

Construct Validity and Reliability Measures of Scores from the Science Teachers' Pedagogical Discontentment (STPD) Scale

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The Science Teachers' Pedagogical Discontentment (STPD) scale has formerly been developed in the United States and used since 2006. Based on the perceptions of selected teachers, the scale is deeply rooted in the cultural and national standards. Given these limitations, the measurement integrity of its scores has not yet been conclusively established internationally, such as in the Saudi Arabia context. The items of the scale are slightly tailored to make the instrument suitable in the specific context, such as with respect to country-based regulations, reforms, and everyday practices of science teachers and their professional development initiatives. Item-based descriptive statistics, the measure's factor structure as opposed to its former validity studies, and factor-based reliability scores are investigated in the present report. Thus, this study extends the validity and reliability measures of the instrument to the international scale and further confirms its appropriateness to measure teacher attitudes towards inquiry-based science education initiatives.

Keywords: science teachers, pedagogical discontentment, construct validity, factor analysis, cross-cultural validation

INTRODUCTION

Pedagogical discontentment is viewed as teachers' assessment of contextual aspects including working conditions and other external factors such as

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