The current study investigates the effects of empathy in the development of second language (L2) prosody by analyzing the acquisition of an unfamiliar Spanish variety’s question intonation. Prior research has shown that empathy influences prosody perception in the first language (Orrico & D’Imperio, 2020; Esteve-Gilbert et al., 2020) and in L2 contexts (Casillas et al., 2023). Casillas et al. found that L2 Spanish learners with higher empathy more accurately categorized questions and statements in a two-alternative forced choice (2AFC) listening task. However, the mechanisms underlying the effect remain unclear.

Melchers et al. (2017) proposed that higher empathy facilitates implicit learning through increased implicit perception and increased storage of environmental details. In their study, participants watched short video clips and answered questions about the setting and characters. Those with higher empathy scores performed more accurately. The current study extends this hypothesis to L2 prosody acquisition by testing whether higher-empathy learners show more rapid acquisition of novel intonation contours.

A total of 200 L2 Spanish learners (L1 English) from the Northeastern United States will be exposed to phone conversations between speakers of Spanish varieties that use a final-fall pitch contour for yes-no questions. After exposure, they will complete a 2AFC listening task in which they must categorize utterances as either interrogative or declarative.

I will use Bayesian multilevel regression and drift diffusion modeling to analyze the 2AFC accuracy and reaction time data as a function of Spanish proficiency and empathy scores, measured with the Empathy Quotient (Baron-Cohen & Wheelwright (2004), for the target utterance type. This design will allow me to test whether empathy predicts perceptual sensitivity or response bias in the rapid acquisition and categorization of novel intonation patterns.

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