

## Validation of Self-Regulated Learning Instrument on Pre-Clinical Medical Students at University of Malaya

*Jamunarani a/p S Vadivelu<sup>1</sup>*

<sup>1</sup>*Medical Education and Research Development Unit (MERDU), Faculty of Medicine, University of Malaya; jamuna@um.edu.my*

**Background:** Many medical schools are adopting strategies and pedagogies to help students develop a self-regulated learning ability which is a key aspect of lifelong learning. Self-regulation is defined as “self-generated thoughts, feelings, and actions that are planned and cyclically adapted to the attainment of personal goals” (Zimmerman, 2000). This will enable the students to take responsibility for, direct and regulate their own learning to achieve their learning goals (Chen & Schwartz, 2014). The three important characteristics of self-regulated learners are goal-directed behavior, use of specific strategies to attain goals, and the adaptation and modification to one’s behaviours or strategies to optimize learning (Sandars & Cleary, 2011). This involves iterative cycles of forethought, performance and self-reflection (Chen & Schwartz, 2014).

In order to analyze and discuss the undergraduate self-regulated learning approaches of the pre-clinical students and investigate the teaching-learning activities which support the development of self-regulated learning at Faculty of Medicine, University of Malaya, a Self-Regulated Learning Instrument was adapted. By understanding the early approaches in self-regulated learning, it will help us to improve the teaching-learning strategies and relevant curriculum approaches to facilitate the process of self-regulated learning.

**Method:** A questionnaire, Self-Regulated Learning Instrument has been adapted from A Manual for the Use of the Motivated Strategies for Learning Questionnaire (MSLQ) by Pintrich, P. R., Smith, D. A. F., Garcia, T., & McKeachie, W. J. (1991) which was further developed to be administered to the pre-clinical medical students of University of Malaya.

**Results:** A pilot study involving 171 pre-clinical medical students was carried out. The statistical results revealed that three items are to be removed from the original instrument when the correlation of the items from the MSLQ and Self-Regulated Learning Instrument were studied.

**Conclusion:** The Self-Regulated Learning Instrument which was validated will be used to measure pre-clinical medical students’ approaches in self-regulated learning.

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