

## 5

# How the Quality of the Learning Environment is Shaped

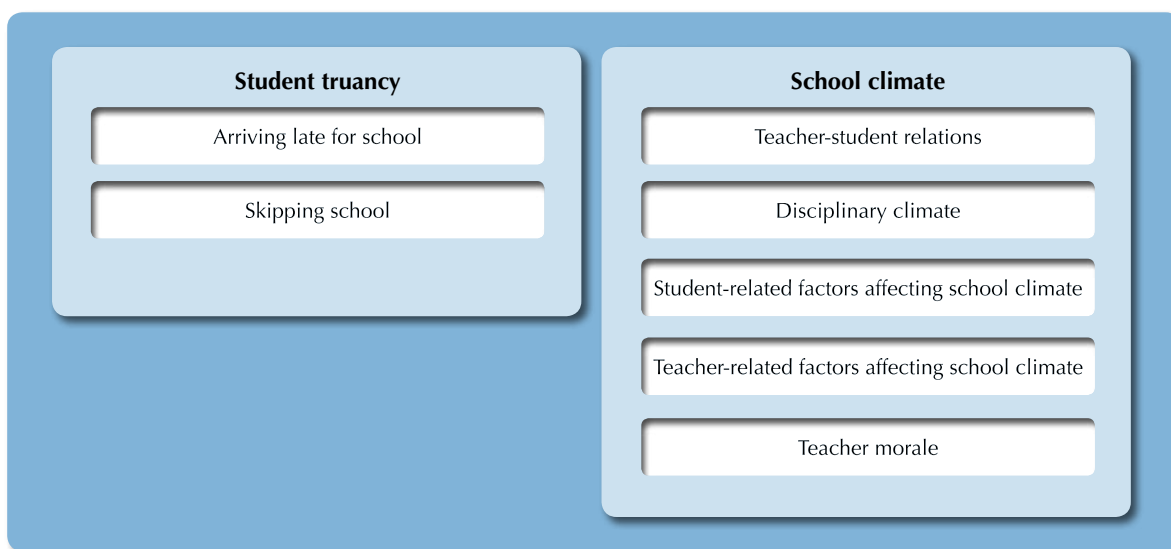
This chapter discusses student- and teacher-related aspects of the learning environment, including student truancy, teacher-student relations, the disciplinary climate and teacher morale. It also examines trends in school climate and student truancy since 2003.



This chapter describes the learning environment and examines how it is related to other aspects of school organisation discussed in Chapters 2 through 4. The aspects of learning environments related to the issues of student truancy and school climate that are discussed in this chapter are summarised in Figure IV.5.1. Student truancy not only hurts the individual student, but when it is pervasive, it hurts the entire class. School climate such as the good quality of relationships and the general orderly atmosphere are important characteristics of effective schools. Chapter 1 shows that student truancy tends to be negatively related to both systems' and schools' overall performance; and a favourable disciplinary climate is consistently related to higher average performance at the school level. In general, learning environments improved between 2003 and 2012: more students reported positive teacher-student relations and positive disciplinary climates, and principals were more likely to report that teacher- and student-related factors rarely hindered learning.

■ Figure IV.5.1 ■

### The learning environment as covered in PISA 2012

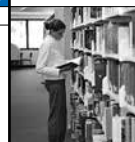


#### What the data tell us

- In virtually all school systems, schools with more negative disciplinary climates tend to have a higher incidence of students arriving late for school or skipping a day of school or a class.
- On average among OECD countries, schools with a more negative disciplinary climate tend to have a largely disadvantaged student population, have greater socio-economic diversity among students, and suffer from more teacher shortages.
- Consistent with trends showing that the overall learning environment improved between 2003 and 2012, students in 2012 were slightly less likely than students in 2003 to report that they had arrived late for school. According to students' reports, teacher-student relations have also improved during the period in all but one country, Tunisia, where they remained stable.

## STUDENT TRUANCY

Student truancy (e.g. arriving late for school, unauthorised non-attendance) not only has serious adverse consequences on the lives of individual young people, but it can also cut into school learning time and distract from learning (Robins and Ratcliff, 1978; Gamoran and Nystrand 1992; Lamdin, 1996; Caldas, 1993; Hallfors et al., 2002; Roby, 2004; Fantuzzo, Grim and Hazan 2005; Henry, 2007; Sheldon, 2007; Saab and Klinger, 2010). If students who arrive late or skip classes fall far behind in their classwork and require extra assistance, the flow of instruction is disrupted and all students in the class may suffer.



## Arriving late for school

PISA 2012 asked students to report the number of times they arrived late for school during the two weeks prior to the assessment. Across OECD countries, 65% of students reported that they had not arrived late for school during that period, 25% reported that they had arrived late once or twice, and 10% reported that they had arrived late three or more times. In Uruguay, Bulgaria, Costa Rica, Latvia, Sweden, Portugal, Israel, Chile, Peru and Tunisia, 50% to 60% of students had arrived late at least once in the prior two weeks. By contrast, around 15% to 19% of students in Hong Kong-China, Viet Nam, Shanghai-China and Liechtenstein had arrived late at least once, and 9% of students in Japan had arrived late at least once (Table IV.5.1).

Are students who arrive late for school concentrated in certain schools, or can they be found in any school? In order to answer this question, students' reports on arriving late for school were aggregated at the school level to calculate the proportion of students who had arrived late for school at least once in the two weeks prior to the PISA test (Figure IV.5.2). As shown in Figure IV.5.2, across OECD countries, 8% of students are in schools where one in ten students or fewer had arrived late for school during that period, 24% of students are in schools where between one in ten students and one in four students had arrived late for school at least once, 47% of students are in schools where between one and two in four students had arrived late for school, and 21% are in schools where more than two in four students had arrived late for school at least once in the previous two weeks. In Uruguay, Bulgaria, Costa Rica, Latvia, Sweden, Portugal, Israel, Peru, Tunisia, Chile and Greece, 50% to 80% of students are in schools where more than half of students had arrived late for school at least once in the previous two weeks. By contrast, in Shanghai-China, Hong Kong-China, Japan, Liechtenstein, Singapore, Viet Nam, Chinese Taipei, Luxembourg and Germany, fewer than 5% of students attend such schools. In Japan, 65% of students are in schools where one in ten students or fewer had arrived late for school during that period (Table IV.5.2).

In all school systems, the proportion of 15-year-old students who arrived late for school varies across schools. However, in some systems, these students seem to be concentrated in certain schools, while in other systems these students are distributed more equitably among all schools. For example, around 39% of students had arrived late for school at least once in the two weeks prior to the PISA test in Denmark and Montenegro (Figure IV.5.2 and Table IV.5.1). But these students are more concentrated in certain schools in Denmark than in Montenegro. In Montenegro, 83% of students are in schools where from one to two in four students had arrived late, while in Denmark, 52% of students are in such schools. Thus, in Montenegro, students will have similar experiences with late-arriving peers no matter which school they attend, while in Denmark, students' experiences with late-arriving peers will vary greatly, depending on the school they attend (Table IV.5.2).

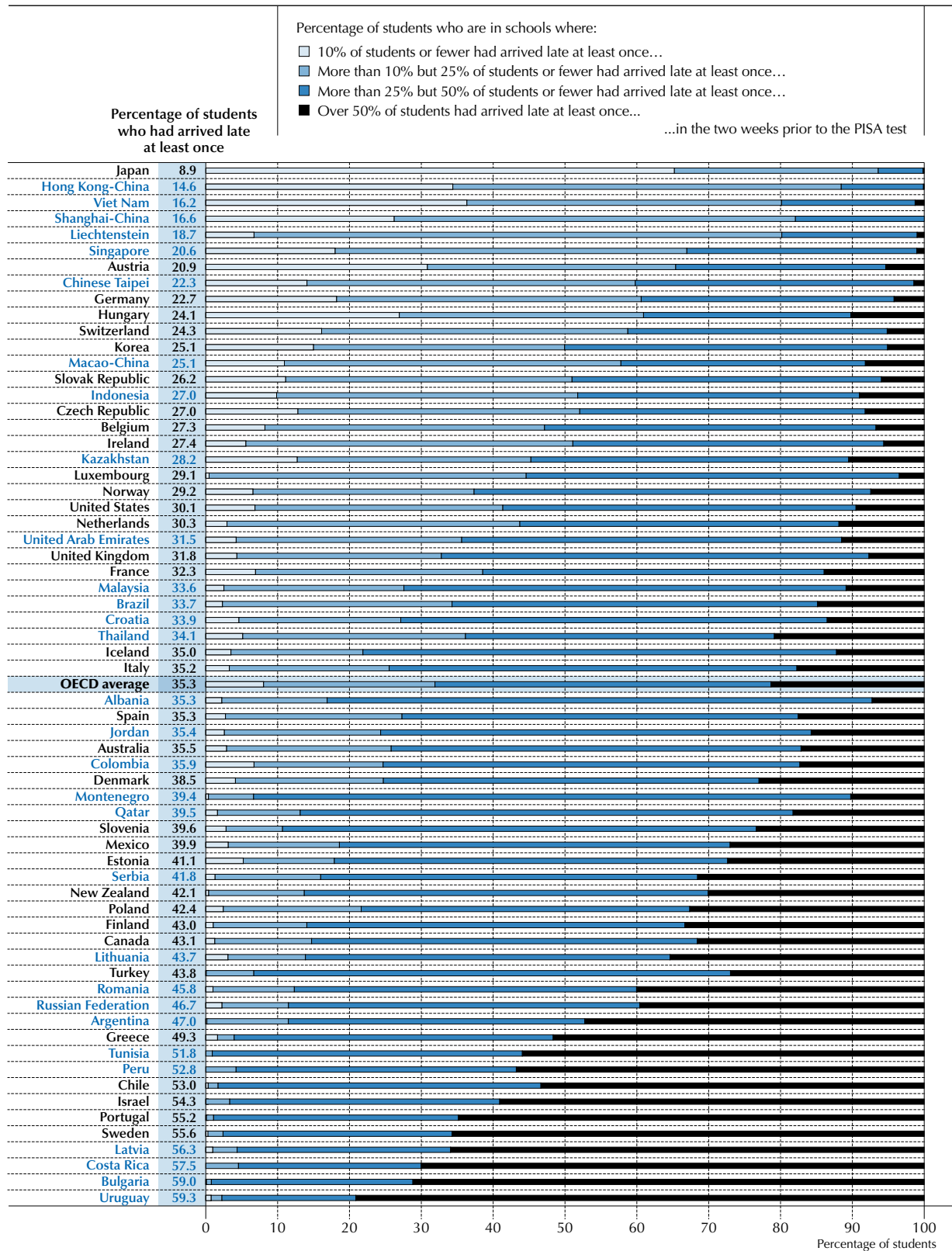
## Skipping school

Students were asked to report the number of times they skipped a whole day of school and the number of times they skipped some classes during the two weeks before the assessment. Across OECD countries, 85% of students reported that they had not skipped a day of school, 12% had skipped a day of school once or twice, and 3% had skipped a day of school three times or more during those two weeks. Similarly, across OECD countries, 82% of students had not skipped classes, 14% skipped classes once or twice, and 4% had skipped classes three times or more during that period (Table IV.5.3).

In Argentina and Turkey, more than 50% of students had skipped a day of school in the two weeks prior to the PISA test, while in Shanghai-China, Japan, Korea, Liechtenstein, Iceland, the Netherlands, Hong Kong-China, Ireland, Chinese Taipei, Colombia, Macao-China and Switzerland, fewer than 5% of students had done so. In general, those countries with high proportions of students who had skipped a day of school also tend to have high proportions of students who skip classes, while those countries and economies with small proportions of students who had skipped a day of school also tend to have small proportions of students who had skipped classes. An exception is Latvia, where about one in five students reported that he or she had skipped a day of school at least once during the period, while about two out of three students reported to have skipped classes at least once (Table IV.5.3).


Are students who skip a day of school concentrated in certain schools? Across OECD countries, an average of 27% of students are in schools where one in ten students or fewer reported that they had skipped a day or a class in the two weeks prior to the PISA test; 31% are in schools where between one in ten students and one in four students reported to have done so at least once; 30% are in schools where between a quarter and half of students reported to have done so; and 13% are in schools where more than half of students reported to have done so. In Argentina, Latvia, Turkey, Italy, Jordan, Romania, Costa Rica and the United Arab Emirates, over 50% of students attend schools where more than half of students reported that they had skipped a day of school or a class at least once in the two weeks prior to the assessment (Table IV.5.4).

■ Figure IV.5.2 ■

**Students arriving late for school**

Countries and economies are ranked in ascending order of the percentage of students who had arrived late at least once in the two weeks prior to the assessment.

Source: OECD, PISA 2012 Database, Tables IV.5.1 and IV.5.2.

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## SCHOOL CLIMATE

Research into what makes schools effective finds that learning requires an orderly and co-operative environment both in and outside the classroom (Jennings and Greenberg, 2009). In effective schools, academic activities and student performance are valued by both students and teachers (Scheerens and Bosker, 1997; Sammons, 1999; Taylor, Pressley and Pearson, 2002). The school climate encompasses not only norms and values but also the quality of teacher-student relations and the general atmosphere (OECD, 2013). How does the climate in a classroom – e.g. the degree of discipline among students, the quality of the relationship between students and their teachers, the values promoted and shared between teacher and student and among the students themselves – vary, and how does it affect teaching and learning? Research has found that students, particularly disadvantaged students, learn more and have fewer disciplinary problems when they feel that their teachers take them seriously (Gamoran, 1993) and when they have strong and affective bonds with their teachers (Crosnoe, Johnson and Elder, 2004). Through these positive relationships, social capital is transmitted, communal learning environments are created, and adherence to norms conducive to learning are both promoted and strengthened (Birch and Ladd, 1998).

### Teacher-student relations

Students were asked to indicate whether and to what extent they agree with several statements regarding their relationships with teachers at school, including whether they get along with their teachers, whether teachers are interested in their personal well-being, whether teachers take the student seriously, whether teachers are a source of support if the student needs extra help, and whether teachers treat the student fairly. These responses were combined to create a composite *index of teacher-student relations* such that the index has an average of zero and a standard deviation of one for OECD countries. Higher values indicate that students have a more positive perception of teacher-student relations. When comparing estimates across school systems, it is important to keep in mind that several factors beyond students' experiences in school may determine the patterns of these responses.

On average across OECD countries, at least three out of four students agreed or strongly agreed with four of these statements, as presented in Figure IV.5.3:

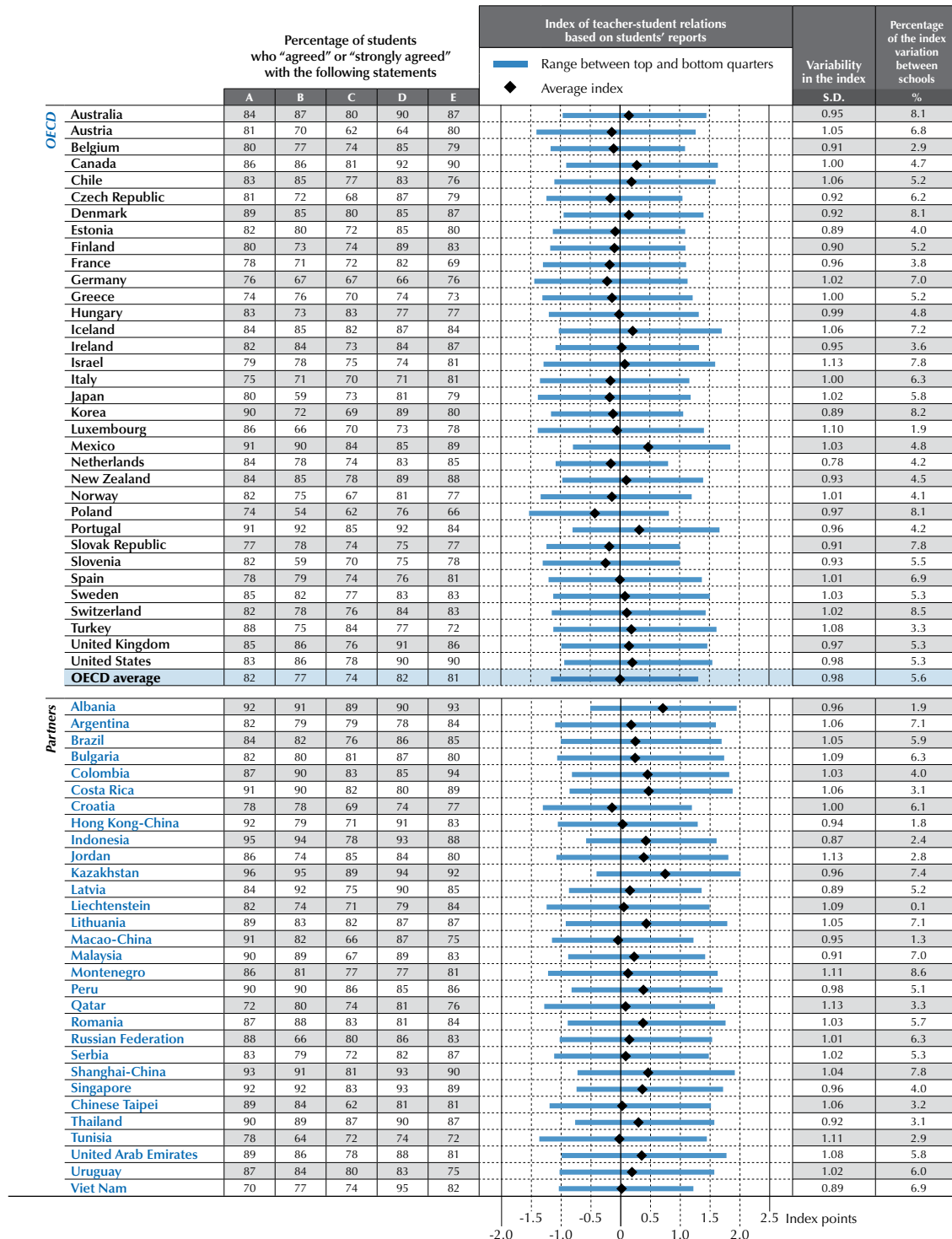
- 82% of students agreed or strongly agreed that students get along well with most teachers. While in Kazakhstan, Indonesia, Shanghai-China, Singapore, Hong Kong-China, Albania, Macao-China, Costa Rica, Portugal, Mexico, Thailand and Malaysia, over 90% of students responded so, fewer than 75% of students in Viet Nam, Qatar, Poland, Greece and Italy responded so.
- 82% of students agreed or strongly agreed that they would receive extra help from their teachers if they need it. In Viet Nam, Kazakhstan, Shanghai-China, Indonesia, Singapore, Canada, Portugal, Hong Kong-China, the United Kingdom, Thailand and Albania, over 90% of students responded so, while in Austria, Germany, Italy, Luxembourg, Croatia, Israel, Tunisia, Greece and Slovenia, fewer than 75% of students responded so.
- 81% of students agreed or strongly agreed that most of their teachers treat them fairly. Over 90% of students in Colombia, Albania, Kazakhstan and Shanghai-China responded so, while in Poland, France, Tunisia, Turkey, Greece and Macao-China, fewer than 75% of students responded so.
- 77% of students agreed or strongly agreed that most teachers are interested in students' well being. Over 90% of students in Kazakhstan, Indonesia, Latvia, Singapore, Portugal, Shanghai-China, Albania, Colombia and Costa Rica responded so, while in Poland, Slovenia, Japan, Tunisia, the Russian Federation and Luxembourg, at least one in three students did not respond so.
- 74% of students agreed or strongly agreed that most of their teachers really listen to what they have to say. Over 85% of students in Kazakhstan, Albania, Thailand, Peru, Portugal and Jordan responded so, while at least one in three students in Austria, Chinese Taipei, Poland, Macao-China and Germany did not respond so.

Although most students across OECD countries reported positive relationships between students and teachers, these relationships vary, as measured by the standard deviation of the *index of teacher-student relations*, which combines the abovementioned questions. Variation within countries (measured through the standard deviation at the student level) is smallest in the Netherlands, Indonesia, Viet Nam, Latvia, Estonia and Korea. In contrast, in Qatar, Israel, Jordan, Tunisia and Montenegro, teacher-student relations vary more (Table IV.5.5).

■ Figure IV.5.3 ■

## Students' views of teacher-student relations

- A Students get along well with most teachers
- B Most teachers are interested in students' well-being
- C Most of my teachers really listen to what I have to say
- D If I need extra help, I will receive it from my teachers
- E Most of my teachers treat me fairly



Note: Higher values on the index indicate better teacher-student relations.

Source: OECD, PISA 2012 Database, Table IV.5.5.

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Students' reports on their relationship with teachers vary both between and within schools. On average across OECD countries, most of the variation in the *index of teacher-student relations* is seen within schools (i.e. 94% of variation is seen within schools, while 6% is observed between schools). In other words, students who attend the same school vary in the extent to which they reported good relations with their teachers. In Liechtenstein, Macao-China, Hong Kong-China, Luxembourg, Albania and Indonesia, around 2.5% or less of variation in the *index of teacher-student relations* is observed between schools; in contrast, in Montenegro, Switzerland, Korea, Australia, Denmark and Poland, 8% or more of the variation is seen between schools (Figure IV.5.3 and Table IV.5.5).

## Disciplinary climate

PISA 2012 asked students to describe the frequency with which interruptions occur in mathematics lessons. This included how often – “never”, “in some”, “in most” or “in all” mathematics lessons – students don't listen to what the teacher says; there is noise and disorder; the teacher has to wait a long time for students to quieten down; students cannot work well; and students don't start working for a long time after the lesson begins. These responses were combined to create a composite *index of disciplinary climate* such that the index has an average of zero and a standard deviation of one for OECD countries. Higher values indicate that students perceive a better disciplinary climate in the classroom.

Most students in OECD countries enjoy orderly classrooms during their mathematics lessons. As presented in Figure IV.5.4, on average across OECD countries:

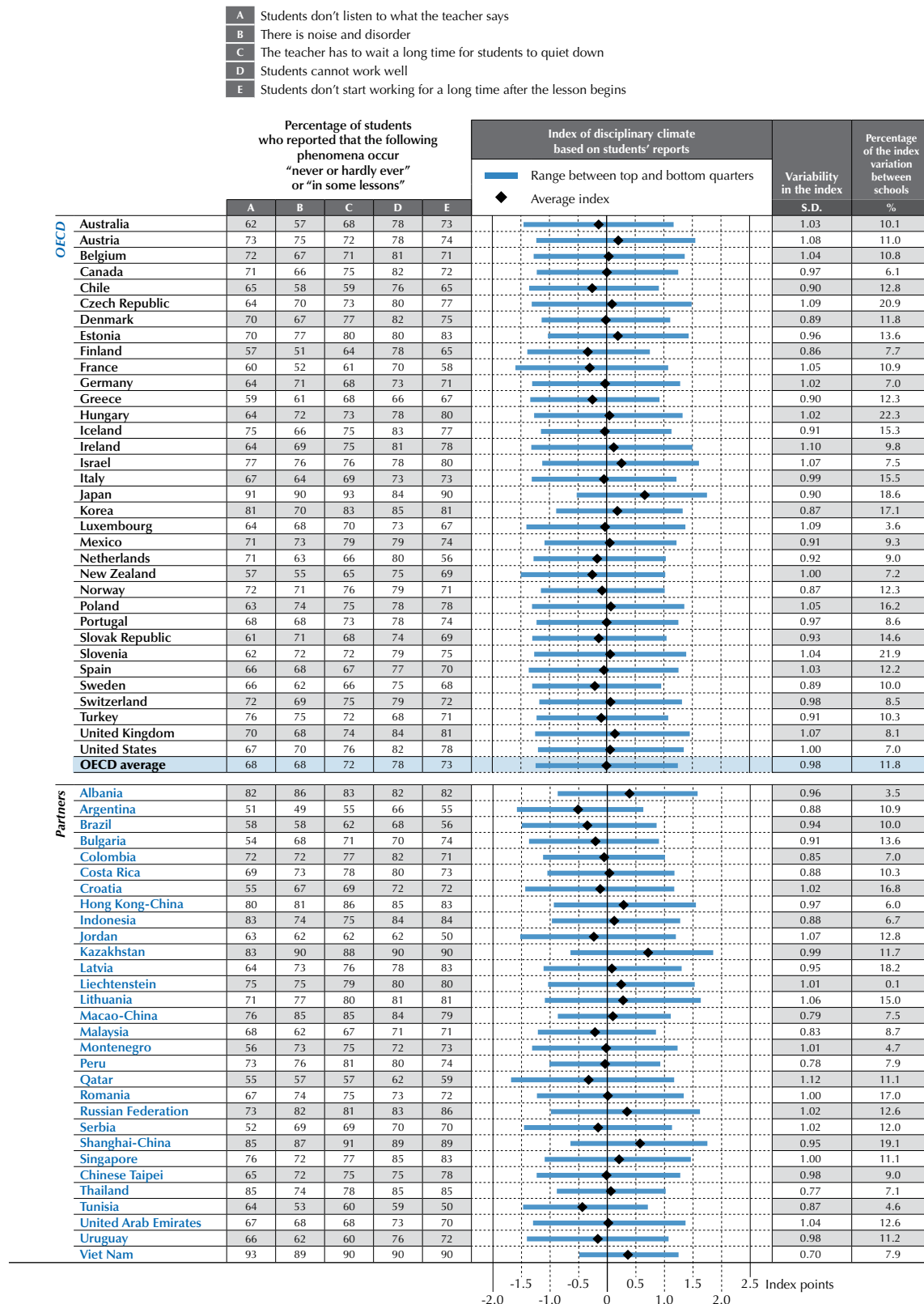
- 78% of students reported that they never or only in some mathematics lessons cannot work well. In Viet Nam, Kazakhstan, Shanghai-China, Singapore and Korea, over 85% of students responded so, while in Tunisia, Qatar, Jordan, Argentina and Greece, 33% of students or more responded that this happens in most or every lesson.
- 73% of students reported that they never or only in some lessons don't start working for a long time after the lessons begins. Over 85% of students in Japan, Viet Nam, Kazakhstan, Shanghai-China and the Russian Federation gave this response, while over 40% of students in Tunisia, Jordan, Argentina, Brazil, the Netherlands, France and Qatar reported that this happens in most or every lesson.
- 72% of students reported that their teacher never or only in some lessons has to wait a long time for students to quiet down. Over 85% of students in Japan, Shanghai-China, Viet Nam, Kazakhstan, Hong Kong-China and Macao-China reported so, while over 40% of students in Argentina, Qatar, Chile and Tunisia reported that this happens in most or every lesson.
- 68% of students reported that students never, or only in some lessons, do not listen to what the teacher says. Over 80% of students in Viet Nam, Japan, Shanghai-China, Thailand, Indonesia, Kazakhstan, Albania and Korea reported so, while over 40% of students in Argentina, Serbia, Bulgaria, Croatia, Qatar, Montenegro, New Zealand, Finland, Brazil, Greece and France reported that this happens in most or every lesson.
- 68% of students reported there is never, or only in some lessons, noise and disorder. Over 80% of students in Kazakhstan, Japan, Viet Nam, Shanghai-China, Albania, Macao-China, the Russian Federation and Hong Kong-China reported so, while over 40% of students in Argentina, Finland, France, Tunisia, New Zealand, Qatar, Australia, Chile and Brazil reported that this happens in most or every lesson.

Disciplinary climate often varies widely within countries and economies, as measured by the standard deviation of the *index of disciplinary climate*, which combines the abovementioned questions. Variations within countries and economies (i.e. the standard deviation at the student level) are the smallest in Viet Nam, Thailand, Peru, Macao-China, Malaysia and Colombia. By contrast, in Qatar and Ireland there is more variation in disciplinary climate within the country (Table IV.5.6).

Variations in the *index of disciplinary climate* can occur between and within schools. On average across OECD countries, 88% of the variation in the *index of disciplinary climate* is seen within schools, while 12% is observed between schools. Higher levels of between-school variation mean lower levels of within-school variation. In other words, students who attend the same school share similar perceptions about the disciplinary climate in their classes. In Hungary, Slovenia and the Czech Republic, 20% or more of the variation in this index is observed between schools. In contrast, in Liechtenstein, Albania, Luxembourg, Tunisia and Montenegro, less than 5% of the variation is seen between schools (Figure IV.5.4 and Table IV.5.6).


■ Figure IV.5.4 ■

## Students' views of how conducive classrooms are to learning



Note: Higher values on the index indicate a better disciplinary climate.

Source: OECD, PISA 2012 Database, Table IV.5.6.

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## Student- and teacher-related factors affecting school climate

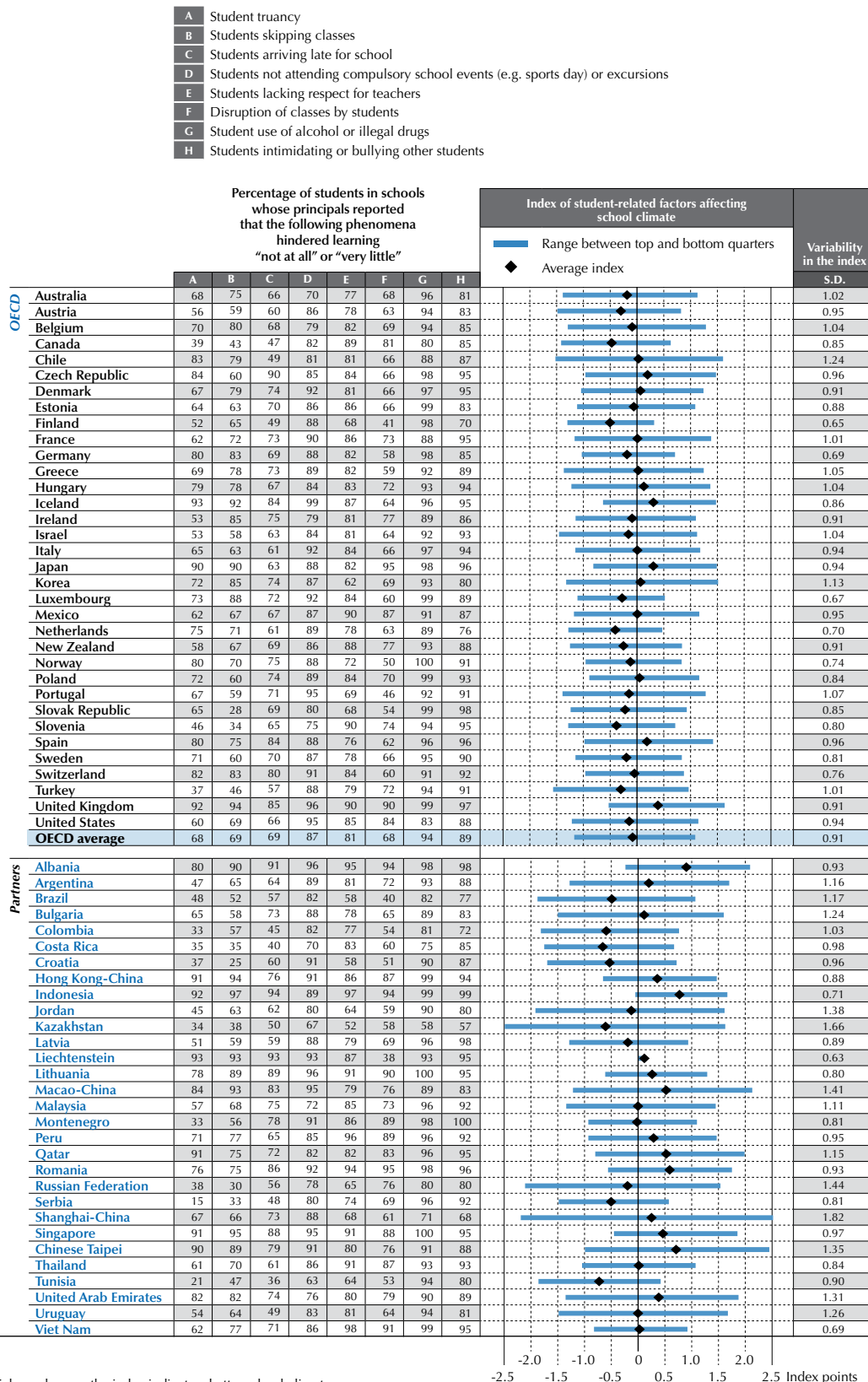
To examine the degree to which student behaviour influences learning, school principals were also asked to report the extent to which they think that learning in their schools is hindered by such factors as: student truancy, students skipping classes, students arriving late for school, students not attending compulsory school events or excursions, students lacking respect for teachers, disruption of classes by students, students using alcohol or illegal drugs, and students intimidating or bullying other students. The responses were combined to create an *index of student-related factors affecting school climate* that has a mean of zero and a standard deviation of one in OECD countries. Positive values reflect principals' perceptions that students' behaviour hinders learning to a lesser extent, and negative values indicate that school principals believe that students' behaviour hinders learning to a greater extent, compared to the OECD average.

In general, student truancy and disruption of classes are reported as more of a hindrance to learning than students' use of alcohol or illegal drugs, or students intimidating other students, not participating in compulsory events, or showing a lack of respect for teachers (Figure IV.5.5). On average across OECD countries:

- 94% of students attend schools whose principals reported that learning is not at all or very little hindered by students' use of alcohol or illegal drugs. Over 95% of students are in such schools in 29 participating countries and economies, while in Kazakhstan and Shanghai-China at least one in four students attends schools whose principals reported that learning is hindered by students' use of alcohol or illegal drugs to some extent or a lot.
- 89% of students are in schools whose principals reported that learning is not at all or very little hindered by students intimidating or bullying other students. Some 95% of students or more in Montenegro, Indonesia, Albania, the Slovak Republic, Latvia, the United Kingdom, Romania, Spain, Japan, Singapore, Lithuania and Iceland attend such schools, while over 20% of students in Kazakhstan, Shanghai-China, Finland, Colombia, the Netherlands, Brazil, Korea and Tunisia attend schools where learning hindered by students intimidating or bullying other students to some extent or a lot.
- 87% of students are in schools whose principals reported that learning is not at all or very little hindered by students not attending compulsory school events, such as sports days or excursions. Over 95% of students in Iceland, the United Kingdom, Lithuania, Albania, Macao-China, Portugal and Singapore attend such schools. In contrast, at least one in four students in Tunisia, Kazakhstan, Australia, Costa Rica, Malaysia and Slovenia attends schools whose principals reported that learning is hindered by students not attending compulsory school events to some extent or a lot.
- 81% of students are in schools whose principals reported that learning is not at all or very little hindered by students lacking respect for teachers. Over 90% of students in Viet Nam, Indonesia, Peru, Albania, Romania, Lithuania, Thailand, Singapore and the United Kingdom attend such schools. In contrast, at least one in three students in Kazakhstan, Croatia, Brazil, Korea, Jordan, Tunisia and the Russian Federation attends schools whose principals reported that learning is hindered by students' lack of respect for teachers to some extent or a lot.
- 69% of students are in schools whose principals reported that learning is not at all or very little hindered by students skipping classes. Over 90% of students in Indonesia, Singapore, the United Kingdom, Hong Kong-China, Macao-China, Liechtenstein, Iceland, Albania and Japan attend such schools. In contrast, at least one in two students in Croatia, the Slovak Republic, the Russian Federation, Serbia, Slovenia, Costa Rica, Kazakhstan, Canada, Turkey and Tunisia attends schools whose principals reported that learning is hindered by this behaviour to some extent or a lot.
- 69% of students attend schools whose principals reported that learning is not at all or very little hindered by students arriving late for school. Over 90% of students in Indonesia, Liechtenstein and Albania attend such schools. In contrast, at least one in two students in Tunisia, Costa Rica, Colombia, Canada, Serbia, Chile, Finland and Uruguay attends schools whose principals reported that learning is hindered by this behaviour to some extent or a lot.
- 68% of students are in schools whose principals reported that learning is not at all or very little hindered by student truancy. Over 90% of students in Liechtenstein, Iceland, Indonesia, the United Kingdom, Hong Kong-China, Qatar, Singapore and Chinese Taipei attend such schools. In contrast, more than two out of three students in Serbia, Tunisia, Colombia and Montenegro attend schools where learning is hindered by student truancy to some extent or lot.
- 68% of students attend schools whose principals reported that learning is not at all or very little hindered by students' disruption of classes. Over 90% of students in Japan, Romania, Indonesia, Albania, Viet Nam and Lithuania attend such schools. In contrast, more than one in two students in Liechtenstein, Brazil, Finland and Portugal attend schools where learning is hindered by this behaviour to some extent or a lot.

■ Figure IV.5.5 ■

## School principals' views of how student behaviour affects learning



Note: Higher values on the index indicate a better school climate.

Source: OECD, PISA 2012 Database, Table IV.5.8.

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As shown in Figure IV.5.6, in the countries and economies where more students reported truancy, more principals reported that student truancy hinders learning at school. For example, over 50% of students in Tunisia, Costa Rica, Chile and Uruguay reported that they had arrived late for school at least once in the two weeks prior to the PISA test – a larger proportion than in most other countries and economies. In these countries, 50% of students or more attend schools whose principals reported that students arriving late hinder learning. However, there is variation here as well. In Sweden, Portugal and Bulgaria, where over 50% of students reported that they had arrived late for school, only around 30% of students are in schools whose principals reported that students' late arrival hinders learning (Table IV.5.9).

Principals' reports on the extent to which students' behaviour hinders learning often vary widely within countries and economies, as measured by the standard deviation of the *index of student-related factors affecting school climate*. Variations within countries and economies are smallest in Liechtenstein, Finland, Luxembourg, Germany, Viet Nam, the Netherlands, Indonesia and Norway. By contrast, in Shanghai-China and Kazakhstan there is more variation in disciplinary climate within the country/economy (Figure IV.5.5 and Table IV.5.8).

School principals were also asked to report the extent to which they believe that learning in their schools is hindered by such factors as: students not being encouraged to achieve their full potential; poor teacher-student relations; teachers having to teach students of heterogeneous ability levels within the same class; teachers having to teach students of diverse ethnic backgrounds within the same class; teachers' low expectations of students; teachers not meeting individual students' needs; teacher absenteeism; school staff resisting change; teachers being too strict with students; teacher being late for classes; and teachers not being well-prepared for classes. The responses were combined to create an *index of teacher-related factors affecting school climate* that has a mean of zero and a standard deviation of one in OECD countries. Positive values reflect principals' perceptions that these teacher-related issues hinder learning to a lesser extent, and negative values indicate that school principals believe that these teacher-related issues hinder learning to a greater extent, compared to the OECD average.

In general, principals perceive that teachers being late for class, poor teacher-student relations, teachers not being prepared for class, and teachers being too strict with students do not hinder learning at their schools. On average across OECD countries over 90% of students attend schools whose principals reported that learning is not at all or very little hindered by one of these four behaviours (Figure IV.5.7):

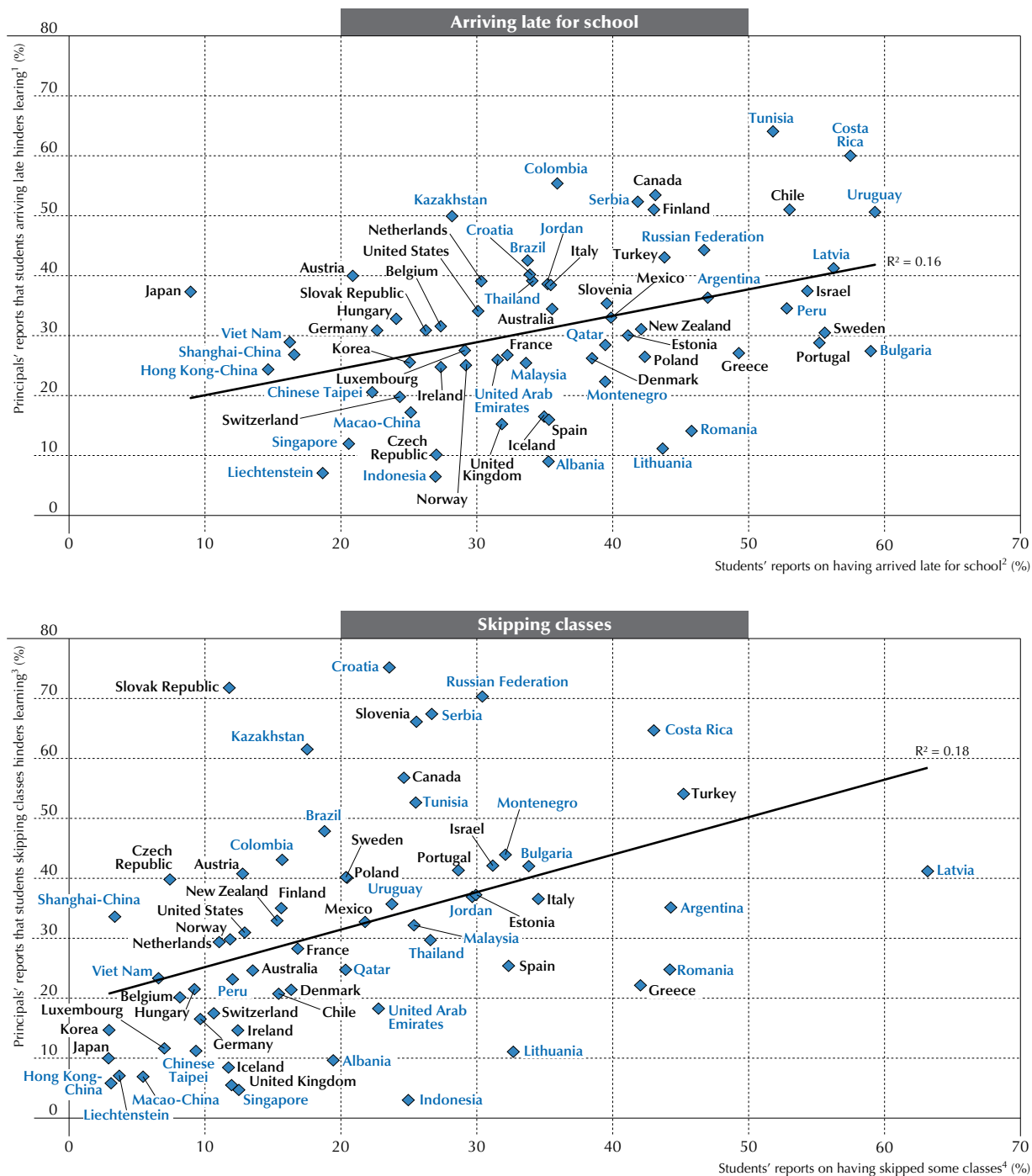
- Virtually all students in Liechtenstein, Lithuania, the Czech Republic, Canada, the Slovak Republic, the United Kingdom, Hungary and the United States attend schools whose principals reported that learning is not at all or very little hindered by teachers being late for class, while fewer than 70% of students in Kazakhstan, Tunisia, Shanghai-China and Uruguay attend such schools.
- Virtually all students in Montenegro, the United Kingdom, Indonesia, Lithuania, Poland and Iceland attend schools whose principals reported that learning is not at all or very little hindered by poor teacher-student relations, while around 80% of students or fewer in Kazakhstan, Shanghai-China, Italy, Tunisia, Jordan, Israel and the Russian Federation attend such schools.
- Virtually all students in Hungary, Liechtenstein, the Czech Republic and Luxembourg attend schools whose principals reported that learning is not at all or very little hindered by teachers not being well-prepared for classes, while 70% of students or fewer in Kazakhstan, Shanghai-China, the Russian Federation and Jordan attend such schools.
- Nearly all students in Lithuania, Denmark, Norway, the United Kingdom and Portugal attend schools whose principals reported that learning is not at all or very little hindered by teachers being too strict with students, while two out of three students, at most, in Kazakhstan, Colombia and Thailand attend such schools.

On average across OECD countries, between 81% and 87% of students attend schools whose principals reported that learning is not at all or very little hindered by teacher absenteeism, teachers' low expectations of students, or teachers having to teach students of diverse ethnic backgrounds within the same class:

- Nearly all students in Hungary, Lithuania, Korea and Portugal attend schools whose principals reported that learning is not at all or very little hindered by teacher absenteeism, while fewer than one in two students in Uruguay, Tunisia and Argentina attend such schools.
- Around 96% or more of students in Liechtenstein, Finland, Hungary, Switzerland, Poland and Luxembourg are in schools whose principals reported that learning is not at all or very little hindered by teachers' low expectations of students, while two out of three students, at most, in Kazakhstan, Tunisia, Brazil, Uruguay, Shanghai-China, Jordan and Chile attend such schools.

■ Figure IV.5.6 ■

## Student truancy reported by students and principals




1. The vertical axis in the top figure refers to the percentage of students in schools whose principals reported that students arriving late for school hinders student learning "to some extent" or "a lot".

2. The horizontal axis in the top figure refers to the percentage of students who reported having arrived late for school at least once in the two weeks prior to the PISA test.

3. The vertical axis in the bottom figure refers to the percentage of students in schools whose principals reported that students skipping classes hinders student learning "to some extent" or "a lot".

4. The horizontal axis in the bottom figure refers to the percentage of students who reported having skipped some classes at least once in the two weeks prior to the PISA test.

Source: OECD, PISA 2012 Database, Tables IV.5.1, IV.5.3 and IV.5.9.

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- Around 96% of students or more in Poland, Lithuania, Korea and Japan attend schools whose principals reported that learning is not at all or very little hindered by teachers having to teach students of diverse ethnic backgrounds within the same class. By comparison, two out of three students, at most, in Luxembourg, Liechtenstein, Switzerland, Greece, Austria and Malaysia attend such schools.

On average across OECD countries, between 74% and 79% of students attend schools whose principals reported that learning is not at all or very little hindered by students not being encouraged to achieve their full potential, teachers not meeting individual students' needs, or school staff resisting change:

- Around 93% or more of students in Liechtenstein, Lithuania, Malaysia, the United Kingdom, Finland, Poland and Thailand attend schools where learning is not at all or very little hindered by students not being encouraged to achieve their full potential. By comparison, fewer than one in two students in the Netherlands, Tunisia, Uruguay, the Russian Federation and Argentina attend such schools.
- Around 90% of students or more in Indonesia, the Czech Republic, Romania, Liechtenstein, Lithuania, the Slovak Republic, Albania and Poland are in schools where learning is not at all or very little hindered by teachers not meeting individual students' needs, while in the Netherlands, Shanghai-China and Turkey, one in two students, at most, attend such schools.
- Over 90% of students in Indonesia, Lithuania, Hungary, Viet Nam, the Czech Republic, Romania, Albania and Latvia are in schools where learning is not at all or very little hindered by school staff resisting change. By contrast, fewer than 60% of students in Italy, Colombia, Shanghai-China, the Netherlands, Argentina, Chile and France attend such schools.

Of all the indicators considered, teachers having to teach students of heterogeneous ability levels within the same class hinders learning most, according to principals. Across OECD countries on average, 45% of students attend schools whose principals reported that learning is not at all or very little hindered by this factor. More than two out of three students in the United Kingdom, Romania, New Zealand, Mexico, the United States and Ireland attend such schools, while one in four students, at most, in Hong Kong-China, Colombia, Poland, Viet Nam and Uruguay attend such schools.

Principals' reports on the extent to which teachers' behaviour hinders learning often vary widely within countries, as measured by the standard deviation of the *index of teacher-related factors affecting school climate*. Variations within countries and economies is smallest in the Netherlands, Liechtenstein, Germany, Viet Nam, and Luxembourg and largest in Kazakhstan and Shanghai-China (Figure IV.5.7 and Table IV.5.7).

## Teacher morale

To examine the level of teacher morale in school, school principals were asked to report whether and to what extent they agree with the following statements: the morale of teachers in this school is high; teachers work with enthusiasm; teachers take pride in the school; and teachers value academic achievement. The responses were combined to create an *index of teacher morale* that has a mean of zero and a standard deviation of one in OECD countries. Positive values indicate principals' perceptions that teacher morale is higher and negative values indicate principals' perceptions that teacher morale is lower than the OECD average.

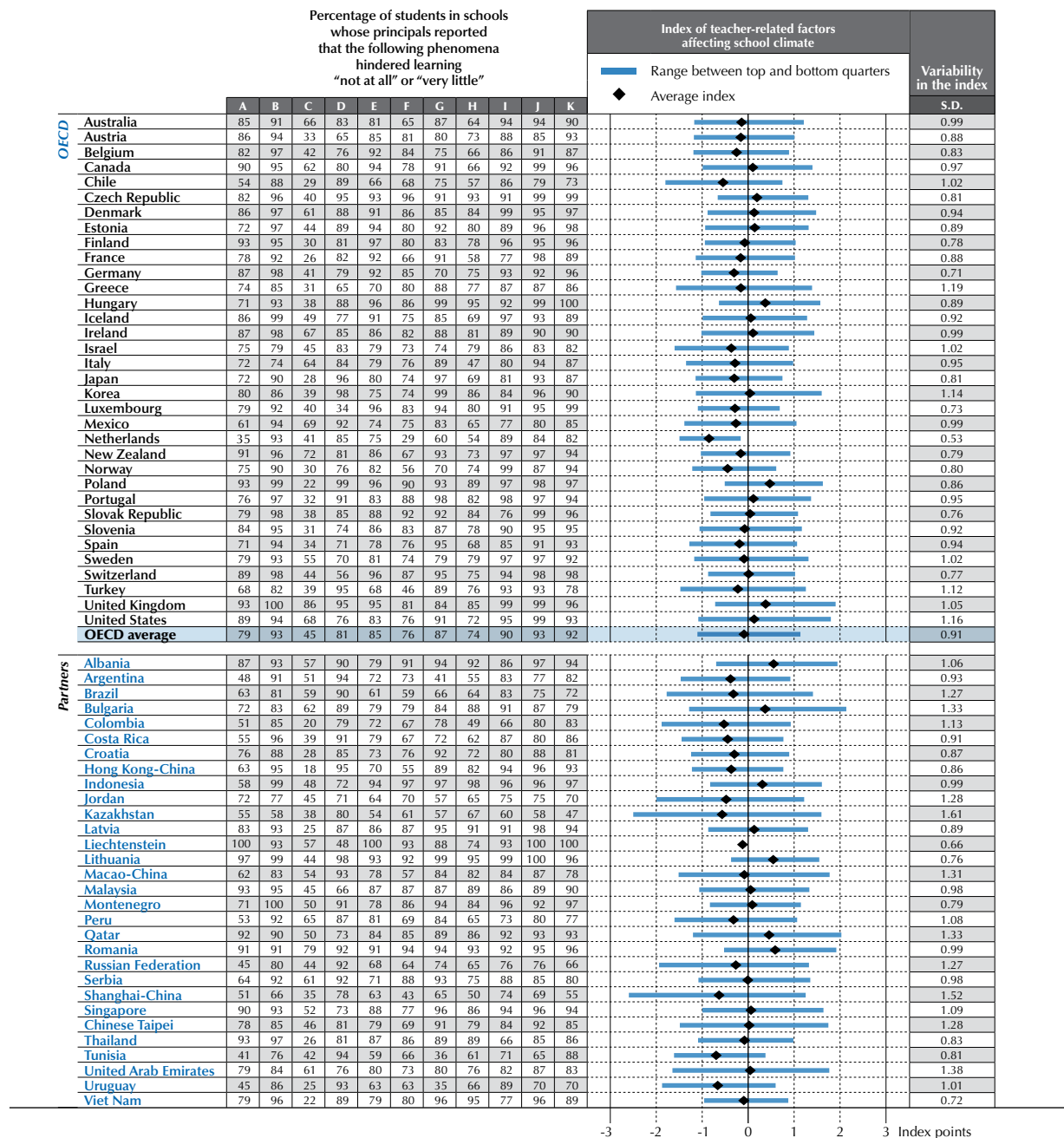
In general, school principals reported that teachers in their schools value academic achievement, take pride in their schools, work with enthusiasm and have high morale (Figure IV.5.8). On average across OECD countries:

- 97% of students attend schools whose principals agree or strongly agree that teachers value academic achievement. Over 90% of students in all participating countries and economies except Japan attend such schools. In Japan, 76% of students attend such schools.
- 95% of students attend schools whose principals agree or strongly agree that teachers take pride in their school. At least 90% of students in 58 participating countries and economies attend such schools, while between 82% and 89% of students in Tunisia, Greece, Turkey, Macao-China and Hong Kong-China attend such schools.
- 94% of students attend schools whose principals agree or strongly agree that teachers work with enthusiasm. At least 90% of students in 49 participating countries and economies attend such schools, while fewer than 80% of students in Tunisia, Brazil and Italy attend such schools.
- 91% of students attend schools whose principals agree or strongly agree that the morale of teachers in their schools is high. At least 90% of students in 48 participating countries and economies attend such schools, while 80% of students, at most, in Italy, Tunisia, Brazil, Spain, Portugal, Hong Kong-China, Korea and France attend such schools.

■ Figure IV.5.7 ■

## School principals' views of how teacher behaviour affects learning

A	Students not being encouraged to achieve their full potential
B	Poor teacher-student relations
C	Teachers having to teach students of heterogeneous ability levels within the same class
D	Teachers having to teach students of diverse ethnic backgrounds (i.e. language, culture) within the same class
E	Teachers' low expectations of students
F	Teachers not meeting individual students' needs
G	Teacher absenteeism
H	Staff resisting change
I	Teachers being too strict with students
J	Teachers being late for classes
K	Teachers not being well prepared for classes



Note: Higher values on the index indicate better school climate.

Source: OECD, PISA 2012 Database, Table IV.5.7.

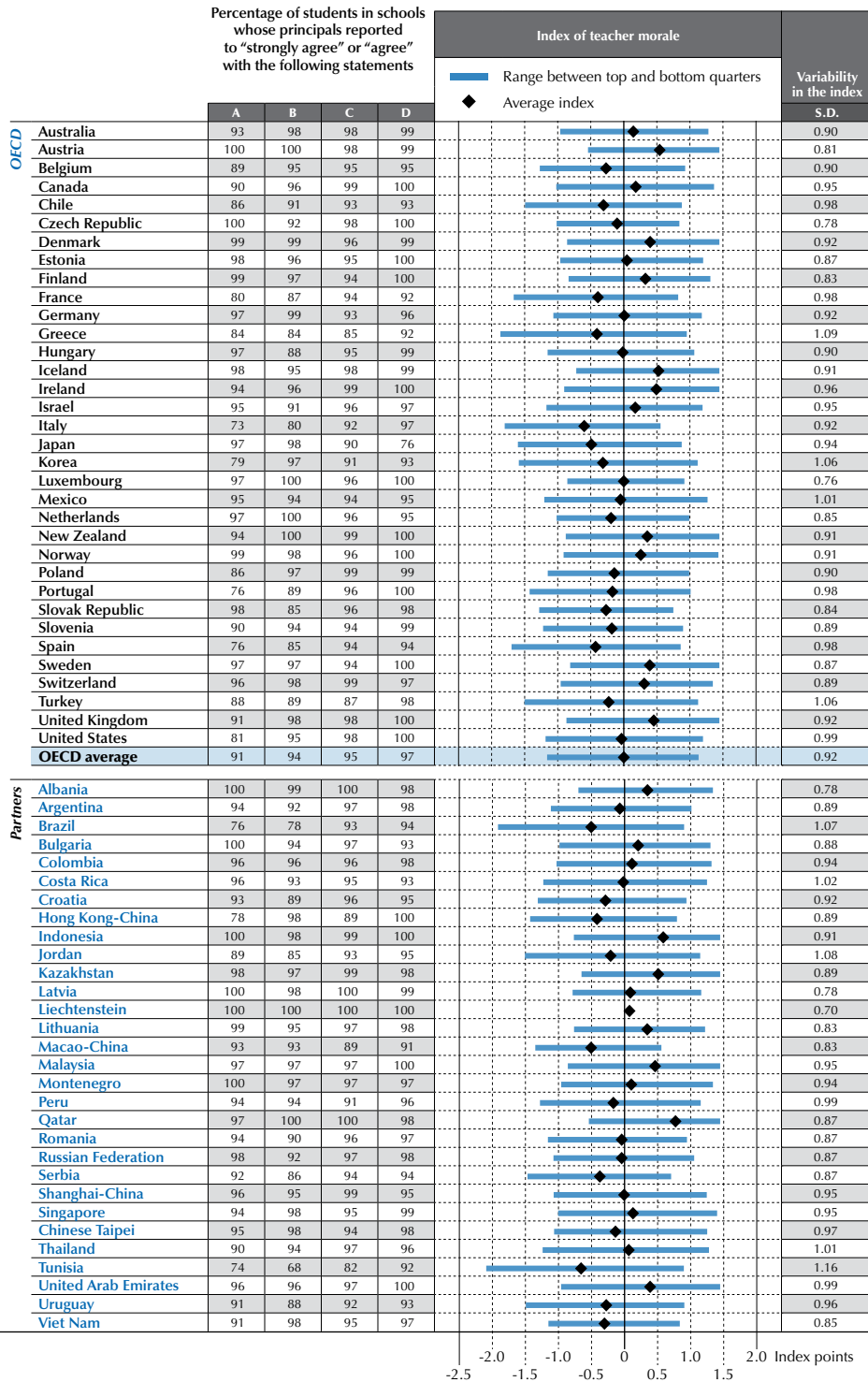
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■ Figure IV.5.8 ■

**Schools' principals views of teacher morale**

- A The morale of teachers in this school is high
- B Teachers work with enthusiasm
- C Teachers take pride in this school
- D Teachers value academic achievement



Note: Higher values on the index indicate higher teacher morale.

Source: OECD, PISA 2012 Database, Table IV.5.10.

StatLink <http://dx.doi.org/10.1787/888932957365>



Principals' reports on the extent to which teachers' behaviour hinders learning often vary widely within countries and economies, as measured by the standard deviation of the *index of teacher morale*. Variations within countries and economies are smallest in Liechtenstein, Luxembourg, Latvia, the Czech Republic, and Albania and largest in Tunisia (Figure IV.5.8 and Table IV.5.10).

## INTER-RELATIONSHIPS AMONG LEARNING-ENVIRONMENT INDICATORS AT THE SCHOOL LEVEL

The seven indicators described above are, to a greater or lesser degree, inter-related at the school level. Schools with larger proportions of students who had arrived late for school at least once in the two weeks prior to the assessment also tend to have larger proportions of students who had skipped a class or a day of school at least once during that period. On average across OECD countries, the correlation coefficient is 0.44, and in 49 countries and economies, the correlation is 0.30 or higher. The relationship is particularly strong in Kazakhstan, Luxembourg, Macao-China, Poland, Romania, Bulgaria, Belgium, Austria, Serbia and Croatia, where the correlation coefficient is 0.60 or higher (Table IV.5.11).

In virtually all school systems, schools with more negative disciplinary climates tend to have a higher incidence of student truancy (arriving late for school or skipping a day or a class). This relationship is especially strong in Croatia, Korea, Chinese Taipei, Kazakhstan, Hungary, Thailand, Slovenia, the Slovak Republic, Bulgaria and New Zealand, where the correlation between the proportion of students who had skipped a day or a class at least once in the previous two weeks and the school's average *index of disciplinary climate* is between -0.55 and -0.42. In these countries and economies, there is also a strong relationship between the percentage of students who had arrived late for school at least once in the two weeks prior to the PISA test and that index (correlation is between -0.50 and -0.28) (Figure IV.5.9).

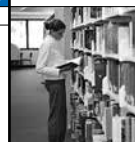
The relationship between student truancy and teacher-student relations seems more complex. In 28 countries and economies, schools with more negative teacher-student relations tend to be those with larger proportions of students who skipped a day or a class. By contrast, in Liechtenstein, Uruguay, Macao-China, Bulgaria, Peru, Italy and Luxembourg, there is a weak but positive relationship between these two factors. Similarly, in 27 countries and economies, schools with more negative teacher-student relations also tend to be those where more students arrived late for school; but in Malaysia, Italy, Luxembourg, Montenegro and Macao-China, a weak and opposite relationship is observed (Figure IV.5.9).

Schools whose principals reported that teachers' behaviour negatively affects learning to a great extent also tend to be those whose principals reported that their teachers' morale is low. On average across OECD countries, the correlation coefficient between the *index of teacher-related factors affecting school climate* and the *index of teacher morale* is 0.44. This relationship is particularly strong in Liechtenstein, Uruguay, Chile, the Slovak Republic, Hong Kong-China, Denmark, Mexico, Sweden, Argentina, Brazil, Thailand, Serbia, Costa Rica, the United States and Luxembourg, where the correlation coefficient is 0.50 or higher (Table IV.5.11).

In 45 countries and economies, schools with a student population that is predominantly socio-economically disadvantaged tend to have a more negative disciplinary climate. The correlation coefficient between the average student socio-economic status in a school and the school average *index of disciplinary climate* is over 0.40 in Chinese Taipei, Slovenia, Hungary, Croatia, Japan, Singapore, the United States, New Zealand and Shanghai-China. However, the opposite is observed in Tunisia, Indonesia and Viet Nam (Table IV.5.12). By contrast, the relationship between the average student socio-economic status in a school and the school average *index of teacher-student relations* varies, depending on the countries and economies. In 14 countries and economies, schools where students reported more positive relations with teachers are those with more advantaged student populations, while in 30 countries and economies, schools where students reported more positive relations with teachers are those with more disadvantaged student populations (Table IV.5.12).

On average across OECD countries as shown in Figure IV.5.10, school size, school location, school type, and the incidence of teacher shortage are related to a school's disciplinary climate, even after accounting for school features, such as the average socio-economic status of a school's student population, school size, school location, whether the school is public or private, and educational resources. Across OECD countries, schools with more advantaged student populations tend to have a more positive disciplinary climate; schools whose classes are larger or smaller than the national average tend to have a more positive disciplinary climate; schools located in cities tend to have a more negative disciplinary climate than schools located in towns; private schools tend to have a more positive disciplinary climate than public schools; schools whose principals reported more teacher shortage tend to have a more negative disciplinary climate; and schools with more socio-economically heterogeneous student populations tend to have a more negative disciplinary climate. On average across OECD countries, some 18% of the variation in school disciplinary climate is accounted for by these schools features (Table IV.5.13).





■ Figure IV.5.9 ■  
**Relationship between student truancy and school climate**

	Correlation between:			
	Percentage of students who had arrived late for school at least once in the two weeks prior to the PISA test (at the school level) and...		Percentage of students who had skipped a day or a class at least once in the two weeks prior to the PISA test (at the school level) and...	
	School average index of teacher-student relations	School average index of disciplinary climate	School average index of teacher-student relations	School average index of disciplinary climate
Croatia	-0.17	-0.35	-0.03	-0.55
Korea	-0.32	-0.48	-0.31	-0.51
Chinese Taipei	-0.19	-0.33	-0.22	-0.49
Kazakhstan	-0.46	-0.47	-0.38	-0.49
Hungary	-0.09	-0.42	-0.05	-0.48
Thailand	-0.03	-0.50	-0.03	-0.46
Slovenia	-0.23	-0.35	-0.19	-0.45
Slovak Republic	-0.08	-0.37	0.00	-0.44
Bulgaria	0.11	-0.35	0.16	-0.42
New Zealand	-0.02	-0.28	-0.11	-0.42
France	0.00	-0.33	-0.05	-0.39
Uruguay	-0.06	-0.24	0.18	-0.37
United Arab Emirates	-0.04	-0.24	-0.09	-0.37
Lithuania	-0.23	-0.29	-0.34	-0.37
United States	-0.25	-0.34	-0.34	-0.36
Japan	-0.15	-0.36	-0.13	-0.35
Macao-China	0.05	-0.49	0.18	-0.35
Argentina	-0.02	-0.16	-0.03	-0.32
Belgium	0.08	-0.24	0.09	-0.31
Poland	-0.33	-0.33	-0.25	-0.30
Serbia	-0.01	-0.28	0.09	-0.30
Shanghai-China	-0.21	-0.44	-0.19	-0.29
Tunisia	-0.13	-0.17	0.02	-0.28
Greece	-0.29	-0.21	-0.20	-0.28
Switzerland	-0.30	-0.26	-0.37	-0.28
Russian Federation	-0.29	-0.35	-0.17	-0.28
Norway	-0.03	-0.14	-0.24	-0.28
Romania	0.09	-0.14	0.04	-0.27
Jordan	0.02	-0.29	-0.07	-0.27
Costa Rica	-0.16	-0.24	-0.06	-0.27
Sweden	-0.13	-0.12	-0.13	-0.26
Montenegro	0.06	-0.43	-0.08	-0.25
Iceland	-0.05	-0.12	-0.23	-0.25
Luxembourg	0.10	-0.20	0.08	-0.25
Portugal	-0.37	-0.20	-0.34	-0.24
Mexico	-0.22	-0.13	-0.17	-0.22
Colombia	-0.15	-0.26	-0.09	-0.22
Ireland	0.07	-0.32	-0.06	-0.22
Peru	0.04	-0.09	0.12	-0.22
Indonesia	0.05	-0.12	-0.08	-0.22
Germany	-0.06	-0.20	-0.03	-0.22
Chile	-0.07	-0.29	-0.22	-0.21
Singapore	-0.19	-0.40	-0.12	-0.20
Australia	-0.09	-0.15	-0.22	-0.20
Albania	-0.04	-0.22	-0.14	-0.20
Malaysia	0.26	-0.19	-0.12	-0.20
Denmark	-0.06	-0.25	-0.06	-0.19
Italy	0.14	-0.21	0.12	-0.18
Estonia	-0.04	-0.06	-0.21	-0.17
United Kingdom	-0.11	-0.07	0.01	-0.16
Brazil	-0.03	-0.05	-0.04	-0.15
Austria	-0.23	-0.27	-0.30	-0.14
Hong Kong-China	-0.04	-0.17	0.02	-0.13
Finland	-0.13	-0.29	-0.20	-0.13
Canada	-0.23	-0.13	-0.17	-0.12
Czech Republic	-0.25	-0.26	-0.16	-0.11
Viet Nam	0.02	-0.19	0.09	-0.10
Latvia	-0.09	-0.34	-0.02	-0.09
Netherlands	-0.15	-0.29	-0.21	-0.09
Israel	-0.05	0.01	-0.08	-0.08
Spain	-0.19	-0.13	0.01	-0.08
Turkey	0.10	-0.29	0.11	-0.01
Qatar	-0.25	-0.29	-0.12	-0.01
Liechtenstein	0.23	-0.52	0.28	0.11
<b>OECD average</b>	<b>-0.12</b>	<b>-0.24</b>	<b>-0.14</b>	<b>-0.25</b>

Note: Statistically significant correlations at the 5% level ( $p < 0.05$ ) are shaded.

Countries and economies are ranked in ascending order of the correlation between students who had skipped a day or a class and school disciplinary climate.

Source: OECD, PISA 2012 Database, Table IV.5.11.


StatLink  <http://dx.doi.org/10.1787/888932957365>

Figure IV.5.10


## Relationship between disciplinary climate and various school features

	School average PISA index of economic, social and cultural status (ESCS) (1 unit increase)	School size (per 100 students)	School size (per 100 students) (squared)	School in a small town or village (15 000 or fewer people)	School in a city (100 000 or more people)	Private school	School is pressured by parents to meet high academic standards	Index of quality of physical infrastructure (1 unit increase)	Index of quality of schools' educational resources (1 unit increase)	Index of teacher shortage (1 unit increase)	Socio-economic heterogeneity of school intake (standard deviation of ESCS within the school)	Academic heterogeneity of school intake (standard deviation of mathematics performance within the school)	
OECD	Australia	0.25				0.13				-0.04			
	Austria	0.29	0.04										
	Belgium	0.24				0.20							
	Canada		-0.04	0.002									
	Chile	0.10											
	Czech Republic	0.46											
	Denmark	0.31				0.31						0.00	
	Estonia								0.09	-0.07			
	Finland	0.21				-0.08	0.28						
	France	0.41											
	Germany	0.18											
	Greece	0.23											
	Hungary	0.39		-0.002			0.28						
	Iceland		0.02	-0.005	0.11	0.12	0.25	0.04	-0.03	-0.04	-0.28		
	Ireland	0.30					0.16						
	Israel												
	Italy	0.31				-0.10	0.09						
	Japan	0.66					-0.24	0.11	0.07			-0.01	
	Korea	0.37	-0.10	0.004	-0.47		0.16	0.12				-0.01	
	Luxembourg	-0.05		0.000	0.09		0.13	-0.12	-0.07	0.09	0.02	-0.83	0.01
	Mexico		0.01			-0.10						-0.16	
	Netherlands					-0.19					-0.08		
	New Zealand	0.35											
	Norway								0.10			-0.49	
	Poland		-0.12	0.013									
	Portugal					-0.16	0.31		0.08				
	Slovak Republic	0.40											
	Slovenia	0.54					0.10	-0.05	0.03	0.05			0.00
	Spain	0.11					0.18		-0.07	0.09			
	Sweden	0.27											
	Switzerland					-0.16						-0.35	
	Turkey	0.19										0.32	
	United Kingdom												
United States	0.28												
OECD average	0.21	-0.02	0.001		-0.04	0.07				-0.02	-0.12		
Partners	Argentina		-0.06	0.003			0.14						
	Brazil					0.20	0.08						
	Bulgaria		0.08	-0.004		-0.17		0.10		-0.11	-0.39		
	Colombia												
	Costa Rica						0.50						
	Croatia	0.66	0.13	-0.008		-0.29							
	Hong Kong-China										-0.55	-0.01	
	Indonesia										-0.31		
	Jordan	-0.23					0.32			-0.07	-0.59		
	Kazakhstan	0.38											
	Latvia			0.007									
	Lithuania	0.36											
	Macao-China	0.21	0.03	-0.001				-0.10	0.00	-0.05	-0.04	-1.20	-0.01
	Malaysia	0.15								0.11		-0.01	
	Montenegro	0.25	-0.06	0.003	0.02	-0.23		0.14	-0.02	0.04	-0.04	1.11	-0.01
	Peru												
	Qatar	0.05	0.00	0.000	-0.05	-0.13	0.45	0.20	-0.03	-0.02	-0.03	-0.28	
	Romania	0.47				-0.16				0.08			
	Russian Federation	0.30	-0.06	0.003	0.25								
	Serbia	0.32										0.75	
	Shanghai-China	0.39											
	Singapore	0.34	0.03	-0.001				0.12	0.01	0.06	-0.02	-0.25	0.00
	Chinese Taipei	0.46	-0.01										
	Thailand				0.14								
	Tunisia												
	United Arab Emirates	0.15					0.20						
	Uruguay	0.15										0.44	0.00
Viet Nam			0.001										

Notes: This figure shows only statistically significant regression coefficients at the 5% level ( $p < 0.05$ ). Negative statistically significant correlations are shaded in grey; positive statistically significant correlations are shaded in blue.

These results are based on a model of regression of the school average disciplinary climate on all variables in this figure.

Source: OECD, PISA 2012 Database, Table IV.5.13.

StatLink  <http://dx.doi.org/10.1787/888932957365>



Across countries and economies, the extent to which the variation in school disciplinary climate is accounted for by these school features differs. In Macao-China, Montenegro, Qatar, Japan, Chinese Taipei, Korea and Luxembourg, 35% or more of the variation is explained by these school features, while less than 8% of the variation is explained in Mexico, Estonia, Peru, Brazil, Finland and Poland (Table IV.5.13). In addition, depending on the country and economy, school disciplinary climate is related to a different set of school features, as shown in Figure IV.5.10.

## STUDENT AND SCHOOL FEATURES RELATED TO THE LIKELIHOOD OF STUDENTS ARRIVING LATE FOR SCHOOL

PISA 2012 results show that, in all participating countries and economies, those students who had arrived late for school at least once in the two weeks prior to the assessment were also more likely to have skipped a class or day of school at least once during the same period. On average across OECD countries, 14 out of 100 students who had not arrived late for school in the previous two weeks would have skipped a class or day of school during the same period, while 38 out of 100 students who had arrived late for school in the previous two weeks would have also skipped a class or day of school during the same period (Table IV.5.14). Since students who arrive late for school are more likely to skip a class or a day, this section focuses on “arriving late for school” and examines which students are more likely to arrive late for school and the profile of the schools that these students are more likely to attend.

As shown in Figure IV.5.11a, boys are more likely than girls to have reported that they had arrived late at least once in the two weeks prior to the PISA test. In Japan, Thailand, Lithuania, Chinese Taipei, Shanghai-China, Poland, Viet Nam and Iceland, boys are between 25% and 40% more likely than girls to have arrived late for school. Students with an immigrant background are more likely than students without an immigrant background to have reported that they had arrived late at least once in the two weeks prior to the PISA test. As shown in Figure IV.5.11b, in Austria, Brazil, Belgium, Germany, France and Spain, students with an immigrant background are between 53% and 93% more likely than students without an immigrant background to have arrived late for school. In Finland, Switzerland, the Netherlands, Malaysia, Luxembourg, Lithuania, Denmark and Estonia, students with an immigrant background are over 30% more likely than students without an immigrant background to have arrived late for school (Table IV.5.15).

In another analysis, the various socio-economic and demographic background characteristics of students and schools (i.e. socio-economic status of students, gender, immigrant and language background, socio-economic profile of the school, school size and school location), as well as the type of school and the learning environment in the school are examined all together. On average across OECD countries, disadvantaged students, boys, and students with an immigrant background are more likely to have arrived late for school. Also, students in schools of average size (for the country or economy concerned), in schools located in cities, in schools with more negative disciplinary climates, and in schools with more negative teacher-student relations are more likely to have arrived late for school, while students in schools located in rural areas are less likely to have arrived late (Table IV.5.16).

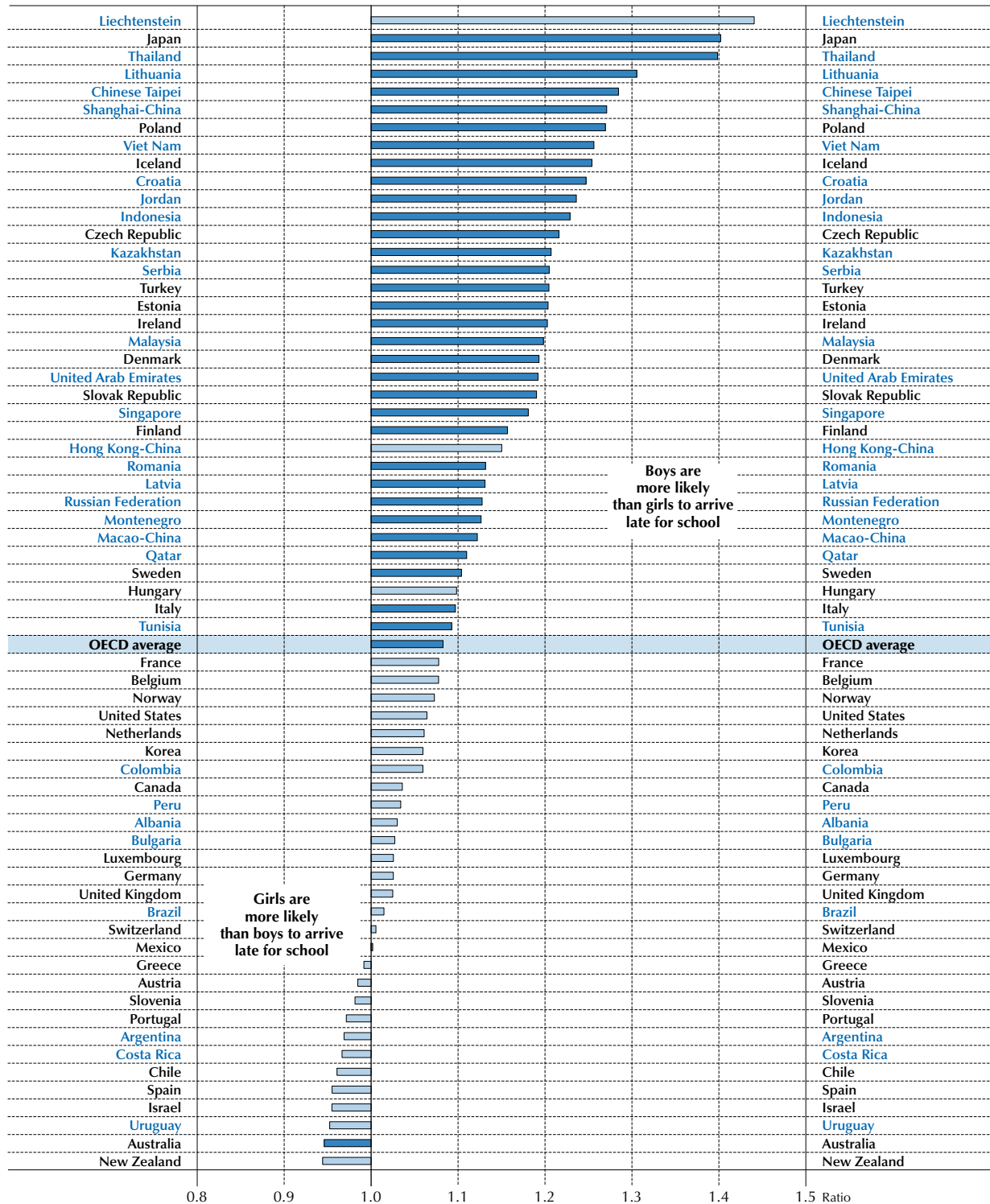
Across countries and economies, the relationships between these student and school features and the likelihood of students arriving late vary; but, in most countries and economies, students’ gender and average school disciplinary climate are consistently related to a higher likelihood of students’ arriving late. In 32 countries and economies, boys are more likely to arrive late, and in 39 countries and economies students in schools with more negative disciplinary climates are more likely to arrive late for school, even after accounting for all these other student and school features (Table IV.5.16).

## TRENDS IN SCHOOL CLIMATE AND STUDENT TRUANCY SINCE PISA 2003

Overall comparisons between PISA 2003 and PISA 2012 data suggest that, with the exception of a few countries and economies, student reports of teacher-student relations have improved. Comparisons also show that the disciplinary climate has improved in most of these countries and economies, and that students in 2012 are less likely to attend schools whose principal reported that student- and teacher-related factors negatively affect the learning climate.

According to students’ reports, teacher-student relations improved between 2003 and 2012 in all but one country, Tunisia, where they remained stable. On average across OECD countries, the share of students who agreed or strongly agreed that they get along with most teachers increased by 12 percentage points during the period and increased by more than ten percentage points in 22 countries and economies.<sup>1</sup> For example, on average across OECD countries, seven in ten students reported getting along well with most teachers in 2003, while more than eight in ten did so in 2012.

■ Figure IV.5.11a ■

**Students arriving late for school, by gender***Increased likelihood that boys reported having arrived late at least once in the two weeks prior to the PISA test*

Note: Statistically significant differences between boys and girls are marked in a darker tone.

Countries and economies are ranked in descending order of the increased likelihood of boys to arrive late with respect to girls.

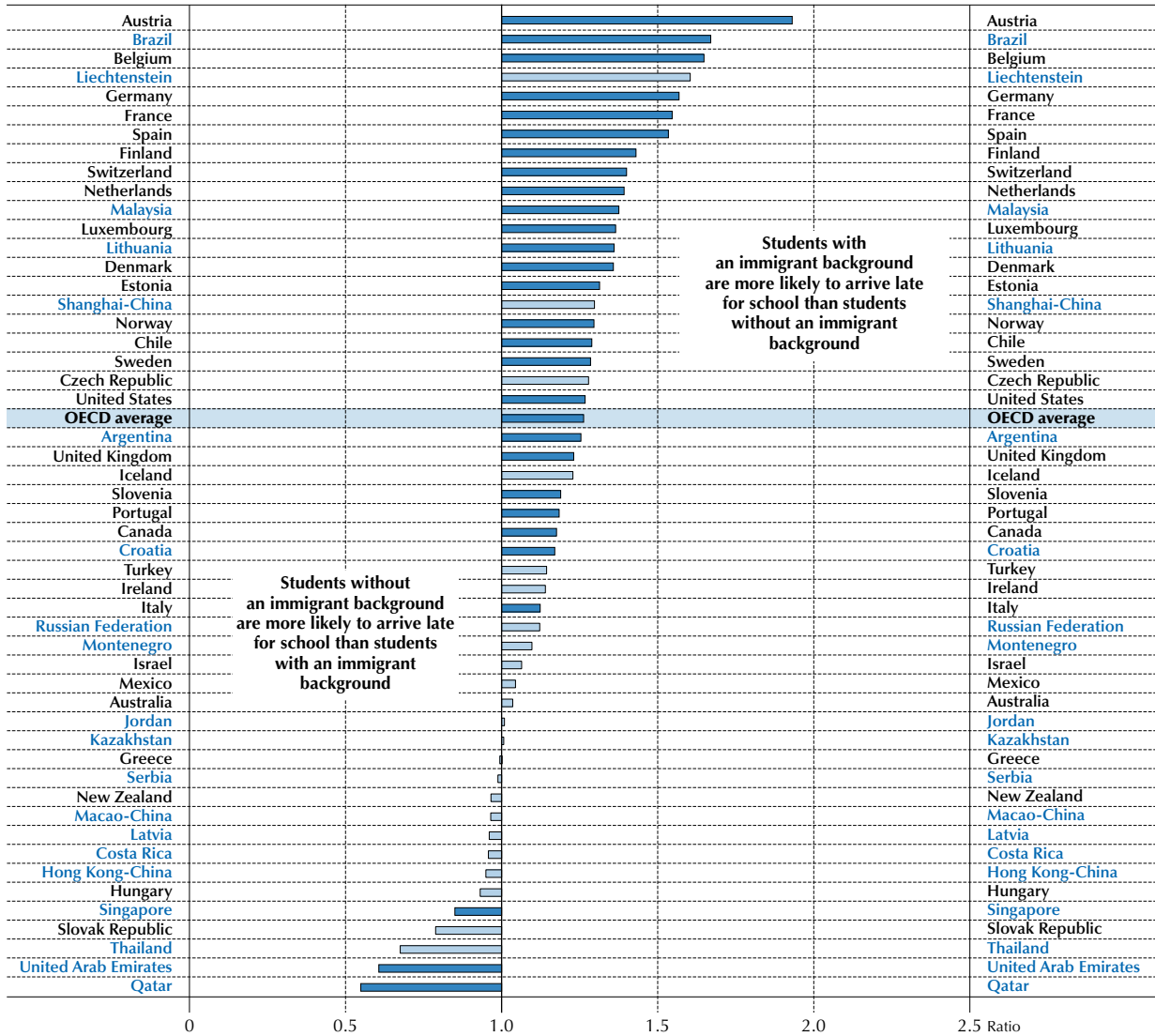
Source: OECD, PISA 2012 Database, Table IV.5.15.

StatLink <http://dx.doi.org/10.1787/888932957365>



■ Figure IV.5.11b ■

**Students arriving late for school, by students with and without immigrant backgrounds**  
*Increased likelihood that students with an immigrant background reported having arrived late at least once in the two weeks prior to the PISA test*



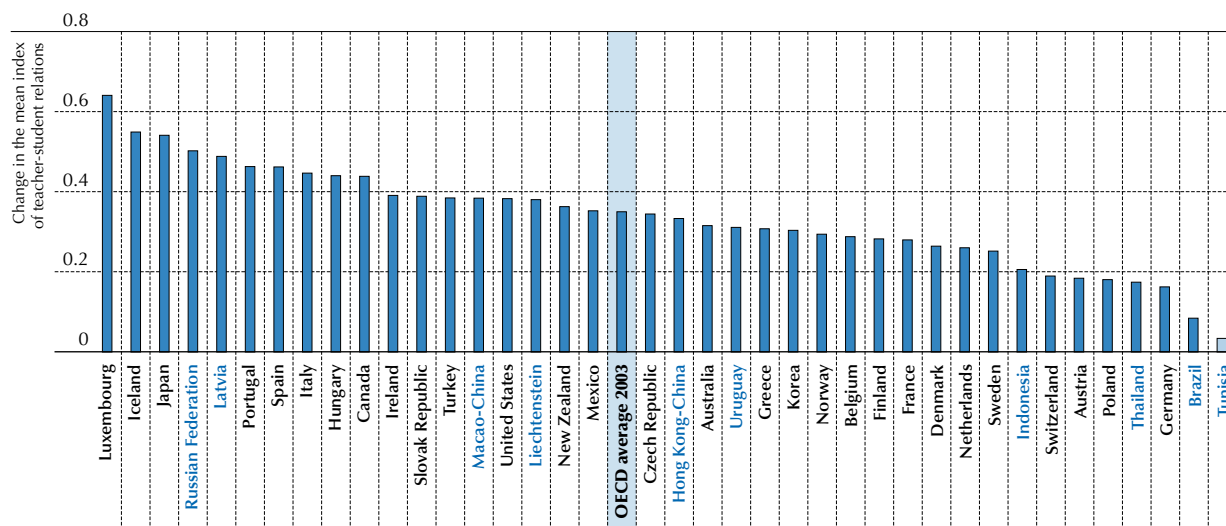
**Note:** Statistically significant differences between students with and without an immigrant background are marked in a darker tone. Countries and economies are ranked in descending order of the increased likelihood of students with an immigrant background to arrive late with respect to students without an immigrant background.  
**Source:** OECD, PISA 2012 Database, Table IV.5.15.  
**StatLink** <http://dx.doi.org/10.1787/888932957365>

Similar increases signalling better teacher-student relations were observed among students who reported that teachers are interested in their well-being, that teachers listen to what they have to say, that teachers will provide extra help if needed, and that teachers treat students fairly. Improvements in teacher-student relations are notable in Luxembourg, Iceland, Japan and the Russian Federation, where the likelihood of students responding favourably to all these questions increased and the *index of teacher-student relations* improved by at least 0.5 index points (Figure IV.5.12 and Table IV.5.17).

Disciplinary climate also shows signs of improvement on average across OECD countries and across 27 individual countries and economies. For example, on average across OECD countries, in 2003, 32% of students reported that the teacher had to wait a long time for students to quiet down in every class or most classes; by 2012, this percentage had dropped to 28%.

■ Figure IV.5.12 ■

## Change between PISA 2003 and PISA 2012 in teacher-student relations



**Notes:** Statistically significant changes between PISA 2003 and PISA 2012 are marked in a darker tone.

Higher values on the index indicate better teacher-student relations.

Only countries and economies with comparable data from PISA 2003 and PISA 2012 are shown.

OECD average 2003 compares only OECD countries with comparable indices of teacher-student relations since 2003.

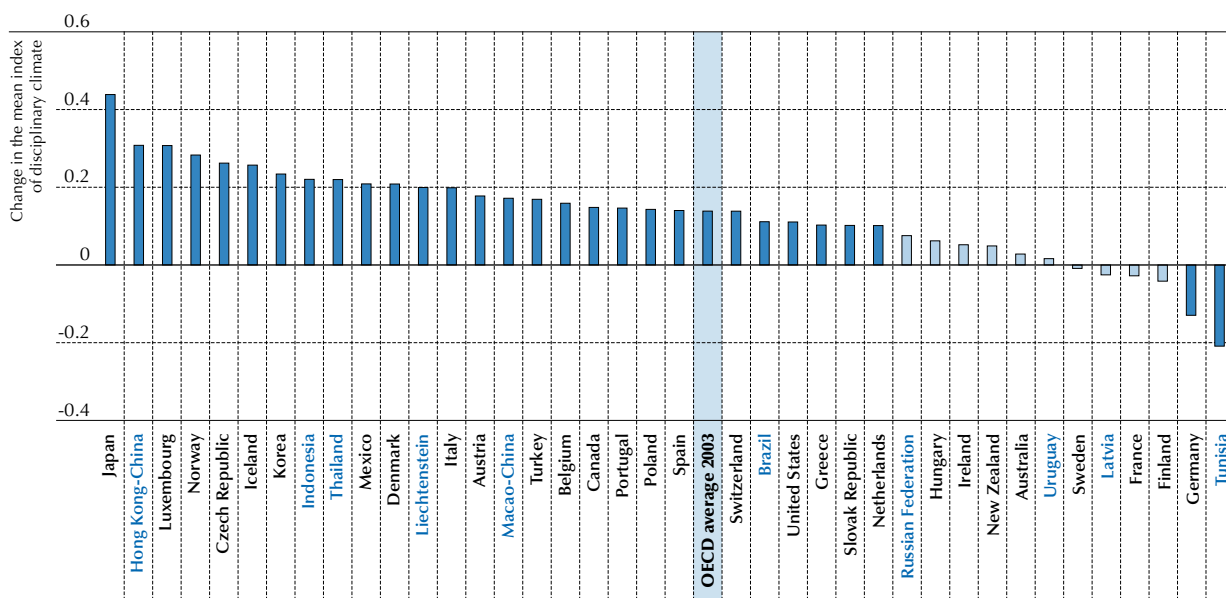
Countries are ranked in descending order of the change in index of teacher-student relations (2012 - 2003).

**Source:** OECD, PISA 2012 Database, Table IV.5.17.

**StatLink** <http://dx.doi.org/10.1787/888932957365>

■ Figure IV.5.13 ■

## Change between PISA 2003 and PISA 2012 in disciplinary climate



**Notes:** Statistically significant changes between PISA 2003 and PISA 2012 are marked in a darker tone.

Higher values on the index indicate better disciplinary climate.

Only countries and economies with comparable data from PISA 2003 and PISA 2012 are shown.

OECD average 2003 compares only OECD countries with comparable indices of disciplinary climate since 2003.

Countries and economies are ranked in descending order of the change in index of disciplinary climate (2012 - 2003).

**Source:** OECD, PISA 2012 Database, Table IV.5.18.

**StatLink** <http://dx.doi.org/10.1787/888932957365>



As a result, the *index of disciplinary climate* improved by 0.14 index points. Disciplinary climate improved the most in Japan, Hong Kong-China, Luxembourg, Norway, the Czech Republic and Iceland: in these countries and economies, the increase in the *index of disciplinary climate* between 2003 and 2012 was significant and greater than 0.25 index points. In Japan, for example, students in 2012 were 10 percentage points more likely than students in 2003 to report that never or only in some lessons do students not listen to what the teacher says. In Luxembourg, students in 2012 were over 10 percentage points more likely than their counterparts in 2003 to report that never, or only in some lessons, is there is noise and disorder, that the teacher has to wait a long time for students to quiet down, or that students cannot work well. By contrast, students' reports on disciplinary climate declined in Tunisia and Germany during the period. In Germany, students in 2012 were significantly more likely to report that students do not listen to what the teacher says in every or in most mathematics lessons (36% so reported) than their peers were in 2003 (22% reported so) (Figure IV.5.13 and Table IV.5.18). See Box IV.3.3 for a description on how indices like the *index of disciplinary climate* are compared across PISA assessments.

Students in 2012 were less likely than students in 2003 to attend schools whose principal reported that teacher-related factors negatively affect learning. On average across OECD countries with comparable data, for example, students are 11 percentage points more likely to attend a school whose principal reported that teachers not meeting individual students' needs hinders learning very little or not at all. Similarly, students in 2012 were less likely to attend schools whose principal reported that teachers' low expectations of students, poor teacher-student relations or teacher absenteeism hinders learning. The decrease in the degree to which teacher-related factors negatively affect student learning is most apparent in Indonesia, Macao-China, Tunisia, Turkey and Portugal, where the *index of teacher-related factors affecting school climate* increased the most, by more than 0.75 points, between 2003 and 2012. By contrast, in Belgium and the Slovak Republic teacher-related factors hindered learning more in 2012 than in 2003 as the *index of teacher-related factors affecting school climate* fell during the period (Table IV.5.19).

Similarly, students in 2012 were also less likely to attend schools whose principal reported that there are more student-related factors that hinder learning. On average across OECD countries with comparable data, students in 2012 were eight percentage points more likely than their peers in 2003 to attend schools whose principal reported that the disruption of classes by students hinders learning very little or not at all. The decrease in reports that student-related factors hinder learning is most pronounced in Indonesia, Macao-China, the Russian Federation and Liechtenstein, where the *index of student-related factors affecting school climate* increased by more than 0.75 points. By contrast, student-related factors that affect the learning climate seem to have declined, as scores on the *index of student-related factors affecting school climate* fell significantly – indicating worse learning environments – in Korea, Uruguay, Belgium, the Slovak Republic and Finland (Table IV.5.20).

Consistent with the above-mentioned general trend towards more favourable learning environments, on average across OECD countries, students in 2012 were slightly less likely to report that they had arrived late for school than students were in 2003. In 15 countries and economies, fewer students in 2012 than in 2003 reported that they had arrived late in the two weeks prior to the PISA test. Improvements in punctuality are most marked in the Netherlands and Iceland, where the percentage of students who reported that they had not arrived late increased by 14 and 11 percentage points, respectively. The incidence of tardiness increased, however, in nine countries and economies, particularly in Turkey and Tunisia, where the percentage of students who reported that they had arrived late at least once in the two weeks prior to the test increased by more than 10 percentage points over the period. In Turkey, for example, 27% of students in 2003 reported that they had arrived late at least once in the previous two weeks, while in 2012, 44% of students reported so (Table IV.5.22).

In both Tunisia and Turkey, as well as in Latvia, Sweden, Uruguay, Poland and the Russian Federation, the share of students attending schools where the majority of students reported that they had arrived late increased by more than 10 percentage points between 2003 and 2012, thus showing an increase in the concentration of late-arriving students in particular schools (Table IV.5.23).



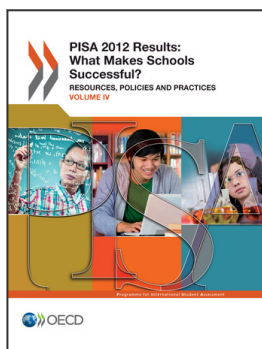
## Note

1. This average trend corresponds to OECD countries with comparable data in PISA 2003 and PISA 2012. Other global averages reported in this section also correspond to the average across OECD countries with comparable data in PISA 2003 and PISA 2012. Although both PISA 2003 and PISA 2012 included questions referring to the learning climate, not all indicators have comparable data. In 2003, for example, questionnaires did not include questions on student truancy, skipping school. Thus, it is not possible to observe trends for these indicators.

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