providing necessary resources and accommodating patients' individual needs. Additionally, older adults with diffuse cognitive impairment often have issues with facets of executive functioning; however, the extant literature does not discuss the role of executive functioning in relation to health numeracy in this population. The purpose of this study was to explore the relationship between performance on tasks of executive functioning and objectively-measured health numeracy abilities in older adult patients.
Participants and Methods: This study included a sample of 42 older adult patients referred for neuropsychological evaluation for memory complaints who were administered the Test of Premorbid Functioning (TOPF), Trail Making Test – Part B (TMT-B), and Stroop Color and Word Test (SCWT Color Word Interference [CWI]) as part of a larger standardized battery. Patients were also administered the Numerical Understand in Medicine Instrument – Short Form (NUMI-SF). All included patients had <2 performance validity test failures. The sample was racially diverse (47.6% Black, 35.7% White, 14.3% Hispanic, 2.4% Asian) and 54.8% female. Average age was 62.95 (SD= 8.6) and average education was 14.1 (SD=2.7). Diagnostically, 47.6% of the sample were cognitively normal, 33.3% had mild cognitive impairment, and 19.0% had dementia. Average NUMI-SF score was 4.79 (SD= 1.7). Two multiple regressions were conducted to evaluate the extent to which executive functioning, as measured by the TMT-B and SCWT CWI predicted NUMI-SF, and the additive predictive power of premorbid IQ and demographics via the TOPF on the relationship between executive functioning and NUMI-SF.
Results: The first regression, which measured the relationship between the TMT-B and SCWT CWI upon NUMI-SF scores, was not significant ($p=.616$). The model was significant with the addition of the TOPF ($\beta=.595$, $p<.001$) and TOPF alone predicted ~60% of the variance in NUMI-SF score, while TMT-B and SCWT CWI remained non-significant.
Conclusions: These results indicate that common measures of executive functioning are not reliable predictors of health literacy with or without the moderating of premorbid intellectual functioning taken into consideration. This suggests that health numeracy is likely to be minimally affected by deficits in executive functioning and rather may be better accounted for by premorbid intellectual functioning and/or other sociodemographic factors (e.g. socioeconomic status, education quality, occupation). Future studies will benefit from elucidating the contributions of other social determinant factors on predicting health numeracy.

Categories: Executive Functions/Frontal Lobes
Keyword 1: executive functions
Keyword 2: premorbid functioning
Keyword 3: assessment
Correspondence: Ayesha Arora, The University of Illinois at Chicago Neuropsychology Service, aarora3@ego.thechicagoschool.edu.

75 Examining the Role of Executive Functions on the Intention-Behavior Gap of Alcohol Harm Reduction Strategy Use

Becky K Gius[1,2], Robert Schlauch[1]
[1]University of South Florida, Tampa, FL, USA. [2]South Texas Veterans Health Care System, San Antonio, TX, USA

Objective: The Temporal Self-Regulation Theory (Hall and Fong, 2007) proposes that initiation and maintenance of effortful health behaviors relies on executive functions (EF: cognitive abilities associated with goal-directed behavior). Alcohol harm reduction strategies are health behaviors that aim to minimize the likelihood or severity of consequences associated with alcohol use. Some drinkers have the intention to drink safely but lack the ability to effectively initiate and execute the harm reduction behaviors. Executive functions may be one mechanism that helps explain the gap between safe drinking intentions and behavior. Specific components of EF may be differentially associated with alcohol harm reduction strategy use; working memory and set-shifting may be especially important in planning and following through with alcohol harm reduction strategies, and individuals with greater working memory capacity and set-shifting abilities may be more successful in implementing strategies that require preplanning and have a focus on altering typical the manner of drinking (e.g., not mixing types of alcohol). Inhibition may be important for resisting temptations that are inconsistent with safe drinking goals, and those with stronger inhibitory control may be more likely to follow through with strategies that require withholding responses despite desire to engage in the

https://doi.org/10.1017/S1355617723003934 Published online by Cambridge University Press

behavior, such as stopping or limiting drinking (e.g., not exceeding a predetermined number of drinks).
Participants and Methods: Using ecological momentary assessment, the current study explored the extent to which an intention-behavior gap in harm reduction strategy use exists among college student drinkers (n=77), and investigated how potential individual differences in EF (i.e., working memory, set-shifting, and inhibition) were associated with translating intentions of drinking safely into action. Daily monitoring assessments contained brief measures of intention to use harm reduction strategies, actual strategy use, and alcohol-related behaviors, and were assessed daily for twenty-one days.
Results: Multilevel model analyses revealed that although intention to use strategies predicted actual strategy use, measures of EF did not significantly moderate the relationship. Exploratory analyses indicated that set-shifting significantly moderated the intention-behavior gap for a subset of harm reduction strategies that relies more heavily on modifying behavior during a drinking event. Set-shifting did not significantly moderate the intention-behavior gap for a subset of strategies that relies more heavily on pre-planning before the drinking event.
Conclusions: Findings from the current study suggests that those who plan to use strategies typically follow through regardless of individual differences in EF. Efforts to increase intention to drink safely can be incorporated into existing alcohol prevention and intervention programs, which would likely lead to increased use of harm reduction strategies and decreased alcohol-related consequences.

Categories: Executive Functions/Frontal Lobes
Keyword 1: alcohol
Keyword 2: executive functions
Keyword 3: substance abuse
Correspondence: Becky Gius, University of South Florida, Tampa, FL; South Texas Veterans Health Care System, San Antonio, TX, bkgius@usf.edu

76 Follow-up of the Therapeutic Effects of Integrative Neuropsychological Training Model for Executive Functions Deficits in School-age Children Born Very Low Birth Weight with Normal Early Development-A Preliminary Report

Ching Hua Shen[1,2], Chao Ching Huang[3], Chii Jeng Lin[4], Nai Wen Guo[5,6]
[1]Institute of Allied Health Sciences, National Cheng Kung University, Tainan, Taiwan. [2]Department of Physical Medicine & Rehabilitation, National Cheng Kung University Hospital, Tainan, Taiwan. [3]Department of Pediatrics, College of Medicine, National Cheng Kung University, Tainan, Taiwan. [4]Department of Pediatric Orthopedics, College of Medicine, National Cheng Kung University, Tainan, Taiwan. [5]Institute of Allied Health Sciences, National Cheng Kung University, Tainan, Tajikistan. [6]Institute of Behavior Medicine, National Cheng Kung University, Tainan, Taiwan

Objective: The preschool children born very low birth weight(VLBW) still have executive functions(EFs) deficits even with normal early development(Ni, Huang, & Guo, 2011). Consequently, early intervention might be more important than expected. This study aims to investigate the follow-up outcome of the therapeutic effects of integrative neuropsychological training model(INTM) focused on EFs for school-age VLBW children with EFs deficits.
Participants and Methods: The VLBW children, recruited from the Regional Cohort Network for premature infants who were admitted to neonatal intensive care units, had normal scores in Bayley and Wechsler Intelligence systems before 6 years old. They also received follow-up neuropsychological assessment for EFs at 6 or 8-year-old. The deficits of EFs were defined from the result of Digit Span Subtest of WISC-IV, Knox's Cube Test(KCT), Tower of London(ToL), Wisconsin Card Sorting Test(WCST), and Comprehensive Nonverbal Attention Test Battery(CNAT). A total of 8 VLBW children with EFs deficits were recruited and received EFs training at 6 or 8-year-old. The INTM combined with Comprehensive Memory Training System(CMTS), Executive FUNction Training(EFT), and multi-ecological materials focused on enhancing the four aspects of EFs, including working memory, planning, cognitive flexibility, and inhibition ability. Then, they received follow-up neuropsychological assessment for EFs at 8 or 10-year-old.

https://doi.org/10.1017/S1355617723003934 Published online by Cambridge University Press