



**Cross-cultural adaptation and psychometric properties of two
questionnaires for the assessment of occupational
performance in children with disability**

Children's Hand-use Experience Questionnaire (CHEQ) and
Pediatric Evaluation of Disability Inventory (PEDI)

av

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Abstract

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Globally, 93–150 million children live with some form of disability, most of them live in developing countries. Occupational performance describes a person's ability to execute tasks that are meaningful, in the context in which the person lives. The Children's Hand-use Experience Questionnaire (CHEQ) and the Pediatric Evaluation of Disability Inventory (PEDI) are measurement tools developed to measure different aspects of occupational performance. However, before using these tools in another cultural context, evidence of validity in that context should be established.

The overall aim of this thesis was to investigate the evidence of validity for CHEQ and the Uganda version of PEDI (PEDI-UG).

Study I established the validity of revised CHEQ 1.0 for children with unilateral cerebral palsy (CP). The study suggested improvements and inclusion of younger children. This led to the development of CHEQ 2.0, which was culturally adapted and validated for Jordan in Study II. Study III indicated that PEDI-UG had good psychometric properties when tested on typically developing children, and it suggested improvements and further analysis in children with disability. Therefore, study IV investigated the psychometric properties on Ugandan children with CP and confirmed the instrument's validity. However, the differential item functioning analysis comparing children with CP and typically developing children, and the developmental trajectories for both groups, suggested that a separate conversion table should be used to transform the total sum score from raw scores to a 0–100 scaled score. This thesis shows the importance of cultural adaptations and psychometric validation of measurement tools before they can be used in new cultural contexts. The Arabic CHEQ 2.0 and PEDI-UG can be used in the evaluation of rehabilitation interventions and will help to fill the need for measurement tools in these countries.

Keywords: Measurement tool, occupational performance, Rasch analysis, reliability, cross-cultural, validity evidence, Jordan, Uganda.

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