

Comparison of the Effectiveness of Mindfulness Intervention and Perceptual–Motor Games on Attention Problems in Students with Attention-Deficit/Hyperactivity Disorder

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E d i t o r

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R e v i e w e r s

Reviewer 1: Roodabeh Hooshmandi¹
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1. Round 1

1.1. Reviewer 1

Reviewer:

The statement “interventions targeting attention problems in children with ADHD should not be considered merely symptom-reduction strategies” is theoretically important; however, the manuscript does not subsequently operationalize educational outcomes. Since academic performance is repeatedly emphasized throughout the Introduction, the absence of any academic achievement indicators in the study design should be acknowledged and justified.

The intervention description for mindfulness states that eight sessions of 90 minutes were conducted. Considering that the participants were children aged approximately 10–11 years, the authors should justify the developmental appropriateness of 90-minute mindfulness sessions and report whether adherence, fatigue, or engagement levels were monitored throughout the program.

The description of the perceptual–motor games intervention includes a large variety of activities, including balance tasks, puzzles, tangrams, dart throwing, and auditory identification exercises. Because the intervention is highly heterogeneous, it is

difficult to determine which components were most influential. The manuscript would benefit from a structured session-by-session protocol table and fidelity monitoring procedures.

The authors indicate that repeated-measures ANOVA was used to analyze the data; however, no a priori power analysis or sample size justification is reported. Given that each group contained only 15 participants, it is important to demonstrate that the study was adequately powered to detect the reported effects.

Authors revised the manuscript and uploaded the document.

1.2. Reviewer 2

Reviewer:

In the paragraph discussing mindfulness, the authors state that “mindfulness refers to intentional, present-moment awareness accompanied by nonjudgmental acceptance of internal and external experiences.” The manuscript would be strengthened by specifying which mindfulness model guided the intervention (e.g., Kabat-Zinn, MBCT, MBSR, or a child-adapted mindfulness protocol), as the theoretical orientation directly affects intervention content and interpretation of findings.

The paragraph beginning with “Perceptual–motor interventions represent another important non-pharmacological approach” provides a useful rationale but lacks a sufficiently detailed neurocognitive explanation of how sensory integration, motor planning, and executive control interact to influence attentional regulation. Expanding this section with contemporary neurodevelopmental models would substantially improve the scientific depth of the manuscript.

The authors state that “the present study was designed to compare two theoretically distinct but practically applicable approaches” and hypothesize that perceptual–motor games may produce stronger effects. Because this prediction appears directional, the manuscript should explicitly formulate research hypotheses at the end of the Introduction rather than presenting only a general study aim.

In the Methods section, the sentence “Students receiving medication treatment or presenting comorbid conditions such as conduct disorder or learning disabilities were excluded” raises concerns regarding external validity. Since comorbidity is highly prevalent in ADHD populations, the authors should discuss how excluding these students may have resulted in a highly selective sample that does not adequately represent typical clinical populations.

The description of participant recruitment indicates that teachers completed the CSI-4 and students above a cutoff score were invited for clinical evaluation. However, the manuscript does not specify who conducted the structured clinical interviews, what training or qualifications interviewers possessed, or whether inter-rater reliability was assessed. This methodological information is necessary to evaluate diagnostic rigor.

The manuscript reports that participants were randomly assigned to groups, yet no information is provided regarding the randomization procedure. The authors should specify whether simple randomization, block randomization, or another allocation method was used and whether allocation concealment procedures were implemented.

In the Measures section, the Conners Neuropsychological Scale is described as assessing five dimensions of attention; however, the Results section reports only a single global attention-problems score. The rationale for aggregating multiple attentional domains into one composite outcome should be clarified, and analyses for individual subscales should be considered.

Authors revised the manuscript and uploaded the document.

2. Revised

Editor’s decision: Accepted.

Editor in Chief’s decision: Accepted.