

Rasch Analysis in the Development of 'Kohesif-Ques': An Instrument to Measure Social Cohesion

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Abstract : Social cohesion, or closeness among members of society, is an important determinant of population health. A cohesive society is a crucial societal condition for a positive life evaluation and subjective wellbeing, and people living in a cohesive society are happier and more satisfied with life and achieve better health status. The objective of this study was to compose and validate a questionnaire for measuring social cohesion with Rasch analysis. We develop a set of 13 questions to measure 4 dimensions of social cohesion. Random samples of 166 Bandung citizens' were selected to answer the questionnaire. To evaluate the questionnaire's validity and reliability, Rasch analysis (a psychometric model for analyzing categorical data on questionnaire responses) was carried out using Winsteps version 3.75.0. Rasch analysis was performed on the response given to 13 items included in the questionnaire. The reliability coefficient, Cronbach's alpha was 0.70, model RMSE 0.08, SD 0.54, separation 7.14, and reliability of 0.98. 'Kohesif-Ques' is a useful instrument to assess social cohesion.

Keywords : rasch analysis, rasch model, social cohesion, questionnaire

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