

Examining the Effectiveness of the Fernald Multisensory Approach on Body Self-Concept in Elementary Students with Learning Disabilities

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1. Round 1

1.1. Reviewer 1

Reviewer:

Paragraph 3 mentions “multisensory approaches have become increasingly prominent”, but does not contextualize how Fernald differs from other multisensory models (e.g., Orton–Gillingham). Adding a comparative clarification would improve conceptual precision.

In the paragraph that begins with “Given that psychological factors often interact with academic performance...”, the authors discuss anthropometric self-beliefs of teachers. This example seems weakly connected to children with learning disabilities. Stronger developmental or child-specific evidence is recommended.

The final paragraph of the Introduction states that the research gap is “limited research on the influence of the Fernald approach on body self-concept.” This is a strong justification, but the authors should clarify whether any prior studies exist or whether this relationship is entirely unexplored.

In Methods and Materials, paragraph 1, the authors state: “To control the effect of the pretest... ANCOVA was used.” The justification is correct, but the authors should also describe whether assumptions such as homogeneity of regression slopes were tested.

The Participants section states that 40 students were selected purposively. However, paragraph 2 does not include demographic characteristics (age range, grade level, gender distribution). This limits interpretability and replication.

Paragraph describing inclusion criteria mentions “absence of sensory impairments or severe motor problems”. It would strengthen methodological rigor to describe how these impairments were screened (clinical reports? diagnostic tests?).

In the Findings, Table 1 is presented, but paragraph interpretation focuses only on mean changes. Consider reporting percentage change or standardized mean difference to contextualize the magnitude of improvement.

Authors revised the manuscript and uploaded the document.

1.2. Reviewer 2

Reviewer:

The description of the Fernald method in paragraph 4 of the Introduction states: “The technique focuses on individualized instruction, positive reinforcement, kinesthetic tracing...”. While accurate, it would help to explain why these mechanisms are theoretically suited to improve body self-concept, not just literacy.

In the paragraph beginning with “In the field of learning disabilities...”, the manuscript claims superiority of multisensory approaches over other techniques. However, the text does not specify the methodological strengths of the cited evidence. Consider clarifying sample characteristics or study designs.

Paragraph referring to Southeast Asian studies states that multisensory instruction “reduces frustration while increasing engagement.” This could benefit from elaboration on whether such emotional improvements translate directly into body self-concept, since this connection is implied but not demonstrated.

In the Measures section, the authors describe the Marsh questionnaire and list six components. However, the scoring description lacks information about whether negatively worded items were reverse-coded and whether cultural validation was considered for the Iranian context.

The paragraph describing the intervention states: “activities such as seeing the word, hearing its pronunciation, tracing the letters...”. The reviewer suggests including a session-by-session overview or a table to clarify intervention fidelity.

In Data Analysis, the sentence “The significance level was set at .05.” should be accompanied by effect-size metrics planned a priori (e.g., partial eta squared), not only reported later.

Authors revised the manuscript and uploaded the document.

2. Revised

Editor’s decision: Accepted.

Editor in Chief’s decision: Accepted.