

Comparison of the Various Methods Used in Solving Missing Data Problems*

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ABSTRACT The aim of this study is to compare various methods used in solving missing data problems in terms of the validity and reliability of scale results under some conditions such as missing completely at the random mechanism, normal distribution, unidimensionality, a large sample size and different missing data rates. In the study the PISA 2012 Math Work Ethics Scale results of Turkey sample were used. In the research process estimated values of validity and reliability from original complete and new complete data sets of various methods were compared. The findings reveal that the estimated values of validity and reliability from the new complete data sets of the expectation maximization, regression imputation and multiple imputation methods are the most similar values estimated from the complete data set.