May 2025

NeuroBITE NEWSLETTER

Welcome to the May 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.

Hello to all in the NeuroBITE community, we are excited to again bring you a selection of new and interesting intervention studies from the NeuroBITE database. All applicable studies have been rated for method quality but be aware that the total PEDro-P or RoBiNT score doesn't tell the full story which is why we list scores on all the criteria for a study. Sometimes a study might do well in terms of criteria that can be controlled but some criteria are difficult or impossible to manipulate (such as blinding therapists and participants to a treatment allocation). In these studies, a lower score might belie a study which has otherwise been conducted to a high standard.

While we have your ear, did you know that NeuroBITE has the backing of the NeuroBITE Board? The Board provides input into the direction of NeuroBITE and, crucially, helps us identify sources of funding, which is critical to ongoing operation of NeuroBITE.

If you have ideas or connections that could benefit NeuroBITE please get in touch with our Director Paul Gertler paul.gertler@sydney.edu.au, we'd love to hear from you!

Traumatic Brain Injury

Single-case experimental design intervention for inappropriate sexualised behaviour in adolescent traumatic brain injury

Pickering, A., Tucker, P., & Limond, J. (2025). Disability & Rehabilitation 47(1), 92-103.
OPEN ACCESS
RoBiNT Score: 14/30

Scan to receive this newsletter monthly to your inbox:

Stroke

A feasibility randomized-controlled trial of an executive functioning telerehabilitation intervention for stroke survivors
Ene, C. G., Gracey, F., & Ford, C. (2025). Brain Injury, 1-12.
OPEN ACCESS
PEDro-P Score: 7/10

Auditory motion stimulation as an add-on therapeutical approach is feasible, enjoyable, and associated with a significant improvement of neglect outcome: A non-randomized, controlled group-matched study
Geiser, N., C., K. B., Dario, C., Tobias, N., & and Nyffeler, T. (2025). Neuropsychological Rehabilitation, 1-15.
PEDro-P Score: 5/10

"Stroke - 65 plus. Continued active life." A randomized controlled trial of a self-management neurorehabilitation intervention for elderly people after stroke
Pallesen, H., Pedersen, S. K. S., Sorensen, S. L., Naess-Schmidt, E. T., Brunner, I., Nielsen, J. F., & Kjeldsen, S. S. (2025). Disability & Rehabilitation, 47(1), 104-113.
PEDro-P Score: 7/10

Effects of motor imagery training on gait performance in individuals after stroke: a systematic review and meta-analysis
Yan, T., Liang, W., Chan, C. W. H., Shen, Y., Liu, S., & Li, M. (2025). Disability & Rehabilitation, 47(1), 47-61.

Traumatic Brain Injury / Acquired Brain Injury

Preliminary feasibility and efficacy of a brief behavioural treatment for insomnia after acquired brain injury: A case series
Gardani, M., Baylan, S., & Zouhar, V. (2025). Journal of Sleep Research, e14441, 1-11.
OPEN ACCESS

Scan to receive this newsletter monthly to your inbox:

Executive function after yoga: Adults with acquired brain injury-A pilot study
Grieb, E. J., Schmid, A. A., Riggs, N. R., & Stephens, J. A. (2024). American Journal of Occupational Therapy, 78(2), 1-8.

Parkinson's Disease

Efficacy and safety of acupuncture therapy for neuropsychiatric symptoms among patients with Parkinson's disease: A systematic review and meta-analysis
Tan, W., Xie, F., Zhou, J., Pan, Z., Liao, M., & Zhuang, L. (2024). Clinical Rehabilitation, 38(8), 1044-1062.
OPEN ACCESS

Action observation treatment may improve daily living activities and verb recovery in Parkinson's disease-dementia: Findings from a preliminary randomized controlled trial.
Paciaroni, L., Mastrosanti, E., Biscetti, L., Paolini, S., Mauri, S., Fabbietti, P., Riccardi, G. R., Rocchi, M. B. L., & Pelliccioni, G. (2024). Frontiers in Aging Neuroscience 16, 1488881.
OPEN ACCESS
PEDro-P Score: 5/10

Impact of psychological treatment in freezing of gait: A pilot study
Brewer-Mixon, K., Shearin, S., Moralez, G., Wang, J., Champagne, P. T., & Jarrard, C. (2025). Rehabilitation Psychology, 1-10.

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'.