

EXAMINING THE RANGE OF PSYCHOMETRIC DATA AVAILABLE FOR INSTRUMENTS PUBLISHED IN THE JOURNAL OF CHEMICAL EDUCATION: 2000-2010 Janelle A. Arjoon and Jennifer E. Lewis, Department of Chemistry, University of South Florida, 4202 E. Fowler Ave. CHE 205, Tampa, FL 33620.

To make an informed decision when selecting an assessment to be used, psychometric evidence is needed. Therefore, for this study, seven instruments published in the Journal of Chemical Education were examined using a rubric to determine the range of psychometric evidence available for each instrument. Each instrument was examined based on specific evidence presented in seven categories: development and usage, validity, reliability, test site, sample, sampling and administration, and measurement theory. Criteria within each category represent those commonly used within the chemical education community. Findings suggest that the available psychometric evidence, such as reliability and validity of the scores, is limited for many of these instruments. Additionally, few instruments have been tested at multiple institutions and only two have been tested outside the United States. Results from this study and suggestions on what additional psychometric evidence is needed to better inform users of these instruments are presented.