

School Discipline and Safety

School Discipline

Continuing from previous TIMSS assessments, TIMSS 2019 asked school principals for their perceptions about the extent that discipline, disorder, and bullying behaviors are problems in their school. As described in Exhibit 8.1, fourth grade students were assigned scores on the *School Discipline* scale according to their principals' characterizations of 10 discipline and safety problems (see About the Scale). The eighth grade scale included one additional problem more suited to older students—"physical injury to teachers or staff." Since TIMSS first reported results on the *School Discipline* scale in 2011, data have shown that attending schools with fewer discipline and safety problems was associated with higher average achievement in mathematics and science.

Exhibit 8.2 presents the results for the *School Discipline* scale at the fourth grade in relation to mathematics achievement. Countries are ordered according to the percentage of students in schools where principals reported "hardly any problems" with discipline and safety. On average, the majority of fourth grade students (60%) attended schools with "hardly any problems," and 32 percent attended schools with "minor problems." Only 8 percent of students, on average, attended schools for which principals reported "moderate to severe problems" with discipline and safety. Consistent with previous TIMSS results, average mathematics achievement was higher for students in schools with "hardly any problems" than for students in schools with "minor problems" (508 vs. 494). At 466 points, on average, mathematics achievement for students in schools with "moderate to severe problems" with school discipline and safety was substantially lower (42 points) than for students in schools with "hardly any problems."

Exhibit 8.3 presents the same percentages of fourth grade students in the three categories of the scale, but in relation to science achievement. Similar to the results for mathematics, fewer discipline problems were related to higher average science achievement. Students in schools with "hardly any problems" with discipline and safety had the highest average science achievement (498), followed by students in schools with "minor problems" (483) and "moderate to severe problems" (457).

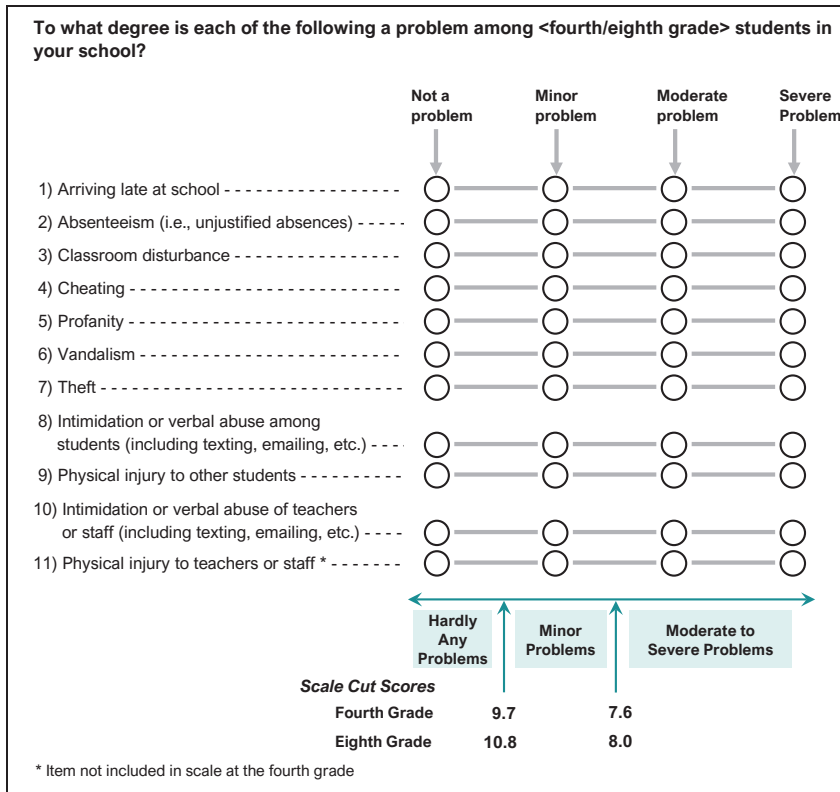
Exhibits 8.4 and 8.5 present the *School Discipline* results for eighth grade students in relation to mathematics achievement and science achievement, respectively. Compared with the fourth grade, fewer eighth grade students attended schools with "hardly any problems" (45% vs. 60%) and more eighth grade students attended schools with "minor problems" (43% vs. 32%). Similar to fourth grade results, the 11 percent of eighth grade students in the "moderate to severe problems" category had the lowest average achievement (448 and 452 in mathematics and science, respectively). However, eighth grade results showed a greater difference in average achievement between students in schools with "hardly any problems" and those in schools with "moderate to severe problems." There was a 55-point gap in average mathematics achievement between the two categories (503 vs. 448) and a 52-point gap in average science achievement (504 vs. 452).

Exhibit 8.1: School Discipline – Principals’ Reports

Students’ Results based on Principals’ Reports

About the Scale

Students were scored according to their principals’ reports regarding eleven potential problems on the *School Discipline* scale. Cut scores divide the scale into three categories. Students in schools with **Hardly Any Problems** had a score at or above the cut score corresponding to their principals reporting that six of the eleven issues are “not a problem” and the other five are a “minor problem,” on average. Students in schools with **Moderate to Severe Problems** had a score at or below the cut score corresponding to their principals reporting that six of the eleven issues are a “moderate problem” and the other five are a “minor problem,” on average. All other students were in schools with **Minor Problems**.



SOURCE: IEA’s Trends in International Mathematics and Science Study TIMSS 2019
 Downloaded from <http://timss2019.org/download>

Exhibit 8.2: School Discipline – Principals’ Reports
Students’ Results based on Principals’ Reports

Country	Hardly Any Problems		Minor Problems		Moderate to Severe Problems		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Albania	82 (3.4)	495 (3.8)	16 (3.2)	491 (9.3)	2 (1.1)	~ ~	10.9 (0.14)
Ireland	82 (3.2)	552 (3.1)	16 (3.1)	540 (5.5)	2 (1.2)	~ ~	10.8 (0.11)
Kazakhstan	82 (3.3)	514 (3.0)	7 (2.0)	500 (11.4)	12 (2.6)	506 (7.8)	10.9 (0.19)
Netherlands	81 (5.0)	540 (2.8)	19 (5.0)	527 (4.6)	0 (0.0)	~ ~	10.9 (0.15)
Hong Kong SAR	77 (4.3)	607 (3.2)	23 (4.2)	583 (7.7)	1 (0.7)	~ ~	10.7 (0.14)
Singapore	76 (0.0)	628 (4.3)	24 (0.0)	616 (8.3)	0 (0.0)	~ ~	10.6 (0.00)
Armenia	76 (3.4)	501 (3.2)	13 (3.2)	484 (6.1)	11 (2.3)	498 (7.6)	10.4 (0.15)
Croatia	76 (3.6)	509 (2.6)	22 (3.5)	513 (5.4)	2 (1.3)	~ ~	10.5 (0.12)
Spain	75 (3.4)	508 (2.8)	22 (3.1)	486 (8.1)	3 (1.2)	493 (14.7)	10.6 (0.13)
Slovak Republic	73 (3.6)	517 (4.1)	20 (3.5)	504 (6.9)	6 (1.7)	447 (14.5)	10.3 (0.11)
Japan	73 (3.6)	595 (2.1)	23 (3.6)	588 (3.5)	4 (1.8)	584 (9.1)	10.4 (0.12)
Korea, Rep. of	73 (3.7)	602 (2.7)	16 (2.8)	595 (5.7)	12 (3.0)	588 (7.1)	10.6 (0.18)
Northern Ireland	73 (3.8)	573 (4.2)	27 (3.9)	552 (6.2)	1 (0.8)	~ ~	10.4 (0.11)
Chinese Taipei	73 (3.2)	600 (2.2)	26 (3.2)	597 (3.7)	1 (1.0)	~ ~	10.8 (0.12)
Lithuania	72 (3.8)	537 (3.4)	28 (3.8)	556 (7.4)	0 (0.3)	~ ~	10.4 (0.11)
Latvia	72 (3.2)	548 (3.3)	27 (3.2)	541 (4.7)	1 (0.0)	~ ~	10.4 (0.09)
Czech Republic	71 (3.5)	538 (3.1)	26 (3.3)	525 (4.8)	3 (1.2)	494 (6.6)	10.3 (0.11)
Azerbaijan	71 (3.2)	514 (3.5)	17 (2.9)	529 (6.2)	12 (2.7)	508 (5.5)	10.0 (0.16)
United Arab Emirates	70 (2.0)	494 (2.0)	26 (2.0)	444 (3.6)	4 (0.3)	446 (9.9)	10.5 (0.07)
Bulgaria	70 (4.1)	528 (4.1)	24 (3.9)	477 (11.9)	6 (2.0)	517 (17.7)	10.4 (0.17)
Malta	69 (0.4)	519 (1.4)	29 (0.4)	490 (3.0)	2 (0.1)	~ ~	10.4 (0.01)
North Macedonia	68 (3.7)	478 (5.8)	24 (4.2)	461 (11.1)	8 (2.7)	458 (24.9)	10.4 (0.16)
Qatar	68 (3.8)	455 (4.7)	24 (3.6)	439 (8.8)	8 (1.8)	434 (13.1)	10.2 (0.13)
Russian Federation	68 (3.6)	569 (4.5)	32 (3.5)	563 (4.1)	1 (0.6)	~ ~	10.2 (0.08)
England	67 (5.1)	566 (5.5)	33 (5.1)	540 (7.6)	0 (0.0)	~ ~	10.1 (0.10)
Italy	66 (4.0)	517 (2.8)	29 (4.2)	510 (4.9)	5 (1.8)	509 (7.6)	10.0 (0.12)
Georgia	66 (4.4)	486 (4.6)	23 (3.8)	473 (6.0)	11 (2.9)	479 (11.6)	10.1 (0.19)
Bahrain	65 (2.8)	486 (2.7)	27 (2.8)	476 (5.0)	8 (0.7)	442 (7.8)	10.2 (0.09)
Saudi Arabia	64 (3.5)	404 (4.7)	23 (3.2)	394 (7.8)	14 (2.7)	385 (15.5)	10.0 (0.16)
Belgium (Flemish)	61 (4.5)	540 (2.7)	37 (4.6)	523 (3.8)	2 (1.4)	~ ~	10.1 (0.12)
Iran, Islamic Rep. of	59 (3.7)	450 (5.4)	33 (3.6)	436 (8.2)	8 (1.8)	423 (15.4)	10.1 (0.12)
New Zealand	59 (3.6)	504 (3.8)	38 (3.7)	466 (5.5)	3 (1.4)	438 (9.9)	10.1 (0.10)
Norway (5)	58 (4.3)	547 (3.7)	33 (4.1)	540 (4.9)	9 (3.2)	533 (7.4)	9.7 (0.12)
France	57 (4.1)	494 (4.3)	39 (4.3)	476 (4.8)	4 (1.4)	445 (9.2)	9.9 (0.11)
Australia	57 (3.5)	529 (4.0)	40 (3.4)	500 (4.8)	3 (1.3)	442 (15.7)	9.9 (0.11)
Serbia	55 (4.3)	505 (4.4)	32 (3.7)	513 (5.8)	12 (2.8)	512 (8.9)	9.7 (0.16)
Bosnia and Herzegovina	55 (3.7)	453 (3.6)	29 (3.5)	453 (4.8)	16 (3.1)	447 (7.6)	9.6 (0.18)
United States	55 (2.6)	547 (3.9)	41 (2.6)	521 (4.4)	4 (1.1)	501 (18.4)	9.9 (0.08)
Finland	53 (3.8)	537 (3.4)	42 (3.8)	529 (3.1)	5 (1.9)	499 (11.9)	9.9 (0.10)
Canada	53 (2.9)	516 (2.4)	43 (3.0)	510 (4.7)	4 (1.0)	470 (9.4)	9.9 (0.09)
Montenegro	52 (0.5)	452 (2.3)	34 (0.4)	457 (3.6)	14 (0.3)	447 (3.8)	9.7 (0.02)
Pakistan	51 (6.5)	321 (16.7)	38 (6.4)	331 (20.2)	11 (2.7)	352 (17.7)	9.4 (0.19)
Hungary	50 (4.7)	532 (4.1)	42 (4.5)	520 (6.0)	8 (2.3)	474 (15.0)	9.7 (0.12)
Cyprus	49 (4.8)	540 (3.4)	45 (4.6)	527 (5.0)	6 (2.3)	502 (12.5)	9.8 (0.16)
Austria	49 (3.7)	548 (3.3)	41 (3.8)	535 (3.3)	10 (2.3)	515 (9.2)	9.6 (0.11)
Kosovo	47 (4.4)	439 (4.9)	26 (3.6)	447 (5.7)	27 (3.7)	451 (4.5)	8.9 (0.21)
Denmark	47 (4.0)	534 (3.4)	52 (3.9)	517 (2.7)	1 (1.0)	~ ~	9.7 (0.11)
Portugal	46 (3.8)	533 (4.1)	45 (3.8)	521 (4.2)	9 (2.1)	511 (6.9)	9.6 (0.14)
Philippines	44 (4.1)	319 (9.5)	52 (3.9)	276 (8.3)	4 (1.6)	317 (13.7)	9.5 (0.11)
Kuwait	44 (3.9)	401 (7.1)	37 (4.1)	373 (8.5)	19 (3.2)	364 (11.6)	9.1 (0.15)
Chile	41 (4.1)	454 (5.8)	49 (4.4)	435 (4.0)	9 (2.5)	416 (11.8)	9.4 (0.13)
Oman	36 (3.2)	436 (5.6)	36 (3.1)	422 (5.2)	28 (3.3)	435 (11.1)	8.7 (0.18)
Poland	36 (4.1)	522 (4.9)	60 (4.2)	518 (3.2)	4 (1.6)	538 (7.6)	9.3 (0.10)
Germany	36 (3.2)	541 (2.9)	52 (3.5)	516 (3.3)	12 (2.0)	484 (9.2)	9.2 (0.09)
Turkey (5)	33 (3.4)	552 (6.1)	40 (3.7)	517 (7.5)	27 (3.3)	496 (9.4)	8.8 (0.16)
Sweden	30 (3.8)	529 (3.9)	65 (4.1)	518 (4.4)	5 (1.5)	491 (13.4)	9.2 (0.10)
Morocco	28 (2.8)	406 (12.9)	24 (2.7)	365 (10.8)	48 (3.5)	380 (7.4)	7.8 (0.18)
South Africa (5)	19 (2.6)	397 (12.0)	53 (3.8)	373 (5.9)	28 (3.7)	364 (7.3)	8.5 (0.09)
International Average	60 (0.5)	508 (0.7)	32 (0.5)	494 (0.9)	8 (0.3)	466 (1.8)	
Benchmarking Participants							
Dubai, UAE	89 (0.1)	546 (1.8)	10 (0.1)	530 (4.8)	0 (0.0)	~ ~	11.1 (0.01)
Madrid, Spain	77 (3.8)	523 (2.1)	19 (3.6)	497 (7.4)	4 (1.4)	528 (9.3)	10.7 (0.14)
Moscow City, Russian Fed.	73 (4.2)	595 (2.6)	26 (4.3)	587 (4.1)	1 (0.6)	~ ~	10.4 (0.11)
Quebec, Canada	60 (4.4)	534 (3.2)	37 (4.4)	528 (3.6)	2 (0.8)	~ ~	10.1 (0.13)
Abu Dhabi, UAE	59 (1.1)	452 (2.8)	38 (1.1)	414 (4.1)	3 (0.1)	392 (11.3)	10.1 (0.04)
Ontario, Canada	42 (5.3)	519 (5.5)	51 (5.5)	513 (7.8)	7 (2.0)	456 (9.9)	9.6 (0.14)

This TIMSS context questionnaire scale was established in 2011 based on the combined response distribution of all countries that participated in TIMSS 2011. To provide a point of reference for country comparisons, the scale centerpoint of 10 was located at the mean of the combined distribution. The units of the scale were chosen so that 2 scale score points corresponded to the standard deviation of the distribution.

() Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

A tilde (~) indicates insufficient data to report achievement.

An "r" indicates data are available for at least 70% but less than 85% of the students. An "s" indicates data are available for at least 50% but less than 70% of the students.

SOURCE: IEA's Trends in International Mathematics and Science Study TIMSS 2019
 Downloaded from <http://timss2019.org/download>

Exhibit 8.3: School Discipline – Principals' Reports

Students' Results based on Principals' Reports

Country	Hardly Any Problems		Minor Problems		Moderate to Severe Problems		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Albania	82 (3.4)	490 (3.9)	16 (3.2)	483 (10.5)	2 (1.1)	~ ~	10.9 (0.14)
Ireland	82 (3.2)	530 (3.9)	16 (3.1)	524 (5.9)	2 (1.2)	~ ~	10.8 (0.11)
Kazakhstan	82 (3.3)	497 (3.5)	7 (2.0)	481 (15.6)	12 (2.6)	488 (10.3)	10.9 (0.19)
Netherlands	81 (5.0)	522 (3.6)	19 (5.0)	504 (6.4)	0 (0.0)	~ ~	10.9 (0.15)
Hong Kong SAR	77 (4.3)	538 (3.2)	23 (4.2)	510 (7.7)	1 (0.7)	~ ~	10.7 (0.14)
Singapore	76 (0.0)	597 (3.8)	24 (0.0)	585 (7.5)	0 (0.0)	~ ~	10.6 (0.00)
Armenia	76 (3.4)	469 (3.9)	13 (3.2)	448 (7.0)	11 (2.3)	468 (8.6)	10.4 (0.15)
Croatia	76 (3.6)	524 (2.6)	22 (3.5)	526 (4.4)	2 (1.3)	~ ~	10.5 (0.12)
Spain	75 (3.4)	517 (2.6)	22 (3.1)	495 (7.1)	3 (1.2)	498 (13.0)	10.6 (0.13)
Slovak Republic	73 (3.6)	529 (4.1)	20 (3.5)	519 (7.4)	6 (1.7)	429 (17.1)	10.3 (0.11)
Japan	73 (3.6)	564 (2.1)	23 (3.6)	557 (3.2)	4 (1.8)	554 (8.2)	10.4 (0.12)
Korea, Rep. of	73 (3.7)	590 (2.5)	16 (2.8)	582 (5.6)	12 (3.0)	579 (6.2)	10.6 (0.18)
Northern Ireland	73 (3.8)	524 (3.3)	27 (3.9)	508 (5.0)	1 (0.8)	~ ~	10.4 (0.11)
Chinese Taipei	73 (3.2)	558 (2.0)	26 (3.2)	557 (3.6)	1 (1.0)	~ ~	10.8 (0.12)
Lithuania	72 (3.8)	533 (3.2)	28 (3.8)	551 (6.8)	0 (0.3)	~ ~	10.4 (0.11)
Latvia	72 (3.2)	544 (3.1)	27 (3.2)	535 (4.1)	1 (0.0)	~ ~	10.4 (0.09)
Czech Republic	71 (3.5)	538 (3.1)	26 (3.3)	527 (4.4)	3 (1.2)	497 (7.5)	10.3 (0.11)
Azerbaijan	71 (3.2)	424 (4.2)	17 (2.9)	446 (7.8)	12 (2.7)	418 (6.5)	10.0 (0.16)
United Arab Emirates	70 (2.0)	489 (2.4)	26 (2.0)	428 (4.2)	4 (0.3)	433 (11.6)	10.5 (0.07)
Bulgaria	70 (4.1)	537 (5.5)	24 (3.9)	477 (13.1)	6 (2.0)	520 (25.5)	10.4 (0.17)
Malta	69 (0.4)	507 (1.5)	29 (0.4)	475 (2.9)	2 (0.1)	~ ~	10.4 (0.01)
North Macedonia	68 (3.7)	435 (6.5)	24 (4.2)	409 (13.8)	8 (2.7)	410 (23.9)	10.4 (0.16)
Qatar	68 (3.8)	456 (5.0)	24 (3.6)	439 (10.3)	8 (1.8)	430 (13.0)	10.2 (0.13)
Russian Federation	68 (3.6)	570 (4.1)	32 (3.5)	562 (3.8)	1 (0.6)	~ ~	10.2 (0.08)
England	67 (5.1)	545 (4.8)	33 (5.1)	521 (7.3)	0 (0.0)	~ ~	10.1 (0.10)
Italy	66 (4.0)	513 (3.1)	29 (4.2)	503 (5.8)	5 (1.8)	507 (9.8)	10.0 (0.12)
Georgia	66 (4.4)	458 (4.9)	23 (3.8)	446 (5.7)	11 (2.9)	449 (11.2)	10.1 (0.19)
Bahrain	65 (2.8)	505 (3.5)	27 (2.8)	483 (7.9)	8 (0.7)	431 (11.4)	10.2 (0.09)
Saudi Arabia	64 (3.5)	410 (5.2)	23 (3.2)	390 (9.8)	14 (2.7)	389 (16.9)	10.0 (0.16)
Belgium (Flemish)	61 (4.5)	508 (2.9)	37 (4.6)	491 (4.3)	2 (1.4)	~ ~	10.1 (0.12)
Iran, Islamic Rep. of	59 (3.7)	449 (5.7)	33 (3.6)	432 (8.7)	8 (1.8)	415 (11.1)	10.1 (0.12)
New Zealand	59 (3.6)	519 (3.3)	38 (3.7)	482 (4.9)	3 (1.4)	451 (10.7)	10.1 (0.10)
Norway (5)	58 (4.3)	543 (3.2)	33 (4.1)	539 (4.7)	9 (3.2)	525 (7.6)	9.7 (0.12)
France	57 (4.1)	497 (4.3)	39 (4.3)	480 (4.7)	4 (1.4)	442 (8.0)	9.9 (0.11)
Australia	57 (3.5)	545 (3.6)	40 (3.4)	519 (4.2)	3 (1.3)	467 (14.3)	9.9 (0.11)
Serbia	55 (4.3)	515 (4.6)	32 (3.7)	519 (6.1)	12 (2.8)	523 (8.8)	9.7 (0.16)
Bosnia and Herzegovina	55 (3.7)	462 (4.0)	29 (3.5)	459 (5.5)	16 (3.1)	447 (6.9)	9.6 (0.18)
United States	55 (2.6)	552 (4.2)	41 (2.6)	524 (4.4)	4 (1.1)	503 (16.7)	9.9 (0.08)
Finland	53 (3.8)	560 (3.6)	42 (3.8)	552 (2.9)	5 (1.9)	518 (13.4)	9.9 (0.10)
Canada	53 (2.9)	528 (2.3)	43 (3.0)	521 (3.6)	4 (1.0)	489 (9.6)	9.9 (0.09)
Montenegro	52 (0.5)	452 (3.0)	34 (0.4)	458 (4.0)	14 (0.3)	447 (4.2)	9.7 (0.02)
Pakistan	51 (6.5)	281 (19.4)	38 (6.4)	296 (20.1)	11 (2.7)	318 (23.7)	9.4 (0.19)
Hungary	50 (4.7)	538 (3.9)	42 (4.5)	526 (5.8)	8 (2.3)	485 (14.7)	9.7 (0.12)
Cyprus	49 (4.8)	518 (3.7)	45 (4.6)	508 (4.8)	6 (2.3)	483 (7.4)	9.8 (0.16)
Austria	49 (3.7)	533 (3.8)	41 (3.8)	517 (4.4)	10 (2.3)	488 (11.9)	9.6 (0.11)
Kosovo	47 (4.4)	406 (5.7)	26 (3.6)	417 (6.9)	27 (3.7)	423 (6.2)	8.9 (0.21)
Denmark	47 (4.0)	530 (3.8)	52 (3.9)	516 (3.0)	1 (1.0)	~ ~	9.7 (0.11)
Portugal	46 (3.8)	510 (3.5)	45 (3.8)	500 (3.6)	9 (2.1)	494 (5.9)	9.6 (0.14)
Philippines	44 (4.1)	275 (11.2)	52 (3.9)	225 (10.0)	4 (1.6)	268 (19.5)	9.5 (0.11)
Kuwait	44 (3.9)	419 (8.6)	37 (4.1)	377 (10.7)	19 (3.2)	366 (14.6)	9.1 (0.15)
Chile	41 (4.1)	481 (5.0)	49 (4.4)	465 (4.1)	9 (2.5)	443 (10.8)	9.4 (0.13)
Oman	36 (3.2)	437 (6.0)	36 (3.1)	429 (6.0)	28 (3.3)	438 (11.8)	8.7 (0.18)
Poland	36 (4.1)	533 (4.6)	60 (4.2)	528 (3.0)	4 (1.6)	549 (7.7)	9.3 (0.10)
Germany	36 (3.2)	541 (3.1)	52 (3.5)	514 (3.3)	12 (2.0)	473 (8.9)	9.2 (0.09)
Turkey (5)	33 (3.4)	553 (5.3)	40 (3.7)	521 (7.3)	27 (3.3)	502 (9.5)	8.8 (0.16)
Sweden	30 (3.8)	545 (3.9)	65 (4.1)	534 (5.1)	5 (1.5)	509 (15.9)	9.2 (0.10)
Morocco	28 (2.8)	396 (15.4)	24 (2.7)	356 (11.8)	48 (3.5)	371 (9.5)	7.8 (0.18)
South Africa (5)	19 (2.6)	355 (16.5)	53 (3.8)	323 (8.1)	28 (3.7)	313 (10.8)	8.5 (0.09)
International Average	60 (0.5)	498 (0.8)	32 (0.5)	483 (1.0)	8 (0.3)	457 (1.9)	
Benchmarking Participants							
Dubai, UAE	89 (0.1)	547 (2.0)	10 (0.1)	532 (6.1)	0 (0.0)	~ ~	11.1 (0.01)
Madrid, Spain	77 (3.8)	527 (2.0)	19 (3.6)	507 (5.9)	4 (1.4)	522 (8.7)	10.7 (0.14)
Moscow City, Russian Fed.	73 (4.2)	597 (2.6)	26 (4.3)	589 (4.1)	1 (0.6)	~ ~	10.4 (0.11)
Quebec, Canada	60 (4.4)	525 (2.8)	37 (4.4)	518 (4.0)	2 (0.8)	~ ~	10.1 (0.13)
Abu Dhabi, UAE	59 (1.1)	434 (3.6)	38 (1.1)	384 (4.8)	3 (0.1)	350 (12.3)	10.1 (0.04)
Ontario, Canada	42 (5.3)	529 (4.5)	51 (5.5)	525 (5.6)	7 (2.0)	480 (10.2)	9.6 (0.14)

This TIMSS context questionnaire scale was established in 2011 based on the combined response distribution of all countries that participated in TIMSS 2011. To provide a point of reference for country comparisons, the scale centerpoint of 10 was located at the mean of the combined distribution. The units of the scale were chosen so that 2 scale score points corresponded to the standard deviation of the distribution.

() Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

A tilde (~) indicates insufficient data to report achievement.

An "r" indicates data are available for at least 70% but less than 85% of the students. An "s" indicates data are available for at least 50% but less than 70% of the students.

SOURCE: IEA's Trends in International Mathematics and Science Study TIMSS 2019
Downloaded from <http://timss2019.org/download>

Exhibit 8.4: School Discipline – Principals’ Reports
Students’ Results based on Principals’ Reports

Country	Hardly Any Problems		Minor Problems		Moderate to Severe Problems		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Kazakhstan	78 (3.7)	491 (3.9)	11 (2.6)	480 (9.6)	11 (2.6)	467 (18.0)	11.7 (0.21)
Hong Kong SAR	76 (3.6)	586 (4.9)	24 (3.6)	555 (13.3)	0 (0.0)	~ ~	11.7 (0.12)
United Arab Emirates	72 (1.5)	486 (2.2)	25 (1.5)	437 (4.0)	3 (0.2)	383 (8.4)	11.6 (0.05)
Singapore	70 (0.0)	624 (4.6)	30 (0.0)	597 (7.6)	0 (0.0)	~ ~	11.4 (0.00)
Chinese Taipei	68 (3.0)	619 (3.4)	32 (3.0)	600 (5.7)	0 (0.0)	~ ~	11.7 (0.11)
Japan	68 (3.5)	598 (3.6)	25 (3.3)	590 (5.1)	7 (2.2)	576 (8.0)	11.0 (0.14)
Ireland	60 (4.1)	534 (3.3)	36 (4.0)	515 (4.4)	3 (1.5)	467 (19.4)	10.9 (0.14)
Bahrain	59 (0.2)	487 (1.9)	28 (0.2)	470 (2.7)	13 (0.1)	476 (8.0)	10.7 (0.01)
Saudi Arabia	58 (3.6)	399 (3.2)	24 (2.8)	391 (4.8)	18 (2.8)	381 (5.5)	10.8 (0.21)
Qatar	53 (3.9)	451 (5.9)	39 (3.5)	439 (9.3)	8 (1.9)	415 (14.6)	10.8 (0.15)
Oman	51 (3.4)	420 (4.6)	27 (3.5)	412 (7.1)	22 (3.1)	388 (7.7)	10.3 (0.20)
Russian Federation	51 (4.0)	547 (5.4)	48 (3.9)	540 (6.4)	1 (0.6)	~ ~	10.7 (0.11)
Korea, Rep. of	50 (4.6)	608 (4.1)	40 (4.3)	605 (4.3)	9 (2.6)	610 (7.1)	10.8 (0.19)
Australia	50 (3.2)	549 (5.5)	44 (3.4)	491 (5.8)	6 (1.7)	467 (7.6)	10.7 (0.10)
Romania	49 (4.1)	497 (6.5)	43 (4.1)	464 (5.5)	8 (2.6)	454 (15.7)	10.6 (0.19)
Lithuania	49 (4.5)	521 (4.3)	50 (4.5)	517 (4.8)	1 (0.7)	~ ~	10.7 (0.12)
Iran, Islamic Rep. of	47 (3.8)	465 (6.4)	46 (3.9)	431 (5.3)	7 (1.9)	419 (12.8)	10.6 (0.13)
Georgia	46 (4.3)	466 (5.9)	41 (4.1)	468 (6.4)	13 (3.0)	425 (11.3)	10.3 (0.19)
Israel	46 (3.6)	541 (7.2)	49 (3.8)	504 (6.4)	5 (1.6)	464 (20.2)	10.5 (0.11)
Hungary	45 (4.0)	535 (6.7)	50 (4.2)	508 (4.7)	5 (1.7)	436 (20.1)	10.4 (0.14)
Malaysia	45 (4.1)	477 (5.5)	49 (4.0)	450 (5.1)	6 (2.0)	424 (14.1)	10.5 (0.15)
Cyprus	r 44 (0.5)	529 (2.8)	40 (0.5)	483 (2.4)	17 (0.4)	475 (5.5)	10.2 (0.02)
England	s 43 (5.2)	534 (10.0)	57 (5.2)	511 (9.1)	0 (0.0)	~ ~	10.8 (0.13)
Lebanon	41 (4.3)	436 (4.3)	35 (4.0)	420 (5.9)	24 (3.7)	428 (7.9)	9.6 (0.22)
United States	40 (3.0)	549 (6.3)	54 (2.9)	503 (6.4)	6 (1.7)	466 (15.2)	10.3 (0.10)
Chile	38 (3.9)	464 (5.5)	51 (3.9)	429 (5.0)	12 (2.4)	418 (8.4)	10.1 (0.14)
New Zealand	37 (4.8)	510 (6.3)	61 (4.6)	474 (4.6)	2 (1.3)	~ ~	10.4 (0.16)
France	r 37 (4.3)	502 (4.3)	56 (4.7)	481 (3.6)	7 (2.5)	427 (7.7)	10.1 (0.14)
Turkey	36 (3.6)	519 (6.6)	44 (4.0)	482 (6.7)	19 (3.2)	483 (14.0)	9.8 (0.18)
Norway (9)	r 36 (4.7)	511 (3.7)	60 (4.8)	501 (4.3)	4 (1.7)	497 (10.3)	10.2 (0.14)
Jordan	36 (3.6)	432 (9.0)	41 (3.6)	418 (6.5)	23 (3.1)	406 (5.3)	9.8 (0.20)
Italy	33 (4.1)	508 (4.9)	62 (4.2)	493 (3.6)	5 (1.7)	497 (10.8)	10.1 (0.13)
Portugal	32 (3.8)	511 (6.0)	60 (4.1)	497 (4.4)	8 (2.4)	485 (15.1)	10.0 (0.13)
Kuwait	28 (3.9)	421 (9.7)	45 (4.2)	401 (5.9)	28 (3.8)	384 (9.7)	9.3 (0.21)
Finland	26 (3.3)	519 (4.6)	71 (3.3)	506 (2.9)	3 (1.6)	468 (11.4)	10.0 (0.10)
Egypt	25 (3.7)	432 (8.9)	34 (3.9)	407 (8.6)	41 (4.0)	407 (7.9)	8.6 (0.19)
Morocco	17 (3.1)	400 (7.3)	31 (3.2)	380 (5.6)	52 (3.5)	390 (3.5)	8.1 (0.19)
Sweden	14 (3.1)	522 (8.4)	78 (3.8)	503 (2.8)	9 (2.4)	475 (6.4)	9.4 (0.09)
South Africa (9)	11 (1.9)	420 (13.0)	50 (3.0)	395 (3.7)	39 (2.7)	373 (2.9)	8.7 (0.09)
International Average	45 (0.6)	503 (1.0)	43 (0.6)	481 (1.0)	11 (0.4)	448 (2.1)	
Benchmarking Participants							
Dubai, UAE	r 87 (0.2)	543 (2.5)	12 (0.2)	486 (7.4)	0 (0.0)	~ ~	12.0 (0.01)
Abu Dhabi, UAE	r 64 (1.3)	447 (4.4)	31 (1.3)	417 (4.7)	5 (0.1)	361 (11.0)	11.3 (0.06)
Moscow City, Russian Fed.	56 (4.6)	579 (5.4)	44 (4.6)	570 (6.4)	0 (0.0)	~ ~	10.8 (0.09)
Quebec, Canada	46 (4.7)	555 (5.0)	49 (4.9)	540 (6.4)	5 (2.2)	538 (7.0)	10.5 (0.15)
Ontario, Canada	r 37 (5.1)	542 (5.9)	56 (5.5)	522 (8.1)	6 (2.3)	499 (15.6)	10.2 (0.15)
Western Cape, RSA (9)	13 (2.3)	559 (9.4)	43 (3.9)	445 (7.2)	43 (3.9)	402 (5.1)	8.7 (0.12)
Gauteng, RSA (9)	10 (2.1)	502 (13.2)	44 (4.3)	427 (5.5)	46 (3.9)	395 (3.9)	8.5 (0.10)

This TIMSS context questionnaire scale was established in 2011 based on the combined response distribution of all countries that participated in TIMSS 2011. To provide a point of reference for country comparisons, the scale centerpoint of 10 was located at the mean of the combined distribution. The units of the scale were chosen so that 2 scale score points corresponded to the standard deviation of the distribution.

() Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

A tilde (~) indicates insufficient data to report achievement.

An "r" indicates data are available for at least 70% but less than 85% of the students. An "s" indicates data are available for at least 50% but less than 70% of the students.

SOURCE: IEA's Trends in International Mathematics and Science Study TIMSS 2019
 Downloaded from <http://timss2019.org/download>

Exhibit 8.5: School Discipline – Principals' Reports

Students' Results based on Principals' Reports

Country	Hardly Any Problems		Minor Problems		Moderate to Severe Problems		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Kazakhstan	78 (3.7)	481 (3.7)	11 (2.6)	472 (10.9)	11 (2.6)	464 (18.0)	11.7 (0.21)
Hong Kong SAR	76 (3.6)	505 (6.2)	24 (3.6)	499 (13.2)	0 (0.0)	~ ~	11.7 (0.12)
United Arab Emirates	72 (1.5)	489 (2.7)	25 (1.5)	430 (5.0)	3 (0.2)	345 (7.6)	11.6 (0.05)
Singapore	70 (0.0)	615 (4.4)	30 (0.0)	590 (7.7)	0 (0.0)	~ ~	11.4 (0.00)
Chinese Taipei	68 (3.0)	579 (2.4)	32 (3.0)	564 (4.3)	0 (0.0)	~ ~	11.7 (0.11)
Japan	68 (3.5)	572 (2.7)	25 (3.3)	565 (4.0)	7 (2.2)	559 (6.6)	11.0 (0.14)
Ireland	60 (4.1)	535 (3.5)	36 (4.0)	513 (5.1)	3 (1.5)	469 (23.4)	10.9 (0.14)
Bahrain	59 (0.2)	496 (2.4)	28 (0.2)	465 (2.7)	13 (0.1)	485 (4.8)	10.7 (0.01)
Saudi Arabia	58 (3.6)	438 (3.7)	24 (2.8)	427 (5.9)	18 (2.8)	416 (5.6)	10.8 (0.21)
Qatar	53 (3.9)	479 (5.7)	39 (3.5)	470 (10.0)	8 (1.9)	462 (11.2)	10.8 (0.15)
Oman	51 (3.4)	466 (4.8)	27 (3.5)	456 (8.1)	22 (3.1)	437 (8.7)	10.3 (0.20)
Russian Federation	51 (4.0)	546 (4.8)	48 (3.9)	540 (5.7)	1 (0.6)	~ ~	10.7 (0.11)
Korea, Rep. of	50 (4.6)	561 (3.3)	40 (4.3)	560 (3.3)	9 (2.6)	560 (5.5)	10.8 (0.19)
Australia	50 (3.2)	556 (4.1)	44 (3.4)	506 (5.1)	6 (1.7)	482 (7.7)	10.7 (0.10)
Romania	49 (4.1)	486 (6.2)	43 (4.1)	457 (4.8)	8 (2.6)	445 (11.2)	10.6 (0.19)
Lithuania	49 (4.5)	534 (4.1)	50 (4.5)	531 (4.5)	1 (0.7)	~ ~	10.7 (0.12)
Iran, Islamic Rep. of	47 (3.8)	466 (6.1)	46 (3.9)	436 (5.3)	7 (1.9)	426 (12.6)	10.6 (0.13)
Georgia	46 (4.3)	451 (5.3)	41 (4.1)	451 (5.7)	13 (3.0)	420 (11.1)	10.3 (0.19)
Israel	46 (3.6)	533 (6.5)	49 (3.8)	499 (6.5)	5 (1.6)	472 (20.8)	10.5 (0.11)
Hungary	45 (4.0)	546 (5.7)	50 (4.2)	523 (4.3)	5 (1.7)	457 (18.5)	10.4 (0.14)
Malaysia	45 (4.1)	476 (5.7)	49 (4.0)	449 (5.5)	6 (2.0)	430 (16.0)	10.5 (0.15)
Cyprus	r 44 (0.5)	509 (3.0)	40 (0.5)	466 (3.3)	17 (0.4)	461 (5.9)	10.2 (0.02)
England	s 43 (5.2)	535 (9.7)	57 (5.2)	512 (8.3)	0 (0.0)	~ ~	10.8 (0.13)
Lebanon	41 (4.3)	390 (7.7)	35 (4.0)	362 (8.7)	24 (3.7)	374 (12.1)	9.6 (0.22)
United States	40 (3.0)	555 (5.0)	54 (2.9)	511 (6.6)	6 (1.7)	473 (14.6)	10.3 (0.10)
Chile	38 (3.9)	486 (5.1)	51 (3.9)	451 (4.9)	12 (2.4)	439 (8.7)	10.1 (0.14)
New Zealand	37 (4.8)	524 (7.6)	61 (4.6)	493 (4.7)	2 (1.3)	~ ~	10.4 (0.16)
France	r 37 (4.3)	511 (4.3)	56 (4.7)	484 (3.9)	7 (2.5)	426 (8.3)	10.1 (0.14)
Turkey	36 (3.6)	535 (5.7)	44 (4.0)	504 (5.7)	19 (3.2)	505 (12.5)	9.8 (0.18)
Norway (9)	r 36 (4.7)	506 (5.1)	60 (4.8)	492 (4.7)	4 (1.7)	488 (12.6)	10.2 (0.14)
Jordan	36 (3.6)	468 (10.2)	41 (3.6)	446 (7.0)	23 (3.1)	437 (7.4)	9.8 (0.20)
Italy	33 (4.1)	509 (4.5)	62 (4.2)	498 (3.6)	5 (1.7)	498 (11.1)	10.1 (0.13)
Portugal	32 (3.8)	527 (5.1)	60 (4.1)	516 (4.0)	8 (2.4)	506 (15.0)	10.0 (0.13)
Kuwait	28 (3.9)	468 (9.6)	45 (4.2)	440 (7.5)	28 (3.8)	423 (10.7)	9.3 (0.21)
Finland	26 (3.3)	555 (5.4)	71 (3.3)	540 (3.7)	3 (1.6)	491 (8.7)	10.0 (0.10)
Egypt	25 (3.7)	409 (8.8)	34 (3.9)	386 (9.9)	41 (4.0)	381 (8.3)	8.6 (0.19)
Morocco	17 (3.1)	406 (8.7)	31 (3.2)	384 (7.0)	52 (3.5)	396 (4.2)	8.1 (0.19)
Sweden	14 (3.1)	545 (9.6)	78 (3.8)	522 (3.5)	9 (2.4)	484 (10.2)	9.4 (0.09)
South Africa (9)	11 (1.9)	406 (18.4)	50 (3.0)	377 (5.0)	39 (2.7)	350 (4.3)	8.7 (0.09)
International Average	45 (0.6)	504 (1.0)	43 (0.6)	482 (1.0)	11 (0.4)	452 (2.1)	
Benchmarking Participants							
Dubai, UAE	r 87 (0.2)	554 (2.3)	12 (0.2)	499 (7.6)	0 (0.0)	~ ~	12.0 (0.01)
Abu Dhabi, UAE	r 64 (1.3)	436 (5.4)	31 (1.3)	395 (6.3)	5 (0.1)	305 (8.0)	11.3 (0.06)
Moscow City, Russian Fed.	56 (4.6)	568 (4.0)	44 (4.6)	565 (4.5)	0 (0.0)	~ ~	10.8 (0.09)
Quebec, Canada	46 (4.7)	547 (4.5)	49 (4.9)	535 (6.0)	5 (2.2)	531 (8.9)	10.5 (0.15)
Ontario, Canada	r 37 (5.1)	531 (5.4)	56 (5.5)	516 (5.2)	6 (2.3)	494 (14.7)	10.2 (0.15)
Western Cape, RSA (9)	13 (2.3)	585 (11.5)	43 (3.9)	443 (8.9)	43 (3.9)	392 (6.2)	8.7 (0.12)
Gauteng, RSA (9)	10 (2.1)	524 (16.6)	44 (4.3)	432 (7.0)	46 (3.9)	388 (5.2)	8.5 (0.10)

This TIMSS context questionnaire scale was established in 2011 based on the combined response distribution of all countries that participated in TIMSS 2011. To provide a point of reference for country comparisons, the scale centerpoint of 10 was located at the mean of the combined distribution. The units of the scale were chosen so that 2 scale score points corresponded to the standard deviation of the distribution.

() Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

A tilde (~) indicates insufficient data to report achievement.

An "r" indicates data are available for at least 70% but less than 85% of the students. An "s" indicates data are available for at least 50% but less than 70% of the students.

SOURCE: IEA's Trends in International Mathematics and Science Study TIMSS 2019

Downloaded from <http://timss2019.org/download>

Safe and Orderly School

In addition to principals' reports, previous TIMSS assessments have also asked teachers about their perceptions of school safety and found that a strong perception of safety and order in school was related to higher average achievement in mathematics and science. For TIMSS 2019, teachers of students in both the fourth and eighth grade assessments were asked the degree to which they agreed or disagreed with eight statements on the *Safe and Orderly School* scale (see About the Scale in Exhibit 8.6). Based on their teachers' responses, students were categorized as being in "very safe and orderly" schools, "somewhat safe and orderly" schools, and "less than safe and orderly" schools.

Exhibits 8.7 and 8.8 present the percentages of fourth grade students in the three categories in relation to average mathematics achievement and average science achievement, respectively. Across countries, on average, more than half the fourth grade students (61%) attended schools judged by their teachers to be "very safe and orderly," with almost all of the remaining students (36%) in schools perceived to be "somewhat safe and orderly." Internationally, on average, students attending "very safe and orderly" schools as reported by their teachers had the highest average mathematics achievement (507) and science achievement (497) compared with students in "somewhat safe and orderly" schools (495 in mathematics and 484 in science). Only small percentages of students (4%, on average) were in schools judged to be "less than safe and orderly."

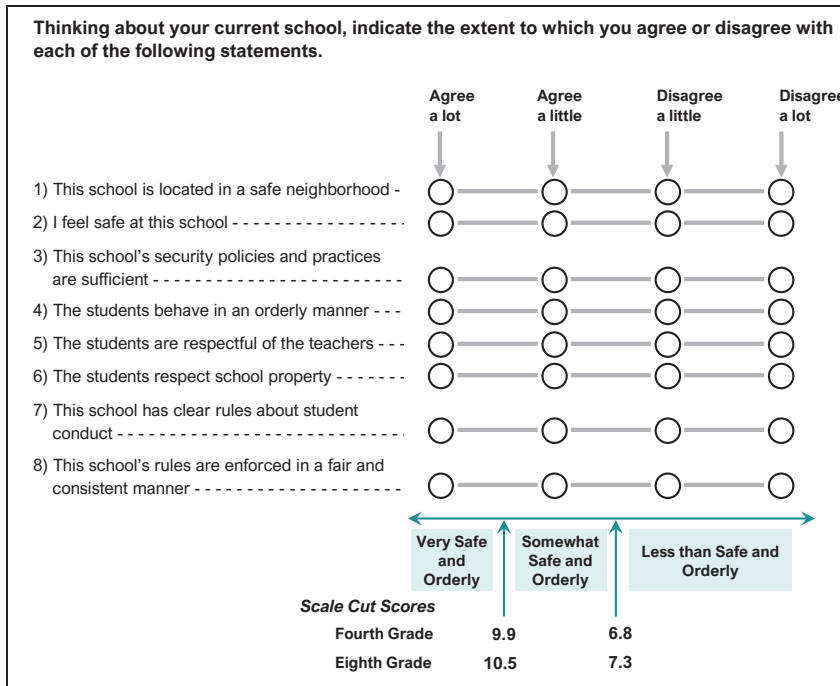
Exhibits 8.9 and 8.10 present the corresponding *Safe and Orderly School* scale results at the eighth grade in relation to mathematics achievement and science achievement, respectively. Similar to the fourth grade, almost all the eighth grade students (93% on average across countries) were in "very safe and orderly" or "somewhat safe and orderly" schools, but smaller percentages of eighth grade students were in the "very safe and orderly" category, and larger percentages of were in the "somewhat safe and orderly" category. On average, 48 percent of eighth grade students attended schools judged by their teachers to be "very safe and orderly," 45 percent were in "somewhat safe and orderly" schools, and 6 percent were in "less than safe and orderly" schools. There was a strong positive association between eighth grade students' average achievement and their teachers' reports about school safety, with students in "very safe and orderly" schools having average mathematics achievement 41 points higher than students in "less than safe and orderly" schools (501 vs. 460). Similarly, students in "very safe and orderly" schools had average science achievement 35 points higher than students in "less than safe and orderly" schools (501 vs. 466).

Exhibit 8.6: Safe and Orderly School – Teachers’ Reports

Students’ Results based on Teachers’ Reports

About the Scale

Students were scored according to their teachers’ responses to eight statements on the *Safe and Orderly School* scale. Cut scores divide the scale into three categories. Students in **Very Safe and Orderly** schools had a score at or above the cut score corresponding to their teachers “agreeing a lot” with four of the eight statements and “agreeing a little” with the other four, on average. Students in **Less than Safe and Orderly** schools had a score at or below the cut score corresponding to their teachers “disagreeing a little” with four of the eight statements and “agreeing a little” with the other four, on average. All other students were in **Somewhat Safe and Orderly** schools.



SOURCE: IEA's Trends in International Mathematics and Science Study TIMSS 2019
Downloaded from <http://timss2019.org/download>

Exhibit 8.7: Safe and Orderly School – Teachers’ Reports

Students’ Results based on Teachers’ Reports

Country	Very Safe and Orderly		Somewhat Safe and Orderly		Less than Safe and Orderly		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Albania	97 (1.3)	494 (3.5)	3 (1.3)	502 (17.7)	0 (0.0)	~ ~	12.6 (0.10)
Kosovo	91 (2.3)	445 (3.2)	9 (2.4)	432 (10.3)	0 (0.5)	~ ~	12.2 (0.12)
Azerbaijan	86 (2.8)	513 (2.9)	13 (2.6)	525 (9.0)	1 (0.8)	~ ~	11.5 (0.14)
Armenia	85 (3.0)	502 (2.8)	15 (3.0)	483 (6.4)	0 (0.2)	~ ~	11.4 (0.13)
Montenegro	85 (1.7)	453 (2.2)	14 (1.7)	452 (7.7)	0 (0.0)	~ ~	11.5 (0.07)
Kuwait	82 (2.9)	387 (5.4)	17 (2.8)	365 (13.2)	1 (0.7)	~ ~	11.3 (0.13)
Georgia	81 (3.3)	479 (3.9)	18 (3.3)	493 (7.7)	1 (0.5)	~ ~	11.2 (0.14)
Bosnia and Herzegovina	80 (2.8)	452 (3.1)	18 (2.7)	454 (5.2)	1 (0.7)	~ ~	11.3 (0.13)
Saudi Arabia	79 (3.1)	403 (4.6)	20 (3.0)	382 (8.0)	1 (0.7)	~ ~	11.3 (0.13)
Pakistan	79 (3.9)	343 (14.0)	19 (3.5)	293 (17.4)	2 (1.4)	~ ~	11.2 (0.27)
Ireland	78 (3.1)	553 (2.8)	19 (2.9)	535 (5.8)	3 (1.4)	511 (11.3)	11.5 (0.15)
North Macedonia	76 (3.4)	469 (6.3)	22 (3.4)	484 (10.1)	1 (0.7)	~ ~	11.2 (0.15)
Spain	76 (3.1)	508 (2.3)	22 (2.9)	489 (3.8)	2 (0.9)	~ ~	11.2 (0.14)
Northern Ireland	75 (3.6)	572 (3.4)	23 (3.4)	545 (6.1)	2 (1.5)	~ ~	11.6 (0.18)
United Arab Emirates	r 75 (1.0)	496 (2.0)	22 (0.9)	441 (5.7)	3 (0.4)	393 (11.9)	11.4 (0.05)
Qatar	74 (2.5)	448 (4.6)	25 (2.5)	452 (8.1)	2 (0.9)	~ ~	11.2 (0.13)
Bulgaria	73 (3.1)	521 (5.6)	26 (2.9)	497 (7.3)	1 (0.8)	~ ~	10.8 (0.13)
Serbia	73 (4.2)	504 (3.9)	24 (4.0)	518 (6.2)	3 (1.4)	516 (10.9)	10.8 (0.15)
Kazakhstan	72 (3.4)	514 (3.1)	27 (3.3)	510 (5.2)	1 (0.6)	~ ~	11.2 (0.14)
Portugal	71 (2.9)	533 (2.8)	27 (2.9)	509 (5.1)	1 (0.4)	~ ~	10.7 (0.12)
Philippines	70 (3.8)	304 (7.4)	27 (3.8)	272 (10.7)	2 (1.2)	~ ~	10.8 (0.15)
Netherlands	r 69 (3.6)	541 (3.3)	28 (3.6)	529 (3.4)	3 (1.5)	513 (7.3)	10.6 (0.17)
Singapore	68 (2.5)	627 (4.6)	30 (2.5)	624 (6.4)	3 (0.9)	594 (29.4)	10.9 (0.10)
Iran, Islamic Rep. of	67 (3.1)	445 (4.8)	30 (3.1)	439 (8.4)	2 (1.1)	~ ~	10.7 (0.13)
New Zealand	67 (2.8)	496 (3.4)	29 (2.5)	473 (5.6)	4 (1.3)	451 (20.6)	10.7 (0.13)
Oman	66 (3.4)	435 (5.3)	33 (3.4)	427 (7.5)	1 (0.5)	~ ~	10.7 (0.13)
Bahrain	65 (2.8)	481 (3.1)	33 (2.9)	480 (5.4)	2 (1.1)	~ ~	10.7 (0.11)
Australia	64 (3.5)	529 (3.7)	28 (3.0)	504 (7.4)	8 (2.3)	479 (9.0)	10.6 (0.16)
Lithuania	63 (3.6)	543 (3.8)	36 (3.5)	539 (3.3)	1 (0.6)	~ ~	10.4 (0.12)
Russian Federation	62 (3.5)	567 (4.4)	36 (3.4)	566 (4.5)	2 (1.0)	~ ~	10.3 (0.14)
Hong Kong SAR	61 (4.3)	612 (3.7)	38 (4.4)	585 (5.4)	0 (0.5)	~ ~	10.5 (0.16)
Austria	60 (2.7)	545 (2.4)	37 (2.8)	533 (3.5)	2 (0.9)	~ ~	10.2 (0.10)
Norway (5)	r 59 (4.1)	549 (3.4)	38 (4.0)	540 (3.5)	3 (1.1)	535 (6.6)	10.2 (0.18)
Cyprus	59 (3.4)	534 (3.8)	37 (3.1)	532 (4.0)	4 (1.2)	539 (16.5)	10.4 (0.16)
Latvia	58 (3.6)	552 (2.8)	40 (3.4)	541 (4.1)	2 (1.3)	~ ~	10.0 (0.10)
Italy	57 (3.7)	518 (2.8)	41 (3.5)	512 (4.2)	2 (1.2)	~ ~	10.0 (0.12)
England	s 55 (5.6)	564 (6.1)	41 (5.6)	553 (7.9)	4 (1.9)	537 (20.9)	10.4 (0.22)
Morocco	54 (3.5)	399 (5.4)	40 (3.3)	367 (6.4)	6 (1.8)	336 (9.4)	10.1 (0.16)
Slovak Republic	53 (3.0)	515 (4.2)	45 (3.0)	504 (4.7)	2 (0.9)	~ ~	9.8 (0.10)
Czech Republic	52 (4.1)	539 (3.6)	47 (4.1)	527 (4.3)	1 (0.5)	~ ~	10.0 (0.14)
Poland	51 (3.8)	520 (3.4)	47 (3.9)	520 (4.4)	2 (1.0)	~ ~	9.7 (0.12)
Turkey (5)	51 (3.8)	538 (5.5)	41 (3.9)	515 (7.6)	8 (2.0)	461 (12.4)	9.8 (0.16)
Canada	48 (2.9)	515 (4.4)	45 (2.9)	512 (3.6)	7 (1.3)	493 (7.8)	10.0 (0.13)
Germany	47 (3.8)	534 (3.1)	46 (4.0)	513 (3.9)	7 (1.8)	486 (10.4)	9.6 (0.14)
Denmark	47 (4.1)	531 (3.3)	44 (4.1)	520 (3.4)	9 (2.1)	513 (5.9)	9.7 (0.16)
United States	47 (2.7)	552 (3.3)	43 (2.6)	527 (3.8)	10 (1.3)	495 (6.1)	9.8 (0.13)
Croatia	47 (3.2)	508 (3.6)	52 (3.2)	510 (2.7)	1 (0.7)	~ ~	10.0 (0.12)
Hungary	45 (3.7)	532 (4.5)	48 (3.9)	524 (4.7)	7 (1.9)	476 (16.1)	9.5 (0.12)
Malta	45 (0.4)	517 (1.8)	48 (0.4)	505 (2.1)	8 (0.2)	491 (3.0)	9.7 (0.02)
Chinese Taipei	40 (3.7)	602 (2.7)	54 (3.6)	596 (2.7)	6 (1.9)	603 (5.9)	9.4 (0.15)
France	37 (3.2)	501 (4.7)	60 (3.2)	477 (4.0)	3 (1.0)	456 (13.3)	9.5 (0.11)
Sweden	37 (3.9)	538 (4.3)	59 (3.9)	514 (3.3)	4 (1.6)	497 (13.9)	9.3 (0.13)
South Africa (5)	35 (3.5)	387 (7.8)	51 (4.0)	366 (5.8)	14 (2.0)	366 (8.8)	9.0 (0.12)
Korea, Rep. of	33 (4.1)	610 (4.1)	61 (4.2)	594 (2.9)	6 (1.7)	599 (7.3)	9.5 (0.18)
Chile	31 (4.1)	453 (6.0)	59 (4.2)	438 (3.8)	10 (2.2)	420 (8.8)	9.0 (0.16)
Finland	31 (2.9)	542 (3.7)	63 (3.1)	528 (2.4)	6 (1.5)	516 (9.5)	9.2 (0.10)
Belgium (Flemish)	28 (3.0)	544 (3.1)	66 (3.0)	531 (2.3)	5 (1.5)	505 (8.8)	9.1 (0.11)
Japan	8 (1.8)	596 (3.8)	80 (2.9)	594 (2.1)	12 (2.6)	583 (3.3)	8.2 (0.09)
International Average	61 (0.4)	507 (0.6)	36 (0.4)	495 (0.9)	4 (0.2)	495 (2.4)	
Benchmarking Participants							
Dubai, UAE	r 85 (1.6)	550 (2.2)	15 (1.7)	525 (8.7)	0 (0.4)	~ ~	11.9 (0.08)
Madrid, Spain	72 (3.8)	523 (2.1)	25 (3.9)	508 (5.1)	2 (1.5)	~ ~	11.1 (0.14)
Moscow City, Russian Fed.	60 (4.3)	595 (2.6)	39 (4.3)	588 (4.0)	1 (0.7)	~ ~	10.4 (0.16)
Abu Dhabi, UAE	57 (2.1)	470 (3.5)	36 (2.1)	406 (5.8)	6 (1.1)	388 (13.1)	10.5 (0.10)
Ontario, Canada	r 49 (5.7)	522 (8.4)	43 (5.3)	506 (7.2)	9 (2.3)	484 (10.6)	10.0 (0.26)
Quebec, Canada	31 (4.1)	537 (3.9)	62 (4.4)	531 (3.1)	7 (2.3)	523 (7.4)	9.2 (0.12)

This TIMSS context questionnaire scale was established in 2011 based on the combined response distribution of all countries that participated in TIMSS 2011. To provide a point of reference for country comparisons, the scale centerpoint of 10 was located at the mean of the combined distribution. The units of the scale were chosen so that 2 scale score points corresponded to the standard deviation of the distribution.

() Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

A tilde (~) indicates insufficient data to report achievement.

An "r" indicates data are available for at least 70% but less than 85% of the students. An "s" indicates data are available for at least 50% but less than 70% of the students.

Exhibit 8.8: Safe and Orderly School – Teachers' Reports

Students' Results based on Teachers' Reports

Country	Very Safe and Orderly		Somewhat Safe and Orderly		Less than Safe and Orderly		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Albania	97 (1.2)	489 (3.7)	3 (1.2)	504 (18.3)	0 (0.0)	~ ~	12.6 (0.10)
Kosovo	91 (2.3)	414 (4.0)	9 (2.4)	396 (12.3)	0 (0.5)	~ ~	12.2 (0.12)
Armenia	88 (2.2)	468 (3.9)	12 (2.2)	466 (6.1)	0 (0.2)	~ ~	11.5 (0.12)
Azerbaijan	85 (2.8)	425 (3.4)	13 (2.6)	441 (9.4)	1 (0.8)	~ ~	11.5 (0.14)
Montenegro	85 (1.7)	453 (2.8)	14 (1.7)	455 (8.6)	0 (0.0)	~ ~	11.5 (0.07)
Pakistan	81 (3.4)	303 (15.5)	17 (3.0)	249 (17.2)	2 (1.4)	~ ~	11.2 (0.25)
Bosnia and Herzegovina	80 (2.8)	459 (3.7)	18 (2.7)	460 (5.7)	1 (0.7)	~ ~	11.3 (0.13)
Kuwait	78 (3.3)	401 (7.5)	22 (3.3)	360 (10.6)	0 (0.0)	~ ~	11.2 (0.15)
Georgia	78 (3.5)	453 (4.3)	21 (3.4)	458 (8.9)	1 (0.5)	~ ~	11.1 (0.13)
Ireland	78 (3.1)	533 (3.7)	19 (2.9)	512 (6.4)	3 (1.4)	491 (10.4)	11.5 (0.15)
Philippines	77 (3.3)	251 (8.4)	21 (3.3)	237 (15.4)	1 (0.9)	~ ~	11.2 (0.14)
North Macedonia	76 (3.4)	422 (7.3)	22 (3.4)	442 (10.8)	1 (0.7)	~ ~	11.2 (0.15)
Saudi Arabia	76 (3.6)	412 (4.4)	21 (3.5)	387 (10.7)	2 (1.4)	~ ~	11.3 (0.17)
Spain	76 (3.4)	514 (2.6)	23 (3.3)	502 (6.3)	2 (0.9)	~ ~	11.1 (0.14)
United Arab Emirates	75 (1.0)	490 (2.7)	22 (1.1)	419 (4.6)	2 (0.6)	~ ~	11.4 (0.05)
Northern Ireland	75 (3.6)	524 (2.6)	23 (3.4)	503 (4.4)	2 (1.5)	~ ~	11.6 (0.18)
Qatar	75 (2.9)	447 (5.1)	22 (2.8)	455 (12.0)	3 (1.4)	457 (18.4)	11.3 (0.15)
Kazakhstan	73 (3.4)	497 (4.0)	26 (3.3)	488 (6.6)	1 (0.6)	~ ~	11.3 (0.14)
Serbia	73 (4.2)	514 (4.2)	24 (4.0)	523 (6.3)	3 (1.4)	527 (10.2)	10.8 (0.15)
Bulgaria	72 (3.0)	531 (6.4)	25 (2.8)	498 (8.7)	3 (1.4)	466 (39.6)	10.6 (0.15)
Portugal	71 (2.9)	510 (2.6)	27 (2.9)	491 (4.6)	1 (0.4)	~ ~	10.7 (0.12)
Oman	70 (3.2)	436 (5.5)	29 (3.1)	438 (8.9)	2 (0.8)	~ ~	10.7 (0.13)
Netherlands	69 (3.6)	525 (3.9)	28 (3.6)	507 (4.9)	3 (1.5)	487 (9.7)	10.6 (0.17)
Bahrain	68 (3.0)	500 (3.9)	28 (2.7)	480 (8.3)	4 (1.6)	450 (15.9)	10.6 (0.12)
Iran, Islamic Rep. of	67 (3.1)	444 (5.1)	30 (3.1)	435 (8.7)	2 (1.1)	~ ~	10.7 (0.13)
Singapore	67 (2.0)	594 (4.2)	31 (2.0)	597 (5.7)	2 (0.7)	~ ~	10.9 (0.08)
New Zealand	66 (2.8)	510 (3.0)	29 (2.5)	491 (5.1)	4 (1.3)	467 (16.6)	10.8 (0.13)
Australia	65 (3.5)	544 (3.0)	26 (2.9)	518 (6.1)	8 (2.3)	497 (5.8)	10.6 (0.17)
Lithuania	65 (3.6)	540 (3.3)	35 (3.5)	534 (3.0)	1 (0.6)	~ ~	10.4 (0.11)
Norway (5)	62 (4.2)	541 (3.1)	34 (4.0)	539 (4.5)	4 (1.6)	531 (6.8)	10.3 (0.19)
Austria	62 (2.4)	532 (2.9)	36 (2.5)	509 (4.3)	2 (0.9)	~ ~	10.2 (0.10)
Russian Federation	61 (3.6)	565 (4.0)	37 (3.5)	570 (4.0)	2 (1.0)	~ ~	10.3 (0.13)
Cyprus	57 (3.9)	515 (4.1)	40 (3.9)	509 (3.9)	3 (1.3)	505 (15.7)	10.4 (0.17)
Italy	57 (3.7)	513 (3.6)	41 (3.5)	506 (4.3)	2 (1.2)	~ ~	10.0 (0.12)
Latvia	56 (4.0)	545 (2.7)	44 (3.9)	538 (4.3)	1 (0.5)	~ ~	10.0 (0.11)
Hong Kong SAR	55 (4.2)	536 (4.5)	42 (4.2)	528 (5.5)	2 (1.4)	~ ~	10.3 (0.17)
England	55 (5.6)	542 (5.5)	41 (5.6)	535 (6.8)	4 (1.9)	515 (21.4)	10.4 (0.22)
Poland	55 (4.1)	529 (3.2)	42 (4.0)	536 (4.4)	3 (1.4)	528 (10.6)	9.8 (0.13)
Morocco	55 (3.3)	393 (9.1)	43 (3.6)	354 (6.5)	2 (1.1)	~ ~	10.2 (0.14)
Slovak Republic	54 (3.0)	528 (4.1)	43 (3.0)	512 (6.0)	3 (1.1)	510 (26.5)	9.9 (0.12)
Czech Republic	52 (3.9)	540 (3.2)	47 (3.9)	527 (3.9)	1 (0.5)	~ ~	9.9 (0.13)
Turkey (5)	52 (3.9)	538 (5.2)	41 (3.4)	519 (6.4)	7 (2.0)	481 (20.0)	9.9 (0.16)
Germany	50 (3.9)	530 (3.3)	44 (3.9)	509 (4.0)	6 (1.8)	484 (14.5)	9.7 (0.15)
Canada	49 (2.5)	532 (2.6)	44 (2.5)	520 (2.9)	7 (1.3)	500 (4.5)	10.0 (0.11)
Hungary	49 (3.7)	534 (4.0)	46 (3.9)	529 (4.7)	5 (1.8)	487 (14.2)	9.7 (0.12)
Denmark	48 (3.6)	528 (3.5)	40 (3.9)	519 (3.8)	12 (2.1)	512 (4.6)	9.7 (0.14)
Croatia	47 (3.2)	523 (3.2)	52 (3.2)	524 (2.6)	1 (0.7)	~ ~	10.0 (0.12)
United States	46 (2.8)	556 (3.8)	44 (2.6)	531 (3.8)	10 (1.5)	493 (6.4)	9.8 (0.13)
Malta	45 (0.4)	504 (1.9)	47 (0.4)	490 (1.9)	8 (0.2)	481 (5.0)	9.7 (0.02)
Chinese Taipei	42 (3.5)	560 (2.6)	52 (3.7)	557 (2.5)	5 (1.8)	551 (7.4)	9.6 (0.15)
South Africa (5)	42 (3.5)	341 (9.1)	46 (3.8)	314 (7.8)	12 (2.1)	319 (12.2)	9.3 (0.15)
Sweden	38 (4.2)	552 (4.1)	56 (4.2)	534 (3.7)	6 (1.6)	511 (13.1)	9.3 (0.13)
France	37 (3.0)	501 (4.7)	60 (3.1)	482 (3.9)	3 (1.0)	452 (13.7)	9.5 (0.11)
Korea, Rep. of	35 (3.7)	595 (3.9)	59 (3.6)	584 (2.6)	6 (2.0)	582 (7.0)	9.5 (0.16)
Finland	32 (2.8)	562 (3.2)	62 (3.0)	552 (3.1)	7 (1.5)	538 (10.4)	9.2 (0.11)
Chile	28 (3.5)	483 (5.7)	60 (4.2)	465 (3.4)	12 (2.6)	446 (8.7)	8.9 (0.15)
Belgium (Flemish)	28 (2.9)	512 (3.3)	66 (2.9)	499 (2.5)	6 (1.6)	473 (10.2)	9.1 (0.11)
Japan	11 (2.8)	564 (6.3)	80 (3.4)	562 (2.1)	9 (2.2)	553 (4.2)	8.4 (0.11)
International Average	61 (0.4)	497 (0.6)	35 (0.4)	484 (0.9)	4 (0.2)	493 (2.7)	
Benchmarking Participants							
Dubai, UAE	85 (1.4)	553 (2.4)	14 (1.4)	518 (7.3)	0 (0.0)	~ ~	12.1 (0.08)
Madrid, Spain	75 (3.8)	528 (2.1)	22 (3.4)	510 (3.6)	3 (1.7)	473 (18.1)	11.0 (0.18)
Abu Dhabi, UAE	63 (2.0)	449 (4.3)	32 (2.1)	370 (6.8)	6 (1.3)	357 (17.0)	10.5 (0.10)
Moscow City, Russian Fed.	60 (4.3)	596 (2.6)	39 (4.3)	593 (4.0)	1 (0.7)	~ ~	10.4 (0.16)
Ontario, Canada	52 (4.7)	536 (4.9)	38 (4.7)	522 (5.5)	10 (2.5)	497 (7.2)	10.1 (0.21)
Quebec, Canada	30 (4.0)	527 (3.7)	64 (4.4)	522 (3.3)	6 (2.4)	508 (6.4)	9.1 (0.13)

This TIMSS context questionnaire scale was established in 2011 based on the combined response distribution of all countries that participated in TIMSS 2011. To provide a point of reference for country comparisons, the scale centerpoint of 10 was located at the mean of the combined distribution. The units of the scale were chosen so that 2 scale score points corresponded to the standard deviation of the distribution.

() Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

A tilde (~) indicates insufficient data to report achievement.

An "r" indicates data are available for at least 70% but less than 85% of the students. An "s" indicates data are available for at least 50% but less than 70% of the students.

SOURCE: IEA's Trends in International Mathematics and Science Study TIMSS 2019
Downloaded from <http://timss2019.org/download>

Exhibit 8.9: Safe and Orderly School – Teachers’ Reports

Students’ Results based on Teachers’ Reports

Country	Very Safe and Orderly		Somewhat Safe and Orderly		Less than Safe and Orderly		Average Scale Score	
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement		
Kuwait	77 (3.3)	405 (5.2)	22 (3.3)	392 (10.5)	1 (0.5)	~ ~	11.5 (0.13)	
Kazakhstan	74 (3.1)	486 (4.2)	26 (3.1)	487 (6.8)	0 (0.0)	~ ~	11.6 (0.12)	
United Arab Emirates	72 (1.6)	491 (2.8)	25 (1.6)	432 (5.4)	2 (0.4)	~ ~	11.9 (0.06)	
Romania	70 (3.4)	486 (5.6)	29 (3.5)	465 (8.3)	1 (0.6)	~ ~	11.5 (0.14)	
Saudi Arabia	70 (3.5)	397 (2.9)	27 (3.4)	383 (4.7)	3 (1.5)	379 (19.7)	11.5 (0.16)	
Georgia	65 (4.1)	465 (5.8)	34 (4.1)	456 (7.9)	0 (0.4)	~ ~	11.0 (0.12)	
Qatar	64 (3.4)	451 (6.5)	32 (3.3)	429 (6.0)	4 (1.2)	441 (16.1)	11.2 (0.15)	
Ireland	62 (2.8)	537 (3.6)	33 (2.6)	509 (4.2)	5 (1.3)	475 (19.2)	11.1 (0.13)	
Egypt	61 (4.4)	421 (6.7)	36 (4.3)	405 (8.6)	3 (1.4)	356 (20.1)	10.9 (0.16)	
Oman	61 (3.6)	417 (4.2)	39 (3.6)	403 (5.2)	0 (0.0)	~ ~	11.0 (0.12)	
Iran, Islamic Rep. of	59 (2.9)	453 (5.2)	36 (2.7)	439 (8.0)	4 (1.4)	413 (18.6)	10.9 (0.13)	
Australia	59 (3.0)	535 (5.9)	35 (2.9)	502 (6.4)	6 (1.7)	472 (19.9)	10.7 (0.14)	
Singapore	58 (2.9)	621 (5.5)	38 (2.9)	610 (6.8)	5 (0.8)	599 (11.0)	11.1 (0.12)	
England	s	57 (5.6)	532 (9.4)	35 (5.4)	505 (14.7)	8 (3.1)	519 (24.0)	10.7 (0.22)
Lithuania	55 (3.6)	524 (4.8)	43 (3.5)	517 (4.5)	2 (0.8)	~ ~	10.6 (0.14)	
Israel	55 (2.9)	533 (7.5)	37 (3.0)	516 (9.1)	8 (1.8)	442 (15.6)	10.7 (0.14)	
Hong Kong SAR	54 (4.1)	587 (7.3)	44 (4.0)	568 (7.2)	3 (1.3)	522 (24.4)	10.6 (0.15)	
Norway (9)	r	53 (4.0)	511 (3.3)	43 (3.9)	498 (4.4)	4 (2.4)	493 (6.0)	10.4 (0.16)
Bahrain	53 (2.6)	486 (2.9)	44 (2.6)	477 (2.9)	4 (1.0)	455 (7.0)	10.8 (0.09)	
Lebanon	48 (4.4)	444 (4.8)	48 (4.5)	419 (4.4)	4 (1.5)	372 (11.3)	10.4 (0.17)	
Russian Federation	48 (3.1)	546 (5.8)	50 (3.0)	541 (5.2)	2 (0.9)	~ ~	10.5 (0.13)	
Jordan	47 (4.4)	432 (7.3)	46 (4.4)	417 (5.6)	7 (2.3)	375 (11.3)	10.4 (0.17)	
New Zealand	47 (3.5)	503 (5.2)	45 (3.1)	470 (6.1)	9 (2.0)	437 (9.7)	10.4 (0.15)	
Morocco	45 (3.6)	398 (3.4)	42 (3.4)	381 (4.0)	12 (2.5)	382 (6.3)	9.9 (0.18)	
Portugal	45 (3.7)	511 (4.9)	47 (4.0)	492 (5.3)	8 (2.5)	484 (12.7)	10.2 (0.17)	
Hungary	43 (3.6)	533 (5.6)	52 (3.8)	504 (5.7)	5 (1.5)	465 (16.4)	10.2 (0.13)	
Chinese Taipei	42 (3.5)	619 (4.5)	55 (3.6)	608 (3.9)	2 (1.1)	~ ~	10.2 (0.11)	
Cyprus	s	38 (3.4)	521 (5.7)	47 (3.6)	501 (5.3)	15 (2.7)	481 (6.6)	9.8 (0.13)
United States	38 (2.6)	532 (6.5)	52 (2.7)	517 (6.1)	11 (1.5)	459 (10.3)	10.0 (0.11)	
Turkey	38 (3.7)	508 (8.8)	52 (3.4)	494 (6.5)	10 (2.3)	465 (13.2)	10.0 (0.19)	
Chile	31 (3.3)	468 (5.8)	51 (3.9)	439 (4.4)	18 (3.2)	399 (6.3)	9.4 (0.16)	
Malaysia	30 (3.1)	477 (6.8)	66 (3.2)	453 (4.7)	4 (1.3)	468 (12.2)	9.6 (0.11)	
France	r	29 (4.0)	496 (5.8)	54 (4.6)	483 (4.3)	16 (3.2)	454 (6.6)	9.5 (0.16)
Sweden	28 (2.7)	523 (5.0)	66 (3.1)	497 (3.2)	6 (2.0)	478 (12.2)	9.5 (0.08)	
Korea, Rep. of	24 (2.9)	615 (6.1)	70 (3.3)	606 (3.4)	6 (2.0)	590 (8.9)	9.5 (0.15)	
Finland	23 (2.6)	520 (4.2)	66 (2.6)	507 (3.1)	11 (2.0)	495 (6.7)	9.3 (0.12)	
Italy	20 (3.3)	507 (5.7)	75 (3.5)	498 (3.3)	5 (1.7)	461 (9.6)	9.4 (0.12)	
South Africa (9)	18 (2.0)	423 (7.7)	58 (2.9)	384 (3.1)	24 (2.6)	378 (4.5)	8.7 (0.12)	
Japan	17 (2.6)	608 (8.1)	69 (3.2)	594 (3.3)	14 (2.5)	583 (4.5)	8.9 (0.11)	
International Average	48 (0.5)	501 (0.9)	45 (0.6)	482 (1.0)	6 (0.3)	460 (2.5)		
Benchmarking Participants								
Dubai, UAE	75 (2.5)	547 (3.2)	23 (2.5)	509 (6.1)	2 (0.1)	~ ~	12.0 (0.12)	
Abu Dhabi, UAE	r	63 (2.1)	467 (4.8)	33 (2.2)	381 (5.6)	4 (1.1)	371 (17.0)	11.3 (0.11)
Ontario, Canada	57 (3.9)	544 (6.6)	37 (3.9)	520 (5.0)	6 (2.1)	491 (10.5)	10.7 (0.20)	
Moscow City, Russian Fed.	46 (4.1)	587 (5.9)	51 (4.1)	566 (5.2)	3 (1.3)	563 (16.8)	10.3 (0.14)	
Quebec, Canada	35 (4.1)	557 (6.3)	57 (4.2)	538 (5.8)	7 (2.4)	511 (11.3)	9.8 (0.16)	
Gauteng, RSA (9)	19 (2.6)	468 (8.8)	52 (4.1)	419 (4.7)	29 (4.2)	391 (4.2)	8.6 (0.16)	
Western Cape, RSA (9)	18 (3.0)	521 (14.9)	50 (4.4)	437 (6.7)	32 (3.8)	401 (5.6)	8.5 (0.15)	

This TIMSS context questionnaire scale was established in 2011 based on the combined response distribution of all countries that participated in TIMSS 2011. To provide a point of reference for country comparisons, the scale centerpoint of 10 was located at the mean of the combined distribution. The units of the scale were chosen so that 2 scale score points corresponded to the standard deviation of the distribution.

() Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

A tilde (~) indicates insufficient data to report achievement.

An "r" indicates data are available for at least 70% but less than 85% of the students. An "s" indicates data are available for at least 50% but less than 70% of the students.

SOURCE: IEA's Trends in International Mathematics and Science Study TIMSS 2019
Downloaded from <http://timss2019.org/download>

Exhibit 8.10: Safe and Orderly School – Teachers' Reports

Students' Results based on Teachers' Reports

Country	Very Safe and Orderly		Somewhat Safe and Orderly		Less than Safe and Orderly		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Romania	79 (2.4)	477 (4.8)	20 (2.3)	453 (6.0)	1 (0.7)	~ ~	11.9 (0.11)
Kuwait	75 (3.6)	446 (6.1)	25 (3.7)	439 (10.9)	0 (0.3)	~ ~	11.5 (0.15)
United Arab Emirates	73 (1.2)	493 (3.1)	24 (1.3)	429 (6.5)	3 (0.4)	338 (14.0)	11.7 (0.06)
Qatar	70 (4.1)	477 (5.9)	27 (4.1)	468 (8.5)	3 (1.2)	477 (18.3)	11.4 (0.16)
Saudi Arabia	69 (3.7)	440 (3.0)	28 (3.5)	415 (6.6)	3 (1.4)	406 (20.9)	11.3 (0.17)
Singapore	68 (2.7)	613 (4.5)	29 (2.8)	594 (7.9)	2 (0.7)	~ ~	11.4 (0.12)
Kazakhstan	68 (1.9)	482 (3.6)	32 (1.8)	470 (4.5)	1 (0.5)	~ ~	11.4 (0.09)
Georgia	67 (2.9)	450 (4.3)	32 (2.8)	441 (4.5)	1 (0.6)	~ ~	11.1 (0.10)
Egypt	64 (4.0)	396 (7.1)	33 (3.8)	383 (9.5)	2 (1.2)	~ ~	11.1 (0.17)
Ireland	62 (3.4)	539 (3.3)	30 (3.3)	516 (6.9)	8 (1.9)	485 (10.2)	11.1 (0.17)
Iran, Islamic Rep. of	62 (3.3)	457 (4.6)	31 (2.9)	443 (6.4)	7 (1.7)	413 (6.7)	10.9 (0.15)
Oman	60 (3.6)	469 (4.5)	37 (3.6)	442 (5.9)	2 (1.0)	~ ~	10.8 (0.10)
Norway (9) r	58 (3.6)	505 (3.7)	37 (3.5)	489 (5.2)	4 (2.4)	476 (14.4)	10.5 (0.15)
Hong Kong SAR	56 (4.2)	514 (8.3)	43 (4.1)	494 (8.6)	1 (0.8)	~ ~	11.0 (0.15)
Israel	56 (2.7)	520 (6.3)	39 (3.1)	514 (8.4)	5 (1.7)	455 (25.5)	10.6 (0.13)
Australia r	54 (3.4)	547 (5.4)	37 (3.2)	518 (4.6)	10 (2.0)	509 (10.6)	10.6 (0.15)
Russian Federation	53 (2.6)	548 (3.8)	44 (2.4)	538 (5.3)	3 (0.8)	533 (8.0)	10.6 (0.08)
Lithuania	52 (2.5)	538 (3.4)	45 (2.3)	528 (3.2)	4 (0.9)	522 (9.1)	10.5 (0.10)
Jordan	49 (3.9)	466 (4.7)	45 (4.2)	440 (8.2)	6 (1.7)	429 (18.9)	10.4 (0.16)
New Zealand	49 (3.6)	516 (6.0)	44 (3.3)	487 (4.9)	7 (1.8)	481 (13.9)	10.4 (0.17)
Bahrain	49 (3.1)	498 (4.0)	48 (3.3)	478 (3.9)	3 (1.5)	439 (19.8)	10.5 (0.10)
Lebanon	47 (3.4)	401 (6.5)	48 (3.4)	356 (6.2)	5 (1.3)	347 (15.7)	10.4 (0.14)
Turkey	47 (3.7)	534 (6.1)	45 (3.7)	504 (6.2)	8 (2.2)	471 (13.5)	10.3 (0.16)
Portugal	46 (3.0)	527 (3.5)	47 (2.9)	515 (3.8)	7 (1.6)	500 (8.6)	10.2 (0.12)
England s	45 (4.8)	532 (9.4)	49 (4.8)	518 (11.3)	7 (2.7)	512 (16.9)	10.5 (0.23)
Cyprus s	44 (2.0)	496 (3.4)	44 (2.5)	484 (3.3)	12 (1.6)	465 (6.9)	10.0 (0.09)
Chinese Taipei	43 (3.4)	583 (3.7)	50 (3.5)	566 (2.9)	6 (1.8)	581 (9.1)	10.2 (0.14)
Hungary	43 (2.6)	541 (3.7)	52 (2.4)	523 (3.5)	5 (1.1)	473 (11.3)	10.2 (0.10)
Morocco	42 (2.5)	400 (5.1)	45 (2.4)	390 (4.2)	13 (1.9)	398 (4.7)	9.9 (0.11)
United States	34 (2.3)	545 (6.4)	49 (2.6)	528 (7.8)	16 (2.1)	471 (10.4)	9.6 (0.12)
Korea, Rep. of	33 (3.6)	565 (3.7)	62 (3.9)	560 (2.5)	6 (1.9)	543 (10.8)	9.7 (0.16)
Malaysia	32 (3.0)	483 (7.2)	63 (3.0)	449 (5.1)	4 (1.6)	446 (27.3)	9.8 (0.12)
Sweden	29 (2.7)	545 (5.8)	64 (3.2)	513 (3.6)	7 (2.1)	500 (22.4)	9.6 (0.12)
France r	26 (2.8)	508 (4.1)	64 (2.8)	486 (3.2)	10 (1.7)	448 (7.2)	9.4 (0.13)
Chile	26 (3.3)	486 (5.8)	59 (4.1)	463 (4.2)	16 (2.9)	431 (7.2)	9.2 (0.14)
South Africa (9)	24 (2.8)	390 (10.7)	51 (2.9)	371 (5.1)	25 (2.1)	350 (4.7)	8.9 (0.12)
Italy	20 (3.4)	505 (4.6)	76 (3.4)	502 (3.2)	4 (1.2)	464 (10.2)	9.3 (0.12)
Finland	20 (2.0)	555 (4.9)	67 (2.2)	542 (2.9)	13 (1.7)	526 (7.2)	9.2 (0.09)
Japan	13 (2.7)	566 (3.9)	77 (3.4)	572 (2.7)	11 (2.3)	558 (4.8)	8.9 (0.11)
International Average	49 (0.5)	501 (0.9)	45 (0.5)	483 (1.0)	6 (0.3)	466 (2.5)	
Benchmarking Participants							
Dubai, UAE	79 (2.0)	556 (3.4)	20 (2.1)	530 (6.8)	1 (0.4)	~ ~	12.1 (0.09)
Abu Dhabi, UAE	61 (2.7)	452 (5.9)	33 (2.5)	375 (8.9)	6 (0.8)	302 (15.8)	11.2 (0.11)
Ontario, Canada s	50 (5.6)	537 (6.6)	42 (5.8)	507 (6.5)	9 (2.8)	505 (8.3)	10.6 (0.27)
Moscow City, Russian Fed.	45 (2.2)	571 (3.3)	51 (2.1)	564 (3.1)	4 (1.0)	546 (8.1)	10.3 (0.09)
Gauteng, RSA (9)	23 (3.6)	467 (12.5)	51 (4.7)	421 (6.5)	26 (3.7)	385 (6.3)	8.8 (0.16)
Western Cape, RSA (9)	20 (3.0)	558 (13.9)	47 (4.6)	431 (8.2)	33 (3.9)	382 (6.2)	8.4 (0.16)
Quebec, Canada y	- -	- -	- -	- -	- -	- -	- -

This TIMSS context questionnaire scale was established in 2011 based on the combined response distribution of all countries that participated in TIMSS 2011. To provide a point of reference for country comparisons, the scale centerpoint of 10 was located at the mean of the combined distribution. The units of the scale were chosen so that 2 scale score points corresponded to the standard deviation of the distribution.

() Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

A tilde (~) indicates insufficient data to report achievement.

An "r" indicates data are available for at least 70% but less than 85% of the students. An "s" indicates data are available for at least 50% but less than 70% of the students.

A "y" indicates data are available for less than 40% of the students.

SOURCE: IEA's Trends in International Mathematics and Science Study TIMSS 2019
Downloaded from <http://timss2019.org/download>

Student Bullying

Since 2011, TIMSS has asked students about how often they experienced various bullying behaviors by their school peers, such as being teased, excluded from activities, or physically hurt. The TIMSS 2019 fourth grade *Student Bullying* scale is described in Exhibit 8.11 (see About the Scale). Students were assigned to one of three categories of the scale (“never or almost never,” “about monthly,” “about weekly”) according to their reports of how often they experienced 11 bullying behaviors.

Exhibits 8.12 and 8.13 present the scale results in relation to mathematics achievement and science achievement, respectively. Internationally, the majority of fourth grade students (63%, on average) reported to be “never or almost never” bullied by school peers, 29 percent reported being bullied “about monthly,” and only 8 percent were bullied “about weekly.” Reports from fourth grade students’ about being bullied were related to their average achievement in mathematics and science. Across countries, there was a negative association between fourth grade students’ reports about the frequency of being bullied and average achievement, with students bullied “about weekly” having substantially lower average mathematics achievement (451) and lower average science achievement (437) than students bullied “about monthly” (495 and 486 in mathematics and science, respectively). Students in the “never or almost never” category had the highest achievement on average—512 in mathematics and 503 in science.

The eighth grade *Student Bullying* scale used in previous TIMSS assessments was revised in TIMSS 2019 to better reflect current trends related to social media and cyberbullying. As described in Exhibit 8.14, the scale in 2019 included 14 items with an emphasis on bullying experienced through digital devices (see About the Scale). Students were assigned to one of three scale categories (“never or almost never,” “about monthly,” “about weekly”) according to their reports of how often they experienced these 14 behaviors.

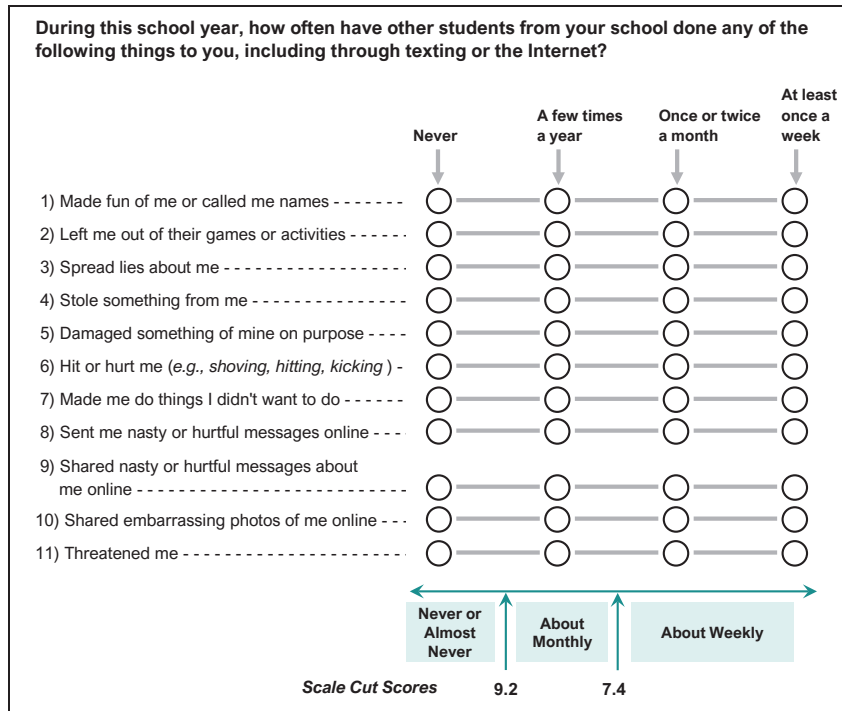
Exhibits 8.15 and 8.16 provide the results for the TIMSS 2019 eighth grade *Student Bullying* scale in relation to mathematics achievement and science achievement, respectively. On average, more than two-thirds of eighth grade students (71%) reported being bullied “never or almost never,” and these students had the highest average achievement—496 in mathematics and 499 in science. With each reported increase in the frequency they experienced bullying, eighth grade students had progressively lower average achievement to the extent that there was a 68-point difference in mathematics achievement and a 78-point difference in science achievement between students in the “never or almost never” category and students in the “about weekly” category. Students bullied “about monthly” also had much higher achievement than students bullied “about weekly” (482 vs. 428 in mathematics and 482 vs. 421 in science).

Exhibit 8.11: Student Bullying

Students' Reports

About the Scale

Students were scored according to their reports regarding eleven bullying behaviors on the *Student Bullying* scale. Cut scores divide the scale into three categories. Students bullied **Never or Almost Never** had a score at or above the cut score corresponding to reporting that they “never” experienced six of the eleven bullying behaviors and experienced the other five “a few times a year,” on average. Students bullied **About Weekly** had a score at or below the cut score corresponding to reporting that they experienced six of the eleven behaviors “once or twice a month” and the other five “a few times a year,” on average. All other students were bullied **About Monthly**.



SOURCE: IEA's Trends in International Mathematics and Science Study TIMSS 2019
Downloaded from <http://timss2019.org/download>

Exhibit 8.12: Student Bullying
Students' Reports

Country	Never or Almost Never		About Monthly		About Weekly		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Albania	85 (0.9)	500 (3.2)	12 (0.8)	480 (5.7)	3 (0.4)	404 (15.7)	11.3 (0.05)
Armenia	84 (0.9)	506 (2.5)	11 (0.7)	494 (4.5)	5 (0.5)	463 (7.1)	11.3 (0.05)
Serbia	83 (1.2)	513 (3.3)	15 (0.9)	497 (5.6)	3 (0.4)	443 (12.6)	11.1 (0.06)
Kosovo	82 (1.0)	453 (2.8)	13 (0.8)	435 (4.8)	5 (0.5)	368 (9.2)	11.1 (0.06)
Montenegro	81 (0.7)	461 (1.8)	15 (0.6)	438 (4.0)	4 (0.3)	391 (7.4)	11.1 (0.04)
Japan	81 (0.9)	595 (1.8)	18 (0.9)	585 (3.3)	1 (0.2)	~ ~	10.9 (0.05)
Georgia	80 (1.1)	486 (3.8)	16 (0.9)	470 (6.4)	4 (0.4)	418 (11.0)	10.9 (0.06)
Finland	79 (1.0)	538 (2.2)	19 (0.9)	519 (4.0)	2 (0.2)	~ ~	10.7 (0.04)
Azerbaijan	78 (1.1)	528 (2.3)	18 (0.9)	511 (4.6)	4 (0.4)	465 (9.6)	10.9 (0.06)
Bosnia and Herzegovina	78 (0.8)	458 (2.3)	17 (0.7)	446 (3.7)	5 (0.4)	402 (5.2)	10.8 (0.05)
Korea, Rep. of	77 (1.1)	601 (2.3)	21 (1.0)	596 (3.9)	2 (0.3)	~ ~	10.6 (0.05)
Ireland	76 (0.9)	555 (2.6)	21 (0.7)	536 (3.8)	3 (0.4)	497 (8.5)	10.5 (0.05)
France	74 (1.0)	494 (3.2)	22 (0.9)	463 (4.0)	3 (0.4)	430 (10.1)	10.5 (0.05)
Norway (5)	73 (1.2)	548 (2.3)	24 (1.1)	536 (3.1)	3 (0.4)	503 (15.9)	10.3 (0.05)
Croatia	73 (1.3)	513 (2.3)	22 (1.2)	506 (3.8)	5 (0.4)	476 (8.2)	10.4 (0.05)
Poland	73 (0.9)	527 (2.8)	22 (0.8)	513 (3.4)	5 (0.4)	470 (8.4)	10.4 (0.04)
Lithuania	72 (1.3)	548 (3.0)	25 (1.2)	534 (4.2)	3 (0.3)	475 (11.9)	10.3 (0.06)
Kazakhstan	69 (1.3)	517 (2.7)	25 (1.1)	507 (3.7)	6 (0.4)	486 (5.1)	10.5 (0.07)
Northern Ireland	68 (1.4)	574 (3.2)	28 (1.3)	556 (3.7)	4 (0.4)	501 (9.4)	10.1 (0.06)
North Macedonia	68 (2.3)	489 (4.7)	23 (2.0)	464 (7.8)	9 (0.8)	403 (10.4)	10.3 (0.09)
Chinese Taipei	67 (1.2)	604 (1.8)	28 (1.0)	593 (3.3)	5 (0.4)	576 (7.5)	10.3 (0.05)
Austria	67 (1.3)	547 (2.3)	28 (1.1)	530 (2.9)	5 (0.5)	499 (5.0)	10.2 (0.06)
Sweden	66 (1.5)	530 (2.8)	30 (1.5)	511 (3.4)	4 (0.4)	474 (9.4)	10.0 (0.06)
Czech Republic	66 (1.1)	542 (2.5)	28 (0.9)	526 (3.6)	6 (0.6)	470 (7.0)	10.2 (0.06)
Netherlands	66 (1.3)	541 (2.2)	30 (1.1)	535 (2.9)	4 (0.5)	512 (8.7)	10.0 (0.05)
Slovak Republic	66 (1.3)	519 (3.2)	29 (1.1)	500 (5.5)	6 (0.5)	461 (10.8)	10.2 (0.06)
United States	64 (0.8)	548 (2.7)	29 (0.8)	527 (3.1)	7 (0.4)	477 (5.7)	10.0 (0.03)
Hungary	63 (1.2)	530 (2.8)	32 (1.2)	516 (3.6)	4 (0.5)	492 (7.7)	9.9 (0.04)
Cyprus	63 (1.2)	541 (2.8)	30 (1.0)	523 (3.7)	7 (0.5)	493 (6.2)	10.0 (0.05)
Germany	62 (1.1)	535 (2.4)	32 (1.0)	512 (3.4)	6 (0.6)	466 (6.9)	9.8 (0.04)
Hong Kong SAR	62 (1.2)	608 (3.1)	32 (1.0)	595 (4.7)	6 (0.5)	576 (7.8)	9.9 (0.05)
Spain	61 (1.1)	512 (2.2)	31 (0.9)	495 (3.3)	7 (0.6)	460 (5.2)	9.9 (0.05)
Iran, Islamic Rep. of	61 (1.3)	450 (4.8)	32 (1.2)	443 (4.4)	7 (0.4)	405 (7.3)	10.0 (0.06)
Portugal	61 (0.9)	532 (2.8)	32 (0.9)	523 (3.0)	7 (0.5)	480 (6.2)	9.8 (0.04)
Denmark	61 (1.4)	532 (2.3)	35 (1.3)	519 (2.5)	4 (0.4)	481 (7.7)	9.7 (0.05)
England	60 (1.3)	566 (4.4)	34 (1.1)	546 (4.1)	6 (0.6)	513 (8.5)	9.8 (0.05)
Bulgaria	60 (1.9)	528 (3.5)	31 (1.3)	511 (4.3)	9 (1.0)	463 (10.4)	9.8 (0.08)
Chile	60 (1.2)	454 (2.3)	29 (0.9)	437 (3.6)	11 (0.7)	392 (5.9)	9.8 (0.05)
Turkey (5)	60 (1.3)	540 (4.3)	32 (1.1)	511 (5.8)	9 (0.6)	451 (9.0)	9.9 (0.06)
Singapore	59 (0.9)	638 (3.6)	34 (0.7)	616 (4.0)	7 (0.4)	569 (9.1)	9.7 (0.03)
Italy	58 (1.3)	522 (2.6)	36 (1.1)	510 (2.9)	7 (0.6)	482 (6.9)	9.7 (0.05)
Malta	57 (0.8)	519 (1.7)	35 (0.8)	504 (2.6)	8 (0.5)	469 (5.2)	9.7 (0.03)
Russian Federation	56 (1.2)	575 (3.2)	37 (1.0)	563 (4.0)	8 (0.5)	538 (6.3)	9.6 (0.05)
Canada	55 (0.7)	520 (2.2)	38 (0.7)	505 (2.2)	8 (0.3)	477 (4.4)	9.6 (0.03)
Australia	54 (1.3)	525 (3.1)	39 (1.0)	513 (3.4)	7 (0.6)	470 (6.2)	9.5 (0.04)
Belgium (Flemish)	53 (1.4)	538 (2.1)	41 (1.2)	529 (2.5)	5 (0.4)	506 (6.5)	9.5 (0.04)
Morocco	53 (1.6)	397 (4.4)	37 (1.3)	379 (5.6)	10 (0.8)	342 (8.0)	9.6 (0.07)
Latvia	52 (1.1)	556 (2.7)	38 (0.9)	541 (2.8)	10 (0.8)	514 (6.0)	9.4 (0.05)
United Arab Emirates	51 (0.8)	501 (1.9)	34 (0.6)	476 (2.1)	15 (0.4)	434 (3.2)	9.5 (0.04)
Saudi Arabia	50 (1.2)	421 (4.3)	33 (1.0)	399 (3.8)	17 (0.7)	349 (5.8)	9.6 (0.06)
New Zealand	48 (1.1)	503 (2.8)	40 (0.9)	486 (3.1)	12 (0.5)	438 (4.4)	9.3 (0.04)
Oman	47 (1.4)	451 (4.9)	38 (1.2)	429 (3.9)	15 (0.8)	385 (5.4)	9.3 (0.06)
Bahrain	46 (1.1)	491 (3.0)	37 (0.9)	481 (3.4)	17 (0.7)	452 (4.4)	9.3 (0.05)
Kuwait	45 (1.3)	406 (6.0)	34 (0.9)	392 (5.2)	21 (1.1)	344 (7.5)	9.2 (0.07)
Pakistan	45 (3.4)	344 (13.0)	36 (2.8)	326 (13.2)	19 (2.1)	301 (13.0)	9.3 (0.15)
Qatar	42 (1.3)	473 (4.1)	37 (1.3)	456 (4.0)	21 (1.2)	397 (3.8)	9.0 (0.06)
South Africa (5)	26 (1.1)	423 (5.5)	45 (1.1)	376 (3.3)	29 (1.4)	333 (4.0)	8.4 (0.05)
Philippines	11 (1.0)	351 (10.3)	44 (1.3)	314 (6.6)	45 (1.8)	269 (6.4)	7.7 (0.06)
International Average	63 (0.2)	512 (0.5)	29 (0.1)	495 (0.6)	8 (0.1)	451 (1.1)	
Benchmarking Participants							
Madrid, Spain	65 (1.3)	523 (2.2)	30 (1.1)	514 (2.7)	5 (0.5)	483 (5.4)	10.1 (0.06)
Dubai, UAE	58 (1.2)	552 (1.8)	32 (0.9)	538 (3.0)	10 (0.5)	514 (4.6)	9.8 (0.05)
Ontario, Canada	55 (1.3)	523 (3.9)	38 (1.2)	506 (3.5)	7 (0.5)	475 (7.8)	9.6 (0.04)
Quebec, Canada	54 (1.3)	539 (3.0)	39 (1.0)	526 (3.0)	7 (0.7)	499 (6.2)	9.5 (0.05)
Moscow City, Russian Fed.	54 (1.2)	602 (2.3)	37 (0.9)	587 (2.8)	9 (0.6)	563 (5.0)	9.5 (0.04)
Abu Dhabi, UAE	44 (1.0)	462 (2.7)	37 (0.8)	439 (3.0)	19 (0.7)	399 (4.0)	9.1 (0.05)

This TIMSS context questionnaire scale was established in 2019 based on the combined response distribution of all countries that participated in TIMSS 2019. To provide a point of reference for country comparisons, the scale centerpoint of 10 was located at the mean of the combined distribution. The units of the scale were chosen so that 2 scale score points corresponded to the standard deviation of the distribution.

() Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.
A tilde (~) indicates insufficient data to report achievement.

SOURCE: IEA's Trends in International Mathematics and Science Study TIMSS 2019
Downloaded from <http://timss2019.org/download>

Exhibit 8.13: Student Bullying

Students' Reports

Country	Never or Almost Never		About Monthly		About Weekly		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Albania	85 (0.9)	495 (3.4)	12 (0.8)	481 (6.5)	3 (0.4)	398 (15.7)	11.3 (0.05)
Armenia	84 (0.9)	476 (3.3)	11 (0.7)	459 (5.5)	5 (0.5)	420 (7.5)	11.3 (0.05)
Serbia	83 (1.2)	522 (3.5)	15 (0.9)	505 (5.7)	3 (0.4)	451 (13.1)	11.1 (0.06)
Kosovo	82 (1.0)	424 (3.4)	13 (0.8)	396 (6.4)	5 (0.5)	326 (9.9)	11.1 (0.06)
Montenegro	81 (0.7)	460 (2.4)	15 (0.6)	444 (5.1)	4 (0.3)	390 (8.6)	11.1 (0.04)
Japan	81 (0.9)	564 (1.7)	18 (0.9)	553 (3.4)	1 (0.2)	~ ~	10.9 (0.05)
Georgia	80 (1.1)	459 (4.0)	16 (0.9)	444 (6.7)	4 (0.4)	376 (10.5)	10.9 (0.06)
Finland	79 (1.0)	560 (2.4)	19 (0.9)	542 (4.3)	2 (0.2)	~ ~	10.7 (0.04)
Azerbaijan	78 (1.1)	441 (2.7)	18 (0.9)	424 (5.2)	4 (0.4)	364 (13.4)	10.9 (0.06)
Bosnia and Herzegovina	78 (0.8)	465 (2.7)	17 (0.7)	455 (5.1)	5 (0.4)	410 (8.5)	10.8 (0.05)
Korea, Rep. of	77 (1.1)	589 (2.3)	21 (1.0)	585 (3.5)	2 (0.3)	~ ~	10.6 (0.05)
Ireland	76 (0.9)	534 (3.3)	21 (0.7)	517 (4.0)	3 (0.4)	471 (9.7)	10.5 (0.05)
France	74 (1.0)	496 (3.1)	22 (0.9)	470 (4.2)	3 (0.4)	435 (9.3)	10.5 (0.05)
Norway (5)	73 (1.2)	544 (2.4)	24 (1.1)	534 (3.0)	3 (0.4)	498 (12.8)	10.3 (0.05)
Croatia	73 (1.3)	527 (2.5)	22 (1.2)	521 (4.1)	5 (0.4)	500 (7.5)	10.4 (0.05)
Poland	73 (0.9)	538 (2.7)	22 (0.8)	523 (3.2)	5 (0.4)	481 (8.2)	10.4 (0.04)
Lithuania	72 (1.3)	544 (2.8)	25 (1.2)	529 (4.1)	3 (0.3)	469 (11.7)	10.3 (0.06)
Kazakhstan	69 (1.3)	500 (3.4)	25 (1.1)	490 (4.3)	6 (0.4)	468 (6.6)	10.5 (0.07)
Northern Ireland	68 (1.4)	526 (2.4)	28 (1.3)	511 (3.7)	4 (0.4)	458 (8.2)	10.1 (0.06)
North Macedonia	68 (2.3)	445 (5.5)	23 (2.0)	412 (10.0)	9 (0.8)	355 (11.2)	10.3 (0.09)
Chinese Taipei	67 (1.2)	564 (1.9)	28 (1.0)	550 (2.9)	5 (0.4)	526 (7.2)	10.3 (0.05)
Austria	67 (1.3)	532 (2.8)	28 (1.1)	509 (4.3)	5 (0.5)	473 (7.2)	10.2 (0.06)
Sweden	66 (1.5)	545 (3.3)	30 (1.5)	529 (4.1)	4 (0.4)	485 (10.3)	10.0 (0.06)
Czech Republic	66 (1.1)	541 (2.6)	28 (0.9)	528 (3.3)	6 (0.6)	478 (6.2)	10.2 (0.06)
Netherlands	66 (1.3)	523 (2.8)	30 (1.1)	515 (4.0)	4 (0.5)	479 (10.4)	10.0 (0.05)
Slovak Republic	66 (1.3)	531 (3.0)	29 (1.1)	508 (6.3)	6 (0.5)	467 (12.3)	10.2 (0.06)
United States	64 (0.8)	551 (2.8)	29 (0.8)	531 (3.3)	7 (0.4)	481 (5.6)	10.0 (0.03)
Hungary	63 (1.2)	536 (2.9)	32 (1.2)	521 (3.5)	4 (0.5)	500 (9.0)	9.9 (0.04)
Cyprus	63 (1.2)	520 (3.1)	30 (1.0)	505 (3.5)	7 (0.5)	473 (7.0)	10.0 (0.05)
Germany	62 (1.1)	533 (2.2)	32 (1.0)	511 (3.5)	6 (0.6)	459 (8.5)	9.8 (0.04)
Hong Kong SAR	62 (1.2)	536 (3.3)	32 (1.0)	526 (4.2)	6 (0.5)	508 (9.2)	9.9 (0.05)
Spain	61 (1.1)	521 (1.9)	31 (0.9)	506 (3.0)	7 (0.6)	465 (5.5)	9.9 (0.05)
Iran, Islamic Rep. of	61 (1.3)	446 (5.1)	32 (1.2)	444 (4.6)	7 (0.4)	402 (8.1)	10.0 (0.06)
Portugal	61 (0.9)	510 (2.8)	32 (0.9)	502 (3.2)	7 (0.5)	459 (5.5)	9.8 (0.04)
Denmark	61 (1.4)	528 (2.6)	35 (1.3)	517 (3.4)	4 (0.4)	490 (6.9)	9.7 (0.05)
England	60 (1.3)	545 (3.9)	34 (1.1)	531 (3.5)	6 (0.6)	505 (7.3)	9.8 (0.05)
Bulgaria	60 (1.9)	535 (4.3)	31 (1.3)	520 (5.5)	9 (1.0)	457 (11.6)	9.8 (0.08)
Chile	60 (1.2)	482 (2.3)	29 (0.9)	466 (3.5)	11 (0.7)	419 (4.6)	9.8 (0.05)
Turkey (5)	60 (1.3)	541 (3.9)	32 (1.1)	520 (6.0)	9 (0.6)	461 (10.1)	9.9 (0.06)
Singapore	59 (0.9)	606 (3.2)	34 (0.7)	586 (3.6)	7 (0.4)	542 (9.1)	9.7 (0.03)
Italy	58 (1.3)	517 (3.1)	36 (1.1)	507 (3.3)	7 (0.6)	473 (6.8)	9.7 (0.05)
Malta	57 (0.8)	505 (1.6)	35 (0.8)	492 (2.7)	8 (0.5)	450 (6.2)	9.7 (0.03)
Russian Federation	56 (1.2)	574 (3.0)	37 (1.0)	563 (3.2)	8 (0.5)	542 (6.8)	9.6 (0.05)
Canada	55 (0.7)	533 (2.2)	38 (0.7)	517 (2.2)	8 (0.3)	491 (4.3)	9.6 (0.03)
Australia	54 (1.3)	541 (2.9)	39 (1.0)	530 (2.9)	7 (0.6)	490 (6.1)	9.5 (0.04)
Belgium (Flemish)	53 (1.4)	508 (2.2)	41 (1.2)	496 (2.8)	5 (0.4)	474 (6.3)	9.5 (0.04)
Morocco	53 (1.6)	389 (5.7)	37 (1.3)	369 (7.8)	10 (0.8)	327 (10.9)	9.6 (0.07)
Latvia	52 (1.1)	553 (2.5)	38 (0.9)	536 (2.4)	10 (0.8)	508 (6.2)	9.4 (0.05)
United Arab Emirates	51 (0.8)	497 (2.2)	34 (0.6)	467 (2.4)	15 (0.4)	413 (3.7)	9.5 (0.04)
Saudi Arabia	50 (1.2)	432 (4.6)	33 (1.0)	404 (4.6)	17 (0.7)	335 (7.3)	9.6 (0.06)
New Zealand	48 (1.1)	519 (2.4)	40 (0.9)	500 (2.9)	12 (0.5)	456 (4.5)	9.3 (0.04)
Oman	47 (1.4)	458 (4.8)	38 (1.2)	437 (4.5)	15 (0.8)	380 (6.1)	9.3 (0.06)
Bahrain	46 (1.1)	515 (3.3)	37 (0.9)	493 (3.8)	17 (0.7)	440 (5.5)	9.3 (0.05)
Kuwait	45 (1.3)	421 (7.5)	34 (0.9)	398 (7.1)	21 (1.1)	347 (8.0)	9.2 (0.07)
Pakistan	45 (3.4)	313 (13.5)	36 (2.8)	282 (16.0)	19 (2.1)	260 (17.0)	9.3 (0.15)
Qatar	42 (1.3)	479 (4.2)	37 (1.3)	458 (4.2)	21 (1.2)	383 (5.2)	9.0 (0.06)
South Africa (5)	26 (1.1)	392 (7.9)	45 (1.1)	328 (4.8)	29 (1.4)	268 (5.3)	8.4 (0.05)
Philippines	11 (1.0)	318 (13.0)	44 (1.3)	270 (8.1)	45 (1.8)	214 (7.0)	7.7 (0.06)
International Average	63 (0.2)	503 (0.5)	29 (0.1)	486 (0.7)	8 (0.1)	437 (1.2)	
Benchmarking Participants							
Madrid, Spain	65 (1.3)	528 (2.1)	30 (1.1)	518 (2.8)	5 (0.5)	485 (5.9)	10.1 (0.06)
Dubai, UAE	58 (1.2)	553 (1.9)	32 (0.9)	540 (3.1)	10 (0.5)	507 (4.8)	9.8 (0.05)
Ontario, Canada	55 (1.3)	535 (3.5)	38 (1.2)	518 (3.8)	7 (0.5)	490 (7.0)	9.6 (0.04)
Quebec, Canada	54 (1.3)	530 (3.1)	39 (1.0)	515 (2.8)	7 (0.7)	494 (4.9)	9.5 (0.05)
Moscow City, Russian Fed.	54 (1.2)	604 (2.5)	37 (0.9)	590 (2.5)	9 (0.6)	563 (4.9)	9.5 (0.04)
Abu Dhabi, UAE	44 (1.0)	446 (3.4)	37 (0.8)	417 (3.8)	19 (0.7)	365 (5.3)	9.1 (0.05)

This TIMSS context questionnaire scale was established in 2019 based on the combined response distribution of all countries that participated in TIMSS 2019. To provide a point of reference for country comparisons, the scale centerpoint of 10 was located at the mean of the combined distribution. The units of the scale were chosen so that 2 scale score points corresponded to the standard deviation of the distribution.

() Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

A tilde (~) indicates insufficient data to report achievement.

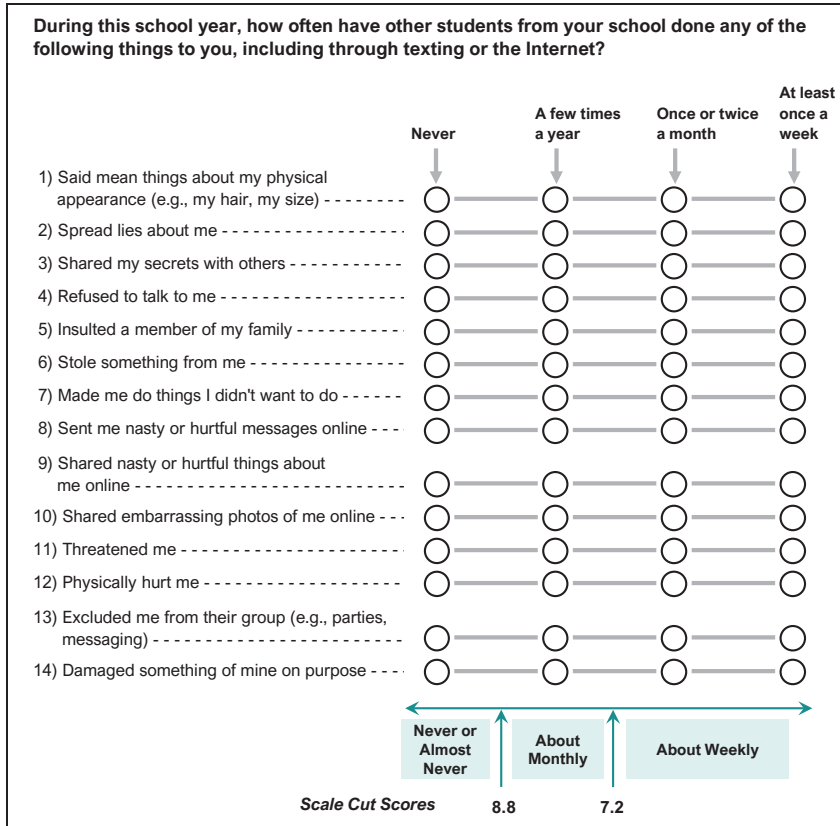
SOURCE: IEA's Trends in International Mathematics and Science Study TIMSS 2019
Downloaded from <http://timss2019.org/download>

Exhibit 8.14: Student Bullying

Students' Reports

About the Scale

Students were scored according to their reports regarding fourteen bullying behaviors on the *Student Bullying* scale. Cut scores divide the scale into three categories. Students bullied **Never or Almost Never** had a score at or above the cut score corresponding to reporting that they “never” experienced seven of the fourteen bullying behaviors and experienced the other seven “a few times a year,” on average. Students bullied **About Weekly** had a score at or below the cut score corresponding to reporting that they experienced seven of the fourteen behaviors “once or twice a month” and the other seven “a few times a year,” on average. All other students were bullied **About Monthly**.



SOURCE: IEA's Trends in International Mathematics and Science Study TIMSS 2019
Downloaded from <http://timss2019.org/download>

Exhibit 8.15: Student Bullying
Students' Reports

Country	Never or Almost Never		About Monthly		About Weekly		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Japan	93 (0.4)	595 (2.8)	6 (0.4)	591 (5.9)	0 (0.1)	~ ~	11.3 (0.04)
Georgia	89 (0.9)	464 (4.3)	9 (0.8)	453 (8.6)	2 (0.3)	~ ~	11.2 (0.06)
Chinese Taipei	88 (0.5)	614 (2.8)	11 (0.5)	608 (4.9)	1 (0.1)	~ ~	11.0 (0.04)
Korea, Rep. of	87 (0.7)	606 (2.9)	12 (0.6)	611 (5.5)	1 (0.1)	~ ~	11.0 (0.05)
Finland	86 (0.6)	512 (2.5)	12 (0.6)	498 (4.4)	2 (0.2)	~ ~	10.8 (0.04)
Kazakhstan	85 (0.8)	488 (3.3)	14 (0.7)	487 (5.5)	1 (0.2)	~ ~	10.4 (0.05)
Portugal	83 (0.9)	502 (3.3)	16 (0.8)	493 (5.3)	2 (0.3)	~ ~	10.5 (0.05)
Lithuania	81 (0.8)	523 (2.9)	17 (0.8)	516 (4.6)	2 (0.2)	~ ~	10.3 (0.04)
Russian Federation	80 (0.7)	545 (4.6)	17 (0.7)	542 (5.6)	3 (0.3)	519 (11.8)	10.3 (0.04)
Hungary	79 (1.0)	523 (3.0)	18 (0.9)	498 (4.6)	3 (0.4)	438 (12.4)	10.2 (0.04)
Norway (9)	79 (0.9)	507 (2.6)	19 (0.8)	498 (4.3)	2 (0.3)	~ ~	10.3 (0.04)
Sweden	78 (0.8)	508 (2.6)	18 (0.7)	493 (3.9)	3 (0.3)	456 (10.2)	10.3 (0.04)
Italy	78 (1.1)	501 (2.8)	20 (1.0)	491 (3.7)	2 (0.2)	~ ~	10.0 (0.05)
Cyprus	76 (0.9)	505 (1.9)	20 (0.8)	493 (3.4)	4 (0.3)	463 (10.3)	10.1 (0.04)
France	75 (0.8)	486 (2.6)	23 (0.7)	475 (3.3)	2 (0.3)	~ ~	10.1 (0.04)
Iran, Islamic Rep. of	74 (1.0)	456 (3.8)	21 (0.9)	426 (5.1)	5 (0.4)	386 (10.9)	10.2 (0.05)
Ireland	74 (1.0)	530 (2.6)	22 (0.9)	513 (3.4)	4 (0.3)	493 (7.6)	10.0 (0.05)
Chile	73 (0.9)	446 (3.0)	23 (0.8)	434 (3.8)	4 (0.4)	393 (8.6)	9.9 (0.04)
Jordan	72 (1.0)	433 (3.6)	18 (0.6)	409 (5.8)	9 (0.7)	362 (6.7)	10.2 (0.06)
Saudi Arabia	72 (1.1)	403 (2.5)	20 (0.8)	386 (3.7)	8 (0.6)	347 (5.3)	10.2 (0.05)
Turkey	72 (1.1)	503 (4.3)	24 (1.0)	485 (6.6)	4 (0.4)	445 (8.7)	9.9 (0.05)
Hong Kong SAR	69 (1.3)	580 (3.9)	24 (1.0)	586 (5.3)	7 (0.6)	539 (12.4)	9.9 (0.05)
United States	69 (0.7)	526 (4.9)	25 (0.6)	509 (4.3)	7 (0.4)	467 (7.8)	9.8 (0.03)
England	69 (0.9)	526 (5.3)	26 (0.8)	510 (6.5)	6 (0.5)	459 (9.3)	9.8 (0.05)
Kuwait	68 (0.9)	409 (5.0)	24 (0.7)	403 (6.2)	8 (0.7)	360 (7.6)	9.9 (0.05)
Romania	66 (1.4)	489 (4.1)	27 (1.1)	473 (6.3)	8 (0.7)	434 (7.4)	9.6 (0.07)
Singapore	65 (0.8)	625 (4.0)	30 (0.7)	604 (4.5)	5 (0.4)	570 (9.2)	9.5 (0.03)
New Zealand	64 (0.9)	490 (3.4)	28 (0.8)	479 (4.0)	7 (0.4)	441 (7.0)	9.6 (0.04)
Oman	64 (1.0)	427 (2.8)	27 (0.9)	400 (3.7)	9 (0.5)	350 (6.3)	9.6 (0.05)
Australia	64 (0.8)	529 (4.1)	28 (0.7)	505 (4.2)	8 (0.4)	478 (4.9)	9.5 (0.03)
Qatar	63 (1.5)	454 (5.0)	25 (1.0)	448 (4.4)	12 (0.9)	383 (6.8)	9.6 (0.07)
Lebanon	63 (1.6)	438 (3.3)	27 (1.2)	425 (3.9)	10 (0.9)	403 (4.9)	9.5 (0.07)
United Arab Emirates	63 (0.6)	492 (2.1)	25 (0.5)	470 (2.5)	12 (0.3)	398 (3.4)	9.6 (0.02)
Bahrain	62 (0.9)	489 (2.1)	28 (0.7)	474 (2.7)	10 (0.5)	449 (4.7)	9.6 (0.04)
Egypt	61 (1.3)	434 (5.2)	23 (0.8)	402 (5.7)	16 (1.0)	360 (7.2)	9.7 (0.08)
Morocco	57 (0.9)	395 (2.9)	34 (0.8)	384 (2.7)	9 (0.5)	366 (3.4)	9.3 (0.04)
Malaysia	35 (1.0)	474 (3.7)	49 (0.8)	456 (3.6)	16 (0.6)	445 (4.6)	8.6 (0.04)
South Africa (9)	35 (0.7)	413 (2.1)	47 (0.5)	389 (2.4)	18 (0.5)	353 (3.2)	8.4 (0.02)
Israel	- -	- -	- -	- -	- -	- -	- -
International Average	71 (0.2)	496 (0.6)	23 (0.1)	482 (0.8)	6 (0.1)	428 (1.5)	
Benchmarking Participants							
Quebec, Canada	78 (1.0)	549 (3.7)	20 (0.9)	531 (5.2)	3 (0.4)	501 (9.8)	10.2 (0.06)
Moscow City, Russian Fed.	77 (1.1)	580 (4.2)	20 (1.0)	566 (5.6)	3 (0.4)	525 (9.2)	10.0 (0.04)
Dubai, UAE	71 (1.0)	544 (2.2)	23 (0.7)	528 (3.7)	6 (0.5)	485 (7.7)	9.9 (0.05)
Ontario, Canada	65 (1.4)	536 (4.5)	28 (1.2)	524 (4.9)	7 (0.6)	510 (10.4)	9.6 (0.06)
Abu Dhabi, UAE	53 (1.0)	465 (3.3)	28 (0.7)	438 (4.0)	19 (0.7)	366 (4.3)	9.1 (0.04)
Western Cape, RSA (9)	52 (0.9)	458 (5.3)	36 (0.7)	434 (4.3)	12 (0.7)	395 (4.8)	9.0 (0.04)
Gauteng, RSA (9)	39 (1.0)	443 (3.7)	47 (0.8)	415 (2.8)	14 (0.5)	381 (4.0)	8.6 (0.03)

This TIMSS context questionnaire scale was established in 2019 based on the combined response distribution of all countries that participated in TIMSS 2019. To provide a point of reference for country comparisons, the scale centerpoint of 10 was located at the mean of the combined distribution. The units of the scale were chosen so that 2 scale score points corresponded to the standard deviation of the distribution.

() Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.
A dash (-) indicates comparable data not available. A tilde (~) indicates insufficient data to report achievement.

SOURCE: IEA's Trends in International Mathematics and Science Study TIMSS 2019
Downloaded from <http://timss2019.org/download>

Exhibit 8.16: Student Bullying

Students' Reports

Country	Never or Almost Never		About Monthly		About Weekly		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Japan	93 (0.4)	570 (2.1)	6 (0.4)	566 (5.8)	0 (0.1)	~ ~	11.3 (0.04)
Georgia	89 (0.9)	450 (4.0)	9 (0.8)	437 (7.7)	2 (0.3)	~ ~	11.2 (0.06)
Chinese Taipei	88 (0.5)	576 (2.0)	11 (0.5)	566 (4.5)	1 (0.1)	~ ~	11.0 (0.04)
Korea, Rep. of	87 (0.7)	561 (2.2)	12 (0.6)	561 (4.6)	1 (0.1)	~ ~	11.0 (0.05)
Finland	86 (0.6)	547 (3.0)	12 (0.6)	529 (4.9)	2 (0.2)	~ ~	10.8 (0.04)
Kazakhstan	85 (0.8)	478 (3.0)	14 (0.7)	482 (6.3)	1 (0.2)	~ ~	10.4 (0.05)
Portugal	83 (0.9)	520 (3.0)	16 (0.8)	513 (4.8)	2 (0.3)	~ ~	10.5 (0.05)
Lithuania	81 (0.8)	536 (2.9)	17 (0.8)	530 (5.3)	2 (0.2)	~ ~	10.3 (0.04)
Russian Federation	80 (0.7)	544 (4.5)	17 (0.7)	544 (4.8)	3 (0.3)	516 (11.4)	10.3 (0.04)
Hungary	79 (1.0)	535 (2.7)	18 (0.9)	515 (4.3)	3 (0.4)	471 (10.5)	10.2 (0.04)
Norway (9)	79 (0.9)	499 (3.3)	19 (0.8)	491 (4.0)	2 (0.3)	~ ~	10.3 (0.04)
Sweden	78 (0.8)	528 (3.2)	18 (0.7)	513 (5.2)	3 (0.3)	456 (12.9)	10.3 (0.04)
Italy	78 (1.1)	505 (2.6)	20 (1.0)	491 (4.4)	2 (0.2)	~ ~	10.0 (0.05)
Cyprus	76 (0.9)	489 (2.3)	20 (0.8)	473 (3.6)	4 (0.3)	439 (9.2)	10.1 (0.04)
France	75 (0.8)	493 (2.7)	23 (0.7)	476 (4.3)	2 (0.3)	~ ~	10.1 (0.04)
Iran, Islamic Rep. of	74 (1.0)	460 (3.5)	21 (0.9)	427 (5.3)	5 (0.4)	379 (10.7)	10.2 (0.05)
Ireland	74 (1.0)	530 (2.9)	22 (0.9)	509 (4.1)	4 (0.3)	490 (9.3)	10.0 (0.05)
Chile	73 (0.9)	470 (2.8)	23 (0.8)	451 (4.0)	4 (0.4)	407 (7.6)	9.9 (0.04)
Jordan	72 (1.0)	471 (3.8)	18 (0.6)	436 (6.5)	9 (0.7)	364 (7.2)	10.2 (0.06)
Saudi Arabia	72 (1.1)	446 (2.6)	20 (0.8)	418 (3.5)	8 (0.6)	358 (6.2)	10.2 (0.05)
Turkey	72 (1.1)	523 (3.8)	24 (1.0)	503 (5.5)	4 (0.4)	463 (8.6)	9.9 (0.05)
Hong Kong SAR	69 (1.3)	506 (5.0)	24 (1.0)	509 (6.9)	7 (0.6)	464 (13.4)	9.9 (0.05)
United States	69 (0.7)	533 (4.8)	25 (0.6)	518 (4.2)	7 (0.4)	475 (7.5)	9.8 (0.03)
England	69 (0.9)	527 (5.0)	26 (0.8)	512 (6.2)	6 (0.5)	461 (10.6)	9.8 (0.05)
Kuwait	68 (0.9)	456 (5.3)	24 (0.7)	442 (6.7)	8 (0.7)	376 (10.0)	9.9 (0.05)
Romania	66 (1.4)	478 (4.3)	27 (1.1)	467 (5.4)	8 (0.7)	428 (7.1)	9.6 (0.07)
Singapore	65 (0.8)	616 (3.8)	30 (0.7)	598 (4.5)	5 (0.4)	564 (9.5)	9.5 (0.03)
New Zealand	64 (0.9)	509 (3.6)	28 (0.8)	493 (4.3)	7 (0.4)	457 (6.6)	9.6 (0.04)
Oman	64 (1.0)	478 (2.6)	27 (0.9)	444 (4.5)	9 (0.5)	378 (6.5)	9.6 (0.05)
Australia	64 (0.8)	540 (3.4)	28 (0.7)	517 (3.7)	8 (0.4)	487 (5.0)	9.5 (0.03)
Qatar	63 (1.5)	491 (4.9)	25 (1.0)	475 (5.4)	12 (0.9)	391 (8.1)	9.6 (0.07)
Lebanon	63 (1.6)	391 (4.9)	27 (1.2)	372 (6.8)	10 (0.9)	328 (7.3)	9.5 (0.07)
United Arab Emirates	63 (0.6)	501 (2.4)	25 (0.5)	468 (2.9)	12 (0.3)	362 (4.6)	9.6 (0.02)
Bahrain	62 (0.9)	503 (2.1)	28 (0.7)	479 (2.8)	10 (0.5)	406 (5.8)	9.6 (0.04)
Egypt	61 (1.3)	417 (5.1)	23 (0.8)	379 (5.8)	16 (1.0)	318 (7.8)	9.7 (0.08)
Morocco	57 (0.9)	406 (3.1)	34 (0.8)	384 (3.2)	9 (0.5)	364 (3.9)	9.3 (0.04)
Malaysia	35 (1.0)	476 (3.8)	49 (0.8)	457 (3.8)	16 (0.6)	439 (6.3)	8.6 (0.04)
South Africa (9)	35 (0.7)	407 (3.1)	47 (0.5)	369 (3.2)	18 (0.5)	311 (4.1)	8.4 (0.02)
Israel	- -	- -	- -	- -	- -	- -	- -
International Average	71 (0.2)	499 (0.6)	23 (0.1)	482 (0.8)	6 (0.1)	421 (1.6)	
Benchmarking Participants							
Quebec, Canada	78 (1.0)	541 (3.8)	20 (0.9)	524 (4.7)	3 (0.4)	509 (10.4)	10.2 (0.06)
Moscow City, Russian Fed.	77 (1.1)	570 (3.0)	20 (1.0)	558 (4.2)	3 (0.4)	533 (7.6)	10.0 (0.04)
Dubai, UAE	71 (1.0)	558 (2.2)	23 (0.7)	535 (3.4)	6 (0.5)	480 (9.1)	9.9 (0.05)
Ontario, Canada	65 (1.4)	528 (2.9)	28 (1.2)	513 (4.4)	7 (0.6)	507 (10.6)	9.6 (0.06)
Abu Dhabi, UAE	53 (1.0)	463 (4.2)	28 (0.7)	424 (4.9)	19 (0.7)	311 (6.0)	9.1 (0.04)
Western Cape, RSA (9)	52 (0.9)	464 (6.0)	36 (0.7)	429 (5.1)	12 (0.7)	371 (6.4)	9.0 (0.04)
Gauteng, RSA (9)	39 (1.0)	456 (4.5)	47 (0.8)	414 (3.7)	14 (0.5)	361 (5.6)	8.6 (0.03)

This TIMSS context questionnaire scale was established in 2019 based on the combined response distribution of all countries that participated in TIMSS 2019. To provide a point of reference for country comparisons, the scale centerpoint of 10 was located at the mean of the combined distribution. The units of the scale were chosen so that 2 scale score points corresponded to the standard deviation of the distribution.

() Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

A dash (-) indicates comparable data not available. A tilde (~) indicates insufficient data to report achievement.

SOURCE: IEA's Trends in International Mathematics and Science Study TIMSS 2019
Downloaded from <http://timss2019.org/download>