ITEM ANALYSIS FOR THE MODIFIED VERSION OF ADOLESCENT PARENTING ATTITUDE FOUR FACTOR QUESTIONNAIRE USING RASCH MEASUREMENT MODEL

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Abstract

This study aims to conduct a validity and reliability test on the modified version of the instrument developed by the past researcher to assess 4 distinct types of parenting styles. Based on the sample size of 70 adolescents from one of the private higher education institution in Malaysia, the analysis revealed that the values of infit and outfit mean square (MNSQ) for all items in the modified instrument have fallen within the acceptable range with positive Point Measure Correlation (PTMEA). The dimensionality analysis also revealed that all items involved were measured what it supposed to measure and possessed a strong unidimensionality. Furthermore, the separation and reliability analysis showed that all items and respondents are stable and consistent when tested with different items in measuring the same construct. Therefore, the study concludes that instrument fits the model and can be adapted in the Malaysian context.

Research Highlights

Parents exhibit different attitudes to nurture their children and have a long lasting influence on child development. Children who grown under a good parenting will enjoy the positive physical and mental development. In contrast, those who received a harsh or neglected parenting often become vulnerable to delinquent activities. Over the years, many researchers have developed various instruments to assess the types of parenting practices. The most widely used instruments are known as Parenting Authority Questionnaire (Buri, 1991) and Parenting Styles and Dimensions Questionnaire (Robinson et. al, 2001). However, these instruments only captured 3 distinct parenting styles known as authoritarian, authoritative and permissive. Less attention was given to the uninvolved or neglected parenting style despite its detrimental effects on child development. Therefore, this study seeks to determine the validity as well as the reliability of the adapted Adolescent Parenting Attitude Four Factor Questionnaire (APA-FFQ) to assess 4 different of parenting styles in Malaysia context.

Research Objectives

This study is carrying out with the main objective to determine whether the modified version of APA-FFQ can be adapted in Malaysia context to measure the parenting style among parents. In other words, the study will look into 4 types of validity and reliability analysis namely i) Item Fit statistics, ii) Item Polarity, iii) Unidimensionality, iv) Reliability and Separation Index through RMM.
Methodology
The study used survey technique through the questionnaire adapted from APA-FFQ which developed by (Shyny, 2017). The questionnaire consisted of 40 items to measure 4 distinct parenting styles as mentioned earlier. Based on the random selection of sample, there are 70 students from one of the private higher education institution in Malaysia took part in this survey. Prior to the distribution of the questionnaire, the researcher has carried out the modification on some items to improve the clarity of the statement. Besides, separated columns for each statement were created for the respondents to evaluate father’s and mother’s attitude towards them. All collected data were analysed using SPSS version 23 and Winsteps version 3.72.3.

Results
The Item fit analysis showed the infit and outfit MNSQ for all items used to measure maternal and paternal authoritative, authoritarian, permissive, and uninvolved parenting styles were fall within the acceptable range, which is 0.5 to 1.5 as proposed by Linacre (2005). In the context of item polarity, all items showed a positive PTMEA and higher than the threshold of 0.2 (Pray and Popovich, 1985). Besides, all raw variances explained by measures and the unexplained variances in 1st contrast for maternal and paternal parenting styles were fell within the acception region of higher than 40% and lower than 15% respectively. Thus, all items in the instrument are clear and each factor possessed a strong unidimensionality. Finally, the analysis revealed that the person and item separation index for maternal and paternal parenting styles were higher than threshold of 2. On the other hand, the index for person and item reliability also exceeded the acceptable value of 0.8.

Findings
This study applied the RMM in conducting the validity and reliability analysis on the adapted and modified instrument to assess 4 different types of parenting styles. The analysis concludes that the modified version of APA-FFQ is suitable to be used in Malaysia context. Nevertheless, this instrument can be regarded as the starting point for further research since the number of respondent in this study is relatively small. Therefore, more analysis with a larger sample using Item Response Theory model is needed to explore deeper into the psychometric characteristics of each item.

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References


