

Dissociations between assessing neglect in the Mobility Assessment Course and pen-and-paper tests



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Abstract

Neglect is a heterogeneous attention deficit, which can manifest in many different forms. It is commonly observed after a stroke. The diagnosis of neglect in clinical practice is mostly based on pen-and-paper tests, which assess visuospatial and peri-personal neglect. However, other forms of neglect, e.g. motor or extra-personal may be missed. This study was aimed at the possibility of double dissociations between neglect as assessed by pen-and-paper tests and assessed by a new test set-up to assess extra-personal neglect in a natural environment; the Mobility Assessment Course (MAC). Additionally, the role of gender, age, and method of moving through a corridor (walking versus in a wheelchair) on the performance of healthy participants on the MAC task was evaluated. Therefore, the MAC and two standard pen-and paper tasks, the Apples test and the Line bisection test were administered to healthy participants (n=32, 16 walking and 16 in a wheelchair) and stroke patients (n=8). Dissociations between the assessment of neglect on the MAC task and on pen-and-paper tests were found. Age influenced MAC performances significantly, but this effect was negligible. No influences were found based on gender or method of moving. Results suggest that the addition of the MAC task to the neglect diagnostics is informative and a useful addition to detailed neglect assessment.