

aneurysm, or tumor resection surgery. Eligibility criteria included participants' admission into a RF program, a vocational goal, and a diagnosis of a moderate to severe TBI or other ABI. Lastly, key sociodemographic features included age, race, ethnicity, education, and sex.

Results: Significant differences were found between ethnic groups (white non-Hispanics and minority group) in terms of years of education ($p < .01$). White non-Hispanics had higher education ($M = 13.39$, $SD = 2.23$), reported significantly more rural addresses (40.2%, $p < .01$), and had private insurance coverage more frequently than the minority group (33.7%, $p < .01$). The full model was statistically significant, $R^2 = .077$, $F(4, 450) = 9.387$, $p < .0001$; adjusted $R^2 = .069$. The addition of ethnicity led to a statistically significant increase in R^2 of .019, $F(1, 450) = 9.025$, $p < .0005$.

Conclusions: Ethnicity was found to be a predictive factor for greater unmet needs even after controlling for insurance, employment status, and urbanicity. It is currently unknown RF's success rate in providing culturally competent services to different racial/ethnic groups, which consider factors such as primary language spoken, immigration status, and additional ethnocultural factors that could deter accurate reporting of unmet needs by minoritized groups. Future studies should investigate barriers in referring and meeting eligibility for this program and analyze post-treatment data to determine if the impact of racial, geographic, and insurance disparities is mitigated with RF treatment.

Categories: Acquired Brain Injury (TBI/Cerebrovascular Injury & Disease - Adult)

Keyword 1: brain injury

Keyword 2: traumatic brain injury

Keyword 3: diversity

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16 Set-Shifting as a Predictor of Adaptive Functioning in Individuals with Acquired Brain Injury

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Objective: Cognitive flexibility, typically measured using neuropsychological tasks of set-shifting, has been associated with mental and physical health, social relationships, resilience, and overall quality of life (Diamond, 2013; Chen et al., 2014; Davis et al., 2010; de Abreu et al., 2014; Genet et al., 2011). Previous research has found conflicting results regarding the relationship between set-shifting and various measures of functional outcomes in individuals with traumatic brain injury (Allanson et al., 2017). The present study examined the relationship between cognitive flexibility and adaptive functioning in individuals with acquired brain injuries (ABI).

Participants and Methods: Participants in this research are adults ($n = 116$) with severe, chronic ABI who completed a neuropsychological evaluation through Bancroft Neurorehab between 2012-2022. Participants ranged in age from 20.4 - 67.8 years ($M = 45.8$). Individuals included in data analysis completed Trails A and B, Wide Range Achievement Test, Fourth Edition (WRAT-4) Word Reading, and Texas Functional Living Scale (TFLS). Set-shifting ability was measured using Trails B and adaptive functioning was measured using the TFLS. Word reading ability, measured using the WRAT-4, was included as a covariate to account for the impact of word reading difficulties on Trails B performance.

Results: A simple linear regression was conducted to examine if Trails B T-score ($M = 24.7$) and WRAT-4 Word Reading Standard Score ($M = 87.8$) predicted TFLS Total T-score ($M = 35.8$). The overall regression model was statistically significant ($R^2 = .351$, $F(2, 113) = 32.0$, $p < .001$). It was found that lower performances on Trails B ($\beta = .272$, $p < .001$) and WRAT-4 Word Reading ($\beta = .189$, $p < .001$) both significantly predicted a lower TFLS Total T-score.

Conclusions: Set-shifting and word reading ability significantly predicted the overall adaptive functioning score on the TFLS which adds to a body of literature that suggests that the ability to think and behave flexibly affects functional aspects of everyday living. These findings are consistent with previous literature regarding the association between cognitive flexibility and adaptive functioning in the general population, and these results add to the growing body of research on cognitive flexibility in individuals with brain injury. Clinicians may use an individual's set-shifting performance to estimate and further assess potential difficulties in

completing activities of daily living. This information may assist in subsequent treatment planning and identifying treatment goals of cognitive rehabilitation consistent with rehabilitation psychology's goals of increasing levels of adaptive functioning and quality of life (Division 22 of the American Psychological Association, n.d.). Future research may examine if certain domains of adaptive functioning are more or less affected by impairments in cognitive flexibility. Future research may also examine patterns of set-shifting performance, such as sequencing errors vs. set-loss errors, associated with specific areas of insult.

Categories: Acquired Brain Injury (TBI/Cerebrovascular Injury & Disease - Adult)

Keyword 1: brain injury

Keyword 2: adaptive functioning

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17 Value-Consistent Rehabilitation is Related to Long-Term Quality of Life and Psychological Adjustment After Traumatic Brain Injury

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Objective: Modern perspectives of rehabilitation after traumatic brain injury (TBI) emphasize the importance of individualized holistic approaches (i.e., physical and psychological adjustment) and collaboration toward goals (e.g., among the survivor, rehabilitation professionals, family/friends, etc.). Recent research has sought to employ a holistic, value-based approach (via the Valued Living Questionnaire) to measuring goals and whether those with TBI are acting in accordance with them, and quality of life outcomes. However, no research has examined whether rehabilitation practices are consistent with survivor values using this framework. The aim of the current study was to investigate the impact of value-consistent rehabilitation practices on quality of life and psychological adjustment outcomes in those with TBI.

Participants and Methods: The current study included a sample of 73 adults with a history of TBI (M years since injury = 7.6, SD = 9.7) between the ages of 18 and 72 (Mage = 44.0

years, SD = 13.1; 73% female, 90.4% white) who had participated in outpatient rehabilitation. Individuals were recruited from brain injury support groups on Facebook and completed a series of surveys measuring TBI severity [Ohio State University Traumatic Brain Injury Identification Method-Short Form (OSU-TBI-ID)], value-consistent rehabilitation practices [modified Valued Living Questionnaire (VLQ)], life satisfaction [Life Satisfaction Questionnaire-9 (LiSat-9)], and psychological flexibility [Acceptance & Action Questionnaire – Acquired Brain Injury (AAQ-ABI)]. Discrepancy scores were calculated to compare perceived importance of and how helpful rehabilitation was for each VLQ domain. Bivariate Pearson correlations were conducted to investigate the relationships between value-consistent rehabilitation, life satisfaction, and psychological flexibility.

Results: The VLQ domains with the greatest discrepancies were spirituality (-2.26), marriage/intimate relations (-2.06), and family relations (-2.02) such that rehabilitation helped less in these domains despite their importance. Greater levels of value-consistent rehabilitation were related to higher levels of life satisfaction overall ($r = 0.40$, $p < 0.001$) and lower levels of reactive avoidance of emotions related to one's brain injury ($r = -0.26$, $p = 0.03$). In terms of specific domains of life satisfaction, greater value-consistent rehabilitation was related to higher levels of vocational ($r = 0.44$, $p < .001$), physical self-care ($r = 0.28$, $p = 0.018$), and friendship satisfaction ($r = 0.41$, $p < .001$).

Conclusions: Our findings suggest rehabilitation practices may not be acting proportionately with TBI survivor values. Moreover, our results suggest value-consistent rehabilitation is important for long term quality of life and psychological adjustment outcomes. Future work should seek to identify factors that optimize opportunity for individualized treatment.

Categories: Acquired Brain Injury (TBI/Cerebrovascular Injury & Disease - Adult)

Keyword 1: brain injury

Keyword 2: quality of life

Keyword 3: activities of daily living

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18 Vascular Risk, Cerebral White Matter, and Executive Functioning in Vietnam-