold. They encompass the goals of decreasing bullying, absenteeism, truancy, crime and violence rates among youth. They also seek to increase student participation and engagement in school; and improve school safety, students’ health, well-being and academic outcomes. More broadly, Bogotá aims to increase completion rates at all levels of the education system, employment rates, and intergenerational mobility, and to decrease social inequality.

Box 1. Key information about Bogotá (Colombia)

City: Bogotá
Location: Central Colombia
Population (2018): 7 743 955 inhabitants
Average age (2018): 34.6
Percentage of first generation immigrants (2018): 2.9%
Average unemployment level among adults aged 25-65 (2018): 6.5%

Sources: Information collected from the city of Bogotá (Colombia).
Social and emotional learning in primary education

The Colombian government is currently working to include certain social and emotional skills such as co-operation, tolerance and empathy in the general school curriculum by treating them as part of citizenship skills ("competencias ciudadanas") in Spanish that are important in school and other environments. However, these efforts are still in the ideation phase and are not yet streamlined into the general school curriculum.

In order to develop students' social and emotional skills from an early age, the Colombian government has initiated specific programmes such as the Emotions for Life curriculum in primary schools. Through this curriculum, students are taught to know and manage their emotions; understand different points of view; resolve conflicts in a creative manner; and improve their personal, family and work relationships. Teachers and parents are provided guides detailing various in-class and at-home activities that can enable students to develop key skills such as open-mindedness, engagement, co-operation, emotional control and empathy. The overall aim of this curriculum is to create competencies that contribute towards improving co-existence at home and school, i.e. meaningfully engaging with peers and family members with different points of view, thus building better personal, family and work relationships.2

Social and emotional learning in secondary education

At the secondary level of education, schools in Bogotá follow the Step by Step programme3 initiated by the Colombian government. This includes guides, student workbooks and didactic sequences that teachers can use as tools to develop target social and emotional skills in grades 8 to 11. The guides aim to train students to take responsibilities for their actions, persevere in working towards their goals, build positive relationships with their peers and develop key citizenship skills that help them contribute to society. While the original design has 18 classes on social and emotional skills, schools have a considerable amount of autonomy in deciding how many hours to spend on the programme. These guidelines aim to enhance skills examined in SSES such as achievement motivation, assertiveness, co-operation, emotional control, empathy, persistence, responsibility, self-efficacy, sociability, stress resistance, tolerance and trust (Educacion Bogotá, 2019[4]).

In addition to specific curricula and training materials promoting social and emotional skills in classrooms, the Colombian government conducts the School Climate Survey every two years. This survey, targeted towards 6th and 11th grade students, collect information on school conditions such as the extent of positive relationships between members of the educational community, institutional environment, and risk factors in and around the school. There is an additional focus on citizenship and co-existence, covering social and emotional skills such as peace, participation in the community and democratic responsibility, plurality, identity and appreciation of differences. Through this survey, schools can understand and further develop institutional frameworks to reduce bullying, enhance student-teacher relationships and create a nurturing environment for students to thrive academically, socially and emotionally. Within the SSES framework, this survey targets skills such as achievement motivation, co-operation, emotional control, responsibility, self-control and tolerance.

Furthermore, primary and secondary teachers in Colombia are encouraged to incorporate social and emotional learning into the general curriculum by way of a set of guidelines and materials to use with students in the classroom. These are based on different topics such as identifying one's emotions and building self-control; developing empathetic yet assertive relationships with others; and improving skills needed to follow pre-determined goals, make decisions responsibly or resolve conflicts amicably.

In order to gain a holistic understanding of student progress, the Colombian government also formally assesses students' cognitive and non-cognitive skills through the SABER test (see Box 2 below). This allows educational establishments, schools and teachers to develop effective strategies to enhance student learning in a targeted manner.

---

1 https://www.mineducacion.gov.co/1621/articles-340021_recurso_1.pdf
2 https://www.educacionbogota.edu.co/portal_institucional/sites/default/files/inline-files/FNL%20LBR%20ISSUU%20Catedra%20de%20paz_0.pdf
3 https://www.mineducacion.gov.co/1759/w3-article-385321.html?_noredirect=1
Box 2. SABER test in Colombian schools

In 2004, Colombia’s Ministry of National Education published the basic standards of citizen competencies required to form a peaceful, democratic and participatory society. These competencies are evaluated using the SABER test administered by the Colombian Institute of Evaluation of Education (ICFES). The test evaluates students’ social and emotional skills such as emotional regulation and citizenship competencies as well as cognitive abilities in mathematics, science and languages to develop a holistic understanding of student progress. The assessment is applied to primary and secondary school students and contains independent tests in the following areas:

- **Citizen thinking:** This test assesses citizenship knowledge and the ability of students to perform various mental processes in everyday contexts that encourage peer interaction and the exercise of citizenship, thereby promoting positive engagement with other stakeholders within the school community.

- **Citizen actions and attitudes:** This test evaluates students’ beliefs, perceptions, attitudes and actions around different aspects of citizenship.

- **Social and emotional skills:** This test focuses on measuring the extent of emotional regulation through the recognition and management of one’s own emotions and those of others. Additionally, it measures students’ confidence in their skills in achieving the goals they set, which include social and emotional skills such as achievement motivation, assertiveness, emotional control, empathy, responsibility, self-control, self-efficacy and group work.

**Source:** ICFES (2018[5])

While this overview provides some context to examine findings from SSES for the city of Bogotá (Colombia), no conclusion can be drawn from SSES as to how elements of this context influence social and emotional learning in Bogotá.
Social and emotional skills matter for academic success

Students’ school achievement is one of the main drivers of success in life. It is linked to later educational attainment but also to important life outcomes like employment, earnings, health and well-being. However, having the same academic performance in school does not always lead to the same life outcomes. One potential reason why some students are more likely to succeed than others is that they have developed specific social and emotional skills, which intervene in the equation.

In all participating cities but Ottawa (Canada), SSES collected information on students’ school grades in three subjects: reading, mathematics and the arts along with the results of a short cognitive ability test administered to participating students. SSES data show that students’ social and emotional skills are significant predictors of school grades (Figure 2 and Figure 3). The strengths of the associations between certain social and emotional skills and school grades are relatively weak but consistent across age cohorts and subjects and they remain after accounting for gender and socio-economic differences across students. In particular, being intellectually curious and persistent are the social and emotional skills most strongly related to school grades for both 10- and 15-year-olds in all three subjects. To a lesser extent, students who are more assertive and responsible also tend to have better school grades. These findings stress the importance of not only pursuing objectives in the face of difficulties but also to have an intellectual curiosity about a diverse set of topics and to love learning new things.

Fifteen-year-olds who reported being more stress-resistant (relaxed) and sociable have, on average, lower school grades (Figure 2). This does not mean that calmness in face of adversity (a benefit of being stress-resistant) and seeking support from peers are harmful to school achievement. Instead, this finding might be related to the fact that older students who typically have more autonomy than younger students may prioritise their social interactions at the expense of school work. Students who assess themselves as more stress-resistant might also be those who feel more remote from school and school demands. In fact, among the younger cohort, which is typically more supervised by parents and teachers, these relationships are not observed (Figure 3). In other words, younger students may have a less demanding school environment and are surrounded by adults who help them contain and channel their energy and desire to interact socially in ways that do not harm their school performance.
Figure 2. Relationship between social and emotional skills, and school performance of 15-year-old students

Coefficients of (standardised) grades in reading, mathematics and the arts on (standardised) scores on social and emotional skills scales (international average)

Note: Data for Sintra (Portugal) did not reach student response rate standards and are not included in international averages. The regressions are site-specific and control for gender, socio-economic status, and scores in the cognitive ability test, with the exception of Houston (United States), where the cognitive ability test was not administered. Ottawa (Canada) is excluded from the analysis of school grades as students’ grades were not available. Coloured bars represent significant differences in at least five cities, bars that are only outlined represent significant differences in fewer than five cities.

Source: Adapted from OECD (2021), Beyond Academic Learning. First Results from the Survey on Social and Emotional Skills, OECD Publishing, Paris, https://doi.org/10.1787/92at11084-en. Figure 2.1.
Figure 4 provides an overview of the social and emotional skills that are most strongly related with students’ grades in all three subjects for the city of Bogotá (Colombia). Being persistent, responsible and intellectually curious are the social and emotional skills most positively related to school grades for 15-year-olds in all three subjects considered as part of the SSES analysis; reading, mathematics and the arts. To a lesser extent, being assertive is also found to be strongly related to better school performance in mathematics and reading among 15-year old students. These findings emphasise the importance of not only dedication in pursuing predetermined goals, even in the face of difficulties, but also cultivating an intellectual curiosity for a diverse range of topics. Those students who are curious about a diverse set of topics and love learning new things are better equipped to face difficulties and are more likely to reach their goals. Furthermore, 15-year old students who reported being more responsible and assertive may be able to better balance their peer relationships with their school work. In Bogotá, 15-year-old students who reported being more sociable have, on average, lower grades in reading and mathematics. School work towards the end of compulsory education can be demanding and academic achievement in high school is made even more challenging by students’ peer relationships, which are often complex. This may require students to re-evaluate priorities and reconfigure relationships with their peers.

Figure 3. Relationship between social and emotional skills, and school performance of 10-year-old students

Coefficients of (standardised) grades in reading, mathematics and the arts on (standardised) scores on social and emotional skills scales (international average)

![Graph showing relationship between social and emotional skills and school performance](image)

Note: Data for Sintra (Portugal) did not reach student response rate standards and are not included in international averages. The regressions are city-specific and control for gender, socio-economic status, and scores in the cognitive ability test, with the exception of Houston (United States), where the cognitive ability test was not administered. Ottawa (Canada) is excluded from the analysis of school grades as students’ grades were not available. Coloured bars represent significant differences in at least five cities, bars that are only outlined represent significant differences in fewer than five cities.

Source: Adapted from OECD (2021), Beyond Academic Learning. First Results from the Survey on Social and Emotional Skills, OECD Publishing, Paris, [https://doi.org/10.1787/92811084-en](https://doi.org/10.1787/92811084-en), Figure 2.2.
Social and emotional skills matter for future educational and occupational outcomes

Adolescence is a period when young people start to prepare for adult life. Teenagers have to make important decisions relevant to their future lives such as what field of study or type of education they will pursue and what job they will have. But young people often have a distorted perception of their cognitive, social and emotional strengths, which is influenced by their immediate environment more than by objective information; and they may lack sufficient knowledge about the breadth of educational opportunities and careers open to them. Importantly, past research has argued and shown that social and emotional skills are an integral component of individuals’ employability, i.e. individuals’ capability of getting and keeping fulfilling work (Pool and Sewell, 2007[6]).

Education systems can play a crucial role in channelling these skills into the labour market, and helping young people develop a fair assessment of themselves and of their future educational opportunities. In doing so, they can ensure that students’ skills, interests and aptitudes find a suitable match in the economy (Musset and Kurekova, 2018[7]).
In Bogotá (Colombia), 88% of 15-year-olds reported that they expect to go on and complete a tertiary degree – one of the largest proportions observed across the participating cities. This is similar to Manizales (Colombia) at 88% and slightly below that of Suzhou (China) at 91%. This share is not only higher in comparison to that of other cities participating in SSES but it is also much larger than the estimated current share of tertiary-educated individuals in Colombia as a whole (30%) (OECD, 2020[2]). This suggests that 15-year-old students in Bogotá are particularly ambitious but also potentially unrealistic. This discrepancy can result from a lack of opportunities or means that might be needed to realise these educational expectations.

Across all SSES-participating cities with available data, the proportion of students who hold high expectations for further education is related to how they portrayed their own social and emotional skills. Among students of similar socio-economic background, differences in education expectations are often related to differences in social and emotional skills. In particular, in Bogotá (Colombia) and in all participating cities, highly intellectually curious students tend to have higher educational expectations. Higher levels of assertiveness, persistence, optimism and tolerance are also, in Bogotá as well as in some cities, associated with expectations of completing higher education (Figure 5). At the same time, stress resistance and energy are negatively related to educational expectations in Bogotá and a few other cities. Additionally, in contrast to most cities participating in SSES, creativity is positively associated with higher educational expectations in Bogotá (Figure 6). All these findings hold while accounting for other skill differences and for differences in gender and socio-economic status.

Why is curiosity strongly and consistently related to expectations for completing tertiary education? This likely reflects the fact that students with a great deal of curiosity and love of learning tend to have positive dispositions not only towards learning, in general, but also towards formal tertiary-education institutions; these students see tertiary institutions such as universities as places where their desire for knowledge can be satisfied. This indicates the importance of cultivating the affective dimensions that support academic performance – and not only behavioural tendencies such as persistence and self-control – in order to prepare students for lifelong learning.

**Figure 5. How curiosity, assertiveness and tolerance relate to expectations of completing tertiary education**

Percentage-point change in the likelihood that a 15-year-old student expects to complete a tertiary degree

---

**Note:** The figure shows the percentage-point change in the likelihood that a 15-year-old student expects to complete a tertiary degree that is associated with a 100-point increase in the corresponding skill score (the standard deviation of the score distribution of each skill was set to 100 for the combined dataset with equally weighted city data). Only significant and lasso-selected relationships are reported. All models include controls for socio-economic status and gender. Data for Helsinki (Finland) are not available.

**Source:** Adapted from OECD (2021), Beyond Academic Learning. First Results from the Survey on Social and Emotional Skills, OECD Publishing, Paris, https://doi.org/10.1787/992011084-en, Table A2.7.
Similar to educational expectations, students’ occupational expectations are related to specific patterns of social and emotional skills. First, the relations between social and emotional skills, and occupational expectations are much stronger among 15-year-olds than 10-year-olds. This might signal the interdependence of these two factors – students might develop job preferences adapted to their own cognitive, and social and emotional skills at the same time as they improve their skills to meet the requirements of their personal job aspirations.

Looking at 15-year-olds’ job expectations, certain patterns of social and emotional skills emerge that are associated with aspirations to work in certain occupational groups. A few exemplar cases illustrate this. For example, in Bogotá (Colombia), as well as in all other participating cities, 15-year-old students who reported aspiring to become health professionals (i.e. medical doctors, nursing and midwifery professionals) are also more curious than peers aspiring to other occupations (Figure 7). In Bogotá, these students also represented themselves as more energetic but also less assertive, tolerant and trusting than other students. In the current context of the pandemic, social and emotional skills such as stress resistance, energy and persistence become especially important when dealing with occupational distress brought on by increased working hours, difficult patient cases that cause emotional exhaustion, lower logistic aid or reduced level of peer and supervisor assistance.
In all cities including Bogotá (Colombia), students expecting to work in a creative occupation also represented themselves as more creative than others (Figure 8). Creative occupations include, for example, artists, musicians, actors but also marketing directors, professionals and associate professionals, architects, journalists, public relations officers, and software professionals. In Bogotá especially, students expecting a creative occupation also tend to be more trusting of others, in control of their emotions, cooperative and tolerant.

**Figure 7. Skills most strongly associated with expectations of working as health professionals in Bogotá (Colombia)**

Percentage-point change in the likelihood that a 15-year-old student expects to become a health professional

Note: The figure shows the percentage-point change in the likelihood that a 15-year-old student expects to become a health professional that is associated with a 100-point increase in the corresponding skill score (the standard deviation of the score distribution of each skill was set to 100 for the combined dataset with equally weighted city data). Only significant and lasso-selected relationships are reported. The international reference is the arithmetic average of the coefficients across the cities with significant and lasso-selected relationships only. All models include controls for socio-economic status and gender.


In all cities including Bogotá (Colombia), students expecting to work in a creative occupation also represented themselves as more creative than others (Figure 8). Creative occupations include, for example, artists, musicians, actors but also marketing directors, professionals and associate professionals, architects, journalists, public relations officers, and software professionals. In Bogotá especially, students expecting a creative occupation also tend to be more trusting of others, in control of their emotions, cooperative and tolerant.
Social and emotional skills matter for well-being

Well-being is an important measure of quality of life alongside other social and economic dimensions (OECD, 2013[8]). Adolescence is a period of rapid physical growth and brain development, increasing demands and expectations regarding school performance, changing relationships with parents and peers as well as increasing autonomy as students start to make their own decisions and develop behaviours that can influence their current and future well-being (Inchley et al., 2020[9]; Patton, 2016[10]). Education policies increasingly address student well-being as part of a whole-child perspective to education. This has led to increased emphasis on social and emotional skills alongside cognitive skills as drivers of future well-being.

The three aspects of students’ psychological well-being measured in the SSES (life satisfaction, current psychological well-being and test anxiety) are strongly related to skills in the domain of emotional regulation: stress resistance, optimism and emotional control. All three aspects of students’ psychological well-being are also only weakly related to skills in the domains of task performance and engaging with others.
Life satisfaction

Students' life satisfaction is an evaluation that students make of their perceived quality of life according to their chosen criteria. This can be determined in part by the student's current mood and memory, and by the immediate context. In Bogotá (Colombia) and in all other participating cities, 15-year-old students who are more optimistic also reported higher levels of life satisfaction (Figure 9). This also holds true for 10-year-old students. Students who are optimistic have a positive attitude and favourable outlook towards life. At the same time, students who have a more privileged life might be more optimistic. Most importantly, higher levels of optimism are inversely related to depressive disorders. Optimism confers resilience and coping skills in dealing with stressful events, and is related to factors such as socio-economic status and social integration, which generally have protective effects for both psychological and physical well-being (Carver, Scheier and Segerstrom, 2010[11]).

In Bogotá (Colombia), optimism is the sole social and emotional skill that is strongly and positively related to 15-year-old students' life satisfaction. Stress resistance, responsibility and trust are also moderately related to the life satisfaction of 15-year-olds in Bogotá.

Figure 9. Skills most strongly associated with students’ life satisfaction
Change in 15-years-olds’ life satisfaction associated with changes in social and emotional skills

Note: The figure shows coefficients from a regression of students' life satisfaction on (standardised) scores on social and emotional skill scales. Only significant and lasso-selected relationships are reported. The international reference is the arithmetic average of the coefficients across the cities with significant and lasso-selected relationships only. All models include controls for socio-economic status and gender.
Current psychological well-being

Students’ current psychological well-being is an evaluation of students’ feelings and experiences during the two weeks prior to the survey. In Bogotá (Colombia) and in all other participating cities, being optimistic is strongly related to one’s current psychological well-being (Figure 10). This holds true for both cohorts of students. Other social and emotional skills that matter for both 10- and 15-year-old students’ current psychological well-being in Bogotá are students’ sense of responsibility, trust in others, emotional control and level of energy. Students who are more optimistic generally respond differently to challenging situations than students who are less optimistic. Optimists are more likely to experience less distress than pessimists when dealing with difficulties in their lives (Scheier, Carver and Bridges, 2004). This is not necessarily because optimists have unrealistic expectations (though that may sometimes be the case) but because they have more coping strategies to deal with challenging situations. Thinking that things will only get worse – even if true – may disengage someone from confronting a situation while thinking that things can improve – even if false – may motivate them to get the best out of a given situation.

Figure 10. Skills most strongly associated with students’ current psychological well-being in Bogotá (Colombia)
Change in 15-year-olds’ current psychological well-being associated with changes in social and emotional skills

Note: The figure shows coefficients from regressions of students’ current psychological well-being on (standardised) scores on social and emotional skill scales. Only significant and lasso-selected relationships are reported. The international reference is the arithmetic average of the coefficients across the cities with significant and lasso-selected relationships only. All models include controls for socio-economic status and gender.

Test Anxiety

Test anxiety can be described as “the set of phenomenological, physiological, and behavioural responses that accompany concern about possible negative consequences or failure in an evaluative situation” (Zeidner, 2007). It typically arises in educational settings where students believe their abilities are stretched or exceeded by the demands of the test situation. In Bogotá (Colombia) and in all participating cities with available data, students who indicated higher stress resistance reported a lower level of test anxiety. This holds true for students aged 10 and 15 while accounting for students’ grades in both mathematics and reading, which are typically correlated with a lower level of test anxiety (Figure 11). Among 10- and 15-year-olds, higher levels of optimism, creativity and emotional control are also related to lower levels of test anxiety in quite a few cities.

In Bogotá (Colombia) more specifically, students aged 10 and 15 who reported being more creative and having higher levels of emotional control also had lower levels of test anxiety. Furthermore, being more empathetic was related to higher levels of test anxiety among 15-year-old students. Previous studies, which have found a relation between students’ test anxiety, and social and emotional skills, corroborate these findings from SSES data. For example, Chamorro-Premuzic, Ahmetoglu and Furnham (2008) used samples of university students in the United States and the United Kingdom to investigate the relationships between test anxiety and the Big Five domains, core self-evaluations and self-assessed intelligence. They found that higher test anxiety was largely a function of having low emotional regulation and liking to engage with others.

Figure 11. Skills most strongly associated with test anxiety in Bogotá (Colombia)
Change in 15-year-olds’ test anxiety associated with changes in social and emotional skills

Note: The figure shows coefficients from a regression of students’ test anxiety on (standardised) scores on social and emotional skill scales. Only significant and lasso-selected relationships are reported. The international reference is the arithmetic average of the coefficients across the cities with significant and lasso-selected relationships only. All models include controls for socio-economic status and gender.
Students’ social and emotional skills are related to students’ background characteristics...

SSES data and past research show that students’ social and emotional skills are important for students’ academic success, employment outcomes and well-being as well as for the prosperity of societies in general. The United Nations Sustainable Development Goals (SDGs) Target 4.7 advocates:

“ensuring that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development”.

In this context, social and emotional skills such as co-operation, empathy and tolerance are key for citizens and societies to achieve these goals and secure the basis for functioning democracies. However, students with different background characteristics tend to possess different combinations of social and emotional skills.

In Bogotá (Colombia) as in all participating cities, boys exhibit higher skills in the domains of emotional regulation (stress resistance, optimism and emotional control) and engaging with others (sociability, assertiveness, energy). Likewise, girls exhibit higher levels of responsibility, empathy and co-operation, tolerance and achievement motivation. In addition, both in Bogotá and on average across cities, gender differences in students’ social and emotional skills seem to increase with age. They tend to be more pronounced among 15-year-olds than 10-year-olds (Figure 12). In Bogotá, this holds particularly true for stress resistance and energy (in favour of boys) as well as tolerance (in favour of girls). Some gender differences also change direction as students age; while they are more favourable for girls at age 10 they become more favourable for boys at age 15; or vice versa. For example, girls reported higher optimism at the age of 10 and lower optimism at the age of 15 compared to boys. The opposite pattern is observed for self-control where boys reported higher self-control at age 10 and lower self-control than girls at age 15.

On average across participating cities, socio-economically advantaged students exhibit higher levels on every social and emotional skill measured by SSES. The difference in skills between students with low or high socio-economic status is especially pronounced in skills related to the domain of open-mindedness such as tolerance, curiosity, and creativity, as well as empathy, assertiveness and self-efficacy. In Bogotá (Colombia), socio-economic differences are also important for responsibility, persistence, co-operation, sociability and achievement motivation, irrespective of student age (10 or 15). Among 15-year-olds in Bogotá, no significant socio-economic differences were found for skills pertaining to the domain of emotional regulation (stress resistance, optimism and emotional control). In Bogotá and on average across cities, socio-economic differences in students’ social and emotional skills tend to decrease between the ages of 10 and 15 (Figure 13).

In Bogotá (Colombia), 10-year-old students with migrant status exhibit lower levels of optimism and empathy as well as lower levels of skills in the domains of open-mindedness (tolerance, creativity and curiosity), collaboration (empathy and co-operation), engaging with others (sociability and energy) and other compound skills (self-efficacy and achievement motivation) than 10-year-old students without migrant status. These differences remain significant only in the case of optimism and empathy among 15-year-old students. The strength of the association weakens over time.
Figure 12. Gender differences in social and emotional skills
Standardised gender differences in skill scores (15-year-old girls – 15-year-old boys)

Note: Data for Sintra (Portugal) did not reach student response rate standards and are not included in international averages. The figures report standardised differences, whereby the raw scale points have been divided by the (city-specific) standard deviation. Significant differences are coloured, non-significant differences are outlined.

Source: Adapted from OECD (2021), Beyond Academic Learning. First Results from the Survey on Social and Emotional Skills, OECD Publishing, Paris, https://doi.org/10.1787/92a11084-en, Tables A1.4, A1.5. and Figure 1.3.
Figure 13. Differences in social and emotional skills by socio-economic status
Standardised differences in skill scores (high socio-economic status – low socio-economic status) among 15-year-olds

Socio-economically advantaged students report higher...

Socio-economically disadvantaged students report higher...

Note: Data for Sintra (Portugal) did not reach student response rate standards and are not included in international averages. Socio-economically advantaged students are those in the top quarter of the city-specific distribution of the index of socio-economic status. Socio-economically disadvantaged students are in the bottom quarter of the city-specific distribution of the index of socio-economic status. The figures report standardised differences, whereby the raw scale points have been divided by the (city-specific) standard deviation. Significant differences are coloured, non-significant differences are outlined.

... But students’ social and emotional skills are malleable...

Inequalities in social and emotional skills among students are not set in stone. SSES data as well as previous research support the notion that social and emotional skills are characteristics and abilities that are malleable and change with biological and psychological maturation, environmental influences, individual effort and important life events (Specht et al., 2014[15]; Kankaraš and Suarez-Alvarez, 2019[1]; OECD, 2015[16]; Roberts, Walton and Viechtbauer, 2006[17]).

In Bogotá (Colombia) and on average across participating cities, 15-year-olds exhibited lower levels than 10-year-olds for most of the social and emotional skills. The differences are particularly pronounced when it comes to optimism, trust, energy and sociability. Tolerance, empathy and assertiveness are the only three skills that are reportedly higher (or as high) among 15-year-olds than (or as) 10-year-olds. On the one hand, this might be because teachers and schools are usually more effective at developing these skills. Instruction in citizenship and citizen rights may enhance tolerant attitudes among students. School assignments like oral presentations and written essays may encourage students to develop more assertiveness. On the other hand, the longer one spends in school with its fixed learning environments the more students’ abilities to build and practice self-regulation skills, interpersonal skills and creativity and curiosity may become inhibited.

Overall, age-related differences in students’ social and emotional skills in Bogotá (Colombia) are of higher magnitude than on average across cities. This is particularly the case for skills that fall in the domain of task performance (responsibility, persistence and self-control) as well as trust, where between the ages of 10 and 15 the levels of these skills drop more substantially than in most of the other participating cities (Figure 1.4).

The dip in students’ social and emotional skills as students age is not uniform for all types of students. In particular, the decline is more acute for socio-economically advantaged students, or in other words, less pronounced for socio-economically disadvantaged students.

**Figure 14. Age differences in social and emotional skills**

Differences (15-year-olds – 10-year-olds) in social and emotional skills

Note: Data for Sintra (Portugal) did not reach student response rate standards and are not included in international averages. The figure reports standardised differences, whereby the raw scale points have been divided by the (city-specific) standard deviation. Significant differences are coloured, non-significant differences are outlined.

Source: Adapted from OECD (2021), Beyond Academic Learning. First Results from the Survey on Social and Emotional Skills, OECD Publishing, Paris, https://doi.org/10.178792a1108d-4e, Figure 1.3.
Important age-related differences are also observed in other key outcomes examined in SSES. SSES data show that 10-year-old students enjoy higher levels of psychological well-being than 15-year-olds. Life satisfaction and current psychological well-being dip as students get older while test anxiety increases from childhood to adolescence. Figure 15 shows, for example, that the share of students who reported being very satisfied with their life in Bogotá (Colombia) goes from 70% among 10-year-olds down to slightly less than 40% among 15-year-olds. This pattern is generally more pronounced among girls than boys.

**Figure 15. Students’ life satisfaction, by age cohort and city**

Percentage of students, by level of life satisfaction

Students’ educational and occupational expectations also change as they get older. In particular, older students embrace more diverse occupational expectations than their younger peers. On average across cities, 48% of 10-year-olds expect to work in one of the 10 most frequently reported occupations for their age cohort. This goes down to 37% for 15-year-old students. In addition, the relation between students’ social and emotional skills, and their occupational expectations is much stronger for 15-year-olds than 10-year-olds. This suggests reciprocal influence between students’ social and emotional skills, and their occupational aspirations.
... And students’ social and emotional skills can be influenced by the school environment

The malleability of social and emotional skills enables them to be modified or developed for the better. Schools can play a particularly important role in providing learning environments where skills can be developed, enhanced and reinforced through practice and daily experiences. There are a number of studies that look at the effect of different school-based interventions to enhance students’ social and emotional learning (Durlak et al., 2011[18]; Park et al., 2008[19]; Sklad et al., 2012[20]; Smithers et al., 2018[21]). A meta-analysis by Durlak et al. (2011[18]) shows that social and emotional learning programmes had significant positive effects on targeted social and emotional skills, and attitudes about self, others and school. They increased pro-social behaviour, reduced behavioural problems and improved school performance. A more recent meta-analysis of quality research studies (comprising randomised experimental, quasi-experimental intervention studies and observational studies, controlling for relevant confounding factors) by Smithers et al. (2018[21]) found that interventions aiming to improve social and emotional skills had more obvious positive effects on academic achievement outcomes than on psychological, cognitive, language and health outcomes. These findings suggest that people are not born with a fixed set of social and emotional skills. Instead, there is considerable potential in developing these skills throughout people’s lives (Helson et al., 2002[22]; Srivastava et al., 2003[23]). Studies linking data on teachers and students show that teachers have an impact on students’ social and emotional skills. Teachers’ interactions with students, classroom organisation, and emphasis on critical thinking in specific subjects were found to support students’ development in areas beyond their core academic skills (Blazar and Kraft, 2017[24]).

SSSES data shed light on teachers’ and schools’ roles in shaping students’ social and emotional skills. A first illustration of this is that students with a greater sense of school belonging and better relations with teachers reported higher social and emotional skills. This holds true for Bogotá (Colombia) and for all other participating cities. Fitting in at school is most strongly related to higher co-operation, optimism and sociability. At the same time, students who reported having positive relations with their teachers also view themselves as more optimistic, curious and achievement-focused. These findings suggest that schools that are able to provide a positive disciplinary climate, offer support from teachers and engage with parents in building a positive school culture can help students develop their social and emotional skills. Indeed, all these factors are positively associated with students’ sense of belonging at school by other research studies (Allen et al., 2018[25]; Crouch, Keys and McMahon, 2014[26]; Dotterer, McHale and Crouter, 2007[27]; Ma, 2003[28]; OECD, 2017[29]; Shochet, Smyth and Homel, 2007[30]).

Secondly, school climate and anti-bullying policies can be instrumental to students’ positive social and emotional development. Bullying at school can affect any schoolchild in any country (Nansel et al., 2004[31]). This violent behaviour can have severe long-term physical, social and emotional consequences for students. Teachers, parents, policy makers and the media are increasingly drawing attention to bullying and trying to find ways to tackle it (Phillips, 2007[32]). A Korean study established that being bullied in middle school causes the onset of symptoms of psychopathologic behaviours to resurface later (Kim, Leventhal and Koh, 2006[33]). Yet, research suggests that a supportive and caring school environment is linked to less bullying and, conversely, students’ willingness to seek help (Låftman, Östberg and Modin, 2017[34]; Ma, 2002[35]; Olweus, 2012[36]). In schools where students perceive greater fairness; feel they fit in at school; work in a more disciplined, structured and cooperative environment; and have understanding teachers, students are less likely to engage in risky and violent behaviour (Gottfredson et al., 2005[37]; Kuperminc, Leadbeater and Blatt, 2001[38]).

SSSES data show that students’ exposure to bullying is negatively related to almost all social and emotional skills. In Bogotá (Colombia), as well as on average across participating cities, 10-year-old and 15-year-old students’ exposure to bullying is most strongly related to lower skills in the domains of emotional regulation. Students who reported greater exposure to bullying tended to report lower levels of optimism, emotional control, stress resistance, and trust in other people (Figure 16). These findings are particularly worrying as in Bogotá 32% of 10-year-old students and 18% of 15-year-old students experienced bullying at least a few times a month or more during the 12 months prior to the 2019 survey.
Figure 16. Relations between students’ exposure to bullying, and social and emotional skills
Change in 15-year-olds’ social and emotional skills related to a one-standard deviation increase in exposure to bullying

Note: Data for Sintra (Portugal) did not reach student response rate standards and are not included in the international average. Control variables include gender, socio-economic status and immigration background. Significant differences are coloured, non-significant differences are outlined.


Change in 10-year-olds’ social and emotional skills related to a one-standard deviation increase in exposure to bullying

Note: Data for Sintra (Portugal) did not reach student response rate standards and are not included in the international average. Control variables include gender, socio-economic status and immigration background. Significant differences are coloured, non-significant differences are outlined.

A third area where schools could make a difference in the holistic development of their students is in organising informal activities. Extracurricular activities at school do not only have an academic focus, they usually aim to achieve a broader set of goals such as physical exercise and health; developing creativity and practice or appreciation of the arts; and encouraging volunteering and involvement with the community. Participation in extracurricular activities can also help students develop social and emotional skills (Farb and Matjasko, 2012).

SSES data show that, in Bogotá (Colombia) as well as in all participating cities, students who participate in after-school art activities reported higher levels of creativity, particularly among 15-year-olds (Figure 17). This holds true even after accounting for differences in socio-economic status and gender among students. Differences in creativity levels between students who participate in art activities and those who do not are higher in Bogotá for 10-year-olds as compared to other cities and at par with most other cities for 15-year-olds. In Bogotá, 70% of 10-year-old students participate in extracurricular art activities outside of school (e.g. playing a musical instrument, dancing, drawing, etc.) – a share that drops down to 52% among 15-year-old students. The pattern of declining participation in art activities as students age combined with wider differences in creativity levels suggests that students who think of themselves as not creative are more likely to discontinue their participation in art activities during adolescence. These findings might also partly derive from the fact that education systems often expect compliance from students, with the potential consequence of driving out curiosity and creativity as students grow older and stay longer in the education system. Extended time in school and being exposed to more rigid learning environments may inhibit students’ abilities to build and practice some of these skills (Bailey et al., 2019; Duckworth, Quinn and Tsukayama, 2012). Conversely, it is possible that sustained participation in art activities helps students build confidence in their creativity. While the nature of SSES data does not allow us to identify the direction of causality, the data suggest a strong association between art activities at age 15 and creativity.

![Figure 17. How participation in art activities relates to creativity](https://doi.org/10.1787/92a11084-en. Figure 4.9.)
Box 3. Key features of the OECD’s Survey on Social and Emotional Skills (SSES)

Target populations and samples

The SSES took a single snapshot of two cohorts of primary and secondary school students, at ages 10 and 15. A sample of around 3,000 students was drawn for each of the two age groups in each participating city. The sample design consisted of creating an initial random sample of schools, followed by a random selection of students within sampled schools.

Ten cities participated in the first round of SSES in 2019: Bogotá (Colombia), Daegu (Korea), Helsinki (Finland), Houston (United States), Istanbul (Turkey), Manizales (Colombia), Moscow (the Russian Federation), Ottawa (Canada), Sintra (Portugal) and Suzhou (China).

In Bogotá (Colombia), the school samples for both cohorts were drawn from the populations of about 1150 high schools and 1685 schools. The school samples were stratified by zone and school type.

Survey instruments

SSES assessed students’ social and emotional skills directly but also obtained information from their parents, teachers and school principals.

SSES’s assessment instruments are self- (student) and others’ (parents and teachers) reports on assessed students’ typical behaviours, thoughts and feelings. Questions/items are in the form of simple statements such as “I like learning new things” (item assessing students’ curiosity) and “I stay calm even in tense situations” (item assessing stress resistance). A 5-point Likert-type agree/disagree response scale was used with answers ranging from 1 – completely disagree to 5 – completely agree. All of the 15 assessment scales used positively and negatively worded items.

These methods are used the most frequently in social and emotional skills assessments. They provide a simple and efficient way to collect information from a large number of respondents, are cost-efficient, simple to administer and tend to produce consistent results.

SSES also collected information on students’ and their parents’ background characteristics as well as family, school, and community learning contexts through four contextual questionnaires developed for: students, parents, teachers and school principals.

SSES data of all participating cities were complemented with information on students’ school grades (except in Ottawa [Canada]) and students’ scores via a short cognitive test (except in Houston [United States] and Ottawa [Canada]).

Administration mode

The students filled out the questionnaires online through desktop or laptop devices. A trained study administrator delivered the survey with school staff present. Parents, teachers and school principals also filled out questionnaires online but in some participating cities, parents could choose a paper and pencil option in case of necessity or personal preference. All instruments were provided using a centrally managed online platform.
Acknowledgements

This city note was prepared by Michelle Cherian and Noémie Le Donné, with the valuable contribution of Eva Feron and Ivona Feldmarova. Its development was guided by Andreas Schleicher, Dirk Van Damme and Marta Encinas-Martin. The authors thank Natalia González Gómez (Site Project Manager for Bogotá, Colombia) for her input. The report was edited by Clara Young. The OECD thanks the Porticus foundation for the financial support provided for this report.

The publication was designed by DHA Communications.

References


ICFES (2018), *Marco de referencia para la evaluación – Prueba de competencias ciudadanas Saber 5, Saber 9, Saber 11, Saber TyT y Saber Pro.*, ICFES.


