

# Effectiveness of a Cyberspace-Based Parenting Model on Parenting Stress and Children's Externalizing Problems

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| E d i t o r                                                                                                                                                    | R e v i e w e r s                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| John S. Carlson<br>Distinguished Professor of the Department of Educational Psychology, Michigan State University, East Lansing, MI, United<br>carlsoj@msu.edu | <b>Reviewer 1:</b> Mohammad Hassan Ghanifar<br>Assistant Professor, Department of Psychology, Birjand Branch, Islamic Azad University, Birjand, Iran. Email: ghanifar@iaubir.ac.ir<br><b>Reviewer 2:</b> Mohsen Kachooei<br>Assistant Professor of Health Psychology, Department of Psychology, Humanities Faculty, University of Science and Culture, Tehran, Iran. kachooei.m@usc.ac.ir |

## 1. Round 1

### 1.1. Reviewer 1

Reviewer:

In the paragraph describing eligibility, the criterion “externalizing problems based on the school counselor’s initial assessment” is insufficiently operationalized. The manuscript should specify how the counselor identified externalizing problems, whether a structured checklist, standardized behavioral instrument, clinical interview, teacher report, predefined cutoff score, or professional judgment was used, and whether the counselor was blinded to subsequent group assignment. Without a reproducible screening criterion, the target population cannot be clearly defined and participant selection may be vulnerable to subjective classification. The authors should also explain whether the Child Behavior Checklist was subsequently used to confirm eligibility or solely as an outcome measure.

The manuscript reports that “the broader developmental framework of the study targeted children aged 8–12 years; however, children included in the quantitative efficacy sample were 8–10 years old.” This discrepancy should be explained more explicitly. If the intervention was developed for children aged 8–12 but tested exclusively among mothers of children aged 8–10, the external validity of the efficacy findings is restricted to the younger portion of the intended age range. The authors should clarify whether no eligible children aged 11–12 were available because the school included only the first three primary

grades, whether this age restriction was planned in advance, and why the intervention is discussed as applicable to the broader 8–12-year age range when the efficacy phase did not evaluate older children.

The statistical strategy should be reconsidered in light of the substantial baseline imbalance in externalizing problems. The intervention group began with a markedly higher externalizing-problem mean than the control group (21.07 vs. 16.40), creating greater potential for regression to the mean and greater numerical room for improvement. Although the Time  $\times$  Group interaction is informative, it does not fully eliminate concerns arising from baseline nonequivalence in a small quasi-experimental sample. The authors should consider a sensitivity analysis that adjusts for baseline scores, such as ANCOVA on posttest and follow-up outcomes, a linear mixed-effects model with baseline adjustment, or another appropriate longitudinal model. At minimum, the Discussion should explicitly acknowledge that part of the observed differential change could be influenced by baseline imbalance.

The assumption-testing paragraph states that significant Shapiro-Wilk tests were obtained for three externalizing-problem distributions and that “Given the limited departures and the relative robustness of repeated-measures F tests, the planned analysis was retained.” This justification requires more rigorous support. With only 15 participants per group, significant nonnormality should not automatically be characterized as limited, especially given the small sample. The authors should examine whether the departures were caused by outliers, skewness, kurtosis, or floor effects and report relevant diagnostics. A sensitivity analysis using a robust longitudinal approach, transformation, generalized estimating equation, or mixed model would strengthen confidence that the main findings are not artifacts of distributional assumptions.

Table 2 should report the Group main effect for total externalizing problems or explain why it is omitted. The table presents Time and Time  $\times$  Group effects for total externalizing problems but includes Time, Group, and Time  $\times$  Group for parenting stress and all reported subscales. This inconsistent reporting makes it difficult to determine whether the Group effect was tested but selectively omitted. All effects specified by the repeated-measures model should be reported consistently, regardless of statistical significance. Selective omission of nonsignificant results should be avoided because comprehensive reporting is necessary for transparent evaluation of the model.

The interpretation of the Time  $\times$  Group interactions should distinguish statistical interaction from direct evidence of within-group efficacy. For example, the Results state that “This interaction demonstrated that the pattern of change in externalizing problems differed markedly between the intervention and control groups.” This formulation is appropriate; however, elsewhere the manuscript sometimes moves directly from a significant interaction to the assertion that the intervention “was effective.” Given the quasi-experimental design, baseline imbalance, small sample, no active control condition, and maternal-report outcomes, the causal language should be moderated. Expressions such as “was associated with greater reductions” or “produced evidence consistent with intervention effectiveness” may more accurately reflect the design unless allocation was genuinely randomized and adequately controlled.

Response: Revised and uploaded the manuscript.

## 1.2. Reviewer 2

Reviewer:

The demographic reporting requires a formal assessment of baseline group comparability. The Results section reports educational attainment, occupational status, child age, and baseline outcomes descriptively, but no inferential comparison is provided for demographic characteristics. Given the small sample and nonrandom or insufficiently described allocation procedure, baseline imbalance is a central concern. The authors should test or otherwise systematically assess comparability between groups in relevant baseline characteristics, including child age, maternal education, maternal employment, and any other available demographic variables. More importantly, the substantial baseline difference in externalizing problems—21.07 in the intervention group versus 16.40 in the control group—should not merely be noted descriptively; its possible influence on subsequent change and regression to the mean requires explicit statistical and interpretive consideration.

The intervention-development paragraph states that “The qualitative synthesis generated five principal domains and 22 subdomains,” yet the intervention description subsequently presents eight broad content areas without explaining how these eight components map onto the five qualitative domains and 22 subdomains. This disconnect weakens the developmental transparency of the intervention. The authors should provide a clear conceptual mapping between qualitative findings and intervention content and explain the procedure through which qualitative categories were transformed into session objectives, exercises, and training materials. If expert appraisal was used, the number and expertise of reviewers, evaluation criteria, and any content-validity indices should also be reported. These details are particularly important because the novelty of the article depends substantially on the development of the cyberspace-based parenting model.

The intervention protocol needs substantially greater reproducibility. The statement that “The final intervention was delivered to mothers in eight weekly 90-minute sessions” is insufficient for replication because the manuscript does not specify the intervention provider’s professional qualifications, training, experience, delivery format, group size, location, use of manuals or homework, attendance requirements, session fidelity procedures, or whether adherence to the intervention protocol was independently monitored. The authors should also explain whether all 15 mothers participated together or in smaller groups, whether makeup sessions were available, and what constituted “effective nonattendance.” Reporting intervention fidelity and attendance is particularly important because observed efficacy cannot confidently be attributed to the specified model without evidence that the intervention was delivered consistently.

The description of the control condition as receiving “no corresponding training during the intervention period” requires further consideration. A no-treatment control condition does not control for nonspecific effects such as therapist attention, group interaction, expectancy, social support, or repeated assessment. The manuscript should acknowledge this explicitly when interpreting efficacy. The authors should also state whether the control participants were placed on a waiting list and whether they were offered the intervention after completion of follow-up. If no attention-matched comparison was used, conclusions should refer to effectiveness relative to no intervention rather than imply superiority over other established parenting programs.

The measurement section for the Child Behavior Checklist needs greater precision regarding scoring. The manuscript states that “the Externalizing Problems outcome was defined by the Rule-Breaking Behavior and Aggressive Behavior subscales; their summed score represented total externalizing problems.” The authors should specify whether raw scores, standardized T scores, or another scoring procedure were used. The reported means strongly suggest raw scores, but this should be stated explicitly. The age-specific CBCL version should also be identified because Achenbach instruments differ by developmental range. In addition, the manuscript should clarify whether validated Iranian cutoff scores or normative classifications were considered and whether the instrument was administered in a validated Persian version. These details are necessary to understand the clinical meaning of the observed score changes.

The reporting of reliability evidence for the study instruments relies entirely on previous validation studies, while internal consistency in the present sample is not reported. For example, the PSI-SF paragraph cites previous Cronbach’s alpha coefficients “ranging from .59 to .86,” but reliability estimates calculated from the present participants should also be provided if feasible. Although the sample is small and such estimates should be interpreted cautiously, reporting internal consistency for the total scales and major subscales would provide information about measurement precision in the actual study population. In addition, an alpha as low as .59 in prior research merits discussion rather than being characterized broadly as satisfactory without qualification.

Response: Revised and uploaded the manuscript.

## 2. Revised

Editor’s decision after revisions: Accepted.

Editor in Chief’s decision: Accepted.