

PRONUNCIATION ATTITUDES: THE ROLE OF MULTILINGUAL STATUS AND PERCEIVED POSITIVE LANGUAGE INTERACTION (PPLI)

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This study investigated foreign language (FL) learners' attitudes toward improving pronunciation in conjunction with bilingual/multilingual status. The analysis involved both an innovative operationalization of multilingualism, Perceived Positive Language Interaction (PPLI), which is influenced by Herdina and Jessner's (2002) Dynamic Model of Multilingualism, as well as a more traditional definition of multilingualism. The current study explored the relationship between experience with multiple languages and pronunciation attitudes with 195 undergraduate students studying FLs in English-speaking North America. A modified version of the Pronunciation Attitude Inventory (Elliott, 1995a) was combined with data related to bilingual/multilingual status. Quantitative analyses included an exploratory factor analysis (EFA) and subsequent ANOVAs, with the open-ended questions analyzed via a content analysis. The EFA resulted in a three-factor solution: F1 – Lack of NS bias; F2 – Importance of improving pronunciation; F3 – Importance of communication/skills other than pronunciation. The results indicated that F2 was the only factor illustrating group differences, with the multilingual and PPLI participants showing a stronger desire to improve pronunciation in the FLs studied. Ultimately, students with experience with more than one FL have a keener desire to improve their pronunciation, a characteristic that FL instructors can use to their advantage.

INTRODUCTION

Pronunciation is an important language skill, and pronunciation instruction can result in learners becoming more intelligible and comprehensible speakers (Derwing, Munro, & Wiebe, 1997, 1998). To be better prepared to teach pronunciation, instructors need more information about the goals and attitudes of their learners with regard to pronunciation in the classroom. Levis (2015), for example, demonstrated that advanced learners in an English as a Second Language (ESL) context held conflicting/contradictory beliefs about pronunciation improvement. They believed they could 'catch' good pronunciation from native speakers (NS) but did not seek out interactions. Having information about learner characteristics and beliefs can better equip teachers to make informed decisions in the classroom.

While we have some information about learners' attitudes toward pronunciation from an ESL/EFL perspective (Derwing, 2003; Levis, 2015), we know much less about learners of other languages. The majority of work that does exist in this area compares foreign language (FL) learners' attitudes toward pronunciation to their segmental accuracy (e.g., Elliott, 1995a; Shively, 2008) or improvement spanning a certain period of time (e.g., Elliott, 1995b; Kissling, 2014).

For example, to determine factors that contribute to accurate production for intermediate Spanish learners, Elliott (1995a) designed and administered a Pronunciation Attitude Inventory (PAI), which we adapted for use in the current study. Results from Elliott (1995a) indicated that pronunciation attitudes were the most significant predictor of accuracy scores. Elliott (1995b), however, showed that while attitudes moderately correlated with pretest and post-test scores, they did not contribute to a model predicting improvement after one semester of instruction. Similarly, Kissling (2014) found that the best predictor of posttest scores were the pretest scores and also reported significant (albeit small) correlations between two factors: 1. attitudes towards pronunciation and number of university classes completed ($r = .24$) and 2. attitudes towards pronunciation and extramural language activities (i.e. Spanish use outside of the classroom) measured in hours per week ($r = .33$). Finally, also investigating learners of Spanish, Shively (2008) found that a U-shaped curve indicated the students with the highest and lowest desire to improve pronunciation had comparable accuracy score profiles (p. 101). In contrast, students who indicated a moderate concern for pronunciation improvement had fairly low accuracy rates in comparison to participants in the other two groups.

Extending pronunciation attitude research beyond the connection between attitudes and improvement/accuracy, Huensch and Thompson (2017) sought to contextualize pronunciation attitudes in U.S. university-level FL classrooms by examining the relationship between attitudes and factors such as language being studied, class level, and extramural language activity. They argued that better understanding attitudes toward pronunciation would allow for knowing how to promote positive attitudes in FL classrooms. The results indicated that the amount of extramural language activity had a strong relationship to positive perceptions about improving pronunciation, especially for learners enrolled in the first two semesters of a FL class, results similar to those in Kissling (2014). However, the authors indicated that further learner variables need to be explored. Considering the fact that a number of students have previous FL learning experience when they enter our classrooms, it is important to understand how attitudes might interact with bilingual/multilingual status. The current work, thus, extends the exploration of the connection between attitudes toward pronunciation and contextual factors by investigating the relationship between pronunciation attitudes and multilingual status of the learners.

What makes a person multilingual? Contrary to popular belief, someone does not need equal levels of competence in all skills to be classified as multilingual (see Gass, Behney, & Plonsky, 2013, pp. 480–481). As such, one of the operationalizations of multilingualism in the current study is those learners who have had experience with two or more foreign languages, regardless of the level of competency achieved. The second operationalization of multilingualism in the current study is the emic perspective of Perceived Positive Language Interaction (PPLI), which classifies a learner as multilingual only if that learner can perceive the positive interactions between the two (or more) foreign languages studied. PPLI was primarily inspired by Kellerman's (1979) work on perceived language distance, with additional theoretical input from the Dynamic Model of Multilingualism (Herdina and Jessner, 2002) and Odlin's (2008) concept of interlingual identification. Essentially, the PPLI framework defines those learners who do not see positive interactions between foreign languages studied as acting similarly to bilingual learners (i.e. learners with one FL) at the cognitive level. In other words, in order to benefit from having studied multiple languages, the learners need to be able to conceptualize the connectivity of the linguistic systems in question. Previous work on PPLI has grouped participants according to their answers on the open-ended question asking about these interactions, and those

multilingual learners who see positive interactions are placed in the PPLI group (i.e. seeing the relationship between L2 German and L3 Swedish vocabulary). Those who only had experience with one language other than the L1, those who experienced no interactions between languages, or those who perceived negative interactions (i.e. saying that learning French before Spanish made Spanish grammar harder to learn) are placed in the No Perceived Positive Language Interaction (NPPLI) group (see Figure 1). Further details and examples of the PPLI construct can be found in Thompson (2016).

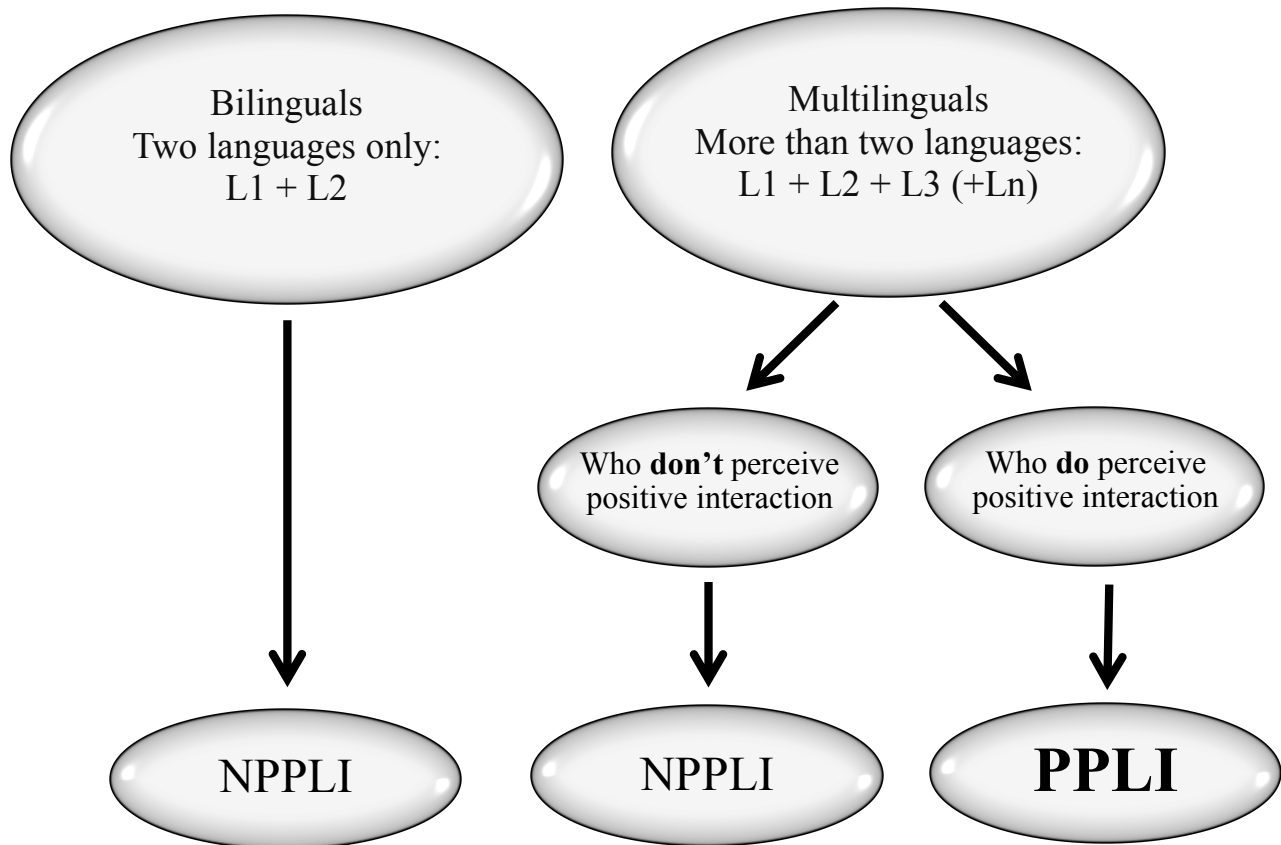


Figure 1. Pictorial representation of the PPLI framework

Several empirical studies have examined the relationship between PPLI and a variety of learner variables, such as language aptitude (Thompson, 2013), motivation (Thompson & Erdil-Moody, 2016), anxiety (Thompson & Khawaja, 2016), and beliefs (Thompson & Aslan, 2015). Additionally, Köylü (2016) examined PPLI and fluency development with Turkish study abroad students, but more work needs to be done regarding the relationship of multilingualism, including the PPLI operationalization, and other learner variables. As such, the impetus of the current study is to examine the relationship of multilingual status and attitudes towards pronunciation.

RESEARCH QUESTIONS

This study is an examination of the relationship between multilingual status and attitudes towards pronunciation in the U.S. university-level FL context. The following are the research questions that guided the study:

1. Do multilinguals have different attitudes towards pronunciation than bilinguals?
2. Do those who perceive positive interactions between foreign languages studied have different attitudes towards pronunciation than those who do not perceive positive interactions?

METHODS

The participants, materials, and procedure used in the current study were described in detail in Huensch and Thompson (2017). Thus a summary of those methods is presented in this manuscript; readers are referred to the aforementioned work for further details, as well as the materials posted on the IRIS website (<http://www.iris-database.org/iris/app/home/index> – search for the authors’ names). Information about the coding of multilingual status is provided in the Data Analysis section.

Participants and Procedures

Participants included 195 university-level FL learners studying a wide variety of foreign languages (see Table 1). The majority of participants were of typical university age (in their 20s) with about 2/3 female and 1/3 male. Participants completed a three-part, online survey that asked about their language learning background, their language learning motivation, and their attitudes toward pronunciation. The survey took about 30 minutes to complete, and those participants who completed the survey were entered into a drawing for one of three \$25 Amazon gift cards. As the pronunciation attitudes questionnaire was at the end of the survey, only 180 of the original 195 participants completed this part; thus, 180 participants were included in the analysis for this study.

Data Analysis

As stated in the introduction, two distinct operationalizations of multilingualism were used in the current study. The first operationalization was that those students with experience with two or more foreign languages were classified as multilinguals, no matter the amount of study or the proficiency obtained in the languages. The second operationalization of multilingualism was the PPLI construct, which was defined in the literature review. For the current study, the participants were asked to respond to the following query: “If you have studied other languages in the past, do you think that this has helped or hindered your ability to learn subsequent languages? In other words, do you see interactions (positive or negative) with the languages you have studied? Please provide as many specific examples as you can.” The participants were also asked to state the languages with which they saw the interactions and to provide specific examples of these interactions. Twenty percent (randomly chosen) of the open-ended responses were coded for PPLI status by both authors. The Cronbach’s Alpha value for inter-rater reliability was .846, indicating strong agreement between the two raters; thus, the remaining 80% were coded by the first author. An example of a statement that would indicate a PPLI grouping is the following: “I

have found that by better understanding one romance language/Latin derivative language (Spanish), it was easier for me to begin learning French. Also, as Spanish has limited vowel sounds, it was easier for me to understand the pronunciations of Japanese syllables.” The following statement is from a learner who was placed in the NPPLI group: “Because I currently study Chinese intensely I don't have the time to practice French anymore. Additionally the two languages are very different from each other and learning one does not help me the other any better.” For the analyses, both operationalizations of multilingualism were used in separate sets of analyses.

Table 1

Participant Demographics

Bi- and Multilinguals	Bilinguals	Multilinguals
<i>n</i> =180	<i>n</i> = 70	<i>n</i> =110
NPPLI and PPLI	NPPLI	PPLI
<i>n</i> =180	<i>n</i> =80	<i>n</i> =100
Languages	Spanish (68), French (49), German (15), Japanese (12), Chinese (9), English (5), Latin, (5), Arabic (4), Italian (3), ASL (3), Greek (2), Russian (2), Korean (2), Urdu (1)	
Total		
<i>n</i> =180		

RESULTS**Quantitative Analysis**

For the analysis, first an Exploratory Factor Analysis (EFA, Maximum Likelihood extraction, direct oblimin rotation) was performed using the 16 pronunciation items (KMO = .852; eigenvalues > 1; item loading values > .3). Details of the EFA procedure can be found in Huensch and Thompson (2017), but the end result was a three-factor solution: F1: lack of NS bias (e.g. not believing that native speakers are inherently more qualified to be pronunciation teachers – items 7 and 16), F2: importance of improving pronunciation (items 1, 2, 3, 4, 5, 6, 8, 11, and 13), and F3: importance of communication/skills other than pronunciation (items 9, 10, 14, and 15). The values from the items that loaded onto each factor were averaged, which resulted in a “factor value” for each participant. The factor values were then used as the dependent variables for group comparisons in the one-way ANOVA analyses in the current study. The effect sizes are reported as η^2 (small: 0.01, medium: 0.059, large: 0.138; Cohen, 1988). All ANOVA analyses were performed twice – once with the multilingual definition of experience with more than one foreign language and again with the PPLI operationalization of

multilingualism. The group variables of either “multilingual” or “PPLI” were used as the independent variables in the analyses.

Table 2

ANOVA Results for Multilingual Status

	Bilingual		Multilingual		ANOVA results			
	<i>(n = 70)</i>		<i>(n = 110)</i>		<i>df</i>	<i>F</i>	η^2	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>				
F1: Lack of NS bias	3.53	1.01	3.59	1.17	1, 178	0.116	0.00	.734
F2: Importance of improving pronunciation	4.67	1.01	5.05	0.80	1, 178	8.010	0.04	.005
F3: Importance of communication/skills other than pronunciation	4.23	0.94	4.22	0.90	1, 178	0.001	0.00	.974

Table 3

ANOVA Results for PPLI

	NPPLI		PPLI		ANOVA results			
	<i>(n = 80)</i>		<i>(n = 100)</i>		<i>df</i>	<i>F</i>	η^2	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>				
F1: Lack of NS bias	3.44	1.15	3.67	1.07	1, 178	1.881	0.01	.172
F2: Importance of improving pronunciation	4.60	1.05	5.14	0.68	1, 178	17.488	0.09	.000
F3: Importance of communication/skills other than pronunciation	4.23	1.01	4.21	0.83	1, 178	0.014	0.00	.906

The results of the quantitative analyses indicated that for both operationalizations of multilingualism, there was a significant group difference for F2: Importance of improving pronunciation. With a lower *p*-value and a medium vs. small effect size for the PPLI grouping, the difference of these pronunciation attitudes is amplified when using the emic operationalization of PPLI.

Short Answer Responses

In addition to the quantitative analyses, the responses to the short-answer question about perceived language interactions were analyzed. There was no specific focus on pronunciation in the question posed to the participants; however, some provided answers that focused on pronunciation (27 of 157 responses, 17%). Within the answers that related to pronunciation, there were four themes. Studying other languages in the past:

- (1) generally helped with pronunciation, but with no specific explanation as to how/why (5 comments);
- (2) helped because learners had previous experience or larger inventories to draw from (2 comments);
- (3) helped because learners could make direct phonological comparisons (10 comments);
- (4) hindered (10 comments).

Some of the comments were quite general in terms of previous language experiences helping with pronunciation in subsequent languages. For example, one participant commented, “I think that studying past languages has helped me with learning new languages. I will make connections with some of the words between languages and make connections that way. I also think that it helps with pronunciation.” Other participants found it helpful to have had previous experiences or larger inventories to draw from. For example, one participant stated, “I think studying another language in the past has helped my ability to learn a new language because it has given me experience interacting with a new set of vocabulary rules, grammar, and pronunciation. I see positive interactions between my two language learning experiences.” Another example from this category is the following statement: “It also helps with pronunciations because it increases the amount of morphemes available to me.”

Several participants also made direct phonological comparisons of the foreign languages studied. Some comments were more general, such as, “Learning how to pronounce new sounds in one language aids pronunciation in another.” Some answers compared specific languages, even ones that are seemingly unrelated, such as this statement comparing German and Chinese: “Pronunciation also helps. When learning basic German, I learned how to pronounce ü. English doesn't have this sound, but Chinese has a sound that's very similar.” There were also comparisons between Spanish and Japanese, which are grammatically distinct, yet phonologically similar languages: “Yes, I think learning Spanish before Japanese has helped me with being able to translate from foreign language to English and the other way around. I think Spanish also really helped me understand pronunciation and phonetic sounds.”

Finally, there were also learners who indicated that the one language studied hindered pronunciation in another language. For example, one learner stated that studying French interfered with his Spanish production: “A negative interaction would be how taking French skewed my ability to pronounce Spanish just by looking at it... After taking several more years of French, Spanish is even more difficult to pronounce now, as I have to remind myself that basic, common words like 'de' are different.” Another learner indicated that the different pronunciations of <ll> in Spanish and Italian caused issues: “The similar spelling with dissimilar pronunciation (such as with the word 'pollo') makes learning Italian more difficult.” Although there were some perceived negative interactions in terms of pronunciation in multiple foreign languages, there were more learners who commented on the benefits of the perceived positive interactions with the languages studied.

DISCUSSION AND CONCLUSION

Both operationalizations of multilingualism indicated significant group differences for F2: Importance of improving pronunciation (multilinguals had a stronger desire than bilinguals and the PPLI learners had a stronger desire than the NPPLI learners to improve their pronunciation). The PPLI operationalization of multilingualism demonstrated a more precise division of attitudes toward pronunciation improvement indicated by the smaller *p*-value and larger effect size, even with the small number of multilinguals who did not indicate a positive perception of interactions between FLs studied ($n = 10$) being placed in the NPPLI group. This is further evidence of the importance of including the emic perspective of student perceptions when defining multilingual status. Ultimately, these results indicate that experience with multiple languages helps these students enjoy the challenges involved with language learning, including improving pronunciation.

Results from the open-ended question indicated that overall students saw the positive effects on phonological development when having experience with multiple languages with a few participants indicating that learning multiple languages negatively affected their pronunciation in one of the languages. Thus, if students can see positive interactions between languages, the previous language learning experience can help them with subsequent language learning, including seeing parallels with the sound systems that are typically viewed as quite distinct (e.g. Chinese and German). Participants also commented on positive connections between phonologically related languages like Japanese and Spanish potentially without any knowledge of the theoretical aspects of the phonological similarities between the systems.

Why are these results important for language instructors to consider in their classrooms? An increasing number of students enrolled in foreign language classes have experience with multiple languages; thus, instructors should be aware of the language background of their students to more appropriately raise awareness for potential beneficial crosslinguistic interactions. After the instructors have determined the language learning backgrounds of their students (Huensch & Thompson, 2017, has a sample survey to use with students), they can investigate how the students view their past language learning experiences in relation to their current learning experiences. Do they see the learning experiences as separate processes, or do they make connections between them? Thompson (2016) raised the question of the teachability of the perception of positive language interactions. In other words, can instructors help students reap the benefits of their experiences with multiple languages, or is this construct only valid if students come to this realization on their own? After knowing the language background of their

students, instructors of less commonly taught languages like Japanese can point out the similarity to other systems (e.g. Spanish). With Spanish being the most commonly studied FL in the U.S. context, encouraging comparisons of FLs can make a less commonly studied language (such as Japanese) more accessible to those students with familiarity with Spanish.

An additional reason for the importance of language instructors considering experience with multiple languages in their classrooms is that students with experiences with multiple languages will have a greater awareness of and a greater desire to work on pronunciation in that language. Even a limited amount of a third language (i.e., one semester) can be beneficial for a variety of reasons, especially in a context where most multilinguals perceive positive interactions between languages, as in the current study.

In conclusion, we need to know more about students' backgrounds to help them with all aspects of language learning, including pronunciation. As the connection between previous language experience and attitudes towards improving pronunciation is a new thread of inquiry, more research needs to be carried out in different contexts to see if the results are replicable. Also, future studies could explore the connection between teacher variables, such as language learning background, and their approach to helping their students with pronunciation, as well as the connection between student and teacher beliefs surrounding the need for explicit attention on pronunciation during class time. The connection between learner variables and attitudes towards improving FL pronunciation is an area ripe for future research.

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