



## **Developmental dyscalculia: An overview & local research findings.**

**Presenter: Bianca Schembri B.Sc(Hons), M.Sc(Melit.)**

Bio:

Bianca Schembri has been a practicing Speech-Language Pathologist since 2010, after obtaining her B.Sc(Hons) Communication Therapy degree from the University of Malta. She provides service to mostly paediatric clients within community clinics and schools in Malta. Bianca enjoys working with various clients with diverse needs and ages, and loves celebrating every tiny milestone that her clients make. She is also a clinical educator and a member of the literacy specialised division within the Speech Language Centre. She also has a passion for cooking! In 2019, Bianca obtained her Masters degree by research in Communication Therapy from the University of Malta. Her research focused on the development of the Maltese-English Numeracy Test (MENT) and how primary school children in Malta perform on numeracy tasks.

Description:

Some individuals have difficulty in developing numerical fluency and basic arithmetic skills that are not accounted for by low intelligence or inadequate schooling (Kaufmann & Von Aster, 2012). This condition is known as Developmental Dyscalculia (DD). DD is a type of Specific Learning Difficulty. This webinar will first provide an overview on developmental dyscalculia (characteristics, causes, co-morbidities etc.) and diagnostic procedures. Ms Bianca Schembri will then be sharing her research findings from her 2019 M.Sc study titled "The Development of the Maltese-English Numeracy Test (MENT) for Primary School Children in Malta".

## **Acalculia after stroke: Impact on everyday life & quality of professional support**

**Presenter: Dr. Yael Benn, Senior Lecturer in Psychology, Manchester Metropolitan University**

Bio:

Dr. Benn is an experimental cognitive neuroscientist. Her research focuses on language processing and high order cognition, in particular mathematical cognition. Her other interests include information seeking and avoidance behavior. She employs multiple methodologies, including fMRI, eye-tracking, behavioral and neuropsychological cases, as well as qualitative reflections, and aims to bridge between theory and practice in multiple health set-up, including stroke rehabilitation.

Description:

Acalculia is an acquired disability following stroke or brain-injury, which involves difficulty processing numerical information (e.g. phone numbers) or problems with calculations and understanding quantities (money, time). Acalculia is not routinely screened for as part of standard brain-injury assessment, but studies suggest a prevalence of between 35%-60%. In this presentation I will present finding of a qualitative study, exploring the experience of acalculia by patients and their carers. Results highlight the urgent need to increase awareness of acalculia amongst patients and professionals involved in post brain-injury care. There is a substantial and presently unmet clinical need to support professionals and patients by developing suitable assessments and interventions for acalculia.