Predictive Modeling of Cognitive Flexibility and Creative Problem-Solving in Adolescents

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1. Round 1

1.1. Reviewer 1

Reviewer:

The manuscript states: "Cognitive flexibility represents a higher-order executive component alongside working memory and inhibitory control…" This hierarchical assumption requires stronger theoretical grounding. Please provide a more explicit justification for treating flexibility as higher-order rather than co-equal, and clarify whether the SEM model reflects this hierarchical structure explicitly.

The authors claim: "Much of the literature examines isolated executive components rather than modeling integrated predictive pathways." This is an important gap statement, but it remains somewhat general. Please specify at least two concrete examples of prior studies that failed to integrate multiple executive components in predictive modeling, and contrast them more explicitly with the present design.

Creative problem-solving was assessed via both performance-based tasks and self-report. However, the manuscript does not report the correlation between CPSTB scores and CPSPS scores. Please provide inter-method correlation coefficients to support construct convergence and justify combining them into a total score.

Authors uploaded the revised manuscript.

1.2.   Reviewer 2

Reviewer:

The manuscript notes: "Six schools were randomly selected from official regional education registries." Please clarify whether these schools differed systematically in socioeconomic status, public vs. semi-private structure, or urban–suburban location. A table summarizing school-level characteristics would strengthen claims of representativeness.

You state that students with "diagnosed neurodevelopmental disorders that might significantly affect executive functioning" were excluded. Please specify how this information was obtained (school records? parental report? self-report?). This is critical for assessing potential selection bias.

The study is described as "quantitative, cross-sectional correlational design with a predictive modeling approach." Please clarify the rationale for choosing a cross-sectional design when modeling potentially developmental constructs (flexibility and creativity). Was longitudinal data collection considered?

Authors uploaded the revised manuscript.

2.   Revised

Editor's decision after revisions: Accepted.
Editor in Chief's decision: Accepted.