PRAM58
MEASUREMENT PROPERTIES OF THE SPANISH VERSION OF THE PEDIATRIC PROMIS FATIGUE ITEM BANK
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OBJECTIVES: Fatigue is common among children with chronic conditions. In order to compare results across languages, a requirement for many clinical trials, one must ensure measurement is not biased by language. This paper reports the psychometric properties of the Spanish version of the pediatric PROMIS Patient Report Outcome Measure Information System fatigue item bank (Spanish-PedsFIB). Developed via a collaborative effort funded by the National Institutes of Health of the United States, PROMIS allows for comparisons across domains and conditions for both adults and children. METHODS: Data from 605 Spanish-speaking pediatric patients from a US general population panel, were analyzed in 2017. Average age was 12.3 years and 45.5% were female. Participants completed the 23-item Spanish-PedsFIB, translated from English via a rigorous methodology (2 forward translations, 1 reconciliation, 1 back-translation, review by bilingual experts, and cognitive debriefing). Psychometric analyses included confirmatory factor analysis (CFA) to evaluate unidimensionality (criterion: comparative fit index (CFI) > 0.95; RMSR < 0.08, MI < 10), residual correlations to evaluate local dependency (criterion: r < 0.15), S-G2 and S-h/H11021/H11022 to evaluate item fit (criterion: p > 0.01). Graded Response Model as implemented in MULTLOG was used to estimate item parameters, and LORDH (R free ware) was used to evaluate differential item functioning between the Spanish and English versions (criterion: p < 0.05). RESULTS: CFA results supported unidimensionality of these 23 items: CFI = 0.955, RMSR = 0.056, residual correlation absolute values ranged from 0 to 0.05, and R2 ranged from 0.69 and 0.87. One item was removed post-pilot (p = 0.0041 and 0.0048). Six items were investigated. Its content measured severe fatigue (criterion: p < 0.01). Correlation between scores with and without DIF candidate items was 0.97. CONCLUSIONS: Excellent psychometric properties of the Spanish version of Spanish-PedsFIB were evidenced. Conclusions from this paper will advance methods and research for the English and Spanish versions. Currently, more translations are in progress.

RESEARCH ON METHODS - Statistical Methods

PRA43
MULTIPLE CRITERIA DECISION ASSESSMENT FOR HEALTH TECHNOLOGY ASSESSMENT
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OBJECTIVES: This paper will discuss the different methods of multi criteria decision analysis (MCDA) that could be used in health technology assessment (HTA) and their relative merits. Description: The current practice of health technology appraisal is based on the incremental cost-effectiveness ratio (ICER) i.e. the incremental cost per quality adjusted life year (QALY) gained by recipients of treatment. Even though other factors (e.g. severity, life saving, etc) are considered along with ICERs, there is concern that its approach may fail to capture other important sources of value. METHODS: MCDA is aimed at supporting decision makers faced with evaluating alternatives taking into account multiple, and often conflicting, criteria in an explicit manner. An overview of MCDA is provided and is compared against the current health technology appraisal processes. A number of important questions are addressed to identify the most appropriate MCDA method that might be used for HTA. For example, what criteria should be incorporated? Whose weights should be used and how to elicit them? How to incorporate uncertainty into the MCDA process? How do we consider the value of displaced technologies? What should the ‘basic’ cost-effectiveness threshold be? How do we evaluate the value of non-health care interventions? Conclusions: Consequences of this paper will advance methods and research for the English and Spanish versions. Currently, more translations are in progress.