

Parents' Perceptions of School Performance Scale, Fourth Grade

The Parents' Perceptions of School Performance (PSP) scale was created based on parents' responses to the eight statements described below.

Items in the TIMSS 2015 Parents' Perceptions of School Performance Scale, Fourth Grade¹

What do you think of your child's school?		Agree a lot	Agree a little	Disagree a little	Disagree a lot
ASBH11A	1) My child's school does a good job including me in my child's education -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBH11B	2) My child's school provides a safe environment -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBH11C	3) My child's school cares about my child's progress in school -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBH11D	4) My child's school does a good job informing me of his/her progress -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBH11E	5) My child's school promotes high academic standards -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBH11F	6) My child's school does a good job in helping him/her become better in reading -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBH11G	7) My child's school does a good job in helping him/her become better in mathematics -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASBH11H	8) My child's school does a good job in helping him/her become better in science -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Very Satisfied Satisfied Less than Satisfied

9.7 6.7

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. The scale statistics that are reported herein reflect analysis of the items following collapsing.

Item Parameters for the TIMSS 2015 Parents' Perceptions of School Performance Scale, Fourth Grade

Item	delta	tau_1	tau_2	Infit
ASBH11A	0.11460	-1.73494	1.73494	1.12
ASBH11B	-0.67540	-1.75855	1.75855	1.32
ASBH11C	-0.56176	-1.77592	1.77592	0.86
ASBH11D	0.01006	-1.43467	1.43467	1.02
ASBH11E	0.89136	-1.72307	1.72307	1.18
ASBH11F	-0.12622	-1.56127	1.56127	0.87
ASBH11G	0.02192	-1.62039	1.62039	0.86
ASBH11H	0.32544	-1.66119	1.66119	0.95

Scale Transformation Constants for the TIMSS 2015 Parents' Perceptions of School Performance Scale, Fourth Grade

Scale Transformation Constants

A = 8.205877

B = 0.922019

Transformed Scale Score = 8.205877 + 0.922019 • Logit Scale Score

SOURCE: IEA's Trends in International Mathematics and Science Study – TIMSS 2015



**Equivalence Table of Raw and Transformed Scale Scores for the TIMSS
2015 Parents' Perceptions of School Performance Scale, Fourth Grade**

Raw Score	Transformed Scale Score	Cutpoint
0	3.94852	
1	5.10034	
2	5.72134	
3	6.19579	
4	6.61062	6.7
5	7.00360	
6	7.39360	
7	7.79675	
8	8.21220	
9	8.62605	
10	9.02464	
11	9.41083	
12	9.79839	9.7
13	10.20989	
14	10.68380	
15	11.30495	
16	12.45977	

SOURCE: IEA's Trends in International Mathematics and Science Study – TIMSS 2015



Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the TIMSS 2015 Parents' Perceptions of School Performance Scale, Fourth Grade

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Component Loadings for Each Item							
			ASBHT1A	ASBHT1B	ASBHT1C	ASBHT1D	ASBHT1E	ASBHT1F	ASBHT1G	ASBHT1H
Australia	0.90	60	0.78	0.51	0.81	0.81	0.74	0.83	0.84	0.81
Bahrain	0.90	60	0.74	0.67	0.82	0.76	0.79	0.81	0.81	0.79
Belgium (Flemish)	0.88	55	0.76	0.62	0.80	0.79	0.59	0.77	0.81	0.78
Bulgaria	0.91	63	0.71	0.71	0.84	0.78	0.78	0.84	0.83	0.84
Canada	0.91	61	0.77	0.59	0.83	0.80	0.78	0.80	0.84	0.82
Chile	0.91	61	0.78	0.64	0.82	0.80	0.75	0.80	0.82	0.79
Chinese Taipei	0.91	62	0.77	0.67	0.84	0.84	0.72	0.77	0.86	0.83
Croatia	0.91	62	0.73	0.69	0.82	0.74	0.76	0.85	0.85	0.85
Cyprus	0.89	57	0.68	0.60	0.82	0.73	0.76	0.82	0.83	0.77
Czech Republic	0.90	60	0.70	0.57	0.81	0.78	0.76	0.84	0.87	0.86
Denmark	0.90	60	0.78	0.64	0.82	0.80	0.80	0.77	0.81	0.76
England	-	-	-	-	-	-	-	-	-	-
Finland	0.89	57	0.70	0.58	0.80	0.72	0.68	0.82	0.86	0.84
France	0.89	58	0.74	0.63	0.80	0.78	0.71	0.80	0.83	0.78
Georgia	0.87	54	0.61	0.63	0.77	0.74	0.64	0.80	0.82	0.81
Germany	0.89	57	0.79	0.60	0.79	0.79	0.59	0.80	0.83	0.82
Hong Kong SAR	0.89	57	0.76	0.55	0.79	0.80	0.75	0.80	0.80	0.76
Hungary	0.90	58	0.73	0.61	0.78	0.77	0.73	0.82	0.83	0.82
Indonesia	0.83	48	0.64	0.54	0.72	0.72	0.58	0.72	0.80	0.78
Iran, Islamic Rep. of	0.86	51	0.67	0.62	0.74	0.70	0.65	0.78	0.78	0.77
Ireland	0.88	56	0.78	0.58	0.80	0.79	0.78	0.76	0.79	0.70
Italy	0.90	59	0.77	0.55	0.79	0.78	0.74	0.81	0.82	0.83
Japan	0.86	51	0.61	0.58	0.70	0.70	0.74	0.80	0.78	0.77
Jordan	0.93	66	0.78	0.71	0.85	0.82	0.82	0.85	0.84	0.83
Kazakhstan	0.88	54	0.68	0.60	0.76	0.69	0.77	0.80	0.78	0.78
Korea, Rep. of	0.91	62	0.64	0.67	0.79	0.78	0.85	0.82	0.86	0.85
Kuwait	0.92	65	0.77	0.72	0.83	0.81	0.83	0.83	0.82	0.81
Lithuania	0.89	57	0.64	0.63	0.78	0.72	0.69	0.84	0.85	0.83
Morocco	0.88	55	0.68	0.66	0.80	0.72	0.69	0.80	0.81	0.77
Netherlands	0.89	56	0.76	0.56	0.80	0.78	0.70	0.83	0.85	0.70
New Zealand	0.91	61	0.81	0.56	0.82	0.82	0.78	0.81	0.83	0.77
Northern Ireland	0.89	58	0.79	0.55	0.83	0.81	0.75	0.80	0.81	0.69
Norway (5)	0.91	63	0.79	0.65	0.83	0.79	0.79	0.82	0.84	0.83
Oman	0.88	55	0.72	0.64	0.77	0.71	0.73	0.76	0.80	0.80
Poland	0.90	58	0.69	0.68	0.83	0.73	0.75	0.80	0.80	0.80
Portugal	0.90	59	0.78	0.59	0.81	0.76	0.71	0.83	0.85	0.81
Qatar	0.92	63	0.77	0.68	0.82	0.79	0.80	0.82	0.82	0.83
Russian Federation	0.89	58	0.62	0.66	0.79	0.70	0.70	0.85	0.87	0.86
Saudi Arabia	0.92	65	0.75	0.73	0.82	0.80	0.81	0.84	0.84	0.83
Serbia	0.92	66	0.81	0.70	0.86	0.82	0.77	0.84	0.84	0.85
Singapore	0.89	58	0.77	0.58	0.82	0.78	0.72	0.77	0.81	0.79
Slovak Republic	0.90	59	0.69	0.62	0.80	0.72	0.77	0.82	0.85	0.84
Slovenia	0.91	61	0.65	0.70	0.82	0.76	0.72	0.85	0.86	0.87
South Africa (5)	0.85	50	0.67	0.58	0.74	0.70	0.70	0.75	0.76	0.73
Spain	0.90	60	0.77	0.64	0.80	0.79	0.71	0.79	0.84	0.83
Sweden	0.91	63	0.77	0.65	0.82	0.80	0.81	0.81	0.83	0.84
Turkey	0.90	60	0.71	0.67	0.78	0.75	0.81	0.81	0.82	0.81
United Arab Emirates	0.91	62	0.78	0.67	0.83	0.79	0.80	0.80	0.81	0.81
United States	-	-	-	-	-	-	-	-	-	-
Benchmarking Participants										
Buenos Aires, Argentina	0.91	61	0.71	0.65	0.83	0.76	0.77	0.81	0.85	0.81
Ontario, Canada	0.91	61	0.79	0.56	0.84	0.80	0.79	0.79	0.84	0.83
Quebec, Canada	0.90	59	0.70	0.65	0.82	0.81	0.75	0.81	0.84	0.77
Norway (4)	0.91	62	0.79	0.62	0.84	0.80	0.76	0.80	0.84	0.81
Abu Dhabi, UAE	0.92	63	0.78	0.69	0.83	0.80	0.82	0.82	0.80	0.82
Dubai, UAE	0.90	59	0.76	0.61	0.83	0.78	0.79	0.77	0.80	0.80
Florida, US	-	-	-	-	-	-	-	-	-	-

A dash (-) indicates comparable data not available.

SOURCE: IEA's Trends in International Mathematics and Science Study – TIMSS 2015

Relationship Between the TIMSS 2015 Parents' Perceptions of School Performance Scale, Fourth Grade, and TIMSS 2015 Achievement

Country	Pearson's Correlation with Achievement				Variance in Achievement Accounted for by Difference Between Regions of the Scale (η^2)	
	(r)		(r)		Mathematics	Science
	Mathematics	Science	Mathematics	Science		
Australia	0.10	0.05	0.01	0.00	0.01	0.01
Bahrain	0.13	0.17	0.02	0.03	0.02	0.03
Belgium (Flemish)	-0.03	-0.05	0.00	0.00	0.00	0.00
Bulgaria	-0.01	-0.04	0.00	0.00	0.00	0.00
Canada	0.00	0.02	0.00	0.00	0.00	0.00
Chile	0.04	0.04	0.00	0.00	0.00	0.00
Chinese Taipei	-0.02	-0.05	0.00	0.00	0.00	0.00
Croatia	-0.02	-0.03	0.00	0.00	0.00	0.00
Cyprus	-0.02	-0.04	0.00	0.00	0.00	0.00
Czech Republic	-0.09	-0.10	0.01	0.01	0.01	0.01
Denmark	0.05	0.04	0.00	0.00	0.01	0.00
England	-	-	-	-	-	-
Finland	0.01	0.01	0.00	0.00	0.00	0.00
France	0.01	-0.01	0.00	0.00	0.00	0.00
Georgia	0.04	0.04	0.00	0.00	0.00	0.00
Germany	0.06	0.02	0.00	0.00	0.01	0.01
Hong Kong SAR	0.11	0.09	0.01	0.01	0.01	0.01
Hungary	0.04	0.04	0.00	0.00	0.00	0.00
Indonesia	0.03	0.06	0.00	0.00	0.00	0.00
Iran, Islamic Rep. of	-0.01	-0.01	0.00	0.00	0.00	0.00
Ireland	-0.03	-0.02	0.00	0.00	0.00	0.00
Italy	0.01	-0.02	0.00	0.00	0.00	0.00
Japan	0.02	0.04	0.00	0.00	0.00	0.00
Jordan	0.16	-	0.03	-	0.03	-
Kazakhstan	0.05	0.02	0.00	0.00	0.00	0.00
Korea, Rep. of	0.05	0.02	0.00	0.00	0.00	0.00
Kuwait	0.06	0.07	0.00	0.00	0.00	0.01
Lithuania	0.04	-0.02	0.00	0.00	0.00	0.00
Morocco	0.15	0.22	0.02	0.05	0.02	0.04
Netherlands	0.06	0.05	0.00	0.00	0.01	0.01
New Zealand	0.04	-0.01	0.00	0.00	0.01	0.00
Northern Ireland	-0.03	-0.07	0.00	0.01	0.00	0.01
Norway (5)	0.12	0.03	0.02	0.00	0.01	0.00
Oman	0.14	0.14	0.02	0.02	0.02	0.02
Poland	-0.04	-0.06	0.00	0.00	0.00	0.00
Portugal	0.09	0.06	0.01	0.00	0.01	0.00
Qatar	0.13	0.14	0.02	0.02	0.02	0.02
Russian Federation	-0.02	-0.05	0.00	0.00	0.00	0.00
Saudi Arabia	0.05	0.03	0.00	0.00	0.01	0.00
Serbia	-0.07	-0.10	0.00	0.01	0.01	0.01
Singapore	0.08	0.06	0.01	0.00	0.01	0.01
Slovak Republic	-0.08	-0.11	0.01	0.01	0.01	0.01
Slovenia	0.01	-0.01	0.00	0.00	0.00	0.00
South Africa (5)	0.13	-	0.02	-	0.01	-
Spain	0.03	0.01	0.00	0.00	0.00	0.00
Sweden	0.03	-0.02	0.00	0.00	0.00	0.00
Turkey	-0.01	0.01	0.00	0.00	0.00	0.00
United Arab Emirates	0.16	0.17	0.03	0.03	0.03	0.03
United States	-	-	-	-	-	-
International Median	0.04	0.02	0.00	0.00	0.00	0.00
Benchmarking Participants						
Buenos Aires, Argentina	0.07	0.09	0.00	0.01	0.00	0.01
Ontario, Canada	0.08	0.05	0.01	0.00	0.01	0.01
Quebec, Canada	-0.04	-0.06	0.00	0.00	0.00	0.00
Norway (4)	0.03	-0.02	0.00	0.00	0.00	0.00
Abu Dhabi, UAE	0.17	0.19	0.03	0.03	0.03	0.03
Dubai, UAE	0.15	0.15	0.02	0.02	0.02	0.02
Florida, US	-	-	-	-	-	-

SOURCE: IEA's Trends in International Mathematics and Science Study – TIMSS 2015

A dash (-) indicates comparable data not available.