Who's ready to collaborate? Evaluating new measures of collaboration readiness among early career scholars in the CTSA network

Larry Hawk1, Eugene Maguin1, Timothy Murphy2, Katherine Hartmann, MD, PhD2 and Morgan Jusko1
1University at Buffalo and 2Vanderbilt University Medical Center

OBJECTIVES/SPECIFIC AIMS: Many CTSA network activities aim to promote collaboration. Who should we target, and how should we evaluate short-term success? This study examined the validity of recently developed collaboration readiness indices among early career scholars, an important and understudied portion of the translational workforce. METHODS/STUDY POPULATION: Participants were 107 scholars within 10 years of completing terminal degree or residency (mean age = 38; 69% female; 29% MD) who applied to one of two week-long NCATS-funded Innovation Labs (www.buffalo.edu/innovationlabs.html). Measures included the MATRICx (Mallinson et al., 2016), which assesses 17 collaboration motivators and 31 threats; the Transdisciplinary Orientation Scale (TDO; Misra et al., 2015), an assessment of attitudes and behaviors theorized to predict effective collaboration; and a brief measure of self-efficacy (see teamscience.net). RESULTS/ANTICIPATED RESULTS: Factor analyses of individual measures and evaluation of cross-scale correlations suggest that collaboration readiness is multi-dimensional. Factor analysis of the MATRICx suggests 3 moderately-correlated facets of motivators (benefits to world, self, and others) and threats (process concerns, external barriers, and leadership style, rs = .29 to .53). Most correlations between motivator and threat scales (except process concerns) were modest, suggesting they reflect relatively independent aspects of collaboration readiness. The TDO scales seemed to capture a different aspect of collaboration readiness; correlations with MATRICx motivator and threat scales were mostly modest (rs = .26 to .43). As expected, collaboration self-efficacy was positively related to collaboration motivators and TDO (rs = .41 to .59) and negatively related to collaboration threats (particularly process threats, r = .47). Participants typically scored in the upper half of the TDO, MATRICx motivator, and collaboration self-efficacy scale ranges, and in the lower half of the MATRICx threat scale ranges. DISCUSSION/SIGNIFICANCE OF IMPACT: Collaboration readiness is a reasonable short-term target of efforts to promote collaboration. However, this work suggests that no single scale captures the entire conceptual space, and multiple measures should be assessed.