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KEY WORD: GRM / GPCM / LOGISTIC MODELS / INFORMATION FUNCTIONS / RATING SCALE

DICHOTOMOUS / POLYTOMOUS

PORAMIN ARIDECH : THE USE OF GRM, GPCM AND LOGISTIC MODELS IN THE  
COMPARISON OF INFORMATION FUNCTIONS OF RATING SCALES WITH DICHOTOMOUS  
AND POLYTOMOUS SCORINGS. THESIS ADVISOR : ASSO. PROF. SUWIMON  
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The purpose of this research was to study the use of GRM, GPCM and logistic models to compare test information functions of rating scale employing dichotomous and polytomous scoring methods. Dichotomous and polytomous scoring methods were analyzed based on 1, 2, 3 parameter logistic models, and based on GRM and GPCM, respectively. The sample consisted of 800 Prathom Suksa 6 students in Chaing Mai province. Likert scale and forced-choice rating were used to collect data in this research. Confirmatory factor analysis was used to examine construct validity of rating scale through LISREL program and test information functions were determined by MULTILOG and PARSCALE programs.

Results showed that likert scale employing dichotomous scoring method based on logistic models provided higher test information function than polytomous scoring method based on GRM and GPCM provided. The forced-choice rating employing polytomous scoring method based on GRM provided higher test information function than dichotomous scoring method and polytomous scoring method based on GPCM, respectively.

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