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The Inter-Construct of Student Ratings of Instruction: An Analysis of Multilevel Cross-Validation

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Abstract

This study examined the rationality of multilevel constructs of student ratings of instruction. The sample consisted of 180 undergraduate classes from a university on the east coast of Taiwan, with a class size ranging between 13 and 78, for a total sample of 6,568 students. The results indicate five sub-dimensions of student ratings of instruction, including Teaching Preparation, Teaching Materials, Teaching Methods, Learning Evaluation, and Teaching Attitudes. The same instrument within class level, however, indicates only one single dimension. This study suggests examining the changes in cross-level constructs through multilevel model competition and multilevel cross-validation approaches. Examining the validity and rationality of the cross-level model presents the effect of each dimension under multilevel constructs to avoid the fallacy of cross-level inference.

Keywords: multilevel criterion related validity, multilevel model competition, multilevel cross-validation, student ratings of instruction