

Per a 2011 census, the illiteracy rate in the Indian older adult population was as high as 56%, and within this group, women and older adults in rural regions were especially vulnerable. Thus, it is important to understand cognitive performance of illiterate Indian older adult population, especially when they are being assessed for neurodegenerative disorders.

Participants and Methods: Participants and Methods: This study used subset of data from Harmonized Longitudinal Aging Study of India, Diagnostic Assessment of Dementia (LASI DAD), which was developed by the Gateway to Global Aging Data. A sample of cognitive healthy OA (n = 715) was selected based on Hindi Mental Status Exam score of >19 and a Clinical Dementia Rating Scale of 0 (literate = 419, illiterate = 296). Given the heterogeneity of the population, adapted cognitive instruments were used. This study compared memory performances, using word list and constructional praxis with delayed recall tasks, of OA based on their literacy status (illiterate vs. literate).

Results: Results: Literate cognitive healthy OA (M = 15.27, SD = 3.9) learned more words over three trials than illiterate OA (M = 12.17, SD = 3.7) on a word list task, a statistically significant difference (M = 3.1, 95% CI [2.5, 3.6], t (713) = 10.62, p<0.05. Literate OA (M = 8.7, SD = 2.2) had higher scores on task of copy of simple geometrical figures than illiterate OA (M = 5.3, SD = 2.8), a statistically significant difference (M = 3.3, 95% CI [2.9, 3.7], t (713) = 7.1, p<0.05. Literate OA (M = 4.5, SD = 1.8) also recalled more words than illiterate OA (M = 3.6, SD = 2.1) after a delay. Recall of geometric figures after a delay was higher for literate OA (M = 5, SD = 2.9) as well compared to illiterate OA (M = 2.4, SD = 2.5).

Conclusions: Conclusion: In a sample of cognitively healthy Indian older adults, literate OA consistently performed better than illiterate OA on both verbal and nonverbal memory measures. This is consistent with past literature which shows that illiterate individuals take longer to learn verbal information and have lower recall. Additionally, use of geometric figure may be complicated for these individuals. These are important considerations when assessing an OA for memory problems with low or no education. Next steps would be to look at differences across other cognitive domains and also examining if cognitive differences exist in illiterate OA based on gender.

Categories: Cross Cultural Neuropsychology/
Clinical Cultural Neuroscience

Keyword 1: cross-cultural issues

Keyword 2: memory: normal

Keyword 3: aging (normal)

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34 The Influence of Bilingualism in Young Adults

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Objective: The research examining the influence of bilingualism on cognition continues to grow. Past research shows that monolingual speakers outperformed bilingual speakers on language, memory, and attention and processing speed tasks. However, the opposite has been found favoring bilingual speakers, when comparing executive functioning abilities. Furthermore, researchers have reported that no differences in executive functioning abilities exist between young adult monolingual speakers compared to young adult bilingual speakers. Moreover, limited research exists examining cognition abilities between monolinguals, bilinguals that learn a language (e.g., English) first, and bilinguals that learn the same language (e.g., English) second. We examined young adult monolinguals cognition abilities (e.g., memory) compared to young adult bilinguals that learned English as a first or second language. It was expected that the monolingual group would outperform both bilingual groups on memory, language, and attention and processing tasks, but no differences would be found on executive functioning tasks.

Participants and Methods: The sample consisted of 149 right-handed undergraduate students with a mean age of 19.58 (SD = 1.90). Participants were neurologically and psychologically healthy and divided into three language groups: English first language (EFL) monolingual speakers, EFL bilingual speakers,

and English second language (ESL) bilingual speakers. All the participants completed a background questionnaire and comprehensive neuropsychological battery that included memory, language, executive functioning, and attention and processing speed tasks in English. A series of ANOVA's were used to evaluate cognitive tasks (e.g., Boston Naming Test, Trail Making Test) between the language groups. Participants demonstrated adequate effort on one performance validity test.

Results: Language groups were well demographically matched. We found the EFL monolingual group outperformed the ESL bilingual group on the Wide Range Achievement Test, fourth edition task and the Controlled Oral Word Association Test (COWAT) phonemic task, $p's < .05$, $\eta p's^2 = .04-.05$. Additionally, results revealed both monolingual groups outperformed the ESL bilingual group on the Wechsler Adult Intelligence Scale, Third edition vocabulary task and the Boston Naming Test, $p's < .05$, $\eta p's^2 = .06-.15$. No significant differences were found on any of the cognitive tasks between the EFL monolingual group and the EFL bilingual group.

Conclusions: As expected, the ESL bilingual group performed worse on language tasks compared to both monolingual groups, specifically the EFL monolingual group. However, in the opposite direction, we found the EFL monolingual demonstrated better phonemic verbal fluency abilities on the COWAT compared to the ESL bilingual group. The current data suggest that bilingualism influences cognitive abilities (e.g., language, executive functioning) more ESL bilingual speakers compared to EFL monolingual speakers. A possible explanation may be due to the type of interaction that ESL bilingual speakers may prefer to have (i.e., mix language conversations) compared to EFL speaking groups. Future studies with a larger bilingual speaking sample should investigate if the Adaptive Control Hypothesis which suggest that different types of conversations may be placing different demands of language control influences cognitive abilities.

Categories: Cross Cultural Neuropsychology/
Clinical Cultural Neuroscience

Keyword 1: bilingualism/multilingualism

Keyword 2: language: second/foreign

Keyword 3: assessment

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35 Bilingualism and Time Perspective in Hispanic-Americans Speed Attention

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Objective: Differences between monolinguals and bilinguals have been documented in neuropsychological test performance. Various explanations have been provided to explain why differences exist among these language groups. Hispanic-Americans are individuals born and reside in the United States and have a family background extending to one of the Spanish-speaking countries in Latin America or Spain. Furthermore, Hispanic-American children from Hispanic homes where Spanish is their first language find themselves academically at a disadvantage because their English vocabulary may be lower than English monolinguals. Time perspective (TP) refers to an individual's orientation towards the past, present, or future. One's ability to change their TP in order to adapt to changes in cultural context can result in optimal psychological well-being. In one study, researchers reported no relationship existed between ethnicity and TP on cognition. To our knowledge, no study has examined the relationship between language and TP in Hispanic-Americans' speed attention performance. Therefore, it was predicted that monolinguals would outperform bilinguals on speed attention tasks. Next, it was predicted that monolinguals would report higher scores on future time orientation compared to bilinguals, and bilinguals would report higher scores on past and present time orientation compared to monolinguals. Finally, differences in TP would correlate with speed attention tasks between language groups.

Participants and Methods: The sample consisted of 119 Hispanic-Americans with a