

## Developing a Structural Equation Model of Disordered Eating Behaviors in Patients With Obesity Based on Perfectionism and the Behavioral Activation/Inhibition Systems, With the Mediating Role of Emotion Dysregulation

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| E d i t o r                                                                                                                                                                   | R e v i e w e r s                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manijeh Daneshpour <sup>1</sup><br>Department of Couple and Family therapy, Alliant International University, California, United States of America<br>mdaneshpour@alliant.edu | <b>Reviewer 1:</b> Ali Akbar Soleymanian <sup>2</sup><br>Associate Professor of Counseling Department, Bojnord University, Iran. Email: Soleymanian@ub.ac.ir<br><b>Reviewer 2:</b> Mahdi Khanjani <sup>3</sup><br>Associate Professor, Department of Psychology, Allameh Tabataba'i University, Tehran, Iran.<br>Email: khanjani_m@atu.ac.ir |

### 1. Round 1

#### 1.1. Reviewer 1

Reviewer:

The sentence “Data were collected through both library-based and field methods” is not appropriate methodological terminology for an empirical quantitative article. Reviewing the literature is part of the conceptual development of a study and should not be presented as a distinct data-collection method. This sentence should be replaced with a precise description of the empirical procedure, including the recruitment period, screening process, setting, informed-consent procedure, questionnaire administration method, average completion time, management of incomplete questionnaires, and whether participants completed the measures privately or in the presence of clinical personnel.

The description of the Eating Attitudes Test contains a major inconsistency that must be resolved. The manuscript states that “This 20-item scale was scored on a six-point Likert scale,” while repeatedly labeling the instrument as “EAT-26” in the Results tables. The original Eating Attitudes Test is a 40-item instrument, whereas the widely used abbreviated EAT-26

contains 26 items and three subscales. A 20-item version requires an explicit citation, validation source, item-selection rationale, scoring protocol, cutoff interpretation, and evidence that its factor structure is appropriate for the present population. The authors should verify the exact version administered and correct the instrument name, number of items, subscales, scoring range, and all related tables.

The scoring description of the eating-attitudes instrument also appears psychometrically problematic. The sentence “This 20-item scale was scored on a six-point Likert scale ranging from 1 = always to 6 = never, and the total score was obtained by summing the item scores” does not correspond to the conventional scoring procedure of the EAT-26, in which responses are generally recoded into weighted scores rather than summed directly as values from 1 to 6. This issue could substantially affect the reported mean of 54.6 and the interpretation of disordered eating severity. The authors should report the precise scoring algorithm, treatment of reverse-keyed items, possible score range, and clinical or screening cutoff, and they should reanalyze the data if an incorrect scoring method was used.

In the paragraph describing the Frost Multidimensional Perfectionism Scale, the manuscript states that “The total score is obtained by summing the items of the five principal subscales, excluding the organization subscale,” yet organization was subsequently included as an indicator of the latent perfectionism construct in Table 4. This represents a conceptual and measurement inconsistency. The authors must determine whether organization is theoretically part of the latent perfectionism variable in this study and apply that decision consistently to scoring, descriptive analyses, reliability estimates, confirmatory factor analysis, and structural modeling. If organization is retained, the rationale should be justified; if excluded, the CFA and SEM should be re-estimated without this indicator.

The sample-size justification in the sentence “The minimum sample size was set at 200 based on Kline’s recommendation” is insufficient for the complexity of the tested model. Rules of thumb based solely on an absolute minimum do not account for the number of latent variables, observed indicators, freely estimated parameters, factor loadings, indirect effects, data distribution, expected effect sizes, or desired statistical power. The authors should provide an a priori or Monte Carlo power analysis for SEM or, at minimum, report the number of estimated parameters and the participant-to-parameter ratio. The adequacy of 250 participants should be evaluated specifically for the proposed measurement and structural models.

The correlation matrix in Table 3 contains inconsistencies with the subsequent SEM results that require careful verification. BIS was negatively and nonsignificantly correlated with disordered eating,  $r = -.156$ , yet the reported indirect effect of BIS through emotion dysregulation is positive in Table 7, whereas Table 8 presents the same indirect effect as negative. Because the BIS-to-emotion-dysregulation coefficient and the emotion-dysregulation-to-disordered-eating coefficient are both positive, their product should be positive. The authors must audit the coding direction, correlation matrix, path coefficients, bootstrap output, and total-effect calculations and correct all signs consistently throughout the abstract, tables, Results, Discussion, and conclusion.

Table 3 should be revised because the significance markers appear inconsistent with the magnitude of correlations in a sample of 250 participants. For example, a correlation of  $r = .274$  would ordinarily be expected to reach a significance level more stringent than  $p < .05$  with this sample size. Similarly,  $r = .308$  would generally be associated with  $p < .001$  rather than merely  $p < .01$ . The authors should calculate and report exact two-tailed  $p$  values or use correctly assigned significance symbols. Confidence intervals for correlation coefficients would also improve statistical transparency.

Response: Revised and uploaded the manuscript.

## 1.2. Reviewer 2

Reviewer:

The participant-selection paragraph requires a more complete account of recruitment and attrition. The statement that “250 women with obesity...completed the questionnaires” does not indicate how many clinic attendees were screened, how many met the eligibility criteria, how many declined participation, how many returned incomplete questionnaires, or whether any cases were excluded during data cleaning. A participant flow description should be added, preferably with numbers at each

stage. This information is essential for evaluating selection bias, response rate, and the representativeness of the convenience sample.

The inclusion criterion “not taking psychiatric medications” requires clinical and ethical clarification. It is unclear whether medication status was determined through self-report, medical records, or clinician assessment, and no rationale is provided for excluding individuals taking psychotropic medication. This criterion may systematically exclude participants with clinically relevant depression, anxiety, or eating pathology and could reduce the generalizability of the findings. The authors should justify this exclusion, explain how it was assessed, and discuss its implications. They should also specify whether participants with diagnosed eating disorders, bariatric surgery history, endocrine disorders, pregnancy, or active psychotherapy were included or excluded.

The manuscript does not provide an ethics approval statement. The Methods section should report the name of the approving institutional review board or ethics committee, the approval code, approval date in the Gregorian calendar, and the ethical principles followed. The statement that written informed consent was obtained is necessary but insufficient. The authors should additionally explain confidentiality procedures, voluntary withdrawal, data protection, whether participation influenced clinical care, and whether participants received compensation. Given the potentially sensitive nature of eating behaviors, body weight, and emotional functioning, the protocol for responding to clinically elevated eating-disorder scores should also be reported.

In Table 1 and the accompanying paragraph, normality is inferred solely because “skewness and kurtosis values fell within the range of  $\pm 2$ .” This is incomplete for SEM because multivariate normality, rather than only univariate normality, is relevant to maximum-likelihood estimation. The authors should report the estimation method used in LISREL and assess multivariate normality using an appropriate statistic, such as Mardia’s coefficient. If multivariate normality was violated, robust maximum likelihood, asymptotic covariance matrices, or bootstrapped standard errors should be considered. The manuscript should also report the procedures used to identify and manage univariate and multivariate outliers.

The reliability analysis in Table 2 should be strengthened. Although Cronbach’s alpha values are reported, alpha assumes essentially tau-equivalent indicators and may not adequately represent reliability in multidimensional latent constructs. The authors should report McDonald’s omega or composite reliability for each latent variable and subscale. For the measurement model, convergent validity should be assessed through average variance extracted, and discriminant validity should be examined using the Fornell–Larcker criterion and preferably the heterotrait–monotrait ratio. Without these statistics, the claim that the measurement model demonstrates satisfactory psychometric quality is not sufficiently supported.

Response: Revised and uploaded the manuscript.

## 2. Revised

Editor’s decision after revisions: Accepted.

Editor in Chief’s decision: Accepted.