Effectiveness of a Creative Problem-Solving Skills Training Package on Self-Efficacy and Personal Growth Initiative in Students

Fatemeh. Dadvand[1] , Reza. Manzaritavakoli[1] , Farhad. Khormaei[2]*

[1] Ph.D Student, Department of Educational Psychology,Faculty of Educational Sciences and Psychology, Shahid Chamran University, Ahvaz, Iran
[2] Associate Professor, Department of Educational Psychology, Faculty of Educational Sciences and Psychology, Shiraz University, Shiraz, Iran

* Corresponding author email address: khormaei@shirazu.ac.ir

1. Round 1

1.1. Reviewer 1

Reviewer:

You should explicitly present a conceptual diagram or theoretical pathway explaining how CPS is expected to influence both self-efficacy and PGI. Is self-efficacy hypothesized as a mediator? Or are they parallel outcomes? Clarifying this would significantly strengthen theoretical coherence.

Several paragraphs in the introduction (e.g., discussion of robotics interventions, STEM, board games) cite broad CPS-related literature. However, the present intervention is group-based, paper-based, and classroom-oriented. Please justify the relevance of robotics (Zhang & Zhu, 2024) and board game studies (Chen et al., 2021) to your specific training format.

In the mixed ANOVA section, you report normality, Levene's test, and Box's M. However, there is no mention of Mauchly's test of sphericity. Please clarify whether sphericity was tested and whether any corrections (Greenhouse–Geisser) were applied.

However, Table 3 appears to present ANOVA interaction effects rather than ANCOVA-adjusted results. Please clarify whether ANCOVA was actually conducted and how pre-test scores were controlled.

Authors uploaded the revised manuscript.

1.2.   Reviewer 2

Reviewer:

In the abstract, the Self-Efficacy Questionnaire is cited as "Morris, 2001," while in the Measures section it is attributed to Muris (2001). This inconsistency must be corrected to ensure methodological accuracy.

However, intact classrooms were used. This is cluster-level assignment, not individual randomization. Please clarify that this is cluster randomization and discuss potential intra-class correlation effects.

With a total sample of 44 participants (22 per group), no a priori power analysis is reported. Please provide statistical justification for sample size adequacy, particularly given the large reported effect sizes.

In Table 3, partial eta squared values are reported as .774 and .801. These are unusually large for psychosocial interventions. Please report confidence intervals and verify calculations. Additionally, clarify whether these effect sizes are for interaction effects or adjusted models.

Authors uploaded the revised manuscript.

2.   Revised

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