14% performed $z \leq -2$ exhibiting major impairment in ≥1 cognitive domain. OHCA survivors performed significantly worse than MI controls in episodic memory (mean difference, *MD* = -0.37, 95% confidence intervals [-0.61, -0.12]), verbal (*MD* = -0.34 [-0.62, -0.07]), and visual/constructive functions (*MD* = -0.26 [-0.47, -0.04]) on linear regressions adjusted for educational attainment and sex. When additionally adjusting for anxiety, depression, fatigue, insomnia, hypertension, and diabetes, processing speed (*MD* = -0.41 [-0.74, -0.09]) and executive functions (*MD* = -0.69 [-1.13, -0.24]) were also worse following OHCA. Depressive symptoms were associated with worse executive functions (r_s = -0.37, p <0.001) and worse processing speed (r_s = -0.27, p = 0.01) post-OHCA. Anxiety symptoms (r_s = -0.21, p = 0.01) and general fatigue (r_s = -0.24, p = 0.01) were associated with worse executive functions. Diabetes was associated with worse processing speed (r_s = -0.20, p = 0.03), visual/constructive (r_s = -0.29, p <0.001) and executive functions (r_s = -0.25, p = 0.02), while hypertension and insomnia were not significantly associated with neuropsychological test performance.
Conclusions: Cognitive impairment is generally mild following OHCA, but most pronounced in episodic memory, executive functions, and processing speed. OHCA survivors performed worse than MI controls. We suggest that a post-OHCA follow-up service should screen for cognitive impairment, emotional problems, and fatigue.

Categories: Anoxia/Hypoxia
Keyword 1: hypoxia
Keyword 2: cardiovascular disease
Keyword 3: neuropsychological assessment
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2 The Role of Flexibility in Learning in Autistic Teens

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Objective: Autistic youth have impaired executive functioning (EF) and these challenges increase throughout adolescence. Deficits in EF have been associated with poor adult outcomes, decreased availability for learning, and linked to academic outcomes. Specifically, flexible problem solving is greatly reduced in autistic youth. We aim to investigate how flexibility contributes to learning in autistic youth and their typically developing peers.
Participants and Methods: Participants included 44 teens with (n=22) and without (n=22) ASD. All teens were 14-18 years old (ASD M = 15.77, SD = 1.05; TD M = 15.73, SD = .96) with FSIQ ³ 70 (ASD M = 105.92, SD= 16.17; TD M = 107.93, SD = 10.14). Teens with ASD met DSM-5 criteria for autism supported by the SCQ and/or ADOS-2. All participants completed the California Verbal Learning Task (Child or Third Edition) over zoom. Parents reported on their child's flexibility skills on the Flexibility Questionnaire (FQ) which encompasses 5 subscales: routines/rituals, transitions, special interests, social flexibility, and generativity. Independent samples t-tests examined group differences in performance on the CVLT, measured by the long delay recall and learning slope. Bivariate correlations examined the relationship between learning and flexibility in the autistic group. Linear regression was used to determine how flexibility contributes to learning above and beyond age, gender, and diagnosis.
Results: Autistic youth had significantly lower scores on the CVLT long-delay recall (t = 2.311, p = .026) and the learning slope (t = 1.186, p = .038) than their typically developing peers. Special interests on the FQ were related to both performance on the first trial of the CVLT (r = -.482 p = .023) and the short delay cued recall (r = -.469 p = .028) in the autistic group. Fewer transition related problems were predictive of higher scores on the CVLT above and beyond age, gender, and diagnosis (R2 = .366, B = -.088, p = .030).
Conclusions: Learning was significantly lower in autistic teens compared to their typically developing peers. Additionally, autistic youth had a less steep learning slope than their typically developing peers. Autistic youth may focus on the first group of words only and don't flexibly update their list to add new words as the

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trials go on. Autistic youth with more restricted interests have difficulty with the first trial due to the shifting required when starting a new unfamiliar task. Additionally, youth with a greater focus on their own interests had more difficulty on cued recall indicating that these youth may have had trouble shifting when prompted to use semantic categories. Fewer challenges with transitions were a significant predictor of learning above and beyond age, gender, and diagnosis. Previous research has shown large discrepancies between parent-report and laboratory-based tasks in autistic youth. This project highlights two unique measures of different modalities that show similarities in their ratings emphasizing their potential as good representations of overall skills. Future research should utilize a larger sample size to continue to examine the role of flexible problem solving in working memory and learning in autistic youth.

Categories: Autism Spectrum Disorders/Developmental Disorders/Intellectual Disability
Keyword 1: autism spectrum disorder
Keyword 2: learning
Keyword 3: executive functions
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3 Exploring the Relationship Between Cognition, Adherence, and Engagement in Compensatory Strategy Training in Mild Cognitive Impairment

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Objective: Compensatory strategy training has been identified as a useful mechanism to improve everyday cognitive function among older adults with Mild Cognitive Impairment (MCI). Despite this, few studies have looked at cognitive factors that support adherence and engagement in these programs, which are key to maximizing benefit. The present study aimed to evaluate the relationship between cognition, adherence, and engagement during a group-based compensatory strategy training for people with MCI. We hypothesized individuals with better memory and executive function performance would show better adherence and higher engagement scores in cognitive training classes.
Participants and Methods: Twenty-five participants enrolled in Emory University's Charles and Harriet Schaffer Cognitive Empowerment Program (CEP) completed an 11-week compensatory strategy training group (CEP-CT). CEP-CT is adapted from Ecologically Oriented Neurorehabilitation to be suitable for people with MCI. Participants enrolled were on average 74.3 years old (SD= 5.4), 52% Male, primarily Caucasian (80%; 16% African American), and college educated (M= 16.5 years; SD= 2.7). All participants received clinical diagnoses of MCI prior to enrollment in the program. Participants completed multiple cognitive measures, including Montreal Cognitive Assessment (MoCA), Hopkins Verbal Learning Test (HVLT), Trail Making Test A & B (TMT), Number Span Forward (NSF) and verbal fluency (S-words and Animals). For all group sessions, class attendance (present vs. not present) was recorded for each participant and their care partner, and engagement ratings for participants were recorded by the facilitator on a 1 to 5 scale (higher scores indicate better engagement). Outcomes include adherence to cognitive training (percentage of sessions attended; M= 82% class attendance, SD= 18%) as well as the average engagement ratings across 11 weeks (M= 3.25, SD= .40).
Results: Bivariate Pearson correlations revealed that individuals who attended more classes also demonstrated better engagement in class, r= .44, p= .03. Class attendance was significantly related to performance on measures of memory and executive function (HVLT: r= -.42, p= .04; TMT-B: r= .69, p= .04), such that participants who performed worse on these measures attended more CEP-CT classes. Average engagement ratings were unrelated to cognitive performance.
Conclusions: Results did not support initial hypotheses, and instead indicate individuals with poorer performance on measures of memory and executive function had better adherence to CEP-CT classes, as measured by attendance. These results may indicate individuals experiencing cognitive difficulties are more likely to attend cognitive training classes. Subjective engagement ratings were unrelated to cognition; however, individuals who attended more sessions were more engaged in cognitive

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