

challenging as Japanese culture is significantly different from western culture. In addition, Japanese-Americans are heterogeneous with salient issues of English proficiency and acculturation. Information to individualize a conceptual understanding of Japanese-Americans, translated and normed tests, and recommendations to maximize fairness in testing are presented to assist clinical neuropsychologists provide competent services to Japanese-Americans.

**Categories:** Cross Cultural Neuropsychology/  
Clinical Cultural Neuroscience

**Keyword 1:** cross-cultural issues

**Keyword 2:** multiculturalism

**Keyword 3:** assessment

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## 12 Do the Cognitive Effects of the Immigrant Health Paradox Vary Across the Lifespan?

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**Objective:** The Immigrant Health Paradox (IHP) suggests that immigrants have better health upon arrival in comparison to their U.S.-born Latinx counterparts, indicating that immigrants' unique experiences may buffer against negative health outcomes, including cognition. Some studies indicate that IHP-related cognitive health benefits diminish with increased time spent in the U.S., while others suggest that this relationship may be age-dependent such that compared to migration during earlier or later life, migration during young/middle adulthood may be related to better cognition-potentially due to higher simultaneous cognitive demands associated with this age epoch (e.g., language acquisition, acculturation). However, this literature is equivocal and has methodological

limitations (e.g., cognition typically assessed with cognitive screeners, lack of clinical populations) Thus, this study aimed to examine the role of age related to IHP and cognition within a well-characterized sample of HIV+ Latinx adults. It was hypothesized that compared to U.S.-born Latinx adults and those who immigrated earlier or later in life, the Latinx immigrant subgroup who migrated during young/middle adulthood would demonstrate better cognitive functioning.

**Participants and Methods:** This cross-sectional study included a HIV+ sample ( $N=105$ ) of 34 Latinx immigrants ( $M_{age}=45.56$ ,  $SD=6.99$ ) and 71 U.S.-born Latinx individuals ( $M_{age}=46.03$ ,  $SD=7.63$ ), who completed a comprehensive sociocultural questionnaire and cognitive battery. Demographically-adjusted average T-scores were computed for each cognitive test and domain (e.g., learning, memory). A series of Welch's-corrected ANOVAS with post hoc Games-Howell tests for multiple comparisons were conducted to compare cognitive function across three groups: Latinx immigrants who migrated during earlier (<19 yrs) or later adulthood (>50 yrs), young/middle adulthood (20-49 yrs), and U.S.-born Latinx adults.

**Results:** Compared to the other Latinx subgroups, Latinx immigrants who migrated during middle adulthood performed worse in Verbal Fluency ( $F(2,98)=8.04$ ,  $p<.001$ ), Attention/Working Memory ( $F(2,96)=6.10$ ,  $p<.01$ ), Executive Function ( $F(2,99)=5.11$ ,  $p<.01$ ), and Processing Speed ( $F(2,101)=3.36$ ,  $p<.05$ ). Posthoc Games-Howell tests showed that the mean Verbal Fluency ( $p<.01$ , 95% C.I.=[-21.37, -2.66]), Attention/Working Memory ( $p<.05$ , 95% C.I.=[-16.82, -1.59]), Executive Function ( $p<.01$ , 95% C.I.=[-14.66, -2.49]) and Processing Speed ( $p<.05$ , 95% C.I.=[-13.60, -1.31]) T-scores were significantly lower in Latinx immigrants who migrated in young/middle adulthood compared to the U.S.-born Latinx sample. Further, there were no differences between the U.S.-born Latinx group compared to the Latinx immigrant group who migrated earlier or later in life ( $ps>.05$ ).

**Conclusions:** This preliminary study is the first to examine whether the potential protective cognitive effects of the IHP vary across the lifespan among Latinx immigrants with HIV, using a comprehensive neuropsychological battery. Age-related IHP benefits were not observed in this study. Moreover, Latinx immigrants who migrated during young/middle adulthood had worse cognitive functioning

compared to their U.S.-born Latinx counterparts and those that migrated earlier or later in life. A possible explanation for this study's unexpected findings is that the IHP is outdated due to the current sociopolitical climate immigrants experience compared to the 1980s when the theory was developed. Future studies, with larger samples, longitudinal designs, and greater sociocultural characterization (e.g., immigration reason/s, country of origin, discrimination), are needed to better understand the role of IHP in cognition.

**Categories:** Cross Cultural Neuropsychology/  
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**Keyword 1:** HIV/AIDS

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**Keyword 3:** neuropsychological assessment

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### 13 Considerations for the Neuropsychological Assessment of Verbal Abilities in Japanese Speakers

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**Objective:** Although the majority of Japanese speakers live in Japan, there are also large populations of Japanese speakers in the United States of America and Brazil, with more than a million Japanese speakers across the two countries. Only 53% of foreign-born Japanese individuals in the United States report proficiency in English. Although there has been increasing attention to the neuropsychological assessment of linguistically diverse patients broadly in recent years, there are specific considerations unique to Japanese that clinicians and researchers should be aware of when working with Japanese speakers outside

of Japan. The aim of the present study is to present considerations and appropriately normed assessments of verbal abilities for Japanese patients.

**Participants and Methods:** A systematic review of cognitive screeners and assessments of verbal fluency, verbal memory, and verbal academic skills that have been translated and normed for use with Japanese speaking populations was conducted. Studies published in both English and Japanese were reviewed. Test content modifications, administration modifications, and relevant cultural and linguistic considerations were synthesized and summarized.

**Results:** One consideration in translation is the use of words that are linguistically and culturally comparable across the two languages. Multiple cognitive screeners and verbal learning/memory tasks have been translated with cultural equivalency considerations (e.g., for the Montreal Cognitive Assessment, velvet, church, and daisy were changed to silk, shrine, and lily). In Japanese, there is a one-to-one correspondence between sound (syllable) and graphemes (kana script), compared to one-to-many associations in alphabet-based languages like English. This impacts normative expectations on letter fluency tasks. The hiragana letters, A, Ka, and Shi (あ, か, し) are recommended because there are relatively large number of words that start with these letters and the number of words generated with these letters showed close to normal distributions in previous research. Unlike letter fluency, semantic fluency is believed to be relatively culture-free and independent of language systems. The Japanese writing system utilizes both phonographic systems where written symbols map onto sounds, and logographic systems, where written symbols map onto concepts. This is in contrast to English, which has a solely phonographic written system. These two separate writing systems complicate the assessment of reading among Japanese-speaking individuals, as there may be a dissociation between abilities in reading in the phonographic versus logographic systems. Acculturation has been shown to impact performance on certain verbal task performances, along with demographic variables such as immigration generation status and bilingualism.

**Conclusions:** Neuropsychologists should be familiar with linguistic differences between English and Japanese such as the one-to-one