

The Mediating Role of Self-Esteem in the Relationship Between Self-Regulation Skills and Academic Engagement with Learning Anxiety Among Students with Learning Disabilities

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E d i t o r	R e v i e w e r s
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1. Round 1

1.1. Reviewer 1

Reviewer:

The paragraph beginning with “*One of the most important protective factors against learning anxiety is self-regulation*” presents self-regulation as a multidimensional construct; however, the manuscript later analyzes only cognitive and metacognitive dimensions. The rationale for excluding motivational, emotional, and behavioral self-regulation components should be discussed in greater depth, especially given contemporary self-regulated learning frameworks.

The discussion of academic engagement states that it encompasses behavioral, emotional, and cognitive dimensions, yet the structural model treats academic engagement as a single latent construct. The authors should explain whether a higher-order latent variable was specified or whether all dimensions were combined into a total score. A more detailed measurement model specification is required.

The paragraph discussing model assumptions reports that Mardia’s coefficient was 2.34 and concludes that “*no outliers were observed for deletion.*” This interpretation is problematic because Mardia’s coefficient assesses multivariate normality

rather than directly identifying outliers. The authors should clarify how multivariate outliers were evaluated, for example through Mahalanobis distance.

The statement “*the factor loadings of items 5 and 9 of self-esteem were lower than .30; therefore, these items were removed from the model*” requires stronger justification. Removing items can alter construct validity and comparability with previous studies. The authors should report the exact factor loadings, explain the theoretical reasons for poor performance, and discuss the implications of modifying the Rosenberg Self-Esteem Scale.

Response: Revised and uploaded the manuscript.

1.2. Reviewer 2

Reviewer:

In the paragraph stating “*Self-esteem refers to an individual's overall evaluation of self-worth, competence, and personal value*”, the authors position self-esteem as the central mediator. However, the theoretical mechanism linking self-regulation and academic engagement to self-esteem is only briefly discussed. The manuscript would benefit from integrating a stronger theoretical framework, such as self-determination theory or social-cognitive theory, to justify the mediating pathway.

Within the Methods section, the sentence “*Using purposive convenience sampling, 200 students from the fourth to sixth grades were selected*” raises concerns regarding sample representativeness and external validity. The authors should discuss the potential sampling bias associated with convenience recruitment and justify why probability-based sampling was not feasible.

The manuscript states that students with learning disabilities were identified based on “*educational records, teachers' opinions, and confirmation by the relevant specialists.*” More methodological detail is required regarding the diagnostic criteria used. The authors should specify whether diagnoses were based on DSM-5, ICD-11, or national educational guidelines and clarify which specific learning disabilities were included.

The inclusion criterion “*absence of acute psychological disorders*” requires clarification. The manuscript does not indicate how psychiatric conditions were screened or verified. The authors should specify whether clinical interviews, school records, parental reports, or specialist assessments were used to establish eligibility.

The Learning Anxiety Questionnaire section reports reliability estimates but provides limited evidence regarding construct validity within the current sample. Given the SEM design, the authors should report confirmatory factor analysis results, including factor loadings, Average Variance Extracted (AVE), and Composite Reliability (CR) for all measurement instruments.

The reported Cronbach's alpha coefficient of .74 for the Self-Regulation Skills Questionnaire is relatively modest. The authors should discuss whether this level of internal consistency is adequate for SEM analyses and provide reliability coefficients separately for cognitive and metacognitive subscales rather than only the overall scale.

In the Academic Engagement Questionnaire section, reliability estimates from previous studies vary considerably (.66 to .92). The manuscript should explain this variability and provide evidence that the instrument performs consistently among elementary-school students with learning disabilities, who may differ substantially from populations used in prior validation studies.

The Data Analysis section notes that “*the significance of indirect effects was also examined using the bootstrap method.*” However, critical methodological details are omitted. The authors should report the number of bootstrap resamples, confidence interval type (bias-corrected or percentile), and justification for the selected bootstrap procedure.

In Table 2, the correlation between cognitive self-regulation skills and self-esteem is reported as .83, while the correlation between cognitive and metacognitive self-regulation skills is .84. These exceptionally high correlations suggest potential multicollinearity concerns. The authors should report Variance Inflation Factors (VIFs), tolerance values, or discriminant validity indices to demonstrate that multicollinearity did not bias parameter estimates.

Response: Revised and uploaded the manuscript.

2. Revised

Editor's decision after revisions: Accepted.

Editor in Chief's decision: Accepted.