

Article history: Received 26 June 2024 Revised 25 July 2024 Accepted 01 August 2024 Published online 01 January 2025

KMAN Counseling & Psychology Nexus

OPEN PEER-REVIEW REPORT



E-ISSN: 3041-9026

Comparison of the Effectiveness of the Central Nervous System Reorganization Method (Doman-Delacato) and Neurofeedback on Improving Reading Skills in Children with Dyslexia

Gholamreza. Darabi 10, Majid. Ebrahimpour 20, Hossain. Sahebdel 30, Reza. Dastjerdi 40

- ¹ PhD Student, Department of Educational Psychology, Qaenat Branch, Islamic Azad University, Qaenat, Iran
 ² Assistant Professor, Department of Psychology of Exceptional Children, Qaenat Branch, Islamic Azad University, Qaenat, Iran
 - ³ Assistant Professor, Department of Counseling, Qaenat Branch, Islamic Azad University, Qaenat, Iran
 - ⁴ Assistant Professor, Department of Psychology, Birjand University of Medical Sciences, Birjand, Iran

* Corresponding author email address: MajidGrave@yahoo.com

Editor	Reviewers
Izet Pehlić®	Reviewer 1: Zahra Yousefi D
Full professor for Educational sciences, Islamic pedagogical faculty of the University of Zenica, Bosnia and Herzegovina izet.pehlic@unze.ba	Assistant Professor, Department of Psychology, Khorasgan Branch, Islamic Azad
	University, Isfahan, Iran.
	Email: yousefi1393@khuisf.ac.ir
	Reviewer 2: Mehdi Rostami [®]
	Department of Psychology and Counseling, KMAN Research Institute, Richmond
	Hill, Ontario, Canada.
	Email: dr.mrostami@kmanresce.ca

1. Round 1

1.1. Reviewer 1

Reviewer:

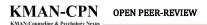
The introduction cites dyslexia prevalence rates as "4% to 8% in the United States" and "13.67%" elsewhere. Ensure consistency or provide context for the differing statistics.

The discussion on the Delacato model (paragraph beginning with "Recently, neuropsychological approaches...") lacks contemporary references. Consider incorporating more recent critiques or support for the model.

The Doman-Delacato treatment lasted 86 sessions, whereas Neurofeedback training involved 16 sessions. Explain why these interventions were not matched in duration for comparability.

The ANOVA results (Table 2) indicate "no statistically significant differences among the three groups", yet the pairwise comparisons (Table 3) show significant improvements. Clarify if this discrepancy arises from different statistical tests used.

The follow-up scores for some variables (e.g., text comprehension) decline after post-test. Discuss whether this suggests temporary effects of interventions or participant fatigue.



The discussion references multiple studies on Neurofeedback (e.g., Lee & Chen, 2017; Ghaemi et al., 2016) but lacks a comparison of effect sizes and sample characteristics. Highlight how your findings align or differ.

Response: Revised and uploaded the manuscript.

1.2. Reviewer 2

Reviewer:

The paragraph stating "Neurofeedback allows individuals to normalize their cortical profile by reducing slow-wave activity and increasing fast-wave activity..." requires citation of primary neuroscience sources explaining this mechanism.

The sentence "No independent variable was applied to the control group." should clarify whether they received any placebo or standard educational intervention to control for placebo effects.

The description of the Reading and Dyslexia Test (Karami Nouri & Moradi, 2005) should provide more details about construct validity and cultural adaptations for the sample population.

The section "Participants were seated comfortably, and sensors (electrodes) were placed on the scalp and earlobes." lacks details on EEG frequency bands targeted and whether individual brainwave baselines were considered.

The pre-test scores for some reading components (e.g., word chain, phoneme deletion) show substantial variability across groups. Address whether ANCOVA was considered to adjust for baseline differences.

The paragraph "Changes at the behavioral level reflect changes at the brain level..." lacks direct evidence linking EEG activity changes to behavioral improvements. Consider discussing brain imaging studies that corroborate such claims.

Response: Revised and uploaded the manuscript.

2. Revised

Editor's decision after revisions: Accepted. Editor in Chief's decision: Accepted.

> KMAN-CPN KMAN-Counseling & Psychology Nexus