

Critical Review:
The efficacy of cognitive rehabilitation approaches for recovery of memory impairments following stroke

Coulas, V.
M.Cl.Sc. (SLP) Candidate
School of Communication Sciences and Disorders, U.W.O.

This critical review examines whether cognitive rehabilitation (i.e. retraining and compensatory strategies) improves memory impairment in stroke patients. Study designs include: randomized controlled trial (2), case study (1) and systematic review (1). As a general conclusion, there is inconclusive evidence to support or refute the overall effectiveness of cognitive rehabilitation within this population. Whether clinicians should aim to reduce impairment or to compensate for the impairment is a question that remains largely unresolved. Recommendations for clinical speech-language pathologists, as well as for future research are provided in this review.

Introduction

Stroke is defined as a sudden loss of brain function that is caused by the interruption of blood flow to the brain or the rupture of blood vessels in the brain (Brookshire, 2003). Interestingly, there are approximately 9 million stroke survivors worldwide, and it is estimated that 43.9% of these patients suffer from cognitive impairment (Lawrence, Coshall, Dundas, Stewart, Rudd, Howard, & Wolfe, 2001).

The concept of cognitive impairment involves a vast array of difficulties, including memory, attention,

with experimenter blinding considerations would have increased the internal validity of this study.

The statistical analyses that were performed in this study are also debatable. The authors used an ANOVA to compare each group separately with the control group. Instead, an analysis that included all three groups for identifying a potential interaction effect (e.g. 3X2 mixed ANOVA) would have yielded more reliable

