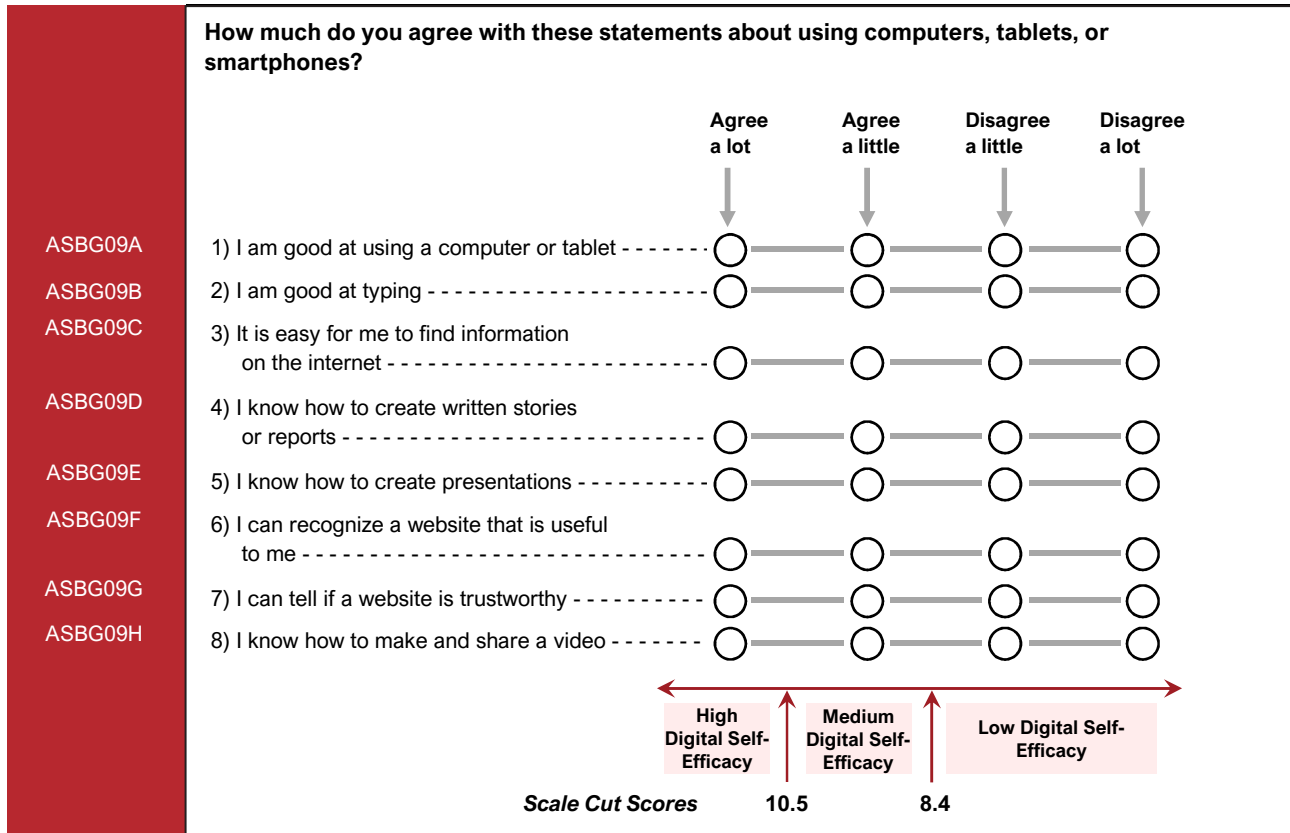


Appendix 15A: PIRLS 2021 Context Questionnaire Scales Based on Students' Reports

Digital Self-Efficacy

About the Scale

Students were scored according to their responses to eight statements on the *Digital Self-Efficacy* scale. Cut scores divide the scale into three categories. Students with **High Digital Self-Efficacy** had a score at or above the cut score corresponding to “agreeing a lot” with four of the eight statements and “agreeing a little” with the other four statements, on average. Students with **Low Digital Self-Efficacy** had a score at or below the cut score corresponding to “disagreeing a little” to four of the eight statements and “agreeing a little” with the other four statements, on average. All other students had **Medium Digital Self-Efficacy**.



Item Parameters for the PIRLS 2021 *Digital Self-Efficacy* Scale

Item	delta	tau_1	tau_2	tau_3	Infit	Q-Index
ASBG09A	-0.57278	0.23786	-0.66058	0.42272	0.99	0.14
ASBG09B	-0.19853	-0.10194	-0.46508	0.56702	1.03	0.15
ASBG09C	-0.28508	-0.27865	-0.30566	0.58431	0.99	0.14
ASBG09D	0.32435	-0.21649	-0.31783	0.53432	1.02	0.13
ASBG09E	0.39076	-0.05623	-0.26358	0.31981	1.06	0.13
ASBG09F	-0.01991	0.06771	-0.46301	0.39530	0.97	0.11
ASBG09G	0.36085	-0.28293	-0.35827	0.64120	1.01	0.13
ASBG09H	0.00034	0.34169	-0.08605	-0.25564	1.14	0.14

Scale Transformation Constants for the PIRLS 2021 *Digital Self-Efficacy* Scale

Scale Transformation Constants

A = 8.428655

B = 1.949361

Transformed Scale Score = 8.428655 + 1.949361 • Logit Scale Score

Equivalence Table of the Raw Score and Transformed Scale Scores for the PIRLS 2021 *Digital Self-Efficacy* Scale

Raw Score	Transformed Scale Score	Cutpoint
0	2.95473	
1	4.64298	
2	5.40442	
3	5.91589	
4	6.31442	
5	6.64764	
6	6.93942	
7	7.20676	
8	7.45376	
9	7.68647	
10	7.90958	
11	8.12699	
12	8.34208	8.4
13	8.55821	
14	8.77882	
15	9.00789	
16	9.25019	
17	9.51164	
18	9.79644	
19	10.12084	
20	10.50352	10.5
21	10.97885	
22	11.61875	
23	12.60945	
24	14.77909	

Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2021 Digital Self-Efficacy Scale

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item							
			ASBG09A	ASBG09B	ASBG09C	ASBG09D	ASBG09E	ASBG09F	ASBG09G	ASBG09H
Albania	0.78	39	0.65	0.57	0.63	0.65	0.63	0.67	0.56	0.62
Australia	0.76	37	0.50	0.56	0.65	0.65	0.63	0.70	0.65	0.53
Austria	0.74	37	0.54	0.57	0.65	0.57	0.58	0.72	0.68	0.51
Azerbaijan	0.73	35	0.58	0.53	0.55	0.60	0.61	0.65	0.66	0.51
Bahrain	0.74	36	0.59	0.57	0.55	0.64	0.63	0.63	0.60	0.55
Belgium (Flemish)	0.73	35	0.58	0.54	0.63	0.58	0.58	0.65	0.62	0.55
Belgium (French)	0.77	39	0.55	0.62	0.65	0.54	0.53	0.74	0.72	0.59
Brazil	0.75	36	0.56	0.61	0.63	0.61	0.60	0.68	0.54	0.56
Bulgaria	0.84	48	0.69	0.69	0.72	0.72	0.62	0.72	0.69	0.67
Chinese Taipei	0.78	40	0.50	0.64	0.68	0.69	0.66	0.65	0.63	0.60
Croatia	0.76	38	0.60	0.58	0.67	0.62	0.61	0.66	0.68	0.51
Cyprus	0.76	37	0.52	0.63	0.63	0.63	0.62	0.68	0.63	0.54
Czech Republic	0.77	40	0.62	0.61	0.64	0.60	0.59	0.71	0.69	0.55
Denmark	0.76	38	0.55	0.61	0.71	0.61	0.56	0.69	0.66	0.53
Egypt	0.86	49	0.66	0.68	0.71	0.66	0.65	0.76	0.72	0.72
England	0.72	34	0.52	0.57	0.62	0.62	0.60	0.64	0.60	0.50
Finland	0.79	41	0.63	0.60	0.69	0.69	0.67	0.68	0.62	0.53
France	0.75	37	0.57	0.57	0.63	0.56	0.60	0.71	0.65	0.56
Georgia	0.73	35	0.46	0.48	0.57	0.64	0.61	0.70	0.65	0.58
Germany	0.78	40	0.59	0.59	0.65	0.66	0.62	0.69	0.69	0.55
Hong Kong SAR	0.77	40	0.54	0.43	0.68	0.73	0.69	0.69	0.65	0.60
Hungary	0.75	37	0.60	0.63	0.62	0.62	0.56	0.65	0.61	0.53
Iran, Islamic Rep. of	0.78	39	0.56	0.66	0.62	0.56	0.64	0.68	0.66	0.64
Ireland	0.74	37	0.61	0.59	0.64	0.59	0.57	0.68	0.59	0.56
Israel	0.75	37	0.56	0.59	0.66	0.59	0.59	0.66	0.65	0.53
Italy	0.74	36	0.56	0.58	0.63	0.50	0.57	0.71	0.68	0.53
Jordan	0.87	52	0.68	0.66	0.70	0.76	0.74	0.78	0.73	0.73
Kazakhstan	0.76	37	0.54	0.56	0.58	0.68	0.63	0.65	0.63	0.59
Kosovo	0.73	35	0.59	0.45	0.66	0.59	0.59	0.67	0.56	0.57
Latvia	0.76	38	0.59	0.61	0.64	0.64	0.61	0.68	0.62	0.53
Lithuania	0.75	36	0.53	0.57	0.63	0.63	0.63	0.64	0.64	0.55
Macao SAR	0.74	36	0.47	0.50	0.65	0.66	0.68	0.66	0.62	0.50
Malta	0.71	33	0.45	0.56	0.60	0.62	0.63	0.61	0.61	0.50
Montenegro	0.74	35	0.52	0.52	0.54	0.62	0.60	0.72	0.70	0.48
Morocco	0.85	47	0.72	0.72	0.72	0.64	0.64	0.74	0.68	0.64
Netherlands	0.71	34	0.49	0.54	0.62	0.60	0.56	0.67	0.67	0.48
New Zealand	0.76	39	0.59	0.62	0.68	0.63	0.63	0.64	0.63	0.54
North Macedonia	0.81	43	0.59	0.62	0.64	0.67	0.66	0.75	0.70	0.59
Northern Ireland	0.73	36	0.54	0.60	0.64	0.62	0.61	0.65	0.58	0.50

Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2021 *Digital Self-Efficacy* Scale

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item							
			ASBG09A	ASBG09B	ASBG09C	ASBG09D	ASBG09E	ASBG09F	ASBG09G	ASBG09H
Norway (5)	0.72	35	0.54	0.53	0.66	0.67	0.60	0.63	0.61	0.46
Oman	0.74	35	0.52	0.53	0.55	0.61	0.64	0.65	0.61	0.59
Poland	0.72	36	0.61	0.59	0.66	0.58	0.57	0.69	0.56	0.50
Portugal	0.74	37	0.55	0.58	0.61	0.62	0.62	0.67	0.64	0.54
Qatar	0.69	32	0.50	0.53	0.56	0.63	0.60	0.58	0.59	0.51
Russian Federation	0.74	36	0.55	0.60	0.59	0.67	0.64	0.63	0.58	0.52
Saudi Arabia	0.75	35	0.53	0.59	0.47	0.68	0.68	0.57	0.63	0.59
Serbia	0.73	35	0.54	0.53	0.54	0.57	0.55	0.73	0.71	0.55
Singapore	0.77	39	0.57	0.58	0.64	0.69	0.67	0.63	0.64	0.56
Slovak Republic	0.78	41	0.65	0.60	0.68	0.64	0.61	0.72	0.70	0.49
Slovenia	0.79	41	0.66	0.65	0.69	0.62	0.58	0.67	0.67	0.59
South Africa	0.80	41	0.67	0.63	0.70	0.56	0.64	0.70	0.67	0.57
Spain	0.72	34	0.56	0.58	0.55	0.62	0.59	0.64	0.62	0.51
Sweden	0.75	37	0.58	0.59	0.67	0.50	0.53	0.70	0.70	0.55
Turkiye	0.74	35	0.54	0.59	0.57	0.57	0.58	0.66	0.66	0.54
United Arab Emirates	0.73	34	0.50	0.55	0.61	0.64	0.62	0.59	0.60	0.55
United States	0.72	34	0.48	0.55	0.61	0.64	0.64	0.63	0.61	0.45
Uzbekistan	0.82	44	0.67	0.48	0.72	0.59	0.62	0.75	0.75	0.67
Benchmarking Participants										
Alberta, Canada	0.77	39	0.54	0.59	0.66	0.63	0.61	0.68	0.67	0.57
British Columbia, Canada	0.78	40	0.56	0.55	0.70	0.65	0.63	0.71	0.66	0.56
Newfoundland & Labrador, Can.	0.75	37	0.52	0.54	0.64	0.66	0.65	0.67	0.62	0.53
Quebec, Canada	0.73	35	0.49	0.54	0.65	0.55	0.56	0.71	0.71	0.51
Moscow City, Russian Fed.	0.71	33	0.50	0.59	0.59	0.65	0.63	0.58	0.55	0.50
South Africa (6)	0.78	39	0.63	0.59	0.67	0.59	0.65	0.70	0.66	0.45
Abu Dhabi, UAE	0.74	35	0.51	0.60	0.64	0.65	0.63	0.58	0.59	0.52
Dubai, UAE	0.73	35	0.52	0.54	0.58	0.64	0.62	0.61	0.62	0.56

Relationship Between the PIRLS 2021 *Digital Self-Efficacy* 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	0.10	0.01	0.01
Australia	0.25	0.06	0.07
Austria	0.04	0.00	0.00
Azerbaijan	0.15	0.02	0.02
Bahrain	0.16	0.02	0.03
Belgium (Flemish)	0.06	0.00	0.00
Belgium (French)	-0.04	0.00	0.00
Brazil	0.08	0.01	0.02
Bulgaria	0.26	0.07	0.08
Chinese Taipei	0.08	0.01	0.01
Croatia	0.12	0.02	0.03
Cyprus	0.12	0.01	0.02
Czech Republic	0.02	0.00	0.00
Denmark	0.15	0.02	0.03
Egypt	-0.01	0.00	0.00
England	0.19	0.04	0.05
Finland	0.07	0.00	0.01
France	0.02	0.00	0.00
Georgia	0.13	0.02	0.02
Germany	0.03	0.00	0.00
Hong Kong SAR	0.11	0.01	0.02
Hungary	0.08	0.01	0.01
Iran, Islamic Rep. of	0.21	0.04	0.04
Ireland	0.08	0.01	0.01
Israel	0.16	0.03	0.03
Italy	0.02	0.00	0.00
Jordan	0.14	0.02	0.02
Kazakhstan	0.15	0.02	0.02
Kosovo	0.11	0.01	0.02
Latvia	0.16	0.02	0.04
Lithuania	0.12	0.01	0.02
Macao SAR	0.12	0.02	0.01
Malta	0.15	0.02	0.04
Montenegro	0.06	0.00	0.01
Morocco	0.18	0.03	0.02
Netherlands	0.05	0.00	0.01
New Zealand	0.14	0.02	0.03
North Macedonia	0.13	0.02	0.02
Northern Ireland	0.17	0.03	0.04
Norway (5)	0.12	0.01	0.02
Oman	0.07	0.00	0.01

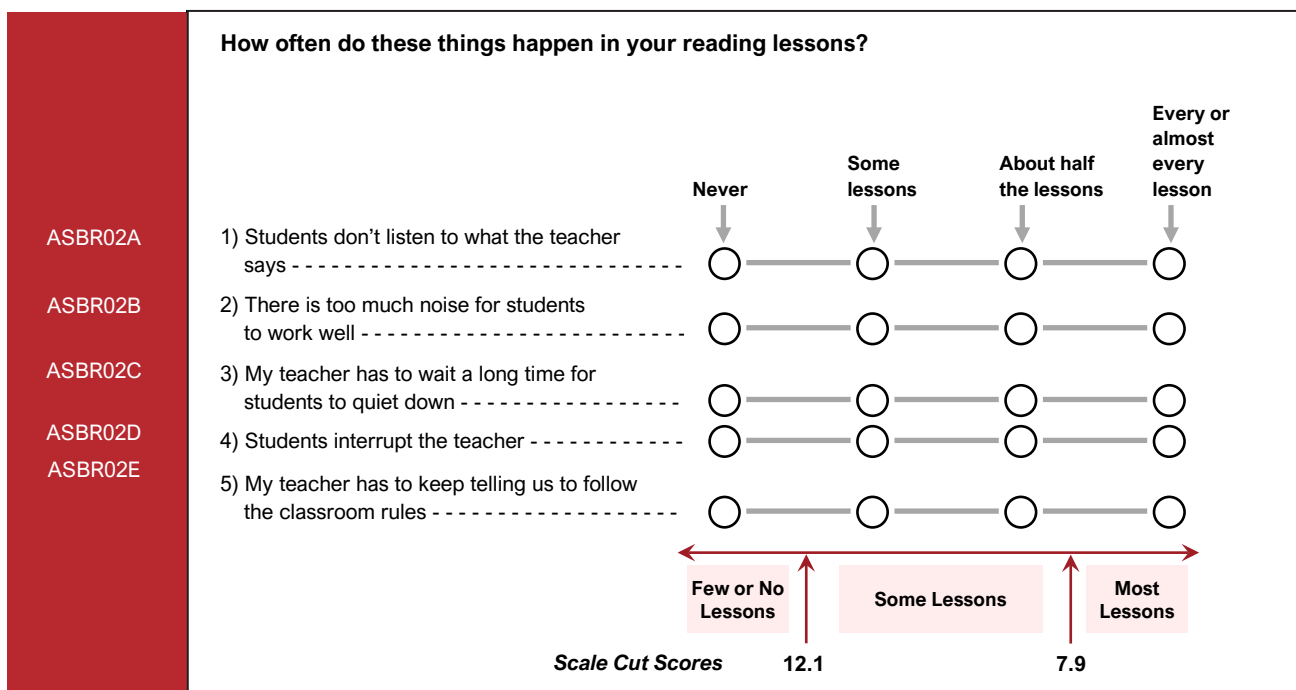
Relationship Between the PIRLS 2021 *Digital Self-Efficacy* Scale and PIRLS 2021 Achievement

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	
Poland	0.02	0.00	0.01
Portugal	0.14	0.02	0.02
Qatar	0.20	0.04	0.04
Russian Federation	0.15	0.02	0.02
Saudi Arabia	0.05	0.00	0.00
Serbia	0.15	0.02	0.02
Singapore	0.17	0.03	0.03
Slovak Republic	0.17	0.03	0.04
Slovenia	0.02	0.00	0.00
South Africa	0.14	0.02	0.02
Spain	0.11	0.01	0.01
Sweden	0.08	0.01	0.02
Turkiye	0.25	0.06	0.06
United Arab Emirates	0.22	0.05	0.06
United States	0.25	0.06	0.06
Uzbekistan	-0.04	0.00	0.00
International Median	0.12	0.02	0.02
Benchmarking Participants			
Alberta, Canada	0.15	0.02	0.03
British Columbia, Canada	0.11	0.01	0.02
Newfoundland & Labrador, Can.	0.23	0.05	0.06
Quebec, Canada	0.11	0.01	0.01
Moscow City, Russian Fed.	0.14	0.02	0.02
South Africa (6)	0.28	0.08	0.08
Abu Dhabi, UAE	0.25	0.06	0.08
Dubai, UAE	0.19	0.04	0.05

Disorderly Behavior During Reading Lessons

About the Scale

Students were scored according to their responses to five statements on the *Disorderly Behavior Reading Lessons* scale. Cut scores divide the scale into three categories. Students who reported disorderly behavior in **Few or No Lessons** had a score at or above the cut score corresponding to reporting that three of the five situations “never” happened in their reading lessons and the other two happened in “some lessons,” on average. Students who reported disorderly behavior in **Most Lessons** had a score at or below the cut score corresponding to reporting that three of the five situations happened in “every or almost every lesson” and the other two happened in “about half the lessons,” on average. All other students reported disorderly behavior in **Some Lessons**.



Item Parameters for the PIRLS 2021 *Disorderly Behavior During Reading Lessons* Scale

Item	delta	tau_1	tau_2	tau_3	Infit	Q-Index
ASBR02A	-0.12445	-0.56257	-0.80388	1.36645	1.10	0.11
ASBR02B	0.01065	-0.53384	-0.51057	1.04441	0.98	0.09
ASBR02C	0.06669	-0.22488	-0.63403	0.85891	0.93	0.07
ASBR02D	-0.11122	-0.26865	-0.63539	0.90404	0.94	0.08
ASBR02E	0.15833	0.05939	-0.83339	0.77400	1.30	0.13

Scale Transformation Constants for the PIRLS 2021 *Disorderly Behavior During Reading Lessons* Scale

Scale Transformation Constants

A = 9.942916

B = 1.519860

Transformed Scale Score = 9.942916 + 1.519860 • Logit Scale Score

Equivalence Table of the Raw Score and Transformed Scale Scores for the PIRLS 2021 *Disorderly Behavior During Reading Lessons* Scale

Raw Score	Transformed Scale Score	Cutpoint
0	5.92238	
1	7.23115	
2	7.86603	7.9
3	8.31437	
4	8.68040	
5	9.00419	
6	9.30655	
7	9.60657	
8	9.89746	
9	10.21804	
10	10.57259	
11	10.98651	
12	11.50099	
13	12.18062	12.1
14	13.15938	
15	15.04369	

Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2021 *Disorderly Behavior During Reading Lessons* Scale

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item				
			ASBR02A	ASBR02B	ASBR02C	ASBR02D	ASBR02E
Albania	0.72	48	0.75	0.76	0.71	0.73	0.48
Australia	0.82	58	0.67	0.76	0.81	0.82	0.74
Austria	0.81	57	0.69	0.75	0.81	0.78	0.73
Azerbaijan	0.77	52	0.71	0.76	0.75	0.76	0.61
Bahrain	0.78	53	0.69	0.76	0.78	0.76	0.65
Belgium (Flemish)	0.82	57	0.71	0.77	0.80	0.78	0.73
Belgium (French)	0.75	50	0.66	0.72	0.76	0.74	0.67
Brazil	0.79	55	0.63	0.70	0.79	0.80	0.77
Bulgaria	0.79	54	0.57	0.75	0.82	0.76	0.75
Chinese Taipei	0.86	64	0.80	0.83	0.84	0.85	0.68
Croatia	0.86	64	0.69	0.82	0.86	0.84	0.79
Cyprus	0.77	52	0.62	0.72	0.78	0.79	0.67
Czech Republic	0.83	59	0.72	0.79	0.81	0.81	0.69
Denmark	0.81	57	0.72	0.78	0.82	0.78	0.68
Egypt	0.76	52	0.74	0.80	0.79	0.76	0.46
England	0.81	57	0.70	0.74	0.81	0.80	0.71
Finland	0.86	63	0.76	0.82	0.84	0.79	0.76
France	0.76	52	0.61	0.75	0.79	0.74	0.69
Georgia	0.85	62	0.65	0.80	0.84	0.85	0.78
Germany	0.84	60	0.68	0.76	0.81	0.80	0.81
Hong Kong SAR	0.83	60	0.77	0.82	0.83	0.81	0.65
Hungary	0.86	63	0.70	0.80	0.84	0.80	0.83
Iran, Islamic Rep. of	0.77	52	0.65	0.72	0.76	0.76	0.71
Ireland	0.83	60	0.75	0.76	0.82	0.81	0.72
Israel	0.85	63	0.74	0.80	0.83	0.85	0.74
Italy	0.79	55	0.66	0.77	0.78	0.79	0.70
Jordan	0.78	55	0.75	0.78	0.79	0.78	0.56
Kazakhstan	0.86	64	0.78	0.84	0.82	0.81	0.76
Kosovo	0.79	55	0.76	0.81	0.79	0.78	0.53
Latvia	0.85	62	0.73	0.81	0.84	0.80	0.77
Lithuania	0.87	66	0.79	0.84	0.86	0.81	0.75
Macao SAR	0.77	53	0.70	0.73	0.78	0.76	0.65
Malta	0.79	54	0.69	0.73	0.80	0.78	0.68
Montenegro	0.81	57	0.67	0.78	0.81	0.78	0.73
Morocco	0.71	46	0.62	0.74	0.69	0.75	0.58
Netherlands	0.81	57	0.67	0.77	0.81	0.79	0.73
New Zealand	0.83	60	0.72	0.76	0.81	0.81	0.76
North Macedonia	0.79	55	0.71	0.77	0.81	0.76	0.65
Northern Ireland	0.82	58	0.70	0.77	0.81	0.80	0.73

Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2021 *Disorderly Behavior During Reading Lessons* Scale

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item				
			ASBR02A	ASBR02B	ASBR02C	ASBR02D	ASBR02E
Norway (5)	0.84	62	0.76	0.80	0.84	0.82	0.69
Oman	0.80	55	0.73	0.80	0.78	0.76	0.65
Poland	0.85	63	0.66	0.79	0.85	0.81	0.82
Portugal	0.83	60	0.69	0.77	0.80	0.81	0.80
Qatar	0.81	56	0.74	0.79	0.81	0.78	0.61
Russian Federation	0.86	63	0.77	0.82	0.83	0.81	0.75
Saudi Arabia	0.83	59	0.77	0.80	0.82	0.82	0.61
Serbia	0.81	58	0.67	0.78	0.82	0.78	0.73
Singapore	0.84	61	0.76	0.81	0.82	0.80	0.73
Slovak Republic	0.85	62	0.74	0.80	0.82	0.83	0.75
Slovenia	0.84	60	0.71	0.77	0.82	0.81	0.77
South Africa	0.69	45	0.60	0.67	0.71	0.70	0.66
Spain	0.79	54	0.62	0.71	0.80	0.82	0.71
Sweden	0.85	63	0.77	0.80	0.83	0.82	0.76
Turkiye	0.75	50	0.63	0.76	0.75	0.73	0.67
United Arab Emirates	0.86	64	0.77	0.82	0.84	0.82	0.73
United States	0.84	60	0.69	0.77	0.83	0.80	0.78
Uzbekistan	0.83	61	0.76	0.80	0.81	0.79	0.73
Benchmarking Participants							
Alberta, Canada	0.84	61	0.72	0.79	0.84	0.81	0.76
British Columbia, Canada	0.85	62	0.73	0.79	0.82	0.82	0.76
Newfoundland & Labrador, Can.	0.85	62	0.75	0.79	0.83	0.82	0.76
Quebec, Canada	0.85	62	0.74	0.81	0.84	0.79	0.77
Moscow City, Russian Fed.	0.85	62	0.77	0.81	0.83	0.79	0.75
South Africa (6)	0.67	43	0.63	0.68	0.70	0.70	0.58
Abu Dhabi, UAE	0.85	62	0.75	0.81	0.83	0.82	0.73
Dubai, UAE	0.86	63	0.76	0.81	0.84	0.82	0.75

Relationship Between the PIRLS 2021 *Disorderly Behavior During Reading Lessons* 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	0.09	0.01	0.01
Australia	0.17	0.03	0.02
Austria	0.26	0.07	0.05
Azerbaijan	0.12	0.01	0.02
Bahrain	0.18	0.03	0.03
Belgium (Flemish)	0.19	0.03	0.02
Belgium (French)	0.21	0.05	0.04
Brazil	0.09	0.01	0.00
Bulgaria	0.21	0.04	0.04
Chinese Taipei	-0.02	0.00	0.00
Croatia	0.08	0.01	0.01
Cyprus	0.16	0.03	0.02
Czech Republic	0.18	0.03	0.02
Denmark	0.10	0.01	0.01
Egypt	0.15	0.02	0.01
England	0.22	0.05	0.02
Finland	0.13	0.02	0.01
France	0.18	0.03	0.02
Georgia	0.22	0.05	0.04
Germany	0.18	0.03	0.02
Hong Kong SAR	0.01	0.00	0.00
Hungary	0.10	0.01	0.01
Iran, Islamic Rep. of	-0.06	0.00	0.00
Ireland	0.18	0.03	0.02
Israel	0.07	0.00	0.00
Italy	0.06	0.00	0.01
Jordan	0.06	0.00	0.01
Kazakhstan	0.07	0.01	0.01
Kosovo	0.16	0.03	0.03
Latvia	0.09	0.01	0.01
Lithuania	0.14	0.02	0.02
Macao SAR	0.04	0.00	0.00
Malta	0.11	0.01	0.01
Montenegro	0.17	0.03	0.04
Morocco	0.05	0.00	0.00
Netherlands	0.18	0.03	0.01
New Zealand	0.20	0.04	0.03
North Macedonia	0.24	0.06	0.05
Northern Ireland	0.25	0.06	0.04
Norway (5)	0.06	0.00	0.01

Relationship Between the PIRLS 2021 *Disorderly Behavior During Reading Lessons* 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	0.16	0.02	0.02
Poland	0.07	0.00	0.01
Portugal	0.12	0.01	0.02
Qatar	0.16	0.02	0.02
Russian Federation	0.15	0.02	0.01
Saudi Arabia	0.19	0.04	0.03
Serbia	0.14	0.02	0.02
Singapore	0.12	0.01	0.01
Slovak Republic	0.11	0.01	0.01
Slovenia	0.14	0.02	0.02
South Africa	0.02	0.00	0.00
Spain	0.13	0.02	0.01
Sweden	0.13	0.02	0.01
Turkiye	0.14	0.02	0.01
United Arab Emirates	0.15	0.02	0.02
United States	0.23	0.05	0.04
Uzbekistan	0.22	0.05	0.05
International Median	0.14	0.02	0.02
Benchmarking Participants			
Alberta, Canada	0.13	0.02	0.02
British Columbia, Canada	0.18	0.03	0.02
Newfoundland & Labrador, Can.	0.13	0.02	0.02
Quebec, Canada	0.15	0.02	0.02
Moscow City, Russian Fed.	0.18	0.03	0.02
South Africa (6)	0.07	0.01	0.01
Abu Dhabi, UAE	0.18	0.03	0.02
Dubai, UAE	0.07	0.01	0.02

Student Bullying

About the Scale

Students were scored according to their reports regarding ten 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 five of the ten 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 five of the ten behaviors “once or twice a month” and the other five “a few times a year,” on average. All other students were bullied **About Monthly**.

During this school year, how often have other students from your school done any of the following things to you, including through texting or the internet?

	Never	A few times a year	Once or twice a month	At least once a week
ASBG11A 1) Made fun of me or called me names -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBG11B 2) Left me out of their games or activities -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBG11C 3) Spread lies about me -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBG11D 4) Stole something from me -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBG11E 5) Damaged something of mine on purpose ----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBG11F 6) Hit or hurt me (e.g., shoving, hitting, kicking) -	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBG11G 7) Made me do things I didn't want to do -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBG11H 8) Sent me nasty or hurtful messages online ----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBG11I 9) Shared nasty or hurtful messages about me online -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBG11J 10) Threatened me -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Scale Cut Scores 9.2 7.7

Never or Almost Never About Monthly About Weekly

Item Parameters for the PIRLS 2021 Student Bullying Scale

Item	delta	tau_1	tau_2	tau_3	Infit	Q-Index
ASBG11A	0.56579	0.19320	-0.25541	0.06221	1.12	0.09
ASBG11B	0.44692	-0.09595	0.02846	0.06749	1.20	0.10
ASBG11C	0.38012	0.04672	-0.05269	0.00597	1.03	0.08
ASBG11D	-0.17192	0.36037	-0.13792	-0.22245	1.07	0.10
ASBG11E	-0.13092	0.31492	-0.09336	-0.22156	0.98	0.08
ASBG11F	0.29337	0.02310	-0.15892	0.13582	1.03	0.09
ASBG11G	-0.09987	0.16607	0.09610	-0.26217	1.00	0.08
ASBG11H	-0.39836	0.33822	0.30730	-0.64552	1.02	0.09
ASBG11I	-0.62374	0.53100	0.44798	-0.97898	0.95	0.08
ASBG11J	-0.26139	0.36241	0.02769	-0.39010	0.99	0.08

Scale Transformation Constants for the PIRLS 2021 Student Bullying Scale

Scale Transformation Constants

A = 7.692988

B = 1.678254

Transformed Scale Score = 7.692988 + 1.678254 • Logit Scale Score

Equivalence Table of the Raw Score and Transformed Scale Scores for the PIRLS 2021 *Student Bullying* Scale

Raw Score	Transformed Scale Score	Cutpoint
0	3.16484	
1	4.64766	
2	5.24314	
3	5.62177	
4	5.90639	
5	6.13793	
6	6.33387	
7	6.51306	
8	6.67670	
9	6.82884	
10	6.97258	
11	7.11040	
12	7.24426	
13	7.37578	
14	7.50627	
15	7.63692	7.7
16	7.76886	
17	7.90321	
18	8.04113	
19	8.18398	
20	8.33331	
21	8.49100	
22	8.65929	
23	8.83840	
24	9.03816	
25	9.26414	9.2
26	9.52871	
27	9.85265	
28	10.28695	
29	10.96501	
30	12.56749	

Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2021 Student Bullying Scale

Country	Cronbach Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item									
			ASBG11A	ASBG11B	ASBG11C	ASBG11D	ASBG11E	ASBG11F	ASBG11G	ASBG11H	ASBG11I	ASBG11J
Albania	0.85	46	0.63	0.62	0.67	0.67	0.69	0.70	0.72	0.70	0.72	0.70
Australia	0.87	46	0.67	0.66	0.72	0.66	0.72	0.70	0.70	0.63	0.60	0.70
Austria	0.87	47	0.68	0.64	0.71	0.66	0.71	0.69	0.72	0.70	0.67	0.68
Azerbaijan	0.87	50	0.59	0.53	0.69	0.74	0.76	0.74	0.74	0.74	0.75	0.73
Bahrain	0.90	53	0.69	0.66	0.73	0.72	0.76	0.76	0.75	0.73	0.73	0.76
Belgium (Flemish)	0.88	48	0.72	0.69	0.74	0.64	0.71	0.69	0.70	0.64	0.68	0.68
Belgium (French)	0.85	43	0.69	0.59	0.71	0.61	0.70	0.70	0.64	0.56	0.62	0.69
Brazil	0.88	49	0.64	0.61	0.71	0.69	0.73	0.72	0.71	0.73	0.72	0.73
Bulgaria	0.85	44	0.66	0.53	0.70	0.66	0.68	0.69	0.69	0.70	0.64	0.71
Chinese Taipei	0.86	46	0.70	0.68	0.68	0.62	0.70	0.70	0.71	0.63	0.62	0.72
Croatia	0.88	49	0.71	0.69	0.69	0.66	0.72	0.71	0.67	0.74	0.73	0.70
Cyprus	0.87	46	0.69	0.62	0.72	0.63	0.70	0.71	0.68	0.66	0.69	0.70
Czech Republic	0.86	45	0.71	0.57	0.70	0.62	0.72	0.69	0.70	0.66	0.63	0.71
Denmark	0.87	47	0.69	0.68	0.75	0.62	0.72	0.68	0.71	0.69	0.61	0.71
Egypt	0.94	64	0.78	0.72	0.80	0.79	0.81	0.80	0.84	0.83	0.82	0.81
England	0.86	44	0.68	0.63	0.73	0.61	0.67	0.69	0.68	0.63	0.61	0.71
Finland	0.88	49	0.73	0.68	0.72	0.63	0.72	0.71	0.70	0.71	0.67	0.75
France	0.82	39	0.67	0.61	0.70	0.57	0.64	0.66	0.62	0.55	0.52	0.68
Georgia	0.85	48	0.67	0.53	0.73	0.70	0.73	0.70	0.69	0.74	0.71	0.70
Germany	0.88	50	0.67	0.63	0.74	0.67	0.73	0.71	0.77	0.71	0.72	0.73
Hong Kong SAR	0.84	43	0.63	0.59	0.72	0.60	0.67	0.65	0.69	0.67	0.66	0.64
Hungary	0.86	46	0.70	0.63	0.73	0.62	0.70	0.67	0.71	0.68	0.61	0.70
Iran, Islamic Rep. of	0.82	41	0.55	0.41	0.66	0.66	0.71	0.65	0.67	0.66	0.65	0.70
Ireland	0.87	47	0.71	0.68	0.73	0.62	0.70	0.72	0.68	0.66	0.61	0.73
Israel	–	–	–	–	–	–	–	–	–	–	–	–
Italy	0.86	45	0.70	0.67	0.73	0.62	0.68	0.69	0.68	0.61	0.59	0.71
Jordan	0.91	57	0.70	0.69	0.73	0.74	0.77	0.77	0.79	0.79	0.78	0.77
Kazakhstan	0.87	47	0.68	0.57	0.71	0.67	0.74	0.71	0.70	0.73	0.64	0.67
Kosovo	0.90	53	0.65	0.66	0.69	0.72	0.79	0.75	0.77	0.77	0.77	0.74
Latvia	0.86	45	0.68	0.57	0.74	0.62	0.71	0.72	0.67	0.71	0.63	0.67
Lithuania	0.89	51	0.72	0.61	0.74	0.67	0.75	0.74	0.72	0.75	0.71	0.75
Macao SAR	0.83	41	0.61	0.58	0.68	0.61	0.70	0.67	0.69	0.59	0.57	0.68
Malta	0.87	47	0.69	0.65	0.72	0.60	0.70	0.70	0.67	0.70	0.70	0.71
Montenegro	0.87	50	0.66	0.67	0.73	0.69	0.75	0.71	0.68	0.74	0.72	0.69
Morocco	0.85	43	0.63	0.61	0.62	0.61	0.70	0.65	0.68	0.67	0.69	0.69
Netherlands	0.88	48	0.71	0.65	0.73	0.66	0.69	0.68	0.72	0.67	0.69	0.68
New Zealand	0.89	50	0.71	0.67	0.74	0.68	0.75	0.70	0.73	0.68	0.68	0.72
North Macedonia	0.92	59	0.67	0.67	0.74	0.78	0.81	0.77	0.79	0.79	0.80	0.81
Northern Ireland	0.87	46	0.69	0.66	0.76	0.61	0.70	0.69	0.66	0.70	0.65	0.67

Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2021 Student Bullying Scale

Country	Cronbach Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item									
			ASBG11A	ASBG11B	ASBG11C	ASBG11D	ASBG11E	ASBG11F	ASBG11G	ASBG11H	ASBG11I	ASBG11J
Norway (5)	0.87	48	0.72	0.67	0.73	0.65	0.73	0.68	0.75	0.67	0.63	0.73
Oman	0.91	57	0.69	0.65	0.77	0.76	0.78	0.78	0.79	0.79	0.79	0.76
Poland	0.87	48	0.69	0.61	0.73	0.69	0.70	0.71	0.72	0.68	0.65	0.73
Portugal	0.85	44	0.69	0.63	0.72	0.61	0.69	0.70	0.67	0.62	0.60	0.67
Qatar	0.90	53	0.70	0.64	0.72	0.70	0.74	0.74	0.74	0.77	0.76	0.76
Russian Federation	0.85	43	0.68	0.43	0.68	0.58	0.69	0.73	0.66	0.69	0.69	0.69
Saudi Arabia	0.93	62	0.78	0.72	0.79	0.76	0.80	0.82	0.81	0.81	0.81	0.80
Serbia	0.86	47	0.66	0.65	0.72	0.62	0.70	0.69	0.67	0.69	0.70	0.73
Singapore	0.87	47	0.67	0.63	0.74	0.67	0.73	0.70	0.70	0.68	0.66	0.70
Slovak Republic	0.87	47	0.69	0.61	0.71	0.64	0.73	0.70	0.69	0.69	0.68	0.73
Slovenia	0.89	50	0.68	0.70	0.74	0.67	0.75	0.70	0.73	0.69	0.68	0.75
South Africa	0.87	45	0.62	0.61	0.65	0.61	0.68	0.68	0.71	0.71	0.71	0.69
Spain	0.86	44	0.67	0.65	0.71	0.59	0.71	0.67	0.69	0.61	0.59	0.71
Sweden	0.88	50	0.72	0.67	0.75	0.62	0.76	0.72	0.72	0.71	0.66	0.72
Turkiye	0.82	40	0.58	0.58	0.66	0.63	0.71	0.64	0.58	0.61	0.64	0.67
United Arab Emirates	0.92	58	0.71	0.71	0.76	0.75	0.78	0.76	0.77	0.79	0.79	0.78
United States	0.86	46	0.66	0.64	0.72	0.68	0.71	0.67	0.69	0.70	0.67	0.65
Uzbekistan	0.90	55	0.63	0.65	0.76	0.74	0.77	0.77	0.78	0.80	0.80	0.70
Benchmarking Participants												
Alberta, Canada	0.89	51	0.72	0.66	0.75	0.68	0.75	0.71	0.72	0.68	0.69	0.74
British Columbia, Canada	0.89	50	0.71	0.68	0.74	0.69	0.75	0.72	0.73	0.65	0.65	0.74
Newfoundland & Labrador, Can.	0.89	50	0.75	0.68	0.76	0.68	0.74	0.72	0.71	0.68	0.67	0.71
Quebec, Canada	0.86	46	0.70	0.63	0.67	0.62	0.67	0.71	0.68	0.68	0.67	0.72
Moscow City, Russian Fed.	0.86	44	0.70	0.51	0.72	0.59	0.68	0.73	0.63	0.69	0.70	0.68
South Africa (6)	0.83	40	0.59	0.61	0.63	0.51	0.66	0.65	0.68	0.67	0.69	0.65
Abu Dhabi, UAE	0.92	59	0.71	0.72	0.77	0.76	0.78	0.75	0.77	0.80	0.80	0.79
Dubai, UAE	0.89	52	0.71	0.67	0.74	0.68	0.73	0.72	0.73	0.75	0.74	0.75

A dash (–) indicates comparable data not available.

Relationship Between the PIRLS 2021 *Student Bullying* 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	0.09	0.01	0.01
Australia	0.16	0.03	0.03
Austria	0.28	0.08	0.09
Azerbaijan	0.27	0.07	0.09
Bahrain	0.36	0.13	0.16
Belgium (Flemish)	0.15	0.02	0.04
Belgium (French)	0.18	0.03	0.05
Brazil	0.31	0.10	0.14
Bulgaria	0.22	0.05	0.05
Chinese Taipei	0.16	0.02	0.04
Croatia	0.19	0.04	0.06
Cyprus	0.23	0.05	0.06
Czech Republic	0.20	0.04	0.05
Denmark	0.15	0.02	0.03
Egypt	0.26	0.07	0.08
England	0.15	0.02	0.04
Finland	0.15	0.02	0.04
France	0.16	0.03	0.04
Georgia	0.28	0.08	0.08
Germany	0.30	0.09	0.12
Hong Kong SAR	0.16	0.02	0.04
Hungary	0.17	0.03	0.05
Iran, Islamic Rep. of	0.21	0.05	0.06
Ireland	0.18	0.03	0.04
Israel	–	–	–
Italy	0.20	0.04	0.06
Jordan	0.12	0.02	0.03
Kazakhstan	0.24	0.06	0.07
Kosovo	0.29	0.08	0.11
Latvia	0.22	0.05	0.07
Lithuania	0.27	0.07	0.10
Macao SAR	0.18	0.03	0.04
Malta	0.12	0.01	0.03
Montenegro	0.29	0.08	0.08
Morocco	0.18	0.03	0.06
Netherlands	0.20	0.04	0.05
New Zealand	0.25	0.06	0.10
North Macedonia	0.33	0.11	0.12
Northern Ireland	0.22	0.05	0.05
Norway (5)	0.13	0.02	0.03
Oman	0.29	0.08	0.10

Relationship Between the PIRLS 2021 *Student Bullying* 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	
Poland	0.22	0.05	0.06
Portugal	0.16	0.03	0.05
Qatar	0.40	0.16	0.20
Russian Federation	0.17	0.03	0.03
Saudi Arabia	0.42	0.18	0.19
Serbia	0.15	0.02	0.04
Singapore	0.22	0.05	0.06
Slovak Republic	0.18	0.03	0.05
Slovenia	0.21	0.04	0.08
South Africa	0.35	0.12	0.13
Spain	0.23	0.05	0.07
Sweden	0.20	0.04	0.05
Turkiye	0.24	0.06	0.07
United Arab Emirates	0.41	0.17	0.22
United States	0.24	0.06	0.08
Uzbekistan	0.27	0.07	0.09
International Median	0.22	0.05	0.06
Benchmarking Participants			
Alberta, Canada	0.20	0.04	0.05
British Columbia, Canada	0.19	0.03	0.04
Newfoundland & Labrador, Can.	0.16	0.03	0.03
Quebec, Canada	0.16	0.03	0.03
Moscow City, Russian Fed.	0.22	0.05	0.06
South Africa (6)	0.44	0.19	0.20
Abu Dhabi, UAE	0.47	0.22	0.27
Dubai, UAE	0.29	0.08	0.11

A dash (–) indicates comparable data not available.

Students Confident in Reading

About the Scale

Students were scored according to their responses to six statements on the *Students Confident in Reading* scale. Cut scores divide the scale into three categories. Students **Very Confident in Reading** had a score at or above the cut score corresponding to “agreeing a lot” with three of the six statements and “agreeing a little” with the other three, on average. Students who were **Not Confident in Reading** had a score at or below the cut score corresponding to “disagreeing a little” with three of the six statements and “agreeing a little” with the other three, on average. All other students were **Somewhat Confident in Reading**.

How well do you read? Tell how much you agree with each of these statements.

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
ASBR08A ^T 1) I usually do well in reading -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR08B ^T 2) Reading is easy for me -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR08C ^T 3) I have trouble reading stories with difficult words ^R -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR08D ^T 4) Reading is harder for me than for many of my classmates ^R -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR08E ^T 5) Reading is harder for me than any other subject ^R -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR08F ^T 6) I am just not good at reading ^R -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

^R Reverse coded

^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 Students Confident in Reading Scale

Item	delta	tau_1	tau_2	tau_3	Infit	Q-Index
ASBR08A	-0.64759	-0.32517	-0.65071	0.97588	1.12	0.17
ASBR08B	-0.63234	-0.36808	-0.43307	0.80115	1.07	0.15
ASBR08C ^R	1.00691	-0.88096	0.42690	0.45406	1.22	0.13
ASBR08D ^R	0.26134	-0.36177	0.20366	0.15811	0.91	0.07
ASBR08E ^R	0.00964	-0.08565	0.22888	-0.14323	0.90	0.06
ASBR08F ^R	0.00204	-0.01448	0.20157	-0.18709	0.94	0.06

^R Reverse coded

Scale Transformation Constants for the PIRLS 2021 Students Confident in Reading Scale

Scale Transformation Constants

A = 8.137507

B = 1.764782

Transformed Scale Score = 8.137507 + 1.764782 • Logit Scale Score

Equivalence Table of the Raw Score and Transformed Scale Scores for the PIRLS 2021 Students Confident in Reading Scale

Raw Score	Transformed Scale Score	Cutpoint
0	2.96784	
1	4.58611	
2	5.37728	
3	5.95198	
4	6.42311	
5	6.83123	
6	7.19857	
7	7.53217	
8	7.84162	
9	8.13680	8.2
10	8.42824	
11	8.72693	
12	9.04570	
13	9.39964	
14	9.80410	
15	10.28978	10.2
16	10.90567	
17	11.76022	
18	13.45388	

Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2021 *Students Confident in Reading* Scale

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item					
			ASBR08A	ASBR08B	ASBR08C _R	ASBR08D _R	ASBR08E _R	ASBR08F _R
Albania	0.77	47	0.50	0.48	0.69	0.78	0.77	0.83
Australia	0.81	52	0.69	0.74	0.61	0.78	0.73	0.78
Austria	0.80	51	0.65	0.68	0.59	0.76	0.78	0.80
Azerbaijan	0.65	37	0.23	0.35	0.59	0.76	0.80	0.68
Bahrain	0.71	42	0.25	0.49	0.63	0.75	0.79	0.79
Belgium (Flemish)	0.82	54	0.68	0.73	0.60	0.78	0.76	0.83
Belgium (French)	0.77	47	0.62	0.65	0.60	0.75	0.72	0.78
Brazil	0.69	39	0.43	0.52	0.50	0.72	0.74	0.77
Bulgaria	0.79	52	0.68	0.71	0.47	0.79	0.82	0.80
Chinese Taipei	0.77	47	0.47	0.58	0.54	0.81	0.81	0.81
Croatia	0.81	52	0.60	0.64	0.59	0.83	0.81	0.81
Cyprus	0.77	48	0.69	0.71	0.52	0.73	0.72	0.78
Czech Republic	0.79	50	0.60	0.69	0.52	0.78	0.78	0.80
Denmark	0.84	57	0.72	0.76	0.64	0.80	0.77	0.81
Egypt	0.66	41	-0.10	0.04	0.68	0.81	0.84	0.78
England	0.84	56	0.73	0.77	0.61	0.80	0.77	0.79
Finland	0.82	54	0.67	0.71	0.59	0.80	0.79	0.80
France	0.79	51	0.72	0.71	0.56	0.75	0.73	0.79
Georgia	0.76	47	0.64	0.62	0.52	0.73	0.78	0.79
Germany	0.81	52	0.63	0.66	0.59	0.80	0.81	0.81
Hong Kong SAR	0.80	51	0.60	0.64	0.57	0.79	0.80	0.81
Hungary	0.81	51	0.61	0.64	0.53	0.82	0.81	0.83
Iran, Islamic Rep. of	0.70	40	0.27	0.33	0.62	0.79	0.79	0.77
Ireland	0.85	58	0.76	0.79	0.62	0.81	0.77	0.81
Israel	0.77	47	0.52	0.62	0.54	0.80	0.79	0.81
Italy	0.76	46	0.58	0.62	0.58	0.76	0.75	0.76
Jordan	0.62	37	0.02	0.16	0.66	0.77	0.81	0.71
Kazakhstan	0.76	46	0.36	0.45	0.67	0.81	0.83	0.78
Kosovo	0.73	44	0.34	0.13	0.70	0.83	0.82	0.82
Latvia	0.78	49	0.73	0.76	0.43	0.71	0.72	0.78
Lithuania	0.79	49	0.57	0.61	0.58	0.79	0.80	0.80
Macao SAR	0.73	44	0.62	0.69	0.32	0.72	0.76	0.77
Malta	0.79	49	0.57	0.61	0.62	0.80	0.76	0.78
Montenegro	0.74	46	0.59	0.64	0.42	0.80	0.78	0.77
Morocco	0.55	36	-0.22	0.28	0.57	0.73	0.77	0.76
Netherlands	0.85	58	0.69	0.79	0.58	0.82	0.81	0.82
New Zealand	0.79	48	0.55	0.62	0.58	0.80	0.80	0.77
North Macedonia	0.77	46	0.39	0.36	0.69	0.84	0.84	0.79
Northern Ireland	0.82	54	0.70	0.76	0.61	0.79	0.75	0.78

Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2021 *Students Confident in Reading* Scale

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item					
			ASBR08A	ASBR08B	ASBR08C ^R	ASBR08D ^R	ASBR08E ^R	ASBR08F ^R
Norway (5)	0.82	53	0.65	0.74	0.63	0.79	0.80	0.74
Oman	0.68	39	0.25	0.38	0.58	0.79	0.79	0.75
Poland	0.81	53	0.68	0.72	0.63	0.80	0.76	0.78
Portugal	0.78	49	0.67	0.66	0.59	0.73	0.70	0.80
Qatar	0.75	45	0.33	0.45	0.65	0.81	0.83	0.79
Russian Federation	0.77	48	0.62	0.65	0.52	0.80	0.77	0.75
Saudi Arabia	0.75	46	0.04	0.21	0.73	0.86	0.88	0.83
Serbia	0.75	48	0.69	0.65	0.44	0.78	0.78	0.74
Singapore	0.81	51	0.62	0.66	0.65	0.81	0.76	0.77
Slovak Republic	0.83	55	0.66	0.74	0.60	0.81	0.77	0.84
Slovenia	0.82	52	0.62	0.68	0.70	0.80	0.78	0.76
South Africa	0.56	35	-0.17	-0.13	0.63	0.74	0.75	0.73
Spain	0.69	40	0.57	0.59	0.41	0.73	0.69	0.75
Sweden	0.83	54	0.68	0.72	0.64	0.79	0.78	0.79
Turkiye	0.68	40	0.51	0.52	0.42	0.73	0.74	0.78
United Arab Emirates	0.78	48	0.27	0.37	0.70	0.86	0.86	0.84
United States	0.82	53	0.68	0.75	0.58	0.79	0.76	0.79
Uzbekistan	0.63	38	-0.05	0.18	0.73	0.84	0.84	0.57
Benchmarking Participants								
Alberta, Canada	0.79	50	0.62	0.67	0.61	0.80	0.78	0.75
British Columbia, Canada	0.81	52	0.64	0.71	0.59	0.80	0.81	0.78
Newfoundland & Labrador, Can.	0.82	53	0.66	0.73	0.62	0.79	0.79	0.75
Quebec, Canada	0.82	54	0.67	0.71	0.64	0.80	0.80	0.79
Moscow City, Russian Fed.	0.77	48	0.65	0.71	0.51	0.79	0.76	0.71
South Africa (6)	0.68	38	0.35	0.41	0.53	0.77	0.78	0.73
Abu Dhabi, UAE	0.77	47	0.26	0.33	0.68	0.86	0.86	0.83
Dubai, UAE	0.80	50	0.45	0.54	0.68	0.84	0.83	0.81

^R Reverse coded

Relationship Between the PIRLS 2021 *Students Confident in Reading* 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	0.31	0.09	0.11
Australia	0.49	0.24	0.23
Austria	0.49	0.24	0.24
Azerbaijan	0.29	0.09	0.10
Bahrain	0.43	0.19	0.20
Belgium (Flemish)	0.42	0.17	0.19
Belgium (French)	0.47	0.22	0.23
Brazil	0.46	0.21	0.23
Bulgaria	0.43	0.19	0.18
Chinese Taipei	0.41	0.17	0.18
Croatia	0.39	0.15	0.17
Cyprus	0.40	0.16	0.17
Czech Republic	0.38	0.14	0.16
Denmark	0.51	0.26	0.24
Egypt	0.25	0.06	0.07
England	0.47	0.22	0.22
Finland	0.42	0.18	0.17
France	0.41	0.17	0.18
Georgia	0.35	0.12	0.15
Germany	0.45	0.20	0.21
Hong Kong SAR	0.38	0.15	0.15
Hungary	0.45	0.20	0.22
Iran, Islamic Rep. of	0.42	0.17	0.19
Ireland	0.48	0.24	0.21
Israel	0.49	0.24	0.29
Italy	0.36	0.13	0.14
Jordan	0.28	0.08	0.08
Kazakhstan	0.27	0.07	0.11
Kosovo	0.33	0.11	0.14
Latvia	0.40	0.16	0.17
Lithuania	0.45	0.20	0.23
Macao SAR	0.37	0.14	0.14
Malta	0.44	0.20	0.20
Montenegro	0.37	0.13	0.17
Morocco	0.36	0.13	0.15
Netherlands	0.43	0.19	0.19
New Zealand	0.50	0.25	0.25
North Macedonia	0.34	0.12	0.15
Northern Ireland	0.47	0.22	0.22
Norway (5)	0.47	0.22	0.22

Relationship Between the PIRLS 2021 *Students Confident in Reading* 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	0.35	0.12	0.13
Poland	0.37	0.14	0.16
Portugal	0.47	0.22	0.23
Qatar	0.44	0.19	0.21
Russian Federation	0.38	0.14	0.16
Saudi Arabia	0.34	0.12	0.12
Serbia	0.39	0.15	0.16
Singapore	0.45	0.21	0.21
Slovak Republic	0.35	0.12	0.15
Slovenia	0.45	0.20	0.22
South Africa	0.44	0.19	0.18
Spain	0.42	0.18	0.19
Sweden	0.42	0.18	0.18
Turkiye	0.38	0.14	0.15
United Arab Emirates	0.47	0.22	0.25
United States	0.49	0.24	0.23
Uzbekistan	0.30	0.09	0.13
International Median	0.42	0.17	0.18
Benchmarking Participants			
Alberta, Canada	0.48	0.23	0.23
British Columbia, Canada	0.44	0.19	0.20
Newfoundland & Labrador, Can.	0.48	0.23	0.23
Quebec, Canada	0.43	0.18	0.18
Moscow City, Russian Fed.	0.42	0.18	0.19
South Africa (6)	0.51	0.26	0.26
Abu Dhabi, UAE	0.53	0.28	0.29
Dubai, UAE	0.41	0.17	0.19

Students Engaged in Reading Lessons

About the Scale

Students were scored according to their responses to nine statements on the *Students Engaged in Reading Lessons* scale. Cut scores divide the scale into three categories. Students **Very Engaged** in reading lessons had a score at or above the cut score corresponding to “agreeing a lot” with five of the nine statements and “agreeing a little” with the other four, on average. Students who were **Less than Engaged** had a score at or below the cut score corresponding to “disagreeing a little” with five of the nine statements and “agreeing a little” with the other four, on average. All other students were **Somewhat Engaged** in reading lessons.

Think about the reading you do for school. How much do you agree with these statements about your reading lessons.

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
ASBR01A [†] 1) I like what I read about in school -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR01B [†] 2) My teacher gives me interesting things to read -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR01C [†] 3) I know what my teacher expects me to do -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR01D [†] 4) My teacher is easy to understand -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR01E [†] 5) I am interested in what my teacher says -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR01F [†] 6) My teacher encourages me to say what I think about what I have read -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR01G [†] 7) My teacher lets me show what I have learned -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR01H [†] 8) My teacher does a variety of things to help us learn -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR01I [†] 9) My teacher tells me how to do better when I make a mistake -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Scale Cut Scores 9.5 7.1

[†] 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 *Students Engaged in Reading Lessons* Scale

Item	delta	tau_1	tau_2	tau_3	Infit	Q-Index
ASBR01A	0.20193	-0.54560	-0.64652	1.19212	1.09	0.11
ASBR01B	0.27147	-0.58689	-0.43406	1.02095	0.97	0.08
ASBR01C	0.19451	-0.34836	-0.63735	0.98571	1.28	0.13
ASBR01D	-0.10822	-0.51275	-0.57877	1.09152	1.04	0.11
ASBR01E	0.06869	-0.45433	-0.56026	1.01459	0.98	0.06
ASBR01F	0.30830	-0.50978	-0.45725	0.96703	1.06	0.09
ASBR01G	0.00215	-0.44662	-0.45319	0.89981	1.02	0.09
ASBR01H	-0.56508	-0.01771	-0.51757	0.53528	0.97	0.09
ASBR01I	-0.37375	-0.07110	-0.50737	0.57847	0.99	0.09

Scale Transformation Constants for the PIRLS 2021 *Students Engaged in Reading Lessons* Scale

Scale Transformation Constants

A = 7.347685

B = 1.521279

Transformed Scale Score = 7.347685 + 1.521279 • Logit Scale Score

**Equivalence Table of the Raw Score and Transformed Scale Scores for the
PIRLS 2021 *Students Engaged in Reading Lessons* Scale**

Raw Score	Transformed Scale Score	Cutpoint
0	2.39842	
1	3.84251	
2	4.49049	
3	4.92202	
4	5.25253	
5	5.52656	
6	5.76416	
7	5.97910	
8	6.17829	
9	6.36679	
10	6.54828	
11	6.72566	
12	6.90346	
13	7.07874	7.1
14	7.25705	
15	7.44071	
16	7.63232	
17	7.83480	
18	8.05152	
19	8.28542	
20	8.54448	
21	8.83577	
22	9.17010	
23	9.56347	9.5
24	10.04278	
25	10.66007	
26	11.54818	
27	13.33453	

Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2021 Students Engaged in Reading Lessons Scale

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item								
			ASBR01A	ASBR01B	ASBR01C	ASBR01D	ASBR01E	ASBR01F	ASBR01G	ASBR01H	ASBR01I
Albania	0.71	34	0.43	0.57	0.45	0.59	0.59	0.71	0.63	0.62	0.61
Australia	0.85	47	0.63	0.75	0.58	0.68	0.76	0.68	0.66	0.69	0.69
Austria	0.82	42	0.66	0.72	0.55	0.53	0.68	0.69	0.68	0.67	0.60
Azerbaijan	0.81	42	0.60	0.61	0.52	0.63	0.72	0.70	0.67	0.70	0.69
Bahrain	0.81	40	0.54	0.66	0.57	0.63	0.66	0.69	0.62	0.68	0.62
Belgium (Flemish)	0.83	43	0.61	0.72	0.62	0.66	0.72	0.58	0.68	0.64	0.63
Belgium (French)	0.82	43	0.58	0.71	0.66	0.68	0.73	0.64	0.53	0.65	0.67
Brazil	0.83	43	0.61	0.71	0.57	0.66	0.70	0.64	0.67	0.65	0.65
Bulgaria	0.82	42	0.63	0.70	0.54	0.62	0.67	0.67	0.66	0.67	0.66
Chinese Taipei	0.89	53	0.64	0.76	0.73	0.68	0.75	0.75	0.76	0.77	0.72
Croatia	0.85	46	0.71	0.73	0.64	0.66	0.67	0.65	0.72	0.70	0.62
Cyprus	0.85	46	0.65	0.74	0.59	0.57	0.75	0.70	0.68	0.71	0.71
Czech Republic	0.86	47	0.66	0.73	0.61	0.68	0.69	0.67	0.70	0.72	0.68
Denmark	0.85	47	0.70	0.74	0.56	0.59	0.72	0.73	0.72	0.70	0.69
Egypt	0.88	50	0.60	0.67	0.63	0.73	0.76	0.76	0.75	0.74	0.72
England	0.83	42	0.60	0.73	0.59	0.63	0.71	0.67	0.63	0.64	0.63
Finland	0.87	50	0.66	0.73	0.61	0.73	0.73	0.69	0.74	0.75	0.72
France	0.82	41	0.65	0.72	0.53	0.58	0.71	0.64	0.66	0.61	0.63
Georgia	0.72	36	0.61	0.71	0.46	0.66	0.46	0.59	0.64	0.65	0.56
Germany	0.85	46	0.68	0.75	0.55	0.71	0.70	0.67	0.69	0.69	0.67
Hong Kong SAR	0.89	53	0.65	0.77	0.73	0.72	0.78	0.75	0.73	0.72	0.69
Hungary	0.87	50	0.68	0.75	0.64	0.71	0.76	0.68	0.71	0.73	0.68
Iran, Islamic Rep. of	0.83	44	0.63	0.67	0.52	0.62	0.75	0.68	0.71	0.65	0.68
Ireland	0.84	44	0.62	0.73	0.58	0.67	0.74	0.70	0.66	0.65	0.61
Israel	0.87	49	0.68	0.78	0.59	0.66	0.77	0.70	0.68	0.70	0.71
Italy	0.81	40	0.68	0.76	0.49	0.62	0.70	0.57	0.64	0.59	0.62
Jordan	0.89	56	0.64	0.73	0.60	0.74	0.82	0.80	0.76	0.81	0.76
Kazakhstan	0.81	41	0.66	0.72	0.50	0.66	0.71	0.60	0.65	0.59	0.62
Kosovo	0.77	40	0.58	0.63	0.44	0.61	0.67	0.67	0.69	0.67	0.66
Latvia	0.84	45	0.68	0.70	0.65	0.69	0.72	0.57	0.67	0.68	0.63
Lithuania	0.87	48	0.71	0.77	0.65	0.70	0.75	0.62	0.67	0.69	0.69
Macao SAR	0.86	48	0.65	0.74	0.69	0.62	0.73	0.72	0.70	0.68	0.66
Malta	0.82	42	0.64	0.72	0.61	0.63	0.72	0.56	0.64	0.64	0.65
Montenegro	0.81	42	0.56	0.66	0.56	0.67	0.63	0.66	0.70	0.65	0.70
Morocco	0.72	34	0.53	0.53	0.45	0.57	0.67	0.66	0.63	0.59	0.57
Netherlands	0.81	40	0.57	0.66	0.52	0.65	0.69	0.59	0.69	0.68	0.66
New Zealand	0.85	45	0.63	0.73	0.64	0.67	0.75	0.63	0.66	0.69	0.66
North Macedonia	0.83	45	0.60	0.69	0.47	0.65	0.73	0.71	0.75	0.71	0.70
Northern Ireland	0.82	41	0.60	0.68	0.60	0.66	0.71	0.64	0.63	0.59	0.61

Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2021 *Students Engaged in Reading Lessons* Scale

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item								
			ASBR01A	ASBR01B	ASBR01C	ASBR01D	ASBR01E	ASBR01F	ASBR01G	ASBR01H	ASBR01I
Norway (5)	0.87	50	0.66	0.75	0.63	0.71	0.73	0.75	0.71	0.71	0.69
Oman	0.84	46	0.55	0.65	0.55	0.70	0.74	0.72	0.70	0.73	0.71
Poland	0.86	47	0.64	0.76	0.68	0.64	0.75	0.67	0.67	0.71	0.67
Portugal	0.79	38	0.58	0.70	0.54	0.58	0.69	0.61	0.61	0.56	0.63
Qatar	0.83	42	0.60	0.70	0.63	0.67	0.68	0.57	0.66	0.68	0.67
Russian Federation	0.84	44	0.68	0.74	0.61	0.69	0.76	0.54	0.62	0.66	0.66
Saudi Arabia	0.83	44	0.49	0.72	0.56	0.68	0.70	0.64	0.72	0.73	0.70
Serbia	0.79	39	0.59	0.64	0.61	0.60	0.63	0.67	0.63	0.62	0.63
Singapore	0.86	47	0.66	0.74	0.62	0.71	0.75	0.68	0.67	0.68	0.68
Slovak Republic	0.86	48	0.66	0.73	0.64	0.70	0.71	0.69	0.68	0.71	0.69
Slovenia	0.85	47	0.63	0.74	0.64	0.75	0.61	0.65	0.70	0.70	0.72
South Africa	0.85	45	0.62	0.69	0.63	0.66	0.67	0.69	0.69	0.69	0.66
Spain	0.80	41	0.63	0.71	0.54	0.61	0.68	0.62	0.62	0.66	0.66
Sweden	0.87	49	0.66	0.75	0.64	0.71	0.73	0.69	0.71	0.72	0.71
Turkiye	0.72	32	0.48	0.47	0.49	0.56	0.63	0.65	0.64	0.61	0.57
United Arab Emirates	0.86	46	0.66	0.73	0.63	0.70	0.73	0.63	0.69	0.70	0.66
United States	0.83	42	0.60	0.68	0.59	0.68	0.72	0.69	0.60	0.64	0.65
Uzbekistan	0.79	39	0.58	0.66	0.53	0.63	0.63	0.63	0.65	0.61	0.67
Benchmarking Participants											
Alberta, Canada	0.84	45	0.66	0.73	0.62	0.68	0.75	0.62	0.63	0.66	0.69
British Columbia, Canada	0.85	46	0.62	0.75	0.64	0.70	0.74	0.62	0.67	0.69	0.68
Newfoundland & Labrador, Can.	0.83	43	0.62	0.75	0.61	0.68	0.75	0.56	0.63	0.66	0.61
Quebec, Canada	0.85	46	0.62	0.71	0.62	0.68	0.73	0.65	0.72	0.69	0.69
Moscow City, Russian Fed.	0.85	46	0.68	0.78	0.61	0.72	0.77	0.54	0.62	0.69	0.68
South Africa (6)	0.82	41	0.63	0.68	0.59	0.64	0.66	0.64	0.66	0.63	0.66
Abu Dhabi, UAE	0.86	47	0.63	0.73	0.66	0.70	0.74	0.62	0.68	0.70	0.67
Dubai, UAE	0.84	45	0.69	0.73	0.59	0.68	0.73	0.65	0.67	0.65	0.64

Relationship Between the PIRLS 2021 *Students Engaged in Reading Lessons* 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	0.10	0.01	0.01
Australia	0.09	0.01	0.01
Austria	0.06	0.00	0.01
Azerbaijan	0.14	0.02	0.03
Bahrain	0.17	0.03	0.04
Belgium (Flemish)	0.03	0.00	0.01
Belgium (French)	-0.04	0.00	0.01
Brazil	0.05	0.00	0.02
Bulgaria	0.04	0.00	0.01
Chinese Taipei	0.12	0.01	0.02
Croatia	0.03	0.00	0.01
Cyprus	0.12	0.01	0.01
Czech Republic	-0.03	0.00	0.01
Denmark	0.10	0.01	0.01
Egypt	0.14	0.02	0.03
England	0.05	0.00	0.01
Finland	0.06	0.00	0.01
France	0.01	0.00	0.00
Georgia	0.17	0.03	0.03
Germany	0.12	0.01	0.02
Hong Kong SAR	0.11	0.01	0.02
Hungary	0.04	0.00	0.01
Iran, Islamic Rep. of	0.14	0.02	0.04
Ireland	0.03	0.00	0.00
Israel	0.03	0.00	0.00
Italy	0.06	0.00	0.01
Jordan	0.14	0.02	0.03
Kazakhstan	0.06	0.00	0.01
Kosovo	0.11	0.01	0.03
Latvia	0.08	0.01	0.01
Lithuania	0.05	0.00	0.00
Macao SAR	0.09	0.01	0.01
Malta	0.05	0.00	0.01
Montenegro	0.14	0.02	0.03
Morocco	0.08	0.01	0.02
Netherlands	0.08	0.01	0.01
New Zealand	0.03	0.00	0.01
North Macedonia	0.13	0.02	0.02
Northern Ireland	0.07	0.01	0.01
Norway (5)	0.05	0.00	0.01

Relationship Between the PIRLS 2021 *Students Engaged in Reading Lessons* 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	0.16	0.03	0.04
Poland	-0.04	0.00	0.00
Portugal	0.07	0.00	0.00
Qatar	0.23	0.05	0.07
Russian Federation	0.01	0.00	0.00
Saudi Arabia	0.26	0.07	0.07
Serbia	0.07	0.01	0.01
Singapore	0.09	0.01	0.01
Slovak Republic	-0.09	0.01	0.00
Slovenia	0.06	0.00	0.01
South Africa	0.17	0.03	0.05
Spain	0.05	0.00	0.01
Sweden	-0.01	0.00	0.01
Turkiye	0.20	0.04	0.05
United Arab Emirates	0.24	0.06	0.08
United States	0.15	0.02	0.03
Uzbekistan	0.15	0.02	0.04
International Median	0.08	0.01	0.01
Benchmarking Participants			
Alberta, Canada	0.15	0.02	0.03
British Columbia, Canada	0.11	0.01	0.01
Newfoundland & Labrador, Can.	0.14	0.02	0.03
Quebec, Canada	0.04	0.00	0.00
Moscow City, Russian Fed.	0.07	0.00	0.01
South Africa (6)	0.24	0.06	0.06
Abu Dhabi, UAE	0.30	0.09	0.11
Dubai, UAE	0.08	0.01	0.02

Students Like Reading

About the Scale

Students were scored on the *Students Like Reading* scale according to their degree of agreement with eight statements and how often they did two reading activities outside of school. Students who **Very Much Like Reading** had a score at or above the cut score corresponding to “agreeing a lot” with four of the eight statements and “agreeing a little” with the other four, as well as doing one of the two reading activities outside of school “every day or almost every day,” on average. Students who **Do Not Like Reading** had a score at or below the cut score corresponding to “disagreeing a little” with four of the eight statements and “agreeing a little” with the other four, as well as doing one of two the reading activities only “once or twice a month,” on average. All other students **Somewhat Like Reading**.

What do you think about reading? Tell how much you agree with each of these statements.

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
ASBR07A ^T 1) I like talking about what I read with other people -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR07B ^T 2) I would be happy if someone gave me a book as a present -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR07C ^T 3) I think reading is boring ^R -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR07D ^T 4) I would like to have more time for reading -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR07E ^T 5) I enjoy reading -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR07F ^T 6) I learn a lot from reading -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR07G ^T 7) I like to read things that make me think -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR07H ^T 8) I like it when a book helps me imagine other worlds -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

^R Reverse coded

Very Much Like Somewhat Like Do Not Like

10.4 8.3

How often do you do these things outside of school?

	Every day or almost every day	Once or twice a week	Once or twice a month	Never or almost never
ASBR06A ^T 9) I read for fun -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBR06B ^T 10) I read to find out about things I want to learn -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Very Much Like Somewhat Like Do Not Like

10.4 8.3

Scale Cut Scores

^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 *Students Like Reading* Scale

Item	delta	tau_1	tau_2	tau_3	Infit	Q-Index
ASBR07A	0.23204	-0.47232	-0.18036	0.65268	1.16	0.14
ASBR07B	-0.04324	-0.30109	-0.31134	0.61243	0.94	0.10
ASBR07C ^R	0.17387	-0.34274	0.15259	0.19015	1.39	0.18
ASBR07D	0.40801	-0.56568	-0.08811	0.65379	0.93	0.09
ASBR07E	-0.17711	-0.26568	-0.35679	0.62247	0.72	0.06
ASBR07F	-0.55913	-0.53505	-0.19149	0.72654	0.88	0.10
ASBR07G	-0.14549	-0.42765	-0.16744	0.59509	0.94	0.11
ASBR07H	-0.43107	-0.01840	-0.27381	0.29221	0.99	0.11
ASBR06A	0.32670	-0.22600	-0.37657	0.60257	1.17	0.14
ASBR06B	0.21542	-0.47617	-0.17118	0.64735	1.12	0.13

^R Reverse coded

Scale Transformation Constants for the PIRLS 2021 *Students Like Reading* Scale

Scale Transformation Constants

A = 8.281596

B = 1.823026

Transformed Scale Score = 8.281596 + 1.823026 • Logit Scale Score

Equivalence Table of the Raw Score and Transformed Scale Scores for the PIRLS 2021 *Students Like Reading* Scale

Raw Score	Transformed Scale Score	Cutpoint
0	2.10925	
1	3.96788	
2	4.80423	
3	5.35292	
4	5.76631	
5	6.10437	
6	6.39342	
7	6.64926	
8	6.88069	
9	7.09749	
10	7.30132	
11	7.49556	
12	7.68295	
13	7.86575	
14	8.04592	
15	8.22519	8.3
16	8.40525	
17	8.58785	
18	8.77480	
19	8.96826	
20	9.17072	
21	9.38515	
22	9.61297	
23	9.86291	
24	10.14141	
25	10.45984	10.4
26	10.83607	
27	11.30153	
28	11.92203	
29	12.86204	
30	14.87956	

Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2021 *Students Like Reading* Scale

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item									
			ASBR07A	ASBR07B	ASBR07C _R	ASBR07D	ASBR07E	ASBR07F	ASBR07G	ASBR07H	ASBR06A	ASBR06B
Albania	0.73	33	0.50	0.65	0.34	0.53	0.75	0.65	0.62	0.62	0.47	0.53
Australia	0.89	51	0.55	0.73	0.70	0.77	0.84	0.74	0.73	0.71	0.70	0.59
Austria	0.88	48	0.55	0.72	0.65	0.73	0.84	0.69	0.69	0.68	0.75	0.60
Azerbaijan	0.68	32	0.46	0.69	0.25	0.54	0.75	0.68	0.64	0.64	0.28	0.45
Bahrain	0.82	40	0.53	0.68	0.40	0.72	0.77	0.71	0.68	0.59	0.57	0.60
Belgium (Flemish)	0.88	49	0.58	0.73	0.65	0.74	0.84	0.73	0.74	0.70	0.72	0.51
Belgium (French)	0.85	44	0.51	0.69	0.56	0.72	0.81	0.70	0.66	0.61	0.65	0.64
Brazil	0.84	41	0.58	0.68	0.42	0.75	0.79	0.63	0.68	0.60	0.58	0.63
Bulgaria	0.87	47	0.62	0.69	0.60	0.75	0.82	0.69	0.72	0.62	0.69	0.63
Chinese Taipei	0.89	51	0.63	0.63	0.55	0.79	0.84	0.79	0.78	0.72	0.69	0.68
Croatia	0.89	51	0.65	0.71	0.60	0.74	0.83	0.73	0.76	0.74	0.69	0.64
Cyprus	0.87	47	0.65	0.75	0.49	0.70	0.80	0.68	0.73	0.67	0.68	0.60
Czech Republic	0.88	48	0.61	0.71	0.62	0.67	0.84	0.72	0.65	0.66	0.73	0.65
Denmark	0.86	45	0.63	0.69	0.64	0.69	0.84	0.65	0.76	0.68	0.55	0.46
Egypt	0.79	40	0.53	0.70	0.08	0.73	0.77	0.79	0.77	0.73	0.32	0.51
England	0.87	47	0.58	0.69	0.72	0.75	0.84	0.68	0.66	0.63	0.68	0.57
Finland	0.90	53	0.61	0.75	0.68	0.69	0.86	0.75	0.82	0.77	0.72	0.56
France	0.86	44	0.52	0.69	0.69	0.71	0.82	0.65	0.66	0.62	0.69	0.60
Georgia	0.80	40	0.60	0.71	0.41	0.70	0.80	0.66	0.67	0.70	0.34	0.58
Germany	0.89	51	0.58	0.72	0.63	0.66	0.86	0.75	0.70	0.74	0.79	0.63
Hong Kong SAR	0.88	49	0.56	0.67	0.48	0.79	0.83	0.74	0.72	0.76	0.69	0.66
Hungary	0.87	47	0.65	0.72	0.58	0.75	0.83	0.71	0.72	0.71	0.67	0.46
Iran, Islamic Rep. of	0.74	34	0.52	0.67	0.28	0.68	0.76	0.68	0.55	0.65	0.34	0.51
Ireland	0.88	49	0.58	0.73	0.73	0.74	0.85	0.69	0.68	0.66	0.72	0.55
Israel	0.87	47	0.58	0.69	0.48	0.73	0.83	0.73	0.74	0.68	0.69	0.64
Italy	0.87	47	0.60	0.70	0.64	0.74	0.83	0.68	0.70	0.66	0.63	0.66
Jordan	0.81	43	0.61	0.73	0.19	0.66	0.81	0.78	0.77	0.74	0.47	0.53
Kazakhstan	0.77	38	0.52	0.71	0.47	0.69	0.77	0.71	0.67	0.63	0.20	0.57
Kosovo	0.72	36	0.43	0.67	0.22	0.67	0.77	0.72	0.65	0.68	0.45	0.51
Latvia	0.88	48	0.62	0.75	0.62	0.75	0.83	0.69	0.69	0.65	0.72	0.60
Lithuania	0.89	49	0.68	0.75	0.56	0.69	0.82	0.73	0.69	0.69	0.72	0.68
Macao SAR	0.86	45	0.54	0.62	0.51	0.80	0.82	0.71	0.70	0.64	0.67	0.65
Malta	0.86	45	0.56	0.70	0.62	0.77	0.82	0.70	0.64	0.62	0.62	0.59
Montenegro	0.83	42	0.58	0.70	0.48	0.69	0.79	0.66	0.71	0.66	0.54	0.59
Morocco	0.73	35	0.47	0.61	0.34	0.66	0.76	0.72	0.69	0.63	0.41	0.46
Netherlands	0.87	46	0.58	0.74	0.65	0.72	0.83	0.69	0.71	0.65	0.68	0.47
New Zealand	0.87	47	0.55	0.67	0.54	0.75	0.83	0.71	0.73	0.70	0.70	0.58
North Macedonia	0.81	41	0.53	0.71	0.36	0.69	0.80	0.71	0.74	0.66	0.50	0.60
Northern Ireland	0.88	48	0.55	0.71	0.73	0.76	0.84	0.68	0.67	0.65	0.69	0.58

Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2021 *Students Like Reading* Scale

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item									
			ASBR07A	ASBR07B	ASBR07C ^R	ASBR07D	ASBR07E	ASBR07F	ASBR07G	ASBR07H	ASBR06A	ASBR06B
Norway (5)	0.87	47	0.61	0.70	0.63	0.72	0.83	0.68	0.74	0.67	0.67	0.53
Oman	0.77	37	0.48	0.65	0.20	0.67	0.76	0.75	0.69	0.67	0.45	0.53
Poland	0.89	51	0.64	0.75	0.66	0.72	0.85	0.74	0.75	0.69	0.72	0.61
Portugal	0.83	42	0.57	0.69	0.54	0.61	0.80	0.67	0.68	0.62	0.63	0.61
Qatar	0.84	43	0.56	0.69	0.47	0.72	0.79	0.75	0.74	0.62	0.55	0.59
Russian Federation	0.87	46	0.59	0.71	0.57	0.74	0.81	0.70	0.71	0.63	0.68	0.60
Saudi Arabia	0.81	41	0.57	0.70	0.26	0.67	0.74	0.76	0.74	0.66	0.49	0.63
Serbia	0.87	47	0.63	0.72	0.59	0.73	0.82	0.68	0.64	0.68	0.67	0.64
Singapore	0.85	45	0.49	0.71	0.63	0.80	0.84	0.74	0.71	0.65	0.40	0.59
Slovak Republic	0.88	49	0.64	0.74	0.59	0.70	0.83	0.68	0.67	0.70	0.76	0.67
Slovenia	0.88	47	0.62	0.75	0.57	0.72	0.84	0.71	0.62	0.73	0.69	0.60
South Africa	0.76	36	0.53	0.66	0.10	0.70	0.73	0.70	0.68	0.66	0.40	0.53
Spain	0.86	46	0.57	0.66	0.60	0.73	0.81	0.72	0.69	0.66	0.65	0.64
Sweden	0.89	50	0.64	0.70	0.67	0.73	0.85	0.72	0.73	0.70	0.74	0.57
Turkiye	0.78	37	0.42	0.69	0.50	0.67	0.78	0.70	0.62	0.57	0.42	0.56
United Arab Emirates	0.83	43	0.57	0.69	0.33	0.71	0.79	0.75	0.74	0.65	0.55	0.63
United States	0.85	43	0.48	0.66	0.63	0.75	0.82	0.66	0.65	0.64	0.69	0.56
Uzbekistan	0.72	34	0.43	0.67	0.27	0.60	0.68	0.72	0.62	0.69	0.41	0.53
Benchmarking Participants												
Alberta, Canada	0.86	46	0.53	0.69	0.61	0.73	0.83	0.72	0.74	0.68	0.65	0.58
British Columbia, Canada	0.86	44	0.50	0.67	0.61	0.71	0.80	0.73	0.71	0.67	0.64	0.57
Newfoundland & Labrador, Can.	0.88	50	0.57	0.69	0.67	0.75	0.85	0.74	0.76	0.69	0.68	0.63
Quebec, Canada	0.86	45	0.51	0.68	0.59	0.72	0.83	0.72	0.69	0.64	0.68	0.61
Moscow City, Russian Fed.	0.88	49	0.62	0.74	0.66	0.76	0.84	0.70	0.70	0.64	0.71	0.60
South Africa (6)	0.78	36	0.55	0.66	0.40	0.71	0.75	0.67	0.65	0.60	0.33	0.54
Abu Dhabi, UAE	0.84	43	0.58	0.69	0.28	0.71	0.78	0.75	0.75	0.67	0.56	0.63
Dubai, UAE	0.86	45	0.60	0.71	0.47	0.74	0.82	0.73	0.71	0.64	0.59	0.65

^R Reverse coded

Relationship Between the PIRLS 2021 *Students Like Reading* 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	0.10	0.01	0.01
Australia	0.19	0.03	0.04
Austria	0.12	0.02	0.01
Azerbaijan	0.08	0.01	0.00
Bahrain	0.11	0.01	0.01
Belgium (Flemish)	0.06	0.00	0.00
Belgium (French)	0.06	0.00	0.01
Brazil	-0.04	0.00	0.00
Bulgaria	0.08	0.01	0.02
Chinese Taipei	0.19	0.04	0.04
Croatia	0.04	0.00	0.00
Cyprus	0.09	0.01	0.01
Czech Republic	0.04	0.00	0.01
Denmark	0.20	0.04	0.04
Egypt	0.20	0.04	0.04
England	0.15	0.02	0.03
Finland	0.17	0.03	0.03
France	0.15	0.02	0.03
Georgia	-0.01	0.00	0.00
Germany	0.16	0.03	0.03
Hong Kong SAR	0.22	0.05	0.05
Hungary	0.14	0.02	0.02
Iran, Islamic Rep. of	0.16	0.03	0.03
Ireland	0.19	0.04	0.03
Israel	0.07	0.00	0.00
Italy	0.05	0.00	0.00
Jordan	0.12	0.02	0.02
Kazakhstan	-0.06	0.00	0.00
Kosovo	0.12	0.01	0.01
Latvia	0.11	0.01	0.01
Lithuania	0.04	0.00	0.00
Macao SAR	0.21	0.05	0.04
Malta	0.01	0.00	0.00
Montenegro	0.07	0.01	0.01
Morocco	0.19	0.04	0.04
Netherlands	0.19	0.04	0.04
New Zealand	0.06	0.00	0.01
North Macedonia	0.05	0.00	0.00
Northern Ireland	0.19	0.03	0.04
Norway (5)	0.18	0.03	0.02
Oman	0.20	0.04	0.03

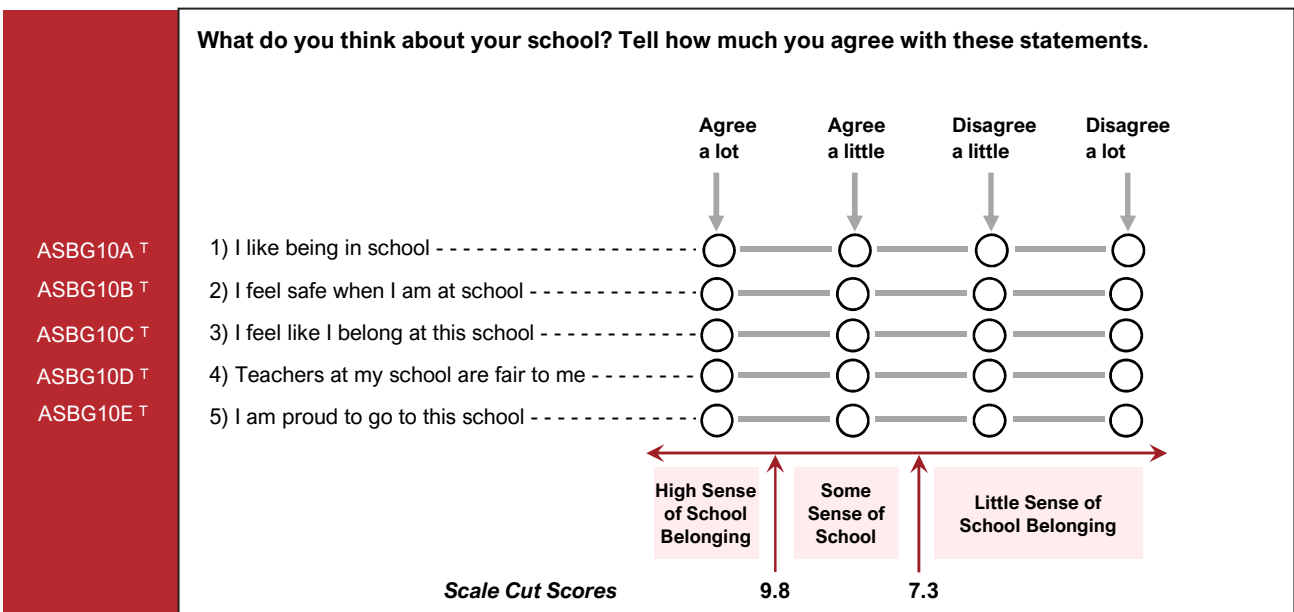
Relationship Between the PIRLS 2021 *Students Like Reading* Scale and PIRLS 2021 Achievement

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	
Poland	0.11	0.01	0.02
Portugal	-0.02	0.00	0.00
Qatar	0.12	0.01	0.02
Russian Federation	-0.02	0.00	0.00
Saudi Arabia	0.18	0.03	0.02
Serbia	0.02	0.00	0.00
Singapore	0.20	0.04	0.04
Slovak Republic	0.03	0.00	0.00
Slovenia	0.11	0.01	0.01
South Africa	0.17	0.03	0.02
Spain	0.09	0.01	0.01
Sweden	0.05	0.00	0.00
Turkiye	0.09	0.01	0.01
United Arab Emirates	0.12	0.01	0.02
United States	0.13	0.02	0.02
Uzbekistan	0.26	0.07	0.06
International Median	0.11	0.01	0.01
Benchmarking Participants			
Alberta, Canada	0.11	0.01	0.01
British Columbia, Canada	0.14	0.02	0.02
Newfoundland & Labrador, Can.	0.11	0.01	0.02
Quebec, Canada	0.11	0.01	0.02
Moscow City, Russian Fed.	0.10	0.01	0.01
South Africa (6)	0.19	0.04	0.04
Abu Dhabi, UAE	0.18	0.03	0.04
Dubai, UAE	0.01	0.00	0.00

Sense of School Belonging

About the Scale

Students were scored according to their responses to five statements on the *Sense of School Belonging* scale. Cut scores divide the scale into three categories. Students with a **High Sense of School Belonging** had a score at or above the cut score corresponding to “agreeing a lot” with three of the five statements and “agreeing a little” with the other two statements, on average. Students with **Little Sense of School Belonging** had a score at or below the cut score corresponding to “disagreeing a little” to three of the five statements and “agreeing a little” with the other two statements, on average. All other students had **Some Sense of School Belonging**.



^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 *Sense of School Belonging* Scale

Item	delta	tau_1	tau_2	tau_3	Infit	Q-Index
ASBG10A	0.30378	-0.41936	-0.64536	1.06472	1.03	0.09
ASBG10B	-0.05432	-0.40891	-0.49095	0.89986	1.01	0.09
ASBG10C	0.10972	-0.32807	-0.36342	0.69149	1.06	0.08
ASBG10D	-0.16037	-0.17098	-0.41825	0.58923	1.15	0.11
ASBG10E	-0.19881	-0.20978	-0.42962	0.63940	0.91	0.07

Scale Transformation Constants for the PIRLS 2021 *Sense of School Belonging* Scale

Scale Transformation Constants

A = 7.558990

B = 1.664144

Transformed Scale Score = 7.558990 + 1.664144 • Logit Scale Score

Equivalence Table of the Raw Score and Transformed Scale Scores for the PIRLS 2021 *Sense of School Belonging* Scale

Raw Score	Transformed Scale Score	Cutpoint
0	3.24506	
1	4.71585	
2	5.40935	
3	5.88997	
4	6.27818	
5	6.61933	
6	6.93638	
7	7.24879	7.3
8	7.55475	
9	7.87932	
10	8.23773	
11	8.64972	
12	9.15299	
13	9.82079	9.8
14	10.82106	
15	12.85262	

Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2021 *Sense of School Belonging* Scale

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item				
			ASBG10A	ASBG10B	ASBG10C	ASBG10D	ASBG10E
Albania	0.69	46	0.65	0.69	0.66	0.62	0.76
Australia	0.80	57	0.74	0.75	0.77	0.67	0.83
Austria	0.78	54	0.77	0.80	0.75	0.57	0.78
Azerbaijan	0.71	47	0.71	0.67	0.66	0.65	0.74
Bahrain	0.75	50	0.71	0.70	0.72	0.64	0.76
Belgium (Flemish)	0.81	58	0.74	0.78	0.78	0.69	0.80
Belgium (French)	0.74	50	0.70	0.69	0.77	0.53	0.81
Brazil	0.72	48	0.73	0.71	0.66	0.57	0.79
Bulgaria	0.75	50	0.70	0.68	0.78	0.57	0.80
Chinese Taipei	0.81	56	0.73	0.75	0.77	0.70	0.80
Croatia	0.82	58	0.72	0.79	0.79	0.70	0.81
Cyprus	0.80	56	0.77	0.71	0.76	0.69	0.82
Czech Republic	0.76	52	0.74	0.74	0.63	0.70	0.78
Denmark	0.81	57	0.76	0.77	0.79	0.65	0.78
Egypt	0.81	56	0.67	0.75	0.77	0.75	0.81
England	0.79	55	0.74	0.73	0.74	0.67	0.81
Finland	0.82	58	0.78	0.78	0.77	0.73	0.76
France	0.67	45	0.71	0.70	0.65	0.47	0.79
Georgia	0.53	39	0.66	0.65	0.46	0.60	0.73
Germany	0.78	53	0.71	0.76	0.73	0.64	0.78
Hong Kong SAR	0.81	57	0.72	0.80	0.84	0.64	0.75
Hungary	0.79	55	0.69	0.75	0.79	0.66	0.82
Iran, Islamic Rep. of	0.60	43	0.72	0.69	0.73	0.68	0.42
Ireland	0.79	56	0.71	0.77	0.75	0.69	0.79
Israel	0.84	61	0.77	0.79	0.79	0.73	0.83
Italy	0.76	52	0.73	0.73	0.69	0.66	0.78
Jordan	0.82	58	0.72	0.77	0.80	0.71	0.81
Kazakhstan	0.77	52	0.73	0.71	0.74	0.69	0.74
Kosovo	0.67	47	0.72	0.70	0.57	0.65	0.76
Latvia	0.78	54	0.73	0.74	0.75	0.66	0.78
Lithuania	0.78	54	0.75	0.74	0.72	0.66	0.79
Macao SAR	0.76	51	0.75	0.74	0.75	0.69	0.64
Malta	0.77	53	0.72	0.74	0.77	0.62	0.77
Montenegro	0.70	47	0.67	0.68	0.71	0.60	0.77
Morocco	0.67	45	0.61	0.67	0.71	0.60	0.73
Netherlands	0.75	51	0.73	0.72	0.72	0.66	0.74
New Zealand	0.82	58	0.76	0.74	0.79	0.67	0.83
North Macedonia	0.66	43	0.65	0.67	0.66	0.67	0.63
Northern Ireland	0.79	56	0.70	0.78	0.75	0.70	0.80

Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the PIRLS 2021 *Sense of School Belonging* Scale

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item				
			ASBG10A	ASBG10B	ASBG10C	ASBG10D	ASBG10E
Norway (5)	0.80	56	0.72	0.74	0.79	0.68	0.81
Oman	0.76	51	0.71	0.72	0.74	0.66	0.75
Poland	0.80	56	0.78	0.75	0.76	0.66	0.80
Portugal	0.75	50	0.72	0.72	0.71	0.61	0.77
Qatar	0.81	56	0.75	0.74	0.79	0.65	0.80
Russian Federation	0.78	54	0.76	0.73	0.72	0.68	0.77
Saudi Arabia	0.79	54	0.69	0.74	0.73	0.72	0.78
Serbia	0.74	51	0.74	0.72	0.71	0.62	0.77
Singapore	0.83	60	0.77	0.78	0.81	0.69	0.82
Slovak Republic	0.81	58	0.73	0.78	0.76	0.71	0.81
Slovenia	0.83	59	0.74	0.77	0.79	0.72	0.82
South Africa	0.73	48	0.69	0.71	0.71	0.64	0.73
Spain	0.77	53	0.73	0.75	0.70	0.67	0.78
Sweden	0.81	57	0.73	0.73	0.81	0.69	0.82
Turkiye	0.65	43	0.67	0.69	0.67	0.51	0.72
United Arab Emirates	0.80	55	0.73	0.76	0.75	0.67	0.80
United States	0.77	53	0.71	0.72	0.78	0.63	0.79
Uzbekistan	0.67	45	0.66	0.60	0.69	0.67	0.74
Benchmarking Participants							
Alberta, Canada	0.81	58	0.74	0.77	0.80	0.65	0.83
British Columbia, Canada	0.82	58	0.75	0.75	0.78	0.71	0.82
Newfoundland & Labrador, Can.	0.79	55	0.73	0.73	0.76	0.64	0.83
Quebec, Canada	0.80	55	0.74	0.76	0.77	0.64	0.78
Moscow City, Russian Fed.	0.80	56	0.77	0.74	0.75	0.69	0.77
South Africa (6)	0.72	48	0.68	0.74	0.72	0.56	0.75
Abu Dhabi, UAE	0.81	56	0.73	0.77	0.76	0.67	0.79
Dubai, UAE	0.79	54	0.74	0.73	0.74	0.66	0.79

Relationship Between the PIRLS 2021 *Sense of School Belonging* 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	0.06	0.00	0.00
Australia	0.15	0.02	0.02
Austria	0.15	0.02	0.02
Azerbaijan	0.11	0.01	0.02
Bahrain	0.21	0.04	0.05
Belgium (Flemish)	0.13	0.02	0.02
Belgium (French)	0.09	0.01	0.02
Brazil	0.01	0.00	0.01
Bulgaria	-0.03	0.00	0.00
Chinese Taipei	0.10	0.01	0.01
Croatia	0.08	0.01	0.02
Cyprus	0.12	0.01	0.02
Czech Republic	0.06	0.00	0.01
Denmark	0.16	0.02	0.02
Egypt	0.15	0.02	0.03
England	0.12	0.02	0.02
Finland	0.12	0.01	0.02
France	0.12	0.02	0.01
Georgia	0.10	0.01	0.01
Germany	0.20	0.04	0.03
Hong Kong SAR	0.16	0.03	0.03
Hungary	0.10	0.01	0.01
Iran, Islamic Rep. of	-0.04	0.00	0.01
Ireland	0.16	0.03	0.03
Israel	0.02	0.00	0.00
Italy	0.14	0.02	0.02
Jordan	0.05	0.00	0.01
Kazakhstan	0.02	0.00	0.00
Kosovo	0.12	0.02	0.02
Latvia	0.10	0.01	0.01
Lithuania	0.08	0.01	0.01
Macao SAR	0.19	0.04	0.04
Malta	0.10	0.01	0.02
Montenegro	0.10	0.01	0.02
Morocco	0.12	0.02	0.02
Netherlands	0.23	0.05	0.04
New Zealand	0.11	0.01	0.02
North Macedonia	0.10	0.01	0.01
Northern Ireland	0.21	0.04	0.04
Norway (5)	0.13	0.02	0.01

Relationship Between the PIRLS 2021 *Sense of School Belonging* 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	0.16	0.03	0.03
Poland	-0.03	0.00	0.01
Portugal	0.09	0.01	0.01
Qatar	0.24	0.06	0.06
Russian Federation	0.01	0.00	0.00
Saudi Arabia	0.29	0.08	0.08
Serbia	0.02	0.00	0.00
Singapore	0.14	0.02	0.02
Slovak Republic	-0.05	0.00	0.01
Slovenia	0.11	0.01	0.02
South Africa	0.10	0.01	0.02
Spain	0.11	0.01	0.01
Sweden	0.12	0.02	0.02
Turkiye	0.20	0.04	0.05
United Arab Emirates	0.21	0.04	0.06
United States	0.22	0.05	0.06
Uzbekistan	0.18	0.03	0.04
International Median	0.12	0.01	0.02
Benchmarking Participants			
Alberta, Canada	0.18	0.03	0.03
British Columbia, Canada	0.13	0.02	0.02
Newfoundland & Labrador, Can.	0.15	0.02	0.02
Quebec, Canada	0.11	0.01	0.01
Moscow City, Russian Fed.	0.09	0.01	0.01
South Africa (6)	0.17	0.03	0.03
Abu Dhabi, UAE	0.25	0.06	0.08
Dubai, UAE	0.12	0.01	0.02