

Using narrative and observation to assess the application of executive function to upper body dressing after stroke

Charlie Chung¹, Tanya Campbell²

¹NHS Fife, Fife, United Kingdom, ²Glasgow Caledonian University, Glasgow, United Kingdom

Introduction: Regaining independence with activities of daily living (ADL) following stroke requires adaptive techniques when patients are unable to regain functional use of an upper limb (Walker et al. 2004). A common task of occupational therapists includes the training of stroke patients to use adaptive techniques for upper body dressing. However, the variability of movements ensures that no two dressing sessions will be identical, and a fixed technique might not always be effective. Thus, for independent upper body dressing, stroke patients are required to self-monitor and problem solve any difficulties which arise during performance. These processes are collectively known as executive function (Evans 2003) and their frequent impairment after stroke restricts adaptation to hemiplegia. Despite the availability of various executive function assessments, none measure executive processes during adaptive ADL. Additionally, traditional observational methods of assessing ADL cannot comprehensively assess executive function due to its internalised nature. Thus, the purpose of this paper is to provide an account of a video-study used to develop a narrative and observational outcome measure designed to assess upper body dressing ability and applied executive function processes.

Objectives: Delegates will be aware of the importance of assessing executive function and will be provided with an account of the video-study narrative and observational data collection.

Method: Three groups of participants were video-recorded putting on a jacket. Groups included those with: 1) new stroke and hemiplegia, 2) the loss of functional use of one upper limb by non-neurological cause, and 3) no physical or cognitive limitation. Participants were instructed to describe verbally, or demonstrate their method of putting on the jacket, before, during and after the task. Executive function data was recorded alongside its application to specific dressing task stage.

Conclusions: Assessment of applied executive function to adaptive ADL is essential to establish effective intervention techniques. The feasibility of the clinical application of a narrative outcome measure is discussed.

Contribution to the Practice of Occupational Therapy: The application of this outcome measure could enhance occupational therapy practice by defining the impact of executive function impairment on adaptive task performance and target executive dysfunction during ADL interventions.