

PISA 2022 Results

UNESCO NEQMAP

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PISA 2022

An introduction

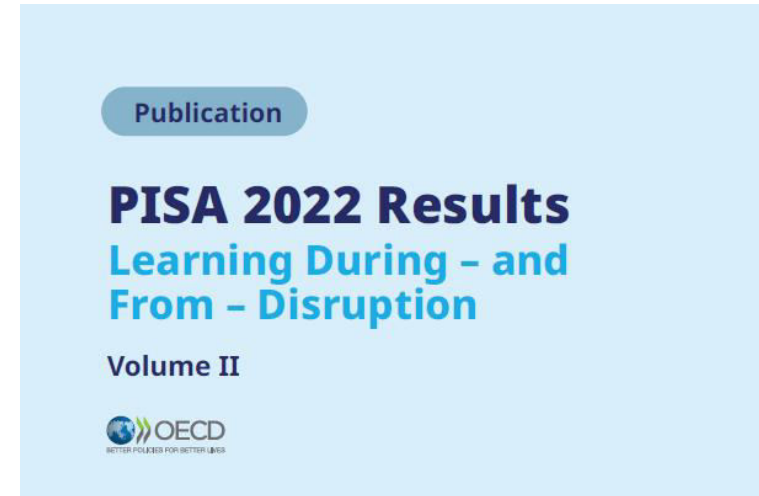


Two volumes were released on 5 December 2023

The first results of OECD's PISA 2022



[link](#)



[link](#)



What is PISA?

Programme for International Student Assessment

assesses 15-year-old students' abilities and knowledge in mathematics, reading and science



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Programme for International Student Assessment

assesses **15-year-old students'**
abilities and knowledge in
mathematics, reading and science





PISA participants

Around **690,000** 15-year-old students in **81 countries and economies** took PISA 2022

PISA Newcomers: El Salvador, Jamaica, **Mongolia**, the Palestinian Authority and **Uzbekistan**

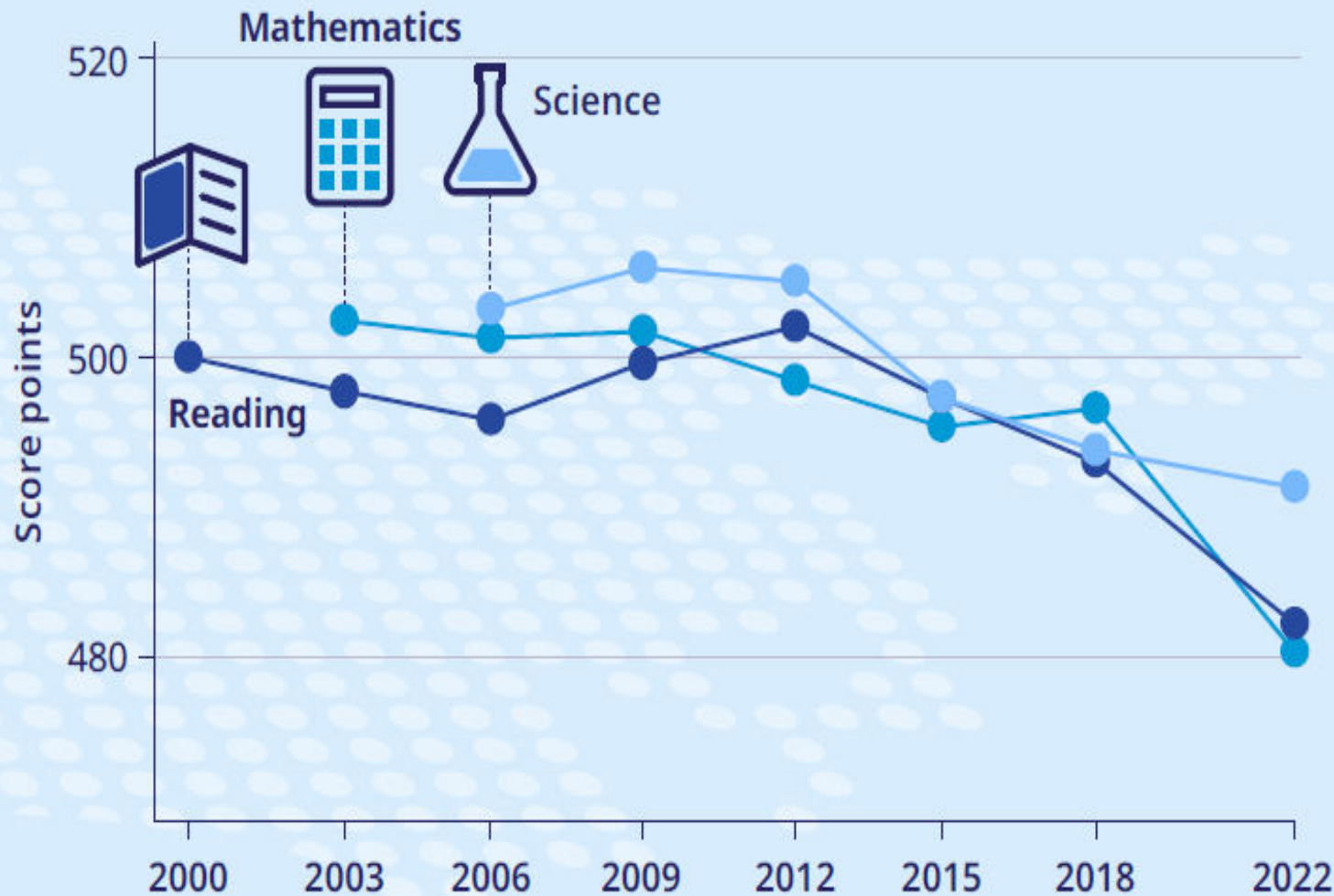


PISA 2022 international results

The state of global education



Trends across OECD countries

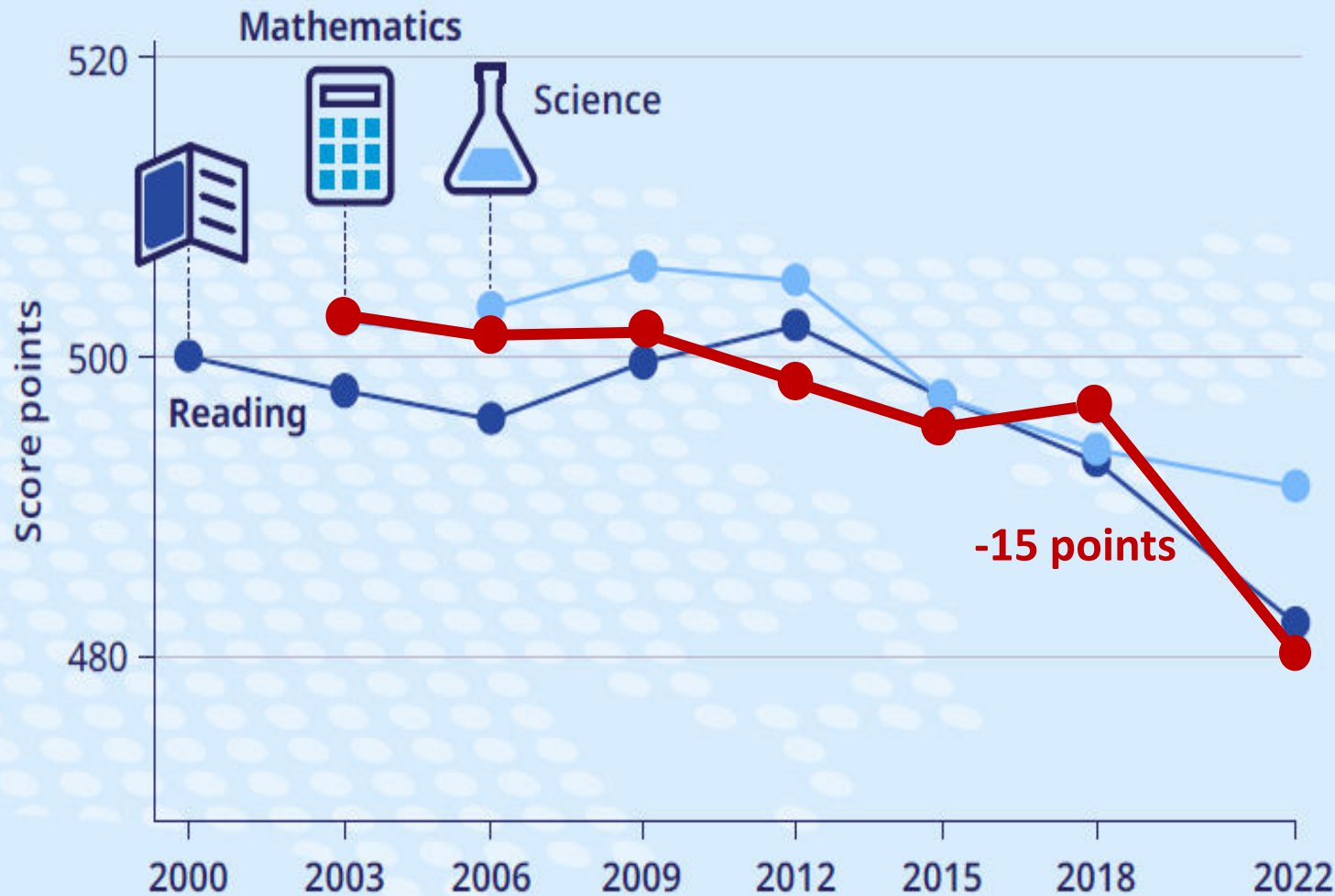


Performance in all three subjects **declined** since PISA began

Between 2018 and 2022

- 15 points decline in mathematics
- 10 points decline in reading
- No significant decline in science

Trends across OECD countries



Performance in all three subjects **declined** since PISA began

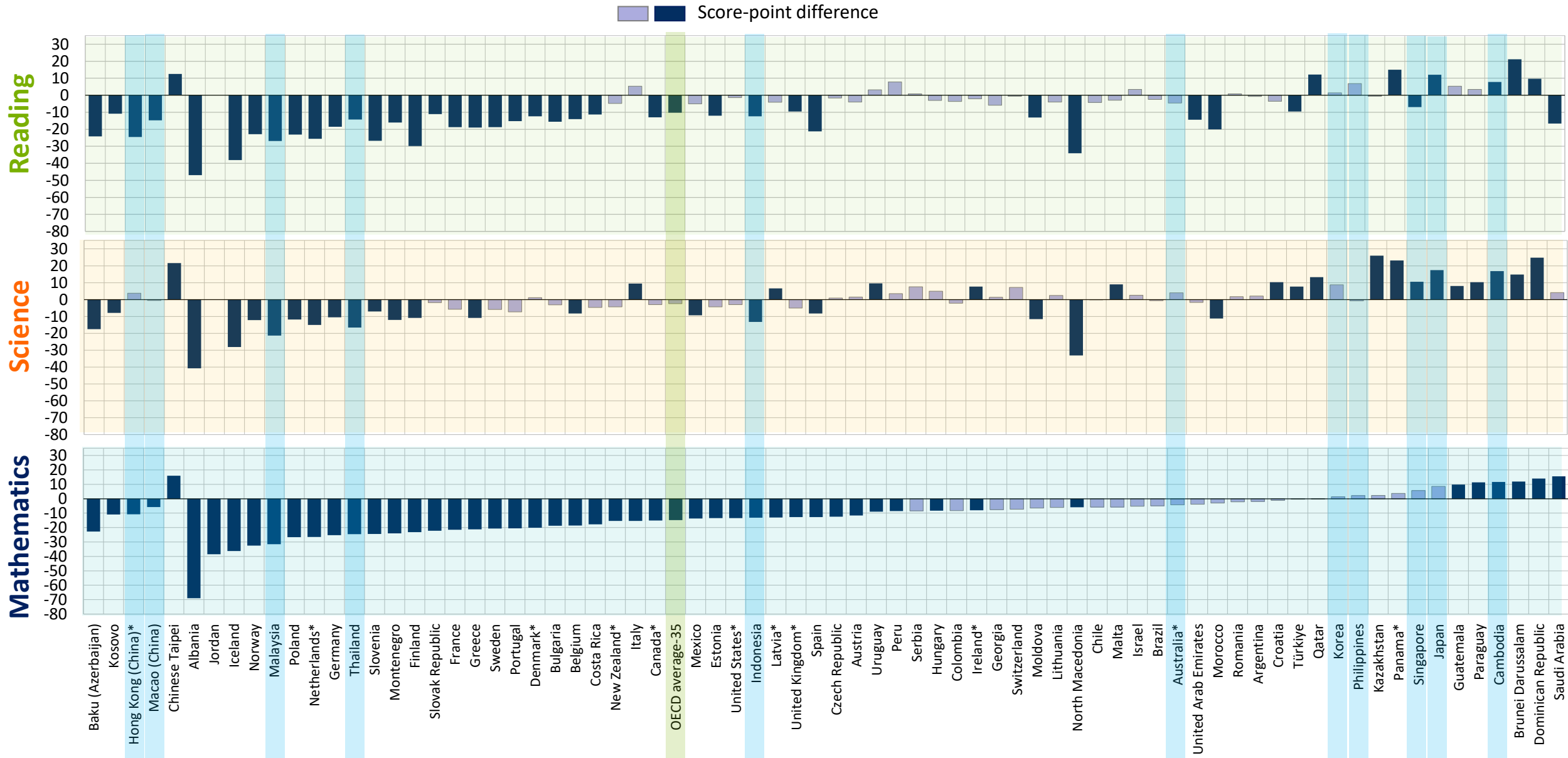
Between 2018 and 2022

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Change between 2018 and 2022 in mean mathematics, reading and science performance

Figure I.5.1





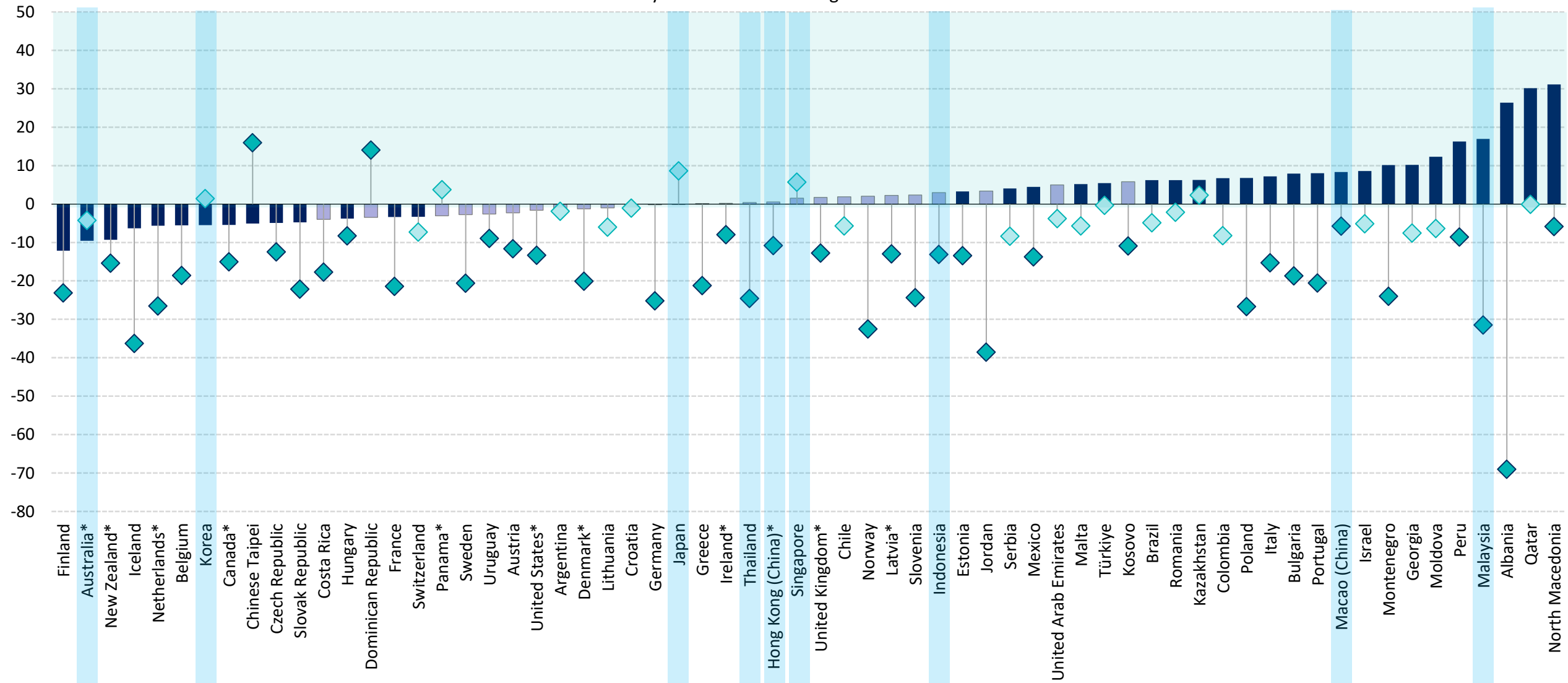
Recent performance changes in the context of pre-2018 performance trends

Figure I.5.3

Mathematics

Score-point difference

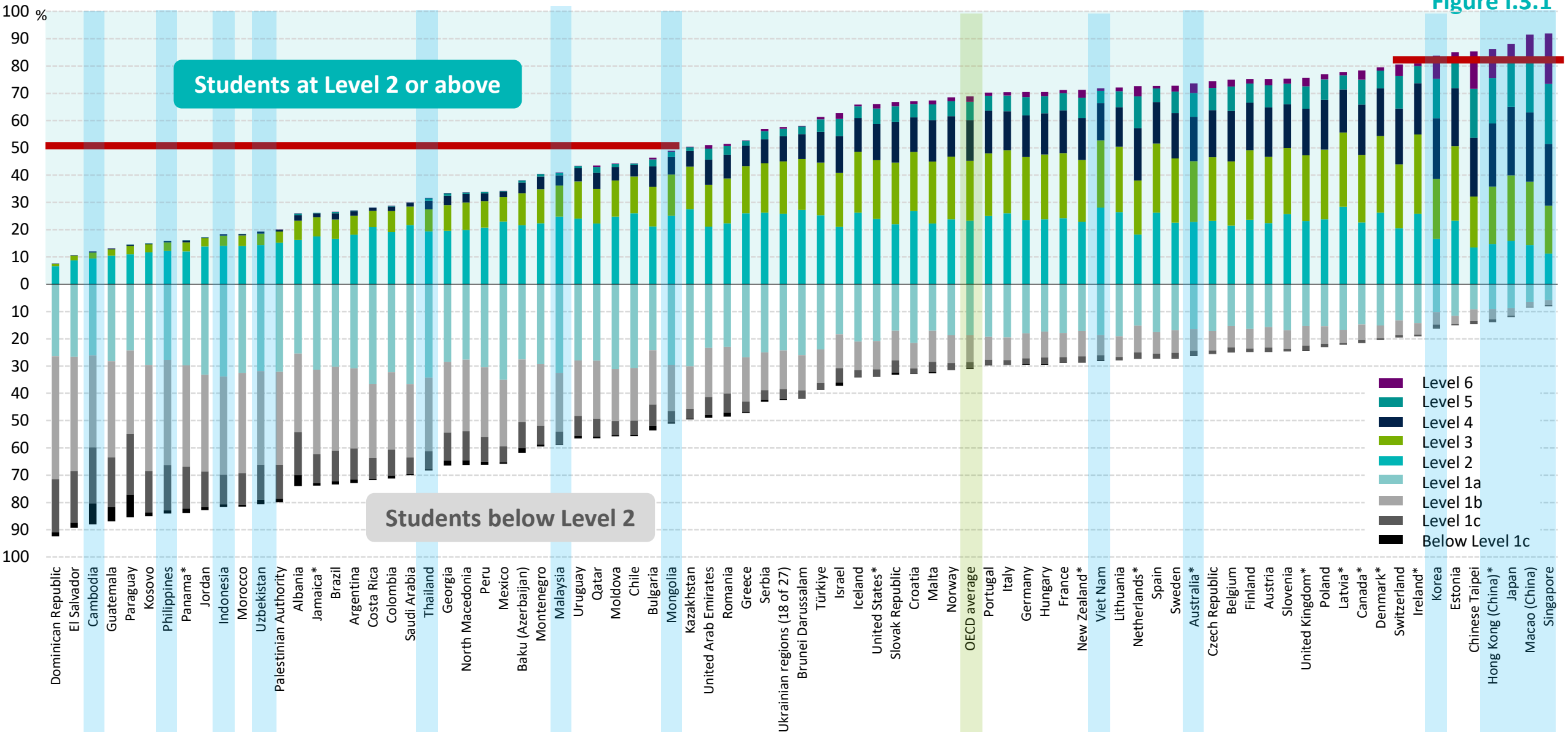
■ Pre 2018 4-year trend ◆ Change between 2018 and 2022





SDG Target 4.1: Students' proficiency in mathematics

Figure I.3.1



Students at Level 2 or above

Students below Level 2

- Level 6
- Level 5
- Level 4
- Level 3
- Level 2
- Level 1a
- Level 1b
- Level 1c
- Below Level 1c



PISA 2022 mathematics item: Level 2

PISA 2022



Triangular Pattern

Question 2 / 3

Refer to "Triangular Pattern" on the right. Click on a choice to answer the question.

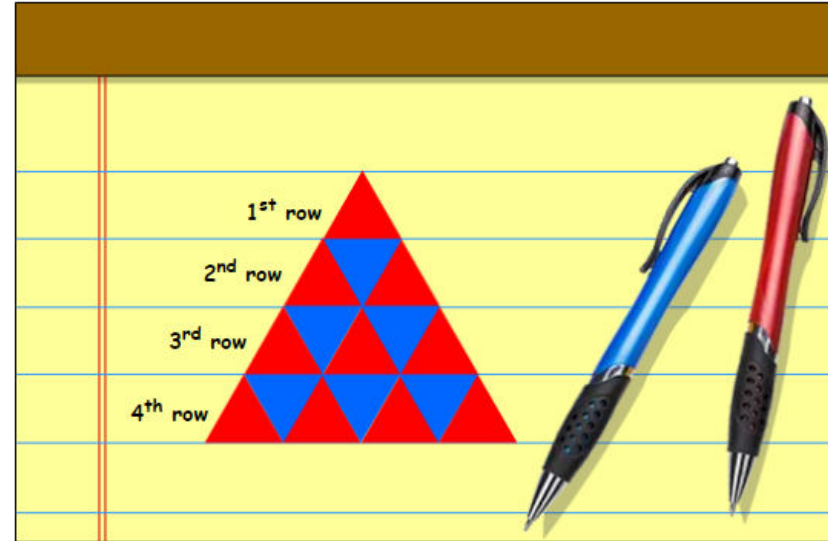
If Alex were to extend the pattern to a fifth row, what would be the percentage of blue triangles in all five rows of the pattern?

- 40.0%
- 50.0%
- 60.0%
- 66.7%

TRIANGULAR PATTERN

Alex drew the following pattern of red and blue triangles.

The first four rows of the pattern are shown below.



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Beyond mathematics, reading and science



Criteria used to identify resilient education systems

Performance

Mathematics scores

Equity

Link between students' performance and socio-economic status

Well-being

Students' sense of belonging at school

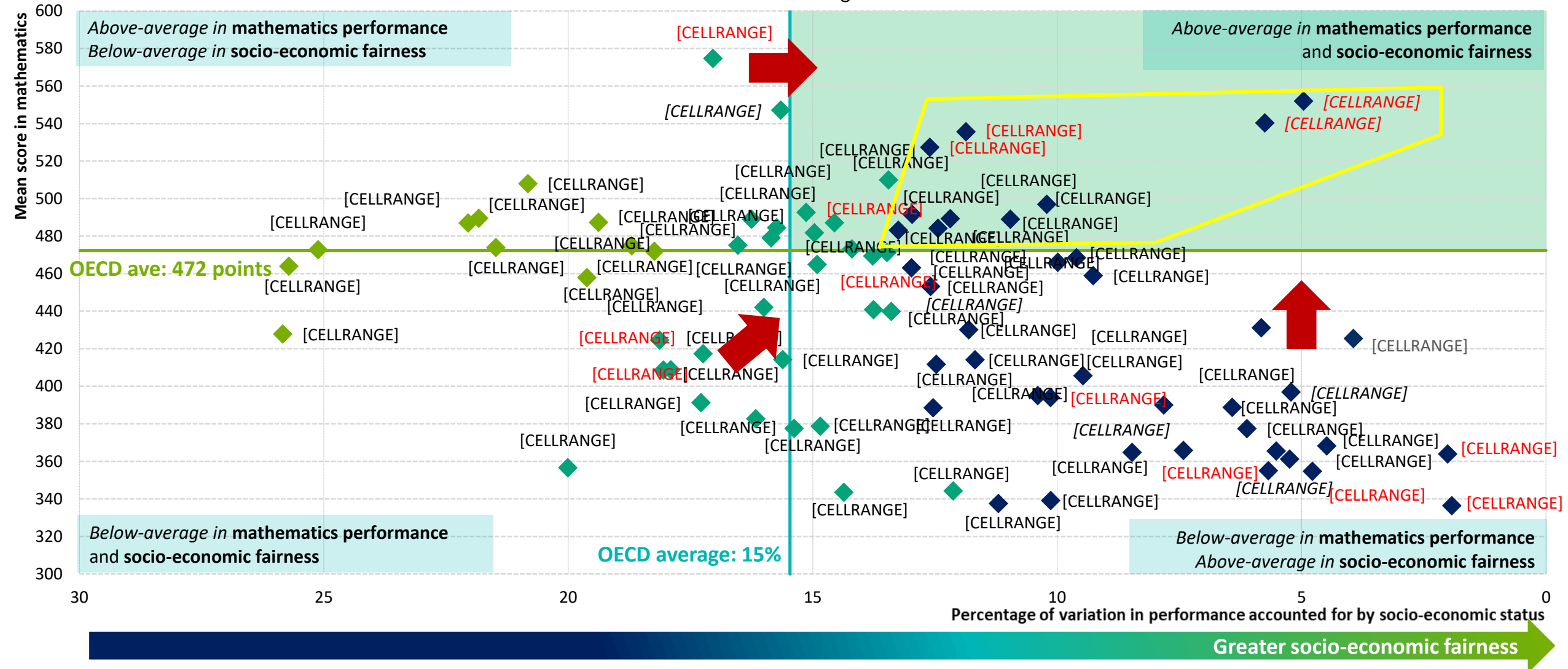




10 systems achieving greater equity

Figure I.4.2

- ◆ Socio-economic fairness is below the OECD average
- ◆ Socio-economic fairness is not statistically significantly different from the OECD average
- ◆ Socio-economic fairness is above the OECD average



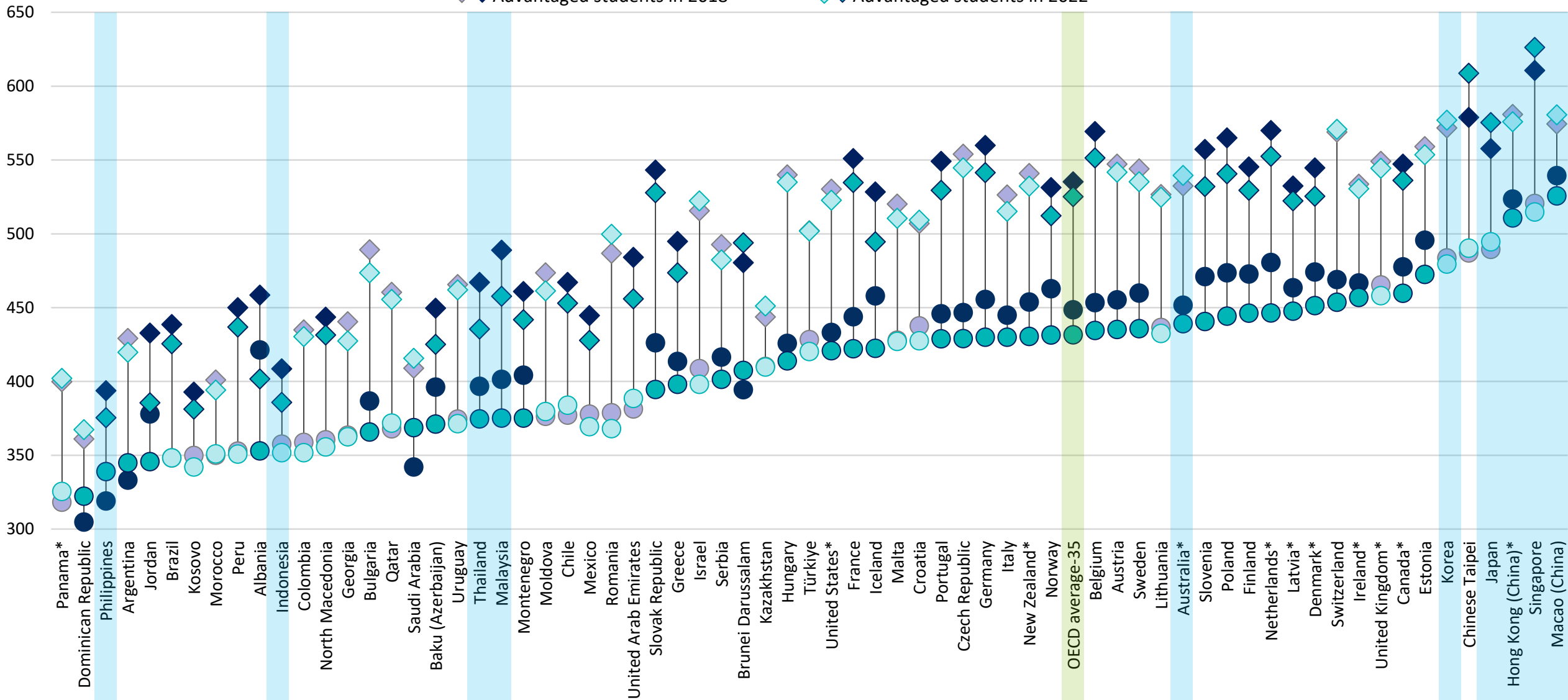


Advantaged and disadvantaged students' performance equally went down

Figure I.5.5

- Disadvantaged students in 2018
- Disadvantaged students in 2022
- ◆ Advantaged students in 2018
- ◆ Advantaged students in 2022

Mathematics score



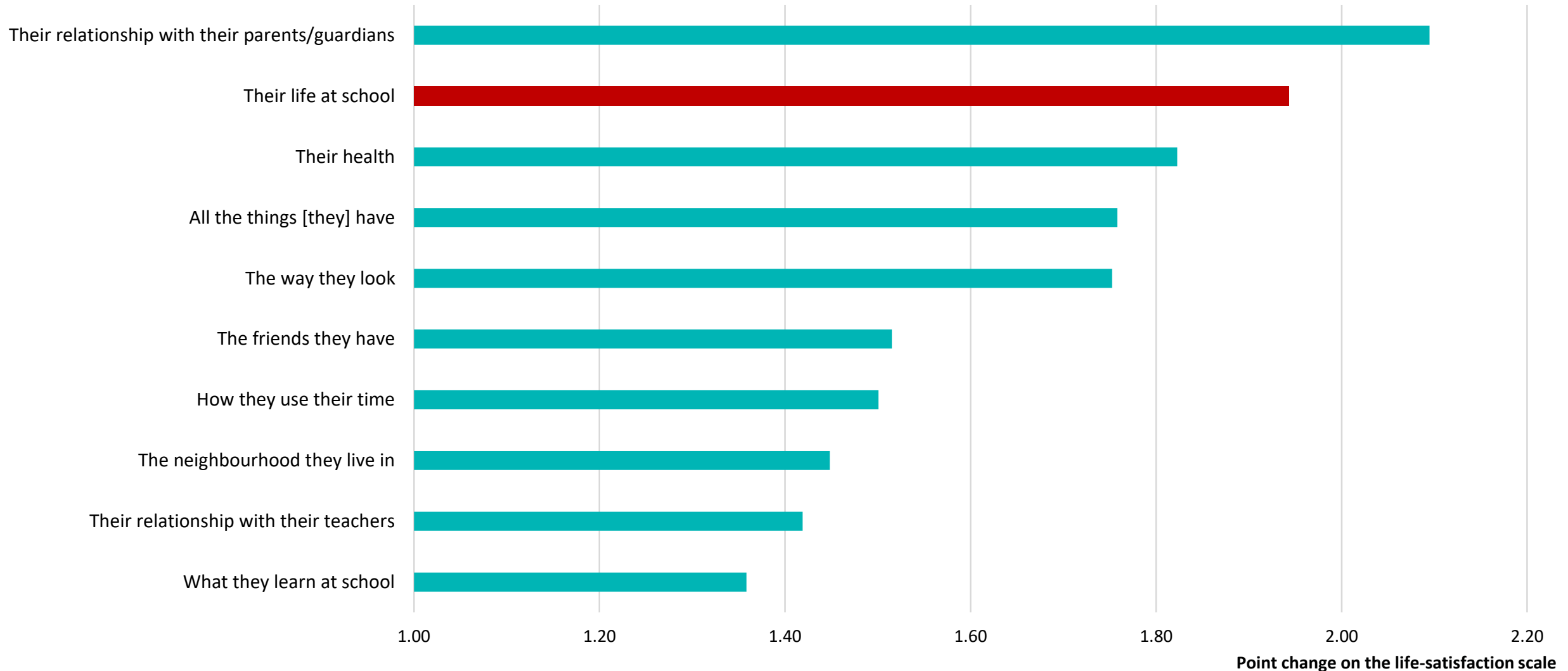


Life satisfaction is closely linked to satisfaction with school life

Figure II.1.7

Average of countries/economies with available data

Change in life satisfaction when students reported that they are satisfied or totally satisfied with the following:

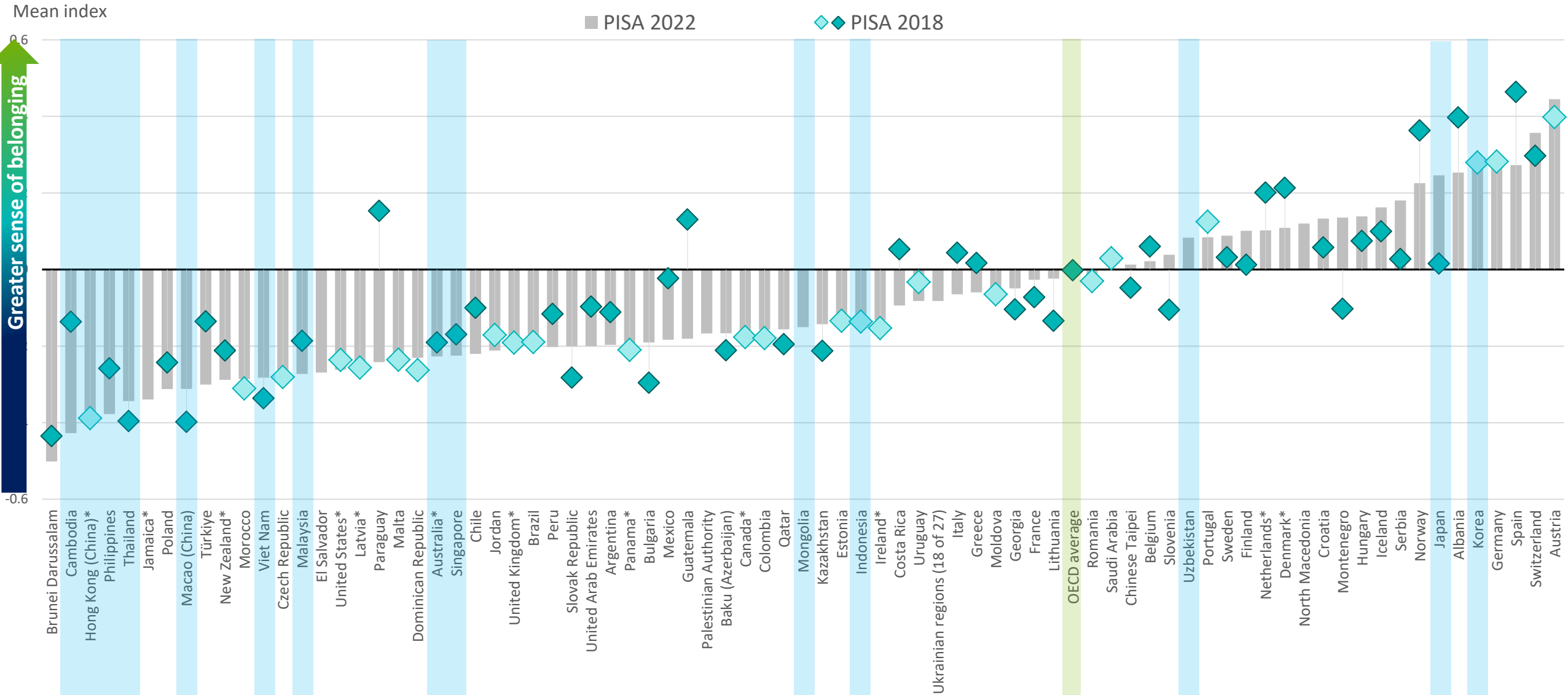




Sense of belonging at school between 2018 and 2022

Table II.b1.1.5

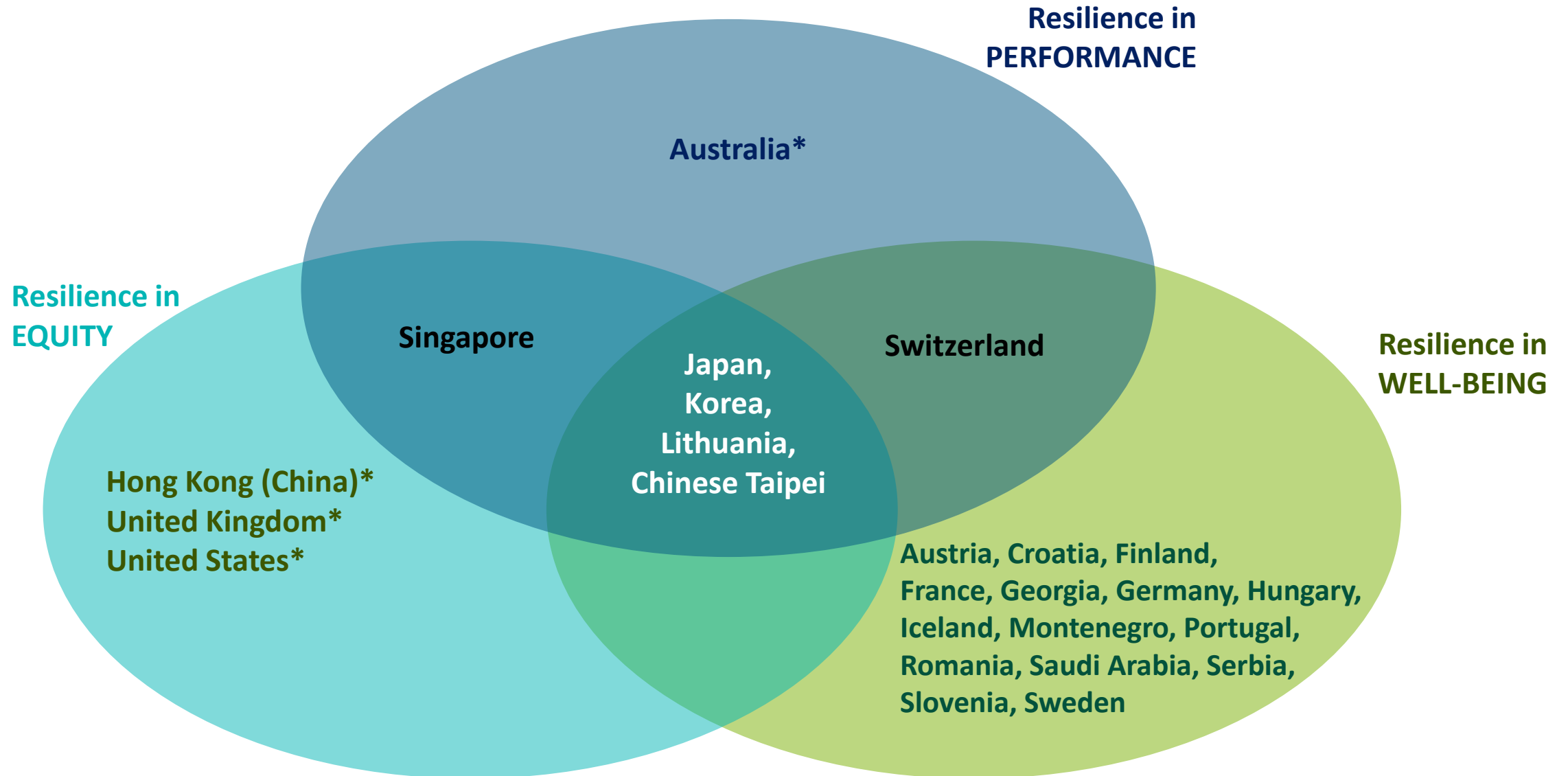
Index of sense of belonging at school





Resilient education systems

Figure II.1.1



Characteristics of resilient education systems

Performance

Equity

Well-being



Learning during school closures

School life and home support

Students' pathways through school

Material and educational resources

School governance



Ten actions related to resilience

Learning during school closures

- ✓ Keep schools open longer for more students
- ✓ Prepare students for self-directed learning

School life and home support

- ✓ Build strong foundations for learning and well-being
- ✓ Strengthen school-family partnerships

Students' pathways through school

- ✓ Delay institutional stratification
- ✓ Provide additional support to struggling students

Material and educational resources

- ✓ Limit digital distractions
- ✓ Align staff and materials with needs

School governance

- ✓ Make schools hubs for social interaction
- ✓ Combine school autonomy with quality assurance





Ten actions related to resilience

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Learning during school closures



High performers kept schools open longer for more students

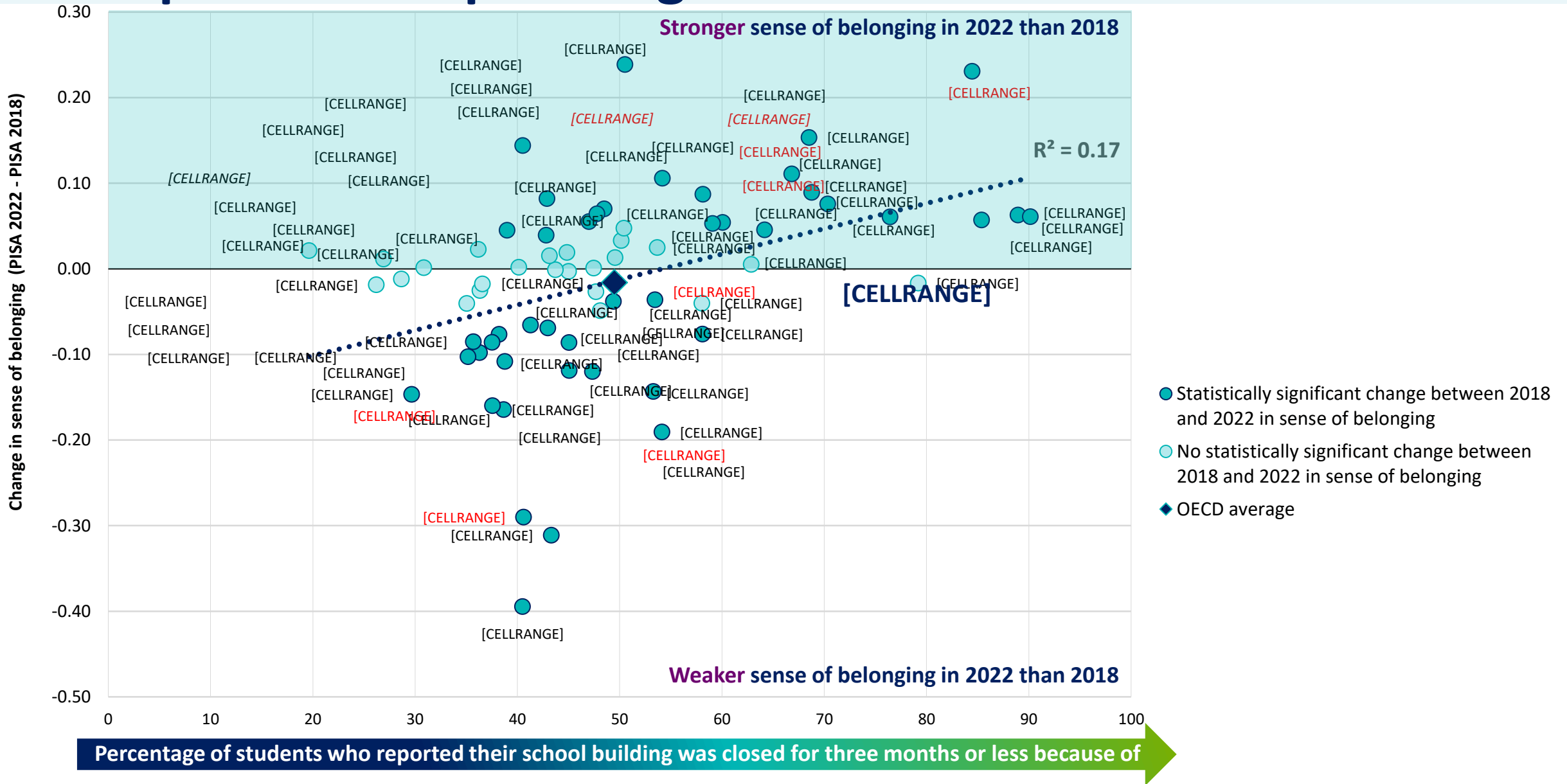
Figure II.2.2



Percentage of students who reported their school building was closed for three months or less because of COVID-19

Systems with improved sense of belonging kept schools open longer for more students

Figure II.2.3



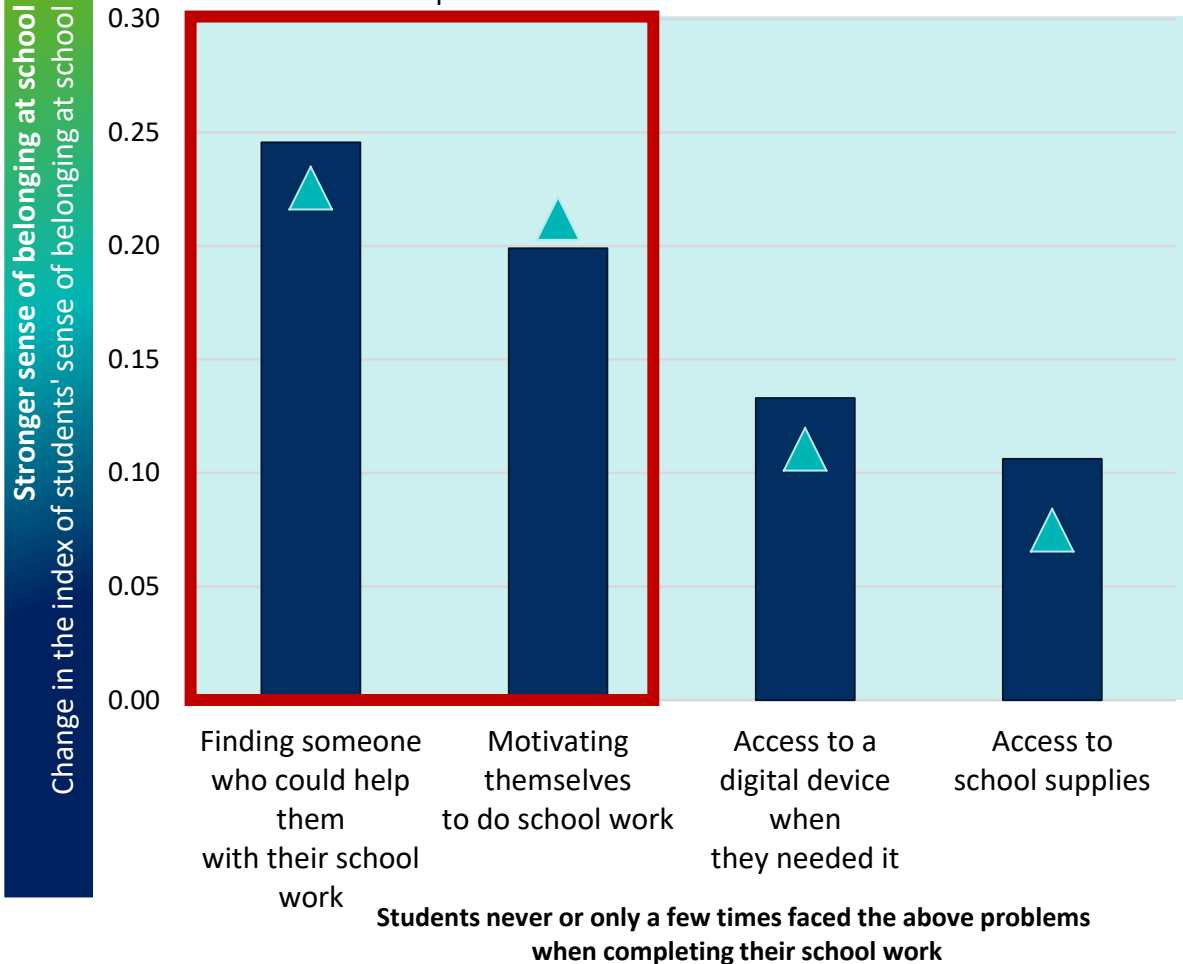


Less problems with remote learning, better sense of belonging and higher performance

Figure II.2.15

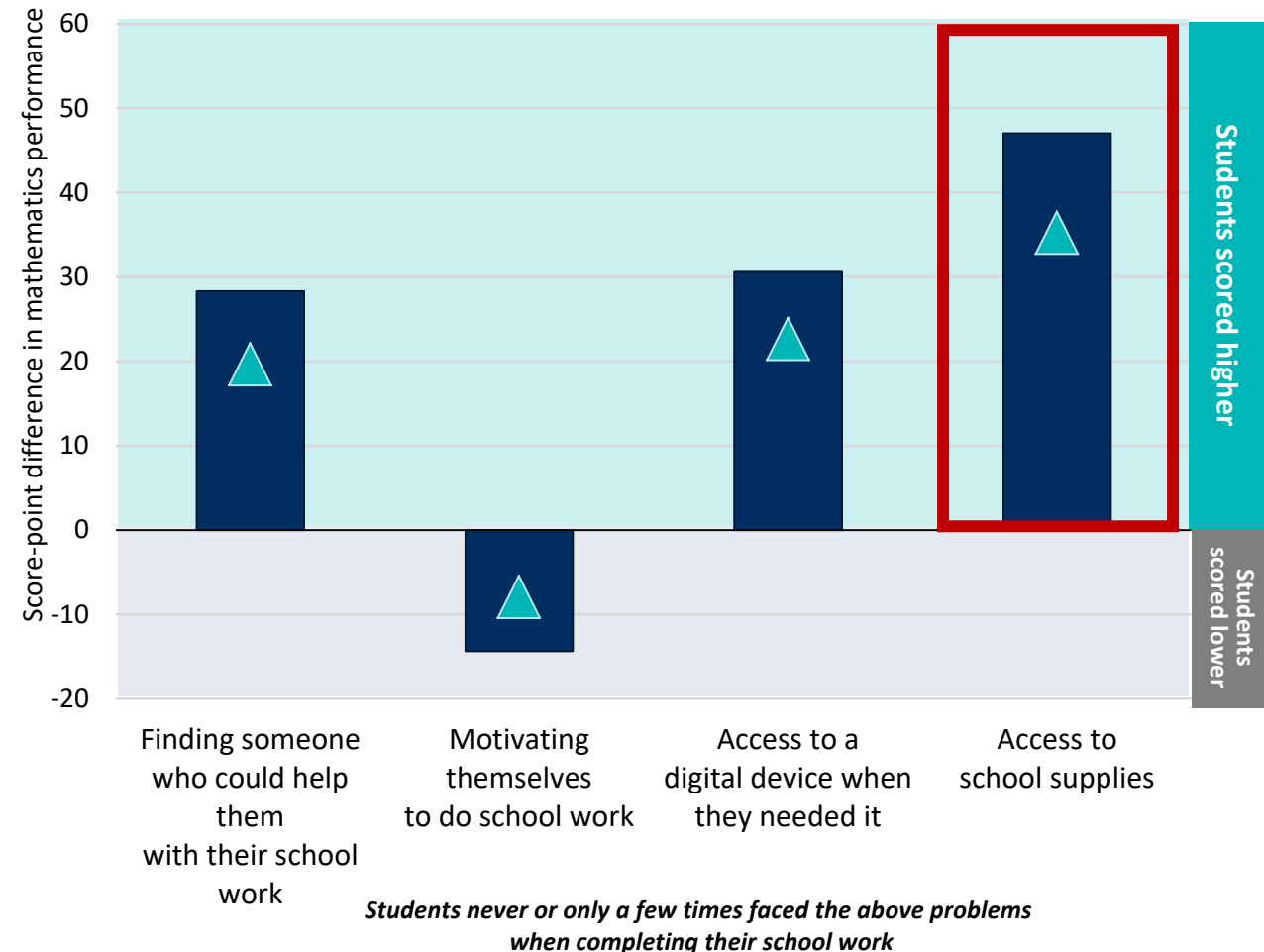
Sense of belonging

- Before accounting
- ▲ After accounting for students' and schools' socio-economic profile, and mathematics performance



Mathematics performance

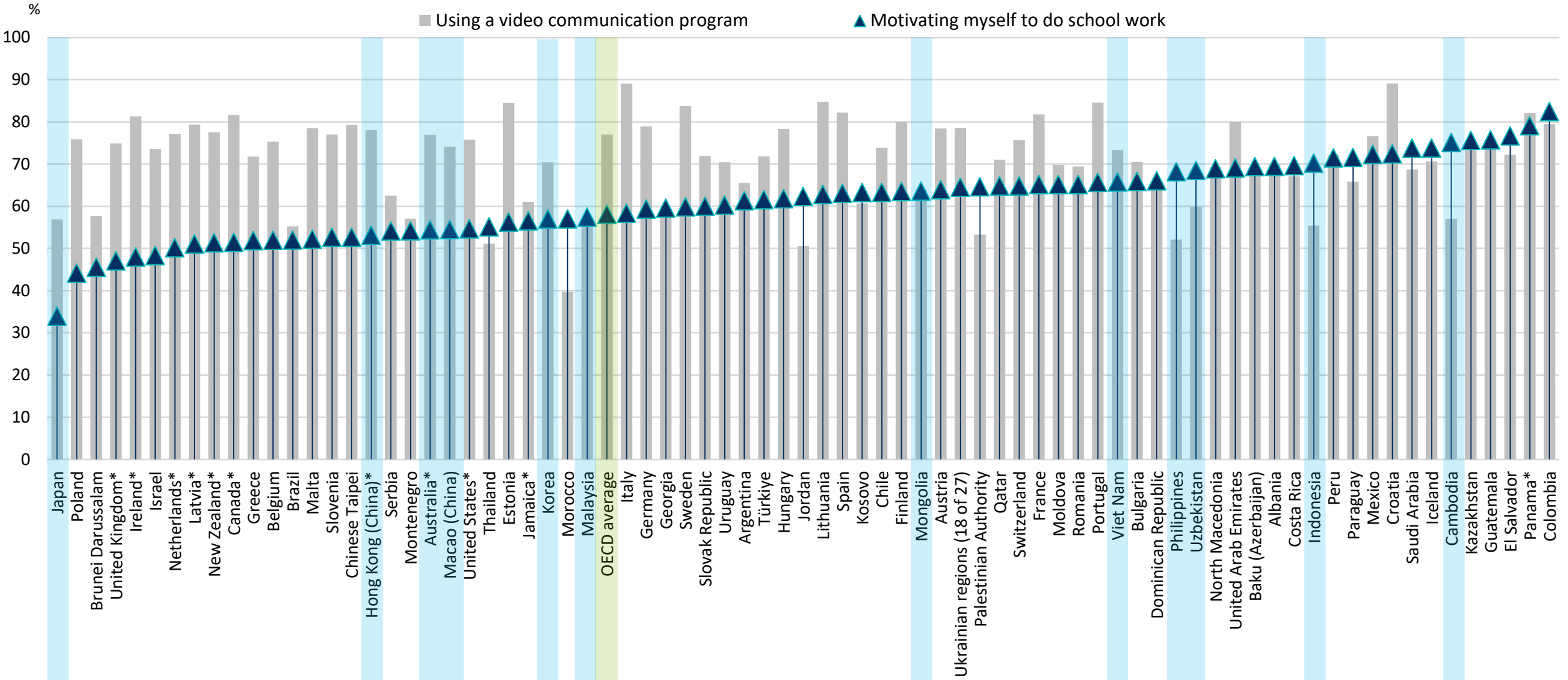
- Before accounting
- ▲ After accounting for students' and schools' socio-economic profile



Prepare students for autonomous learning

Figure II.2.5

Percentage of students who reported feeling confident/very confident in taking the following actions if their school building closes again in the future



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Digital distractions



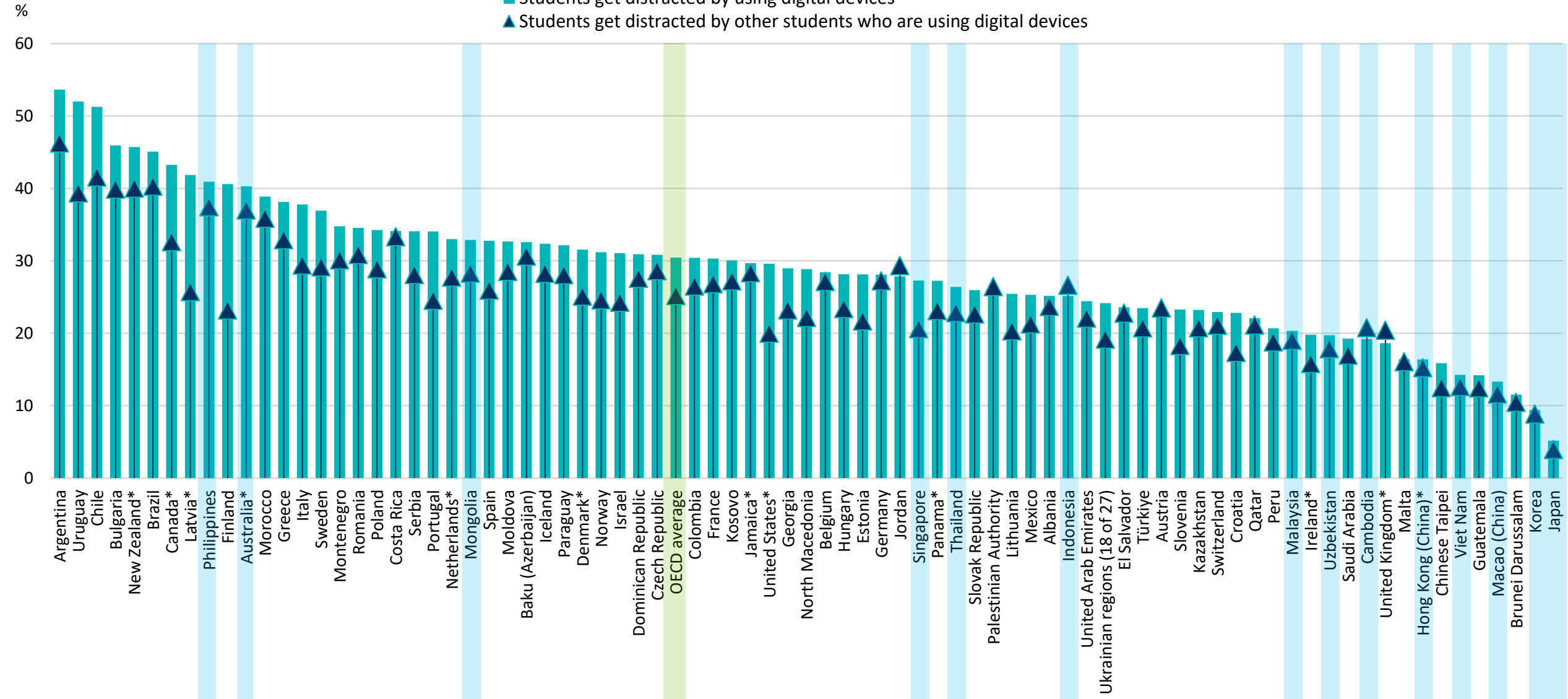


Distraction from digital devices in mathematics lessons

Figure II.3.4

Percentage of students who reported that the following happens in every or in most of their mathematics lessons

- Students get distracted by using digital devices
- ▲ Students get distracted by other students who are using digital devices

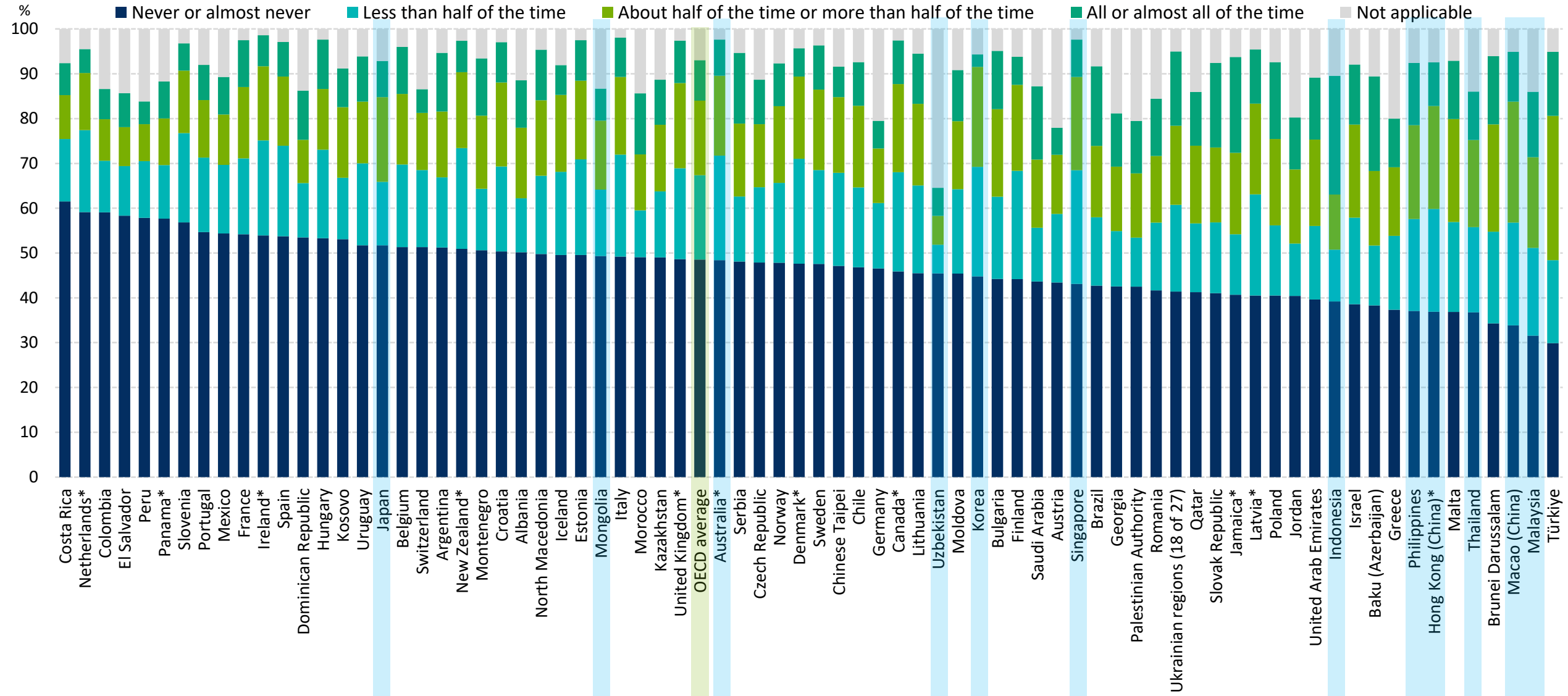




Over a half of students feeling nervous/anxious when digital devices are not near

Figure II.5.16

Based on students' reports



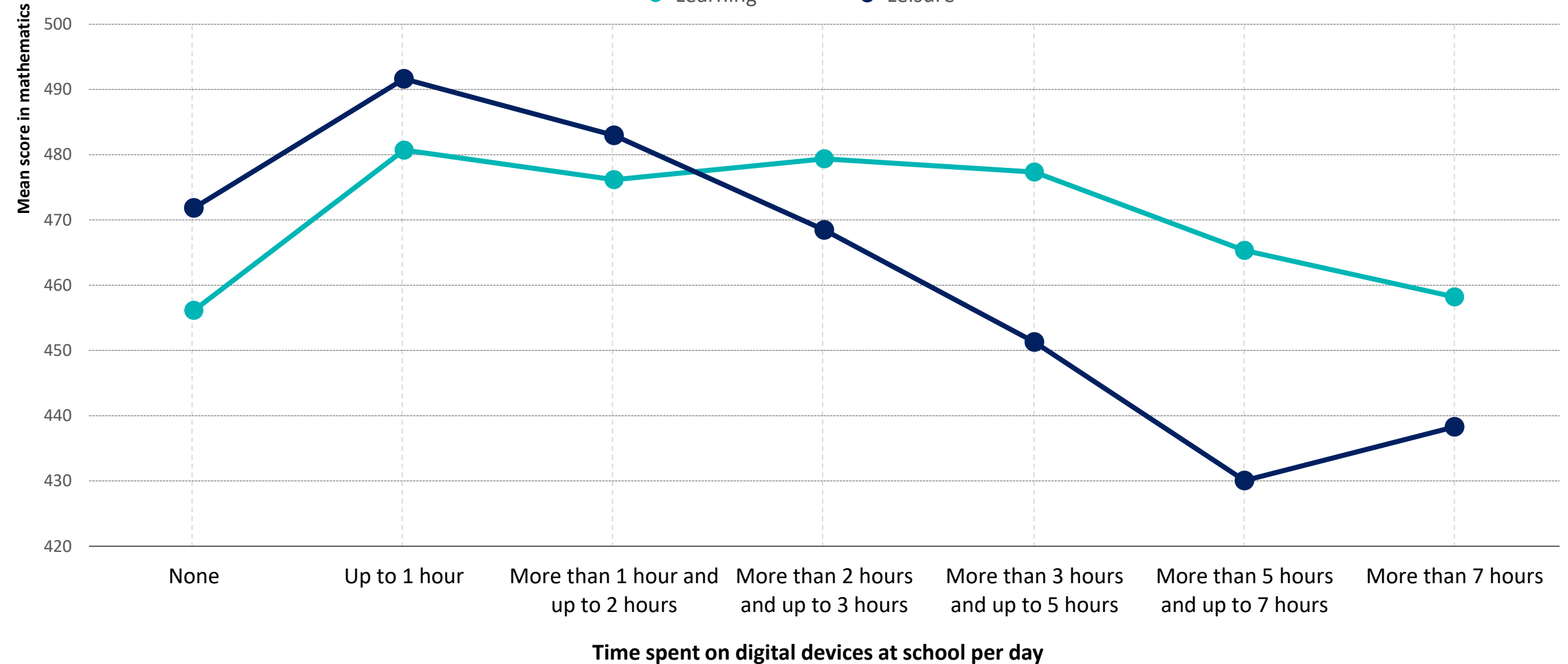


Time spent on digital devices at school and mathematics performance

Figure II.5.14

Based on students' reports; OECD average

Learning Leisure

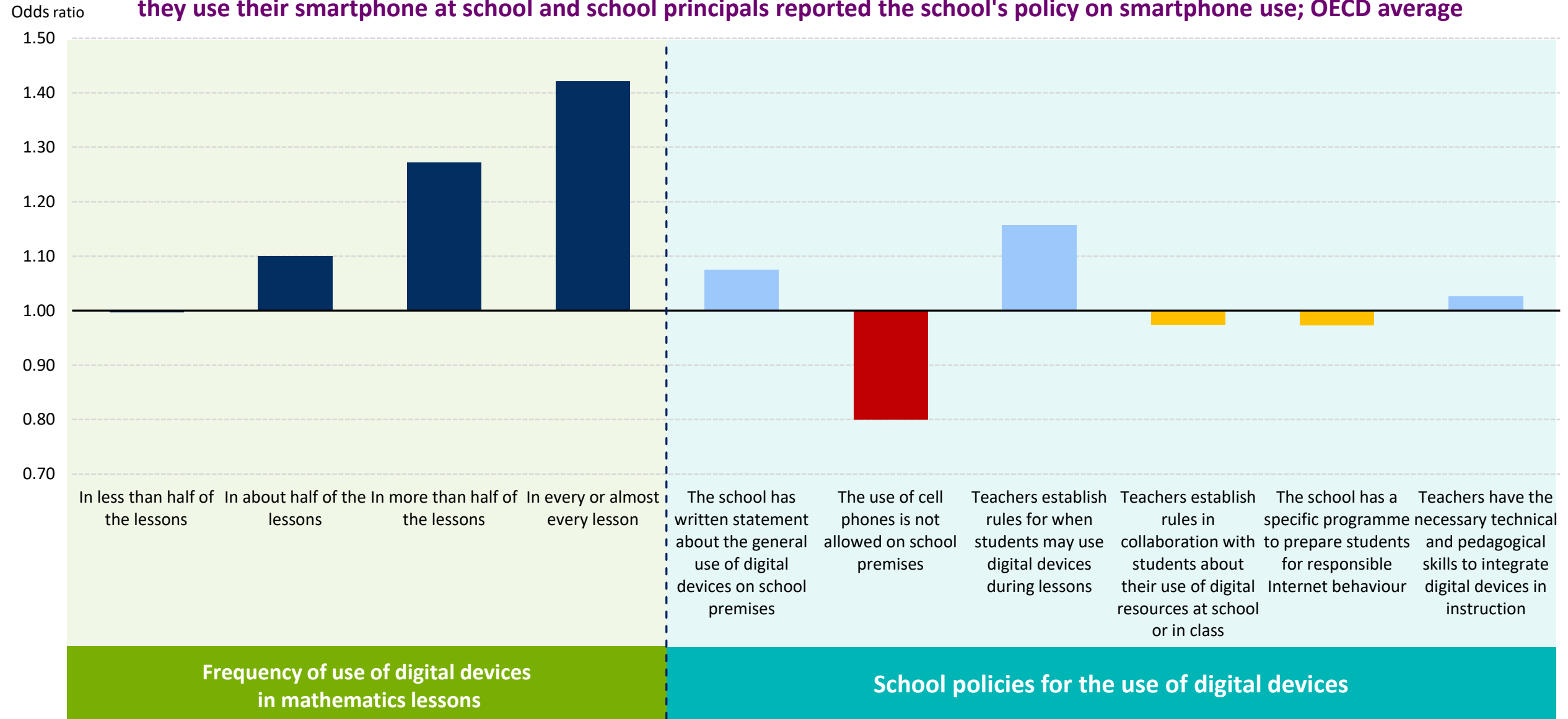




School policies to limit digital distraction

Figure II.5.9

Change in the likelihood of students becoming distracted by using digital devices in mathematics lessons when students reported that they use their smartphone at school and school principals reported the school's policy on smartphone use; OECD average



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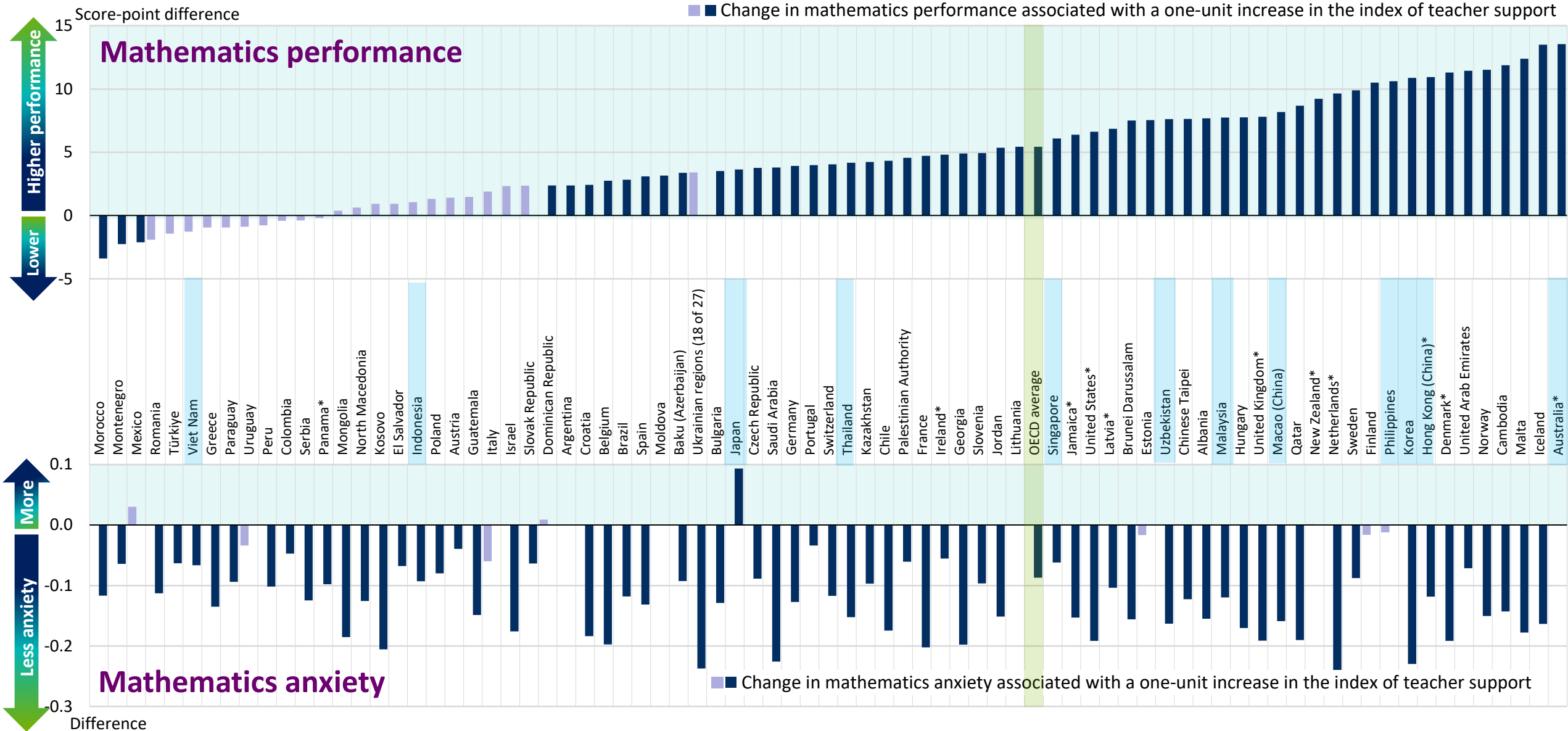
Teacher support





More teacher support, higher mathematics performance and less anxiety towards mathematics

Figure II.3.3

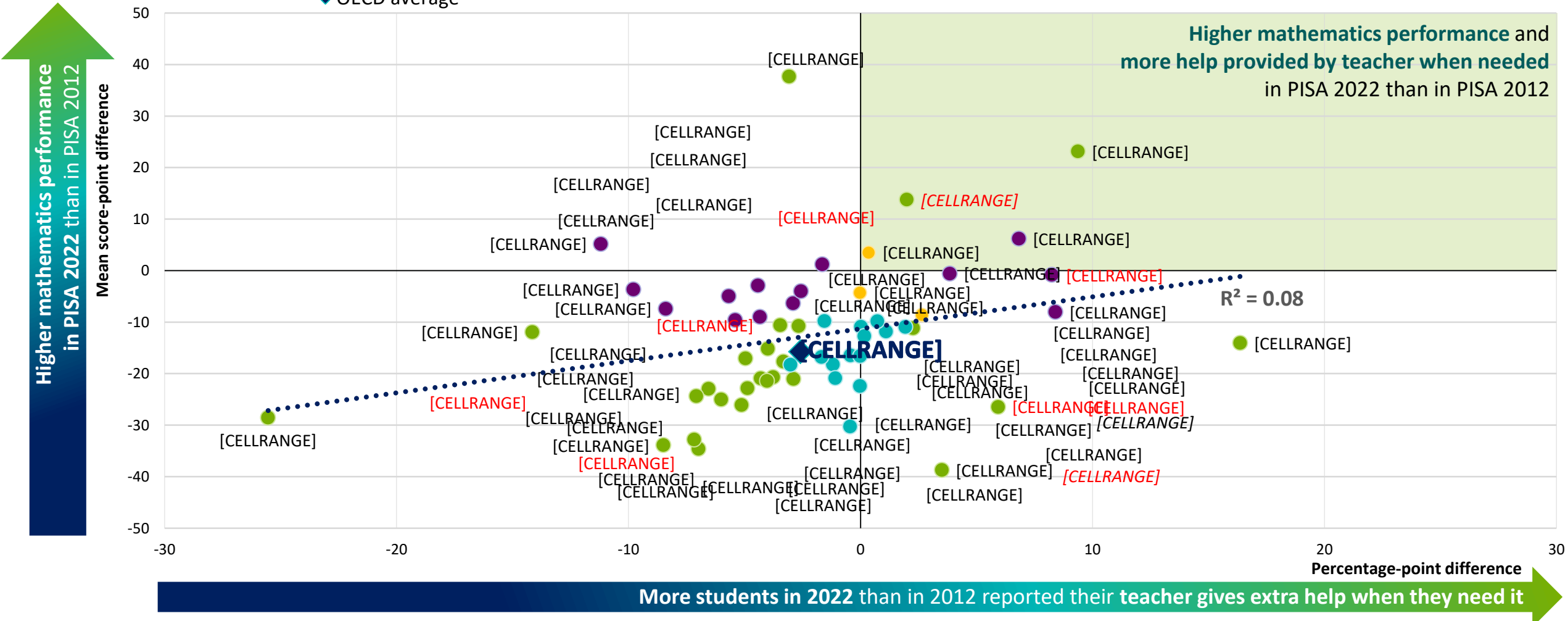




Increase in teacher help, increase in mathematics performance

Figure II.3.2

- Change between 2012 and 2022 is statistically significant for mathematics performance and the percentage of students
- Change between 2012 and 2022 is only statistically significant for mathematics performance
- Change between 2012 and 2022 is only statistically significant for the percentage of students
- Change between 2012 and 2022 is not statistically significant
- ◆ OECD average

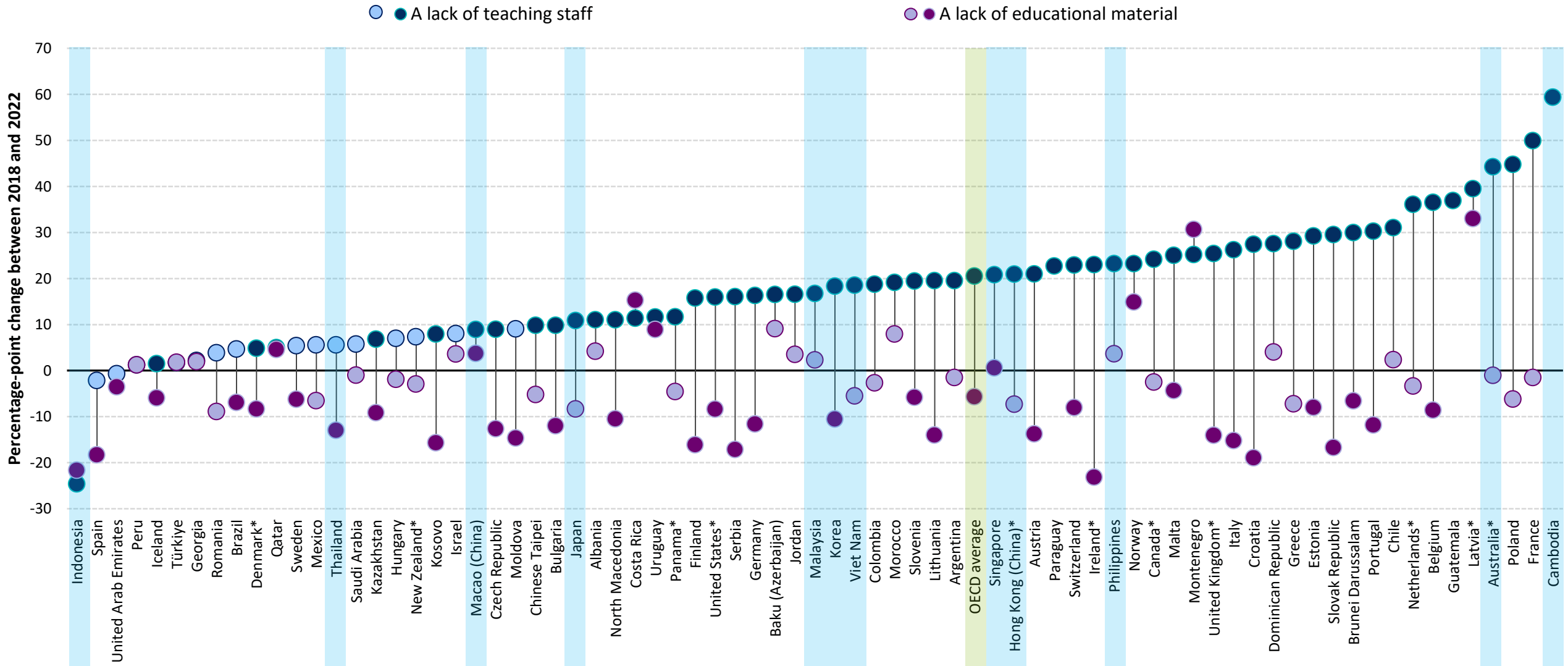




Principals were more concerned about the shortage of teaching staff in 2022 than in 2018

Figure II.5.3

Percentage-point change of students whose principals reported that the school's capacity to provide instruction is hindered to some extent or a lot by the following



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Parents and families

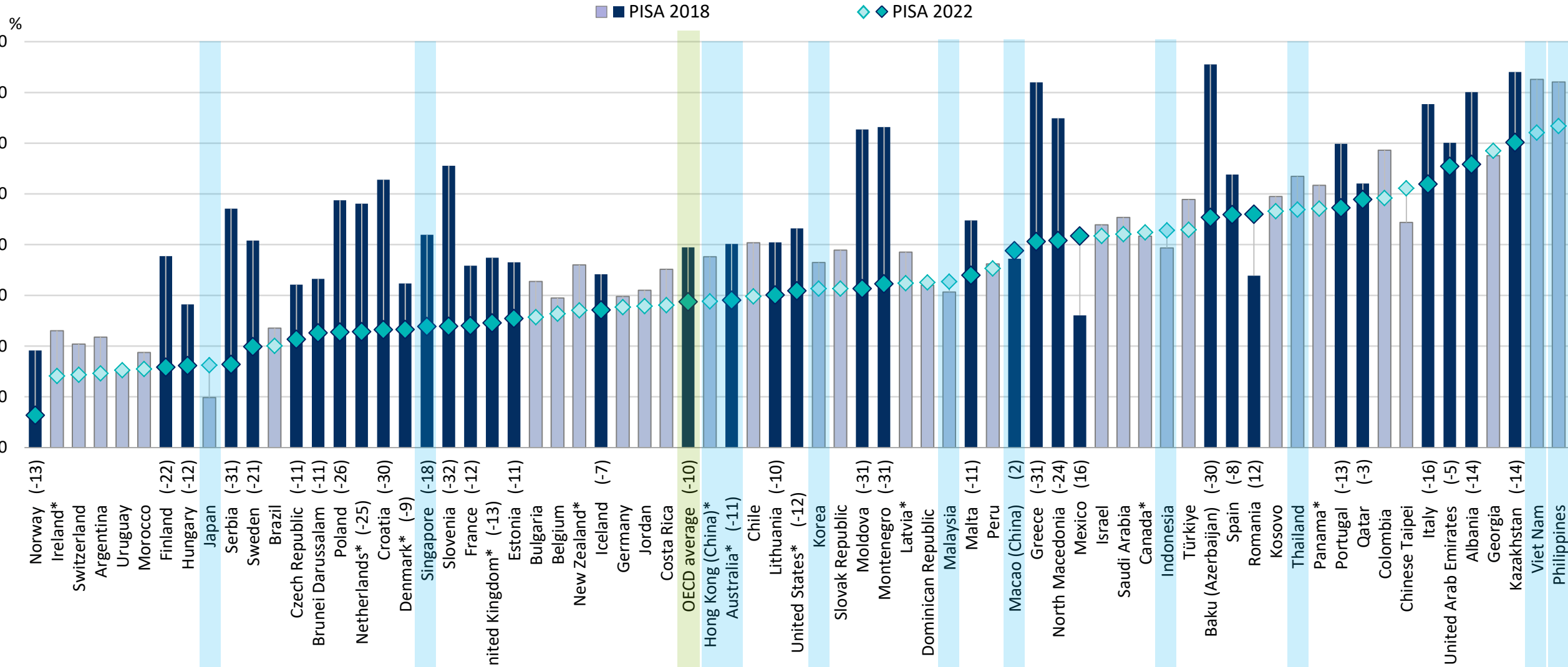




Decline in parents-initiated talks about students' progress

Figure II.3.15

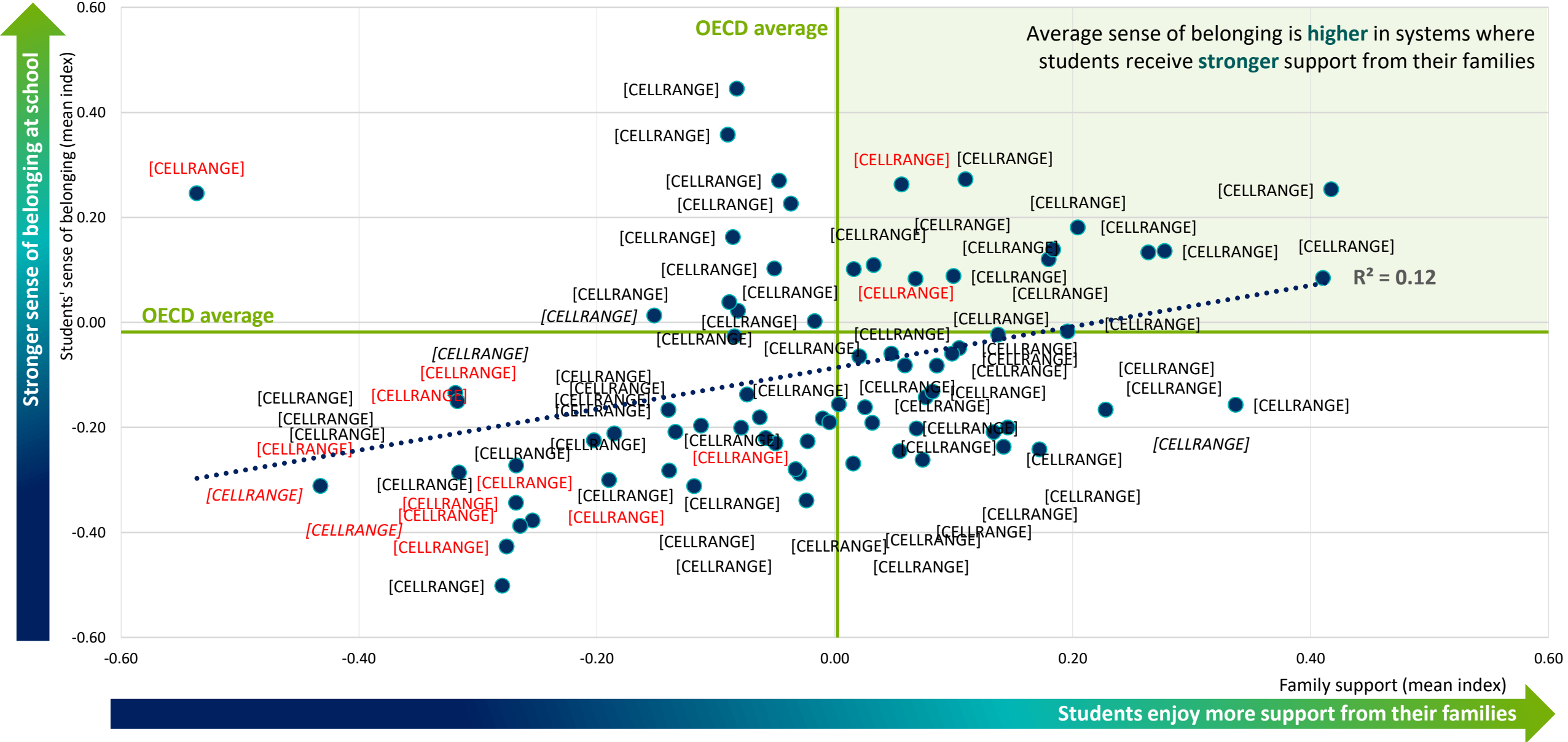
Percentage of students in schools whose principal reported that at least 50% of students' parents are involved in discussing their child's progress with a teacher on their own initiative





More family support, stronger sense of belonging

Figure II.3.17

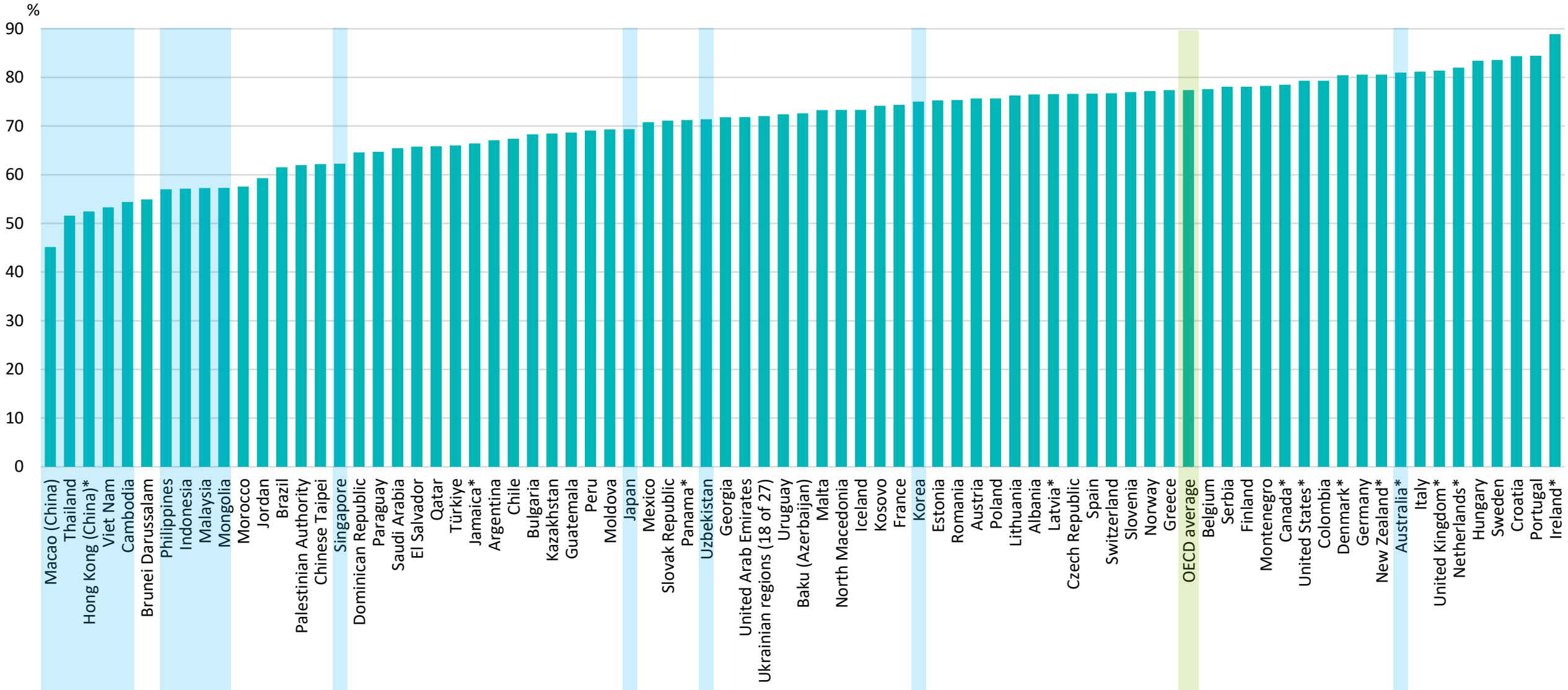




Students whose family regularly asks about school

Figure II.3.18

Percentage of students who reported that at least once a week or twice a week their parents or someone in their family asks them what they did in school that day



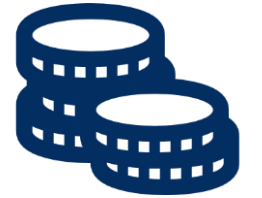


More to come



PISA volumes to be released **in 2024**

1. **Creative Thinking**
2. **Financial Literacy**
3. **Student readiness for life-long learning**



Find out more about our work at www.oecd.org/pisa



PISA main reports



PISA Country notes

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide of [PISA 2022 Results Volume I](#)).

