Assessment of social and emotional skills in a cross-national setting
OECD's Study on Social and Emotional Skills

MEasurement in STEM Education
Naples, 30 January – 1 February 2023

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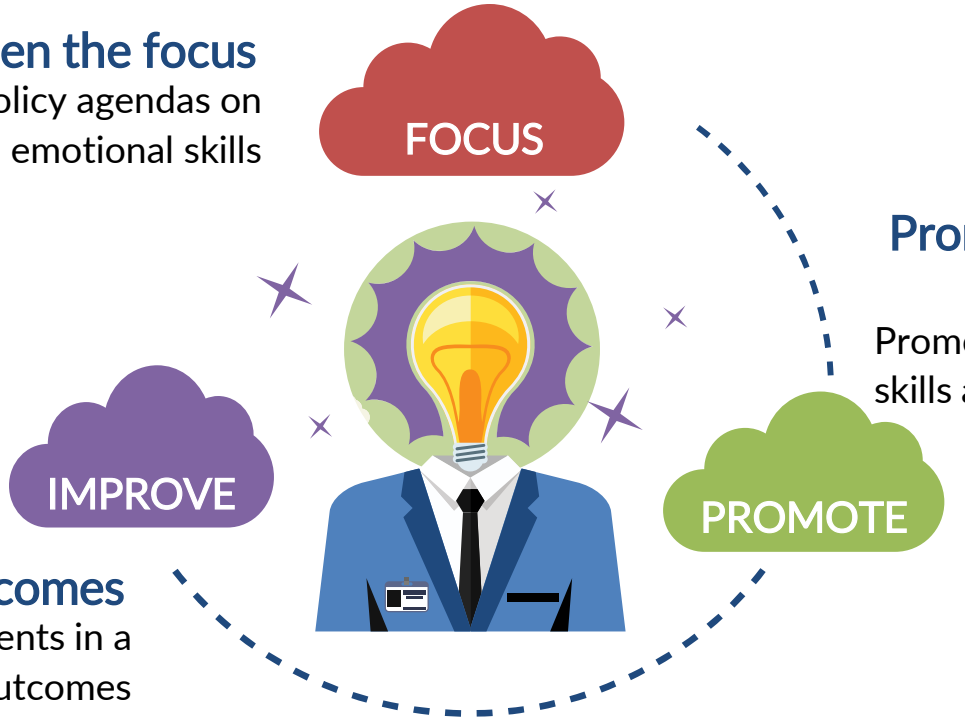
Why this study?

Broaden the focus

Expand the focus of policy agendas on students' social and emotional skills



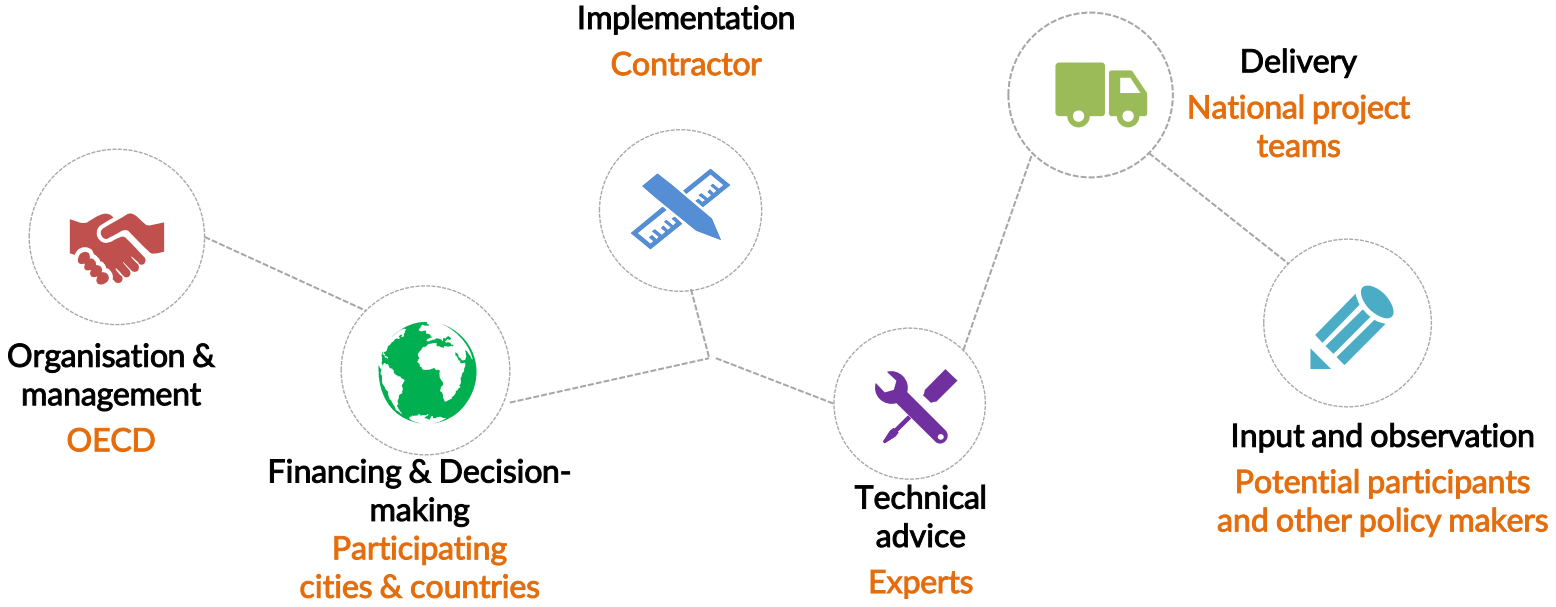
Promote development

Promote development of these skills among students

Improve outcomes

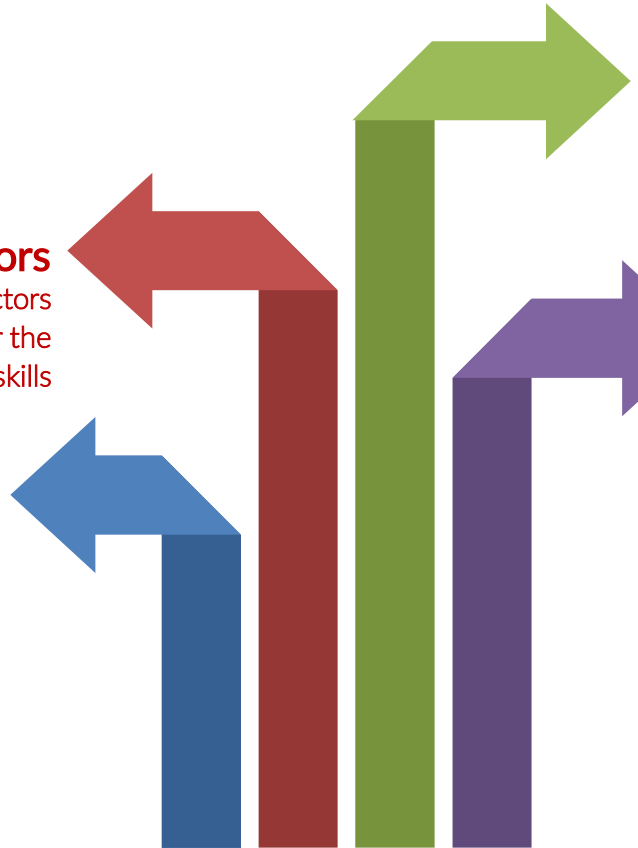
Achieve improvements in a range of student outcomes

Various stakeholders



Like all OECD surveys, The SSES is organised as a project with complex management structure and multiple stakeholders, involving national and international institutions, policy makers, researchers, experts and administrators.

Objectives of the study



Show that it is possible

Demonstrate that valid, reliable, comparable data on SE skills can be obtained across diverse settings

Identify important factors

Examine potential contextual factors that promote or hinder the development of SE skills

Create instruments for next cycles

Design assessment instruments that can be used in subsequent studies, for monitoring progress over time

Information on skill levels

Provide robust, reliable information on the level of SE skills

Study topics

Assessment of SE skills

Children's social and emotional skills will be assessed

Skill-related factors at home

Relevant characteristics of family environment

Skill-related factors in school

Relevant characteristics of school and wider community environment

Background characteristics

Students and family background

Outcome variables

Academic outcome and personal well-being

Study principles

Policy relevant
Enabling changes in policies and/or practices

Feasible
Straightforward and easy to implement

Valid & reliable
Providing robust empirical data

Comparable
Across countries, languages, cultural contexts and over time

Ethical
Ensuring well-being of children and other study participants

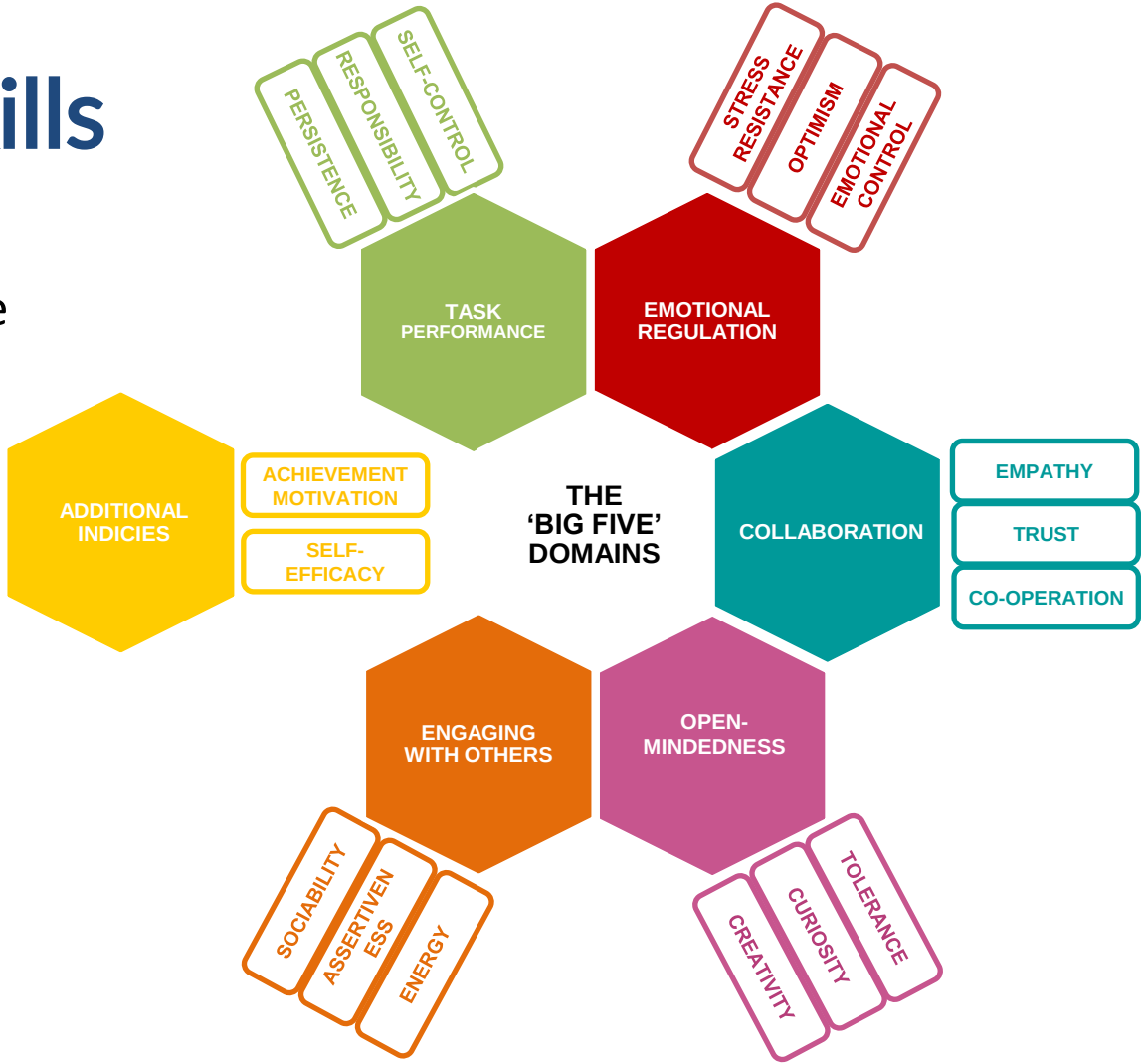
Efficient
Limiting the burden on practitioners and parents, as well as on children

Cost-effective
Affordable for a range of countries

Sustainable
Establishing a strong foundation for continuing the study

Assessed skills

- 15 skills selected for the initial testing
- 2 additional indices are calculated
- Grouped in 5 broad domains corresponding to the Big Five model



Key decisions made by city and country representatives

10 cities and countries

No too big but enough to allow comparisons. Both cities and countries can participate.

Two cohorts of children

Allowing for comparison and easing possible transition on into longitudinal study

Age-based, not grade-based

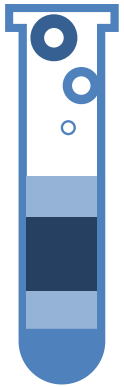
Making it easier to compare across cultures and jurisdictions

Include all Big Five dimensions

Assessed skills should be covering range of SE skills in a comprehensive manner.

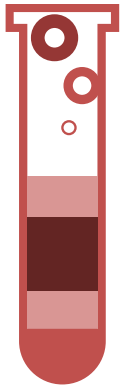
A comprehensive research approach

Combining methods



1. Assessment through self-reports
2. Assessment through others-reports
3. Use of anchoring vignettes

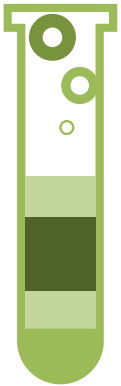
Combining sources



Information from:

1. Students
2. Parents
3. Teachers
4. Principals

Combining contexts



Information about:

1. School
2. Family environment
3. Wider community

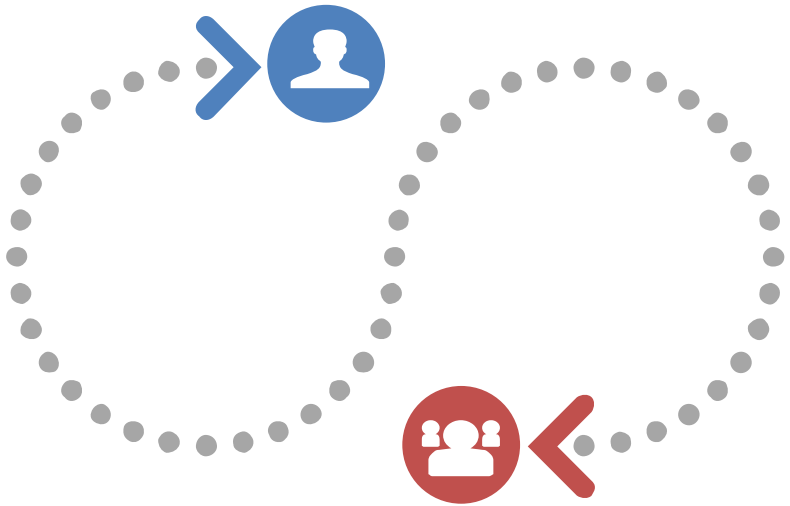
Two types of assessments of SE skills

Direct assessment: student self-reports

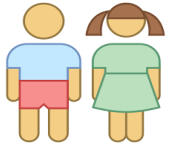
Students will provide evaluation of their own typical behavior by answering on a number of questions designed to assess behaviors that are indicative for selected SE skills

Indirect assessment: reports from parents and teachers

Parents and teachers will also be asked to provide reports on typical behaviour of individual students, using similar or same set of questions



Contextual questionnaires



Children

- Individual socio-demographic background
- Family culture
- Subjective health and well-being
- Academic expectations
- School climate
- Perception of SE skills

Parents

- Children's SE skills
- Family background
- Child's performance
- Home learning environment
- Parent-child relations
- Parental styles
- Learning activities
- Parent's attitudes and opinions

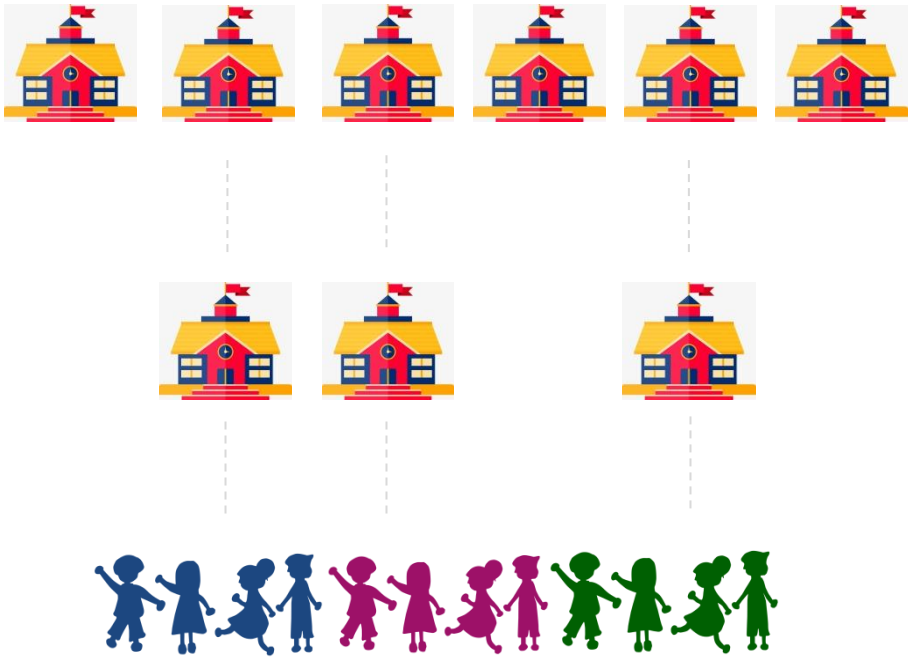
Teachers

- Children's SE skills
- Teachers background
- School characteristics
- Teaching practices
- Values and expectations about SE skills

Principals

- School background
- School management, principles and rules
- School climate
- Role of SE skills in curriculum or school agenda
- Administrative data

Sample design



Target population

Children 10 and 15 years old in educational institutions

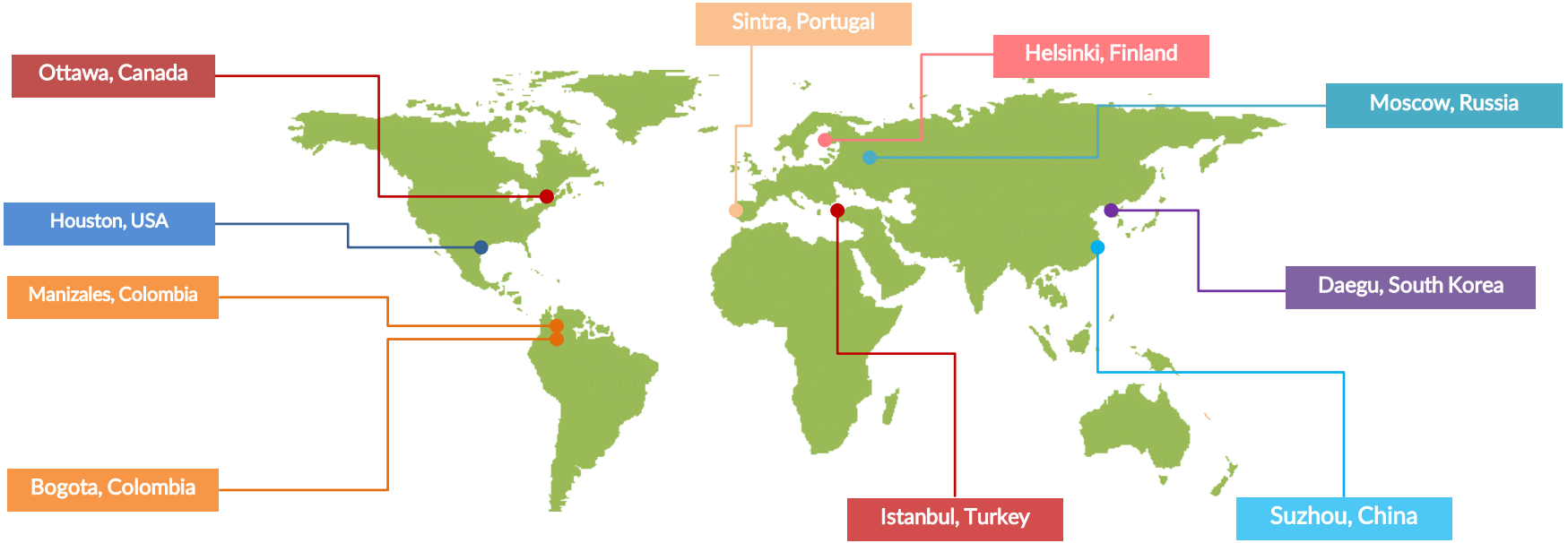
Sample size

2,000 children in each participating city and in each cohort

Sample design

1. Initial random selection of schools
2. A follow-up random selection of students within selected schools

Participating cities and countries



Phases of the study

Design & preparation

Conceptual frameworks, survey documentation, instrument development

Item trials

Testing of initial set of direct and indirect set of items.

Field test

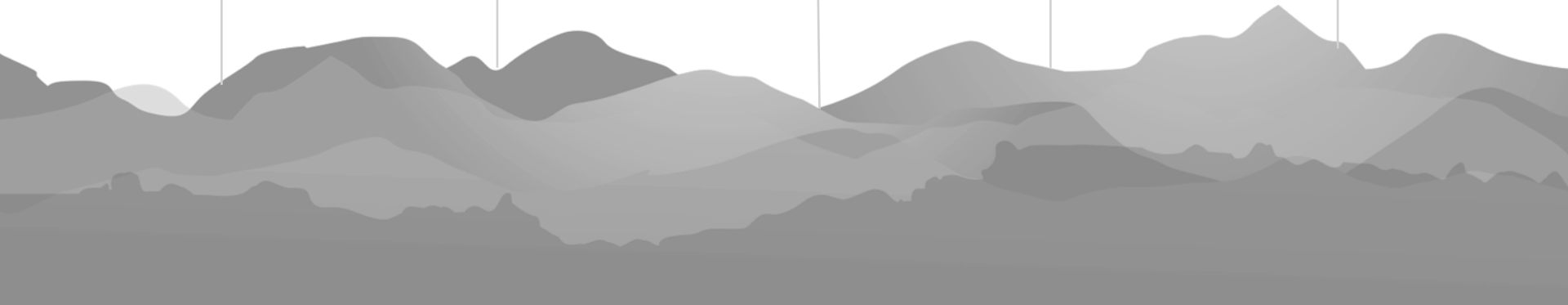
Full test of instruments and study procedures.

Main study

Delivery of the main study

Analysis & Reporting

Data analyses and report drafting



Study timeline

Approval and preparations

September 2016 – March 2017

Start of the study

April 2017

Conceptual framework & instrument drafting

April - October 2017

Instrument development & cognitive interviews

September - December 2017

Online study of parents

February 2018

Item trials

March 2018

Analysis of the Item trials data

April – June 2018

Preparation for the Field test

May – September 2018

Field test

October – November 2018

Analysis of the Field test data

December 2018 – April 2019

Preparation for the Main study

May – September 2019

Main study fieldwork

October – November 2019

Data preparation

2020

Data analyses

2020 - 2021

Reports drafting

November 2020 – December 2021

Publication of final reports and datasets

December 2021

INSTRUMENT DEVELOPMENT

DEVELOPMENT OF DIRECT ASSESSMENT INSTRUMENTS

Study stage	Timeline	No of items per skill		No of skills	
		Older cohort	Younger cohort	Older cohort	Younger cohort
Initial item pool	Nov 2017	20	20	19	19
After feedback from OECD & TAG	Dec 2017	15	12	19	19
Cognitive interviews	Dec 2017		12	19	19
Item Trials	Apr 2018	15	10	19	19
Field Test	Oct 2018	10	8	19	19
Main Study	Oct 2019	8	6	15	15
Main Study (total No of items)				~120	90

TRIANGULATION

- Three different, and mutually independent sources of information about students' SE skills:
- Possibility of mutual validation and increased reliability of estimates of students' SE skills
- Efficient: use of the same instruments and items across the three informants
- Detailed analysis in: *Kankaraš, Feron & Renbrager (2019)*

INDIRECT ASSESSMENT OF STUDENTS' SKILLS

Study stage	Timeline	No of items per skill	
		Parents	Teachers
Initial item pool	Nov 2017	20	20
After cognitive interviews	Jan 2018	10	10
Item Trials	Apr 2018	10	10
Field Test	Oct 2018	8	3
Main Study	Oct 2019	6	3
Main Study (total No of items per assessed child)		90	45

ANCHORING VIGNETES

- Innovative assessment option
- Used for improving the cross-cultural comparability
- “Reference bias” can exist across nations and cultures
- Anchoring vignettes provide common reference point
- AV ratings are used to recalibrate results across cultures based on this common standard

ANCHORING VIGNETTES: EXAMPLE FOR CONSCIENTIOUSNESS

	Vignette statements	Completely agree	Agree	Neither agree nor disagree	Disagree	Completely disagree
+	[Mia] studies hard and gets very good grades. She always does her homework, finishes her assignments, and is never late to class. [Mia] is a hard-working person.	1	2	3	4	5
0	[Peter] usually gets good grades. He sometimes has trouble paying attention in class, but usually completes his homework on time. [Peter] is a hard-working person.	1	2	3	4	5
-	[Tom] often forgets to do his homework, is sometimes late to class, and does not care about his grades. [Tom] is a hard-working person.	1	2	3	4	5

BEHAVIOURAL INDICATORS

- Concrete behaviours that are characteristic of persons with particular skills
- Provide more real-life context for SE skills
- Easy to understand and to relate to by policy makers and non-experts
- Useful for testing and improving the validity of direct and indirect assessment measures
- Interesting possibility of comparing concrete behaviours across contexts/informants

STRUCTURE OF INSTRUMENTS

STRUCTURE OF INSTRUMENTS		Students	Parents	Teachers	Principals
PART A: Assessment of students' skills	Direct assessment	✓	✗	✗	✗
	Indirect assessment	✗	✓	✓	✗
	Anchoring vignettes	✓	✓	✓	✗
	Behavioural indicators	✓	✓	✓	✗
PART B: Contextual questionnaires		✓	✓	✓	✓

KEY DOCUMENTS PREPARED

- Conceptual framework - *Chernyshenko, Kankaraš & Drasgow (2018)*
  - Defining the social and emotional skills
- Assessment framework - *Kankaraš & Suarez-Alvarez (2019)*
  - Discussing what, why, how and when of the study
- Technical Report – *(OECD, 2021)*:
  - Reports statistical and methodological characteristics of the Main study
- International Report – *(OECD, 2021)*:
  - Reports key results from the Main study
- Study documentation:
  - Explaining procedures for study preparation and implementation

Four empirical phases of instrument development

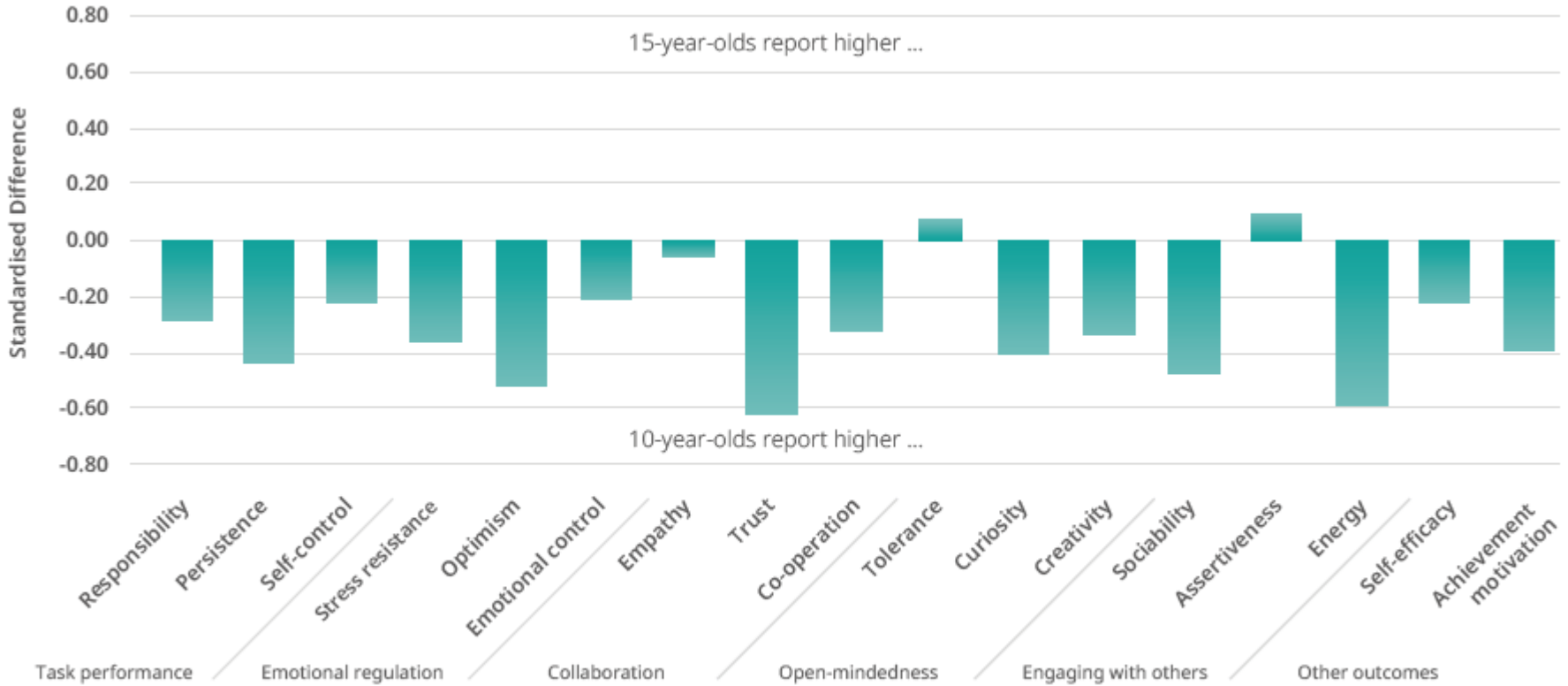
- Cognitive interviews conducted in December 2017
- Online study of parents conducted in February 2018
- Item Trials administered in April/May 2018 in 6 participating sites
  - Convenient samples, 300 students per cohort
- Field Test administered in Oct/Nov 2018 in all 11 participating sites
  - Random samples, 500 students per cohort

Reliability coefficients for student direct assessment scales

Scale	All		Younger cohort		Older cohort	
	Omega	Alpha	Omega	Alpha	Omega	Alpha
ASS	0.85	0.85	0.82	0.82	0.88	0.88
COO	0.79	0.78	0.80	0.79	0.78	0.77
CRE	0.75	0.75	0.72	0.71	0.78	0.78
CUR	0.80	0.78	0.79	0.77	0.81	0.79
EMO	0.77	0.77	0.74	0.73	0.80	0.80
EMP	0.71	0.71	0.70	0.70	0.73	0.73
ENE	0.78	0.77	0.73	0.72	0.80	0.79
OPT	0.83	0.82	0.78	0.77	0.86	0.85
PER	0.82	0.82	0.79	0.78	0.85	0.84
RES	0.73	0.72	0.70	0.70	0.75	0.74
SEL	0.76	0.75	0.75	0.74	0.77	0.77
SOC	0.74	0.72	0.70	0.68	0.77	0.76
STR	0.80	0.80	0.76	0.76	0.82	0.82
TOL	0.74	0.74	0.71	0.71	0.77	0.77
TRU	0.81	0.81	0.78	0.77	0.82	0.82
EFF	0.73	0.72	0.74	0.73	0.72	0.71
MOT	0.76	0.76	0.76	0.76	0.76	0.75

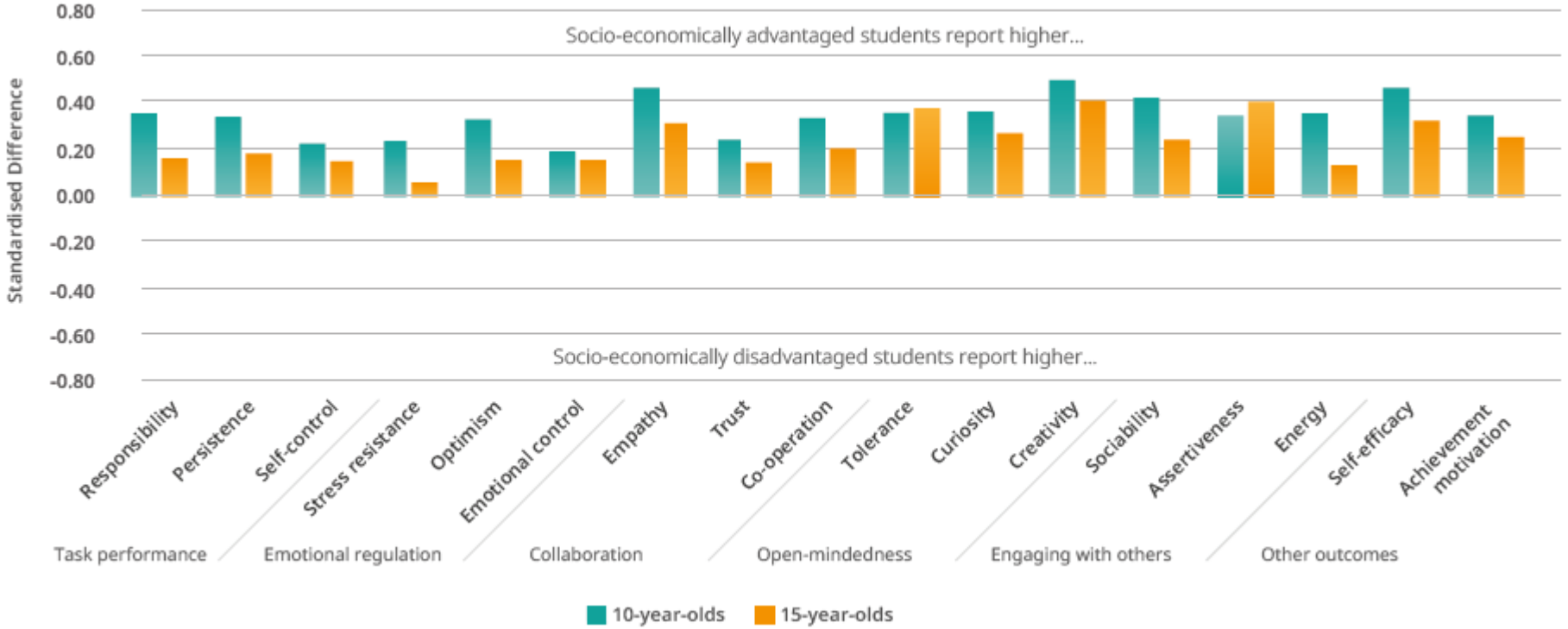
STUDY RESULTS

Age differences in social and emotional skills



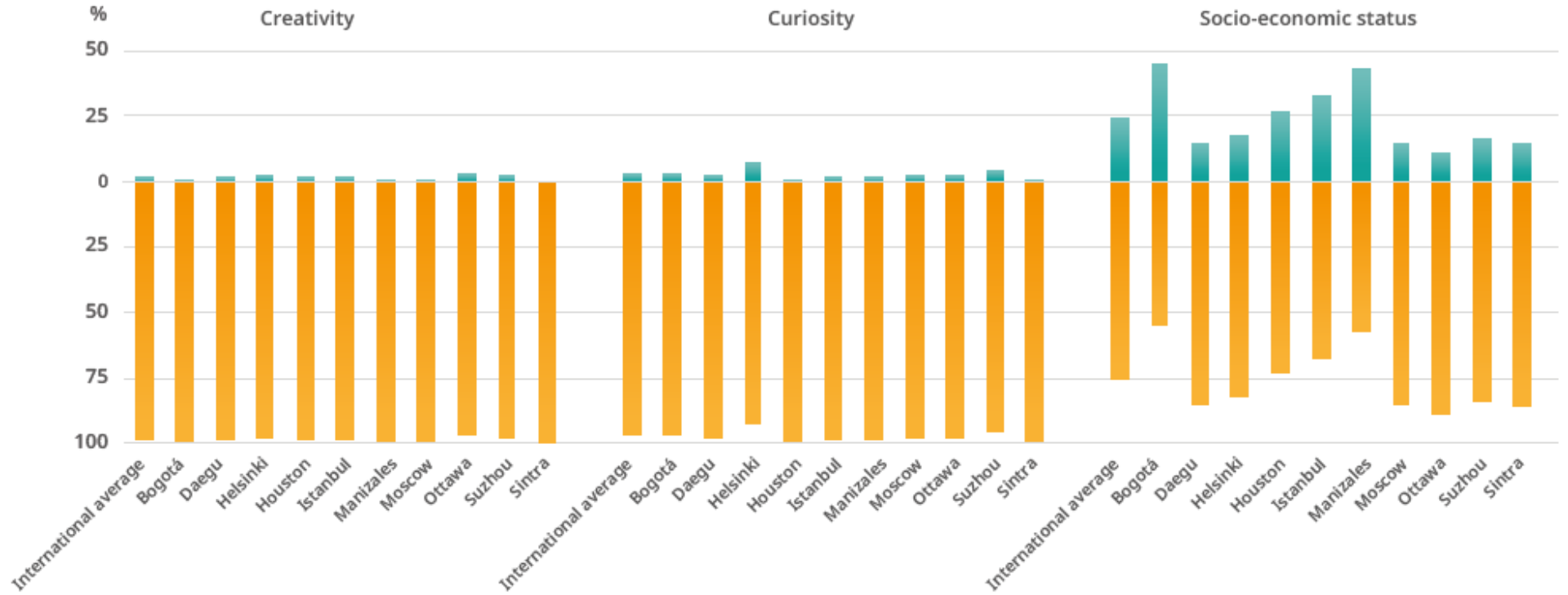
Gender differences in social and emotional skills

Socio-economic status differences in social and emotional skills, by age

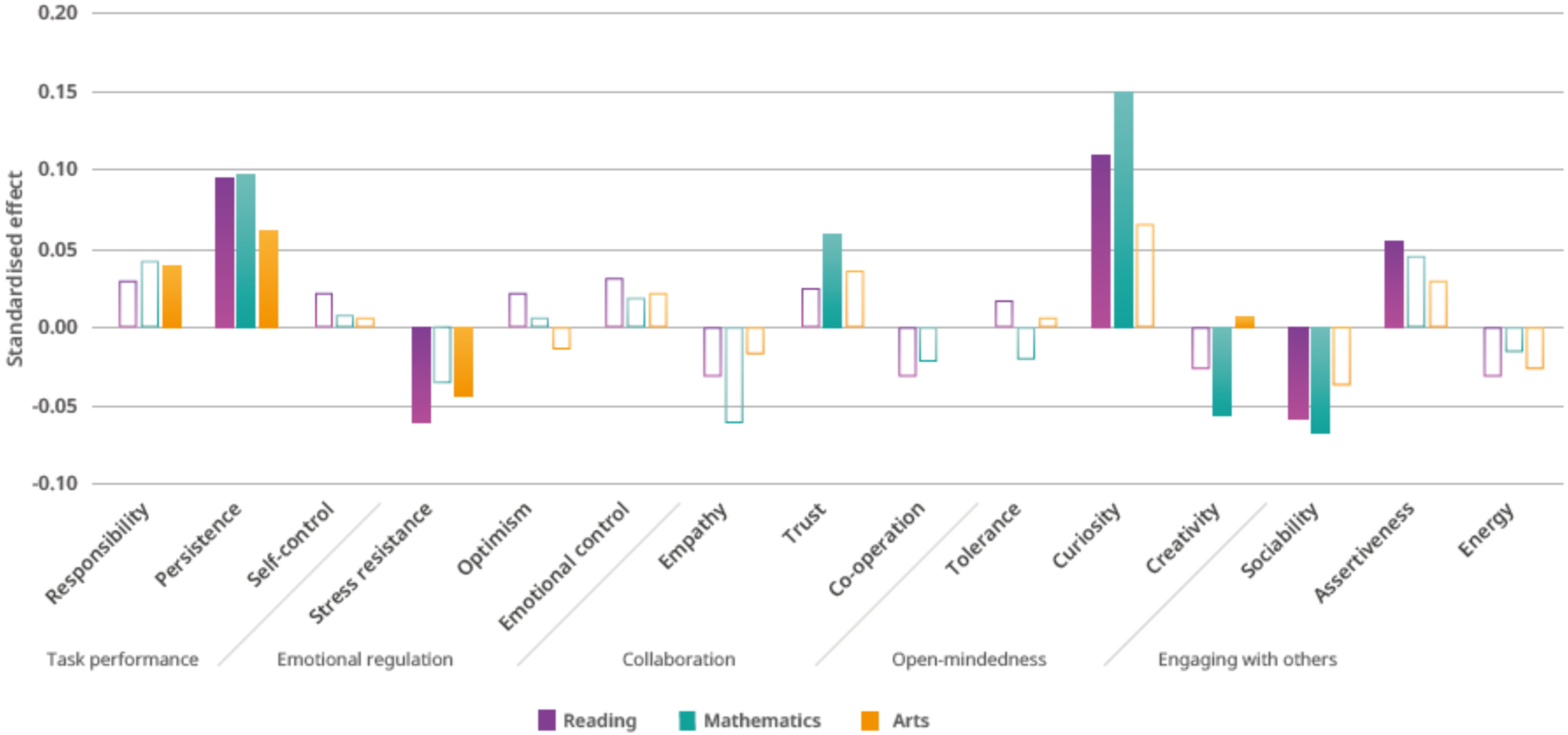


Index of between-school variation in creativity, curiosity and socio-economic status

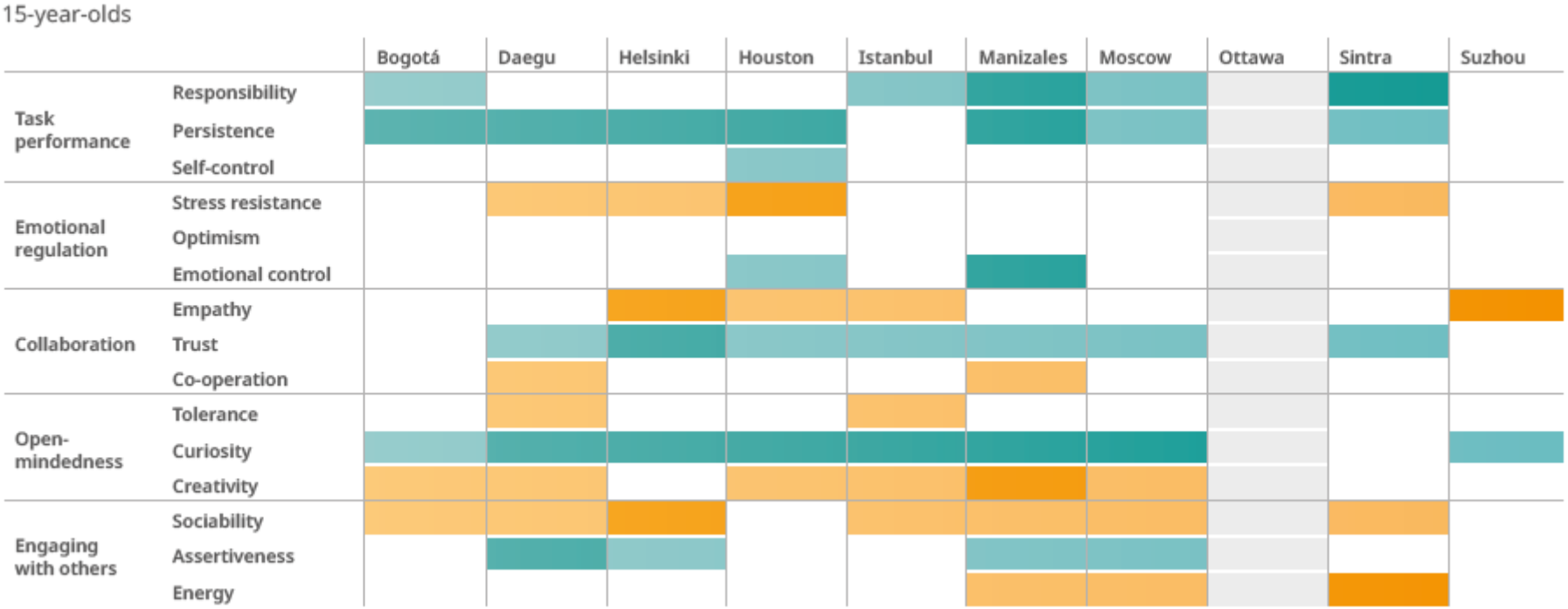
Percentage of variation that lies between schools (intra-class correlation), based on student self-reports (15-year-olds)



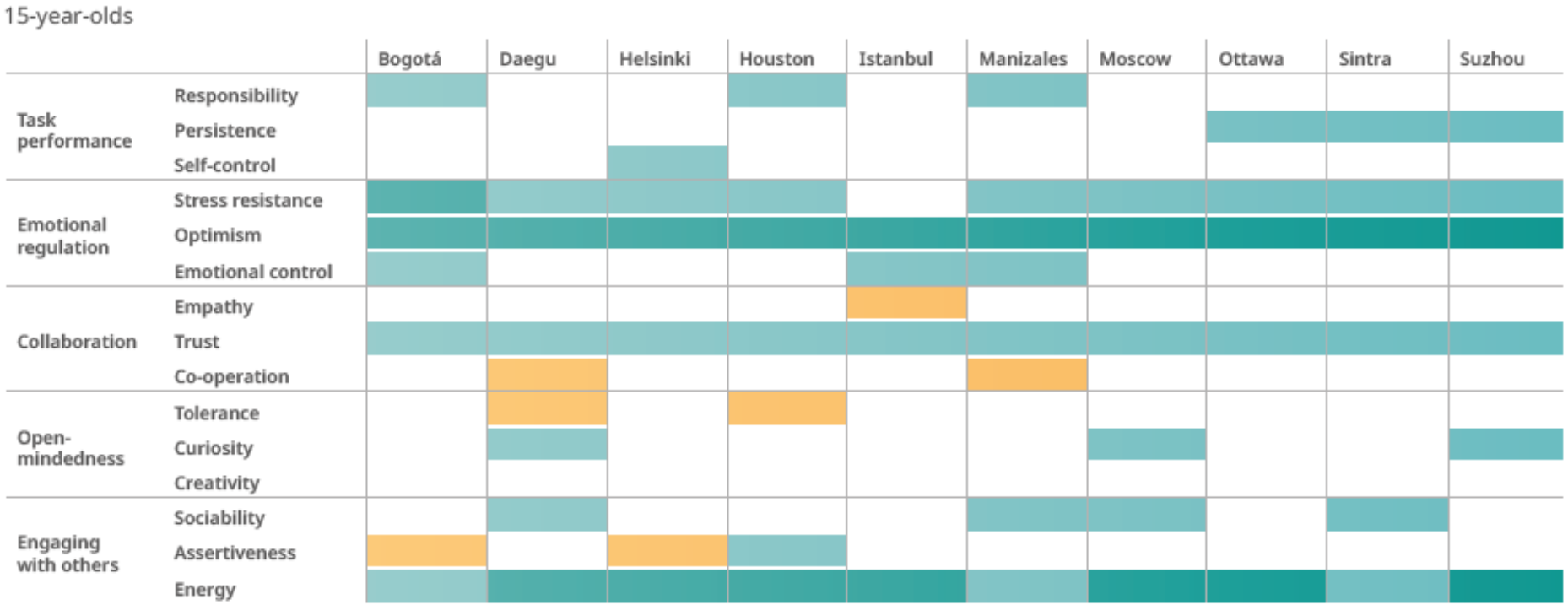
Average relationship between social and emotional skills and school performance of 15-year-old students



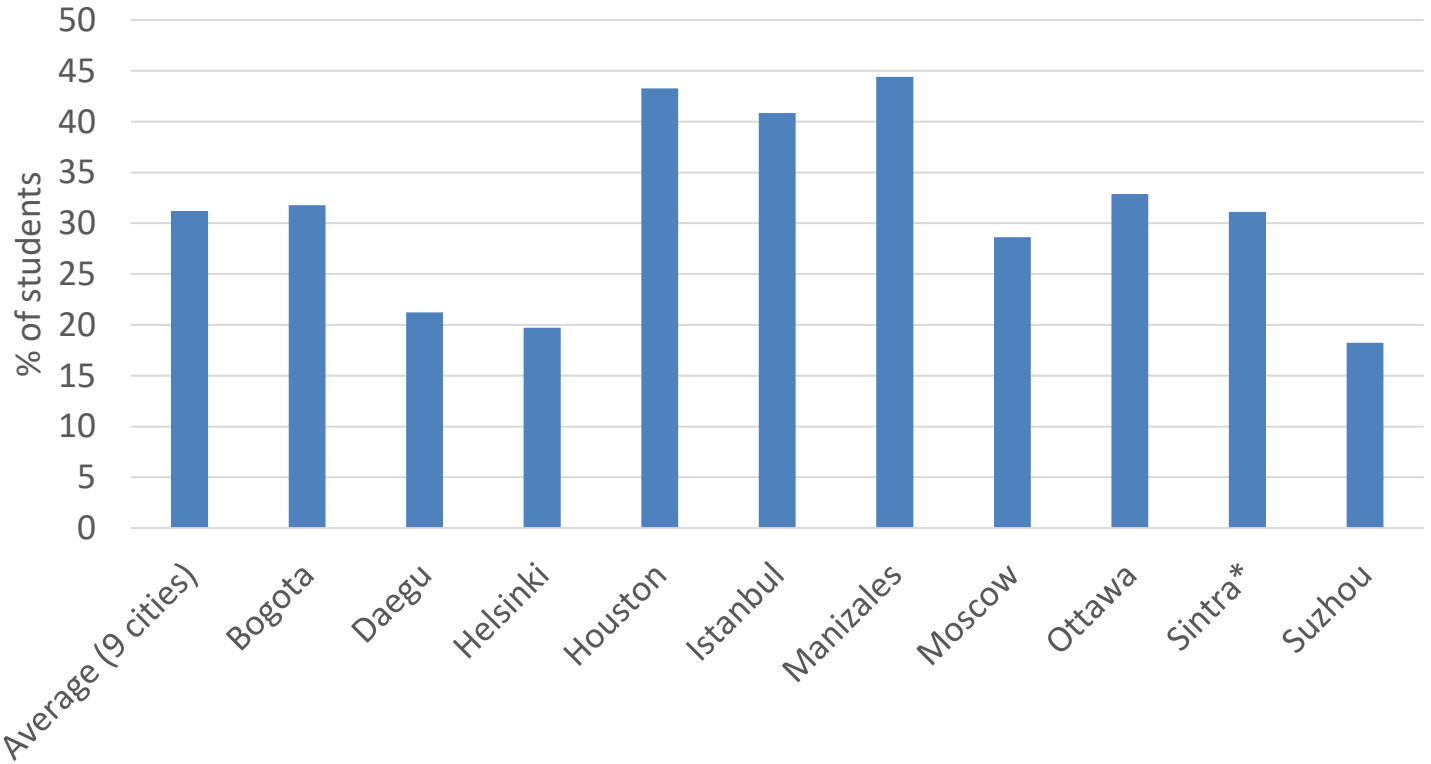
Skills most strongly associated with Mathematics performance, 15 yo



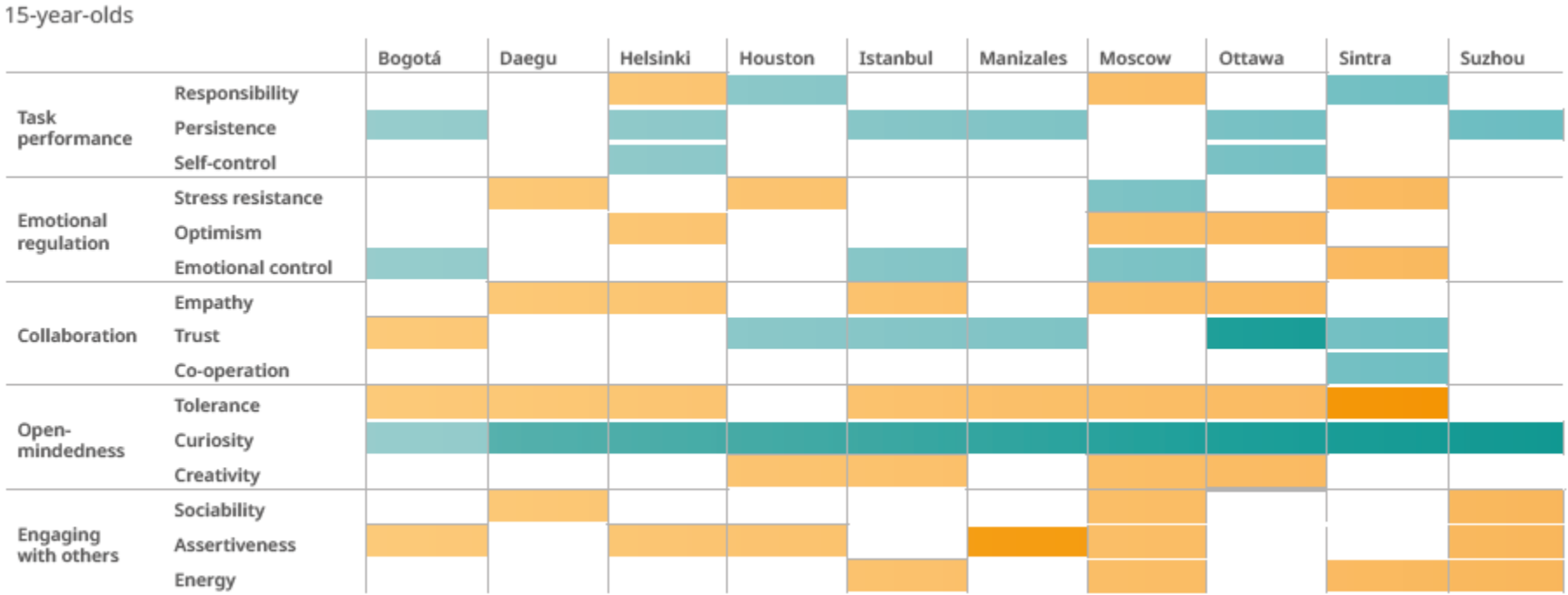
Skills most strongly associated with students' current psychological well-being



Percentage of students who expect to work in a science-related occupation

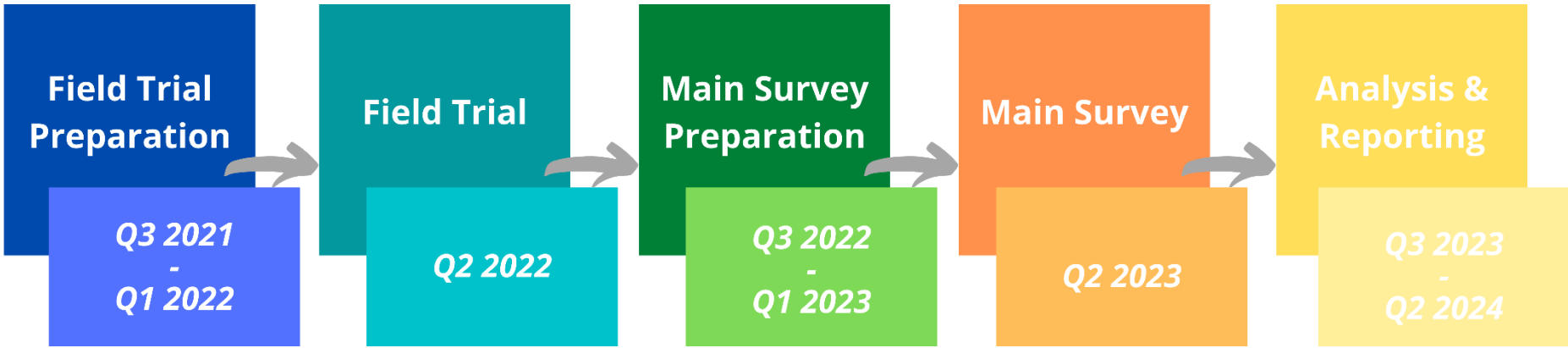


How social and emotional skills relate to expectations of working in a science-related occupation (15-year-olds)



Second round of the study

- The Survey on Social and Emotional Skills has begun its 2nd cycle
- It will take place over several years, with the main data collection in 2023
- The datasets and reports are planned to be published in 2024



Information about the study

Directorate for education and skills

Study on Social and Emotional Skills

sses.contact@oecd.org

Study website:

Information about the Study

Data (Main Study)

International report

Ten individual site reports

Technical report

Documentation

Related publications

News and events