

acceptable fit and evidence for validity, in that the total executive function score had a stronger correlation with subjective cognitive complaints and ADHD symptoms than negative affect. The reliability of some individual factors fell below conventional cutoffs for acceptable reliability, indicating a need for further refinement of this new questionnaire.

Categories: Executive Functions/Frontal Lobes

Keyword 1: executive functions

Keyword 2: psychometrics

Keyword 3: self-report

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85 Performance Consistency on a Measure of Sustained and Selective Attention

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Objective: Attention concerns, particularly difficulties with focusing and regulating attention, are reported in diverse clinical contexts. The Ruff 2&7 Selective Attention Test (Ruff 2&7; Ruff & Allen, 1996) is a measure of sustained and selective attention that assesses automatic detection and effortful processing. The goal of this study was to create an internal consistency metric within this test and to determine cognitive predictors by evaluating associations with executive control of attention and other cognitive skills. It was hypothesized that those who are more consistent across Ruff 2&7 performance would have more robust executive functioning skills, particularly those related to regulating and directing attention and the planning and utilization of cognitive resources.

Participants and Methods: The current study examined a clinical sample of 98 United States veterans with a history of mild traumatic brain injury. After excluding invalid cases ($n=24$), the final sample consisted of 74 veterans (Age=38.5 (8.9) years old; 13.9 (2.2) years of education; 78% male; 82% white, 7% Black, 8% Hispanic, 2% Asian). A consistency score was defined as the absolute value of the intertrial change in target hits plus errors across each pair of trials

of the same stimulus type (Automatic Detection, AD, and Controlled Search, CS). Hierarchical linear regression modeling was used to evaluate the relative contributions of memory and executive functions (Rey Auditory Verbal Learning Test, Delis-Kaplan Executive Function System Tower Test, phonemic fluency, Trail Making Test B) and subjective symptom report (PTSD Checklist for DSM-5, Barkley Adult ADHD Rating Scale for DSM-IV).

Results: The mean deviation scores for the two trial types were similar (AD mean=13.6, SD=5.9; CS mean=13.6, SD=5.3). In predicting consistency across AD trials, delayed recall contributed 11% unique variance ($p=.013$), while no other block was statistically significant. For CS trials, self-reported PTSD and inattention symptoms contributed a combined 20% of unique variance to the model ($p=.007$), while there were no statistically significant cognitive predictors in this model.

Conclusions: Contrary to expectation, executive function measures did not explain statistically significant variance in performance across either trial type. Less consistent performance on AD trials was associated with weaker verbal memory. Less consistent performance on CS trials, which theoretically require greater executive control, was not associated with any cognitive scores, but was associated with more severe self-reported psychological and inattention symptoms. These findings buttress the conceptual distinction between AD and CS trial types, and they point to both cognitive and non-cognitive underpinnings of performance consistency.

Categories: Executive Functions/Frontal Lobes

Keyword 1: attention

Keyword 2: everyday functioning

Keyword 3: psychometrics

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86 COVID-19 Coping Style Predicts Executive Dysfunction in University Students

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Objective: COVID-19 caused a worldwide restructuring of daily life, necessitating a sharp increase in social distancing, telecommunication, and adherence to rapidly changing public health recommendations. Coping, a response to stressors, is a protective mechanism to increase resiliency against uncertainty and decreased social connectedness. This disruption of daily life has prompted unanticipated and unique research opportunities and allowed researchers to consider whether individuals' primary coping style with the pandemic is associated with cognition. Previous research has found that problem coping, or action-oriented approaches to a stressor, is the most adaptive coping strategy. Emotion-based coping, like venting or humor, varies and depends on the stressor. Avoidant coping, like denial or ignoring the stressor, is generally considered maladaptive (Carver, 1977), which may lead to increased psychosocial disturbance. Executive functioning, responsible for planning, organizing, inhibition, and self-management are theorized to be most impacted by the social and psychological effects of COVID-19 (Pollizi et al., 2021). While some research has examined this question in working parent and older adult populations, we seek to understand this relationship in emerging adults, whose frontal lobes, responsible for executive functioning, are still developing. The present study seeks to examine the association between coping with the COVID-19 pandemic and executive functioning.

Participants and Methods: College students (N=440; M=19.30 years old, SD=1.42, 76% female) across seven US universities completed self-report questionnaires on SONA, which included Barkley's Deficits in Executive Functioning, Short Form (BDEFS-SF; Barkley, 2011) and the Brief Coping Orientation to Problems Experienced Inventory adapted for coping with the COVID-19 pandemic (Brief COPE; Carver 1989). Items on the BDEFS-SF were summed to create a global executive functioning score. Items on the Brief COPE were combined to create three factors: emotional,, avoidant,, and problem-focused (Dias et al., 2012).

Results: Stepwise linear regression was used to assess whether coping style predicted executive functioning. Results indicate that the use of emotional coping ($\beta = 0.19$, $p < .001$) and avoidant coping ($\beta = 0.33$, $p < .001$) predicted higher scores on the BDEFS (greater deficits in executive functioning). Additionally, the use of

problem coping ($\beta = -0.27$, $p < .001$) predicted lower BDEFS scores (better executive functioning), with this overall model explaining 16.37% of the variance.

Conclusions: Results from this study confirm that COVID-19 coping styles are associated with decreased executive functioning. Specifically, emotional coping and avoidant coping predicted decreased executive functioning, which has been supported in non-pandemic samples. The use of problem-focused coping predicted increased executive functioning, indicating that this may be a protective form of coping with the pandemic. Because tasks necessary for daily life, such as planning, organizing, and judgment, rely on executive functioning, maladaptive coping with COVID-19 may impede college students' daily functioning necessary for successful engagement in schoolwork, emotion regulation, and activities of daily living. This research begins to address the gap in knowledge regarding the relationship between coping with the COVID-19 pandemic and executive functioning. This knowledge can be used in future crises in order to promote the use of problem-focused coping and mitigate the self-observed deficits in executive functioning demonstrated in this population.

Categories: Executive Functions/Frontal Lobes

Keyword 1: executive functions

Keyword 2: everyday functioning

Keyword 3: self-report

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87 The Cumulative and Unique Effect of Competitive Youth Participation in the United States' Most Popular Sports on Executive Function

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Objective: Engagement in sporting activities has shown improvement in executive function among youth (Contreras-Osorio et al., 2021). Additionally, participation in specific sports such as soccer has been shown to enhance executive function in youth athletes compared to same-aged non-athletes (Yongtawee et al., 2021). The