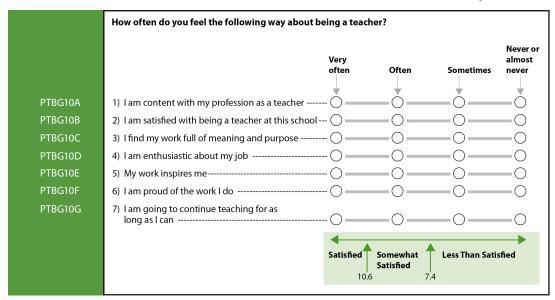


# Teacher Job Satisfaction Scale, Physics

The Teacher Job Satisfaction (TJS) scale was created based on how often teachers responded positively to the seven statements described below.

### Items in the TIMSS Advanced 2015 Teacher Job Satisfaction Scale, Physics1



<sup>1</sup> 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. The scale statistics that are reported herein reflect analysis of the items following collapsing.



## Item Parameters for the TIMSS Advanced 2015 Teacher Job Satisfaction Scale, Physics

Item	delta	tau_1	tau_2	Infit
PTBG10A	0.15383	-1.80976	1.80976	1.02
PTBG10B	-0.38606	-1.52386	1.52386	1.29
PTBG10C	-0.60185	-1.68715	1.68715	0.93
PTBG10D	0.30247	-1.45516	1.45516	0.87
PTBG10E	0.45983	-1.54534	1.54534	0.86
PTBG10F	-0.15541	-1.45758	1.45758	1.03
PTBG10G	0.22719	-1.16800	1.16800	1.47

### Scale Transformation Constants for the TIMSS Advanced 2015 Teacher Job Satisfaction Scale, Physics

Scale Transformation Constants	
A = 9.030432	Transformed Scale Score = 9.030432 + 0.897591 • Logit Scale Score
B = 0.897591	Hallstottilea scale scole = 5.030432 + 0.057351 • Logit scale scole

### **Equivalence Table of the Raw Score and the Transformed Scale Score** for the TIMSS Advanced 2015 Teacher Job Satisfaction Scale, Physics

Raw Score	Transformed Scale Score	Cutpoint
0	5.13977	
1	6.27326	
2	6.89329	
3	7.37441	7.4
4	7.80316	
5	8.21352	
6	8.62591	
7	9.04442	
8	9.46026	
9	9.86512	
10	10.26699	
11	10.68423	10.6
12	11.15621	
13	11.76054	
14	12.88244	





### Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the TIMSS **Advanced 2015 Teacher Job Satisfaction Scale, Physics**

Country	Cronbach's Alpha Reliability Coefficient	Percent of Variance Explained	Plages	/	٠ /	nt Loadi	٠ /	/	1	Spir
France	0.91	66	0.83	0.70	0.85	0.84	0.86	0.84	0.74	
Italy	0.90	63	0.84	0.70	0.72	0.89	0.86	0.84	0.67	
Lebanon	0.91	65	0.77	0.74	0.81	0.85	0.81	0.83	0.82	
Norway	0.90	63	0.83	0.76	0.80	0.84	0.90	0.75	0.66	
Portugal	0.84	52	0.80	0.70	0.77	0.78	0.71	0.57	0.68	
Russian Federation	0.90	64	0.84	0.81	0.77	0.83	0.85	0.81	0.68	
Slovenia	0.89	61	0.79	0.62	0.82	0.84	0.91	0.81	0.63	
Sweden	0.88	59	0.80	0.68	0.72	0.85	0.84	0.79	0.67	
United States	0.92	69	0.84	0.77	0.83	0.88	0.87	0.84	0.77	
International Avg.	0.89	62	0.81	0.72	0.79	0.85	0.85	0.79	0.70	

Relationship Between the TIMSS Advanced 2015 Teacher Job Satisfaction Scale, and **TIMSS Advanced 2015 Physics Achievement** 

	Pearson's Correlation w	Variance in Physics Achievement Accounted for		
Country	(r)	(r²)	by Difference Between Regions of the Scale (η²)	
France	0.02	0.00	0.00	
Italy	-0.09	0.01	0.02	
Lebanon	-0.02	0.00	0.01	
Norway	0.01	0.00	0.00	
Portugal	0.02	0.00	0.01	
Russian Federation	0.07	0.00	0.00	
Slovenia	0.20	0.04	0.06	
Sweden	0.03	0.00	0.00	
United States	0.11	0.01	0.03	
International Median	0.02	0.00	0.01	