

Comparison of the Effectiveness of Motivational Interviewing and Mindset Interventions on Academic Motivation among Female Secondary School Students

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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

Reviewer:

In the Study Design and Participants paragraph, the statement that participants were “randomly assigned to three groups” should be expanded substantially. The manuscript currently does not describe the randomization sequence generation procedure, allocation ratio, concealment mechanism, or who performed allocation. The authors should specify whether simple randomization, block randomization, drawing lots, computerized random numbers, or another procedure was used. Because the sample sizes were 19, 19, and 20, the allocation procedure is particularly important for assessing risk of selection bias. The manuscript should also clarify whether randomization occurred at the individual level after screening or whether students were assigned according to school or classroom clusters.

In the growth mindset intervention paragraph, the sentence “Although the original package for lower secondary school students comprised five sessions, it was adapted into six sessions for the present study” requires a more transparent account of

adaptation. The authors should explain which original components were retained, modified, divided, added, or removed and why these changes were necessary for the target population. The manuscript should also clarify whether the intervention remained theoretically faithful to the original growth mindset materials. Since intervention adaptation can influence efficacy, a clear description is necessary for reproducibility and for determining whether the findings can legitimately be attributed to a growth mindset intervention rather than to a broader motivational-skills program.

The reported content-validity procedure for the growth mindset intervention requires methodological correction and clarification. The manuscript states that “using the content validity ratio procedure proposed by Lawshe (1975), a value of .80 was obtained for all sessions.” A Content Validity Ratio is normally calculated at the item or component level based on experts’ judgments regarding essentiality, and its critical value depends on the number of experts. The authors should explain exactly what the experts rated, what response categories were used, whether .80 refers to CVR or a content validity index, and how the value was calculated. Reporting the same value for every session is unusual and should be verified against the original expert-rating data.

Response: Revised and uploaded the manuscript.

1.2. Reviewer 2

Reviewer:

The description of the design as “quasi-experimental” is not fully compatible with the statement that eligible participants were randomly assigned to intervention and control groups. If individual random allocation was genuinely implemented, the study more closely resembles a randomized controlled trial rather than a conventional quasi-experimental study. The authors should either revise the design terminology or explain which methodological feature prevented classification as a randomized trial. This issue should be resolved consistently across the Abstract, Methods, title if relevant, and statistical interpretation because study-design terminology has direct implications for the strength of causal inference.

In the Study Design and Participants paragraph, the eligibility criterion described as “obtaining a score at least one standard deviation below the population mean on the variables examined in the study” is insufficiently operationalized. The authors should specify exactly which variable or variables were used, whether the mean and standard deviation were calculated from the screened sample of 300 students, and whether the cutoff was applied to total academic motivation, intrinsic motivation, extrinsic motivation, self-efficacy, or another measure. The exact numerical cutoff score should be reported. Furthermore, the number of students excluded at each screening stage should be stated so readers can understand the participant flow from 300 screened students to 58 randomized participants.

In the Methods section, the sentence “Measurements were conducted at the pretest, posttest, and three-month follow-up stages” conflicts with the previously presented Abstract, which originally described a two-month follow-up. This inconsistency must be resolved throughout the manuscript. The authors should verify the actual follow-up interval from the study records and use the correct interval consistently in the Abstract, Methods, Results, Discussion, tables, and conclusions. Because maintenance of treatment effects is a central finding, uncertainty regarding whether follow-up occurred after two or three months materially affects interpretation of intervention durability.

The paragraph describing Harter’s Academic Motivation Questionnaire should provide more precise information about scoring and interpretation. The current description states that the instrument includes intrinsic and extrinsic subscales and identifies reverse-scored items, but it does not clearly state the possible score range for each subscale or whether a total academic motivation score was calculated. Given that intrinsic motivation contains 17 items and extrinsic motivation contains 16 items, the authors should provide the theoretical score range for each dimension and clarify whether higher extrinsic scores indicate stronger extrinsic motivation after reverse scoring. This is especially important because the scoring direction of Harter-type measures can be conceptually complex and may affect interpretation of group increases.

In the Data Collection Tools paragraph, the manuscript reports historical reliability estimates, including “Cronbach’s alpha coefficient of .92,” but does not report reliability coefficients calculated in the present sample. The authors should compute and

report internal consistency estimates for intrinsic and extrinsic academic motivation using the baseline data from the current participants, preferably Cronbach's alpha and, if feasible, McDonald's omega. Psychometric evidence from previous samples does not substitute for demonstrating acceptable score reliability in the present study, particularly because the sample is relatively small and culturally specific.

The motivational interviewing intervention paragraph raises an important fidelity issue. The intervention includes SMART goal setting, ABC functional analysis, self-monitoring, values clarification, and behavioral planning, several of which are not specific to motivational interviewing and may overlap with cognitive-behavioral or self-regulation approaches. The authors should distinguish core motivational interviewing components from adjunctive educational techniques and clarify how the intervention adhered to established motivational interviewing principles such as partnership, acceptance, compassion, evocation, open questions, affirmations, reflective listening, summaries, eliciting change talk, and responding to sustain talk. Ideally, treatment fidelity should be documented through therapist training, session checklists, supervision, or an established fidelity instrument.

Response: Revised and uploaded the manuscript.

2. Revised

Editor's decision after revisions: Accepted.

Editor in Chief's decision: Accepted.