0023

An introduction to the application of Rasch measurement model in Occupational Therapy

Sok Mui Lim[1,2], Chi-Wen Chien[1]
[1]*The University of Queensland, Queensland, Australia,* [2]*KK Women's and Children's Hospital, Singapore, Singapore,* [3]*Monash University, Victoria, Australia*

Backgrounds

The Rasch Measurement Model (RMM) has increasingly been used to validate or develop a number of rehabilitation-related assessment tools. These Rasch-built assessment tools make the claim that they reflect valid and interval-level measurement of clients' characteristics, skills and abilities that can be difficult to quantify (e.g., social skills, functional abilities or play skills). An understanding of the RMM will enable occupational therapists to make informed critiques, comparisons, and selections of Rasch-built assessment tools. This information will also benefit therapists who wish to evaluate the construct validity of newly developed instruments or already existing assessment tools using the RMM. Clinicians can further use accurate measurement of clients' performance based on appropriate Rasch-built assessment tools in the decision making process regarding intervention eligibility, progress, and discharge. Using valid and reliable instruments will also enable therapists to accurately measure clients' occupational performance.

Learning Objectives

This 1.5-hour workshop has the following objectives. Participants will:

1. Gain a general understanding of the RMM and its advantages over other statistical analysis approaches to test development and validation
2. Learn to critique and interpret the RMM results published in the peer-reviewed literature
3. Gain an overview on how Rasch analysis can be used for validating new instruments and evaluating already existing instruments
4. Become familiar with the psychometric properties of Rasch-built instruments

Description of Teaching Methods

The workshop will be presented in an interactive way, incorporating various teaching methods. Concepts of the RMM will be delivered with visual illustrations and summaries drawn from recent studies. RMM applications will be presented in relation to existing instruments such as the Peabody Developmental Motor Scales and the Child Behaviour Rating Scales. Demonstration of RMM-related software will also be included to highlight to their key features. In addition, a journal article using the RMM will be provided for participants demonstrating how RMM results can be interpreted and judged. The workshop will end with a short brainstorming, and question and answer session about how the participants can apply the RMM to gauge or improve the psychometric properties of the assessments they currently use with clients.

Maximum of Participants: 45