

Exhibit 3.1.1: Home Socioeconomic Status – Parents’ Reports

About the Scale

Students were scored according to their parents’ reports regarding the four indicators on the *Home Socioeconomic Status* scale. Cut scores divide the scale into three categories. Students with **Higher** socioeconomic status had a score at or above the cut score corresponding to their parents reporting they had more than 25 books and more than 25 children’s books in their home, that at least one parent finished university, and that at least one parent had a professional occupation, on average. Students with **Lower** socioeconomic status had a score at or below the cut score corresponding to their parents reporting they had 25 or fewer books and 25 or fewer children’s books in the home, that neither parent had gone beyond upper-secondary education, and that neither parent was a small business owner or worked in a clerical or professional occupation, on average. All other students had **Middle** socioeconomic status.

Number of books in the home:

- 1) 0–10
- 2) 11–25
- 3) 26–100
- 4) 101–200
- 5) More than 200

Number of children’s books in the home:

- 1) 0–10
- 2) 11–25
- 3) 26–50
- 4) 51–100
- 5) More than 100

Highest level of education of either parent:

- 1) Finished some primary or lower-secondary or did not go to school
- 2) Finished lower-secondary
- 3) Finished upper-secondary
- 4) Finished post-secondary education
- 5) Finished university or higher

Highest level of occupation of either parent:

- 1) Has never worked outside home for pay, general laborer, or semi-professional (skilled agricultural or fishery worker, craft or trade worker, plant or machine operator)
- 2) Clerical (clerk or service or sales worker)
- 3) Small business owner
- 4) Professional (corporate manager or senior official, professional, or technician or associate professional)

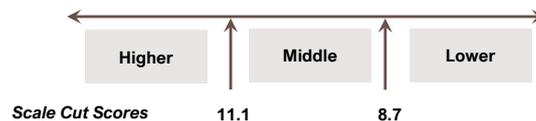


Exhibit 3.1.2: Home Socioeconomic Status – Parents’ Reports

Country	Higher Socioeconomic Status		Middle Socioeconomic Status		Lower Socioeconomic Status		Average Scale Score	
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement		
Albania	s	12 (1.7)	551 (9.3)	39 (2.9)	514 (6.7)	48 (3.4)	496 (7.5)	8.8 (0.12)
Armenia		18 (0.9)	534 (4.2)	58 (1.1)	514 (2.7)	24 (1.1)	494 (4.8)	9.8 (0.04)
Azerbaijan		7 (0.6)	552 (8.3)	48 (1.3)	511 (3.1)	45 (1.4)	468 (4.4)	9.0 (0.05)
Bahrain		20 (1.0)	512 (8.1)	62 (0.9)	459 (3.9)	19 (0.8)	422 (6.7)	9.9 (0.03)
Belgium (Flemish)		41 (1.4)	552 (2.2)	47 (1.3)	513 (2.7)	13 (0.8)	483 (4.6)	10.6 (0.05)
Belgium (French)		40 (1.1)	526 (2.6)	46 (0.9)	478 (2.9)	14 (0.7)	447 (4.0)	10.6 (0.04)
Bosnia & Herzegovina	s	20 (1.7)	496 (5.8)	48 (1.8)	463 (3.3)	33 (2.5)	417 (5.2)	9.6 (0.09)
Brazil		7 (1.3)	491 (17.0)	36 (1.2)	427 (3.5)	57 (1.4)	376 (2.4)	8.6 (0.06)
Bulgaria		34 (1.1)	579 (3.3)	39 (1.4)	541 (3.1)	27 (1.6)	457 (7.9)	9.9 (0.08)
Chile	s	10 (0.8)	500 (5.6)	57 (1.4)	453 (3.4)	33 (1.6)	419 (3.7)	9.4 (0.05)
Chinese Taipei		37 (1.3)	632 (2.0)	50 (1.0)	602 (1.8)	14 (0.6)	562 (3.1)	10.6 (0.04)
Cyprus		44 (1.0)	548 (2.3)	48 (0.8)	502 (2.7)	8 (0.5)	467 (7.2)	10.8 (0.04)
Czech Republic	r	47 (1.1)	562 (3.0)	48 (1.0)	521 (2.2)	5 (0.4)	469 (5.9)	10.9 (0.04)
Denmark		49 (1.5)	548 (2.3)	44 (1.2)	509 (2.7)	7 (0.7)	484 (5.2)	11.0 (0.05)
Finland		51 (1.5)	556 (2.5)	44 (1.3)	516 (2.4)	6 (0.5)	476 (5.9)	11.0 (0.05)
France		40 (1.8)	524 (3.4)	49 (1.5)	472 (2.5)	11 (0.9)	430 (4.1)	10.7 (0.07)
Georgia		36 (1.2)	523 (3.3)	52 (1.1)	490 (3.2)	12 (0.8)	461 (9.1)	10.5 (0.04)
Germany	s	42 (1.5)	568 (2.6)	49 (1.3)	523 (2.2)	9 (0.7)	471 (5.7)	10.8 (0.06)
Hong Kong SAR	r	39 (1.6)	627 (4.2)	46 (1.3)	584 (4.3)	15 (1.0)	543 (6.3)	10.6 (0.07)
Hungary	s	47 (1.9)	571 (3.2)	40 (1.7)	521 (3.5)	13 (1.7)	439 (12.7)	10.9 (0.09)
Iran, Islamic Rep. of		9 (0.8)	492 (6.5)	40 (1.2)	445 (3.3)	52 (1.6)	390 (5.0)	8.7 (0.06)
Ireland		50 (1.7)	573 (2.7)	42 (1.5)	535 (3.2)	7 (0.8)	472 (7.5)	11.0 (0.06)
Italy		26 (1.4)	546 (2.6)	51 (1.2)	513 (3.2)	23 (1.1)	485 (4.3)	10.0 (0.06)
Japan		25 (1.4)	629 (3.0)	62 (1.2)	586 (2.0)	13 (0.7)	553 (3.6)	10.2 (0.04)
Jordan		6 (0.7)	484 (8.4)	49 (1.3)	444 (5.2)	45 (1.5)	406 (7.1)	8.9 (0.05)
Kazakhstan		10 (0.8)	527 (9.0)	66 (1.2)	492 (3.5)	23 (1.3)	458 (4.8)	9.6 (0.04)
Korea, Rep. of		65 (1.5)	613 (2.5)	32 (1.3)	568 (3.3)	3 (0.4)	517 (10.4)	11.6 (0.05)
Kosovo	s	16 (1.2)	510 (6.3)	51 (1.3)	465 (3.8)	33 (1.6)	425 (7.0)	9.5 (0.06)
Kuwait		13 (1.0)	429 (7.8)	70 (1.2)	387 (4.6)	17 (1.0)	352 (7.8)	9.8 (0.04)
Latvia	s	39 (1.5)	566 (4.6)	49 (1.4)	532 (3.4)	12 (1.2)	490 (8.4)	10.6 (0.06)
Lithuania	s	42 (1.4)	595 (3.5)	50 (1.2)	556 (3.0)	8 (0.8)	494 (6.6)	10.7 (0.05)
Macao SAR		30 (0.6)	609 (2.2)	53 (0.6)	578 (1.4)	17 (0.5)	550 (2.8)	10.3 (0.02)
Montenegro	r	31 (1.1)	506 (3.4)	53 (0.9)	475 (2.3)	16 (0.8)	447 (4.4)	10.2 (0.04)
Morocco		3 (0.4)	458 (12.3)	19 (0.9)	428 (5.8)	78 (1.1)	384 (5.1)	7.2 (0.06)
North Macedonia		18 (1.2)	522 (4.3)	47 (1.2)	482 (3.6)	35 (1.5)	444 (5.0)	9.4 (0.08)
Norway (5)	s	54 (1.7)	560 (2.5)	42 (1.6)	525 (3.8)	4 (0.5)	486 (9.7)	11.5 (0.05)
Oman		10 (0.5)	469 (7.0)	59 (0.7)	430 (4.6)	31 (0.8)	389 (4.0)	9.4 (0.03)
Poland		47 (1.3)	571 (2.5)	46 (1.1)	533 (1.9)	7 (0.7)	487 (7.2)	10.9 (0.05)
Portugal		32 (1.6)	555 (3.2)	46 (1.1)	513 (3.3)	21 (1.2)	476 (4.1)	10.2 (0.07)
Qatar	s	22 (1.3)	506 (6.1)	65 (1.3)	460 (3.9)	13 (1.0)	413 (6.4)	10.1 (0.05)
Romania	s	31 (2.7)	595 (5.2)	44 (2.4)	556 (3.4)	25 (2.7)	504 (9.1)	10.1 (0.13)
Saudi Arabia	r	8 (0.5)	451 (6.3)	61 (1.1)	431 (4.3)	32 (1.2)	402 (5.6)	9.2 (0.04)
Serbia		28 (1.2)	564 (2.8)	52 (1.3)	524 (3.7)	21 (1.4)	468 (6.7)	10.1 (0.06)
Singapore	r	54 (0.8)	653 (2.4)	43 (0.7)	603 (3.2)	4 (0.3)	544 (9.0)	11.2 (0.03)
Slovak Republic		33 (1.3)	552 (2.5)	48 (1.2)	518 (2.6)	18 (1.2)	440 (8.8)	10.2 (0.06)
Slovenia		45 (1.2)	541 (2.7)	47 (1.1)	501 (2.1)	8 (0.5)	476 (4.7)	10.8 (0.03)
South Africa (5)	r	6 (0.7)	507 (12.9)	42 (1.0)	390 (5.0)	53 (1.1)	334 (3.2)	8.8 (0.04)
Spain		34 (1.1)	534 (2.7)	47 (0.8)	497 (1.9)	19 (1.0)	455 (3.6)	10.3 (0.05)
Sweden	r	55 (1.8)	559 (2.3)	39 (1.4)	512 (3.4)	6 (0.6)	482 (4.7)	11.3 (0.07)
Türkiye (5)		25 (1.6)	616 (4.3)	48 (1.3)	554 (4.0)	26 (1.8)	501 (5.8)	9.9 (0.08)
Uzbekistan		6 (0.6)	497 (5.7)	53 (1.1)	451 (3.2)	41 (1.2)	426 (3.7)	9.1 (0.04)
International Average		30 (0.2)	544 (0.8)	48 (0.2)	502 (0.5)	22 (0.2)	459 (0.9)	
Canada	x	55 (1.2)	542 (3.0)	41 (1.1)	505 (2.9)	4 (0.4)	468 (8.6)	11.3 (0.04)
United Arab Emirates	x	25 (0.5)	557 (2.0)	65 (0.5)	506 (1.7)	11 (0.3)	452 (4.0)	10.3 (0.01)
New Zealand	y	--	--	--	--	--	--	--
Australia		--	--	--	--	--	--	--
England		--	--	--	--	--	--	--
Netherlands		--	--	--	--	--	--	--
United States		--	--	--	--	--	--	--
Benchmarking Participants								
Sharjah, UAE	s	20 (0.9)	553 (4.7)	70 (1.0)	516 (4.2)	10 (0.7)	480 (8.9)	10.1 (0.03)
Abu Dhabi, UAE	x	25 (0.9)	529 (3.4)	64 (1.0)	479 (2.9)	10 (0.6)	412 (5.6)	10.3 (0.02)
Dubai, UAE	x	36 (0.9)	595 (2.5)	59 (1.0)	555 (2.9)	5 (0.4)	483 (9.7)	10.7 (0.03)
Quebec, Canada	x	55 (1.8)	539 (3.5)	41 (1.6)	508 (3.3)	4 (0.6)	460 (11.7)	11.3 (0.06)
Ontario, Canada	y	--	--	--	--	--	--	--

This TIMSS context questionnaire scale was established in 2019 based on the combined response distribution of 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.
- 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.
- An "x" indicates data are available for at least 40% but less than 50% of the students—interpret with caution.
- A "y" indicates data are available for less than 40% of the students.
- A dash (-) indicates comparable data not available.

Exhibit 3.1.3: Home Socioeconomic Status – Parents' Reports

Country	Higher Socioeconomic Status		Middle Socioeconomic Status		Lower Socioeconomic Status		Average Scale Score	
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement		
Albania	s	12 (1.7)	527 (8.9)	39 (2.9)	491 (6.0)	48 (3.4)	477 (6.4)	8.8 (0.12)
Armenia		18 (0.9)	478 (4.2)	58 (1.1)	457 (2.6)	24 (1.1)	442 (4.7)	9.8 (0.04)
Azerbaijan		7 (0.6)	466 (7.8)	48 (1.3)	434 (2.9)	45 (1.4)	402 (4.1)	9.0 (0.05)
Bahrain		20 (1.0)	526 (7.6)	62 (0.9)	475 (3.9)	19 (0.8)	428 (7.1)	9.9 (0.03)
Belgium (Flemish)		41 (1.4)	524 (2.3)	47 (1.3)	479 (3.1)	13 (0.8)	436 (5.8)	10.6 (0.05)
Belgium (French)		40 (1.1)	522 (2.3)	46 (0.9)	467 (3.1)	14 (0.7)	430 (4.6)	10.6 (0.04)
Bosnia & Herzegovina	s	20 (1.7)	491 (5.3)	48 (1.8)	462 (5.2)	33 (2.5)	414 (7.7)	9.6 (0.09)
Brazil		7 (1.3)	520 (12.8)	36 (1.2)	460 (3.7)	57 (1.4)	396 (3.1)	8.6 (0.06)
Bulgaria		34 (1.1)	587 (3.7)	39 (1.4)	546 (3.7)	27 (1.6)	440 (11.0)	9.9 (0.08)
Chile	s	10 (0.8)	537 (6.1)	57 (1.4)	490 (3.1)	33 (1.6)	454 (3.2)	9.4 (0.05)
Chinese Taipei		37 (1.3)	602 (1.7)	50 (1.0)	565 (2.1)	14 (0.6)	523 (3.6)	10.6 (0.04)
Cyprus		44 (1.0)	525 (3.1)	48 (0.8)	470 (3.2)	8 (0.5)	418 (6.9)	10.8 (0.04)
Czech Republic	r	47 (1.1)	557 (3.0)	48 (1.0)	516 (2.3)	5 (0.4)	467 (6.1)	10.9 (0.04)
Denmark		49 (1.5)	552 (2.6)	44 (1.2)	506 (2.6)	7 (0.7)	467 (5.8)	11.0 (0.05)
Finland		51 (1.5)	572 (2.3)	44 (1.3)	528 (3.0)	6 (0.5)	473 (7.0)	11.0 (0.05)
France		40 (1.8)	528 (2.9)	49 (1.5)	476 (2.6)	11 (0.9)	432 (4.8)	10.7 (0.07)
Georgia		36 (1.2)	484 (3.0)	52 (1.1)	459 (3.7)	12 (0.8)	440 (9.4)	10.5 (0.04)
Germany	s	42 (1.5)	569 (3.3)	49 (1.3)	516 (3.1)	9 (0.7)	443 (7.2)	10.8 (0.06)
Hong Kong SAR	r	39 (1.6)	580 (4.6)	46 (1.3)	529 (4.2)	15 (1.0)	493 (7.2)	10.6 (0.07)
Hungary	s	47 (1.9)	573 (3.8)	40 (1.7)	525 (3.1)	13 (1.7)	445 (12.8)	10.9 (0.09)
Iran, Islamic Rep. of		9 (0.8)	516 (7.4)	40 (1.2)	464 (3.8)	52 (1.6)	397 (5.1)	8.7 (0.06)
Ireland		50 (1.7)	560 (3.5)	42 (1.5)	518 (3.5)	7 (0.8)	462 (7.3)	11.0 (0.06)
Italy		26 (1.4)	547 (2.5)	51 (1.2)	511 (2.8)	23 (1.1)	477 (3.7)	10.0 (0.06)
Japan		25 (1.4)	592 (3.3)	62 (1.2)	550 (2.1)	13 (0.7)	517 (3.2)	10.2 (0.04)
Jordan		6 (0.7)	483 (8.0)	49 (1.3)	437 (4.8)	45 (1.5)	395 (6.8)	8.9 (0.05)
Kazakhstan		10 (0.8)	514 (9.6)	66 (1.2)	470 (3.3)	23 (1.3)	437 (4.7)	9.6 (0.04)
Korea, Rep. of		65 (1.5)	601 (2.3)	32 (1.3)	557 (2.9)	3 (0.4)	514 (9.8)	11.6 (0.05)
Kosovo	s	16 (1.2)	456 (6.7)	51 (1.3)	418 (4.2)	33 (1.6)	380 (6.0)	9.5 (0.06)
Kuwait		13 (1.0)	430 (8.9)	70 (1.2)	380 (5.5)	17 (1.0)	336 (7.6)	9.8 (0.04)
Latvia	s	39 (1.5)	561 (4.4)	49 (1.4)	523 (3.4)	12 (1.2)	481 (9.5)	10.6 (0.06)
Lithuania	s	42 (1.4)	568 (3.3)	50 (1.2)	532 (3.4)	8 (0.8)	471 (7.1)	10.7 (0.05)
Macao SAR		30 (0.6)	565 (2.4)	53 (0.6)	530 (1.8)	17 (0.5)	506 (2.7)	10.3 (0.02)
Montenegro	r	31 (1.1)	492 (3.2)	53 (0.9)	458 (2.5)	16 (0.8)	421 (4.2)	10.2 (0.04)
Morocco		3 (0.4)	445 (12.5)	19 (0.9)	421 (7.2)	78 (1.1)	383 (5.7)	7.2 (0.06)
North Macedonia		18 (1.2)	494 (4.9)	47 (1.2)	446 (4.1)	35 (1.5)	405 (4.6)	9.4 (0.08)
Norway (5)	s	54 (1.7)	565 (2.8)	42 (1.6)	523 (4.2)	4 (0.5)	449 (12.1)	11.5 (0.05)
Oman		10 (0.5)	491 (6.8)	59 (0.7)	443 (4.7)	31 (0.8)	397 (4.5)	9.4 (0.03)
Poland		47 (1.3)	576 (2.8)	46 (1.1)	536 (2.4)	7 (0.7)	491 (6.9)	10.9 (0.05)
Portugal		32 (1.6)	544 (2.4)	46 (1.1)	505 (2.7)	21 (1.2)	476 (3.3)	10.2 (0.07)
Qatar	s	22 (1.3)	521 (6.6)	65 (1.3)	473 (4.1)	13 (1.0)	420 (6.4)	10.1 (0.05)
Romania	s	31 (2.7)	576 (4.8)	44 (2.4)	538 (3.2)	25 (2.7)	498 (8.8)	10.1 (0.13)
Saudi Arabia	r	8 (0.5)	464 (7.8)	61 (1.1)	442 (4.0)	32 (1.2)	407 (5.9)	9.2 (0.04)
Serbia		28 (1.2)	547 (3.0)	52 (1.3)	509 (3.4)	21 (1.4)	465 (6.7)	10.1 (0.06)
Singapore	r	54 (0.8)	647 (2.1)	43 (0.7)	592 (2.9)	4 (0.3)	531 (8.7)	11.2 (0.03)
Slovak Republic		33 (1.3)	565 (2.8)	48 (1.2)	526 (2.6)	18 (1.2)	429 (9.3)	10.2 (0.06)
Slovenia		45 (1.2)	558 (2.6)	47 (1.1)	513 (2.9)	8 (0.5)	460 (6.7)	10.8 (0.03)
South Africa (5)	r	6 (0.7)	493 (17.6)	42 (1.0)	344 (7.2)	53 (1.1)	272 (4.5)	8.8 (0.04)
Spain		34 (1.1)	540 (2.7)	47 (0.8)	502 (1.7)	19 (1.0)	464 (3.3)	10.3 (0.05)
Sweden	r	55 (1.8)	569 (2.7)	39 (1.4)	511 (3.5)	6 (0.6)	458 (5.2)	11.3 (0.07)
Türkiye (5)		25 (1.6)	621 (3.3)	48 (1.3)	570 (3.2)	26 (1.8)	529 (5.5)	9.9 (0.08)
Uzbekistan		6 (0.6)	462 (5.6)	53 (1.1)	419 (3.7)	41 (1.2)	395 (4.2)	9.1 (0.04)
International Average		30 (0.2)	535 (0.8)	48 (0.2)	490 (0.5)	22 (0.2)	444 (0.9)	
Canada	x	55 (1.2)	555 (2.8)	41 (1.1)	515 (2.9)	4 (0.4)	476 (8.2)	11.3 (0.04)
United Arab Emirates	x	25 (0.5)	562 (2.1)	65 (0.5)	507 (2.3)	11 (0.3)	440 (4.4)	10.3 (0.01)
New Zealand	y	--	--	--	--	--	--	--
Australia		--	--	--	--	--	--	--
England		--	--	--	--	--	--	--
Netherlands		--	--	--	--	--	--	--
United States		--	--	--	--	--	--	--
Benchmarking Participants								
Sharjah, UAE	s	20 (0.9)	559 (5.2)	70 (1.0)	519 (4.5)	10 (0.7)	469 (9.3)	10.1 (0.03)
Abu Dhabi, UAE	x	25 (0.9)	526 (4.2)	64 (1.0)	472 (4.2)	10 (0.6)	384 (6.3)	10.3 (0.02)
Dubai, UAE	x	36 (0.9)	606 (2.7)	59 (1.0)	563 (3.0)	5 (0.4)	482 (11.2)	10.7 (0.03)
Quebec, Canada	x	55 (1.8)	535 (3.5)	41 (1.6)	498 (3.9)	4 (0.6)	446 (10.1)	11.3 (0.06)
Ontario, Canada	y	--	--	--	--	--	--	--

This TIMSS context questionnaire scale was established in 2019 based on the combined response distribution of 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.

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.

An "x" indicates data are available for at least 40% but less than 50% of the students—interpret with caution.

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

A dash (-) indicates comparable data not available.