

Categories: Concussion/Mild TBI (Adult)

Keyword 1: traumatic brain injury

Keyword 2: neuropsychological assessment

Keyword 3: visuoconstruction

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18 Nightmares Independently Predict Neurobehavioral Symptoms in Adults with mTBI

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Objective: To investigate the informative value of nightmares on neurobehavioral functioning in individuals with mild traumatic brain injury (mTBI) beyond general sleep disturbance.

Participants and Methods: A sample of 146 adults with mTBI (mean age = 45.1±16.0), recruited from a specialized concussion treatment center, underwent an assessment of neurobehavioral functioning using the Behavioral Assessment Screening Tool (BAST), self-reported habitual sleep disturbance and quality (via the Pittsburgh Sleep Quality Index; PSQI), and reported nightmare frequency in the past two weeks.

Results: Nightmare frequency was the strongest predictor of negative affect ($\beta = .362$, $p < .001$), anxiety ($\beta = .332$, $p < .001$), and impulsivity ($\beta = .270$, $p < .001$) after controlling for sex and age. Sleep disturbance accounted for the greatest variance in depression ($\beta = .493$, $p < .001$), burden from concussion ($\beta = .477$, $p < .001$), and fatigue ($\beta = .449$, $p < .001$) after controlling for sex and age.

Conclusions: Nightmares independently associate with neurobehavioral symptoms and likely have differential etiology from reported sleep disturbance. Nightmare frequency was more strongly related to positive neurobehavioral symptoms (i.e., added factors that impact functioning, e.g., anxiety), while general sleep disturbance was associated with negative neurobehavioral symptoms (i.e., factors taken away that impact functioning, e.g., lack of energy). Our findings suggest that neuropsychological evaluations of individuals

with mTBI should assess for sleep disturbance and nightmare frequency as risk factors for neurobehavioral barriers to functioning.

Categories: Concussion/Mild TBI (Adult)

Keyword 1: sleep disorders

Keyword 2: brain injury

Keyword 3: concussion/ mild traumatic brain injury

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19 Consistency of self-reported sport-related concussion history

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Objective: An accurate accounting of prior sport-related concussion (SRC) is critical to optimizing the clinical care of athletes with SRC. Yet, obtaining such a history via medical records or lifetime monitoring is often not feasible necessitating the use of self-report histories. The primary objective of the current project is to determine the degree to which athletes consistently report their SRC history on serial assessments throughout their collegiate athletic career.

Participants and Methods: Data were obtained from the NCAA-DoD CARE Consortium and included 1621 athletes (914 male) from a single Division 1 university who participated in athletics during the 2014-2017 academic years. From this initial cohort, 752 athletes completed a second-year assessment and 332 completed a third-year assessment. Yearly assessments included a brief self-report survey that queried SRC history of the previous year. Consistency of self-reported SRC history was defined as reporting the same number of SRC on subsequent yearly