

Post Traumatic Growth and Rehabilitation Outcomes in Traumatic Brain Injury



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Background

- Post traumatic growth (PTG) is defined as “positive psychological change resulting from the struggle to overcome highly challenging life circumstances” (Tedeschi & Calhoun, 2004).
- PTG is associated with well-being and has been demonstrated in persons with traumatic brain injury. Given limited research, the relationship between PTG and TBI rehabilitation outcomes is unclear.
- The current study was informed by Tedeschi and Calhoun's PTG model (1996), and the Y-Shaped Model of Change in Rehabilitation.
- Study aims included:
 1. Examine the relationship between self-reported PTG and rehabilitation outcomes (MPAI-4);
 2. Investigate cognitive coping, impaired self-awareness (ISA), and mindfulness as possible predictors of PTG;
 3. Examine time since injury as a potential moderator of the relationship between cognitive coping and PTG.

Method

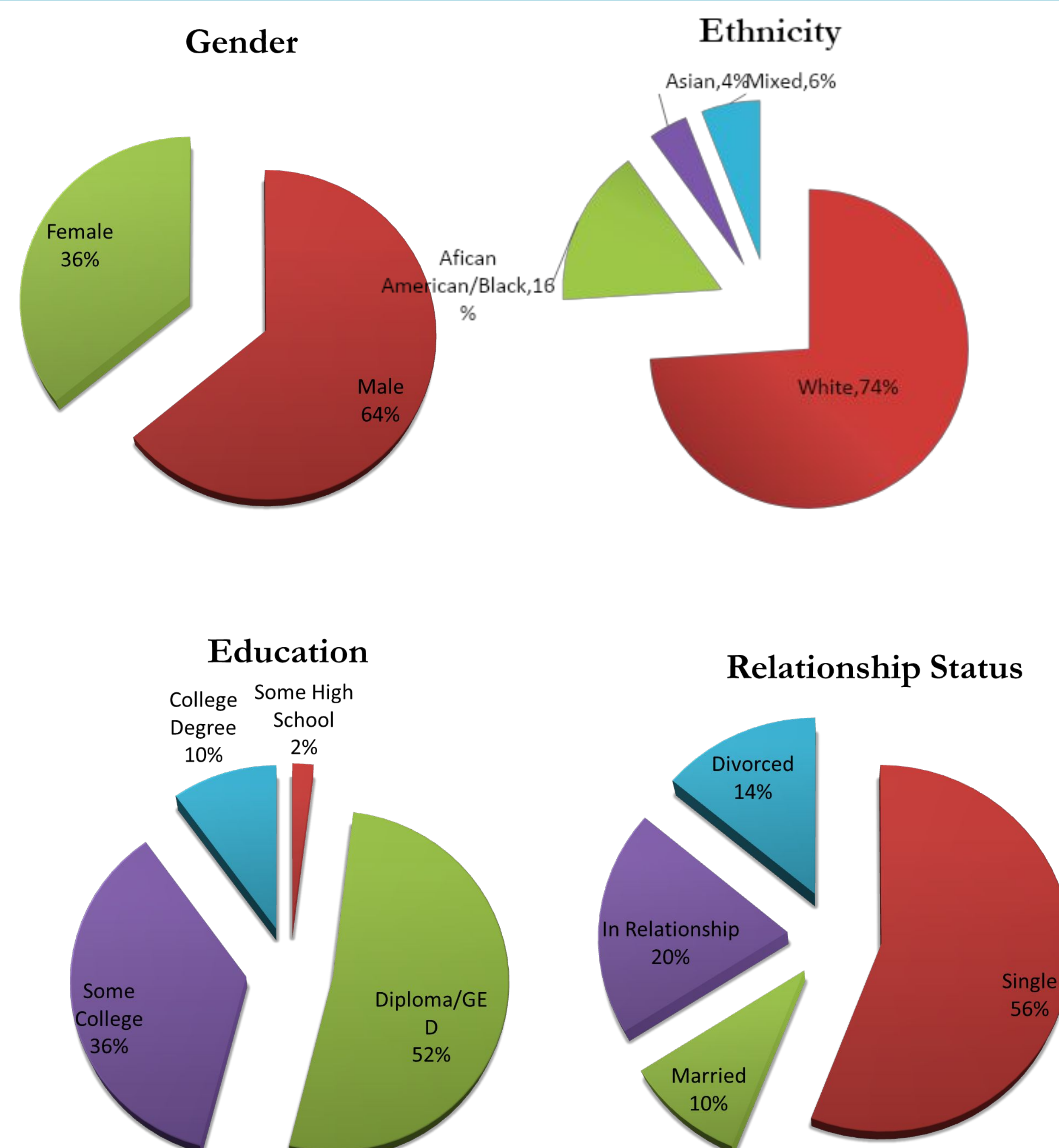
Cross-sectional data was collected at Bancroft Brain Injury Services, a post-acute, community based, day-treatment brain rehabilitation program. Data included:

1. Descriptive variables (e.g., executive functioning, injury type)
2. Post-Traumatic Growth Inventory
3. Cognitive Processing of Trauma Scale
4. Awareness Questionnaire
5. Philadelphia Mindfulness Scale
6. The Mayo-Portland Adaptability Inventory, completed by professional consensus, assessed rehabilitation outcomes.

Participants

Fifty adults with moderate-to-severe TBI, who were receiving rehabilitation services from Bancroft for at least six months; and were oriented to time, place and year, were included. Persons who were actively psychotic or currently involved in a lawsuit were excluded.

Demographics



Results Continued

PTGI Total score was significantly associated with the MPAI Adjustment Index ($Y = -0.10, X = 28.27, SEb = 3.26, p = 0.03, R^2 = 0.09$).

CPTS Positive Cognitive Restructuring was significantly related to PTGI Total ($Y = 6.31, X = 40.65, SEb = 7.86, p < .01, R^2 = 0.23$) Time Since Injury did not moderate this relationship.

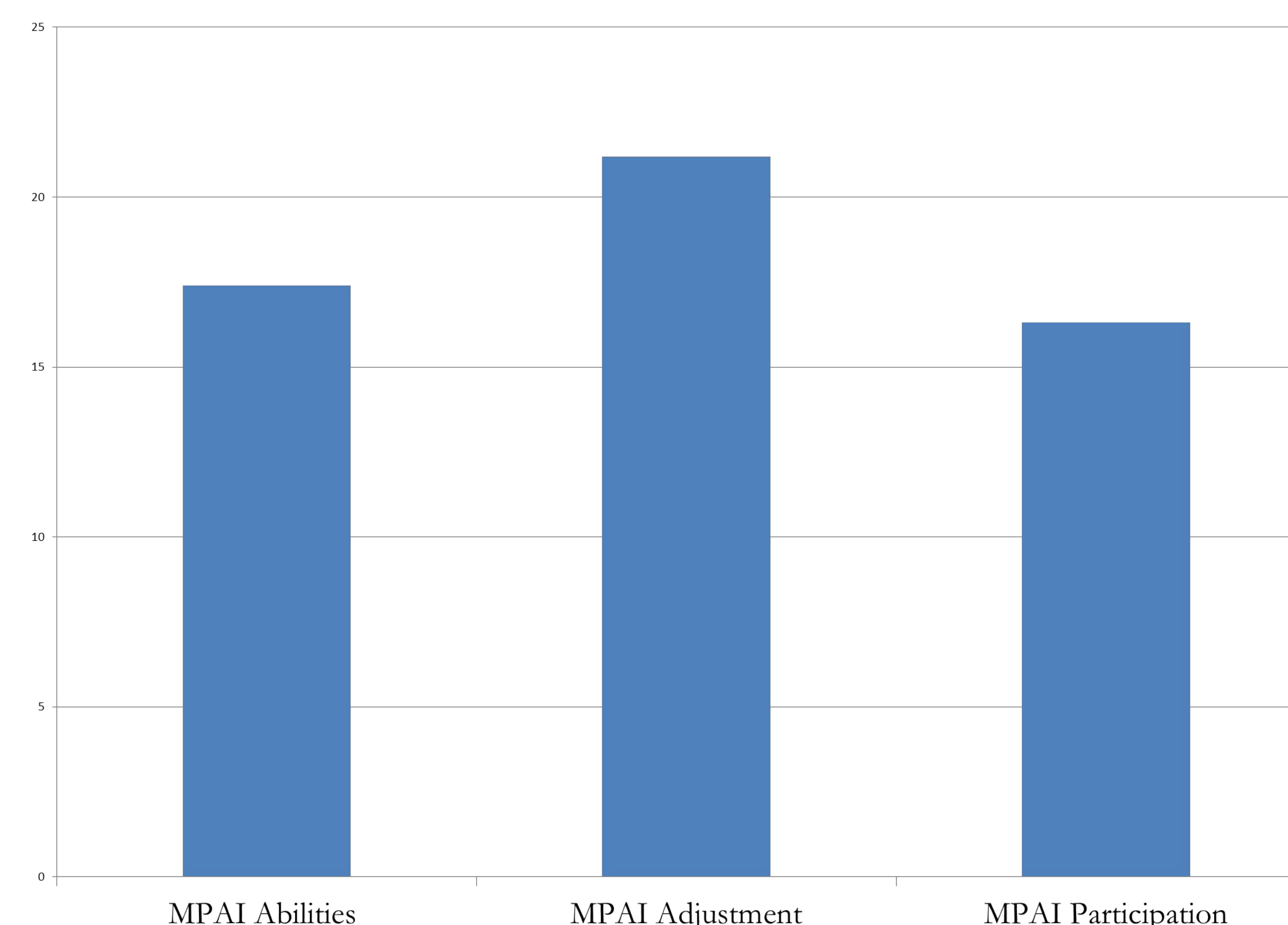
ISA was significantly associated with PTGI Total ($Y = -0.67, X = 60.35, SEb = 3.53, p < .01, R^2 = 0.19$).

PHLMS Experiential Awareness and Acceptance were significantly related to PTGI Total ($Y = -0.67, X = 60.35, SEb = 3.53, p < .01, R^2 = 0.19$).



Results

MPAI Means



Conclusion

Psychological well-being (which includes adjustment) is among the 12 central rehabilitation outcomes identified by the TBI Outcomes Workgroup (Wilde et al., 2010).

We found that PTG may indicate (or predict) adjustment to rehabilitation or disability in a TBI rehabilitation setting. Due to non-significant results with MPAI-4 total score, the Adjustment Index of the MPAI-4 may be a more appropriate tool in examining PTG in rehabilitation populations.

Impaired self-awareness was also positively related to PTG, indicating that PTG may be a by-product of ISA rather than a veridical process.

Mindfulness and cognitive coping (positive restructuring) were associated with PTG. These variables may be valuable assessment and treatment targets in TBI rehabilitation.

