

children did not cope with the task to determine a sound in a word, while the rest successfully completed at least 83% of the task. A significant positive correlation between all speech subtests was found in the group. Correlation analysis for parameters of speech development, severity of autistic manifestations and non-verbal intelligence revealed a significant direct relationship between the total scores of impressive and expressive speech and IQ and an inverse relationship with the severity of autistic manifestations and disorders of social and communicative behavior. No relationships like described above were found for group 1.

Conclusions: Obtained results indicate variability of reasons for delayed development of various language aspects in children with ASD.

Categories: Cognitive Neuroscience

Keyword 1: language: development

Keyword 2: autism spectrum disorder

Correspondence: Darya Pereverzeva, Moscow State University of Psychology and Education, pereverzevads@mgppu.ru

12 Examining Illness Perception Among Cognitively Healthy Older Adults

Elizabeth Soto¹, Martina Azar², Jillian Joyce¹, Silvia Chapman¹, Leah Waltrip¹, Peter Zeiger¹, Shaina Shagalow¹, Sandra Rizer¹, Michael Kann¹, Stephanie Cosentino¹

¹Taub Institute for Research in Alzheimer's Disease and the Aging Brain, The Gertrude H. Sergievsky Center, Department of Neurology, Columbia University, NY, New York, USA. ²VA Boston Healthcare System, Boston, MA, USA

Objective: An individual with dementia suffers from cognitive decline affecting not only memory but at least one of the other domains, such as personality, praxis, abstract thought, language, executive functioning, attention, and social skills. Further, the severity of the decline must be significant enough to interfere with daily functions. It is currently unknown whether any of the causes of dementia can be cured. Many challenges confront patients and their families, including a lack of knowledge about dementia and associated treatments; therefore, it is essential to study illness perception regarding dementia-related symptoms in order to improve psychoeducation and lower barriers to seeking

assistance. How individuals perceive and make sense of early dementia symptoms can significantly impact their help-seeking behaviors (HS). Exploring illness-perception regarding dementia-related symptoms may contribute to the development of strategies for increasing HS, early diagnosis, and intervention. The objective of this study is to describe aspects of illness perception in cognitively healthy older adults and examine potential correlations with demographic variables, including age, gender, and education.

Participants and Methods: The cohort comprised 55 cognitively healthy older adults enrolled in a study examining Subjective Cognitive Decline. All participants performed > - 1.5 SD on clinical neuropsychological testing. Participants were 70% female and 30% male; and self-identified as White = 78%, Black = 16%, Asian = 2%, Other = 4% and Non-Hispanic = 98%. Participants read a short vignette describing a person experiencing significant memory issues representative of an individual with mild dementia and answered seven follow-up questions regarding the cause of memory problems, the likely course of memory problems, and potential treatments for memory problems. Chi-square analyses examined the endorsement of items in relation to age, gender, and education.

Results: When asked about the likely cause of memory problems, 65% of participants endorsed neurologic disease, 53% of participants endorsed normal aging, 26% endorsed stress, 25% endorsed genes, 4% endorsed fate/luck, and 16% endorsed "Don't know" for likely cause of symptoms. 64% of participants responded "will get worse", 18% "will go up and down", 16% "Don't know", and 2% "Other" in response to the progression of memory problems over time. For "Can he do anything to help [memory problems]?", only 2% responded "No" while 76% responded "Yes" and 22% endorsed "Don't know". On a follow-up question regarding ways an individual could improve his cognitive difficulties, 78% "Social Engagement", 73% "Exercise", 64% endorsed "Medication", 48% "Diet", 42% Psychological Treatment", 29% "Rehabilitation", 9% "Don't know" and 15% "Other." Lastly, 58% of participants reported "Independence", 33% "Identity," 4% "Friends," 4% "Respect," and 1% "Don't know" for things he may risk losing due to memory problems. Age, gender, and education were not associated with any of the above responses ($p > .05$).

Conclusions: Older adults demonstrate a range of ideas about the cause, course, and potential

treatment for memory disorders. Understanding how and what factors impact illness perception is a pivotal step in improving illness perception and ultimately narrowing the gap in health disparities and HS. Further work in a large demographically representative sample is needed on illness perception and how socioeconomic factors, ethnicity, and other mediators interact with its impact on HS for dementia-related symptoms.

Categories: Cognitive Neuroscience

Keyword 1: cognitive functioning

Keyword 2: memory complaints

Keyword 3: aging (normal)

Correspondence: Elizabeth Soto Taub Institute for Research in Alzheimer's Disease and the Aging Brain, The Gertrude H. Sergievsky Center, Department of Neurology, Columbia University es3983@cumc.columbia.edu

13 Money versus Feedback: Comparing Reward Types and Frequency on Cognitive Fatigue

Fareshte Erani¹, Harrison Stoll¹, Darshan Patel¹, Maria T Schultheis¹, John D Medaglia^{1,2}

¹Drexel University, Philadelphia, PA, USA.

²University of Pennsylvania, Philadelphia, PA, USA

Objective: Cognitive fatigue (CF) is a common, yet poorly understood symptom in neurological disorders (e.g., multiple sclerosis, Parkinson's disease, stroke). Studies show that reward plays a central role in CF. For instance, introducing or increasing reward often improves task performance. It is less clear, however, how reward affects subjective (self-reported) CF (SCF). This study examined the effect of reward type (monetary or performance feedback) and frequency (infrequent or frequent) on SF.

Participants and Methods: In an online between-subjects study, 400 participants completed a computerized cognitive switching task and were randomly grouped into one of the five possible groups based on reward condition: [1] infrequent monetary reward, [2] frequent monetary reward, [3] infrequent performance-feedback reward, [4] frequent performance feedback reward, and [5] a no-reward group. SCF was assessed using the Visual Analog

Scale of Fatigue (VAS-F) during the task. Mixed effects models were used to estimate the influence of reward type and frequency on task performance and SCF.

Results: We found that the monetary groups were significantly faster ($p < .001$) compared to the feedback and no-reward groups, and that the frequent group was faster ($p = .05$) compared to the infrequent group. Reward type and frequency did not have a significant effect on VAS-F scores. However, when we looked at each reward group, we found that the monetary-infrequent reward group was associated with a decrease in VAS-F scores on average compared to the no-reward group ($p = .04$).

Conclusions: The type and frequency of reward influence aspects of task performance (response time but not accuracy). Findings suggest that money had a greater effect on response time and may decrease SCF in cognitively healthy individuals when provided infrequently. Future studies should examine how these findings translate to clinical populations. Continued work is needed to understand how and which specific behavioral reward manipulations reduce fatigue, which could eventually lead to improved assessment and our ability to target fatigue across clinical populations.

Categories: Cognitive Neuroscience

Keyword 1: cognitive control

Keyword 2: cognitive neuroscience

Keyword 3: fatigue

Correspondence: Fareshte Erani, Drexel University, fareshte.erani@gmail.com

14 Title: Design of a neuropsychological battery for the detection of cognitive deficits in asymptomatic patients with low-grade glioma: a pilot study

Greta Keller, María Agustina Carello, Vanina Banjsak, Noelia Egido, Ismael Luis Clandri, Ricardo Allegri, Andres Cervio, Lucia Crivelli Fleni, Capital Federal, Buenos aires, Argentina

Objective: Gliomas are a group of CNS neoplasms arising from neuroglial cells with various degrees of aggressiveness. Resection of brain tumors is complex to perform without neurological sequelae due to the diffuse nature of the tumors. This study aimed to design a neuropsychological battery to examine pre-