

Exhibit 6.6: Students' Sense of School Belonging

To develop the *Sense of School Belonging* scale, students were asked how much they agreed with five statements about their attitude toward school. Exhibit 6.6 presents students' very positive responses. On average, more than half (59%) had a **High** sense of belonging, 33 percent had **Some** sense of belonging, and only 8 percent of the fourth grade students had **Little** sense of belonging. A higher sense of school belonging was related to higher average reading achievement (518, 505, and 495, respectively).

4th Grade



Students' Reports

Students were scored according to their agreement with five statements about their *Sense of School Belonging*. Students with a **High Sense of School Belonging** had a score on the scale of at least 9.7, which corresponds to their "agreeing a lot" to three of the five statements and "agreeing a little" to each of the other two statements, on average. Students with **Little Sense of School Belonging** had a score no higher than 7.3, which corresponds to their "disagreeing a little" to three of the five statements and "agreeing a little" to each of the other two statements, on average. All other students had **Some Sense of School Belonging**.

| Country | High Sense of School Belonging | | Some Sense of School Belonging | | Little Sense of School Belonging | | Average |
|-----------------------|-----------------------------------|------------------------|-----------------------------------|------------------------|-------------------------------------|------------------------|-------------|
| | Percent of Students | Average Achievement | Percent of Students | Average Achievement | Percent of Students | Average Achievement | Scale Score |
| Egypt | 87 (1.2) | 331 (5.8) | 12 (1.1) | 335 (9.7) | 2 (0.2) | ~ ~ | 11.6 (0.08) |
| Kazakhstan | 84 (0.8) | 537 (2.5) | 15 (0.7) | 533 (3.5) | 1 (0.2) | ~ ~ | 11.4 (0.04) |
| Morocco | 82 (1.1) | 362 (4.4) | 16 (1.0) | 345 (5.7) | 2 (0.2) | ~ ~ | 11.4 (0.06) |
| Azerbaijan | 82 (0.9) | 480 (3.7) | 16 (0.7) | 458 (5.7) | 2 (0.3) | ~ ~ | 11.2 (0.05) |
| Portugal | 82 (0.9) | 532 (2.4) | 15 (0.8) | 511 (4.2) | 3 (0.3) | 510 (9.2) | 11.2 (0.05) |
| Georgia | 75 (1.0) | 493 (3.0) | 21 (0.8) | 483 (3.7) | 3 (0.4) | 469 (9.3) | 10.8 (0.06 |
| Bulgaria | 74 (1.3) | 551 (4.5) | 22 (1.1) | 557 (5.3) | 4 (0.5) | 547 (13.2) | 10.8 (0.06 |
| Saudi Arabia | 70 (1.6) | 444 (4.3) | 25 (1.3) | 415 (5.4) | 6 (0.6) | 386 (10.1) | 10.7 (0.08 |
| Oman | 69 (1.1) | 433 (3.4) | 25 (0.9) | 396 (3.6) | 6 (0.4) | 383 (6.9) | 10.6 (0.06 |
| Spain | 69 (0.8) | 532 (1.4) | 26 (0.7) | 521 (3.6) | 5 (0.3) | 511 (4.5) | 10.4 (0.03 |
| Norway (5) | 69 (1.3) | 565 (2.4) | 27 (1.1) | 550 (3.0) | 4 (0.5) | 530 (7.1) | 10.4 (0.06 |
| Kuwait | 66 (1.3) | 404 (3.8) | 28 (1.2) | 385 (6.3) | 7 (0.5) | 366 (9.6) | 10.4 (0.06) |
| Malta | 64 (0.8) | 465 (2.0) | 29 (0.8) | 436 (3.5) | 7 (0.4) | 411 (6.8) | 10.3 (0.03) |
| Northern Ireland | 63 (1.5) | 575 (2.4) | 30 (1.2) | 554 (3.3) | 7 (0.4) | 520 (7.6) | 10.3 (0.05) |
| Finland | 63 (1.3) | 574 (2.0) | 32 (1.1) | 558 (2.5) | 5 (0.5) | 526 (7.3) | 10.2 (0.00 |
| New Zealand | 62 (0.9) | 532 (2.6) | 31 (0.7) | 514 (3.3) | 6 (0.5) | 497 (5.8) | 10.2 (0.03 |
| Netherlands | 62 (1.3) | 552 (2.0) | 32 (1.1) | 539 (2.1) | 7 (0.7) | 512 (6.8) | 10.1 (0.06 |
| Lithuania | 61 (1.3) | 554 (2.7) | 34 (1.2) | 542 (3.5) | 5 (0.4) | 532 (7.4) | 10.1 (0.05 |
| Ireland | 61 (1.4) | 577 (2.5) | 31 (1.0) | 557 (3.4) | 8 (0.8) | 533 (5.7) | 10.1 (0.06 |
| Chile | 61 (1.2) | 507 (2.7) | 28 (0.9) | 485 (4.1) | 11 (0.6) | 465 (5.4) | 10.1 (0.06 |
| Iran, Islamic Rep. of | 61 (1.6) | 421 (4.8) | 34 (1.4) | 445 (4.4) | 5 (0.4) | 415 (10.7) | 10.4 (0.08 |
| South Africa | 59 (1.1) | 331 (3.6) | 31 (0.9) | 314 (6.2) | 9 (0.6) | 300 (8.6) | 10.2 (0.06 |
| Denmark | 59 (1.4) | 558 (2.4) | 34 (1.1) | 537 (3.0) | 7 (0.6) | 519 (5.2) | 10.2 (0.00 |
| Sweden | 58 (1.5) | 563 (2.8) | 35 (1.2) | 549 (3.0) | 7 (0.7) | 533 (5.7) | 10.0 (0.06 |
| Bahrain | 58 (1.4) | 461 (3.0) | 33 (1.0) | 435 (2.8) | 10 (0.6) | 415 (6.3) | 10.0 (0.07 |
| Australia | 57 (1.0) | 554 (3.1) | 33 (0.9) | 537 (3.2) | 10 (0.5) | 517 (4.6) | 9.9 (0.04 |
| Hungary | 57 (1.5) | 560 (3.4) | 35 (0.5) | 548 (3.5) | 8 (0.8) | 537 (5.7) | 9.9 (0.06 |
| Canada | 57 (0.9) | 551 (2.1) | 35 (0.8) | 540 (2.5) | 8 (0.4) | 515 (3.8) | 9.9 (0.04 |
| England | 56 (1.4) | 569 (2.1) | 35 (1.0) | 552 (2.3) | 9 (0.7) | 526 (4.5) | 9.9 (0.06 |
| United Arab Emirates | 56 (0.8) | 473 (3.4) | 34 (0.7) | 433 (3.9) | 10 (0.4) | 406 (6.0) | 10.0 (0.04 |
| Belgium (Flemish) | 56 (1.2) | 533 (2.2) | 36 (1.0) | 520 (2.6) | 7 (0.5) | 496 (4.6) | 9.9 (0.05 |
| Italy | 56 (1.2) | 554 (2.3) | 36 (1.0) | 543 (2.7) | 8 (0.5) | 532 (4.3) | 9.8 (0.05 |
| Russian Federation | 54 (1.3) | 582 (2.7) | 40 (1.2) | 582 (2.5) | 6 (0.4) | 572 (4.3) | 9.8 (0.05 |
| Trinidad and Tobago | 54 (1.8) | 490 (3.9) | 35 (1.4) | 471 (4.3) | 10 (0.8) | 456 (6.6) | 9.8 (0.08 |
| United States | 54 (1.3) | 562 (3.1) | 34 (1.0) | 544 (3.6) | 13 (0.8) | 526 (5.3) | 9.8 (0.06 |
| Austria | 52 (1.1) | 547 (2.5) | 38 (0.9) | 537 (2.8) | 10 (0.6) | 524 (4.4) | 9.7 (0.05 |
| Israel | 51 (1.4) | 529 (2.8) | 35 (1.2) | 534 (3.9) | 15 (1.0) | 536 (5.8) | 9.6 (0.07 |
| Qatar | 50 (0.8) | 465 (2.0) | 35 (0.7) | 437 (3.0) | 15 (0.6) | 404 (3.5) | 9.6 (0.04 |
| Slovak Republic | 50 (0.0) | 534 (4.6) | 41 (1.0) | 539 (3.1) | 9 (0.6) | 525 (4.8) | 9.6 (0.05 |
| Latvia | 49 (1.4) | 560 (2.2) | 43 (1.1) | 559 (2.2) | 8 (0.7) | 538 (5.3) | 9.6 (0.06 |
| Singapore | 49 (0.9) | 583 (3.5) | 42 (0.8) | 574 (3.3) | 9 (0.4) | 550 (4.9) | 9.6 (0.04 |
| Germany | 47 (1.7) | 556 (2.7) | 41 (1.2) | 536 (3.9) | 12 (0.7) | 516 (6.3) | 9.4 (0.07 |
| Slovenia | 44 (1.4) | 544 (2.7) | 46 (1.2) | 542 (2.4) | 10 (0.9) | 537 (4.1) | 9.3 (0.05 |
| Belgium (French) | 43 (1.3) | 503 (3.0) | 42 (1.1) | 497 (3.0) | 15 (1.0) | 482 (4.1) | 9.3 (0.06) |
| France | 43 (1.6) | 512 (2.7) | 48 (1.2) | 514 (2.6) | 9 (0.8) | 492 (5.1) | 9.4 (0.05 |
| Czech Republic | 42 (1.1) | 547 (3.2) | 48 (1.0) | 545 (2.3) | 9 (0.5) | 525 (4.1) | 9.3 (0.04 |
| Poland | 42 (1.4) | 562 (2.6) | 46 (1.1) | 569 (2.8) | 12 (0.8) | 560 (4.4) | 9.3 (0.04 |
| Chinese Taipei | 41 (1.3) | 569 (2.3) | 46 (1.1) | 557 (2.5) | 13 (0.6) | 537 (3.7) | 9.2 (0.05 |
| Macao SAR | 37 (0.7) | 557 (1.8) | 50 (0.7) | 541 (1.7) | 13 (0.6) | 537 (3.7) | 9.1 (0.03 |
| Hong Kong SAR | 35 (1.2) | 580 (3.4) | 48 (1.0) | 567 (2.9) | 17 (1.0) | 553 (5.5) | 8.9 (0.06) |
| International Avg. | 59 (0.2) | 518 (0.4) | 33 (0.1) | 505 (0.5) | 8 (0.1) | 495 (0.9) | 0.5 (0.00) |

This PIRLS questionnaire scale was established in 2016 based on the combined response distribution of all countries that participated in PIRLS 2016. 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.

Exhibit 6.6: Students' Sense of School Belonging (Continued)

| Country | High Sense of School Belonging | | Some Sense of School Belonging | | Little Sense of School Belonging | | Average |
|---------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------|-------------------------------------|------------------------|-------------|
| | Percent of Students | Average Achievement | Percent of Students | Average Achievement | Percent of Students | Average Achievement | Scale Score |
| chmarking Participants | | | | | | | |
| Andalusia, Spain | 71 (1.2) | 528 (2.1) | 23 (0.9) | 519 (3.0) | 6 (0.5) | 509 (6.3) | 10.5 (0.06) |
| Norway (4) | 70 (1.2) | 522 (2.4) | 25 (0.9) | 508 (3.7) | 5 (0.5) | 493 (5.9) | 10.5 (0.05) |
| Madrid, Spain | 69 (1.5) | 551 (2.0) | 26 (1.3) | 547 (3.2) | 5 (0.5) | 531 (5.2) | 10.4 (0.07) |
| Dubai, UAE | 61 (0.8) | 532 (1.9) | 32 (0.7) | 502 (2.8) | 8 (0.3) | 455 (6.0) | 10.1 (0.04) |
| Eng/Afr/Zulu - RSA (5) | 60 (1.7) | 405 (5.1) | 31 (1.2) | 418 (9.1) | 9 (1.0) | 400 (12.5) | 10.2 (0.08) |
| Denmark (3) | 58 (1.3) | 510 (2.9) | 35 (1.1) | 491 (3.9) | 7 (0.5) | 475 (7.1) | 10.0 (0.06) |
| Ontario, Canada | 53 (1.5) | 554 (3.7) | 38 (1.3) | 539 (4.2) | 9 (0.6) | 514 (6.5) | 9.8 (0.06) |
| Buenos Aires, Argentina | 52 (1.1) | 484 (3.4) | 37 (0.8) | 484 (3.7) | 11 (0.7) | 478 (5.8) | 9.7 (0.05) |
| Quebec, Canada | 51 (1.8) | 553 (3.3) | 40 (1.6) | 545 (2.9) | 8 (0.7) | 527 (5.2) | 9.7 (0.06) |
| Moscow City, Russian Fed. | 50 (1.2) | 616 (2.4) | 42 (1.0) | 611 (2.4) | 8 (0.6) | 597 (5.1) | 9.6 (0.05) |
| Abu Dhabi, UAE | 49 (1.6) | 437 (5.3) | 38 (1.2) | 401 (5.9) | 12 (0.9) | 391 (9.0) | 9.7 (0.07) |

