

“Its not only the injury but also the kind of head that matters”: Factors predicting cognitive and psychosocial outcome following traumatic brain injury

Traumatic brain injury (TBI) results in a significant and lasting changes in physical, cognitive, behavioural and emotional functions that impede return to functional independence, work, study, social and leisure activities and relationships. This can lead to long-term social isolation and mental health problems. There is however considerable variability in outcomes and in recent years attention has turned to identifying factors associated with outcome following TBI. A recent study examined the association of resilience alongside demographic, injury-related, cognitive, emotional and family factors with participation in 245 individuals with mild-severe TBI (Mean age 44.41 years, mean PTA 24.95 days). They completed the Participation Assessment with Recombined Tools-Objective (PART-O-17), Traumatic Brain Injury Quality of Life Resilience scale, Family Assessment Device General Functioning Scale, Rey Auditory Verbal Learning Test, National Adult Reading Test, and Hospital Anxiety and Depression Scale an average 4.63 years post-injury. Multiple regression analyses revealed that higher participation was associated with shorter PTA duration and more years since injury, but also with higher education and IQ, younger age and greater resilience. Mediation analyses revealed HADs depression mediated the relationship between resilience and participation, suggesting that individuals with poor resilience are more likely to develop depression which in turn is associated with poorer participation and psychosocial adjustment. A second study has examined cognitive recovery and identified that whilst PTA duration, age and IQ all determine the initial degree of cognitive impairment, the degree of *recovery* of cognitive function over time is associated with IQ and to a lesser extent age, but not with injury severity. This funding has highlighted the significance of cognitive reserve for recovery of cognitive function following TBI. Finally, we have found that individuals from a Culturally and Linguistically Diverse (CALD) background report being less functionally independent and more emotionally distressed than Australians matched on demographic and injury severity variables, and that cultural background is also a very significant predictor of outcome. These findings support the development of specialised interventions focused on understanding the person who sustained the injury including their cultural beliefs in response to injury, and promoting resilience, as a means of improving psychosocial outcomes following TBI.