Language Proficiency Diagnostic Assessment: A Psychometric Investigation

Each semester, thousands of students return to our campus having learned one (or more) foreign languages for an extended period of time, and the college provides upper-division courses for approximately 70 languages to help these students maintain and improve their language ability. With so many students and languages, correct placement into the appropriate course is a major challenge, as creating and maintaining 70 separate tests of student ability would be resource prohibitive. As a result, we developed the Language Proficiency Diagnostic Assessment (LPDA) as a low-cost language-agnostic way to provide placement recommendations to students. The LPDA does not directly measure student ability; rather, the course recommendation provided at the end of the LPDA is based entirely from self-reported data provided by the student. It takes into account a student’s language background (including difficulty of language learned in relation to English, years of study, number of other languages spoken, level of language immersion, etc.), self-assessment of speaking and writing ability (based on can-do statements from ACTFL), and responses to a modified language-learning grit scale.

While validation of an assessment is multifaceted, an important step in providing evidence for the validity of results for any instrument is an investigation of its psychometric properties. We examined the internal structure of the LPDA by answering the following questions:

To what extent

* does the factor structure match the theoretical structure on which the LPDA is based?
* do the items function as intended?
* are subscales reliable?
* are the subscales biased when comparing results between males and females?

To answer these questions, we administered the LPDA to over 1,000 students returning to study Spanish, Portuguese, French, and Italian, and analyzed the results using Structural Equation Modeling (SEM) and Item Response Theory (IRT). We will discuss the results, including areas for instrument improvement, and limitations to the study.