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Computerized cognitive rehabilitative training of a traumatic brain injury patient: a seven year followup case study

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Case Report

Most research on computerized cognitive rehabilitation (CCR) for individuals with traumatic brain injury has focused on the process of the intervention and its immediate impact on memory and cognitive functioning (e.g., [1]). Few studies have examined the longterm impact of CCR on an individual's functioning. Even in a study where longer term outcomes were evaluated, the followup periods were six to twelve months and focused primarily on memory functioning [2]. This case study describes the longterm outcome of a middle aged male who had a traumatic brain injury as a result of hypoxia secondary to a heart attack. The patient had received CCR daily during the period of inpatient hospitalization. The CCR consisted of the PSSCogRehab program [3], which incorporates rehearsal, compensation, and strategies in various activities of daily living including in vivo trips to the grocery store and route finding [4]. After discharge from the inpatient unit, the patient self-administered the CCR protocol twice daily with supervised administration weekly and individual and couples psychotherapy twice a week. Over a period of two years, this was tapered to one psychotherapy session per week during which a few minutes were allotted to go over his progress on the CCR program and make adjustments, as necessary. A qualitative methodology utilizing written questionnaires and followup interviews was used to collect information in the areas of executive, interpersonal, and social functioning. This outcome study documents the return of functioning in cognitive abilities of an individual seven years post-injury. Executive, interpersonal, and social skills are also discussed.

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