**EVALUATION OF THE QUESTIONNAIRE FOR UNDERSTANDING PAIN IN INDIVIDUALS WITH INTELLECTUAL DISABILITIES: ITEM ANALYSIS**

**Lara Genik1, Tamlyn Freedman-Kalchman1, C. Meghan McMurtry1,2, Lynn Breau3**

**1University of Guelph, 2McMaster Children’s Hospital, 3Glenrose Rehabilitation Hospital**

Objectives:

Pain is common for children with intellectual disabilities (ID; Breau et al., 2003), and pain assessment and management can be challenging (e.g., inability to provide self-report; Chen-Lim et al., 2012). Knowledge measures are important tools that can be used to evaluate what caregivers know about a given topic and inform/assess the impact of educational initiatives. No previous knowledge measures specific to the unique pain-related needs of individuals with ID have been designed for non-health care secondary caregivers (e.g., respite workers). As such, Genik, McMurtry, and Breau (2015) have developed the Questionnaire for Understanding Pain in Individuals with Intellectual Disabilities – Caregiver Version (QUPID-C), a 35-item true/false and multiple choice questionnaire about pain in individuals with ID. Using item analysis, our aim was to determine whether the items within this mastery-based measure were valid. Following pain training, it was expected that item difficulty would reduce, and participants would be less likely to choose an incorrect distractor response. There was also expected to be less of a performance gap between the upper and lower quartiles of participants.

Methods:

Fifty respite workers (46 female; *Meanage*: 33.20; range: 20 - 59) from a larger study completed the QUPID-C immediately before and after a 3.5 hour pain training. Item analyses including: item difficulty (number of people answering item correctly divided by number of people taking the test), distractor analyses (number of people expected to choose distractors), and discrimination index measures (percentage of people answering a question correctly in upper and lower quartile) were used to assess the performance of individual QUPID-C items prior to and immediately following the pain training.

Results:

Prior to the training, ten items had a difficulty score < 0.50, and 13 items had a difficulty score > 0.70 (closer to 1.00 = easier). Immediately after the training, participants found the majority of items much easier; only three items had a difficulty score < 0.50 and 20 items had a difficulty score > .70. Distractor analyses revealed a similar pattern, such that fewer participants were typically chose distractor items after completing the pain training. The discrimination index values decreased overall after completion of the training, suggesting that there was less of a difference between the upper and lower quartile of participant scores. In all three analyses, a number of items deviated consistently from the patterns described above.

Discussion/Conclusions:

Item analyses suggested that most individual items in the QUPID-C performed as expected: after training completion, the items were easier, fewer participants chose distractors, and the gap between correct item responses for the upper and lower quartiles was smaller. However, to improve the QUPID-C’s validity, eight items may warrant further attention and revision. For example, results suggested that the wording of specific questions and distractor response options be edited to improve item performance. Future work should incorporate the suggested changes and evaluate the revised QUPID-C’s reliability and validity in measuring non-health care secondary caregivers’ pain knowledge.

**Correspondence:**

**Lara Genik**

**University of Guelph**

**lgenik@uoguelph.ca**

**Tamlyn Freedman-Kalchman**

**University of Guelph**

**tfreedma@mail.uoguelph.ca**

**C. Meghan McMurtry**

**University of Guelph; McMaster Children’s Hospital**

**cmcmurtr@uoguelph.ca**

**Lynn Breau**

**Glenrose Rehabilitation Hospital**

**lynn.breau@albertahealthservices.ca**