environment is distracting," and time of day of the response.

Results: Data was screened such that all data points outside the 7-day prompt window were removed, one participant who did not respond to any prompts was removed, and participants who responded to less than 60% of the shape test prompts were removed (n = 10). The sample used for this preliminary analysis included 17 participants (Age, M = 71.94 years; Education, M = 14 years; 88% Female; 88% White) with an average compliance of 75% (Range = 17 – 26 shape test responses) and an average shape test accuracy of > 92%. Hypothesis 1 was supported by the large fluctuations of the average cognitive test scores across timepoints (M = 24.35, Min = 16, Max = 27, SD = 2.54) and by repeated-measures ANOVA of average cognitive test scores by day ($F(1,7)$ = 5.24, $p <$ 0.01). Hypothesis 2: Cross-correlation lags 0 to 4 were assessed. For internal contexts, cross-correlation showed a medium correlation between mental sharpness and cognition for lags 0 (r = 0.46) and 1 (r = 0.4); a small to medium correlation between physical fatigue and cognition for lags 0 (r = -0.51) and 1 (r = -0.31); and no correlation between stress and cognition ($r < 0.2$). For external contexts, cross-correlation revealed no correlation between environmental distraction and cognition ($r < 0.3$), and repeated measures ANOVA revealed no effect of time of day on cognition scores ($p >$ 0.05).

Conclusions: Older adults' cognitive performance on an n-back shape test varied over time with internal contextual states. Cognitive performance was positively associated with feelings of mental sharpness and negatively associated with physical fatigue. Current external environmental distractions and time of day were less influential on cognitive performance. As more data is collected, influences of individual fluctuations in cognitive performance will be investigated.

Categories: Teleneuropsychology/ Technology
Keyword 1: technology
Keyword 2: cognitive functioning
Keyword 3: everyday functioning
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81 Test-retest Reliability of the Oral Trail Making Test Administered on the Telephone

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Objective: In the aftermath and continuance of the COVID-19 pandemic, the field of neuropsychology has experienced a burgeoning literature base on remote telehealth practices. These practices include both videoconference and telephone modalities. Several studies to date have proposed evidence suggesting that in-person and remote telehealth assessments demonstrate comparable results. One of the major limitations to telehealth practices is the scarcity of measures of processing speed. A widely used measure is the Oral Trail Making Test, which has two trials (A & B). Oral Trails B is often conceptualized as a measure of set-shifting and cognitive flexibility. And validity studies support Oral Trails B having strong test-retest reliability and correlation to its written counterpart. In contrast, there is contention as to whether Oral Trails A can be conceptualized as a measure of basic attention and speed versus simple numerical automaticity. Importantly, to our knowledge, the test-retest reliability of Oral Trails A administered specifically via telephone has never been reported in a healthy sample. The following study presents test-retest reliability for the Oral Trails A and B (in a healthy control group) administered as part of a larger study investigating the effects of deep diaphragmatic breathing on cognitive functioning.

Participants and Methods: Eighty healthy young adults with elevated stress levels were recruited from a major metropolitan city at a major university. The subjects had to be between the ages of 18 to 29 and self-reported Perceived Stress Scale score >13. The subjects could not practice any form of meditation, yoga, or breathing exercise regularly. Additionally, they could not have any severe medical or psychiatric

disorder, be actively suicidal; have a substance use disorder within the past year, or use of medication with a known negative impact on cognition or autonomic nervous system (ANS) arousal. Participants were randomized to a waitlist control group or an intervention group. Cognitive assessments were administered over the phone to both groups (pre and post-treatment) and self-report measures were completed online due to quarantine restrictions.
Results: Among participants in the waitlist control group, the mean difference (MD) between time points on OTMT-A (MD= -0.17, SD= 1.69) was small and not significant (p>0.05). The mean difference for OTMT-B (MD= -13.06, SD=26.99) was large and significant (p=0.01). Bivariate Pearson correlations were computed revealing a significant moderate strength relationship between OTMT-A performance across time points (r=0.6, p<0.001). In contrast, performance on OTMT-B across time points revealed a non-significant, weak relationship (r=0.2, p=1.94).
Conclusions: These results do not support literature demonstrating strong test-retest reliability for OTMT-B. Furthermore, this is the first study establishing test-retest reliability for the OTMT-A as administered via a novel telephonic modality. Given the novel and non-standardized method of administration, the data should be interpreted with caution. Nonetheless, given the weak relationship in OTMT-B performance and the only moderate relationship of OTMT-A performance across time points, the results suggest that the OTMT may not be highly reliable as administered via a telephonic modality.

Categories: Teleneuropsychology/ Technology
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82 Development of a Hybrid Teleneuropsychology Clinic within a VA Medical Center: A Qualitative Evaluation of Patient and Clinician Expectations and Experiences.

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Objective: Gaining access to specialty care services, including neuropsychology, can be challenging, especially for older adults and individuals who live in rural areas. In addition to these barriers, the ongoing COVID-19 pandemic further disrupted patient access to essential healthcare services. Telehealth, which underwent rapid expansion in response to service disruptions due to COVID-19, offers opportunities to prevent or reduce disruptions in patient care, including neuropsychological assessment. Here we describe the development and implementation of a teleneuropsychology (telenp) clinic within a major VA medical center and discuss salient clinical observations and patient feedback gathered during telenp evaluations.
Participants and Methods: A hybrid telenp clinic was developed at the Tennessee Valley VA Healthcare system to serve patients referred for neuropsychological evaluations whose access to services was impacted by the COVID-19 pandemic. Patients presented to the VA and were connected to neuropsychology providers seated in separate rooms of the hospital through synchronous video. Test batteries were created to closely approximate in-person evaluations while allowing for minor procedural modifications so tests could be administered virtually. All tests were administered by on-site trained staff. After the evaluation, anecdotal information about patient experiences and satisfaction and salient clinical observations were gathered to elucidate potential benefits and shortcomings of hybrid telenp model.
Results: 65 telenp neuropsychological evaluations were conducted between December 2020 and April 2021. Overall, patients consistently and strikingly reported a high degree of openness and acceptance towards telenp services, even despite initial technological apprehension. Importantly, patients ubiquitously reported believed they were able to adequately engage in telenp assessments, and no perceptible barriers were identified. Clinically, examiners consistently expressed surprise at the relative ease with which the evaluations