1446

Cognitive strategy application errors impacting on occupational performance in men with HIV Associated Neurocognitive Disorder (HAND)

Judy Ranka, Christine Chapparo
The University of Sdyney, Sydney, New South Wales, Australia

Introduction: One continuing consequence of HIV infection is HIV Associated Neurocognitive Disorder (HAND). Two sub-categories of HAND produce neurocognitive impairments that impact on task performance: Minimal Cognitive Disorder (MND) and HIV Associated Dementia (HAD). Neuropsychological profiles of HAND have been described and laboratory-based assessments of daily life task performance investigated. Little is known about the specific impact of MND and HAD on the performance of meaningful everyday tasks in typical performance contexts. Consequently, occupational therapy programs designed for clients with HAND are typically built on hypothesis rather than objective and ecologically valid data.

Objectives: The objective of this study was to identify and describe the characteristics and patterns of neurocognitive impairment demonstrated by men with HAD as they perform everyday tasks in typical performance contexts using an ecological measurement model.

Methods: Thirty men between the ages of 30-60 who were diagnosed with HAD (n=10 mild, n=10 moderate, n=10 severe) and living in home contexts in the Sydney metropolitan area were recruited. Neurocognitive impairment impacting on task performance was identified using the Perceive, Recall, Plan and Perform (PRPP) System of Task Analysis. Each participant was assessed performing three meaningful, relevant self-selected tasks in situations where tasks would typically be performed. Performances were videotaped when specific consent was given for this to occur and then independently scored by two assessors skilled in administration of the instrument. Rasch analysis methods and traditional statistics were used to examine the data for patterns of strategy application errors.

Results: A hierrarchy of strategy application errors was identified in the total sample and for sub-groups within the sample. All subjects demonstrated difficulties in attenting to salient cues, searching for relevant information, recalling key procedures to be performed, mapping out a plan, programming strategies to carry out, evaluating and making judgements about performance and monitoring motor output. These errors resulted in inaccuracies in performance and increased the time required to complete tasks.

Conclusion: HIV-associated dementia impacts on the real-world performance of everyday tasks. The specific impairments identified are associated with basic and learned attention mechanisms, prospective recall and higher order cognition.

Contribution: The results provide the first ecologically valid evidence of the specific impact of HAD on real-world performance and participation. This evidence is critical to the design of occupational therapy programs for clients with HAD and future outcome research.