

research is necessary to replicate and extend this study in larger samples. Moreover, future work should incorporate neuroimaging variables to better interrogate structural and functional correlates of these observed genetic polymorphism associations in Veterans with mTBI histories.

Categories: Concussion/Mild TBI (Adult)

Keyword 1: concussion/ mild traumatic brain injury

Keyword 2: cognitive functioning

Keyword 3: genetics

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41 Predictors of Cognitive Symptoms Following Adult Civilian Mild Traumatic Brain Injury

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Objective: Mild traumatic brain injury (mTBI) is an important public health problem, due to its high incidence and the failure of at least 20% of patients to successfully recover from injury. Cognitive symptoms, in particular, are an important area of research in mTBI, due to their association with return to work and referral to neuropsychological services. Understanding the predictors of cognitive symptoms may help to improve outcomes after mTBI. This study explored female sex, psychological distress, coping style and illness perceptions as potential predictors of cognitive symptoms following adult civilian mTBI.

Participants and Methods: Sixty-nine pre-morbidly healthy adults with mTBI (mean age = 36.7, SD = 14.7, range = 18-60; 15 females) were recruited from trauma wards at two public hospitals in Australia and assessed 6-12 weeks following injury. Cognitive complaint was measured using a comprehensive 30-item scale (CCAMCHI) assessing mTBI-specific symptoms in the domains of processing speed, attention, memory and executive function. Participants

additionally completed the following measures: Brief-COPE, Illness Perceptions Questionnaire-Revised, Inventory of Depressive Symptomatology, Beck Anxiety Inventory, and PTSD Checklist for DSM-5. The latter three measures were combined to create an index of psychological distress.

Results: Bivariate nonparametric correlational analyses indicated that female sex ($r[67] = .26$, 95% CI [.14, .55], $p = .03$) and psychological distress ($r[66] = .54$, 95% CI [.40, .72], $p < .001$) were each significantly associated with cognitive symptom reporting following mTBI. Additionally, while none of the three coping style factors were associated with cognitive symptom reporting, seven of the eight dimensions of illness perceptions were associated with symptom reporting ($|r| = .25 - .58$, $p < 0.05$). In a linear regression model assessing the combined effects of each variable, female sex, greater psychological distress, and overall negative illness perceptions were each significant independent predictors of increased cognitive complaint (adj. $R^2 = .47$, $F[4,63] = 15.59$, $p < .001$).

Conclusions: These findings implicate female sex, psychological distress, and illness perceptions as key factors associated with cognitive symptom reporting after mTBI. This research suggests that these factors may be useful in clinical practice when considering early identification of individuals at risk of poor recovery. Specifically, this research implicates females, individuals with high psychological distress, and individuals with negative illness perceptions as important to subgroups to consider for potential intervention after mTBI. Additionally, as psychological distress and illness perceptions are both potentially modifiable, this research suggests that these factors may be useful targets for intervention.

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Keyword 1: concussion/ mild traumatic brain injury

Keyword 2: self-report

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42 Associations Between Mild Traumatic Brain Injury, Executive Function, and