An Exploration of the Convergent and Divergent validity of the NSA-16 Global Item

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Methodological Question Being Addressed: What are the convergent and divergent validity characteristics of the NSA-16 Global Item?

Introduction: There is sparse evidence to guide clinical trialists in selecting among global measures for negative symptom trials. Frequently used measures of negative symptoms such as the Marder PANSS negative factor, PANSS negative subscale, the BNSS and the CAINS do not contain global items. In contrast, the NSA-16 includes a global item but there is relatively little psychometric exploration of the NSA-16 Global Item in the published literature.

Methodology: We utilized subject visit data from multiple schizophrenia clinical trials in negative symptoms. Convergent validity of the NSA Global score was assessed with the NSA-16 total score, CGI-S score (Guy, 1976), CGI-S negative score (Haro, 2003), PANSS Negative factor score (Marder, 1997), PANSS negative subscale, and PSP. Divergent validity was established against PANSS positive subscale, PANSS positive factor score and PANSS general psychopathology subscale. Both, convergent and divergent validity were assessed using polyserial and polychoric correlations as appropriate.

Results: The dataset consisted of 19,723 subject visits. The NSA global score demonstrated convergent validity with the NSA total score (0.8236 +/-0.0027), the PANSS negative factor score (0.6864+/-0.0036), PANSS negative subscale score (0.7107+/-0.0035), PSP score (-.74035+/-0.0047), CGI-S negative (.8392+/-0.0) and CGI-S (0.7911+/-0.0). The divergent validity was demonstrated against the PANSS Positive factors score (0.2001+/-0.0079) and PANSS positive subscale score (0.1314+/-0.0077).

Discussion: The NSA-16 Global Score showed strong convergent and divergent psychometric properties. In addition, the NSA-16 Global Score appears well suited as a global rating because it is informed by the comprehensive evaluation of negative symptoms that occurs when the rater completes the NSA-16 structured interview and evaluates the individual NSA-16 items.