7

Teacher behaviour and student learning

This chapter examines differences between countries and economies in school principals' reports about the teacher behaviours that hinder student learning, and how they vary by school characteristics. The chapter also looks at how these teacher behaviours are related to students' reading performance and parental involvement in school-related activities.

Teachers play an integral role in boosting student learning. What matters is not so much where teachers come from or how many qualifications they have earned, but what they end up doing in their day-to-day interactions with students (Hanushek, 2011[1]; Kane, Rockoff and Staiger, 2008[2]). With this in mind, PISA 2018 asked school principals about some of the teacher behaviours that can create an unpleasant school climate and hinder student learning, such as teachers' resistance to change, unpreparedness and absenteeism.

When teachers miss work, the learning process is disrupted, particularly when the absences are unexpected and there is a lack of good substitute teachers (Miller, Murnane and Willett, 2008[3]; Rogers and Vegas, 2009[4]). Studies in the United States and Indonesia, for instance, show that excessive teacher absenteeism reduces student achievement considerably (Clotfelter, Ladd and Vigdor, 2007[5]; Suryadarma et al., 2007[6]) – up to 3% of a standard deviation for every 10 additional days of absence, according to one study (Miller, Murnane and Willett, 2008[3]). Moreover, excessive teacher absenteeism presents a sizeable financial cost to education systems, increases the administrative burden on school management and can tempt students to skip school too (Ehrenberg et al., 1989[7]; Rogers and Vegas, 2009[4]).

Teachers' resistance to change is another behaviour that could hinder student learning. Many promising school reforms are deferred or stall completely because teachers feel overstretched and short-changed, and because they fear the uncertainty that comes with the proposed changes (Evans, 1996[8]; Lunenburg, 2010[9]). However, staff resistance is not always problematic. Experienced, committed and creative teachers often resist top-down reforms because they believe they can bring valuable ideas to the process (Thomas and Hardy, 2011[10]).

The success of school reform depends, in part, on the ways in which school leaders address teachers' resistance to change. They can adopt collaborative strategies, such as communicating, negotiating and creating a professional learning community, or divisive ones, including coercion and "divide and conquer" tactics (Anderson, 2011[11]; Zimmerman, 2006[12]). Even when principals adopt the right strategies to address teacher resistance, traditional views from parents and other stakeholders, and narrow performance targets may discourage teachers from experimenting with and sustaining new teaching approaches in the classroom (Howard and Mozejko, 2015[13]).

What the data tell us

- On average across OECD countries, a majority of students attended schools whose principals reported that teacher behaviours do not hinder students' learning or hinder it very little.
- Principals of disadvantaged schools, schools located in cities and public schools were more likely to report that teacher behaviours hinder learning than those of advantaged schools, schools located in rural areas and private schools.
- Reading scores were lower in countries/economies with higher percentages of students enrolled in schools whose principal reported that teacher behaviours hinder learning a lot.
- Greater involvement from parents in school-related activities was associated with principals being less likely to report that teacher behaviours hinder learning.

Teacher quality is the single most important school factor for student learning (Coleman et al., 1966[14]; Rivkin, Hanushek and Kain, 2005[15]) and other student outcomes (Gershenson, Jacknowitz and Brannegan, 2017[16]; Ladd and Sorensen, 2015[17]). PISA 2018 did not measure teacher quality directly; instead, it asked school principals about two related teacher behaviours: teachers not meeting individual students' needs and being unprepared for classes. Another teacher behaviour – being too strict with students – could also be considered a dimension (or a lack) of teacher quality. However, previous studies have cautioned that some degree of strictness may have positive effects on student learning as students may interpret teachers' sternness as a sign that teachers care about them (Poplin et al., 2011[18]; Howard, 2002[19]). Wilson and Corbett (2001[20]), for instance, find that most students prefer teachers who adhere to a "no excuses" policy.

This chapter examines the degree to which teacher behaviour, as perceived by school principals, is related to student learning. PISA asked school principals to report the extent ("not at all", "very little", "to some extent", "a lot") to which they think that student learning in their schools is hindered by such factors as teachers not meeting individual students' needs; teacher absenteeism; school staff resisting change; teachers being too strict with students; and teachers not being well-prepared for classes. The responses were combined to create an index of teacher behaviour hindering learning that has a mean of zero and a standard deviation of one across OECD countries. Positive values reflect principals' perceptions that these teacher-related behaviours hinder learning to a greater extent; negative values indicate that school principals believe that these teacher-related behaviours hinder learning to a lesser extent, compared to the OECD average.

HOW TEACHER BEHAVIOUR HINDERING LEARNING VARIES ACROSS COUNTRIES AND SCHOOLS

According to school principals, instruction in their schools takes place in largely positive environments. On average across OECD countries, a majority of students attended schools whose principal reported that the above-mentioned teacher behaviours do not hinder student learning, or hinder it only very little (Figure III.7.1). Across OECD countries, the behaviours school principals cited most frequently as hindering learning were teachers not meeting individual students' needs and staff resisting change, whereas the behaviours least frequently mentioned were teachers being too strict with students and teachers not being well-prepared.

Only 2% of students across OECD countries attended schools whose principal reported that teacher absenteeism hinders learning a lot; but in several countries and economies, including Argentina, Baku (Azerbaijan), Beijing, Shanghai, Jiangsu and Zhejiang (China) (hereafter "B-S-J-Z [China]"), Chile, Jordan, Kazakhstan, Morocco, the Russian Federation (hereafter "Russia"), Ukraine, the United Arab Emirates and Uruguay, more than 10% of students attended such schools (Table III.B1.7.1). By contrast, in the Czech Republic, Finland, Japan, Luxembourg, Malta, Montenegro, New Zealand, Serbia and Switzerland, no school principal reported that teacher absenteeism hinders learning a lot. Obviously, this does not mean that teachers are never absent from work in these countries; these countries/economies may have implemented effective policies to replace absent teachers with substitute or emergency teachers. Principals in different countries may also have different views as to what level of absenteeism hinders learning.

Similarly, only 3% of students across OECD countries attended schools whose principal reported that teachers being unprepared for classes hinders learning a lot; but in several countries and economies, including B-S-J-Z (China), Croatia, Georgia, Jordan, Kazakhstan, Lebanon, Malaysia, Morocco, Russia, Ukraine and the United Arab Emirates, more than 10% of students attended such schools (Table III.B1.7.1). By contrast, in Finland, Germany, Latvia, Luxembourg, Norway, Sweden, Switzerland, the United Kingdom and the United States, less than 1% of students were enrolled in a school whose principal reported that teachers' lack of preparedness hinders learning a lot.

When considering differences across groups of schools, principals of socio-economically advantaged schools were less likely than principals of disadvantaged schools to report that teacher behaviours hinder student learning, on average across OECD countries and in 25 other education systems (Figure III.7.2 and Table III.B1.7.4). The countries and economies with the largest gaps related to the schools' socio-economic profile, all of which in favour of advantaged schools, were Brazil, Colombia, France, Hong Kong (China), Panama, Peru, Sweden, the United Arab Emirates and Uruguay. Across OECD countries, teacher-related behaviours hindering learning were more frequently cited by principals of city schools than of rural schools, and by principals of public schools than by those of private schools. Indeed, in 31 education systems the principals of public schools were more likely to report these types of behaviours as hindrances than the principals of private schools, and this difference was particularly large in Brazil, Brunei Darussalam, Colombia, Costa Rica, France, Italy, Mexico, Portugal, Turkey and Uruguay. Interestingly, teachers expressed similar concerns about the behaviour of teachers in schools with high and low concentrations of students with an immigrant background, on average across OECD countries.

TRENDS IN TEACHER BEHAVIOUR HINDERING LEARNING

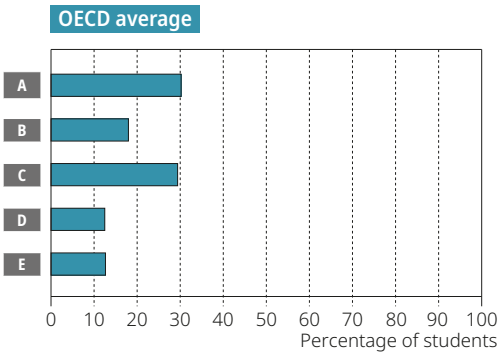
On average across OECD countries, the only behaviours that principals in 2018 mentioned more frequently as hindering learning than their counterparts in 2015 did were teachers not meeting individual students' needs and, to a lesser extent, teacher absenteeism (Table III.B1.7.2). This does not necessarily mean that teachers are paying less attention to individual students' needs or are more frequently absent; it could also be that school leaders have become increasingly demanding of their teachers and more concerned about providing individualised attention, or that the student body today is more diverse in many school systems and more principals are urging teachers to pay greater attention to students' individual needs. In 27 countries and economies, the percentage of students in schools whose principal reported that teachers not meeting individual students' needs hinders student learning to some extent or a lot increased between 2015 and 2018. In Hong Kong (China), Iceland, Israel, Japan, Kazakhstan, Korea, Lebanon, Portugal, Slovenia, and Uruguay, the share of students enrolled in such schools increased by at least 15 percentage points during the period.

Principals' concern about teacher absenteeism increased in 20 school systems between 2015 and 2018, and particularly so in Colombia, Iceland, Israel, Kazakhstan and Lebanon. By contrast, teacher absenteeism became less of a concern in Denmark, Luxembourg, Macao (China) and Montenegro during the same period.

Examining the evolution of teacher preparedness, as perceived by school principals, is also important as it can be considered a measure of teacher quality. In 17 education systems, school principals in 2018 were more concerned than their counterparts in 2015 about teachers not being well-prepared for classes. According to school principals, the concern about this behaviour increased the most in Georgia, Kazakhstan, the Republic of North Macedonia, Portugal and the United Arab Emirates during the period, whereas it decreased the most in Macao (China), Montenegro, Norway and the United Kingdom.

Figure III.7.1 **Teacher behaviour hindering learning**

Based on principals' reports



Percentage of students in schools whose principal reported that student learning is hindered to some extent or a lot by the following

- **A** Teachers not meeting individual students' needs
- **B** Teacher absenteeism
- **C** Staff resisting change
- **D** Teachers being too strict with students
- **E** Teachers not being well prepared for classes

	Percentage of students in schools whose principal reported that student learning is hindered to some extent or a lot by the following:				
	A	B	C	D	E
Kazakhstan	61	61	55	57	70
Netherlands	69	47	58	25	34
Uruguay	46	61	60	24	35
Chile	39	35	43	27	31
Belgium	36	42	52	19	21
Russia	51	37	45	38	44
Argentina	42	54	44	23	22
Portugal	45	14	59	13	20
Japan	42	6	29	24	28
Brunei Darussalam	52	16	33	23	26
Costa Rica	40	32	39	25	25
Morocco	47	35	44	32	35
Hong Kong (China)	56	13	43	12	22
Jordan	38	42	35	25	31
Germany	30	42	37	10	14
Israel	35	46	30	20	23
B-S-J-Z (China)	52	32	53	23	41
Croatia	40	15	41	24	33
Panama	27	27	37	34	21
Brazil	46	36	37	18	33
Peru	30	17	33	26	27
Norway	45	31	21	6	9
Colombia	36	32	43	26	20
Chinese Taipei	32	7	31	20	23
Canada	34	19	39	17	9
Australia	38	19	37	9	14
New Zealand	39	10	34	7	8
Ireland	32	20	30	9	13
France	36	17	46	24	19
Iceland	48	29	37	6	10
Bosnia and Herzegovina	28	19	38	22	25
United States	35	14	35	11	10
Slovenia	29	23	38	10	14
Italy	23	11	48	20	21
Malta	36	22	24	31	17
United Arab Emirates	28	26	28	22	24
Kosovo	25	20	27	24	18
Malaysia	25	24	15	16	23
Luxembourg	22	5	12	6	0

	Percentage of students in schools whose principal reported that student learning is hindered to some extent or a lot by the following:				
	A	B	C	D	E
Mexico	18	14	33	27	11
Sweden	40	21	18	4	8
Singapore	26	4	25	15	8
Estonia	35	20	27	19	6
Lebanon	29	23	26	21	19
United Kingdom	26	21	11	3	5
Finland	32	13	27	6	5
Dominican Republic	21	6	26	21	14
Viet Nam	18	6	3	14	11
Macao (China)	26	14	11	16	15
Moldova	22	19	29	16	21
Korea	31	5	17	17	20
Spain	20	7	37	11	14
Austria	24	18	25	11	4
Philippines	21	13	11	16	13
Ukraine	27	20	22	22	21
Switzerland	19	5	24	6	2
Baku (Azerbaijan)	27	24	22	38	20
Turkey	26	7	15	1	15
Romania	19	4	34	13	7
Denmark	15	17	17	3	7
Saudi Arabia	18	23	25	12	17
Montenegro	5	6	12	10	7
Greece	21	14	25	10	13
Serbia	16	5	23	12	17
Slovak Republic	19	7	15	19	9
Bulgaria	25	20	22	13	18
Indonesia	15	9	4	21	14
Latvia	20	8	10	8	6
Czech Republic	10	12	17	7	3
Hungary	24	5	10	10	8
Poland	12	9	20	8	9
Lithuania	13	1	10	2	5
Georgia	21	11	11	11	30
North Macedonia	19	11	23	17	14
Thailand	14	4	6	19	18
Qatar	15	11	11	5	9
Belarus	10	4	8	12	13
Albania	7	5	11	10	12

Countries and economies are ranked in descending order of the index of teacher behaviour hindering learning.

Source: OECD, PISA 2018 Database, Table III.B1.7.1.

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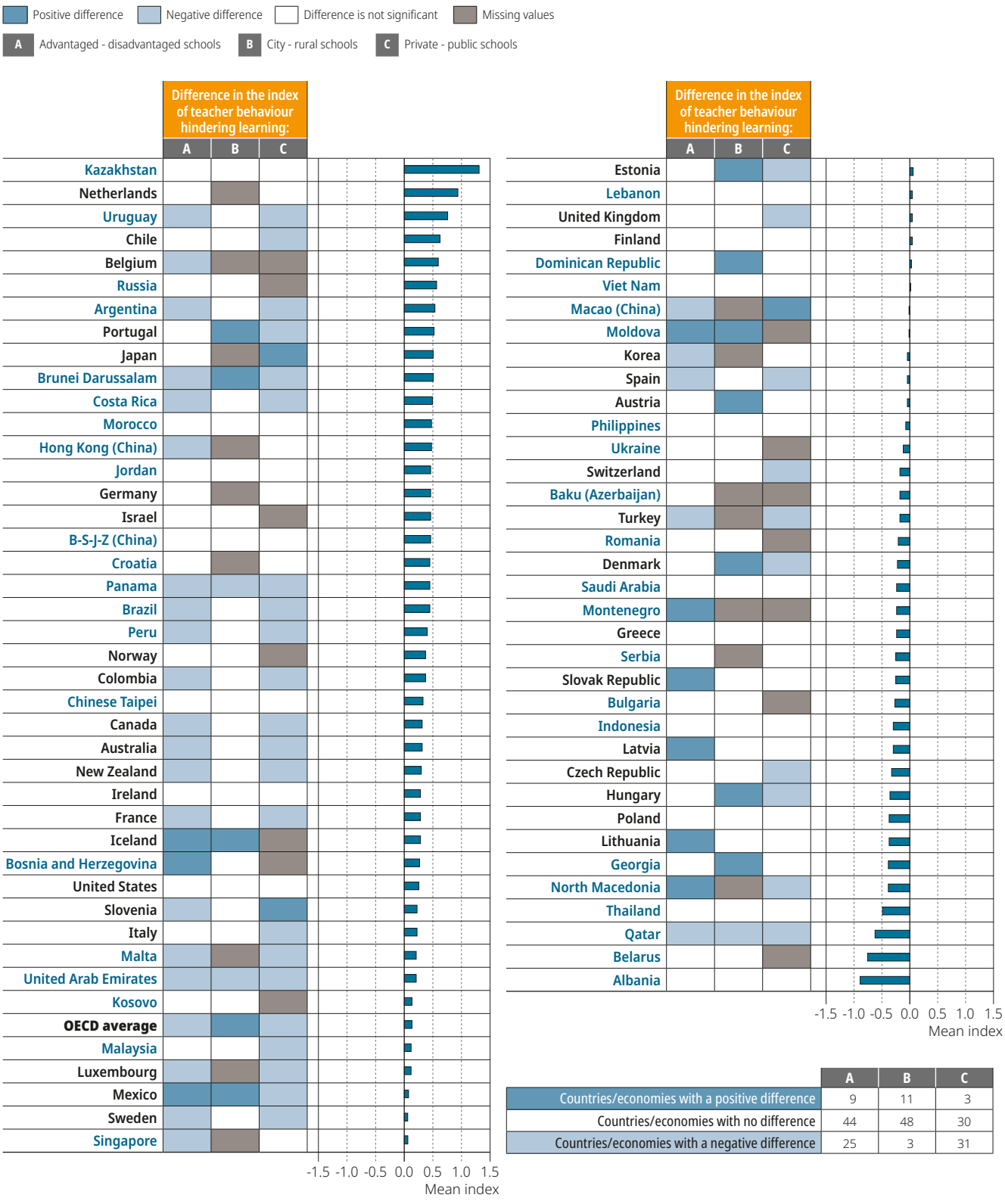
Figure III.7.2 **Teacher behaviour hindering learning, by school characteristics**

Based on principals' reports



	A	B	C
Countries/economies with a positive difference	9	11	3
Countries/economies with no difference	44	48	30
Countries/economies with a negative difference	25	3	31

Note: Higher values in the index indicate that teacher behaviour hinders student learning to a greater extent.

Countries and economies are ranked in descending order of the index of teacher behaviour hindering learning.

Source: OECD, PISA 2018 Database, Tables III.B1.7.1 and III.B1.7.4.

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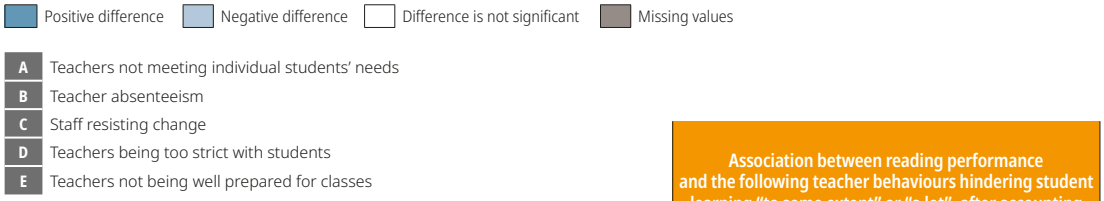
Figure III.7.3 **Teacher behaviour hindering learning and reading performance**



OECD	Association between reading performance and the following teacher behaviours hindering student learning "to some extent" or "a lot", after accounting for students' and schools' socio-economic profile:[1] A	B	C	D	E
OECD average					
Australia					
Austria					
Belgium					
Canada					
Chile					
Colombia					
Czech Republic					
Denmark					
Estonia					
Finland					
France					
Germany					
Greece					
Hungary					
Iceland					
Ireland					
Israel					
Italy					
Japan					
Korea					
Latvia					
Lithuania					
Luxembourg					
Mexico					
Netherlands					
New Zealand					
Norway					
Poland					
Portugal					
Slovak Republic					
Slovenia					
Sweden					
Switzerland					
Turkey					
United Kingdom					
United States					

Partners	Association between reading performance and the following teacher behaviours hindering student learning "to some extent" or "a lot", after accounting for students' and schools' socio-economic profile: A	B	C	D	E
Albania					
Argentina					
Baku (Azerbaijan)					
Belarus					
Bosnia and Herzegovina					
Brazil					
Brunei Darussalam					
B-S-J-Z (China)					
Bulgaria					
Costa Rica					
Croatia					
Dominican Republic					
Georgia					
Hong Kong (China)					
Indonesia					
Jordan					
Kazakhstan					
Kosovo					
Lebanon					
Macao (China)					
Malaysia					
Malta					
Moldova					
Montenegro					
Morocco					
North Macedonia					
Panama					
Peru					
Philippines					
Qatar					
Romania					
Russia					
Saudi Arabia					
Serbia					
Singapore					
Chinese Taipei					
Thailand					
Ukraine					
United Arab Emirates					
Uruguay					

A	B	C	D	E	
8	3	5	6	6	Countries/economies with a positive difference
58	58	66	61	57	Countries/economies with no difference
10	13	5	7	12	Countries/economies with a negative difference

1. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Source: OECD, PISA 2018 Database, Table III.B1.7.5.

StatLink http://dx.doi.org/10.1787/888934029831

HOW TEACHER BEHAVIOUR IS RELATED TO READING PERFORMANCE

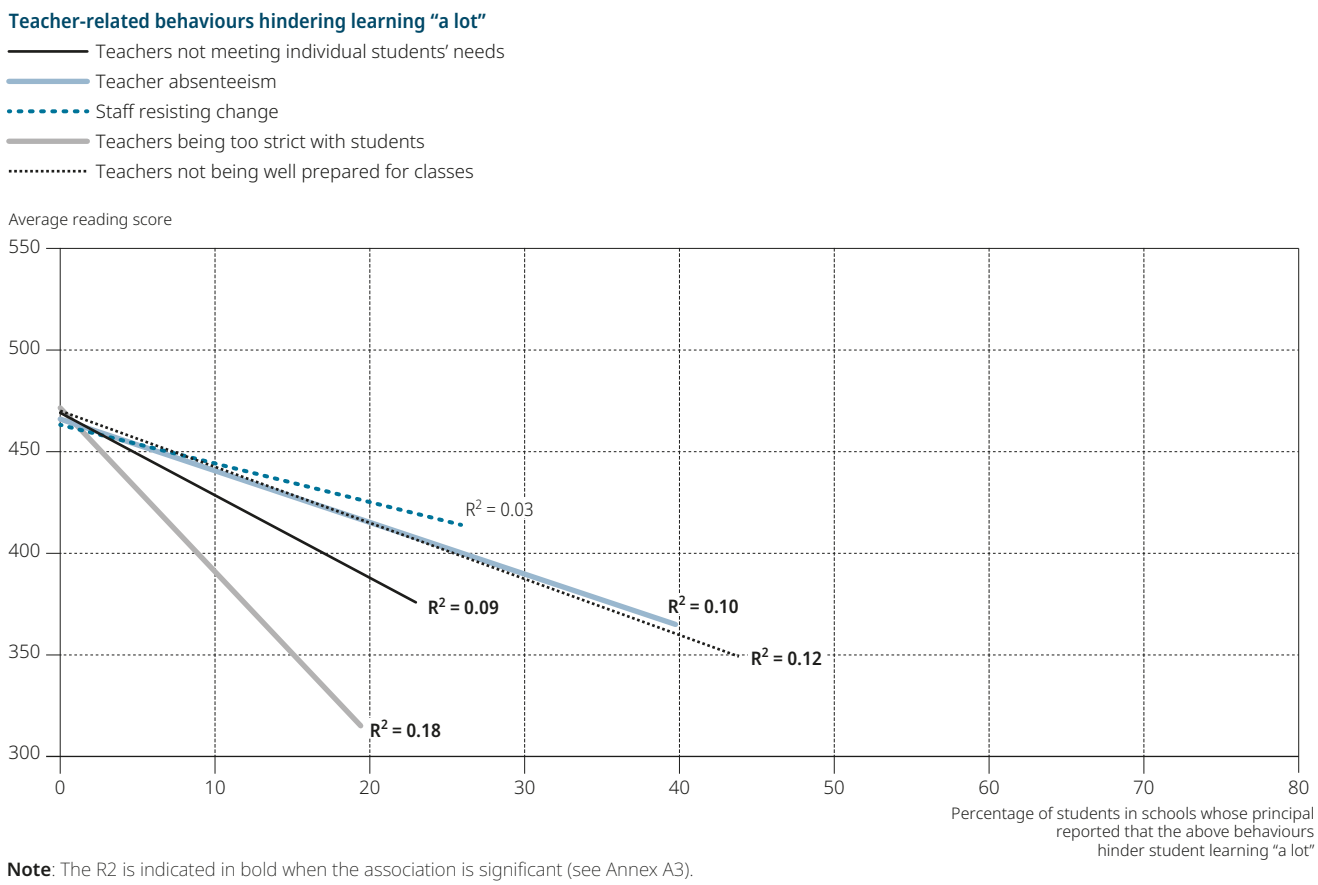
In almost every country, students in schools whose principals reported more teacher-related problems affecting student learning scored about the same as students in schools whose principals reported fewer of these problems, after accounting for the socio-economic profile of students and schools (measured by the PISA index of economic, social and cultural status) (Figure III.7.3 and Table III.B1.7.5). In fact, on average across OECD countries, the only association with reading performance that remained significant after accounting for socio-economic status was when principals reported that teacher absenteeism hinders learning to some extent or a lot. Students in schools whose principal reported that teacher absenteeism hinders learning to some extent or a lot scored four points lower in reading than students in schools whose principals reported that this problem does not hinder learning at all, or very little.

The relationship between teacher behaviour and reading performance was more revealing when analysed at the system level (Figure III.7.4). On average, reading scores were lower in countries with higher percentages of students enrolled in schools whose principal reported that the following behaviours hinder learning a lot (in ascending order of the proportion of the variance explained): teachers not meeting individual students' needs; teacher absenteeism; teachers not being well-prepared for classes; and teachers being too strict.

The findings suggest that countries'/economies' average reading performance was not associated with the share of principals who reported that student learning is negatively affected by teachers' resistance to change. This finding is consistent with previous studies indicating that teachers who resist change may signal an experienced, committed and creative workforce (Thomas and Hardy, 2011[10]), but the finding is also consistent with a transformational school leader who is trying to implement a promising school reform. After all, teachers can only resist change if a school reform is envisaged or taking place. What the results do not reveal is whether high-performing countries are successful in limiting the prevalence of some of these teacher-related behaviours or are successful in reducing the negative consequences associated with them.

Figure III.7.4 **Teacher behaviour hindering learning and average reading performance across countries and economies**

System-level analysis (77 countries and economies)



Note: The R2 is indicated in bold when the association is significant (see Annex A3).

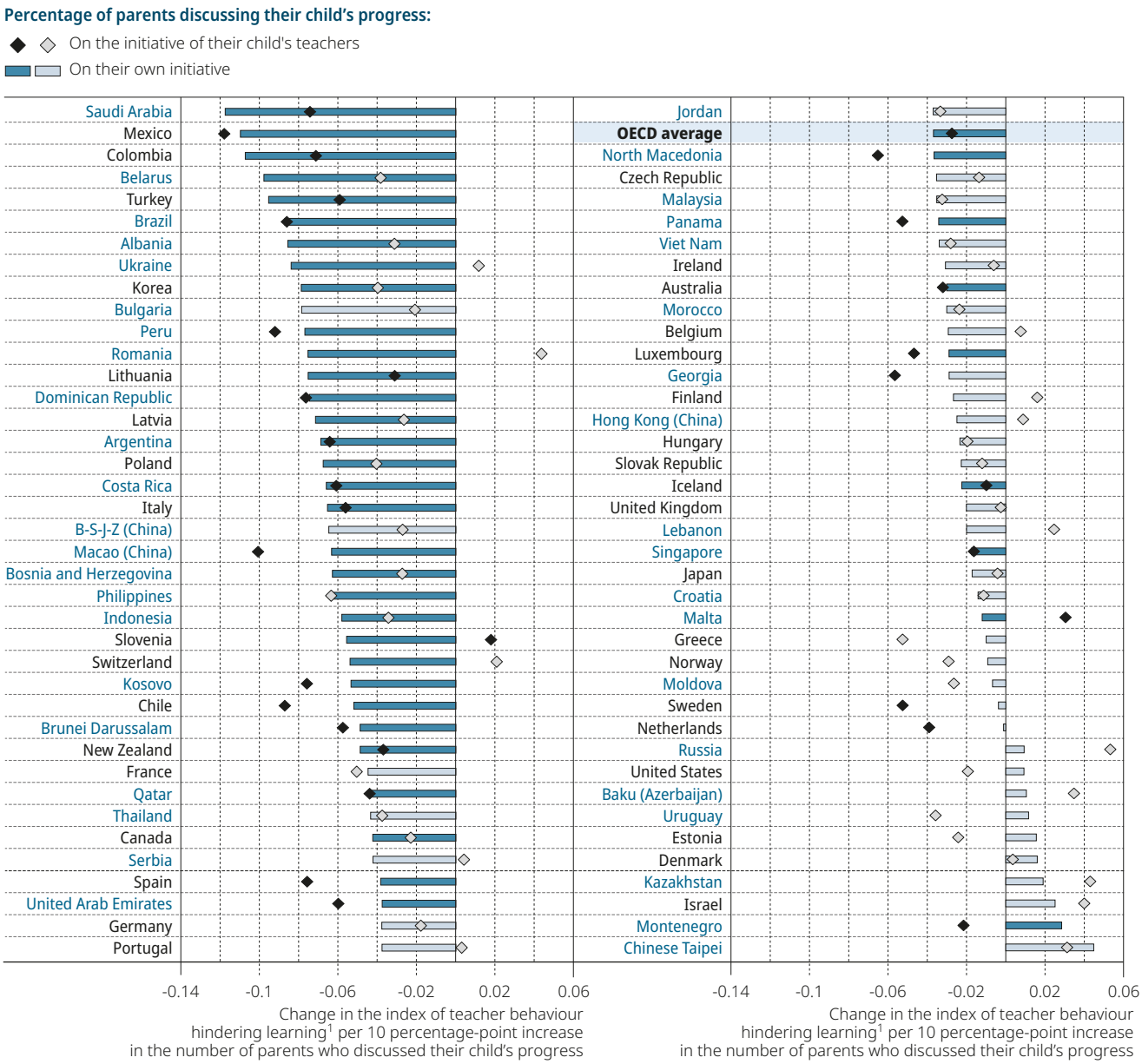
Source: OECD, PISA 2018 Database, Tables III.B1.7.1 and I.B1.4.

StatLink http://dx.doi.org/10.1787/888934029850

RELATIONSHIPS BETWEEN TEACHER BEHAVIOUR HINDERING LEARNING AND PARENTAL INVOLVEMENT

There are many reasons why parents get involved in school matters: to obtain first-hand information on the learning environment, learn how to navigate the education system or influence their child's behaviour by establishing consistent norms, to cite just three (Cohen et al., 2009[21]; Grolnick and Slowiaczek, 1994[22]). Another important reason could be to ensure that their child's progress is not hindered by the way teachers perform at work. For instance, parents may decide to participate in school activities to encourage teachers to prepare their lessons adequately and meet their child's needs, and to ensure that substitute teachers are available to replace absent teachers.

Figure III.7.5 **Discussing child's progress with teachers and teacher behaviour hindering learning**



1. Higher values in the index indicate that teacher behaviour hinders student learning to a greater extent.

Notes: Statistically significant values are shown in darker tones (see Annex A3).

The results are based on linear regression analysis, after accounting for schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Countries and economies are ranked in ascending order of the change in the index associated with the percentage of parents discussing their child's progress with a teacher on their own initiative.

Source: OECD, PISA 2018 Database, Table III.B1.7.6.

StatLink http://dx.doi.org/10.1787/888934029869

PISA 2018 asked principals about the percentage of parents who participated, during the previous academic year, in the following school activities: "discussed their child's progress with a teacher on their own initiative"; "discussed their child's progress on the initiative of one of their child's teachers"; "participated in local school government"; and "volunteered in physical or extracurricular activities" (see Chapter 10). This section examines how principals' answers to this question are related to their views on the teacher behaviours that hinder student learning.

The findings presented in Table III.B1.7.6 show that, on average across OECD countries, principals were less likely to report that teacher behaviour hinders student learning when, according to their estimates, more parents participated in school-related activities. For instance, the index of teacher behaviour hindering learning decreased by about 0.05 of a standard deviation, both before and after accounting for the socio-economic profile of the school, for every 10 percentage-point increase in the number of parents who participated in local school government or volunteered in physical or extracurricular activities at the school.

According to school principals, student learning was hindered by the behaviour of teachers to a lesser extent when more parents discussed their child's progress with teachers, and especially when parents initiated those discussions (Figure III.7.5). After accounting for the socio-economic profile of schools, this relationship was observed in 39 school systems when the initiative came from parents, and in 29 school systems when the initiative came from teachers.

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