Abstract for the Danish symposium at Nordic Meeting in Neuropsychology 2024

Responsible Nordic Society: Danish Neuropsychological Society and Danish Child Neuropsychology Society

Title of the symposium: Technology-based interventions in treatment and rehabilitation – how to promote uptake, effect, and sustainability.

Chair: Laila Øksnebjerg, PhD, Associate professor, Department of Psychology, University of Copenhagen and Senior researcher, Danish Dementia Research Centre, Copenhagen University Hospital.

Presenters and title for each presentation:
Presentation 1:
Title: Virtual Reality Assessment and Treatment of Spatial Neglect.
Presenter: Lars Evald, Lars Evald, PhD, Head of Neuropsychological Research, Hammel Neurorehabilitation Centre and University Research Clinic Central Denmark Region.

Presentation 2:
Title: App-based memory control training in children and adolescents.
Presenter: Julie Ertman Nørkær Lundsgaard, PhD Student, Department of Psychology, University of Copenhagen.

Presentation 3:
Title: Virtual reality for anxiety disorders (VR8) – improving treatment interventions using technology.
Presenter: Per Trads Ørskov, PhD, Postdoc, Research Unit for Digital Psychiatry (READI), Centre for Digital Psychiatry, Region of Southern Denmark.

Presentation 4:
Title: Design, implementation, and sustainability of cognitive support technology for people with dementia.
Presenter: Laila Øksnebjerg, PhD, Associate professor, Department of Psychology, University of Copenhagen and Senior researcher, Danish Dementia Research Centre, Copenhagen University Hospital.

Brief description of symposium
The use of technology-based tools and methods in treatment and rehabilitation of neuropsychiatric and neurological conditions is rapidly expanding. Many research projects show promising results, but often face challenges when it comes to implementation in professional practice and daily life of end-users. The overarching theme of this symposium is how we, based on expertise from various clinical research perspectives, can promote uptake, effect, and sustainability of technology-based interventions in treatment and rehabilitation. This theme will be discussed based on perspectives from four different research project. First, results from a proof-of-concept study on the use of virtual reality in assessment and treatment of spatial neglect in right-hemisphere stroke patients will be presented. In the second talk results from the AMEMO project will be presented. This project examines if app-based memory control training in children and adolescents with obsessive compulsive disorder can affect attention control, emotion regulation

abilities, and mental health. Thirdly, results from the VR8 project will be presented. In this RCT the effect of individually adapted exposure therapy in virtual reality, as part of cognitive behavioural therapy, is compared to cognitive behavioural therapy with exposure in vivo. Finally, results from the ReACT project will be presented. This research project investigated co-design and user-centred implementation of an app-based technology for cognitive support of people with dementia.

The symposium will end with a discussion on shared themes and perspectives on the uptake, effect, and sustainability of such technology-based interventions in treatment and rehabilitation of various neuropsychiatric and neurological conditions.