

Introduction

- Several issues exist regarding the IQ assessment of Spanish-speakers in the United States:
 - No IQ tests developed for the Spanish population by Spanish-speaking psychologists and problems with translations
 - US Hispanic population and number of Spanish-speaking psychologists
 - Available tests in Spanish and limited research on available measures
- Only seven articles pertaining to the most widely used IQ Spanish test have been published.

Purpose

- To qualitatively compare the Mexican, Puerto Rican, and Spaniard versions to the English version of the WAIS-III.

Method

Instruments

- Four distinct WAIS-III kits; published at different times and regions and by different publishers.

Procedure: Each of the Spanish versions was compared to the English version with regards to:

- Standardization sample and test structure
- Item concept and order
- Response options
- Teaching Items
- Range of scaled scores, index scores and IQs
- Range of confidence intervals (CIs)
- Hypothetical profile of a 45-year-old individual scoring at the 50th percentile

Results

- Similar variables were considered with the standardization sample and procedure, however, variables were categorized differently and sometimes too broadly (see Table 1).
- Item concept and Order: four Mexican items, 23 Puerto Rican items, and 29 items were conceptually different. 70% of Mexican items, 55% of Puerto Rican items, and 71% of comparable items differed in order.
- Response options: responses are generally the same; however unique differences to each of the Spanish versions are present.
- Teaching Items: the order was the same however, item concept were different. Also, no feedback is provided when a non-perfect response is given in one of the Spaniard's Teaching Item.
- Range of scaled scores: the Mexican version differed the most and only Digit Span had the exact same range of scale scores across all four versions.
- Range of Index scores and IQs: in general, Mexican IQ and Index scores are narrower, Puerto Rican scores are broader, and Spaniard scores are identical. (See Table 2 for an exemption)
- Range of confidence intervals (CIs): see Table 3
- Hypothetical profile: the use of Spanish norms tends to yield higher Index and IQ scores (see Figure 1 for FSIQ).

Table 1

Standardization Sample and Considered Variables

	English	Mexican	Puerto Rican	Spaniard
n	2,450	9700	330	1,369
Gender (M/F)	1147/1303	448/522	172/158	735/765
Age (years)	16 - 89	16 - 89	6 - 89	16 - 89
Education Level	<ul style="list-style-type: none"> • 0 - 8 • 9 - 11 • 12 • 13 - 15 • 16 + 	<ul style="list-style-type: none"> • Completion of last year before University • Completion of first year at University 	<ul style="list-style-type: none"> • 0 - 8 • 9 - 11 • 12 • 13 - 15 • 16 + 	<ul style="list-style-type: none"> • Elementary incomplete • Required education up to 14 years • Required education up to 16 years • Diploma/superior titles
Geographic Location	<ul style="list-style-type: none"> • West • North Central • South • North East 	<ul style="list-style-type: none"> • Urban 	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • Urban • Rural Intermediate • North • Central • East • South
Exclusion Criteria	<ul style="list-style-type: none"> • Visual/hearing impairment • Head injury • Etc. 	<ul style="list-style-type: none"> • Interfering Physical illness • Acute illness • Spanish not first language 	<ul style="list-style-type: none"> • Visual/hearing impairment • Head injury • Meningitis • Brain surgeries • Substance/alcohol 	<ul style="list-style-type: none"> • Visual/hearing impairment • Language/motor deficiency • Substance/alcohol abuse

Table 2

Range of POI Scores

	English	Mexican	Puerto Rican	Spaniard
Sum of Scale Scores	3 - 57	≤ 16 - 113	3 - 57	3 - 57
Index Scores	50 - 150	69 - ≥ 294	44 - 158	50 - 150

Table 3

Average Confidence Interval Ranges Across Versions of the WAIS-III

Version	VIQ	PIQ	FSIQ	VCI	POI	WMI	PSI
English	9.6	14	8	11.2	14	14	17.8
Mexican	26.2	48.8	37.4	41	20.4	50	8.4
Puerto Rican	9.6	12.4	8	11.2	14	15	19
Spaniard	10	12	16	8	8	8.4	8

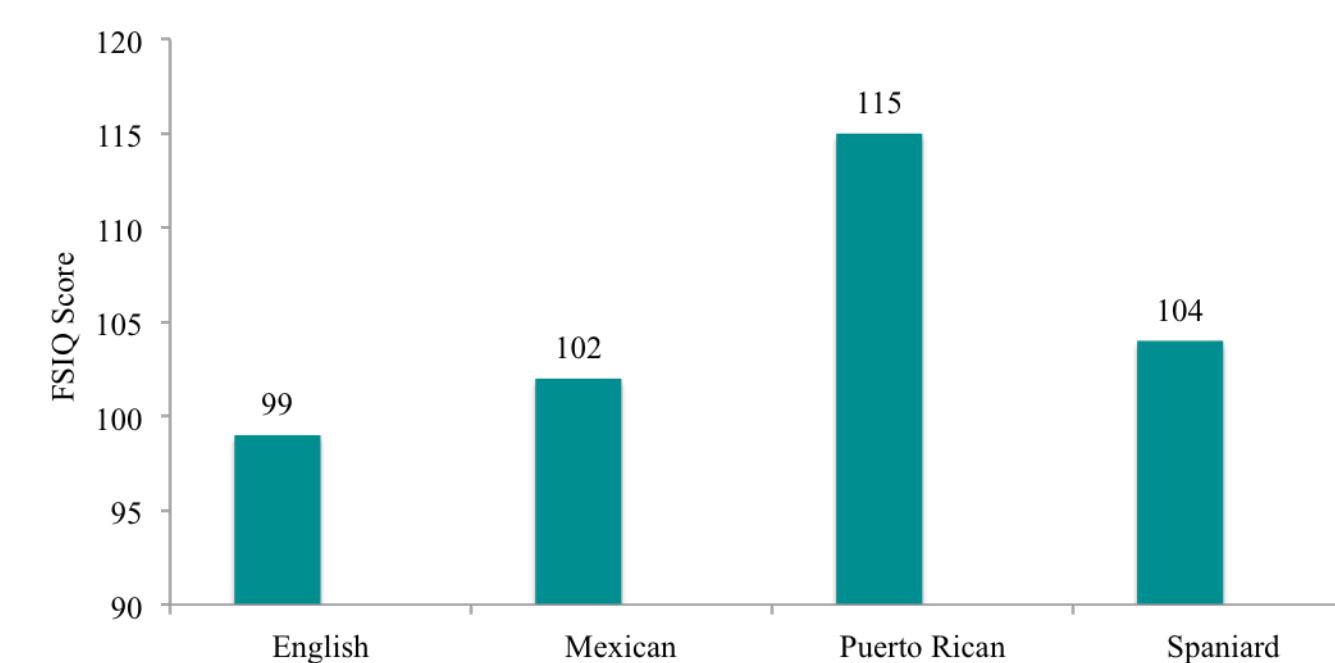


Figure 1. Hypothetical Full Scale IQ (FSIQ) Scores. Scores above are for a 45-year-old individual across the four versions of the WAIS-III, given the same raw scores at the 50th percentile. Puerto Rican version of the WAIS-III yields a higher FSIQ, when compared to the English version, by one standard deviation.

Conclusion

- Translated tests should be compared to the original version in order to determine similarities and differences amongst them.
- Clinicians and researchers should be aware and understand the limitations and strengths of such measures.
- Findings of this study ultimately indicate that although all three of the Spanish versions of the WAIS-III appear to be the same when compared to the English version, they are not in totality.
 - Each Spanish version presents its own adaptations and changes that consequently yields different scores given the same raw scores across versions.
- For this reason, and because the test is being used outside of the normed population, cautions should be taken when interpreting results.

Limitations and Future Directions

- Limitations
 - Qualitative and exploratory in nature.
 - Inclusion of a hypothetical profile rather than actual data.
- Future Directions
 - Determine the similarities and differences that exist with the Spanish WAIS-IV version, normed in Spain, that was published in 2012.

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