Item Response Theory models for outcome measures in aphasia

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The tools currently available for assessing anomia severity in persons with aphasia are limited by a number of features, including lack of comparability of scores obtained from different instruments, invalid estimates of measurement error and change over time, and the need to administer tests in their entirety in order to obtain valid score estimates. Over the past decade, we have carried out a program of research focused on the application of item response theory (IRT) models to these problems. This work has resulted in a computer adaptive version of the Philadelphia Naming Test (PNT-CAT) with strong validity evidence. After briefly reviewing this work and demonstrating a web-based version of the PNT-CAT, we will present two extensions of this framework, one for selecting items for naming treatment in the context of a clinical trial and one for investigating construct validity in verb naming. We will also discuss the application of IRT to multidimensional cognitive psychometric assessment of the processes underlying picture naming.

The online lecture can be followed online from your computer, tablet or smartphone, in Zoom. The zoom link is accessible via the C-STAR website: http://cstar.sc.edu/lecture-series/.

The live in-person lecture will be in Discovery, room #140 (915 Greene Street, Columbia, SC)

For more information, or to be added to the C-STAR mailing list, contact Dirk den Ouden: denouden@sc.edu