

Designing an Integrated Play Therapy Program Based on the Cognitive-Behavioral Approach and Sensory Integration for Children With Autism

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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:

The description of Stage 4 states that “repeated reviews of the codes and themes resulted in the elimination of inappropriate items,” but the criteria used to judge an item as inappropriate are not defined until much later in the Results section. The Methods section should prospectively specify the decision criteria used to retain, merge, revise, or delete codes and themes. For example, the authors might describe criteria related to conceptual redundancy, insufficient empirical support, lack of relevance to the intervention scope, diagnostic rather than intervention-oriented content, or insufficient distinction from another theme. Doing so would demonstrate that code elimination followed predefined analytic principles rather than post hoc judgment.

The validation paragraph reports both “member checking” and “inter-coder agreement,” yet the data source appears primarily to be literature rather than participant-generated interviews. The authors should reconsider the use of the term “member checking,” which traditionally refers to returning interpretations to research participants who generated the original qualitative data. If expert review was actually used to assess interpretive credibility, it may be more accurate to describe the process as expert review, peer debriefing, or external validation. Similarly, the statement that doctoral peers “coded and developed themes from one interview” appears inconsistent with the rest of the manuscript, where no interview procedure is described. This methodological inconsistency must be resolved.

In Table 4, the manuscript integrates components such as “weighted vest,” “joint compression,” “deep pressure,” “oral sensory diet,” and “controlled spinning” within the sensory integration component of the protocol. Because sensory-based techniques vary considerably in empirical support and should not automatically be treated as equivalent to fidelity-based Ayres Sensory Integration, the authors should distinguish clearly between Ayres Sensory Integration, sensory-based interventions, and sensory modulation strategies. Each component should be justified in relation to current evidence, contraindications, therapist competency requirements, and individualized assessment. This is particularly important because several of the proposed activities involve vestibular, proprioceptive, or oral stimulation that should be administered according to clinical assessment rather than as universal protocol elements.

The paragraph stating that “neuroimaging evidence has indicated that such interventions may be associated with positive structural and functional changes in sensory cortical regions” appears stronger than the cited literature presented in the manuscript can confidently support. The authors should verify that the cited study directly provides neuroimaging evidence for sensory integration intervention-induced cortical change in children with autism. If the reference instead addresses behavioral or clinical outcomes, this statement should be revised or removed. Claims regarding neuroplasticity and neural mechanisms require especially precise citation because they imply biological treatment effects beyond the behavioral evidence reported in most sensory integration studies.

Authors revised the manuscript and uploaded the document.

1.2. Reviewer 2

Reviewer:

The paragraph titled “Content Validity of the Educational Package” describes evaluation of relevance, simplicity, and clarity using Waltz and Bausell’s method, but the subsequent description includes several different rating formats: a four-point scale for CVI, a three-category scale for CVR, and a five-point scale from “strongly agree” to “strongly disagree.” These procedures are currently conflated. The authors should separate the CVI and CVR procedures clearly, state exactly which items were rated with which scale, provide the correct formulas, and identify which form of CVI was calculated, such as item-level CVI (I-CVI) and/or scale-level CVI (S-CVI). The current presentation makes replication difficult.

The formula reported for content validity ratio as “ $CVR = Ne - N/2$ ” is incomplete. The standard Lawshe formula is $CVR = (Ne - N/2)/(N/2)$, where Ne represents the number of panelists rating an item as essential and N represents the total number of panelists. The authors should correct the formula and report the critical CVR value appropriate for a panel of 10 experts. Moreover, although the Methods section emphasizes CVR, no actual CVR results are presented later in the manuscript. The authors should either report session-level or item-level CVR values and explain their interpretation or remove claims that CVR contributed to the final validation.

Table 1, “Assessment of the Needs of Children With Autism Spectrum Disorder,” identifies 10 broad need domains, but the relationship between this preliminary needs table and the subsequent 60-code thematic analysis is not sufficiently explained. The authors should clarify whether Table 1 was generated before coding as an organizing framework, after coding as a summary of findings, or independently from a separate literature synthesis. If it served as an a priori framework, this has implications for the claimed inductive nature of the thematic analysis. The analytic sequence should be made explicit to prevent ambiguity about whether the themes emerged from the data or were partially predetermined.

Table 2 is a central contribution of the manuscript, but several coding labels require conceptual refinement. For example, the initial code “negative cognitive restructuring” appears to describe a therapeutic procedure rather than a child need or symptom and is subsequently classified under “cognitive distortions.” The terminology should be changed to something conceptually consistent, such as “maladaptive cognitions,” “negative automatic thoughts,” or “cognitive distortions.” More broadly, the authors should systematically review all initial codes to ensure that each represents the same conceptual level—namely, an identified need, difficulty, or functional characteristic—rather than mixing symptoms, mechanisms, intervention strategies, and diagnostic descriptors.

The manuscript reports that eight initial codes were eliminated and that “the final set of 52 retained initial codes resulted from a purposeful refinement process.” This is an important methodological decision and should be strengthened by reporting the expert-review procedure more quantitatively. The authors should indicate how many experts recommended deletion of each code, whether consensus thresholds were predefined, whether disagreements were resolved through discussion or voting, and whether any codes were merged or renamed rather than simply removed. A supplementary audit table showing the original code, panel decision, rationale, and final disposition would substantially improve dependability and confirmability.

The paragraph interpreting Table 2 states that the analysis is “fully consistent with the principles of deductive-inductive thematic analysis,” whereas the earlier Methods section describes thematic analysis largely as inductive. This inconsistency should be resolved. If the study actually used a hybrid approach, the authors should explain which elements were deductive—for example, sensory integration theory, cognitive-behavioral constructs, or predefined intervention domains—and which elements were inductively derived from the reviewed literature. A clear analytic model would strengthen the theoretical credibility of the eight final themes.

Authors revised the manuscript and uploaded the document.

2. Revised

Editor’s decision: Accepted.

Editor in Chief’s decision: Accepted.