

Journal of Research in Education Sciences

2013, 58(1), 91-116

doi:10.3966/2073753X2013035801004

Is Using a SRI to Determine the Fate of Teachers or Commencement of Work Suitable? A Mixture IRT Analysis

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Abstract

This study examines the effects of variability in student ratings regarding instruction on decision-making for faculty teaching evaluation. A total of 6,111 undergraduate students from 173 classes in a university on the east coast of Taiwan were included in the research sample.

This study is different from previous studies regarding student ratings for instruction that are constructed in classical test theory. We use item response theory to analyze the heterogeneity of students, to rigorously examine the effects on student ratings regarding instruction. The results show that teachers may easily exceed the teaching criterion score set by the university when not considering the heterogeneity of the student ratings. However, the different latent types of the variability of student ratings may be important for interpreting the results of different student rating scores. The recommendations for university teaching and student ratings regarding instruction are created based on the results from this study.

Keywords: student ratings of instruction, mixture IRT analysis

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Manuscript received: Apr. 18, 2012; Revised: Dec. 13, 2012; Accepted: Feb. 23, 2013.