

Appendix 15C: PIRLS 2021 Context Questionnaire Scales Based on Teachers' Reports

Classroom Teaching Limited by Student Not Ready for Instruction

About the Scale

Students were scored according to their teachers' reports regarding eight student attributes on the *Classroom Teaching Limited by Students Not Ready for Instruction* scale. Cut scores divide the scale into three categories. Students with teachers who felt their teaching was limited **Very Little** had a score at or above the cut score corresponding to their teachers reporting they were "not at all" limited by four of the eight student attributes and were limited "some" by the other four, on average. Students with teachers who felt their teaching was limited **A Lot** had a score at or below the cut score corresponding to their teachers reporting they were limited "a lot" by four of the eight attributes and were limited "some" by the other four, on average. All other students had teachers who felt their teaching was limited **Some**.

In your view, to what extent do the following limit how you teach this class?

	Not at all	Some	A lot
ATBR03A [†] 1) Students lacking prerequisite knowledge or skills - - - - -	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBR03B [†] 2) Students suffering from lack of basic nutrition -	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBR03C [†] 3) Students suffering from not enough sleep - - -	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBR03D [†] 4) Students absent from class - - - - -	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBR03E [†] 5) Disruptive students - - - - -	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBR03F [†] 6) Uninterested students - - - - -	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBR03G [†] 7) Students with mental, emotional, or psychological impairment - - - - -	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBR03H 8) Students needing extra support in reading - - -	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Very Little Some A Lot

Scale Cut Scores 10.9 6.6

[†] Trend item—item was included in the same scale in PIRLS 2016 and was used for linking the PIRLS 2016 and PIRLS 2021 scales.

Item Parameters for the PIRLS 2021 Classroom Teaching Limited by Student Not Ready for Instruction Scale

Item	delta	tau_1	tau_2	Infit	Q-Index
ATBR03A	0.77764	-1.81297	1.81297	1.00	0.13
ATBR03B	-1.35648	-0.80680	0.80680	1.08	0.12
ATBR03C	-0.41070	-1.50709	1.50709	0.96	0.11
ATBR03D	-0.09823	-1.25947	1.25947	1.01	0.12
ATBR03E	0.11314	-1.30257	1.30257	1.01	0.12
ATBR03F	0.43837	-1.76165	1.76165	0.88	0.09
ATBR03G	-0.26713	-1.39159	1.39159	1.04	0.12
ATBR03H	0.80339	-1.78839	1.78839	1.07	0.14

Scale Transformation Constants for the PIRLS 2021 Classroom Teaching Limited by Student Not Ready for Instruction Scale

Scale Transformation Constants

A = 8.721039

B = 1.358071

Transformed Scale Score = 8.721039 + 1.358071 • Logit Scale Score

Equivalence Table of the Raw Score and Transformed Scale Scores for the PIRLS 2021 Classroom Teaching Limited by Student Not Ready for Instruction Scale

Raw Score	Transformed Scale Score	Cutpoint
0	2.79550	
1	4.44897	
2	5.31576	
3	5.96314	
4	6.51654	6.6
5	7.02686	
6	7.52318	
7	8.02670	
8	8.54995	
9	9.10220	
10	9.68037	
11	10.27928	
12	10.90415	10.9
13	11.57611	
14	12.34223	
15	13.32137	
16	15.07968	

Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2021 Classroom Teaching Limited by Student Not Ready for Instruction Scale

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item							
			ATBR03A	ATBR03B	ATBR03C	ATBR03D	ATBR03E	ATBR03F	ATBR03G	ATBR03H
Albania	0.82	45	0.48	0.69	0.72	0.65	0.53	0.75	0.81	0.65
Australia	0.82	44	0.70	0.69	0.70	0.60	0.73	0.67	0.65	0.53
Austria	0.76	38	0.62	0.48	0.72	0.68	0.58	0.69	0.61	0.49
Azerbaijan	0.83	46	0.58	0.59	0.71	0.73	0.71	0.71	0.79	0.56
Bahrain	0.79	41	0.64	0.54	0.68	0.56	0.63	0.80	0.58	0.65
Belgium (Flemish)	0.74	36	0.55	0.59	0.69	0.65	0.60	0.55	0.62	0.54
Belgium (French)	0.73	35	0.70	0.47	0.64	0.58	0.52	0.68	0.60	0.52
Brazil	0.81	43	0.61	0.75	0.74	0.74	0.51	0.81	0.56	0.46
Bulgaria	0.85	49	0.82	0.50	0.56	0.73	0.66	0.84	0.76	0.67
Chinese Taipei	0.65	30	0.59	0.51	0.53	0.33	0.50	0.62	0.51	0.68
Croatia	0.75	37	0.52	0.60	0.61	0.61	0.59	0.67	0.60	0.64
Cyprus	0.82	45	0.64	0.65	0.73	0.68	0.66	0.71	0.73	0.54
Czech Republic	0.67	31	0.70	0.09	0.47	0.51	0.60	0.69	0.44	0.67
Denmark	0.79	41	0.68	0.49	0.61	0.62	0.76	0.75	0.58	0.59
Egypt	0.75	37	0.64	0.61	0.59	0.45	0.73	0.74	0.56	0.47
England	0.85	49	0.69	0.72	0.71	0.70	0.72	0.72	0.73	0.61
Finland	0.73	35	0.60	0.49	0.70	0.48	0.58	0.60	0.68	0.60
France	0.71	35	0.54	0.61	0.68	0.66	0.64	0.68	0.51	0.29
Georgia	0.85	49	0.64	0.68	0.70	0.73	0.72	0.77	0.78	0.56
Germany	0.73	36	0.68	0.45	0.59	0.54	0.60	0.67	0.67	0.54
Hong Kong SAR	0.79	41	0.54	0.51	0.60	0.62	0.70	0.63	0.74	0.74
Hungary	–	–	–	–	–	–	–	–	–	–
Iran, Islamic Rep. of	0.82	44	0.63	0.68	0.63	0.63	0.74	0.70	0.76	0.53
Ireland	–	–	–	–	–	–	–	–	–	–
Israel	0.85	48	0.69	0.63	0.77	0.71	0.67	0.75	0.75	0.56
Italy	0.81	43	0.69	0.64	0.73	0.73	0.78	0.67	0.53	0.41
Jordan	0.74	36	0.54	0.64	0.51	0.69	0.71	0.66	0.52	0.48
Kazakhstan	0.86	51	0.64	0.61	0.69	0.79	0.77	0.78	0.75	0.64
Kosovo	0.76	37	0.54	0.53	0.67	0.64	0.55	0.67	0.62	0.62
Latvia	0.75	37	0.54	0.63	0.65	0.64	0.59	0.66	0.55	0.56
Lithuania	0.80	43	0.60	0.65	0.71	0.62	0.72	0.71	0.69	0.50
Macao SAR	0.85	49	0.60	0.66	0.73	0.74	0.72	0.74	0.78	0.60
Malta	0.85	50	0.66	0.66	0.74	0.73	0.70	0.74	0.79	0.60
Montenegro	0.78	40	0.47	0.59	0.60	0.68	0.68	0.69	0.69	0.60
Morocco	0.65	31	0.58	0.63	0.46	0.64	0.70	0.66	0.35	0.25
Netherlands	0.79	42	0.66	0.66	0.72	0.60	0.67	0.78	0.57	0.45
New Zealand	0.80	41	0.54	0.70	0.68	0.64	0.63	0.67	0.69	0.56
North Macedonia	0.78	40	0.65	0.56	0.60	0.72	0.60	0.72	0.55	0.61
Northern Ireland	0.76	39	0.56	0.59	0.69	0.65	0.60	0.80	0.65	0.34

Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2021 Classroom Teaching Limited by Student Not Ready for Instruction Scale

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item							
			ATBR03A	ATBR03B	ATBR03C	ATBR03D	ATBR03E	ATBR03F	ATBR03G	ATBR03H
Norway (5)	0.76	38	0.67	0.47	0.72	0.49	0.62	0.73	0.62	0.54
Oman	0.81	42	0.50	0.59	0.67	0.67	0.72	0.71	0.68	0.58
Poland	0.73	34	0.64	0.29	0.61	0.53	0.59	0.72	0.62	0.60
Portugal	0.81	43	0.65	0.57	0.71	0.67	0.69	0.77	0.59	0.57
Qatar	0.83	45	0.68	0.65	0.72	0.66	0.69	0.76	0.59	0.63
Russian Federation	0.87	52	0.63	0.63	0.71	0.76	0.80	0.77	0.73	0.72
Saudi Arabia	0.85	49	0.69	0.71	0.65	0.69	0.64	0.79	0.74	0.70
Serbia	0.74	39	0.62	0.29	0.57	0.71	0.52	0.75	0.73	0.65
Singapore	0.83	47	0.65	0.65	0.71	0.76	0.62	0.64	0.71	0.71
Slovak Republic	0.77	39	0.70	0.45	0.59	0.69	0.49	0.70	0.60	0.71
Slovenia	0.78	40	0.62	0.61	0.67	0.58	0.67	0.76	0.67	0.43
South Africa	0.78	40	0.63	0.59	0.62	0.56	0.69	0.75	0.58	0.59
Spain	0.80	44	0.61	0.65	0.68	0.79	0.71	0.72	0.57	0.51
Sweden	0.69	32	0.61	0.40	0.58	0.54	0.67	0.57	0.50	0.63
Turkiye	0.84	47	0.68	0.69	0.67	0.65	0.67	0.74	0.64	0.74
United Arab Emirates	0.84	47	0.69	0.57	0.76	0.70	0.72	0.75	0.68	0.58
United States	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uzbekistan	0.78	41	0.52	0.46	0.58	0.72	0.79	0.78	0.61	0.59
Benchmarking Participants										
Alberta, Canada	0.76	38	0.63	0.77	0.71	0.53	0.53	0.40	0.72	0.59
British Columbia, Canada	0.84	48	0.66	0.69	0.74	0.72	0.69	0.69	0.72	0.64
Newfoundland & Labrador, Can.	0.83	46	0.72	0.72	0.68	0.54	0.69	0.55	0.80	0.66
Quebec, Canada	0.79	41	0.51	0.64	0.73	0.69	0.69	0.71	0.66	0.46
Moscow City, Russian Fed.	0.80	42	0.67	0.54	0.67	0.66	0.71	0.70	0.67	0.55
South Africa (6)	0.77	38	0.57	0.59	0.61	0.59	0.74	0.70	0.57	0.53
Abu Dhabi, UAE	0.81	43	0.61	0.51	0.75	0.67	0.74	0.74	0.63	0.58
Dubai, UAE	0.85	48	0.73	0.63	0.75	0.73	0.70	0.75	0.70	0.53

A dash (–) indicates comparable data not available.

Relationship Between the PIRLS 2021 Classroom Teaching Limited by Student Not Ready for Instruction Scale and PIRLS 2021 Achievement

Country	Pearson's Correlation with Reading Achievement		Variance in Reading Achievement Accounted for by Difference Between Regions of the Scale (η^2)
	r	r^2	
Albania	0.05	0.00	0.01
Australia	0.20	0.04	0.03
Austria	0.18	0.03	0.03
Azerbaijan	0.00	0.00	0.00
Bahrain	0.24	0.06	0.05
Belgium (Flemish)	0.12	0.02	0.01
Belgium (French)	0.21	0.05	0.03
Brazil	0.22	0.05	0.03
Bulgaria	0.30	0.09	0.07
Chinese Taipei	0.10	0.01	0.01
Croatia	0.08	0.01	0.00
Cyprus	0.14	0.02	0.02
Czech Republic	0.12	0.02	0.01
Denmark	0.11	0.01	0.01
Egypt	0.08	0.01	0.01
England	0.14	0.02	0.01
Finland	0.19	0.04	0.03
France	0.19	0.03	0.02
Georgia	0.06	0.00	0.00
Germany	0.21	0.04	0.03
Hong Kong SAR	0.16	0.03	0.02
Hungary	–	–	–
Iran, Islamic Rep. of	0.15	0.02	0.03
Ireland	–	–	–
Israel	0.14	0.02	0.03
Italy	0.05	0.00	0.01
Jordan	0.02	0.00	0.00
Kazakhstan	-0.09	0.01	0.02
Kosovo	0.07	0.00	0.01
Latvia	0.09	0.01	0.01
Lithuania	0.03	0.00	0.00
Macao SAR	0.07	0.00	0.01
Malta	0.19	0.04	0.03
Montenegro	0.09	0.01	0.00
Morocco	0.15	0.02	0.01
Netherlands	0.17	0.03	0.02
New Zealand	0.23	0.05	0.03
North Macedonia	0.08	0.01	0.00
Northern Ireland	0.19	0.04	0.03
Norway (5)	0.10	0.01	0.01

Relationship Between the PIRLS 2021 Classroom Teaching Limited by Student Not Ready for Instruction Scale and PIRLS 2021 Achievement

Country	Pearson's Correlation with Reading Achievement		Variance in Reading Achievement Accounted for by Difference Between Regions of the Scale (η^2)
	r	r^2	
Oman	0.11	0.01	0.01
Poland	0.08	0.01	0.00
Portugal	0.16	0.02	0.02
Qatar	0.14	0.02	0.02
Russian Federation	0.06	0.00	0.00
Saudi Arabia	0.12	0.01	0.01
Serbia	0.11	0.01	0.01
Singapore	0.28	0.08	0.08
Slovak Republic	0.26	0.07	0.12
Slovenia	0.06	0.00	0.00
South Africa	0.14	0.02	0.01
Spain	0.17	0.03	0.02
Sweden	0.14	0.02	0.01
Turkiye	0.14	0.02	0.01
United Arab Emirates	0.24	0.06	0.04
United States	–	–	–
Uzbekistan	0.05	0.00	0.00
International Median	0.14	0.02	0.01
Benchmarking Participants			
Alberta, Canada	0.17	0.03	0.03
British Columbia, Canada	0.25	0.06	0.06
Newfoundland & Labrador, Can.	0.16	0.03	0.03
Quebec, Canada	0.09	0.01	0.01
Moscow City, Russian Fed.	0.05	0.00	0.00
South Africa (6)	0.14	0.02	0.02
Abu Dhabi, UAE	0.20	0.04	0.02
Dubai, UAE	0.15	0.02	0.02

A dash (–) indicates comparable data not available.

Safe and Orderly School

About the Scale¹

Students were scored according to their teachers' responses to nine 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 five of the nine 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 five of the nine statements and "agreeing a little" with the other four, on average. All other students were in **Somewhat Safe and Orderly** schools.

Thinking about your current school, indicate the extent to which you agree or disagree with each of the following statements.

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
ATBG11A ^T 1) This school is located in a safe neighborhood -	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBG11B ^T 2) I feel safe at this school - - - - -	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBG11C ^T 3) This school's security policies and practices are sufficient - - - - -	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBG11D ^T 4) The students behave in an orderly manner - - -	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBG11E ^T 5) The students are respectful of the teachers - - -	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBG11F ^T 6) The students respect school property - - - - -	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBG11G ^T 7) This school has clear rules about student conduct - - - - -	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBG11H ^T 8) This school's rules are enforced in a fair and consistent manner - - - - -	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBG11I 9) The students are respectful of each other - - -	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Scale Cut Scores 10.4 6.5

¹ For the purpose of scaling, categories in which there were very few respondents were combined. The categories "Disagree a little" and "Disagree a lot" were combined for all variables. Scale statistics reflect analysis of the items following collapsing.

^T Trend item—item was included in the same scale in PIRLS 2016 and was used for linking the PIRLS 2016 and PIRLS 2021 scales.

Item Parameters for the PIRLS 2021 *Safe and Orderly School* Scale

Item	delta	tau_1	tau_2	Infit	Q-Index
ATBG11A	-0.63042	-1.06582	1.06582	1.43	0.14
ATBG11B	-1.61318	-1.20178	1.20178	1.09	0.10
ATBG11C	-0.75938	-1.37217	1.37217	1.27	0.11
ATBG11D	0.83487	-1.97679	1.97679	0.87	0.05
ATBG11E	0.35905	-1.89383	1.89383	0.87	0.05
ATBG11F	1.18956	-1.89270	1.89270	0.90	0.05
ATBG11G	-0.59819	-1.39472	1.39472	1.11	0.09
ATBG11H	-0.02814	-1.52653	1.52653	1.07	0.07
ATBG11I	1.24583	-2.17160	2.17160	0.88	0.05

Scale Transformation Constants for the PIRLS 2021 *Safe and Orderly School* Scale

Scale Transformation Constants

A = 8.421107

B = 0.997188

Transformed Scale Score = 8.421107 + 0.997188 • Logit Scale Score

Equivalence Table of the Raw Score and Transformed Scale Scores for the PIRLS 2021 *Safe and Orderly School* Scale

Raw Score	Transformed Scale Score	Cutpoint
0	3.67446	
1	4.91298	
2	5.56887	
3	6.05453	
4	6.46434	6.5
5	6.83434	
6	7.18418	
7	7.52665	
8	7.87142	
9	8.22671	
10	8.59932	
11	8.99685	
12	9.42597	
13	9.89419	
14	10.40627	10.4
15	10.96579	
16	11.59163	
17	12.35702	
18	13.68151	

Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2021 Safe and Orderly School Scale

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item								
			ATBG11A	ATBG11B	ATBG11C	ATBG11D	ATBG11E	ATBG11F	ATBG11G	ATBG11H	ATBG11I
Albania	0.83	50	0.59	0.75	0.35	0.71	0.82	0.86	0.66	0.66	0.81
Australia	0.92	61	0.61	0.60	0.69	0.88	0.89	0.88	0.74	0.78	0.87
Austria	0.84	45	0.57	0.53	0.55	0.82	0.81	0.78	0.41	0.63	0.80
Azerbaijan	0.83	44	0.56	0.67	0.53	0.63	0.71	0.72	0.69	0.76	0.67
Bahrain	0.85	46	0.47	0.36	0.49	0.75	0.72	0.78	0.79	0.79	0.78
Belgium (Flemish)	0.87	50	0.46	0.48	0.59	0.84	0.82	0.77	0.73	0.76	0.81
Belgium (French)	0.87	50	0.67	0.60	0.66	0.77	0.77	0.76	0.67	0.73	0.74
Brazil	0.89	55	0.57	0.70	0.72	0.83	0.80	0.87	0.74	0.64	0.76
Bulgaria	0.83	44	0.48	0.63	0.64	0.76	0.77	0.77	0.54	0.56	0.73
Chinese Taipei	0.88	52	0.60	0.64	0.69	0.77	0.76	0.77	0.71	0.78	0.75
Croatia	0.91	58	0.68	0.74	0.77	0.79	0.82	0.78	0.76	0.80	0.74
Cyprus	0.90	55	0.56	0.68	0.72	0.85	0.84	0.76	0.70	0.75	0.76
Czech Republic	0.83	43	0.52	0.60	0.63	0.74	0.75	0.72	0.60	0.63	0.67
Denmark	0.90	55	0.61	0.51	0.62	0.84	0.83	0.81	0.74	0.82	0.82
Egypt	0.86	47	0.54	0.46	0.67	0.71	0.76	0.76	0.70	0.72	0.79
England	0.88	52	0.60	0.67	0.57	0.85	0.86	0.83	0.65	0.61	0.80
Finland	0.88	53	0.61	0.64	0.63	0.81	0.81	0.80	0.66	0.80	0.73
France	0.88	51	0.68	0.65	0.64	0.79	0.79	0.76	0.63	0.66	0.79
Georgia	0.78	38	0.28	0.25	0.57	0.72	0.77	0.70	0.56	0.70	0.76
Germany	0.84	46	0.65	0.53	0.57	0.77	0.75	0.78	0.57	0.65	0.75
Hong Kong SAR	0.89	53	0.50	0.58	0.57	0.79	0.83	0.81	0.78	0.78	0.83
Hungary	–	–	–	–	–	–	–	–	–	–	–
Iran, Islamic Rep. of	0.91	60	0.76	0.78	0.73	0.80	0.81	0.76	0.80	0.73	0.79
Ireland	–	–	–	–	–	–	–	–	–	–	–
Israel	0.86	49	0.31	0.46	0.38	0.84	0.88	0.79	0.77	0.78	0.81
Italy	0.85	47	0.51	0.63	0.62	0.77	0.77	0.79	0.62	0.65	0.73
Jordan	0.88	52	0.65	0.69	0.80	0.79	0.64	0.76	0.61	0.77	0.76
Kazakhstan	0.88	55	0.46	0.65	0.75	0.79	0.75	0.84	0.76	0.77	0.82
Kosovo	0.76	40	0.26	0.30	0.17	0.75	0.80	0.77	0.64	0.74	0.80
Latvia	0.79	38	0.42	0.38	0.50	0.68	0.73	0.81	0.56	0.62	0.71
Lithuania	0.88	51	0.40	0.67	0.72	0.76	0.79	0.80	0.73	0.69	0.81
Macao SAR	0.90	55	0.55	0.68	0.73	0.79	0.78	0.77	0.84	0.81	0.71
Malta	0.88	52	0.40	0.65	0.68	0.78	0.83	0.78	0.73	0.77	0.76
Montenegro	0.88	52	0.50	0.52	0.70	0.77	0.84	0.86	0.77	0.75	0.72
Morocco	0.79	48	0.68	0.69	-0.32	0.76	0.71	0.79	0.65	0.71	0.81
Netherlands	0.89	54	0.59	0.55	0.72	0.85	0.84	0.77	0.68	0.74	0.82
New Zealand	0.89	53	0.57	0.66	0.67	0.80	0.83	0.77	0.67	0.73	0.82
North Macedonia	0.86	49	0.45	0.41	0.50	0.81	0.75	0.83	0.63	0.82	0.87
Northern Ireland	0.88	53	0.54	0.38	0.37	0.86	0.90	0.79	0.77	0.82	0.87

Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2021 Safe and Orderly School Scale

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item								
			ATBG11A	ATBG11B	ATBG11C	ATBG11D	ATBG11E	ATBG11F	ATBG11G	ATBG11H	ATBG11I
Norway (5)	0.88	50	0.45	0.48	0.54	0.84	0.86	0.86	0.66	0.72	0.81
Oman	0.85	46	0.52	0.62	0.61	0.76	0.72	0.72	0.67	0.70	0.72
Poland	0.85	46	0.50	0.61	0.63	0.77	0.77	0.71	0.68	0.74	0.66
Portugal	0.87	50	0.63	0.69	0.69	0.76	0.79	0.78	0.63	0.65	0.75
Qatar	0.91	59	0.40	0.59	0.67	0.85	0.85	0.87	0.82	0.85	0.86
Russian Federation	0.90	55	0.59	0.63	0.62	0.84	0.83	0.84	0.57	0.84	0.84
Saudi Arabia	0.89	55	0.57	0.61	0.82	0.72	0.78	0.80	0.79	0.80	0.76
Serbia	0.85	47	0.55	0.54	0.69	0.79	0.71	0.79	0.69	0.72	0.64
Singapore	0.90	56	0.47	0.63	0.64	0.84	0.87	0.85	0.75	0.80	0.82
Slovak Republic	0.87	49	0.49	0.62	0.64	0.76	0.81	0.80	0.68	0.71	0.74
Slovenia	0.86	47	0.65	0.69	0.72	0.76	0.75	0.69	0.65	0.68	0.60
South Africa	0.90	55	0.66	0.70	0.73	0.81	0.76	0.83	0.65	0.70	0.81
Spain	0.87	50	0.58	0.59	0.60	0.76	0.85	0.80	0.69	0.71	0.72
Sweden	0.89	55	0.64	0.66	0.73	0.83	0.87	0.77	0.64	0.77	0.72
Turkiye	0.92	60	0.75	0.75	0.81	0.81	0.75	0.82	0.72	0.75	0.81
United Arab Emirates	0.88	51	0.31	0.31	0.52	0.87	0.83	0.85	0.71	0.85	0.87
United States	–	–	–	–	–	–	–	–	–	–	–
Uzbekistan	0.84	46	0.57	0.65	0.68	0.59	0.76	0.72	0.55	0.77	0.77
Benchmarking Participants											
Alberta, Canada	0.87	50	0.53	0.61	0.65	0.78	0.78	0.81	0.69	0.67	0.78
British Columbia, Canada	0.90	56	0.58	0.68	0.63	0.76	0.85	0.84	0.79	0.77	0.79
Newfoundland & Labrador, Can.	0.89	54	0.60	0.64	0.65	0.79	0.90	0.88	0.65	0.69	0.76
Quebec, Canada	0.86	49	0.62	0.63	0.61	0.81	0.73	0.78	0.63	0.67	0.75
Moscow City, Russian Fed.	0.89	54	0.54	0.65	0.67	0.81	0.80	0.82	0.65	0.82	0.80
South Africa (6)	0.91	58	0.67	0.69	0.74	0.79	0.80	0.81	0.75	0.80	0.82
Abu Dhabi, UAE	0.88	52	0.38	0.32	0.56	0.88	0.83	0.87	0.67	0.84	0.88
Dubai, UAE	0.87	49	0.16	0.27	0.42	0.86	0.83	0.83	0.78	0.85	0.84

A dash (–) indicates comparable data not available.

Relationship Between the PIRLS 2021 *Safe and Orderly School* Scale and PIRLS 2021 Achievement

Country	Pearson's Correlation with Reading Achievement		Variance in Reading Achievement Accounted for by Difference Between Regions of the Scale (η^2)
	r	r^2	
Albania	0.03	0.00	0.00
Australia	0.15	0.02	0.02
Austria	0.19	0.04	0.03
Azerbaijan	0.00	0.00	0.00
Bahrain	0.19	0.03	0.02
Belgium (Flemish)	0.12	0.02	0.02
Belgium (French)	0.17	0.03	0.01
Brazil	0.24	0.06	0.07
Bulgaria	0.13	0.02	0.02
Chinese Taipei	-0.01	0.00	0.00
Croatia	0.04	0.00	0.00
Cyprus	0.11	0.01	0.01
Czech Republic	0.07	0.01	0.00
Denmark	0.09	0.01	0.01
Egypt	0.11	0.01	0.00
England	0.16	0.02	0.01
Finland	0.11	0.01	0.01
France	0.14	0.02	0.01
Georgia	-0.01	0.00	0.00
Germany	0.18	0.03	0.02
Hong Kong SAR	0.15	0.02	0.01
Hungary	–	–	–
Iran, Islamic Rep. of	0.10	0.01	0.02
Ireland	–	–	–
Israel	-0.10	0.01	0.01
Italy	0.05	0.00	0.00
Jordan	0.20	0.04	0.02
Kazakhstan	-0.04	0.00	0.00
Kosovo	0.03	0.00	0.00
Latvia	-0.01	0.00	0.00
Lithuania	-0.06	0.00	0.00
Macao SAR	0.14	0.02	0.02
Malta	0.14	0.02	0.02
Montenegro	-0.06	0.00	0.00
Morocco	0.18	0.03	0.03
Netherlands	0.13	0.02	0.01
New Zealand	0.17	0.03	0.02
North Macedonia	0.04	0.00	0.00
Northern Ireland	0.16	0.03	0.03
Norway (5)	0.07	0.00	0.00

Relationship Between the PIRLS 2021 *Safe and Orderly School* Scale and PIRLS 2021 Achievement

Country	Pearson's Correlation with Reading Achievement		Variance in Reading Achievement Accounted for by Difference Between Regions of the Scale (η^2)
	r	r^2	
Oman	0.08	0.01	0.01
Poland	-0.04	0.00	0.00
Portugal	0.12	0.01	0.01
Qatar	0.03	0.00	0.00
Russian Federation	-0.01	0.00	0.00
Saudi Arabia	0.13	0.02	0.02
Serbia	-0.01	0.00	0.00
Singapore	0.07	0.00	0.01
Slovak Republic	0.11	0.01	0.01
Slovenia	-0.01	0.00	0.00
South Africa	0.08	0.01	0.01
Spain	0.08	0.01	0.00
Sweden	0.19	0.04	0.04
Turkiye	0.09	0.01	0.01
United Arab Emirates	0.23	0.05	0.05
United States	–	–	–
Uzbekistan	0.08	0.01	0.00
International Median	0.10	0.01	0.01
Benchmarking Participants			
Alberta, Canada	0.15	0.02	0.02
British Columbia, Canada	0.18	0.03	0.03
Newfoundland & Labrador, Can.	0.11	0.01	0.02
Quebec, Canada	0.09	0.01	0.01
Moscow City, Russian Fed.	0.09	0.01	0.01
South Africa (6)	0.17	0.03	0.04
Abu Dhabi, UAE	0.26	0.07	0.06
Dubai, UAE	0.06	0.00	0.00

A dash (–) indicates comparable data not available.

School Emphasis on Academic Success – Teachers' Reports

About the Scale¹

Students were scored according to their teachers' responses characterizing twelve aspects on the *School Emphasis on Academic Success* scale. Cut scores divide the scale into three categories. Students in schools with a **Very High Emphasis** on academic success had a score at or above the cut score corresponding to their teachers characterizing six of the twelve aspects as "very high" and the other six as "high," on average. Students in schools with a **Medium Emphasis** on academic success had a score at or below the cut score corresponding to their teachers characterizing six of the twelve aspects as "medium" and the other six as "high," on average. All other students attended schools with a **High Emphasis** on academic success.

How would you characterize each of the following within your school?

	Very high	High	Medium	Low	Very low
ATBG10A ^T 1) Teachers' understanding of the school's curricular goals -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBG10B ^T 2) Teachers' degree of success in implementing the school's curriculum -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBG10C ^T 3) Teachers' expectations for student achievement -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBG10D ^T 4) Teachers' ability to inspire students -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBG10E ^T 5) Collaboration between school leadership and teachers to plan instruction -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBG10F ^T 6) Parental involvement in school activities -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBG10G ^T 7) Parental commitment to ensure that students are ready to learn -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBG10H ^T 8) Parental expectations for student achievement -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBG10I ^T 9) Parental support for student achievement -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBG10J ^T 10) Students' desire to do well in school -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBG10K ^T 11) Students' ability to reach school's academic goals -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ATBG10L ^T 12) Students' respect for classmates who excel academically -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Scale Cut Scores: 12.9, 9.2

Very High Emphasis, High Emphasis, Medium Emphasis

¹ For the purpose of scaling, categories in which there were very few respondents were combined. The categories "Low" and "Very Low" were combined for all variables. Scale statistics reflect analysis of the items following collapsing.

^T Trend item—item was included in the same scale in PIRLS 2016 and was used for linking the PIRLS 2016 and PIRLS 2021 scales.

Item Parameters for the PIRLS 2021 *School Emphasis on Academic Success – Teachers’ Reports Scale*

Item	delta	tau_1	tau_2	tau_3	Infit	Q-Index
ATBG10A	-1.04676	-2.53137	-0.11284	2.64421	1.07	0.16
ATBG10B	-0.83404	-2.90962	-0.00207	2.91169	0.98	0.14
ATBG10C	-0.71575	-2.87636	-0.04684	2.92320	1.05	0.17
ATBG10D	-0.96237	-2.65997	0.00948	2.65049	1.00	0.14
ATBG10E	-0.21718	-1.39579	-0.18632	1.58211	1.22	0.16
ATBG10F	0.95289	-2.03221	0.06660	1.96561	1.01	0.13
ATBG10G	1.14759	-2.23487	0.14799	2.08688	0.87	0.09
ATBG10H	0.04044	-2.30568	-0.06777	2.37345	1.12	0.16
ATBG10I	0.99895	-2.46596	0.18533	2.28063	0.92	0.11
ATBG10J	0.16856	-2.68487	0.08560	2.59927	0.92	0.12
ATBG10K	0.64317	-3.20334	0.24992	2.95342	0.87	0.11
ATBG10L	-0.17550	-2.45011	-0.12566	2.57577	1.11	0.17

Scale Transformation Constants for the PIRLS 2021 *School Emphasis on Academic Success – Teachers’ Reports Scale*

Scale Transformation Constants

A = 9.085861

B = 1.423624

Transformed Scale Score = 9.085861 + 1.423624 • Logit Scale Score

**Equivalence Table of the Raw Score and Transformed Scale Scores for the PIRLS
2021 School Emphasis on Academic Success – Teachers’ Reports Scale**

Raw Score	Transformed Scale Score	Cutpoint
1	2.11046	
2	3.02450	
3	3.69700	
4	4.25334	
5	4.74295	
6	5.18576	
7	5.59410	
8	5.97557	
9	6.33546	
10	6.67793	
11	7.00620	
12	7.32427	
13	7.63433	
14	7.93892	
15	8.24023	
16	8.54003	
17	8.83963	
18	9.13986	9.2
19	9.44107	
20	9.74330	
21	10.04645	
22	10.35049	
23	10.65566	
24	10.96267	
25	11.27266	
26	11.58744	
27	11.90844	
28	12.24020	
29	12.58648	
30	12.95333	12.9
31	13.34977	
32	13.79010	
33	14.29769	
34	14.92360	
35	15.79388	
36	17.49801	

Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2021 School Emphasis on Academic Success – Teachers' Reports Scale

Country	Cronbach Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item											
			ATBG10A	ATBG10B	ATBG10C	ATBG10D	ATBG10E	ATBG10F	ATBG10G	ATBG10H	ATBG10I	ATBG10J	ATBG10K	ATBG10L
Albania	0.86	40	0.43	0.62	0.62	0.57	0.53	0.57	0.75	0.71	0.75	0.65	0.65	0.65
Australia	0.90	49	0.68	0.73	0.73	0.68	0.62	0.64	0.76	0.70	0.79	0.77	0.72	0.57
Austria	0.84	38	0.43	0.66	0.60	0.49	0.37	0.73	0.82	0.55	0.77	0.62	0.74	0.45
Azerbaijan	0.86	39	0.66	0.67	0.62	0.62	0.65	0.62	0.71	0.51	0.70	0.55	0.58	0.53
Bahrain	0.91	50	0.65	0.63	0.70	0.69	0.61	0.74	0.77	0.70	0.78	0.76	0.76	0.64
Belgium (Flemish)	0.84	38	0.42	0.64	0.63	0.61	0.38	0.70	0.76	0.61	0.75	0.60	0.69	0.43
Belgium (French)	0.84	38	0.36	0.55	0.58	0.36	0.35	0.73	0.80	0.67	0.78	0.70	0.71	0.53
Brazil	0.90	49	0.58	0.71	0.63	0.60	0.59	0.78	0.82	0.76	0.75	0.68	0.74	0.72
Bulgaria	0.89	46	0.47	0.57	0.71	0.69	0.57	0.74	0.71	0.63	0.78	0.78	0.81	0.60
Chinese Taipei	0.89	46	0.64	0.52	0.70	0.71	0.63	0.61	0.72	0.66	0.75	0.75	0.78	0.64
Croatia	0.89	46	0.71	0.67	0.59	0.69	0.64	0.71	0.77	0.61	0.71	0.71	0.71	0.60
Cyprus	0.89	48	0.60	0.68	0.69	0.61	0.43	0.69	0.81	0.78	0.82	0.75	0.78	0.53
Czech Republic	0.84	37	0.48	0.57	0.53	0.56	0.58	0.61	0.70	0.55	0.63	0.71	0.73	0.58
Denmark	0.89	47	0.63	0.58	0.66	0.57	0.55	0.79	0.80	0.68	0.76	0.74	0.80	0.61
Egypt	0.91	52	0.71	0.73	0.56	0.60	0.65	0.68	0.82	0.74	0.76	0.77	0.81	0.74
England	0.87	42	0.47	0.60	0.49	0.63	0.48	0.66	0.75	0.77	0.76	0.72	0.77	0.56
Finland	0.85	38	0.54	0.56	0.57	0.50	0.56	0.61	0.74	0.68	0.70	0.69	0.63	0.56
France	0.83	36	0.42	0.53	0.54	0.51	0.44	0.69	0.77	0.62	0.73	0.68	0.71	0.41
Georgia	0.90	49	0.69	0.71	0.68	0.71	0.65	0.74	0.74	0.57	0.79	0.74	0.67	0.65
Germany	0.81	35	0.39	0.46	0.53	0.43	0.32	0.62	0.80	0.65	0.80	0.65	0.74	0.43
Hong Kong SAR	0.88	43	0.59	0.66	0.63	0.66	0.63	0.65	0.76	0.68	0.71	0.71	0.73	0.33
Hungary	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Iran, Islamic Rep. of	0.89	47	0.59	0.67	0.60	0.60	0.63	0.78	0.77	0.57	0.72	0.71	0.75	0.75
Ireland	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Israel	0.88	44	0.68	0.72	0.54	0.72	0.69	0.46	0.66	0.60	0.72	0.74	0.75	0.60
Italy	0.85	39	0.66	0.69	0.58	0.54	0.62	0.56	0.76	0.56	0.71	0.62	0.69	0.48
Jordan	0.91	51	0.69	0.69	0.49	0.56	0.56	0.81	0.86	0.77	0.78	0.79	0.80	0.70
Kazakhstan	0.93	56	0.67	0.71	0.77	0.74	0.73	0.71	0.74	0.80	0.80	0.77	0.76	0.77
Kosovo	0.88	47	0.70	0.70	0.59	0.65	0.69	0.72	0.72	0.68	0.78	0.66	0.72	0.56
Latvia	0.85	38	0.68	0.69	0.62	0.59	0.70	0.61	0.72	0.19	0.70	0.61	0.66	0.49
Lithuania	0.89	47	0.66	0.71	0.52	0.68	0.68	0.73	0.73	0.63	0.73	0.71	0.72	0.67
Macao SAR	0.92	54	0.75	0.80	0.75	0.78	0.75	0.75	0.78	0.65	0.74	0.75	0.74	0.57
Malta	0.88	45	0.65	0.62	0.68	0.61	0.60	0.66	0.78	0.62	0.75	0.73	0.74	0.53
Montenegro	0.85	39	0.74	0.68	0.59	0.68	0.66	0.58	0.66	0.35	0.63	0.62	0.61	0.59
Morocco	0.87	43	0.63	0.69	0.61	0.60	0.68	0.69	0.75	0.49	0.61	0.70	0.69	0.69
Netherlands	0.80	34	0.32	0.57	0.59	0.62	0.18	0.61	0.68	0.60	0.74	0.73	0.71	0.37
New Zealand	0.89	46	0.62	0.72	0.63	0.63	0.55	0.66	0.79	0.76	0.76	0.71	0.74	0.54
North Macedonia	0.91	50	0.61	0.72	0.70	0.67	0.58	0.75	0.76	0.64	0.78	0.71	0.77	0.75
Northern Ireland	0.90	49	0.57	0.57	0.70	0.67	0.53	0.68	0.81	0.69	0.83	0.79	0.81	0.66

Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2021 School Emphasis on Academic Success – Teachers' Reports Scale

Country	Cronbach Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item											
			ATBG10A	ATBG10B	ATBG10C	ATBG10D	ATBG10E	ATBG10F	ATBG10G	ATBG10H	ATBG10I	ATBG10J	ATBG10K	ATBG10L
Norway (5)	0.80	33	0.45	0.59	0.63	0.60	0.40	0.59	0.66	0.56	0.57	0.64	0.65	0.45
Oman	0.88	43	0.46	0.41	0.70	0.52	0.59	0.70	0.77	0.72	0.73	0.75	0.72	0.67
Poland	0.84	37	0.53	0.59	0.56	0.66	0.53	0.65	0.76	0.51	0.66	0.68	0.66	0.48
Portugal	0.88	44	0.44	0.56	0.61	0.50	0.53	0.75	0.82	0.75	0.80	0.77	0.78	0.53
Qatar	0.91	52	0.74	0.76	0.70	0.71	0.73	0.62	0.76	0.56	0.79	0.74	0.81	0.68
Russian Federation	0.89	45	0.65	0.73	0.68	0.69	0.67	0.70	0.72	0.49	0.69	0.62	0.73	0.63
Saudi Arabia	0.92	56	0.74	0.77	0.73	0.66	0.65	0.63	0.74	0.77	0.77	0.81	0.87	0.77
Serbia	0.87	42	0.64	0.65	0.43	0.70	0.61	0.77	0.74	0.27	0.72	0.70	0.71	0.66
Singapore	0.91	50	0.53	0.61	0.66	0.62	0.67	0.76	0.82	0.72	0.81	0.77	0.82	0.61
Slovak Republic	0.88	44	0.57	0.67	0.54	0.57	0.47	0.71	0.76	0.60	0.79	0.78	0.80	0.59
Slovenia	0.83	36	0.70	0.69	0.67	0.67	0.66	0.56	0.71	0.26	0.64	0.49	0.55	0.49
South Africa	0.91	50	0.57	0.60	0.53	0.61	0.61	0.78	0.79	0.70	0.77	0.83	0.81	0.75
Spain	0.87	42	0.50	0.65	0.72	0.52	0.51	0.72	0.79	0.72	0.77	0.69	0.64	0.48
Sweden	0.85	40	0.64	0.63	0.71	0.60	0.39	0.63	0.75	0.63	0.75	0.67	0.67	0.40
Turkiye	0.90	48	0.64	0.67	0.65	0.70	0.66	0.74	0.76	0.64	0.74	0.71	0.78	0.59
United Arab Emirates	0.92	54	0.73	0.76	0.73	0.71	0.70	0.68	0.81	0.65	0.78	0.77	0.80	0.63
United States	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Uzbekistan	0.88	43	0.57	0.61	0.70	0.66	0.52	0.64	0.68	0.69	0.74	0.68	0.70	0.64
Benchmarking Participants														
Alberta, Canada	0.89	46	0.45	0.60	0.64	0.60	0.52	0.74	0.79	0.82	0.78	0.73	0.74	0.60
British Columbia, Canada	0.89	47	0.54	0.71	0.71	0.64	0.54	0.70	0.83	0.75	0.83	0.66	0.75	0.48
Newfoundland & Labrador, Can	0.87	46	0.67	0.63	0.64	0.65	0.29	0.70	0.80	0.79	0.80	0.81	0.56	0.65
Quebec, Canada	0.85	39	0.61	0.56	0.48	0.57	0.44	0.60	0.70	0.69	0.78	0.73	0.71	0.55
Moscow City, Russian Fed.	0.89	46	0.64	0.76	0.74	0.74	0.75	0.71	0.72	0.49	0.70	0.59	0.71	0.53
South Africa (6)	0.91	49	0.56	0.63	0.47	0.58	0.68	0.77	0.77	0.70	0.79	0.81	0.83	0.73
Abu Dhabi, UAE	0.93	58	0.73	0.75	0.77	0.70	0.71	0.75	0.84	0.71	0.82	0.77	0.84	0.73
Dubai, UAE	0.90	49	0.74	0.78	0.68	0.74	0.71	0.59	0.77	0.54	0.74	0.76	0.76	0.50

A dash (–) indicates comparable data not available.

Relationship Between the PIRLS 2021 *School Emphasis on Academic Success – Teachers’ Reports* Scale and PIRLS 2021 Achievement

Country	Pearson’s Correlation with Reading Achievement		Variance in Reading Achievement Accounted for by Difference Between Regions of the Scale (η^2)
	r	r^2	
Albania	0.13	0.02	0.02
Australia	0.14	0.02	0.01
Austria	0.23	0.05	0.04
Azerbaijan	-0.01	0.00	0.00
Bahrain	0.21	0.05	0.04
Belgium (Flemish)	0.12	0.01	0.01
Belgium (French)	0.19	0.04	0.02
Brazil	0.23	0.05	0.04
Bulgaria	0.35	0.12	0.09
Chinese Taipei	0.12	0.01	0.01
Croatia	0.02	0.00	0.01
Cyprus	0.23	0.05	0.05
Czech Republic	0.08	0.01	0.00
Denmark	0.15	0.02	0.02
Egypt	0.13	0.02	0.02
England	0.16	0.03	0.03
Finland	0.16	0.02	0.02
France	0.13	0.02	0.02
Georgia	0.06	0.00	0.00
Germany	0.27	0.07	0.05
Hong Kong SAR	0.12	0.02	0.02
Hungary	–	–	–
Iran, Islamic Rep. of	0.15	0.02	0.01
Ireland	–	–	–
Israel	0.03	0.00	0.00
Italy	-0.02	0.00	0.00
Jordan	0.17	0.03	0.04
Kazakhstan	-0.06	0.00	0.00
Kosovo	0.07	0.01	0.01
Latvia	0.05	0.00	0.01
Lithuania	-0.05	0.00	0.00
Macao SAR	0.17	0.03	0.03
Malta	0.08	0.01	0.01
Montenegro	0.02	0.00	0.00
Morocco	0.26	0.07	0.08
Netherlands	0.18	0.03	0.01
New Zealand	0.20	0.04	0.04
North Macedonia	0.03	0.00	0.01
Northern Ireland	0.17	0.03	0.03
Norway (5)	0.05	0.00	0.00

Relationship Between the PIRLS 2021 *School Emphasis on Academic Success – Teachers’ Reports* Scale and PIRLS 2021 Achievement

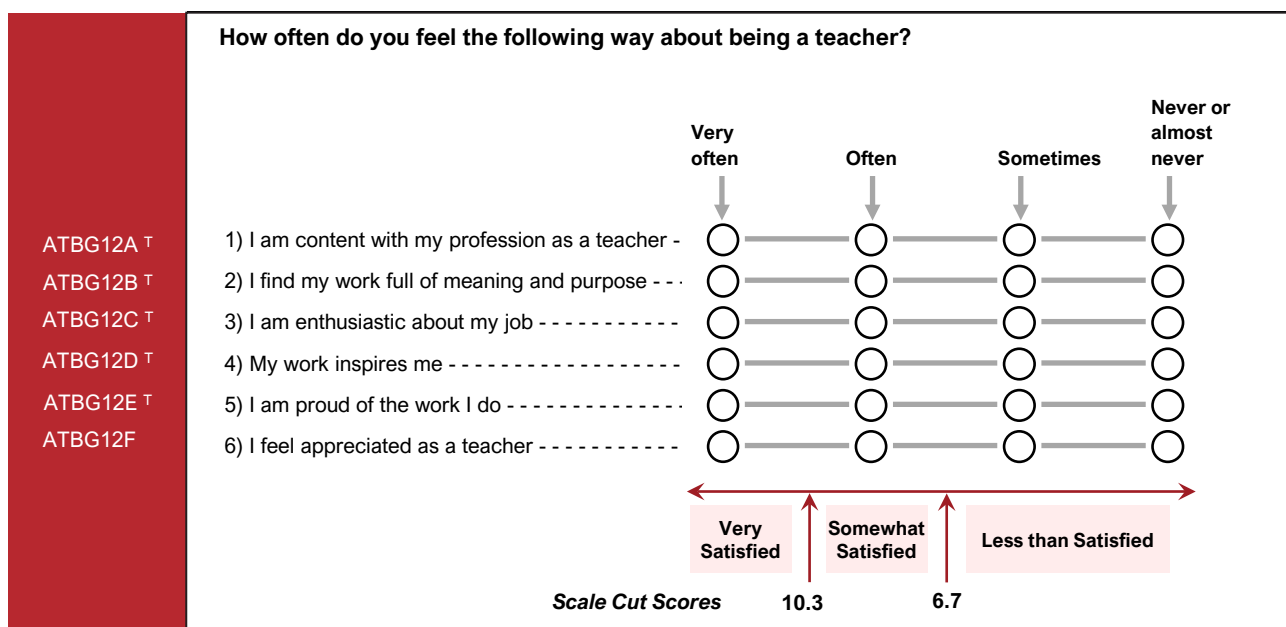
Country	Pearson’s Correlation with Reading Achievement		Variance in Reading Achievement Accounted for by Difference Between Regions of the Scale (η^2)
	r	r^2	
Oman	0.07	0.01	0.01
Poland	0.03	0.00	0.00
Portugal	0.17	0.03	0.02
Qatar	0.02	0.00	0.00
Russian Federation	0.16	0.02	0.02
Saudi Arabia	0.07	0.01	0.01
Serbia	0.09	0.01	0.01
Singapore	0.20	0.04	0.03
Slovak Republic	0.20	0.04	0.04
Slovenia	0.00	0.00	0.00
South Africa	0.09	0.01	0.01
Spain	0.05	0.00	0.00
Sweden	0.17	0.03	0.02
Turkiye	0.21	0.05	0.03
United Arab Emirates	0.14	0.02	0.04
United States	–	–	–
Uzbekistan	0.06	0.00	0.00
International Median	0.13	0.02	0.01
Benchmarking Participants			
Alberta, Canada	0.09	0.01	0.00
British Columbia, Canada	0.17	0.03	0.03
Newfoundland & Labrador, Can.	0.15	0.02	0.01
Quebec, Canada	0.12	0.01	0.01
Moscow City, Russian Fed.	0.07	0.01	0.01
South Africa (6)	0.00	0.00	0.01
Abu Dhabi, UAE	0.20	0.04	0.07
Dubai, UAE	0.04	0.00	0.00

A dash (–) indicates comparable data not available.

Teachers' Job Satisfaction

About the Scale¹

Students were scored according to their teachers' responses to six statements on the *Teachers' Job Satisfaction* scale. Cut scores divide the scale into three categories. Students with **Very Satisfied** teachers had a score at or above the cut score corresponding to their teachers responding "very often" to three of the six statements and "often" to the other three, on average. Students with **Less than Satisfied** teachers had a score at or below the cut score corresponding to their teachers responding "sometimes" to three of the six statements and "often" to the other three, on average. All other students had **Somewhat Satisfied** teachers.



¹ For the purpose of scaling, categories in which there were very few respondents were combined. The categories "Sometimes" and "Never or Almost Never" were combined for all variables. Scale statistics reflect analysis of the items following collapsing.

^T Trend item—item was included in the same scale in PIRLS 2016 and was used for linking the PIRLS 2016 and PIRLS 2021 scales.

Item Parameters for the PIRLS 2021 Teachers' Job Satisfaction Scale

Item	delta	tau_1	tau_2	Infit	Q-Index
ATBG12A	-0.20935	-1.86029	1.86029	0.95	0.06
ATBG12B	-1.08962	-1.82456	1.82456	0.97	0.06
ATBG12C	-0.20649	-1.81103	1.81103	0.87	0.04
ATBG12D	0.09996	-1.64132	1.64132	0.88	0.04
ATBG12E	-0.42069	-1.51054	1.51054	0.98	0.06
ATBG12F	1.82619	-1.29045	1.29045	1.42	0.09

Scale Transformation Constants for the PIRLS 2021 Teachers' Job Satisfaction Scale

Scale Transformation Constants

A = 8.566821

B = 1.024015

Transformed Scale Score = 8.566821 + 1.024015 • Logit Scale Score

Equivalence Table of the Raw Score and Transformed Scale Scores for the PIRLS 2021 Teachers' Job Satisfaction Scale

Raw Score	Transformed Scale Score	Cutpoint
0	3.83998	
1	5.21324	
2	6.01233	
3	6.68030	6.7
4	7.33436	
5	8.01840	
6	8.67953	
7	9.27422	
8	9.82876	
9	10.39017	10.3
10	11.01744	
11	11.82034	
12	13.24134	

Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2021 *Teachers' Job Satisfaction Scale*

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item					
			ATBG12A	ATBG12B	ATBG12C	ATBG12D	ATBG12E	ATBG12F
Albania	0.83	55	0.71	0.78	0.81	0.77	0.65	0.71
Australia	0.91	70	0.83	0.89	0.91	0.90	0.79	0.68
Austria	0.83	58	0.77	0.73	0.84	0.83	0.78	0.56
Azerbaijan	0.75	45	0.56	0.63	0.75	0.75	0.73	0.59
Bahrain	0.83	55	0.79	0.68	0.83	0.80	0.65	0.69
Belgium (Flemish)	0.88	65	0.82	0.77	0.86	0.86	0.82	0.68
Belgium (French)	0.88	64	0.84	0.85	0.89	0.87	0.70	0.63
Brazil	0.81	53	0.78	0.68	0.79	0.82	0.66	0.64
Bulgaria	0.85	59	0.73	0.68	0.85	0.80	0.78	0.73
Chinese Taipei	0.92	71	0.86	0.87	0.88	0.88	0.84	0.70
Croatia	0.86	62	0.82	0.75	0.80	0.85	0.80	0.68
Cyprus	0.92	73	0.88	0.89	0.92	0.90	0.85	0.66
Czech Republic	0.88	64	0.79	0.82	0.86	0.84	0.81	0.65
Denmark	0.89	65	0.87	0.78	0.84	0.85	0.76	0.75
Egypt	0.79	53	0.71	0.75	0.83	0.75	0.72	0.57
England	0.89	65	0.82	0.80	0.86	0.86	0.79	0.70
Finland	0.90	68	0.85	0.78	0.88	0.89	0.81	0.73
France	0.85	57	0.78	0.67	0.84	0.84	0.76	0.61
Georgia	0.69	44	0.67	0.70	0.67	0.68	0.73	0.54
Germany	0.86	60	0.79	0.69	0.87	0.84	0.79	0.64
Hong Kong SAR	0.91	70	0.86	0.88	0.81	0.83	0.88	0.76
Hungary	–	–	–	–	–	–	–	–
Iran, Islamic Rep. of	0.86	65	0.81	0.76	0.84	0.90	0.81	0.70
Ireland	–	–	–	–	–	–	–	–
Israel	0.89	68	0.81	0.86	0.87	0.90	0.83	0.65
Italy	0.86	61	0.77	0.74	0.83	0.85	0.82	0.67
Jordan	0.88	65	0.82	0.82	0.89	0.82	0.83	0.65
Kazakhstan	0.92	70	0.80	0.77	0.87	0.88	0.87	0.85
Kosovo	0.66	41	0.64	0.67	0.79	0.60	0.58	0.51
Latvia	0.88	62	0.80	0.74	0.78	0.85	0.81	0.73
Lithuania	0.89	66	0.81	0.72	0.83	0.88	0.88	0.73
Macao SAR	0.93	76	0.89	0.92	0.88	0.91	0.89	0.74
Malta	0.90	69	0.87	0.89	0.88	0.90	0.76	0.64
Montenegro	0.84	60	0.83	0.61	0.85	0.89	0.81	0.63
Morocco	0.78	51	0.79	0.59	0.85	0.81	0.61	0.59
Netherlands	0.88	65	0.83	0.79	0.89	0.86	0.81	0.61
New Zealand	0.89	66	0.83	0.86	0.88	0.86	0.72	0.67
North Macedonia	0.87	64	0.86	0.75	0.83	0.86	0.79	0.68
Northern Ireland	0.91	69	0.87	0.86	0.87	0.88	0.79	0.71

Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2021 *Teachers' Job Satisfaction Scale*

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item					
			ATBG12A	ATBG12B	ATBG12C	ATBG12D	ATBG12E	ATBG12F
Norway (5)	0.89	66	0.82	0.83	0.87	0.87	0.78	0.70
Oman	0.80	53	0.70	0.74	0.80	0.65	0.76	0.71
Poland	0.88	64	0.80	0.87	0.81	0.83	0.82	0.64
Portugal	0.86	61	0.81	0.76	0.88	0.87	0.77	0.57
Qatar	0.91	72	0.85	0.88	0.90	0.87	0.83	0.75
Russian Federation	0.88	65	0.82	0.76	0.85	0.86	0.83	0.69
Saudi Arabia	0.90	70	0.82	0.79	0.90	0.90	0.81	0.79
Serbia	0.85	59	0.74	0.66	0.86	0.85	0.82	0.67
Singapore	0.94	78	0.88	0.90	0.93	0.93	0.89	0.75
Slovak Republic	0.88	65	0.82	0.84	0.88	0.89	0.86	0.44
Slovenia	0.88	64	0.76	0.82	0.86	0.87	0.82	0.65
South Africa	0.87	63	0.79	0.80	0.85	0.85	0.79	0.65
Spain	0.80	53	0.69	0.63	0.78	0.81	0.76	0.67
Sweden	0.89	65	0.83	0.74	0.86	0.89	0.80	0.70
Turkiye	0.88	66	0.88	0.70	0.92	0.91	0.84	0.58
United Arab Emirates	0.91	70	0.83	0.85	0.89	0.89	0.79	0.76
United States	–	–	–	–	–	–	–	–
Uzbekistan	0.82	54	0.71	0.76	0.71	0.79	0.77	0.64
Benchmarking Participants								
Alberta, Canada	0.88	66	0.82	0.88	0.87	0.89	0.75	0.62
British Columbia, Canada	0.92	72	0.85	0.88	0.89	0.92	0.82	0.72
Newfoundland & Labrador, Can.	0.92	71	0.87	0.90	0.91	0.88	0.77	0.71
Quebec, Canada	0.87	63	0.82	0.74	0.86	0.86	0.84	0.60
Moscow City, Russian Fed.	0.88	64	0.81	0.73	0.81	0.86	0.82	0.75
South Africa (6)	0.86	64	0.80	0.83	0.86	0.90	0.76	0.59
Abu Dhabi, UAE	0.91	71	0.85	0.84	0.88	0.89	0.82	0.77
Dubai, UAE	0.90	70	0.82	0.86	0.90	0.90	0.77	0.74

A dash (–) indicates comparable data not available.

Relationship Between the PIRLS 2021 *Teachers' Job Satisfaction* Scale and PIRLS 2021 Achievement

Country	Pearson's Correlation with Reading Achievement		Variance in Reading Achievement Accounted for by Difference Between Regions of the Scale (η^2)
	r	r^2	
Albania	0.02	0.00	0.00
Australia	0.01	0.00	0.00
Austria	0.08	0.01	0.01
Azerbaijan	0.01	0.00	0.01
Bahrain	0.06	0.00	0.00
Belgium (Flemish)	0.05	0.00	0.01
Belgium (French)	0.03	0.00	0.00
Brazil	0.05	0.00	0.00
Bulgaria	0.13	0.02	0.02
Chinese Taipei	-0.01	0.00	0.00
Croatia	-0.03	0.00	0.00
Cyprus	0.04	0.00	0.00
Czech Republic	0.04	0.00	0.00
Denmark	0.05	0.00	0.00
Egypt	0.03	0.00	0.00
England	0.01	0.00	0.00
Finland	0.03	0.00	0.00
France	-0.01	0.00	0.00
Georgia	0.05	0.00	0.00
Germany	0.08	0.01	0.01
Hong Kong SAR	0.05	0.00	0.00
Hungary	–	–	–
Iran, Islamic Rep. of	0.03	0.00	0.01
Ireland	–	–	–
Israel	-0.07	0.00	0.01
Italy	-0.08	0.01	0.01
Jordan	0.12	0.01	0.01
Kazakhstan	-0.07	0.00	0.00
Kosovo	-0.02	0.00	0.00
Latvia	0.04	0.00	0.00
Lithuania	-0.05	0.00	0.00
Macao SAR	0.04	0.00	0.00
Malta	-0.02	0.00	0.00
Montenegro	-0.06	0.00	0.00
Morocco	0.12	0.01	0.01
Netherlands	0.05	0.00	0.02
New Zealand	0.01	0.00	0.00
North Macedonia	-0.05	0.00	0.01
Northern Ireland	0.02	0.00	0.00
Norway (5)	0.01	0.00	0.00

Relationship Between the PIRLS 2021 *Teachers' Job Satisfaction* Scale and PIRLS 2021 Achievement

Country	Pearson's Correlation with Reading Achievement		Variance in Reading Achievement Accounted for by Difference Between Regions of the Scale (η^2)
	r	r^2	
Oman	-0.01	0.00	0.00
Poland	-0.03	0.00	0.00
Portugal	0.04	0.00	0.00
Qatar	-0.12	0.02	0.00
Russian Federation	0.07	0.01	0.00
Saudi Arabia	0.05	0.00	0.00
Serbia	-0.01	0.00	0.00
Singapore	0.02	0.00	0.00
Slovak Republic	0.06	0.00	0.01
Slovenia	0.01	0.00	0.00
South Africa	-0.05	0.00	0.00
Spain	-0.02	0.00	0.00
Sweden	0.01	0.00	0.00
Turkiye	0.01	0.00	0.00
United Arab Emirates	0.06	0.00	0.00
United States	–	–	–
Uzbekistan	0.04	0.00	0.00
International Median	0.02	0.00	0.00
Benchmarking Participants			
Alberta, Canada	0.05	0.00	0.00
British Columbia, Canada	0.06	0.00	0.01
Newfoundland & Labrador, Can.	0.05	0.00	0.00
Quebec, Canada	0.08	0.01	0.01
Moscow City, Russian Fed.	0.02	0.00	0.00
South Africa (6)	-0.11	0.01	0.01
Abu Dhabi, UAE	0.12	0.01	0.01
Dubai, UAE	-0.03	0.00	0.00

A dash (–) indicates comparable data not available.