




# Comparison of the Effectiveness of Neurocognitive Rehabilitation Program and Acceptance and Commitment Therapy on Metacognitive Skills, Executive Functions, and Emotion Regulation in Women with Breast Cancer


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## 1. Round 1

### 1.1. Reviewer 1

Reviewer:

The introduction effectively outlines the significance of breast cancer's cognitive and emotional effects, but the research gap is not explicitly stated. The sentence, "Given these challenges, targeted interventions focusing on neurocognitive rehabilitation and psychological flexibility approaches are crucial for improving cognitive and emotional well-being in this population," could be expanded by specifying what prior research lacks and how this study uniquely contributes.

The psychometric properties of the MAI, BRIEF-A, and DERS are mentioned, but reliability scores from the current study are not reported. Including Cronbach's alpha values for each measure would enhance transparency.

The discussion states, "Both interventions led to significant improvements in all three dependent variables," but does not discuss potential ceiling effects or individual variation. Were certain participants non-responders? If so, what characteristics differentiated them?

The study findings align with prior research, but the discussion does not critically compare the study results with other direct comparisons of NRP and ACT. Are the reported improvements consistent in magnitude with prior research?

The discussion does not elaborate on how findings contribute to the theoretical understanding of metacognition, executive function, and emotion regulation. Expanding on this would strengthen the academic contribution.

Authors revised the manuscript and uploaded the document.

### 1.2. Reviewer 2

Reviewer:

The description of the NRP intervention includes structured cognitive exercises but lacks specific details on their theoretical foundations. Expand on how these exercises align with established neurocognitive rehabilitation models and cite relevant studies.

The ACT intervention includes metaphor-based exercises (e.g., "passengers on a bus"), but it is unclear how these were adapted for breast cancer patients. Justify why these metaphors were chosen and whether they have been validated for this population.

The study uses repeated-measures ANOVA, but it is unclear whether assumptions such as homogeneity of variances and sphericity were met. While Mauchly's test results are provided, a Greenhouse-Geisser correction should be reported if violations occurred.

While p-values are reported, effect sizes (e.g., partial eta squared) are only mentioned in Table 2. Effect size interpretation should be integrated into the text to contextualize the practical significance of the findings.

The results state that "no significant differences between NRP and ACT were found," but it would be beneficial to explicitly report confidence intervals for these comparisons in Table 4 to reinforce the conclusion.

The limitations mention the small sample size but do not discuss potential cultural or demographic constraints. Since participants were from Tehran, discuss how findings might differ in other cultural contexts.

Authors revised the manuscript and uploaded the document.

## 2. Revised

Editor's decision: Accepted.

Editor in Chief's decision: Accepted.