## CheckIT

Administration and Scoring of the Language Acculturation Meter ${ }^{m \mathrm{~m}}$ (LAM)

PAR Staff



## OVERVIEW

The Language Acculturation Meter (LAM) is designed for individuals ages 5 to 84 years who are transitioning from Spanish to Englishlanguage proficiency. Administration and scoring, available on PARiConnect, take approximately 10 minutes to complete. Paper-andpencil administration and scoring of the LAM may also be completed using the LAM scoring sheet and white paper, which feature normative data. PARiConnect administration and scoring will be addressed in this technical paper.

## BACKGROUND

Prior to development, the authors conducted a review of existing acculturation scales and found most failed to combine background information and educational history with questions about language acculturation. The LAM was developed to address this deficit. Item development was aided by consultations with bilingual psychologists and experts in the field.

The LAM is available in English and Spanish; however, only the English version is currently available on PARiConnect. The content of the English version was translated into Spanish, specifically Spanish for the U.S., by an International Organization for Standardization (ISO)-certified translation company that specializes in the translation and adaptation of psychometric tests and assessments. Items were then back-translated into English by an expert unfamiliar with the English version of the form.

PAR staff reviewed this back translation to ensure that the translated statements matched the purpose and intent of the original measure. Additionally, items were reviewed extensively throughout the process by a professional Spanish-speaking copy editor.

## ADMINISTRATION

The LAM may be administered in English using PARiConnect, PAR's online assessment platform. Examinees can complete the LAM in-office or at a remote location via an email link, which launches the administration. Detailed information on the use of PARiConnect is available under All Help Topics on PARiConnect.

After confirming the accuracy of their demographic information, all examinees are asked to describe their level of comfort speaking English and the amount of conversational English they use, as well as their country of origin. Those examinees who indicate they are from outside the U.S. and Puerto Rico are also asked to indicate their age of arrival in the U.S. and the number of years they have been in the U.S.

On Part 1: Education History, examinees are asked to indicate the type and language of instruction for each level of schooling. For each grade level, the examinee answers whether they were taught in Spanish, had bilingual education (ELL) in the U.S., were taught in English outside the U.S., or were taught in English-only classes in the U.S. If they were taught multiple ways during one school year, examinees can select more than one column for that grade.

If they did not attend a grade, examinees are instructed to select the Did not attend school this grade column.

The Part 2: Everyday Language Usage and Part 3: English Comprehension sections provide information about the degree of language acculturation from Spanish to English using 17 items rated on a 9-point sliding scale. There are no values designated on the screen; however, the scale includes anchors at the middle and ends of the scale.

On the Everyday Language Usage screen, examines are asked to indicate how often they use Spanish and/or English in each situation. This section includes 11 statements rated on a sliding scale with anchor points at each end of the scale, with Spanish only and English only at the ends and with half Spanish/half English as the midpoint anchor. Examinees may also select N/A for items that do not apply. For example, examinees who do not have siblings should mark N/A for Item 3, "Language spoken with your siblings."

In the English Comprehension section, examines are asked to indicate how well they understand English in each situation. This section includes 6 statements rated on a sliding scale with anchor points at each end of the scale, from Don't understand to Fully understand, with Sometimes understand as the midpoint anchor. If an item is not applicable, the examinees should select N/A. For example, examinees who are not employed should select N/A for Item 13, "English spoken with co-workers."

## SCORING

The LAM includes a section for demographic and background information and three sections on Education History, Everyday Language Usage, and English Comprehension. Demographic information, background information, and education history are not scored, but the information is presented in the LAM Score Report. Items from the Everyday Language Usage and English Comprehension scales are grouped into three clusters: Home Environment, Social Interaction, and Academic/ Cognitive. See the Appendix.

Items on the Everyday Language Usage scale are rated from 0 to 8 points: 0 for Spanish only, 4 for half Spanish/half English, and 8 for English only. Items on the English Comprehension scale are rated from 0 to 8 points: 0 for Don't understand, 4 for Sometimes understand, and 8 for Fully understand. Scale/cluster raw score means are obtained by dividing each raw score by the number of items completed (i.e., items that were not endorsed as N/A) on that scale/ cluster. Raw score means are rounded to the nearest whole number (e.g., $4.5=5$ ). If more than $50 \%$ of a scale or cluster's items are missing, LAM scale scores should not be interpreted. Item-level analysis is still possible, but caution should be taken when interpreting the scores.

The LAM Score Report provides raw score means and the corresponding percentiles to facilitate interpretation of the scales/clusters (see Figure 1). Percentiles are based on the normative comparison group selected on the

## LAM

Figure 1. LAM Score Report Figure Example


Note. Mean represents the raw score mean for each scale or cluster.
report options screen. The comparison groups include: U.S. natives (includes individuals from Puerto Rico), non-U.S. natives who have lived in the U.S. for 0-5 years, non-U.S. natives who have lived in the U.S for 6-19 years, non-U.S. natives who have lived in the U.S for 20 years or more or a combined group of U.S. and non-U.S. natives.

## INTERPRETATION

Background information and education history included on the LAM Score Report provide invaluable information for interpretation of raw score means.

## Background Information

The Background Information serves to increase cultural awareness of the examiner and ensure a more ecologically valid assessment. Country of origin informs probable dialect and provides
information about immigration factors (e.g., an individual coming from Puerto Rico, a U.S. territory, likely has greater cultural ties to the U.S. and may have certain aspects of acculturation [e.g., social interaction] similar to those who are English-speaking monolinguals compared to someone from El Salvador, where political strife has warranted seeking asylum in the U.S.). Age of arrival in the U.S. provides information about language acquisition. Immigrating as a young child rather than as a teenager or an adult will have different impacts. It is important to note that although a child may be born in the U.S., they may only speak Spanish or know minimal English until they are enrolled in formal education. The number of years in the U.S. provides the probable number of years of exposure to the English language. Level of comfort and amount of conversational English is an openended response to describe the examinee's subjective language acculturation.

LAM

## Education History

The Education History section documents the number of years of formal education in Spanish and/or English and addresses the amount of exposure to English-language instruction. If enrolled in bilingual instruction in the U.S., the type of instruction received (e.g., dual immersion, sheltered) should be queried to aid in interpretation. If the individual learned to read in Spanish before coming to the U.S., then English literacy is likely to progress more rapidly (Ortiz et al., 2018). If the individual has been exposed to a third language or did not attend school at all for some time period, follow-up inquiry may be helpful. Documenting the number of years of education taught in Spanish, the number of years of English language learning (e.g., ELL), and the number of years of English-only instruction provides the examiner with information that helps determine the examinee's probable level of English-language proficiency.

## Everyday Language Usage and English Comprehension Scales and Cluster Scores

Examiners should follow up with the examinee to determine if there are any unusual circumstances as the basis for N/A endorsements (e.g., a child who speaks English with their parents but only speaks Spanish with a grandparent). The Everyday Language Usage scale gives an indication about the level of cultural immersion and degree of exposure to U.S. culture. Everyday Language Usage raw score means greater than 4 indicate that English is used more than Spanish. The English

Comprehension scale provides insight into how well the examinee comprehends spoken English in daily interactions and can be useful in determining the examinee's English-language proficiency. However, this will depend on the normative data comparison as described in the following section. English Comprehension raw score means closer to 8 indicate good English comprehension. The ratings of items in the three clusters can be viewed qualitatively. For example, individuals with Social Interaction cluster raw score means of 4 or greater may have attained conversation fluency known as basic interpersonal communicative skills (BICS; Cummins, 1979). If the individual also shows values greater than 4 on most items on the Academic/Cognitive cluster, then the individual may have achieved cognitive academic language proficiency (CALP; Cummins, 2008) and assessment in English is likely appropriate. This information is useful when determining the most appropriate assessment to administer-a decision that is ultimately up to the professional administering the test. Home Environment and Social Interaction scores may be less significant in choosing Spanish-language versus Englishlanguage assessment materials. Conversely, English Comprehension, Everyday Language Usage, and Academic/Cognitive scores can provide better insight into choosing an Englishlanguage assessment over a Spanish-language assessment and vice-versa.

Percentile ranks are also provided for an examinee's total, scale, and cluster scores. A description of the development of percentile

ChecKIT Series
LAM
rank scores, including participant demographics can be found here. Percentile rank scores allow examiners to interpret the level of endorsement of a particular examinee against similar individuals for each of the scales/clusters.

## PAR.



## REFERENCES

Cummins, J. (1979). Cognitive/academic language proficiency, linguistic interdependence, the optimum age question and some other matters. Working Papers on Bilingualism, 19, 121-129. Ontario Institute for Studies in Education.

Cummins, J. (2008). BICS and CALP: Empirical and theoretical status of the distinction. In B. Street \& N. H. Hornberger (Eds.). Encyclopedia of Language and Education, 2nd Edition, Volume 2: Literacy (pp. 71-83). Springer Science and Business Media. https://doi.org/ffsgms

Ortiz, S. O., Piazza, N., Ochoa, S. H., \& Dynda, A. M. (2018). Testing with culturally and linguistically diverse populations: New directions in fairness and validity. In D. Flanagan\& E. Mcdonough (Eds.), Contemporary intellectual assessment, fourth edition: Theories, tests, and issues (pp. 684-712). Guilford.

Trujillo, S. M., Greene, J. A., \& Carrillo, A. (2020). Introduction to the Language Acculturation Meter for Spanish-speaking English language learners [white paper]. PAR.

## APPENDIX

Language Acculturation Meter Items and Clusters

| Item | Cluster | Cluster |
| :--- | :--- | :--- |
| Part $\mathbf{2}$ |  |  |
| 1. Language you speak at home: | Home Environment |  |
| 2. Language spoken by adults in your home: | Home Environment |  |
| 3. Language spoken with your siblings: | Social Interaction | Home Environment | - 16204 N. Florida Ave. • Lutz, FL 33549 •1.800.331.8378 • www.parinc.com

Copyright © 2020 by PAR. All rights reserved. May not be reproduced in whole or in part in any form or by any means without written permission of PAR.
To cite this document, use:
PAR Staff (2020). Administration and Scoring of the Language Acculturation Meter (LAM) [technical supplement]. PAR.


