

January 2024

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# NeuroBITE

## NEWSLETTER

***Welcome to the second monthly NeuroBITE newsletter!***

***We are excited about bringing this new feature to our supporters, as well as anybody interested in research on cognitive, behavioural and other treatments for psychological problems and issues occurring as a consequence of acquired brain impairment (ABI)! Here you can find a list of interesting intervention studies that have recently been added to NeuroBITE database.***

***Happy reading!***

### **Mild TBI**

Jennings, T., & Islam, M. S. (2023). Examining the interdisciplinary approach for treatment of persistent post-concussion symptoms in adults: a systematic review. *Brain Impairment*, 24, 290-308. **OPEN ACCESS**

Meusel, L.-A., Colella, B., Ruttan, L., Tartaglia, M. C., & Green, R. (2023). Preliminary efficacy and predictors of response to a remotely-delivered symptom self-management program for persistent symptoms after concussion. *Brain Injury*, 1-8. **OPEN ACCESS**

Pieniak, M., Seidel, K., Oleszkiewicz, A., Gellrich, J., Karpinski, C., Fitze, G., & Schriever, V. A. (2023). Olfactory training effects in children after mild traumatic brain injury. *Brain Injury*, 1-13.

### **Dementia**

Monroe, P., Halaki, M., Luscombe, G., Kumfor, F., & Ballard, K. J. (2023). Phase I trial of the MuSic to CONnect (MuSiCON) protocol: feasibility and effect of choir participation for individuals with cognitive impairment. *Brain Impairment*, 1-18. **OPEN ACCESS**

**RoBiNT score: 20/30**



## Stroke

Kneebone, I. I., Munday, I., Van Zanden, B. E., Thomas, S., & Newton-John, T. (2023). Psychological interventions for post stroke pain: a systematic review. *Neuropsychological Rehabilitation*, 33(7), 1304-1324.

Leochico, C. F. D., Austria, E. M. V., Gelisanga, M. A. P., Ignacio, S. D., & Mojica, J. A. P. (2023). Home-based telerehabilitation for community-dwelling persons with stroke during the COVID-19 pandemic: A pilot study. *Journal of Rehabilitation Medicine*, 55, jrm4405. **OPEN ACCESS**

Osaki, S., Amimoto, K., Miyazaki, Y., Tanabe, J., & Yoshihiro, N. (2023). Effect of stimulation-driven attention in virtual reality balloon search training of patients with left unilateral spatial neglect after stroke: A randomized crossover study. *Neuropsychological Rehabilitation*, 1-21. **PEDro-P score: 8/10**

Sim, T. Y., & Kwon, J. S. (2022). Comparing the effectiveness of bimanual and unimanual mirror therapy in unilateral neglect after stroke: A pilot study. *NeuroRehabilitation*, 50(1), 133-141. **PEDro-P score: 6/10**

## ABI (TBI, Stroke, Hypoxia, Tumour)

Ingebretsen, S. M. H., Kirmess, M., Smastuen, M. C., Hawley, L., Newman, J., & Stubberud, J. (2023). Rehabilitation of social communication skills in patients with acquired brain injury with intensive and standard group interactive structured treatment: A randomized controlled trial. *Archives of Physical Medicine and Rehabilitation*, 104(7), 1016-1025. **OPEN ACCESS**  
**PEDro-P score: 6/10**

Liu, Z., Zhang, X., Yu, B., Wang, J., & Lu, X. (2023). Effectiveness on level of consciousness of non-invasive neuromodulation therapy in patients with disorders of consciousness: A systematic review and meta-analysis. *Frontiers in Human Neuroscience*, 17, 1129254. **OPEN ACCESS**



## Ratings

NeuroBITE also evaluates the methodological rigor (methodological quality) of primary studies that use a control condition to demonstrate the efficacy of a treatment. The primary studies involved are randomised controlled trials (RCTs), non-RCTs, and single-case experimental designs (SCEDs). Two method quality rating scales are used: the PEDro-P Scale to rate RCTs and nRCTs, and the Risk of Bias in N-of-1 Trials (RoBiNT) Scale to rate SCEDs. For more information, and to learn how to critically appraise studies using these scales, please visit our [Rating Information](#) and [Training](#) pages.

### **PEDro-P Scale**

The PEDro-P Scale consists of 11 items (10 of which contribute to the total score). Often, complex (behavioural) intervention studies can only score a maximum of 8/10 because it is difficult to meet criteria on the two PEDro items for blinding participants and blinding therapists given the nature of behavioural interventions. For score interpretation, by convention, a score of 6 or more on the PEDro Scale is considered to reflect 'moderate' or 'good' methodological quality.

### **RoBiNT Scale**

The RoBiNT Scale consists of two subscales: the Internal Validity (IV) Subscale (7 items) and the External Validity and Interpretation (EVI) Subscale (8 items). Items are rated on a 3-point scale (0-2), resulting in a maximum score of 14 for the IV Subscale, 16 for the EVI Subscale, and 30 for the total score. Score interpretation for the IV subscale, which reflects the methodological rigor (methodological quality) of a study, uses a validated algorithm, which is described in a supplement (Perdices, Tate & Rosenkoetter, 2019) to the RoBiNT Manual. The algorithm classifies the weighted scores of the seven IV Subscale items into six categories of methodological rigor, ranging from 'very high' to 'very low'.

