

Predicting cognitive function of the Malaysian elderly: a structural equation modelling approach

ABSTRACT

Objectives: The aim of this study was to identify the predictors of elderly's cognitive function based on biopsychosocial and cognitive reserve perspectives. **Method:** The study included 2322 community-dwelling elderly in Malaysia, randomly selected through a multi-stage proportional cluster random sampling from Peninsular Malaysia. The elderly were surveyed on socio-demographic information, biomarkers, psychosocial status, disability, and cognitive function. A biopsychosocial model of cognitive function was developed to test variables' predictive power on cognitive function. Statistical analyses were performed using SPSS (version 15.0) in conjunction with Analysis of Moment Structures Graphics (AMOS 7.0). **Results:** The estimated theoretical model fitted the data well. Psychosocial stress and metabolic syndrome (MetS) negatively predicted cognitive function and psychosocial stress appeared as a main predictor. Socio-demographic characteristics, except gender, also had significant effects on cognitive function. However, disability failed to predict cognitive function. **Conclusion:** Several factors together may predict cognitive function in the Malaysian elderly population, and the variance accounted for it is large enough to be considered substantial. Key factor associated with the elderly's cognitive function seems to be psychosocial well-being. Thus, psychosocial well-being should be included in the elderly assessment, apart from medical conditions, both in clinical and community setting.

Keyword: Cognitive function; Biopsychosocial model; Metabolic syndrome; Psychosocial stress; Structural equation modelling