

individuals from Generation Y and Z on both verbal fluency measures.

Participants and Methods: The sample of the present study consisted of 107 participants with a mean age of 27.39 (SD = 9.16). Participants were divided into three groups: Generation X (n = 19), Generation Y (n = 52), and Generation Z (n = 36). The phonemic verbal fluency task consisted of three trials and the semantic verbal fluency task consisted of one trial, one minute each. A series of ANCOVAs with Bonferroni post-hoc tests were used to evaluate verbal fluency performance between generational groups. All participants passed performance validity testing.

Results: We found significant differences between our generational groups on both verbal fluency tasks. Post-hoc tests revealed that the Generation Y group outperformed both Generation X and Z groups on both verbal fluency tasks, p 's <.05, $\eta^2 = .11-.16$. No significant differences were found on either verbal fluency task between the Generation X and Z groups.

Conclusions: Contrary to our hypothesis, Generation Y individuals possessed better phonemic and semantic fluency than both Generation X and Z individuals. Meanwhile, Generation X individuals did not significantly differ on any of the verbal fluency tasks compared to Generation Z individuals. Speaking multiple languages has been shown to impact verbal fluency performance. In our sample, the Generation X and Z groups consisted primarily of bilingual speakers compared to the Generation Y group. Examining generational differences is essential to understand the unique characteristics and impact of the times in which various individuals have grown up. Future research, for instance, should evaluate the influence of bilingualism across generational groups on verbal fluency performance.

Categories: Cross Cultural Neuropsychology/
Clinical Cultural Neuroscience

Keyword 1: verbal abilities

Keyword 2: aging (normal)

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26 Remotely Training Research Assistants in other Countries to Conduct

Neuropsychological Tests: Lessons Learned

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Objective: Technological advances allow for increased international collaboration within the medical community (e.g., internet, e-mail, instant messaging, video-teleconferencing [VTC]). Partnering with clinicians and researchers across the globe allows for shared resources, particularly beneficial for underserved populations and communities with poor access to specialty resources, including neuropsychology. Along with the potential benefits of such collaborations comes challenges including language, cultural, and physical barriers. The presented findings detail important lessons learned from an ongoing research collaboration between the Einstein team (Bronx, NY) and a research group in Kerala, India, called the Kerala Einstein Study (KES), a study evaluating pre-dementia syndromes in Indian older adults. Here we highlight the training process of research assistants administering neuropsychological measures to older adults in India, by neuropsychologists in the USA.

Participants and Methods: One study manager and several research assistants (collectively referred to as RAs) based in India were trained by the first author, a neuropsychology post-doctoral fellow (MS) based in the US via VTC (i.e., Zoom), under supervision of a clinical neuropsychologist. RAs were trained in test administration and scoring for a variety of neuropsychological measures. RAs speak Malayalam and English; training occurred in English. Following training, VTC meetings were held to process testing experience and channels were created for ongoing administration/scoring questions and concerns (i.e., email, WhatsApp). RAs scanned and uploaded scored protocols to a protected web-based platform. MS double-scored several protocols and additional VTC meetings were held to discuss/update scoring procedures.

Results: Physical challenges included time difference between sites, internet connectivity, language barriers (i.e., varying English dialects) cultural considerations (e.g., some test/task

directions were changed based on RAs knowledge of more appropriate wording). Test administration challenges included cultural factors (i.e., allowing for continuation of some tasks beyond time limits for rapport) and RA comfort level with administration of some tasks (e.g., trail making test). Scoring challenges included RAs tendency to score too strictly or leniently and confusion regarding specific scoring criteria.

At an initial VTC meeting, MS modeled test administration. Then RAs practiced the tests together. To reduce challenges including time difference, connectivity problems, language barriers, and comfort with testing/scoring, VTC training sessions were scheduled individually between MS and each RA. During these sessions, the RA 'tested' MS and received immediate feedback. Most sessions lasted approximately 90 minutes with one RA requiring a second session (i.e., sessions were tailored for individuals to obtain level of testing comfortability and competency). After each RA was 'cleared' by MS to start testing, RAs began testing and scoring. Following MS's review of several scored protocols, meetings took place in groups in order to improve scoring skills and increase consistency between RAs. Given the continued high degree in scoring variability, a third RA was hired with one of his main responsibilities being to double score all protocols.

Conclusions: Findings highlight important challenges and considerations for remotely training study personnel to administer neuropsychological measures (i.e., RAs in India and neuropsychologists in the USA). Important steps to reduce identified barriers included individualized training sessions, specific training in scoring, and open/ongoing communication channels.

Categories: Cross Cultural Neuropsychology/
Clinical Cultural Neuroscience

Keyword 1: diversity

Keyword 2: assessment

Keyword 3: cross-cultural issues

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27 Examining the Relationship Between Spanish-English Bilingualism and Digit Span Performance

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Objective: Bilingualism has shown to have significant implications for neuropsychological assessment, namely, the Digit Span task. Moreover, bilingual individuals have been shown to exhibit both advantages and disadvantages on Digit Span; however, the relationship between bilingualism and performance on this subtest is poorly understood. This research aims to better understand how Hispanic Spanish-English bilinguals perform on this commonly administered working memory subtest.

Participants and Methods: Participants included 82 Hispanic Spanish-English bilinguals [Age: $M=29.11$ ($SD=6.369$); Education: $M=15.68$ ($SD=2.255$); 53.7% female]. The participants completed the Language and Social Background Questionnaire (LSBQ; composite factor scores) and the Wechsler Adult Intelligence Scale - Fourth Edition (WAIS-IV) Digit Span (raw scores) subtest via Zoom, an online video conferencing platform. A hierarchical multiple regression analysis was utilized to predict participants' Digit Span performance based on their LSBQ composite factor scores. Hierarchical multiple regression analyses were conducted using SPSS Version 27.

Results: LSBQ composite factor scores significantly predicted Digit Span Forward, $F(3, 78) = 1.835$, $p < 0.43$ ($R^2 = .030$) and Longest Digit Span Forward, $F(1, 78) = 4.02$, $p < 0.48$ ($R^2 = .041$) scores. LSBQ composite factor scores did not significantly predict Digit Span Backward, $F(3, 78) = .344$, $p = .941$, Digit Span Sequencing, $F(3, 78) = .598$, $p = .731$, Digit Span Total, $F(3, 78) = .440$, $p = 0.296$, Longest Digit Span Backward, $F(3, 78) = .510$, $p = .666$, or Longest Digit Span sequencing $F(3, 78) = .200$, $p = .751$ scores.

Conclusions: Results suggest that Hispanic Spanish-English bilinguals perform worse on Digit Span Forward and Longest Digit Span Forward as their bilingual experiences increase. However, bilingual experiences did not significantly predict Digit Span Backward, Digit Span Sequencing, Digit Span Total, Longest Digit Span Backward, or Longest Digit Span