

March 2025

# NeuroBITE

## NEWSLETTER

*Welcome to the March 2025 edition of the NeuroBITE newsletter!*

*Stay up-to-date with our monthly updates by subscribing >> [here](#) << or by scanning the QR code at the bottom of the page.*

*This month we are very excited to announce that we have published a [NeuroBITE Walkthrough video](#), available on the home page of our website. It demonstrates step-by-step how to get the most out of our database of research, as well as highlighting our online rater training and other resources. Please take a look!*

*The single-case design we have included in this newsletter is open access, so if you're interested in further understanding the application of our method quality rating scale (RoBiNT), click through to view an example where exposure therapy is evaluated to determine its impact on post-concussion symptoms.*

*Happy reading (and viewing)!*

### Parkinson's Disease

Abuoaf, R., AlKaabi, R., Saleh, A. M., Zerough, U., Hartley, T., van Niekerk, S.-M., Khalil, H., & Morris, L. D. (2023). The effect of physical exercise on anxiety in people with Parkinson's disease: A systematic review of randomized control trials. *NeuroRehabilitation*, 52(3), 387-402.

Plzakova, V., Mana, J., Ruzicka, E., & Nikolai, T. (2024). Efficacy of non-computerized cognitive rehabilitation in Parkinson's disease: A one year follow up study. *Applied Neuropsychology: Adult*.

**PEDro-P Score: 5/10**



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So, H. Y., Kim, S. R., Kim, S., Park, Y. S., Jo, S., Park, K. W., Choi, N., Lee, S. H., Hwang, Y. S., Kim, M. S., & Chung, S. J. (2023). Effect of home-based self-management intervention for community-dwelling patients with early Parkinson's disease: A feasibility study. *Journal of Community Health Nursing*, 40(2), 133-146.

**PEDro-P Score: 6/10**

### Stroke

AlFraih, S. S., Patchwood, E., & Conroy, P. (2024). A scoping review of therapies targeting confidence in stroke survivors. *Aphasiology*. **OPEN ACCESS**

Zhao, Y., Li, W., Huang, D., Zhang, W., Zhang, S., Liu, Q., Lv, P., & Yin, Y. (2023). The therapeutic effect of transcranial direct current stimulation combined with cognitive training on patients with unilateral neglect after stroke. *NeuroRehabilitation*, 52(3), 477-483.

**PEDro-P Score: 6/10**

### Traumatic Brain Injury

Alashram, A. R. (2024). Computerized cognitive rehabilitation for patients with traumatic brain injury: A systematic review of randomized controlled trials. *Applied Neuropsychology: Adult*.

Moore, B. M., Stark, R. K., & D'Angelo, E. C. (2024). Multidisciplinary care for patients with persistent symptoms following concussion: A systematic review. *Disability & Rehabilitation*, 46(9), 1760-1775.

### Mild Traumatic Brain Injury

Hecker, L., King, S., Stapert, S., Geusgens, C., den Hollander, M., Fleischeuer, B., & van Heugten, C. (2024). Can exposure therapy be effective for persistent post-concussion symptoms? A nonconcurrent multiple baseline design across 4 cases. *The Journal of Head Trauma Rehabilitation*, 10-1097. **OPEN ACCESS**

**RoBiNT Score: 18/30**



## Multiple Sclerosis

Eldemir, K., Guclu-Gunduz, A., Eldemir, S., Saygili, F., Ozkul, C., & Irkec, C. (2024). Effects of Pilates-based telerehabilitation on physical performance and quality of life in patients with multiple sclerosis. *Disability & Rehabilitation*, 46(9), 1807-1814.

**PEDro-P Score: 5/10**

## Epilepsy

Bennett, S. D., Cross, J., Chowdhury, K., Ford, T., Heyman, I., Coughtrey, A. E., Dalrymple, E., Byford, S., Chorpita, B., Fonagy, P., Moss-Morris, R., Reilly, C., Smith, J. A., Stephenson, T., Varadkar, S., Blackstone, J., Quartly, H., Hughes, T., Lewins, A., Moore, E., Walji, F., Welch, A., Whelan, E., Zacharia, A., D'Oelsnitz, A., Shah, M., Xu, L., Vezyroglou, A., Mitchell, K., Nizza, I. E., Ganguli, P., & Shafran, R. (2024). Clinical effectiveness of the psychological therapy Mental Health Intervention for Children with Epilepsy in addition to usual care compared with assessment-enhanced usual care alone: A multicentre, randomised controlled clinical trial in the UK. *The Lancet*, 403(10433), 1254-1266. **OPEN ACCESS**

**PEDro-P Score: 7/10**



## 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'.

