NeuroBITE
NEWSLETTER

Welcome to the fourth issue of our 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!

Dementia

Carbone, E., Gardini, S., Pastore, M., Piras, F., Vincenzi, M., & Borella, E. (2021). Cognitive stimulation therapy for older adults with mild-to-moderate dementia in Italy: Effects on cognitive functioning, and on emotional and neuropsychiatric symptoms. *The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, 76(9), 1700-1710. **OPEN ACCESS**
PEDro-P score: 5/10

Dementia - Parkinson's Disease

Gallou-Guyot, M., Nuic, D., Mandigout, S., Compagnat, M., Welter, M., Daviet, J., & Perrochon, A. (2022). Effectiveness of home-based rehabilitation using active video games on quality of life, cognitive and motor functions in people with Parkinson's disease: A systematic review. *Disability and Rehabilitation: An International, Multidisciplinary Journal*, 44(26), 8222-8233.

Latella, D., Maggio, M. G., Maresca, G., Andaloro, A., Anchesi, S., Pajno, V., De Luca, R., Di Lorenzo, G., Manuli, A., & Calabro, R. S. (2022). Effects of domotics on cognitive, social and personal functioning in patients with Parkinson's disease: A pilot study. *Assistive Technology*, 34(4), 423-428.
PEDro-P score: 5/10

Lin, H.-W., Tam, K.-W., & Kuan, Y.-C. (2023). Mindfulness or meditation therapy for Parkinson's disease: A systematic review and meta-analysis of randomized controlled trials. *European Journal of Neurology*, 30(8), 2250-2260.

Multiple Sclerosis

Hadoush, H., Alawneh, A., Kassab, M., Al-Wardat, M., & Al-Jarrah, M. (2022). Effectiveness of non-pharmacological rehabilitation interventions in pain management in patients with multiple sclerosis: Systematic review and meta-analysis. *NeuroRehabilitation*, 50(4), 347-365.

Kneebone, I. I., Van Zanden, B. E., Dorstyn, D. S., Roberts, R. M., Lord, S. R., Querstret, D., Theadom, A., Kennedy, D. S., Raman, J., & Nair, R. d. (2022). Relaxation and related therapies for people with multiple sclerosis (MS): A systematic review. *Clinical Rehabilitation*, 36(7), 883-899.

Zarotti, N., Eccles, F., Broyd, A., Longinotti, C., Mobley, A., & Simpson, J. (2023). Third wave cognitive behavioural therapies for people with multiple sclerosis: A scoping review. *Disability and Rehabilitation: An International, Multidisciplinary Journal*, 45(10), 1720-1735. **OPEN ACCESS**

Stroke

Armour, M., & Del Toro, C. M. (2021). The effectiveness of verbal–gestural treatment on verb naming in acute inpatient rehabilitation. *American Journal of Speech-Language Pathology, 30*(2), 713-721.
RoBiNT score: 12/30

Daviet, J. C., Compagnat, M., Bonne, G., Maud, L., Bernikier, D., & Salle, J. Y. (2023). Individualized home-based rehabilitation after stroke in France: a pragmatic study of a community stroke rehabilitation team. *Canadian Journal of Neurological Sciences, 50*(3), 405-410.
OPEN ACCESS

Oh, H. X., De Silva, D. A., Toh, Z. A., Pikkarainen, M., Wu, V. X., & He, H.-G. (2022). The effectiveness of self-management interventions with action-taking components in improving health-related outcomes for adult stroke survivors: A systematic review and meta-analysis. *Disability and Rehabilitation: An International, Multidisciplinary Journal*, 44(25), 7751-7766.

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'.