## The Processes of Change Scale: A Confirmatory Study of the Malay Language Version


#### Abstract

Background: Processes of change (POC) comprise one of the psychological constructs in the Transtheoretical Model. The objective of this study is to test the validity and reliability of the Malay version of the POC scale among university students by using a confirmatory approach. Method: A cross-sectional study design with a convenience sampling method using a selfadministered questionnaire was carried out. University undergraduate students were approached to fill in the questionnaire, which consisted of demographic information and a POC scale. The POC scale consisted of 30 items and two main factors (i.e., cognitive and behavioural). The POC scale was translated into the Malay language using a standard procedure of forward and backward translation. Confirmatory factor analysis (CFA) was performed, and composite reliability was computed using Mplus version 8 . Results: A total of 620 respondents with a mean age of 20 years (standard deviation $=1.15$ ) completed the questionnaire. Most of the participants were female ( $74.7 \%$ ) and Malay ( $78.2 \%$ ). The initial CFA model of the POC scale did not exhibit fit based on several fit indices (comparative fit index (CFI) $=0.880$, Tucker Lewis index (TLI) $=0.867$, standardised root mean square residual $(S R M R)=0.075$ and root mean square error of approximation (RMSEA) $=$ 0.058 ). Several respecifications of the model were conducted and the modification included adding correlation between the items' residuals. The final model for the Malay version of the POC scale showed acceptable values of model fit indices (CFI $=0.922, \mathrm{TLI}=0.911, \mathrm{SRMR}=0.064$ and RMSEA $=0.048$ ). The composite reliability of both the cognitive and behavioural processes was acceptable at 0.856 and 0.752 , respectively. Conclusion: The final model presented acceptable values of the goodness of fit indices, indicating that the scale is fit and acceptable to be adopted for future study.


