Validation Study of Metacognitive Awareness Inventory for Myanmar High School Students

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Abstract

This study is a primary attempt to investigate whether the Metacognitive Awareness Inventory (MAI) can be used to measure the metacognitive awareness of Myanmar high school students. Based on Brown's two-component model of metacognition, the Metacognitive Awareness Inventory (MAI) was developed by Schraw and Dennison (1994) in order to assess the metacognitive awareness of the individuals. The MAI is composed of 52 items and they are classified into eight subcomponents under two broader components; Knowledge of Cognition and Regulation of Cognition. Knowledge of cognition includes three different kinds of knowledge and Regulation of cognition includes five subcomponents. The purpose of the study was to validate the Metacognitive Awareness Inventory (MAI) in a sample of high school students from Basic Education High Schools in Myanmar. A total of 1241 Grade 10 students in 2021-2022 AY participated in this study. The results of the confirmatory factor analysis indicated that the model fits with the two-factor structure model (RMSEA = 0.043., TLI = 0.901, CFI = 0.903, SRMR = 0.056, $p < 0.001$). Moreover, this study confirmed the convergent and discriminant validity of the scale. Furthermore, the internal consistency of scale and subscales were found to be satisfactory. Therefore, the Metacognitive Awareness Inventory (MAI) was found to be valid and reliable to measure metacognitive awareness of Myanmar high school students.

Key words: Metacognitive awareness, Knowledge of cognition, Regulation of cognition, Reliability, Validity

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