

Survey on Social and Emotional Skills (SSES): Helsinki (Finland)



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.

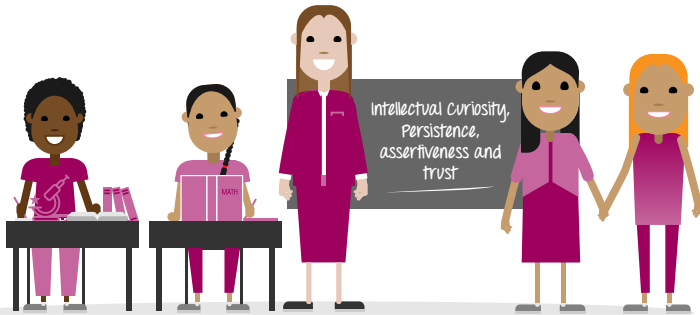
The OECD Survey on Social and Emotional Skills (SSES) focuses on 17 social and emotional skills ranging from curiosity and creativity through to emotional control (see Figure 1). These skills have been selected according to three main criteria. First, previous research shows that they are associated 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

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

Source: Assessment Framework of the Survey on Social and Emotional Skills (Kankaraš and Suarez-Alvarez, 2019^[11])

HIGHLIGHTS FOR HELSINKI (FINLAND)



In Helsinki, intellectual curiosity, persistence, assertiveness and trust are the social and emotional skills most strongly related to 15-year-olds' school performance in reading, mathematics and the arts.

Overall, gender differences in students' social and emotional skills are slightly more pronounced in Helsinki than on average across participating cities.

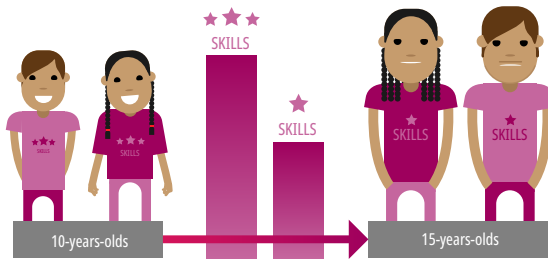


15-year-old boys exhibit higher skills in the domains of emotional regulation (stress resistance, optimism and emotional control) and engaging with others (sociability, assertiveness, energy), in Helsinki and in all participating cities. Likewise, 15-year-old girls exhibit higher levels of responsibility, empathy, co-operation, and tolerance.



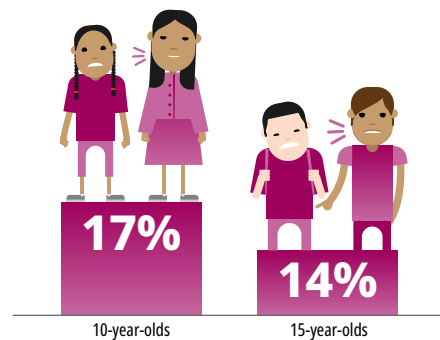
On average, across all participating cities, socio-economically advantaged students exhibit higher levels of every social and emotional skill measured by SSES than those less advantaged.





15-year-olds exhibit lower social and emotional skills than 10-year-olds, in Helsinki and on average across participating cities. The differences are particularly pronounced when it comes to optimism, trust, energy and sociability.

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



In Helsinki, 17% of 10-year-olds and 14% of 15-year-olds have 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.



In Helsinki, social and emotional skills that matter for students' current psychological well-being include optimism, self-control, stress resistance, trust, and energy.

Find more about the findings of the **Survey on Social and Emotional Skills** in the international report: 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>

The context of social and emotional learning in Helsinki (Finland)

Helsinki (Finland) is one of 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 Helsinki). Helsinki is the capital city of Finland. Although it is the primary and most populous city in Finland with about 650,000 inhabitants, it is one of the smallest among the cities participating in the SSES. It is bigger only than Sintra (Portugal), which has fewer than 400 000 inhabitants, but smaller than all other participating cities. In comparison to the diverse pool of cities participating in SSES, Helsinki (Finland) distinguishes itself through its high level of economic development, manifested through the educational level and wealth of its population (in Helsinki, almost 50% of the population is tertiary educated and Helsinki exhibits one of the highest gross domestic product (GDP) per capita among the SSES-participating cities). Compared to the rest of Finland, Helsinki singles out through its high share of immigrants (16% versus 7% for Finland as a whole). Education is obviously one of the key areas of investment of Finland, with an estimated 6% of the GDP spent on education (as of 2018), which is above the OECD average (5%).

A wealth of data has been accumulated on the knowledge and cognitive skills that Finnish students and adults possess and how they compare around the world, thanks to OECD surveys such as the Programme for International Student Assessment (PISA) and the Programme for the International Assessment of Adult Competencies (PIAAC). PISA consistently showed that 15-year-old students in Finland have greater cognitive skills than the OECD average in reading, mathematics and science. Yet, mean reading, mathematics and science performance has started to decline in Finland beginning in 2006 (OECD, 2019_[2]). Adults in Finland have also ranked among the top skilled across participating countries in PIAAC, with adults aged 16 to 65 showing above-average proficiency in literacy, numeracy and problem solving in technologically rich environments (OECD, 2013_[3]). Past OECD surveys have also provided key information on equity in education in Finland in a cross-country comparative fashion. In the last PISA cycle in 2018, the gender gap in reading in Finland was one of the widest of all participating countries and economies. The gap was similar to that observed in 2009, as both girls' and boys' performance declined over the period. In Finland, the gap in performance related to students' socio-economic status is smaller than the average difference between advantaged and disadvantaged students across OECD countries. However, in Finland, this gap has widened since PISA 2009 while it remains the same on average across OECD countries (OECD, 2019_[4]).

Box 1. Key information about Helsinki (Finland)

City: Helsinki

Location: Capital city of Finland

Population (2019): 650 000 inhabitants

Average age (2019): 41

Percentage of first- and second-generation immigrants (2018): 16%

Share of tertiary-educated people (2020): 43%

Average unemployment level among individuals aged 15 to 74 (2018): 8%

Sources: Information provided by the city of Helsinki.

However, little is known about students' social and emotional skills and how these relate to key individual outcomes, despite the attention paid to these skills in Finland and in the city of Helsinki. Helsinki has a strong focus on their students' social and emotional skills, which are embedded in the national curriculum and courses in both primary and secondary education.



While there is no formal course for social and emotional learning, developing social and emotional skills is included in the national curriculum for basic education (grades 1-9), which was introduced in Finland in 2016. This curriculum includes social and emotional skills in all school subjects as part of the seven transversal competence areas: thinking and learning to learn; cultural competence; interaction and expression; taking care of oneself and managing daily life; multi-literacy; information and communications technology (ICT) competence; working life competence and entrepreneurship; and participation, involvement and building a sustainable future. The transversal competence area referred to as “taking care of oneself and managing daily life” particularly emphasises social and emotional skills.

In the first two grades of primary education in Finland, social and emotional skills are included in environmental studies, which is a combination of biology, geography, physics, chemistry and health education. It is an integrated subject with a sustainable development perspective. It combines perspectives from natural and human sciences. Its goal is to direct students to practise group work skills and emotional skills and to strengthen respect of oneself and others. Contents are chosen so that students form an understanding of the parts and function of the human body, the life trajectory and the overall growth and development of this life phase. Students practise emotional skills and mental well-being development and a respect for others that is appropriate for their particular life phase. Social and emotional skills are also practised in religion classes (grades 3-6) with topics on children’s rights and responsibilities; forming and justifying one’s own views; friendship, positive class and school society formation; and preventing discrimination. Developing preparedness in social and emotional skills is also included in health education (grades 7-9) to support students’ capability to act in different conflict situations; acknowledge one’s own values and attitudes. Students work on issues such as individualisation, communality, equality, and responsible decision-making. They also work on expressing and regulating emotions in social interactions. Students learn to deal with conflicts, problematic situations, stress and crisis in a constructive manner. Quite a few social and emotional skills are developed through these programmes and tie in with the skills assessed in SSES – assertiveness, co-operation, empathy, persistence, responsibility, self-control sociability, stress resistance, tolerance and trust.

Developing social and emotional skills is also embedded in all programmes of upper secondary education. Students enrolled in vocational education programmes develop 8 lifelong learning key skills, including societal and citizenship skills, which encompass social and emotional skills. The new national curriculum for general upper secondary education implemented in 2021 is based on transversal (generic) skills. These include social and emotional skills to support student well-being. In general upper secondary education, social and emotional skills are also embedded in health education. Students can also opt for an optional course on learning skills, which includes 3 themes: studying; social relationships; and emotions and the mind. The goal is that the student understands the meaning of feelings, how feelings are formed and how feelings and thoughts affect each other. Students learn about the role of social relationships for their well-being and acknowledge their responsibility in social relationships. At this upper secondary level of education, emphasis is put on developing social and emotional domains and skills such as task performance (responsibility, persistence and self-control), collaboration (empathy, trust and co-operation) and engaging with others (sociability and assertiveness).

Assessment is at the core of the implementation of the basic education curriculum. In Finland, assessment focuses on three dimensions: students’ learning, work and behaviour. Social and emotional skills are thus assessed as part of students’ behaviour. Behaviour objectives are based on the educational objectives of the school and the school policies that define the culture of the community.

In addition to embedding social and emotional learning into the national curriculum and education objectives, the city of Helsinki (Finland) adopts a local curriculum emphasising a holistic approach to student development. Helsinki also runs several city-level activities, under the umbrella of the “*Ruuti*” system, which contribute to the development of social and emotional skills of young people. The *Ruuti* system in Helsinki aims to empower young people by creating opportunities to promote issues they consider important. *Ruuti* aims to ensure that every young person in Helsinki has at least one experience of making a difference each year. The activities are guided by five principles: learning the skills of empowerment and participation; equality and equity; doing well by others; regionalism and collective work; and diversity of participation. *Ruuti* includes a range of activities showcased in Box 2.

Box 2. The *Ruuti* system in Helsinki

The *Ruuti* system in Helsinki helps young people develop a wide range of social and emotional skills from assertiveness, optimism and sociability through to responsibility, curiosity and creativity.

Student body

Every student at a school or educational institution belongs to a student body.

Student council

A group of students is elected by other students to represent them and help plan activities for the students.

Educational institutions' own groups and teams

Based on learners' suggestions and activity, educational institutions host various groups and teams that learners can utilise to promote matters that they find important. Learners can also tackle any issues they observe themselves and find groups to promote matters. Examples of such groups include environmental teams, food juries, well-being groups, tutor activities, eco-supporters and peer mediators.

Participatory budgeting

The city of Helsinki offers three participatory budgeting models for youth: *Ruuti* funding (*Ruuti-raha*), *Ruuti Budget* and *OmaStadi*. *Ruuti* funding consists of annual funds allocated to pupil and student councils to be used for developing communality or improving the pleasantness of the study environment. In *Ruuti Budget*, 12- to 17-year-olds come up with ideas, vote and negotiate every year on what kind of leisure time activities and services will be provided to young people in Helsinki. In *OmaStadi*, Helsinki residents can draw up proposals and make plans that benefit everyone in Helsinki. Residents aged over 12 can vote and thus influence decisions.

Student council days

Student councils assemble every year to share experiences and develop activities.

Youth Council

The Youth Council is an influential group of 30 young people that ensures they have a voice in decision-making in Helsinki. It is a youth lobbying body established by municipal law. Its members (aged 13 to 17) are elected every two years to ensure that young people are involved in decision-making and in the planning, implementation and monitoring of activities in Helsinki's various departments. The Youth Council meets in working and small groups to discuss different topics regularly, about twice a month.

Youth Initiatives

Thirteen- to 17-year-olds can submit initiatives to the City of Helsinki through a dedicated webpage. Young people can submit initiatives such as requesting that a park next to their school be equipped with benches. They can flag a dangerous intersection in their neighbourhood or request to have a basketball court in their area. While submitting their suggestion, they are requested to build a case for this and explain how their proposal can improve collective well-being.

Sponsi grants

Young people aged 7 to 28 can apply and receive grants for implementing their ideas and projects.

Young Voice Editorial Board

In the Young Voice Editorial Board, young people aged 13 to 19 can speak out and influence societal matters in the media.

Source: <https://ruuti.munstadi.fi/en/ruuti/>



Lastly, each school in Helsinki or in Finland more generally is expected to endorse and implement an anti-bullying programme (see more information on the KiVa programme, as an example, in Box 3).

Box 3. The KiVa Anti-bullying Programme

KiVa is an anti-bullying programme that was developed in the University of Turku (Finland) with funding from the Ministry of Education and Culture. The programme is evidence-based, which means that the effectiveness of KiVa has been proven scientifically. KiVa offers a wide range of concrete tools and materials for schools to tackle bullying. It provides a thoughtful definition of what bullying is, emphasising that bullying takes many different forms. That it is a group phenomenon in which not only the bullies but also their bystanders play a significant role. It also provides helpful information in detecting bullying. These warning signs typically include changes in child's behaviour such as being suddenly afraid of walking to school or taking the bus; becoming stressed, anxious, withdrawn, and easily irritable; being absent from school due to head or stomach aches; and visible signs of physical aggression.

This programme hosts a website where students can look for recommendations of things they can do if they are bullied. Students are advised to tell someone they trust either at school or at home; look for friends who can support them; and be assertive. These recommendations tie in with social and emotional skills examined in SSES such as trust, sociability, co-operation and assertiveness.

The programme also provides a guide targeted to parents. It offers information about bullying, what the current research says and what can be done at home and at school. It strongly relies on the notion that co-operation between home and school is important in addressing bullying.

The programme further includes a research component called "Challenge", which aims to identify the characteristics and conditions of youth who continue to be bullied or continue bullying despite targeted interventions.

Source: <https://www.kivaprogram.net/>

While this overview provides some context within which to examine findings from SSES for the city of Helsinki (Finland), no conclusion can be drawn from SSES as to how elements of this context influence social and emotional learning in Helsinki.

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.

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 students¹. SSES data from all participating cities with available 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.

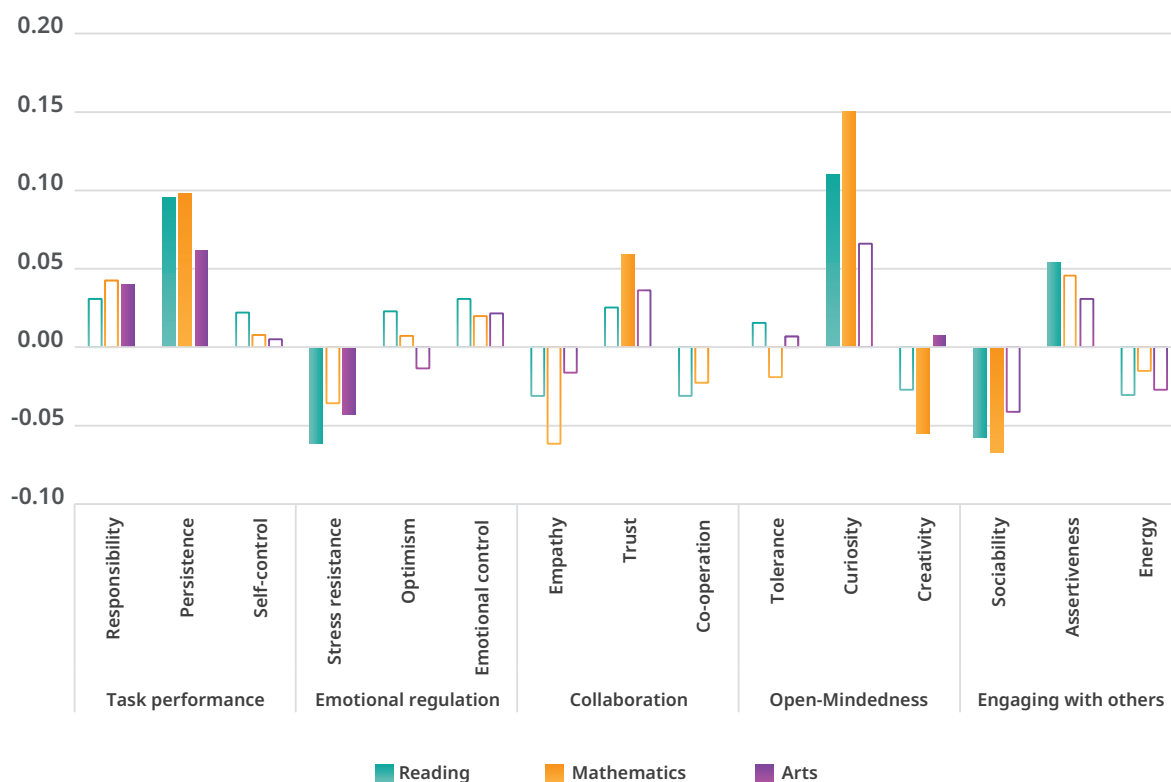
Fifteen-year-olds who reported being more stress-resistant (relaxed) and sociable have, on average, lower school grades (Figure 2). This does not mean that calmness in face of adversity (a benefit of being stress-resistant) and seeking support from peers are harmful to school achievement. Instead, this 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.

¹ School grades were not collected in Ottawa (Canada).



Figure 2. Relationship between social and emotional skills, and school performance of 15-year-old students (international average)

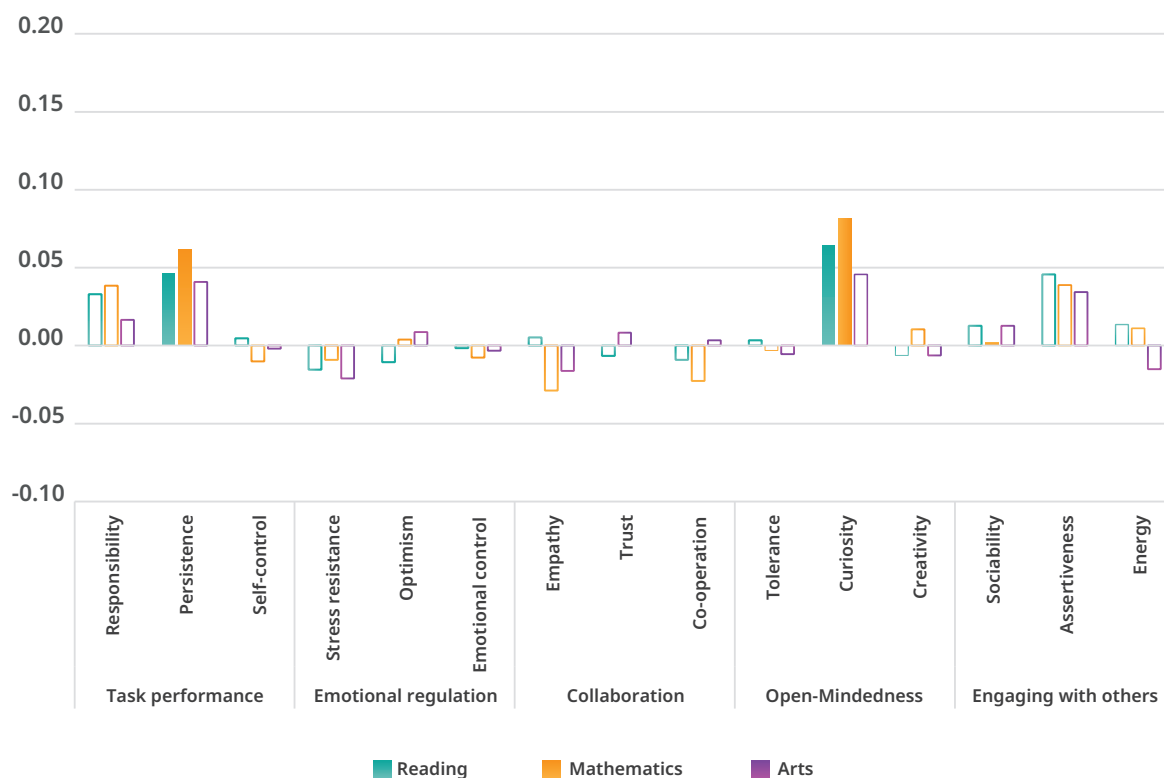
Coefficients of (standardised) grades in reading, mathematics and the arts on (standardised) scores on social and emotional skills scales (international average)



Note: Data for Sintra (Portugal) did not reach student response rate standards and are not included in international averages. The regressions are 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/10.1787/92a11084-en>, Figure 2.1.

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

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



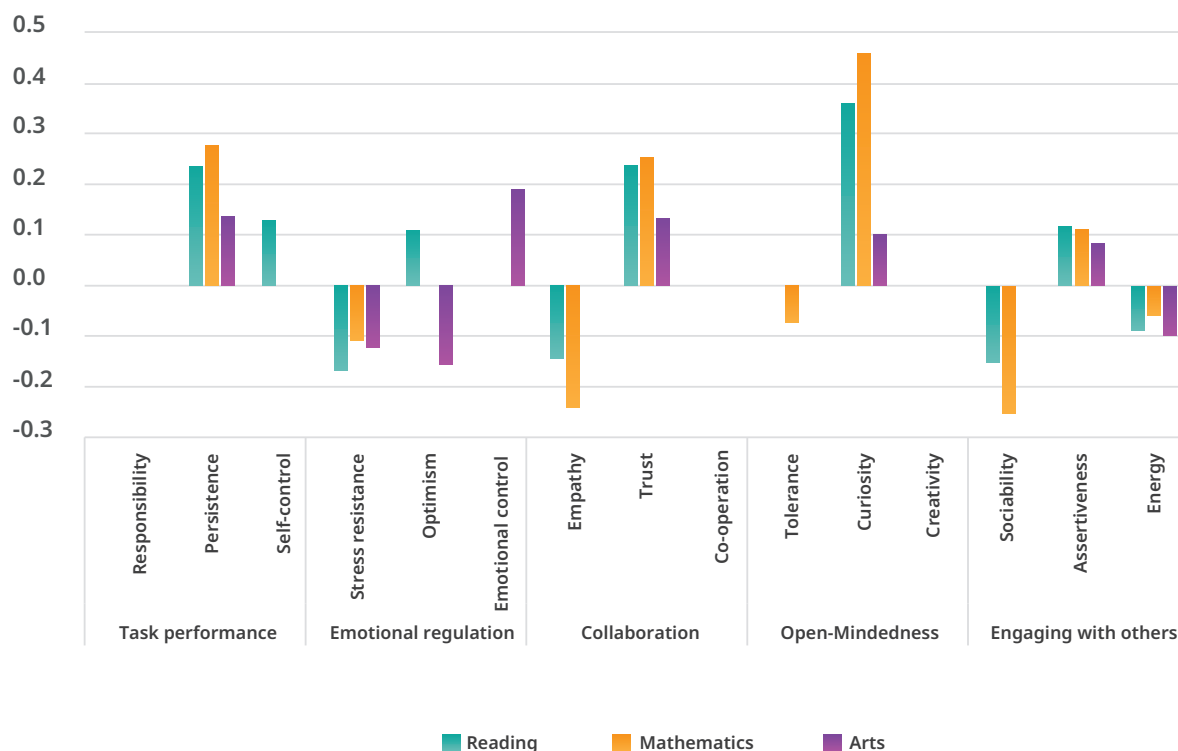
Note: Data for Sintra (Portugal) did not reach student response rate standards and are not included in international averages. The regressions are city-specific and control for gender, socio-economic status, and scores in the cognitive ability test, with the exception of Houston (United States), where 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/10.1787/92a11084-en>, Figure 2.2.

Figure 4 provides an overview of the social and emotional skills that are most strongly related with 15-year-old students' grades in all three subjects for the city of Helsinki (Finland). Being intellectually curious, persistent, assertive, and trusting are the social and emotional skills most positively related to school grades for 15-year-olds in all three subjects considered as part of SSES analysis: reading, mathematics and the arts. 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. Students who reported being more trusting are those who feel that they can rely on their peers for support and confide in them. This appears conducive to higher school performance. Being resistant to stress and having more energy are negatively related to grades in all subjects. Students with higher stress resistance may not have anxiety about school performance and therefore do not worry about their grades as much as other students. This finding about energy may be due to the fact that educational assignments often require students to exhibit low energy (e.g. stay at their desks).



Figure 4. Skills most strongly associated with 15-year-olds' performance in Helsinki (Finland)

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



Note: Coefficients from regressions of 15-year-olds' (standardised) grades in reading, mathematics and the arts on (standardised) scores on social and emotional skills scales. Each regression controls for gender, socio-economic status, and scores in the cognitive ability test. Only significant and lasso-selected relationships are reported.

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 A2.1, A2.2, A2.3, A2.4, A2.5 and A2.6.

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^[5]).

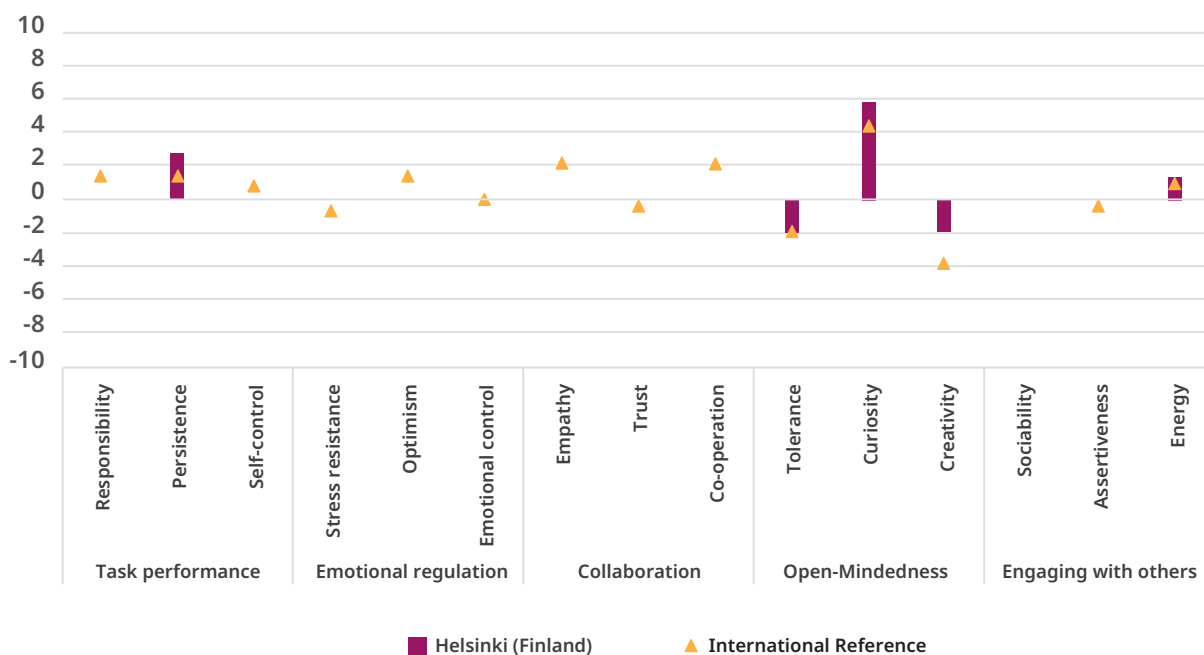
Education systems can play a crucial role in channelling these skills into the labour market, and helping young people develop a fair assessment of themselves and of their future educational opportunities. In doing so, they can ensure that students' skills, interests and aptitudes find a suitable match in the economy (Musset and Kurekova, 2018^[6]).

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 Helsinki (Finland) 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 5). In Helsinki and nearly all other cities, these students also represent themselves as less creative than other students. More specific to Helsinki is the fact that students aspiring to become health professionals are more persistent, energetic, and less tolerant. This combination of social and emotional skills is not surprising given that health occupations require curiosity for the sciences and health professionals often spend their workdays on their feet moving from patient to patient.

Figure 5. Skills most strongly associated with expectations of working as health professionals in Helsinki (Finland)

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



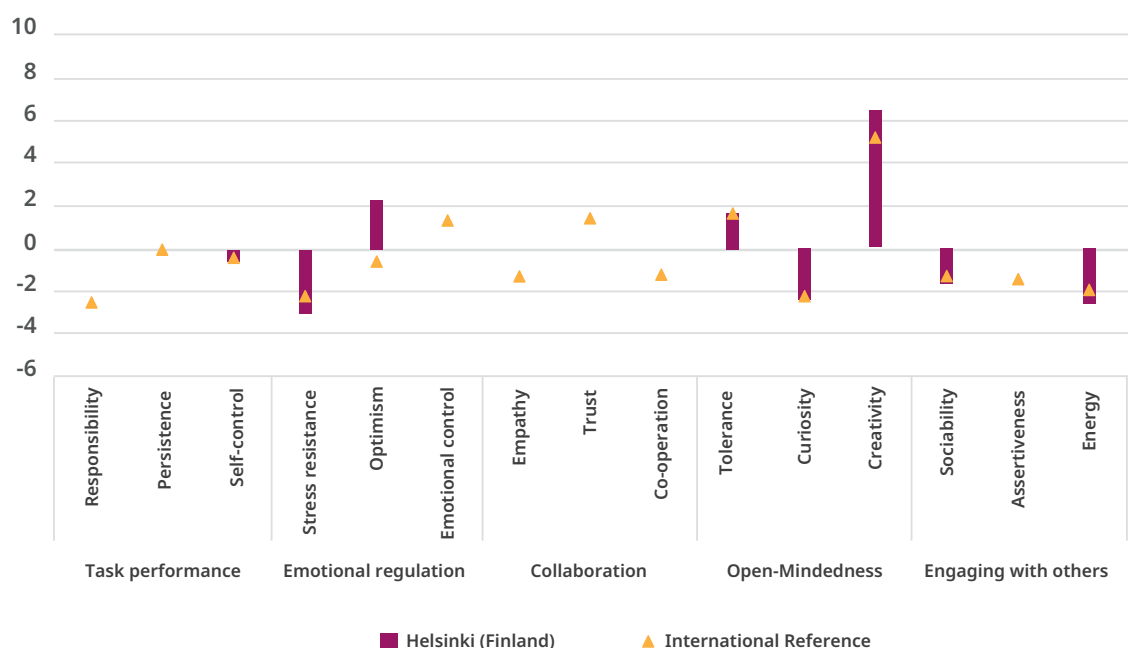
Note: The figure shows the percentage-point change in the likelihood that a 15-year-old student expects to become a health professional that is associated with a 100-point increase in the corresponding skill score (the standard deviation of the score distribution of each skill was set to 100 for the 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. **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>, Table A2.8.



In all cities including Helsinki (Finland), students expecting to work in a creative occupation also represent themselves as more creative (Figure 6). 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 Helsinki, students expecting a creative occupation tend to be more optimistic and tolerant but less resistant to stress – they are also less sociable, curious and energetic compared to the rest of the students.

Figure 6. Skills most strongly associated with expectations of working in a creative occupation in Helsinki (Finland)

Percentage-point change in the likelihood that a 15-year-old student expects to work in a creative occupation



Note: The figure shows the percentage-point change in the likelihood that a 15-year-old student expects to work in a creative occupation 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. **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>, Table A4.20.

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^[77]). 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^[8]; Patton, 2016^[9]). 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.

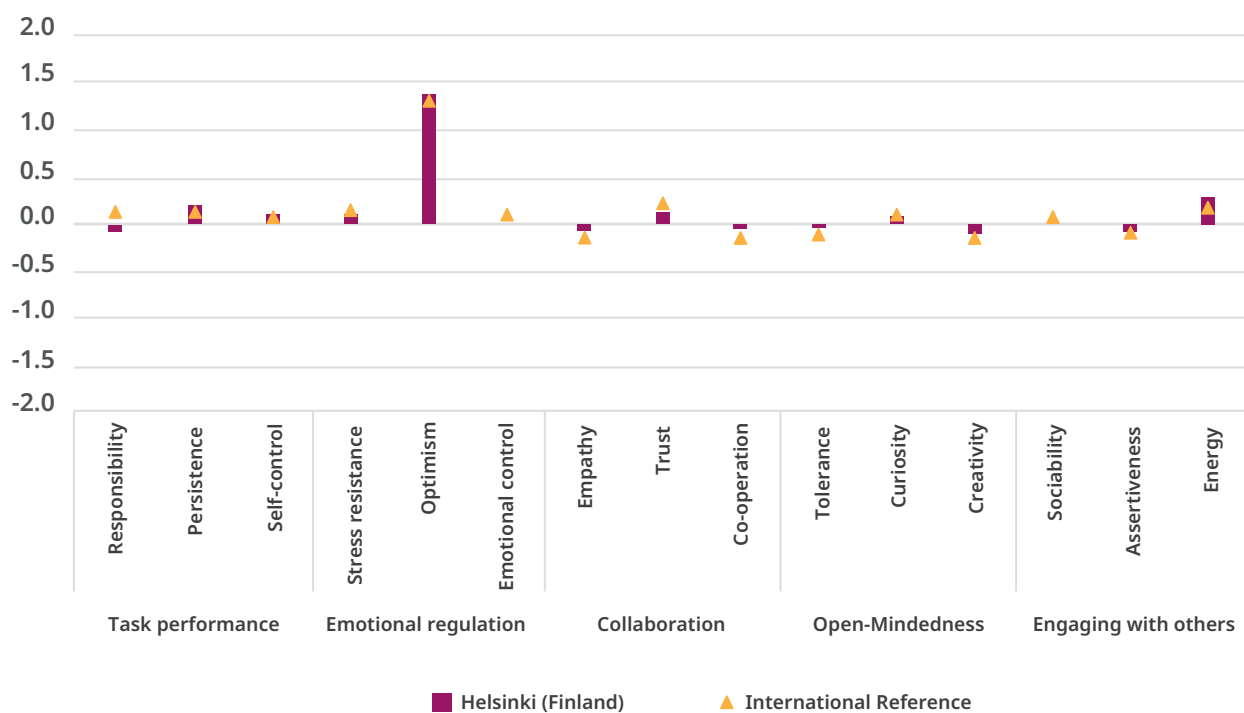
Life satisfaction

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 Helsinki (Finland) and in all other participating cities, 15-year-old students who are more optimistic also reported higher levels of life satisfaction (Figure 7). 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₍₁₀₎).

Helsinki (Finland) is similar to other participating cities in that optimism is the social and emotional skill that is strongly related to 15-year-old students' life satisfaction. There are other social and emotional skills that are also positively related to students' life satisfaction, although to a smaller extent than optimism. These are persistence, stress resistance, energy, and trust among 15-year-olds and sociability among 10-year-olds.

Figure 7. 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.

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>, Table A3.18.

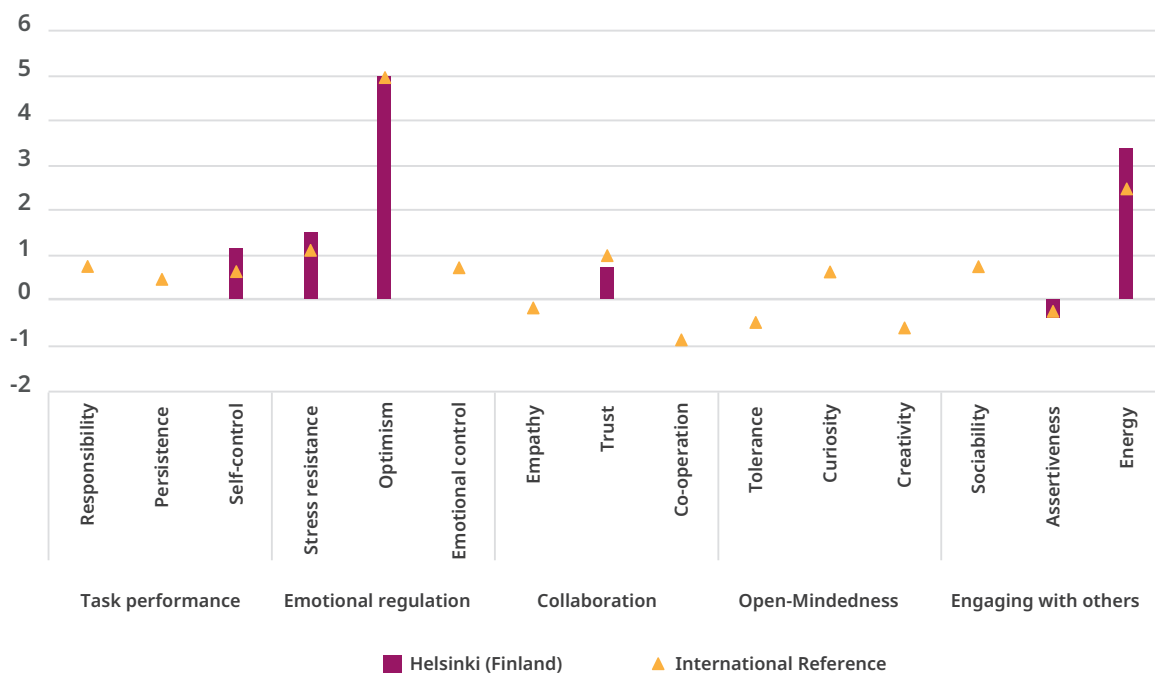


Current psychological well-being

Students' current psychological well-being is an evaluation of students' feelings and experiences during the two weeks prior to the survey. In Helsinki (Finland) and in all other participating cities, being optimistic is strongly related to one's current psychological well-being (Figure 8). 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 Helsinki are self-control, stress resistance, trust, and 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^[11]). 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. A recent study conducted on Finnish adolescents found that “grit” (consistency of interest and perseverance of effort) can act as a resilience factor among adolescents. Higher levels of reported grit reduces reported depressive symptoms when adolescents experience high-school burnout (Tang et al., 2021^[12]).

Figure 8. Skills most strongly associated with students' current psychological well-being in Helsinki (Finland)

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.

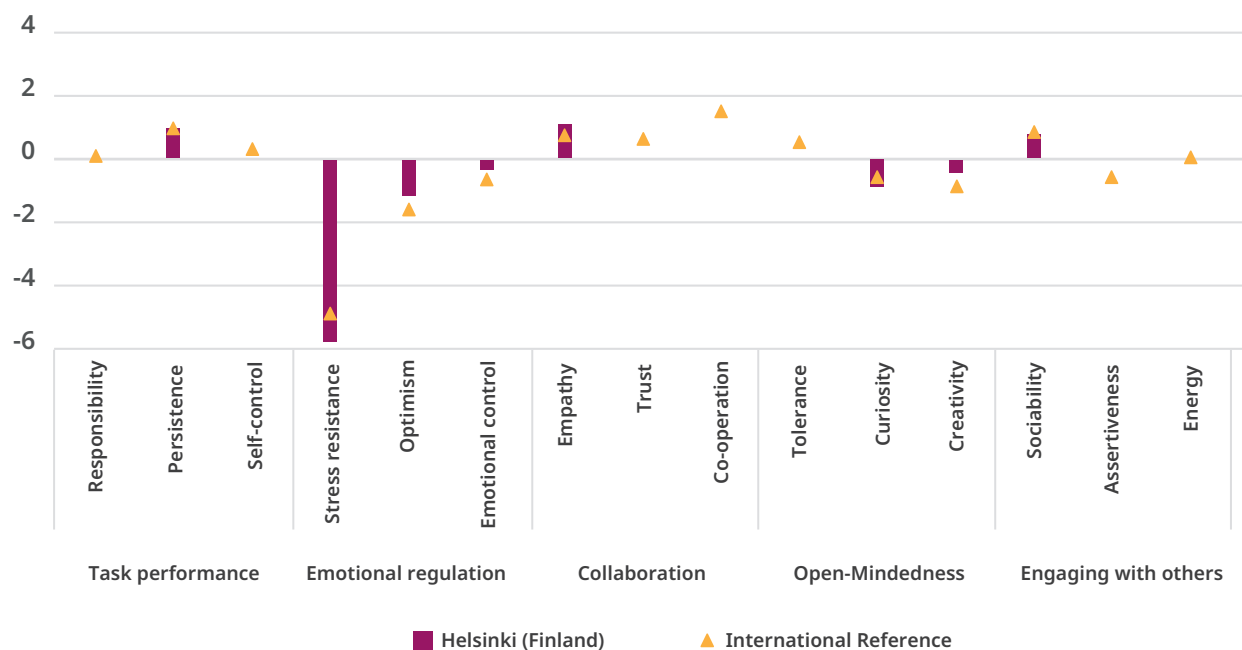
Source: Adapted from OECD (2021), *Beyond Academic Learning. First Results from the Survey on Social and Emotional Skills*, OECD Publishing, Paris, <https://doi.org/10.1787/92a11084-en>, Table A3.19.

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^[13]). It typically arises in educational settings where students believe their abilities are stretched or exceeded by the demands of the test situation. In Helsinki (Finland), and all participating cities with available data, students who indicated higher stress resistance reported a lower level of test anxiety. More specific to Helsinki is the fact that both 10- and 15-year-olds who are more optimistic also reported lower levels 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 9). Among 10-year-olds in Helsinki, higher levels of responsibility are also related to lower levels of test anxiety. For 15-year-olds, higher levels of persistence are related to lower test anxiety while students with more curiosity are more likely to have higher test anxiety.

Figure 9. Skills most strongly associated with test anxiety in Helsinki (Finland)

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.

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>, Table A3.20.



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.

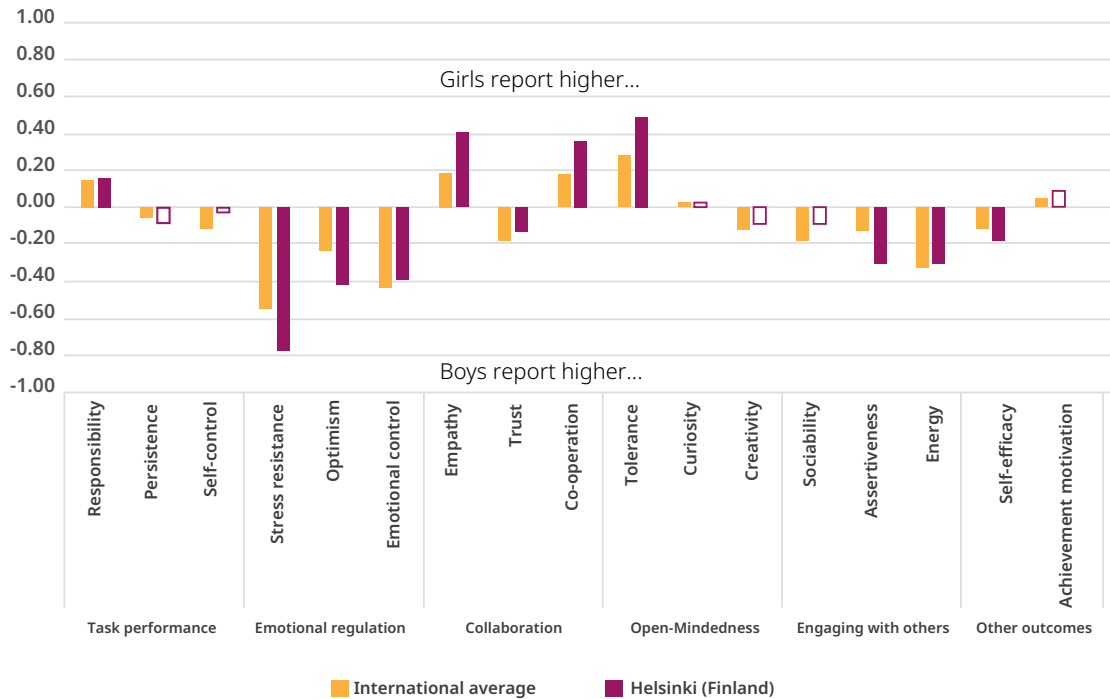
In Helsinki (Finland), as well as on average across participating cities, boys exhibit higher skills in the domains of emotional regulation (stress resistance, optimism and emotional control) and engaging with others (sociability, assertiveness, energy). Likewise, 15-year-old girls exhibit higher levels of responsibility, empathy, co-operation, tolerance and achievement motivation. Overall, gender differences in 15-year-olds' social and emotional skills seem slightly more pronounced in Helsinki than on average across the participating cities. A recent study conducted on about two thousand 7th and 8th graders from Finland also indicated that social and emotional skills can play an important role in students' holistic development, depending on students' gender. More specifically, this study found that “grit” protects students from depressive symptoms and more so among boys than girls. When male adolescents are at risk of school burnout, both consistency of interest and perseverance of effort protect them and they have low levels of loneliness and depressive symptoms (Tang et al., 2021[12]). Data from SSES further show that, both in Helsinki and on average across cities, gender differences in students' social and emotional skills seem to increase with age as they tend to be more pronounced among 15-year-olds than 10-year-olds (Figure 10).

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. This also generally holds true for Helsinki (Finland). However, unlike what is observed for the international average, in Helsinki, there are a few social and emotional skills for which no socio-economic difference is observed in the reported levels. Among 15-year-olds, socio-economically disadvantaged students report similar levels to their advantaged peers on: persistence and self-control (in the domain of task performance); optimism and emotional control (in the domain of emotional regulation); and sociability and energy (in the domain of engaging with others). Among 10-year-olds, no socio-economic gap is found for stress resistance and assertiveness. In Helsinki, there is even one social and emotional skill of which 15-year-old students from socio-economically disadvantaged homes reported higher levels than their advantaged peers – stress resistance. Of note in Helsinki as well as on average across cities, socio-economic differences in students' social and emotional skills tend to decrease between the ages of 10 and 15 (Figure 11).

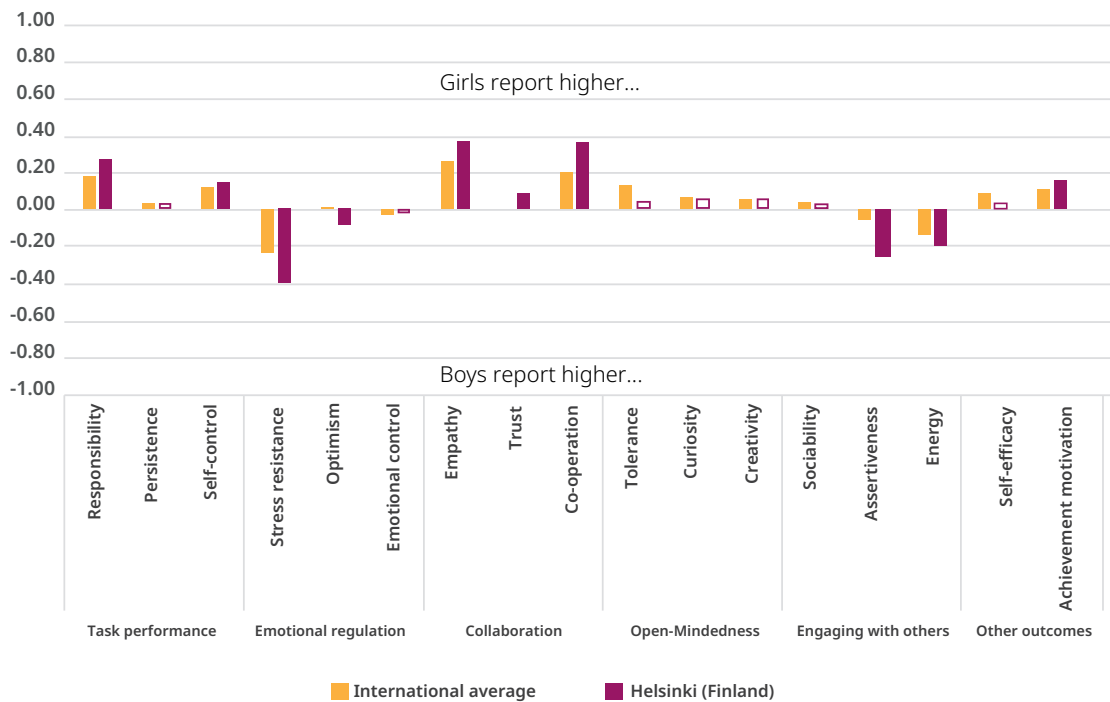
In Helsinki (Finland), 15-year-old students with a migrant background exhibit higher levels of skills than students without a migrant background in persistence, self-control, stress resistance, optimism, co-operation, tolerance, sociability, assertiveness, energy, and self-efficacy. Fifteen-year-olds with a migrant background are also less likely to trust others compared to students who are native-born.

Figure 10. Gender differences in social and emotional skills

Standardised gender differences in skill scores (15-year-old girls – 15-year-old boys)



Standardised gender differences in skill scores (10-year-old girls – 10-year-old boys)



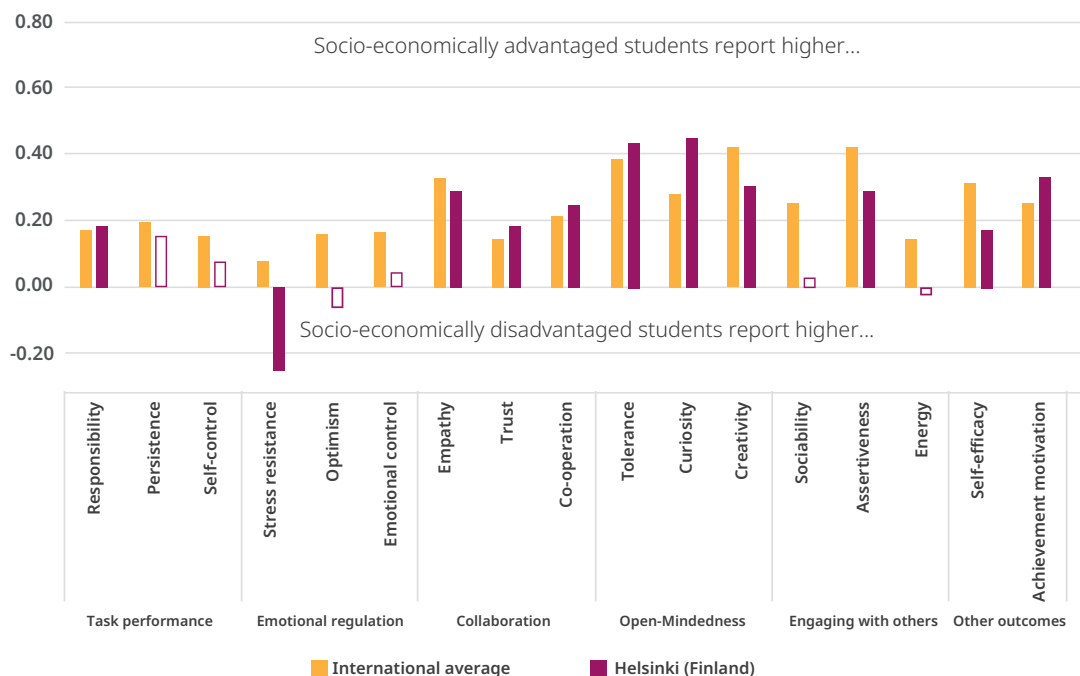
Note: Data for Sintra (Portugal) did not reach student response rate standards and are not included in international averages. The figures report standardised differences, whereby the raw scale points have been divided by the (city-specific) standard deviation. Significant differences are coloured, non-significant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

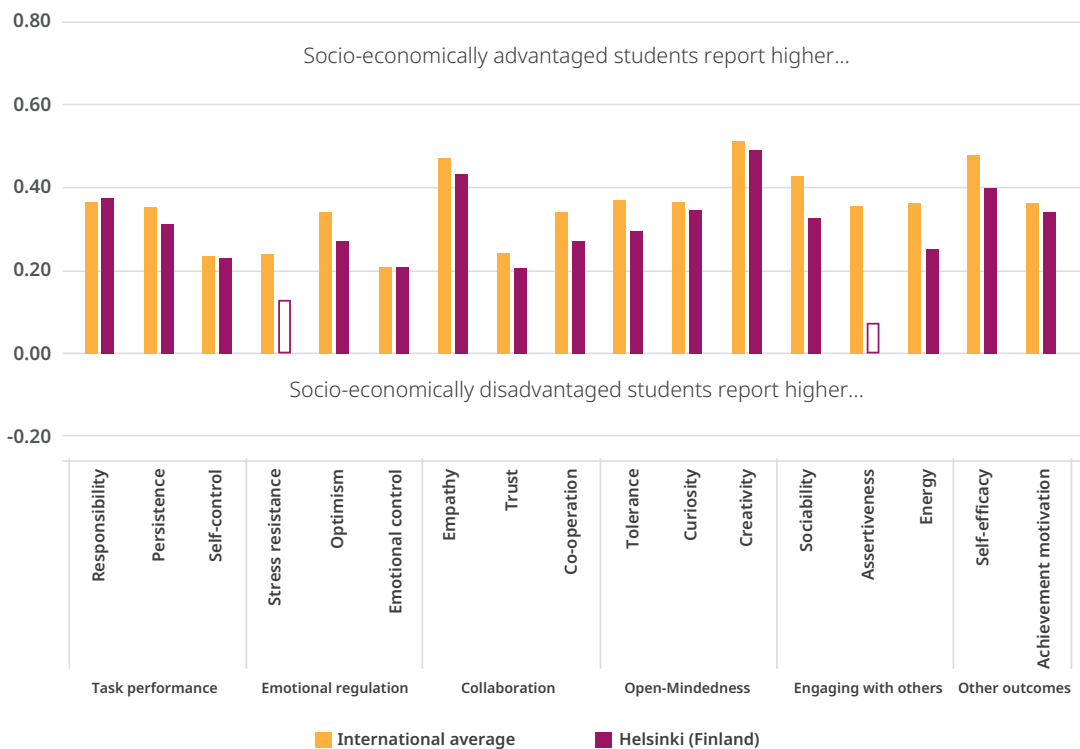


Figure 11. Differences in social and emotional skills by socio-economic status

Standardised differences in skill scores (high socio-economic status – low socio-economic status) among 15-year-olds



Standardised differences in skill scores (high socio-economic status – low socio-economic status) among 10-year-olds



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.

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>, Figures 1.8. and 1.9.

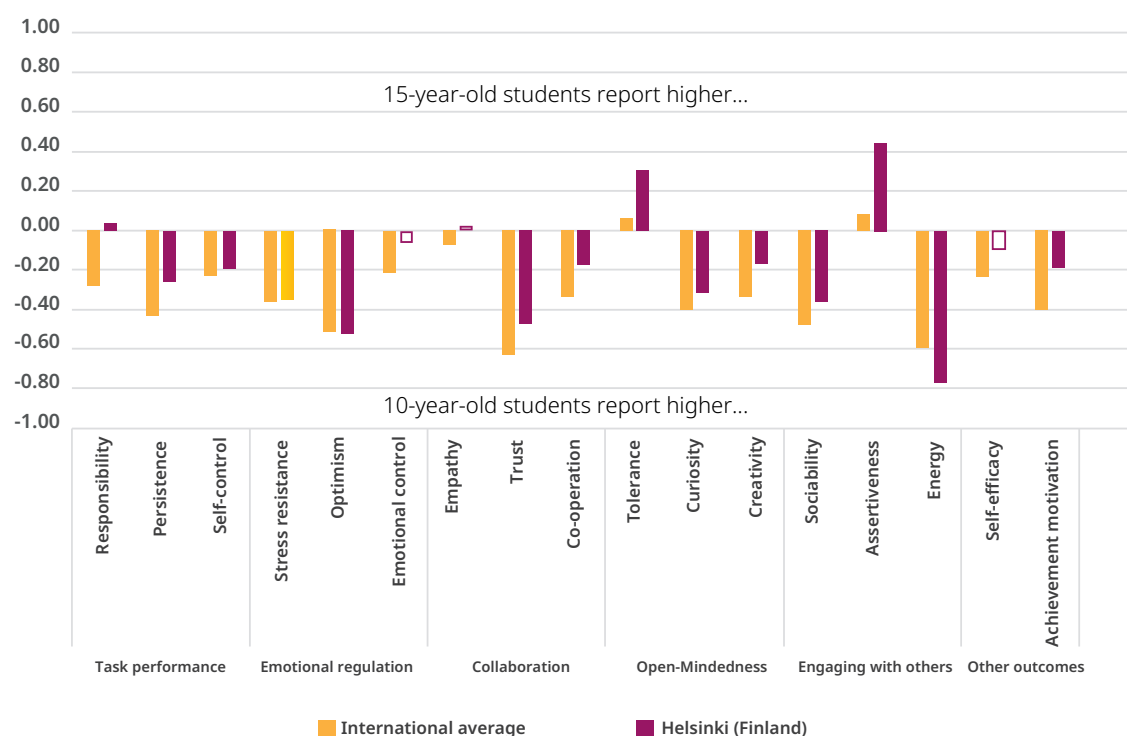
... But students' social and emotional skills are malleable...

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^[14]; Kankaraš and Suarez-Alvarez, 2019^[15]; OECD, 2015^[16]; Roberts, Walton and Viechtbauer, 2006^[17]).

In Helsinki (Finland) and on average across participating cities, 15-year-olds exhibit lower levels than 10-year-olds for most social and emotional skills. Of note overall, the dip in students' social and emotional skills observed as students age is less pronounced in Helsinki (Finland) than on average across cities (Figure 12). The differences are more pronounced when it comes to optimism, trust, energy and sociability but are smaller for empathy. Tolerance and assertiveness, and, to a lesser extent, responsibility, are the only skills that are reportedly higher among 15-year-olds than 10-year-olds. This suggests that schools might play a role in the development of skills like tolerance, assertiveness and responsibility but possibly neglect or even impede other social and emotional skills. Instruction on citizenship and citizen rights, for instance, may enhance tolerant and responsible behaviour among students. And school assignments like oral presentations and written essays may encourage students to develop more assertiveness. However, 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.

Figure 12. 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.

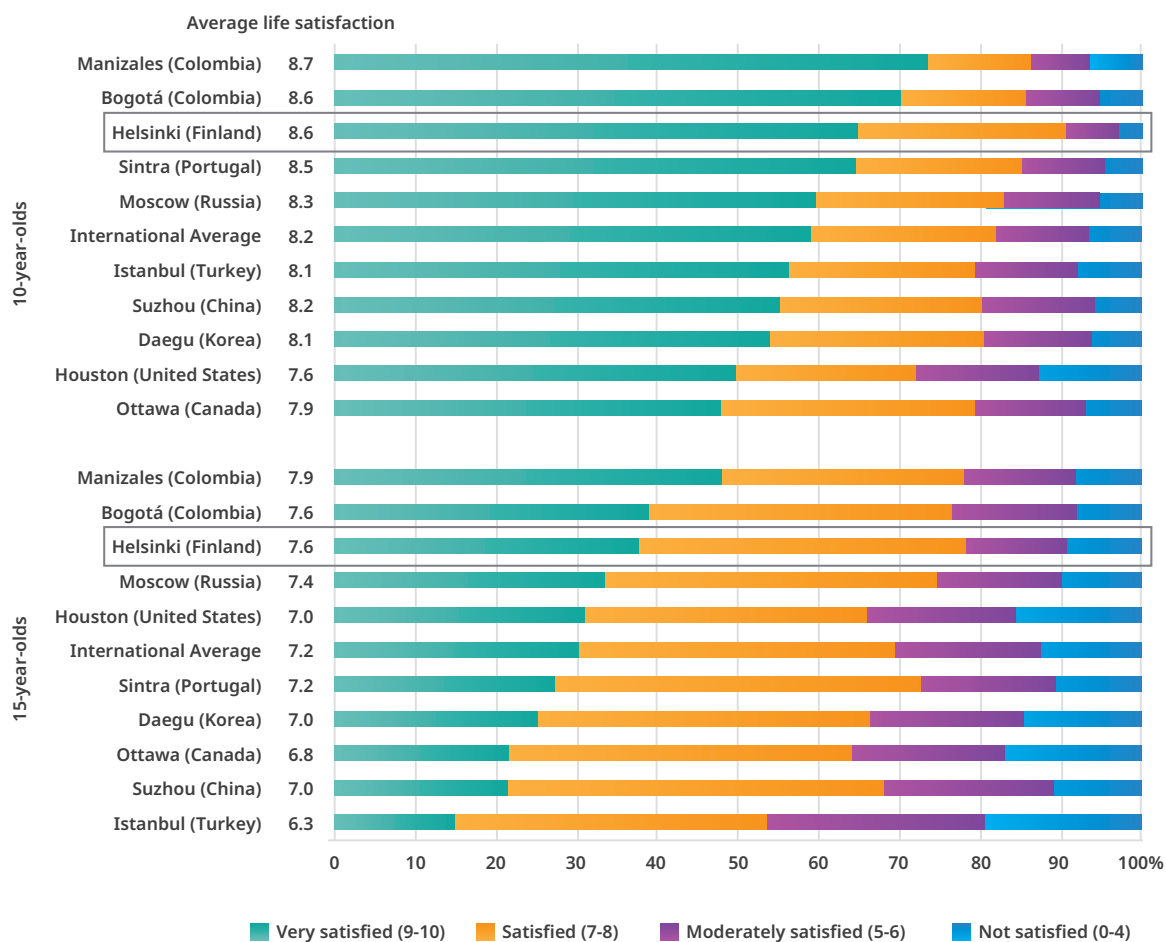
Source: Adapted from OECD (2021), *Beyond Academic Learning. First Results from the Survey on Social and Emotional Skills*, OECD Publishing, Paris, <https://doi.org/10.1787/92a11084-en>, Figure 1.3.



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 13 shows, for example, that the share of students who reported being very satisfied with their life in Helsinki (Finland) goes from nearly 65% among 10-year-olds down to less than 40% among 15-year-olds. This pattern is generally more pronounced among girls than boys.

Figure 13. Students' life satisfaction, by age cohort and city

Percentage of students, by level of life satisfaction



Note: Cities are ranked in descending order of the percentage of students who reported being very satisfied with their life.

Data for Sintra (Portugal) did not reach student response rate standards

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>, Figure 3.1.

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 participating 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]).

SSES 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 Helsinki (Finland) and for all other participating cities. Fitting in at school is most strongly related to higher co-operation, optimism and sociability. A recent study conducted on 1 038 high-school students from the Helsinki metropolitan area also found that students reporting higher curiosity, grit, academic buoyancy and social engagement were more likely to be engaged in their school life, and less likely to suffer from school burnout (Salmela-Aro and Upadaya, 2020^[25]).

Data from SSES further show that 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 in other research studies (Allen et al., 2018^[26]; Crouch, Keys and McMahon, 2014^[27]; Dotterer, McHale and Crouter, 2007^[28]; Ma, 2003^[29]; OECD, 2017^[30]; Shochet, Smyth and Homel, 2007^[31]).

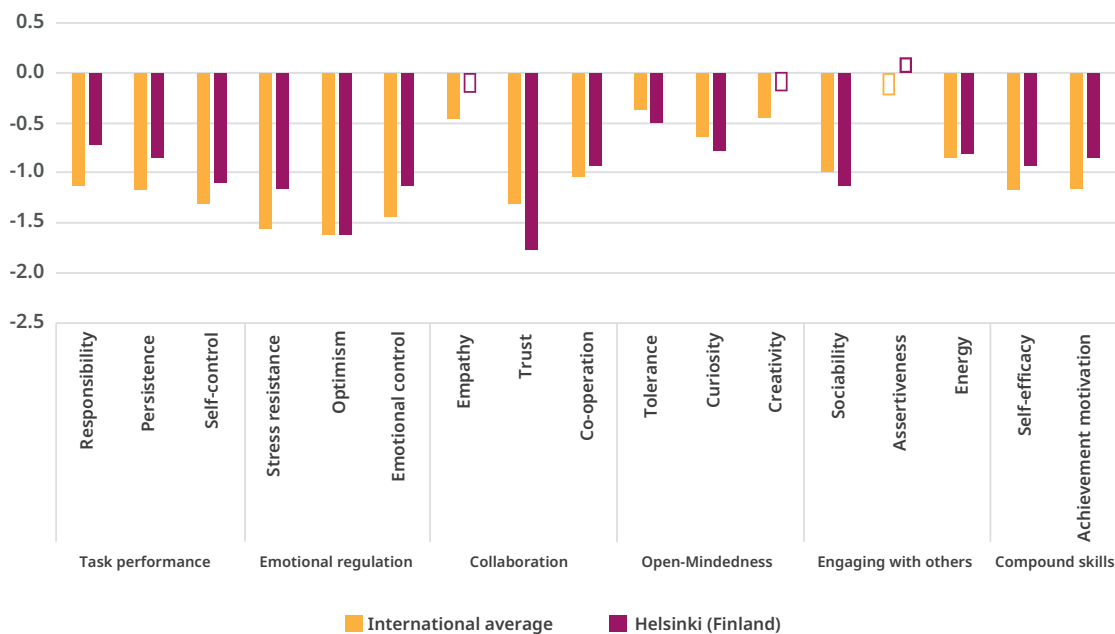
Secondly, school climate and anti-bullying policies can be instrumental to students' positive social and emotional development. Bullying at school can affect any schoolchild in any country (Nansel et al., 2004^[32]). This violent behaviour can have severe long-term physical, social and emotional consequences 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^[33]). 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^[34]). 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^[35]; Ma, 2002^[36]; Olweus, 2012^[37]). 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^[38]; Kuperminc, Leadbeater and Blatt, 2001^[39]).

SSES data show that students' exposure to bullying is negatively related to almost all social and emotional skills. In Helsinki (Finland) 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 and collaboration. Students who reported greater exposure to bullying tend to report lower levels of optimism, emotional control, stress resistance, and trust in other people (Figure 14). These findings are worrying as, in Helsinki, 17% of 10-year-old students and 14% of 15-year-old students had experienced bullying at least a few times a month or more during the 12 months prior to the 2019 survey.



Figure 14. 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



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



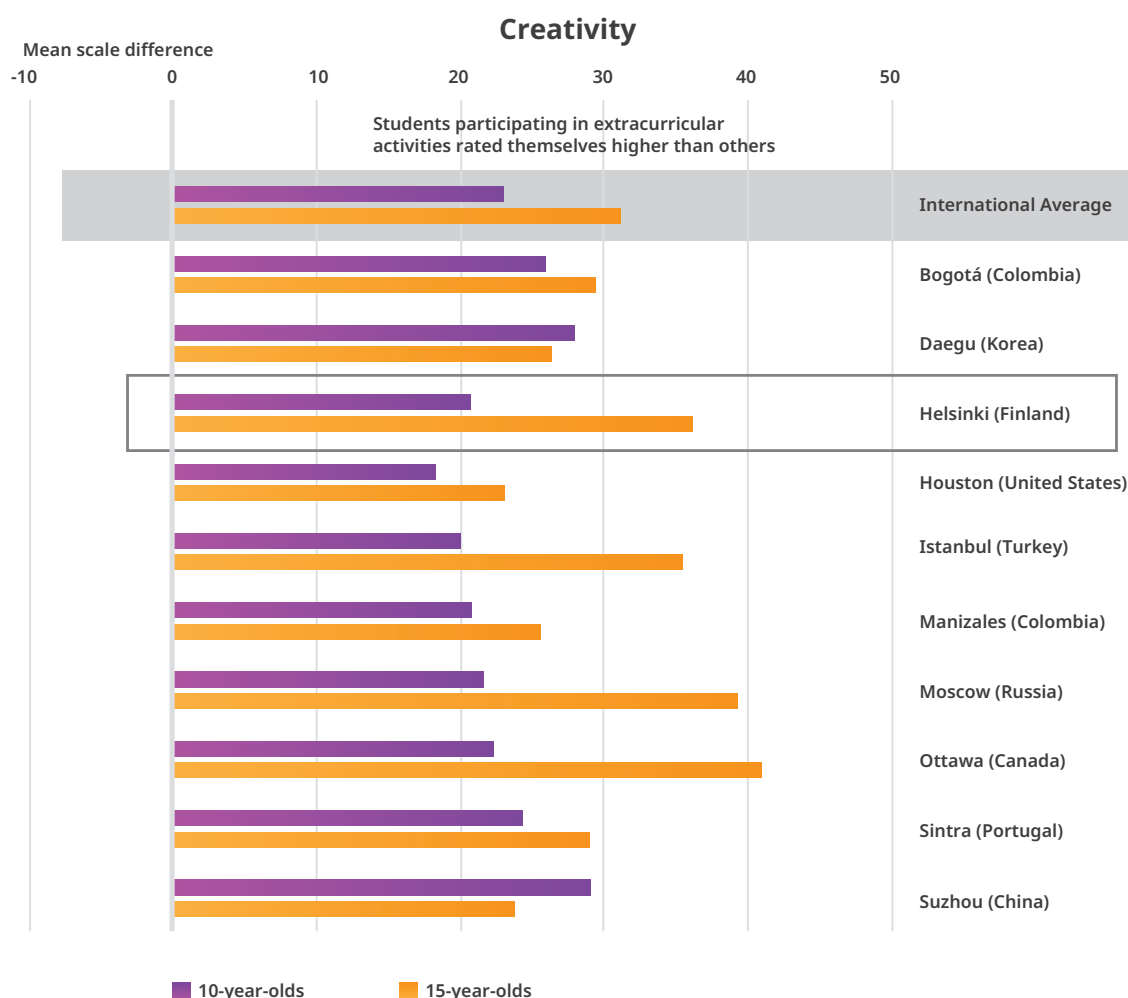
Note: Data for Sintra (Portugal) did not reach student response rate standards and are not included in the international average. Control variables include gender, socio-economic status and immigration background. Significant differences are coloured, non-significant differences are outlined.

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>, Table A5.17.

A third area where schools could make a difference in the holistic development of their students is in organising extracurricular 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_[40]).

SSES data show that, in Helsinki (Finland) as well as in almost all participating cities, students who participate in after-school art activities reported higher levels of creativity, particularly among 15-year-olds (Figure 15). This holds true even after accounting for differences in socio-economic status and gender among students. In Helsinki, 62% of 10-year-old students participate in extracurricular art activities after school (e.g. playing a musical instrument, dancing, drawing, etc.) – a share that drops down to 42% 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. 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 15. How participation in art activities relates to creativity
Mean scale differences after accounting for socio-economic status and gender



Note: Data for Sintra (Portugal) did not reach student response rate standards and are not included in international averages.
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>, Figure 4.9.



Box 4. 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 Helsinki (Finland), the school samples for both cohorts were drawn from the population of public schools. The school samples were stratified by language of education (Finnish and Swedish).

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.

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