

TIMSS 2011

TIMSS 2011 Student

Value Chemistry Scale

Example Item

The Students Value Chemistry (SVC) scale was created based on students' degree of agreement to the six statements described below. This scale was administered in countries where the sciences are taught as separate subjects. See [Creating and Interpreting TIMSS and PIRLS 2011 Context Questionnaire Scales](#) for more information on how the scales were formed.

Exhibit 5: Cronbach's Alpha Reliability Coefficient and Principal Components Analysis of the Items in the TIMSS 2011 Students Value Chemistry Scale, Eighth Grade (Continued)

| Country | Cronbach's Alpha Reliability Coefficient | Percent of Variance Explained | Factor Loadings for Each Item | | | | | |
|----------------------|--|-------------------------------|-------------------------------|---------|---------|---------|---------|---------|
| | | | BSBC28J | BSBC28K | BSBC28L | BSBC28M | BSBC28N | BSBC26G |
| Morocco | 0.86 | 59 | 0.73 | 0.79 | 0.85 | 0.84 | 0.73 | 0.64 |
| Romania | 0.89 | 65 | 0.78 | 0.79 | 0.87 | 0.87 | 0.80 | 0.72 |
| Russian Federation | 0.89 | 64 | 0.78 | 0.77 | 0.89 | 0.88 | 0.81 | 0.64 |
| Slovenia | 0.88 | 63 | 0.81 | 0.77 | 0.85 | 0.86 | 0.76 | 0.69 |
| Sweden | 0.89 | 64 | 0.78 | 0.79 | 0.87 | 0.87 | 0.77 | 0.70 |
| Syrian Arab Republic | 0.85 | 57 | 0.73 | 0.79 | 0.83 | 0.82 | 0.72 | 0.62 |
| Ukraine | 0.88 | 64 | 0.82 | 0.80 | 0.85 | 0.85 | 0.73 | 0.71 |

Exhibit 6: Relationship Between TIMSS 2011 Students Value Chemistry Scale, Eighth Grade (Continued) and TIMSS 2011 Students Value Chemistry Scale, Eighth Grade (Continued)