2023 ANNUAL REPORT

SIG/Committee Name: Psychometrics SIG   **Date: 16 May. 23**

Co-Chairs: John Devin Peipert, Donald Bushnell and Jinxiang (Fran) Hu   **Board Liaison: Jakob Bjorner**

Mission: The goals of the Psychometric SIG are to: 1) advance the science of HRQOL research through the application of psychometric methods; and 2) educate researchers and clinicians on the appropriate use of psychometric methods. The field of psychometrics plays a critical role in HRQOL research. Psychometrics plays a key role alongside qualitative methods to develop and evaluate HRQOL measures. Further, structural equation models provide an incredible methodology for looking at associations among HRQOL variables or to model changeover time when there are multiple endpoints or mediating/moderating factors.

Project/Objective	Actions/Deliverables	Methods, Theory or Application Project	Project Chair	Project Members	Timeline
1. Psychometric Methods for Small Samples	Develop a set of recommendations for minimum sample size requirements for testing common psychometric properties • A scoping literature review is ongoing • We will perform simulation studies to fill-in gaps from literature as necessary • An abstract was presented for ISOQOL 2022 Annual Conference • Anticipate manuscript in 2023	Methods	Devin Peipert	Ahmed Osman, Brandon Foster, Christina Zigler, Emily Henkle, Jimmy Martin Delgado, Nikki Ow, Cristian Gugiu, Jia Ma, Aaron Kaat, Fran Hu	Aim to generate our list of recommendations by the ISOQOL 2023 Annual Conference
2. Evaluating Correlations: Workgroup 1 - What is a correlation?	Conducted a literature search using a critical review methodology with the aim to identify and present the various correlation coefficient thresholds, labels for these thresholds, and the context in which they were used. Questions to answer: • What is a correlation and how we should use it? • What type of correlation to use depending on the data? • What are the thresholds that we should use to interpret the magnitude of the correlations? Abstract presented to ISOQOL 29th Annual Conference Title: Correlations: What Is With All Of These Different Thresholds?	Methods	Don Bushnell	Daskalopoulou (Leader), Ahmed Osman, Jimmy Martin Delgado, Kedar Mate, Milena Anatchkova, Valerie Williams	The effort will be to continue with more detail and work on a methods paper.

3. Evaluating Correlations: Workgroup 2 – Use in COA anchor-based analyses	Group has been developed but has not met. Questions to answer: - What are the thresholds that we should use when we judge the appropriateness of an anchor? - Should we have different thresholds depending on the nature of the anchor (i.e., self-reported, clinical)? - Synthesize current literature/recommendations? - Evaluate FDA recommendations?	Methods	Don Bushnell	Christina Daskalopoulou, David Cella, Jakob Bjorner, Kedar Mate, Milena Anatchkova, Richard White, Valerie Williams	Aim to kick-off this workgroup in Q1 and share initial findings at the ISOQOL 2023 Annual Conference.
4. Psychometric methods for Intensive Longitudinal Data (ILD)	Develop a set of methods for analysing ILD • Presented at SIG Symposium on ILD at 2022 ISOQOL • Write 1-3 papers or a position statement on method use • Submit code for methods to be hosted on the Teamwork site	Methods	Pip Griffiths	Fatoumata Fofana, Mathilde Verdam, James Shaw, Andre de Champlain, Joe Cappelleri, Veronique Sebille, Dave Andrae, Shanshan Qin, Jinxiang Hu	Submit papers by ISOQOL 2023
5. Developing Useful Visualizations for Psychometric Results	Develop set of standard visualizations for psychometric research • Present a talk as part of an ISOQOL symposium • Develop standard code to be hosted on Teamwork site	Methods	Pip Griffiths	Nikki Williams, Christina Cheng, Myriam Blanchin, Ava Mehdipour, Yangjun Liu, Frances Yang	Upload materials by end 2023

Issues Requiring Board Attention:

None