ADAPTING THE CHILDREN TEST ANXIETY SCALE (CTAS): VALIDATING AND REFINING FOR DIVERSE AGE GROUPS

Kristóf Lakatos

Doctoral School of Education, University of Szeged

Children Test Anxiety Scale (CTAS) was used as an instrument in Input Measurement, 2021, University of Szeged, Szeged, with an acceptable level of reliability (n = 1068, Cronbach's α = .92). However, the assessment is originally validated for a younger sample. The research question is whether the CTAS is usable for older samples or not. The hypotheses therefore as follows. H1: CTAS correlates with other assessments in three different age groups. H2: CTAS negatively correlates with a nonanxiety assessment in three different age groups. H3: The original three-factor-model of CTAS can be established with the results of the participants of the Input Measurement. Convergent and discriminative validity were tested with FRIEDBEN test anxiety Scale (FTA; 3 subscales, 23 items, 6 point frequency scale), Westside Test Anxiety Scale (Westside; 1 subscale, 10 items, 5 point intensity scale), Cognitive Test Anxiety Scale (Cog.TAS; 1 subscale, 24 items, 4 point intensity scale), and Basic Psychological Needs for Satisfaction and Frustration Scale (BPNSFS; 3 subscales, 24 items, 5 point intensity scale) in a sample of adults (n = 104, Mage = 28.54 years, SDage = 6.54 years, FTA r = .83, Westside r = .80, Cog.TAS r = .80, BPNSFS r = −.34, p < .01), teenagers (n = 300, Mage = 15.83, SDage = 3.90, FTA r = .85, Westside r = .83, Cog.TAS r = .84, BPNSFS r = −.61, p < .01) and children (n = 55, Mage = 13.42, SDage = .71, FTA r = .88, Westside r = .88, Cog.TAS r = .87, BPNSFS r = −.47, p < .01). Correlations and negative correlations exist between CTAS and the other assessments in every age groups (H1, H2 accepted). Executing exploratory factor analysis (EFA) with varimax rotation, a five-factor model instead of a three-factor model was supported in the Input Measurement of Szeged, (n = 1068; H3 rejected). Thoughts (10 items), Off-task behaviour (9 items), Autonomic Reactions (5 items), External Oppinion (4 items), Body Movements (4 items), with a cumulative variance of 65.89%, and a satisfactory level of Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (.94). All of the factor loadings are beyond the expected level of the absolute value of .35. However with the method of confirmatory factoranalysis (CFA) only 4 factors (Thoughts: 9 items, Off-task Behaviour: 7 items, Autonomic Reactions: 3 items, Body Movements: 2 items) reaching the level of a satisfactory root mean comparative fit index (RMSEA) p < .05, the comparative fit index (CFI = .97), and the Tucker-Lewis Index (TLI = .97). All of the items possessing below .40 factor loadings suggested to be excluded, 21 items seem to be fit for the using in an adult sample. As CTAS in the adult dataset (n = 104) could be established with a 3-factor model (Cronbach's α = .91, KMO = .84, CFI = .78, TLI = .76 RMSEA = .08, RMSEA p < .01), limitations, like the matter of state-trait anxiety, the different sampling methods and future steps of the possibility of decreasing test anxiety with the unification of Self-determination Theory and Specific Anxiety Theory will be described.