

Recovering Preipsative Latent Factor Scores from Ipsative Measures: A Simulation Study

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Abstract

Ipsative data (individual scores subject to a constant sum constraint) are frequently observed in social sciences, especially in psychological research. One advantage of using ipsative measures is to control response bias and faking that affect the validity of psychological measurements. Although there are procedures on analyzing ipsative data, for instance, Chan and Bentler (1993; 1996), ipsative data are not useful for further analyses because they are not comparable across individuals. By assuming that there is a confirmatory factor analytic model for the underlying preipsative data, Cheung (2003) proposed to use the method of Chan and Bentler and the estimation of factor score to recover the latent preipsative factor scores. The estimated factor scores can be used for further data analyses. Based on a real data set, Cheung (2003) demonstrated that the method was successful in estimating the latent preipsative factor scores. However, simulation studies are needed to investigate the empirical performances of this method. Thus, simulation studies will be used to investigate the statistical performance of this approach. The factors studied are (1) number of latent factors; (2) number of indicators per factor; (3) reliability of measurement; and (4) sample size.

References

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