

ABSTRACT

Title of Dissertation: THE MULTIDIMENSIONAL GENERALIZED GRADED UNFOLDING MODEL FOR ASSESSING CHANGE IN REPEATED MEASURES

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A multidimensional extension of the generalized graded unfolding model for repeated measures (GGUM-RM) is introduced and applied to analyze attitude change across time using responses collected by a Thurstone or Likert questionnaire. The model conceptualizes the change across time as separate latent variables and provides direct estimates of both individual and group change while accounting for the dependency among latent variables. The parameters and hyperparameters of GGUM-RM are estimated by fully Bayesian estimation method via WinBUGS. The accuracy of the estimation procedure is demonstrated by a simulation study, and the application of the GGUM-RM is illustrated by the analysis of attitude change toward abortion among college students.

THE MULTIDIMENSIONAL GENERALIZED GRADED UNFOLDING MODEL
FOR ASSESSING CHANGE IN REPEATED MEASURES

By
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DEDICATION

This dissertation is dedicated to:

My parents, my husband, and my daughter.

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