

Validation study of the Italian version of Math Anxiety Questionnaire for Adults (MAQA)

Saturday, September 13, 2025 11:00 AM (10 minutes)

Understanding math anxiety in adults is important because it leads to a cycle of low confidence and anxiety that can affect academic and/or work performance. It also was very challenging given that most existing tools focus this construct on younger populations and school-related contexts—such as classrooms, teachers, and exams—, raising concerns about their relevance and ecological validity for grown-up experiences. To assess specifically math anxiety in adults, Szczygieł (2022) developed the Math Anxiety Questionnaire for Adults (MAQA), a 19-item self-report measure using a 4-point Likert scale. The present study aims to evaluate dimensionality, convergent and criterion-related validity and reliability of the Italian version of the MAQA. A sample of 375 university students of Psychology (female = 327; 87.2%), from university of Foggia and Chieti, aged 18–61 ($M = 21.42$, $SD = 6.50$), completed a series of questionnaires. Both Explorative and Confirmatory Factor Analysis supported the unidimensional structure of the MAQA consistently with the original validation. Significant correlations with the STICSA-State ($r = .237$, $p < .01$) and STICSA-Trait ($r = .265$, $p < .01$) and SAS total score ($r = .485$, $p < .01$) confirmed convergent validity, while associations with MASA subscales (from $r = .054$, $p = .300$, to $r = .428$, $p < .01$) and MPP ($r = -.374$, $p < .01$) supported criterion validity. Further, MAQA showed excellent reliability coefficients. Overall, from these findings the MAQA shows to be a psychometrically sound tool for assessing math anxiety in adult populations across varied contexts.

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Session Classification: Methodology 2

Track Classification: Methodology