The Language Background Questionnaire in L2 Research: Teasing Apart the Variables

Laura Sabourin, Jean-Christophe Leclerc, Myriam Lapierre, Michele Burkholder & Christie Brien
University of Ottawa

Language background questionnaires (LBQs) are a fundamental tool used in studies targeting bilingual and multilingual populations. Their success, however, depends on their ability to quickly and effectively assess complex and often-confounded variables, such as age of acquisition (AoA), manner of acquisition (MoA), language proficiency, language dominance and frequency of use. While these variables are thought to have a significant impact on bilingual language processing and representation, their individual effects are difficult to tease apart.

For example, in studies investigating the existence of a sensitive period for bilingual lexical organization, recent studies suggest that an early AoA contributes to the integration of the bilingual lexicon, even when second language (L2) proficiency is controlled for (Silverberg & Samuel, 2004; Dimitropoulou et al., 2011). New research, however, suggests that MoA, a factor that has received little attention in the literature, also plays a crucial role: a more naturalistic MoA appears to facilitate integration of the two lexicons even for late bilinguals (Sabourin et al., 2014). Indeed, MoA is a particularly interesting variable to investigate in an officially bilingual country such as Canada. In many regions, native speakers of English acquire French as a L2 in "French Immersion programs", and rarely use it outside of the classroom setting; however, native speakers of French often acquire English as a L2 in a much more naturalistic manner, as daily contact with English in the community and through media is inevitable. However, due to its complex nature and the heterogeneity of the L2 learning experience, MoA is difficult to operationalize and measure. Existing language questionnaires (e.g., the LEAP-Q by Marian et al., 2007) lack the ability to fully and systematically tease apart all of these variables.

Our goal was thus to develop a comprehensive LBQ capable of assessing and quantifying the multiple factors that affect bilingual processing. In addition to typical questions concerning age of first exposure (Ao1E) and self-rated proficiency, we have operationalized such factors as age of immersion (AoI), MoA and language dominance. As such, this LBQ specifically targets information about immersion settings both inside and outside of the education system, as well as detailed information about language experience from infancy to adulthood, and self-reported language proficiency in five different skill areas.

In order to validate this LBQ, 81 participants with diverse language backgrounds completed the questionnaire, in addition to French and English cloze tasks (Tremblay, 2011; Brown, 1996) to evaluate their language proficiency. Two months later, 48 of these participants completed the LBQ for a second time. Results showed a significant correlation between cloze task score and all five measures of self-rated proficiency, with the strongest effect for self-rated reading proficiency ($r=0.792$, $p<.001$), and the weakest effect for pronunciation ($r=0.492$, $p<.001$). Second, a significant correlation between test and retest results was found with respect to group classification ($r=0.882$, $p<.001$), demonstrating that the LBQ yields reliable and systematic results for participant classifications with respect to MoA, AoI, Ao1E and L2 Proficiency. Finally, cluster analyses indicated that the factors used to operationalize MoA were able to successfully classify participants into expected groups.

In addition to presenting these results, we will discuss tools used to score the LBQ for the different variables and ways that researchers can adapt these tools for different types of research questions, allowing for our LBQ to be maximally useful for many different types of L2 investigations. As such, we believe that this LBQ will enable us, as well as others, to effectively obtain complete information about participants' language backgrounds, making it a tool of interest to researchers investigating various aspects of bilingualism and multilingualism.

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