

Categories: Concussion/Mild TBI (Adult)

Keyword 1: concussion/ mild traumatic brain injury

Keyword 2: executive functions

Correspondence: Carolyn M. Parsey, PhD, University of Washington School of Medicine, Department of Neurology, cmparsey@uw.edu

44 The Link Between Loss of Consciousness, Working Memory, and Depressive Symptoms in Adult Concussion Patients.

Catherine N Hewatt^{1,2}, Lauren Bennett¹

¹Hoag Hospital, Newport Beach, Ca, USA.

²Alliant International University, Alhambra, Ca, USA

Objective: Individuals who have experienced a mild traumatic brain injury, or concussion, often experience a variety of cognitive and emotional sequelae. Specifically, concussions can place individuals at increased risk for experiencing symptoms of depression. It is important to understand if loss of consciousness (LOC) is related to higher rates of depression in order to improve care and cognitive functioning by appropriately monitoring for mood-related symptoms post-concussion. The current study sought to examine the relationship between depressive symptoms (measured using the PHQ-9), working memory (WM; measured using RBANS Digit Span subtest), and presence of LOC in individuals who have sustained a head injury. The relationships between presence of LOC, depressive symptoms, and WM performance were examined, as it was expected LOC would result in greater depressive symptoms and negatively impact WM performance. Finally, the relationship between depressive symptoms and WM performance, while controlling for LOC, was also assessed.

Participants and Methods: Data was drawn from archival medical records of 40 patients who underwent brief neuropsychological screening in an outpatient, community clinic after being referred following a head injury. Patients ranged in ages from 14 to 75, with a mean age of 39.1. The average years of education amongst patients was 14.62. Twenty-five (62%) of the patients were women. Ten individuals endorsed LOC secondary to their head injury.

Results: The average PHQ-9 score was 9.68 (SD=7.69). LOC did not impact reported depressive symptoms ($p > .05$). The correlation between LOC and WM performance was also nonsignificant ($p > .05$). While it was predicted there would be an inverse relationship between PHQ-9 scores and WM performance, there was no statistical significance ($p > .05$). Similarly, there was no significant relationship between PHQ-9 and WM performance when controlling for LOC ($p > .05$).

Conclusions: While the relationships between LOC, depressive symptoms, and WM performance were found to be nonsignificant, understanding the course and best supports of cognitive and emotional sequelae of head injuries is of paramount importance. Future research exploring these relationships with larger, diverse populations would likely prove beneficial.

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Correspondence: Catherine Hewatt, Hoag Hospital, catherine.hewatt@hoag.org

45 Providing a Definition of Head Injuries Increases Reported Trauma in Women Between 30 and 50

Chris Fifty¹, Ben Ehret¹, Katie Haeffner¹, Daniel Seichepine²

¹University of New Hampshire, Manchester, New Hampshire, USA. ²University of New Hampshire, Manchester, NH, USA

Objective: Utilization of an objective measure to evaluate history of head trauma has been demonstrated to have a significant effect on the amount of sustained trauma reported by the individual, in athletic male populations. The ability to generalize this definition across a more diverse population remains an opportunity; a report from the World Health Organization recognized that 93% of current research on mild traumatic brain injuries omitted gender specific data. Further, relative to reports in young adults, research on the effects of concussions in midlife remain sparse. Researchers hypothesized that women between the ages of 30 and 50 from a