

CRI, and GEC, or BRIEF Adult Version BRI, Metacognitive Index, and GEC.

**Conclusions:** Bilingual status is associated with stronger auditory and visual working memory among people with ADHD, but not with stronger inhibitory control, switching, planning, or problem solving skills. At the same time, there were no significant differences between monolingual and bilingual ADHD patients on BRIEF parent- or self-rated behavioral or cognitive dysregulation. Our results suggest that bilingualism may confer an advantage in some aspects of executive function among a population with weak attention and executive function skills more broadly. Furthermore, we did not find any type of disadvantage for those who are bilingual. Future studies should examine whether lower parental ratings of emotion dysregulation among ADHD patients who are bilingual are due to bilingual children's better ability to adapt to different situations or cultural differences in parenting practices.

**Categories:** ADHD/Attentional Functions

**Keyword 1:** attention deficit hyperactivity disorder

**Keyword 2:** bilingualism/multilingualism

**Keyword 3:** executive functions

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### 31 Outcomes of an ACT-Based Group Protocol on Neuropsychological Late Effects in Survivors of Childhood Cancer

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**Objective:** Attention of the research community on childhood cancer has grown exponentially over the last 5 decades (Robinson & Hudson, 2014). With research attention growing rapidly, cure rates have increased just as dramatically, with survivorship well over 80% (Ward, et al., 2014). With survivorship on the rise, research has turned to the examination of late effects in survivors of childhood cancer, especially neuropsychological late effects (Krull, et al., 2018). Late effects, functional impairment, and

the awareness of one's own impairment can create several lasting issues in a survivor's life (Oeffinger, et al., 2010). The objective of this study is to explore the feasibility and functionality of a group intervention for this population.

**Participants and Methods:** Participants were recruited from a pediatric cancer institute in southern California. To be considered for inclusion, participants must have completed curative treatment for childhood cancer, not be currently undergoing treatment for childhood cancer, be free of any severe and persistent mental illnesses, and have access to a stable internet connection (for Zoom sessions). This study examined the impact of an Acceptance and Commitment Therapy (ACT)-based group intervention protocol on survivors of childhood cancer. Specifically, this study explored a strategy to identify early neuropsychological late effects and a strategy to improve these impacts. The group intervention was conducted via Zoom (www.zoom.us) which provided an opportunity to continue to provide this service in the wake of COVID-19. Data was collected at baseline and at the completion of the group intervention. This data focused on the functional and perceived impacts of neuropsychological sequelae in these participants, as well as the changes as related to the group intervention.

**Results:** Data did not show any significant changes from baseline to follow-up in this population. The lack of significance was likely due to a severely truncated sample size. Despite the lack of significant findings, data appears to trend negatively. Although these findings do not provide conclusive evidence for this ACT-based group as an intervention for neuropsychological late effects in survivors of childhood cancer, the data suggested some interesting trends which will be explored further in this presentation.

**Conclusions:** The results of this study help to further explore the importance of attention to neuropsychological symptoms and issues in survivors of childhood cancer, especially within the first few years following the completion of treatment. As survivorship continues to increase, it will be of utmost importance to continue to examine the impact of neuropsychological late effects and how the field of neuropsychology can best serve this population. This study was severely limited by a small sample size, a single clinician providing the protocol, and a truncated timeline. Further research will examine the impact of this study protocol in a larger sample size, which will likely increase the ability to reject

the null hypothesis. In addition, future research must also be conducted to better explore strategies of early and consistent neuropsychological intervention in this population.

**Categories:** ADHD/Attentional Functions

**Keyword 1:** cancer

**Keyword 2:** teleneuropsychology

**Keyword 3:** assessment

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### 32 Associations between Childhood Attention Deficit Hyperactivity Disorder and Learning Disabilities and Cognition in Late Adulthood.

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**Objective:** There has been relatively little research on the effect of childhood attention difficulties/weaknesses and learning disabilities/differences on cognitive aging. This study examined associations between self-reported symptoms and diagnoses/concerns of childhood attention deficit hyperactivity disorder (ADHD) and reading or math learning disabilities (LD) and cognitive abilities in older adulthood. We hypothesized that cognitive weaknesses in childhood would be associated with cognitive abilities later in life.

**Participants and Methods:** The 25 individuals with healthy cognition or MCI were recruited from the greater Philadelphia area (M<sub>age</sub>= 74.4; SD= 5.34; 40% men; 84%white) and completed a self-report questionnaire of childhood ADHD and LD. Specifically, participants rated their experience of ADHD symptoms of inattention and hyperactivity/impulsivity and indicated whether they had a past diagnosis of (or concerns regarding past) ADHD, math LD or language/reading LD. Participants also completed tests of language, attention, episodic memory, executive function, and processing speed. Pearson or point-biserial correlation coefficients (r-values) indicating a medium effect size (.30 or greater) were interpreted as meaningful.

**Results:** On average, participants reported 3.48 symptoms of inattention and 2.56 symptoms of hyperactivity/impulsivity (i.e., at least six symptoms from either category are consistent with diagnostic criteria for ADHD). 16% of the sample reported childhood ADHD/attention difficulties, 48% reported childhood math LD/math difficulties, and 32% reported childhood language LD/difficulties. On cognitive tests, the sample performed in the average range, with considerable variability (i.e., norm-based, demographically adjusted T-scores ranged from 20-74). The relation between cognitive scores and report of childhood ADHD symptoms was weak and non-significant correlation ( $r < .18$ ). By contrast, report of childhood ADHD/attention difficulties was associated with lower scores attention tests ( $r = .33$ ). Report of childhood language LD/difficulties was associated with a worse overall cognitive composite ( $r = -.35$ ) and executive function ability ( $r = -.35$ ). Childhood math LD/difficulties was not meaningfully associated with lower scores on any of the cognitive tests administered. Unexpectedly, report of childhood cognitive difficulties also were associated with higher scores on cognitive tests, such that childhood ADHD/attention difficulties was associated with better performance on tests of episodic memory ( $r = .39$ ), and childhood math LD/difficulties were associated with better performance on tests of language ( $r = -.37$ ).

**Conclusions:** Current cognitive abilities in older adults may be influenced by lifelong cognitive weakness and academic difficulties. A history of ADHD and LD/difficulties should be considered in clinical neuropsychological assessment and future research on cognitive aging should consider ADHD/LD from a lifespan, developmental framework.

**Categories:** ADHD/Attentional Functions

**Keyword 1:** attention deficit hyperactivity disorder

**Keyword 2:** cognitive functioning

**Keyword 3:** aging (normal)

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### 33 Does Comorbid Depression Impact Executive Functioning (EF) in Adults Diagnosed with ADHD?: A Comparison