



The Effect of Selected Exercises on the Motor Development of Overweight and Obese Iraqi Children Aged 8 to 9 Years: The Moderating Role of Gender

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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

Date: 10 February 2025

Reviewer:

The paragraph beginning "Fundamental motor skills (FMS) serve as the foundation for children's movement..." cites several references but lacks a clear connection to the study's specific hypotheses. Consider explicitly linking this background to the research questions.

The section stating "To measure motor development, the short form of the second edition of the Bruininks-Oseretsky Test of Motor Proficiency was utilized." should provide justification for why the short form was chosen over the full version. Was it due to time constraints, feasibility, or previous validation in similar populations?

The sentence "The SPARK (Sports, Play, and Active Recreation for Kids) training protocol was utilized in accordance with the study objectives and the participants' conditions." lacks details on how the exercises were tailored to overweight and obese children. Clarifying if modifications were made to accommodate this population would be beneficial.

The text states "Data analysis was conducted using factorial analysis of variance (ANOVA) and univariate analysis of covariance (ANCOVA)." The rationale for choosing ANCOVA for certain comparisons and ANOVA for others should be explicitly stated, especially since assumptions were violated for fine motor skills.

The results section states "The effect of gender was not significant ($p > 0.05$)." but does not report effect sizes for these comparisons. Providing eta-squared or Cohen's d would help contextualize these findings.

Authors revised the manuscript and uploaded the updated document.

1.2 Reviewer 2

Date: 13 February 2025

Reviewer:

The study focuses on children aged 8 to 9 years, but there is no strong justification for selecting this specific age range. Adding a reference explaining why this developmental stage is critical for motor development would strengthen the rationale.

The statement "differences have been observed in the motor performance of boys and girls, such that boys excel in tasks requiring strength and speed..." needs further elaboration on how gender differences might moderate the intervention effects. Consider discussing prior research that has tested gender as a moderator in similar interventions.

Tables are informative but could be improved by including confidence intervals alongside means and standard deviations, as these provide a better understanding of the precision of the estimates.

In the paragraph "The significant effect of the group in the post-test of fine motor skills ($p < 0.05$) indicates that a meaningful change occurred..." it would be helpful to clarify whether this difference is of practical significance, not just statistical significance.

The discussion states "This finding aligns with the results of studies conducted by Mahmoodifar et al. (2017), Arvin et al., Moghadasi et al. (2020)..." but does not explain how the current findings expand or challenge these studies. Providing a more critical comparison would add depth.

Authors revised the manuscript and uploaded the updated document.

2. Revised

Editor's decision after revisions: Accepted.

Editor in Chief's decision: Accepted.