The Effectiveness of Item Parceling to Increase the Model Fit: A Case Study of PAPS

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The impact of item parceling to improve model fit indexes in confirmatory factor analysis has been on debate amongst psychometricians. In this study, the effectiveness of item parceling was examined using *Tes Potensi Akademik Pascasarjana* (PAPS) UGM. Item parceling approach, second-order approach, and item based approach were used for examination. Data were collected from a sample of 1374 postgraduate candidate in 2017. The result found that model fit indexes such as chi-squared test, comparative fit index, Tucker-Lewis index, and standardized root mean square residual were improved in item parceling approach when compared to item based approach. Interestingly, root mean square error of approximation were deteriorates in item parceling approach. The finding of this study suggested that model dimensionality and sample size should be carefully considered when using item parceling approach.

Keywords: *item parceling, confirmatory factor analysis, PAPS test*