

ATTITUDES TOWARDS L2 PRONUNCIATION INSTRUCTION: A COMPARATIVE ANALYSIS OF USEFULNESS RATINGS

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While there has been a call in the literature for more empirically-tested pronunciation materials to assess the effectiveness of treatments, it is also necessary that more research be conducted concerning adult L2 learner thoughts about pronunciation activities, as learner perceptions are essential to better understanding of which instructional type should be considered for best-practices. In this study, instructional types consisted of: (1) explicit instruction, (2) visual feedback, and (3) a combination instruction that incorporates both explicit instruction and visual feedback. Three different groups received one of the three forms of instruction, and an attitudes survey was distributed to each group at the close of the treatment sessions. From the survey's five constructs, which contained 10 different statements total (one to three statements per construct), one construct was selected to examine attitudes towards the usefulness of each instructional type, rated on a Likert-scale by L2 learners in their respective treatment group. Results suggest that while all learners regarded their type of instruction as useful, L2 learners in the combination group rated their treatment type numerically more positive regarding usefulness.

INTRODUCTION

Since the seminal study by Derwing & Munro (2005), a growing number of second language (L2) pronunciation studies has surfaced, empirically testing various methods and practices (Derwing & Munro, 2015; Thomson & Derwing, 2014) to remedy the lack of instructional materials for teaching pronunciation noted by researchers (Foote et al., 2011; Morin, 2007; Olson, 2014b). With the rise of empirically-tested instructional types and the need to investigate different methods in relation to improvement in L2 production, one aspect that is crucial to observe when considering best-practices is L2 learner views of various methodologies.

Three types of pronunciation instruction were the focus of comparison: explicit instruction, visual feedback, and a combined instructional method incorporating explicit instruction and visual feedback. For the pronunciation trainings carried out in this study, each treatment type focused on reducing VOT values for Spanish tokens, as English long-lag productions of /p,t,k/ have greater values in comparison to Spanish short-lag productions. Once the treatment sessions were completed, a survey was distributed to each group regarding their attitudes towards their particular treatment. Analyses and results specifically focused on how useful each group viewed their specific instructional type. The following sub-section details each of the instructional methods, followed by a rationale for investigating learner thoughts about these methods.

Methods for Teaching L2 Pronunciation

Explicit Pronunciation Instruction

Various researchers have proposed that L2 teaching should include some form of explicit pronunciation instruction in efforts to observe how this type of instruction affects learner production (Camus, 2019; Derwing & Munro, 2009; Miller, 2012; Saito & Lyster, 2012; Yoshida & Fukada, 2014). As many studies focus on segmental features for adults at the university level, phonetic training in a phonetics course has been the dominant framework for executing explicit pronunciation instruction (Lord, 2005; Lord, 2010; Miller, 2012; Sturm, 2013). For example, researchers have familiarized students with the International Phonetic Alphabet (IPA) symbols that represent sounds in the target language, rather than having L2 learners focus on graphemes in the first language (L1) and the L2.

In a more recent example of explicit instruction, Yoshida & Fukada (2014) contend that drills are beneficial to L2 learners, despite arguments against incorporating drills. Furthermore, another type of explicit instruction is corrective feedback. As defined by Lyster & Ranta (1997), corrective feedback explicitly reveals the error to the student, providing them feedback in the form of modeling, recasting, and eliciting the target form. Corrective feedback can then be interpreted as correcting the mispronounced utterance or segment and providing an accompanying explanation of the mispronunciation (Lyster et al., 2013; Saito & Lyster, 2012). With the review of the previous studies, a combination of IPA use, modeling, explanation of articulation, repetitions and drills, and corrective feedback is proposed as being the most viable option for explicit instruction.

Visual Feedback

In one of the earliest visual feedback studies, deBot & Mailfert (1982) found the L2 learners of English were able to significantly improve intonation after receiving visual feedback involving different pitch ranges of native speakers (NSs) being displayed on a screen for non-native speakers (NNSs). A growing number of studies continue the use of visual feedback in the classroom by instructing participants on various segmental features (Motohashi-Saigo & Hardison, 2009; Offerman & Olson, 2016; Olson, 2014a). Olson (2014a) found that L2 learners of Spanish significantly improved after comparing their productions to NS productions via displaying NS and NNS sound waves and spectrograms. Visual feedback treatments were also incorporated into a L2 Spanish course to demonstrate the difference between the voiceless plosives [p,t,k] in Spanish vs. American English in word initial position, resulting in significant improvement post-training (Offerman & Olson, 2016).

Combined Explicit Pronunciation Instruction & Visual Feedback

While visual feedback treatments administered by Offerman & Olson (2016) are more of an inductive paradigm, a few studies have incorporated more of a combined instructional approach. However, these studies involved novice learners (no experience with the language) (Kartushina et al., 2015) or higher level L2 learners that were often involved in a type of phonetics course (Lord, 2005). As an example of combination instruction, Kartushina et al. (2015) conducted a study in which L1 speakers of French received a combined training of corrective feedback coupled with

visual feedback for the production of Danish vowels. It was found that the experimental group improved, while the control group displayed no trends of improvement.

Learner Thoughts about Pronunciation Instruction

Regarding learner thoughts on pronunciation instruction, it has also been noted by several researchers that L2 learners wish to receive pronunciation instruction (Elliott, 1995; Levis & Grant, 2003), and they also view pronunciation instruction as important to their L2 learning (Drewelow & Theobald, 2007; Grim & Sturm, 2016; Lord, 2008; Olson, 2014b). For example, Lord (2008) found that participants valued the pronunciation gains made during a semester, and that they also felt it was important for future L2 learners to take part in pronunciation activities to become more aware of how to improve. Huensch & Thompson (2017) found that L2 learners of a variety of languages rated the importance of pronunciation learning higher than other communicative skills, while Sturm et al. (2019) found that L2 French learners also regarded pronunciation instruction as an essential aspect to their language learning.

As it has become more evident that L2 learners wish to receive pronunciation instruction and believe it to be crucial to their L2 development, we have yet to discover what students' attitudes are towards different types of instruction. Additionally, it would be of interest to gauge which, if any, of the current methodologies they find most useful to their own learning. Moreover, it has been claimed that it is crucial to investigate learner attitudes and perceptions of pronunciation instruction (Jarosz, 2019, p.69), as their performance may be affected by factors such as individual differences or motivation (Nagle, 2018). However, there is still little investigation on L2 learner thoughts regarding pronunciation instruction they have received and to what extent they view instruction as beneficial to their pronunciation development. Upon considering the three different instructional methods delineated above, along with the gap in the learner attitudes literature, the following research questions have been proposed:

RQ1: To what extent will L2 learners find three different types of pronunciation instruction useful to their language learning?

RQ2: To what extent will one type of instruction be found to be most useful after the analysis of each group's responses?

METHODOLOGY

Participants & Instructors

Participants were all L1 American English speakers, with an intermediate level of Spanish, attending a midwestern university. A language background questionnaire, based on the Bilingual Language Profile (Birdsong et al., 2012), was distributed to assess monolingual status, with criteria such as not growing up in a bilingual home and using limited to no Spanish outside of the classroom setting. Intermediate-level (third semester) proficiency in Spanish was determined by either a standard placement test provided by the university or the participants naturally moving from second to third semester Spanish. Aside from treatments, all content and curriculum were the same for each group of participants.

The three groups consisted of the following instructional types and populations: CI (combination instruction) (n=17); VF (visual feedback) (n=13); EI (explicit instruction) (n=16). Each group only received one form of treatment (i.e., the EI group only received explicit instruction treatments). The CI and EI groups were taught by NSs of Spanish, as the VF group was taught by a NNS with extensive experience and knowledge of Spanish.⁷ All instructors were provided two sessions of training: an initial training one week prior to the first treatment session, as well as a training the day before the first treatment session. Additional sessions were offered to instructors on an as-needed basis, with all instructors having requested one additional session.

Treatments

Each group participated in three treatments, with the first focusing on /p/, the second focusing on /t/, and the third focusing on /k/. Treatments took place every two weeks, amounting to a six-week period. The researcher directed each instructor to utilize ten minutes of their class time for all three treatments, albeit five extra minutes were given for the first treatment to allow for extra time to adjust to the material. With respect to the focus of all treatments, voice onset time (VOT) in Spanish was selected. Abramson & Whalen (2017, p. 76) define VOT as “the temporal relation between the moment of the release of the stop and the onset of glottal pulsing”. Spanish productions of /p,t,k/ are considered short-lag (Hualde, 2005), producing very little aspiration, as American English productions are long-lag in the onset position (Lisker & Abramson, 1964; Flege, 1991) and are represented as [p^h, t^h, k^h] (Hualde, 2005). As such, the Spanish voiceless plosives were chosen as the basis for pronunciation instruction.

The EI group participated in treatments that involved the teaching of IPA symbols, drills and repetitions, modeling, and corrective feedback. Participants in this group also were given a worksheet in which they were asked to repeat multiple target tokens in isolation as well as tokens embedded in utterances. Participants were then asked to give each other feedback while the instructor circulated the room to offer individual, corrective feedback for non-target-like productions.

For the VF group, participants were asked to compare their own spectrogram and soundwave productions of four tokens, which they recorded, with the productions of a NS of Spanish (presented by the instructor). This training was considered to be implicit in that participants were directed to make observations and conclusions via visual comparisons of English and Spanish productions of /p,t,k/, as they were not explicitly told by the instructor the differences between both languages. Participants were then asked to make inferences about both types of speakers’ productions based on differences, for example, such as “lighter” vs. “darker” in reference to the spectrograms (Olson, 2014b).

As for the CI group, treatments were a conglomeration of the explicit instruction and the visual feedback treatments. Learners were presented both types of instruction at the same time (EI and VF), incorporating use of IPA symbols, repetitions, modeling, and corrective feedback, while simultaneously introducing the spectrogram and soundwave features. To keep this at the same time

⁷ Originally, all instructors were NSs of Spanish; however, one instructor had to drop out due to health issues. The NNS has studied Spanish for 15 years and has spent considerable time in Spanish speaking countries. Additionally, there were no other NS instructors teaching third semester Spanish at the time of the study.

length as the other groups, the sound waves and spectrograms were explained in relation to the explicit instruction measures.

Survey

The survey was designed to assess five different constructs via 10 different statements (see Table 1): (1) Usefulness, (2) General Thoughts about the Activity, (3) Attitudes Towards My Own Pronunciation, (4) Importance of Pronunciation, and (5) Attitudes towards Accent. The survey contained multiple statements modeled after the survey by Olson (2014b), with 10 total statements that reflect the five constructs. Participants were instructed to rate their response for each statement on a 9-point Likert scale (1 = Agree; 5 = Neutral; 9 = Disagree). If participant response averages were recorded as 1.0-3.0, this was categorized as Agree, with 3.1-4.5 as Somewhat Agree. Any response averages from 4.6-5.4 were considered Neutral. Response averages of 5.5-6.9 were categorized as Somewhat Disagree, with 7.0-9.0 recorded as Disagree.

The constructs Usefulness and General Thoughts about the Activity were chosen to assess learner attitudes that directly relate to the training they received. Attitudes Towards My Own Pronunciation and Importance of Pronunciation constructs were chosen to measure learner thoughts on whether pronunciation in general is essential to their learning. The final construct, Attitudes towards Accent, was chosen to see if learners felt negatively about others that speak with accented speech in their L1 (American English), and if there existed any relationship between attitudes towards their pronunciation and the pronunciation of others. Descriptive statistics for all statements will be displayed in the results section. However, for the purposes of answering the specific research questions, statistical analyses were only run on the statements that directly pertain to the construct of Usefulness, which will be elaborated on in the results and analysis section, as well as in the discussion section.⁸

RESULTS & ANALYSIS

Constructs

For each of the five constructs included in the survey, the descriptive results can be found in Table 1 (below) for each group's respective opinions about each statement. Averages are displayed in each column to the left, with the standard deviation to the right of the averages:

⁸ While it would be of interest to assess each construct and the interrelationships between constructs, due to time and space constraints, Usefulness was chosen as the construct of focus for this study.

Table 1
Descriptive Results for Statements by Group⁹

	Statement Average (SD)		
	CI	VF	EI
(1) I think my pronunciation improved significantly.	3.6 (1.8)	4.2 (1.5)	3.9 (1.5)
(2) This method is good for understanding ways in which to practice and improve my pronunciation.	2.7 (1.7)	3.7 (0.8)	4.1 (1.8)
(3) This activity made me think consciously about my pronunciation.	2.3 (1.7)	4.0 (1.7)	3.4 (2.0)
(4) The visual analysis software we learned about were useful for improving my pronunciation. / The explanations of the sounds we learned about were useful for improving my pronunciation. / The visual analysis software and the explanations of sounds we learned about were useful for improving my pronunciation.	3.1 (2.1)	5.5 (2.8)	4.2 (1.8)
(5) The teacher's explicit instruction/ guided instruction for this activity was useful for improving my pronunciation.	2.2 (1.5)	3.5 (2.3)	4.6 (1.4)
(6) My pronunciation in Spanish is very important to me.	3.0 (1.1)	3.4 (1.0)	3.6 (1.9)
(7) Not having a strong American accent when speaking in Spanish is important to me.	2.6 (1.3)	3.7 (1.6)	2.6 (1.4)
(8) Knowing vocabulary and grammar is more important than having good pronunciation.	3.8 (1.7)	2.9 (1.7)	4.1 (1.7)
(9) I struggle to understand people who have an accent in my native language.	5.7 (2.6)	4.4 (1.9)	5.5 (2.3)
(10) People that have a strong accent when they speak my native language seem less intelligent.	7.6 (1.6)	6.8 (1.7)	7.4 (2.2)

Statements 2-4 correspond to the construct Usefulness, statements 1 and 5 correspond to General Thoughts about the Activity, statements 6 and 7 correspond to Attitudes towards My Own Pronunciation, statement 8 corresponds to Importance of Pronunciation, with statements 9 and 10 corresponding to Attitudes towards Accent.

Usefulness

With respect to the construct of Usefulness, three statements, 2-4, were extracted to represent how participants reacted to their respective treatments. For these analyses, a one-way ANOVA was run along with a Post-hoc Tukey test for the averages of each of the three statements to observe differences between group responses. For statement 2, there was a significant difference between the CI ($M=2.7$) and EI ($M=4.1$) groups' responses ($p < .05$; $d=0.80$) but no significant difference of responses between other group pairs (i.e. CI and VF; VF and EI). In regards to statement 3, there was found to be a significant difference between the CI ($M=2.3$) and the VF ($M=4.0$) groups ($p < 0.5$; $d=1.00$), as well as for statement 4 between the CI ($M=3.1$) and VF ($M=5.5$) groups ($p < 0.5$; $d=0.97$), with no significant differences between other group pairings. Differences in response averages can also be seen graphically in Figure 1:

⁹ For statements (4) and (5), different statements were used depending on training type; therefore, in the above table there exist multiple options for these statements.

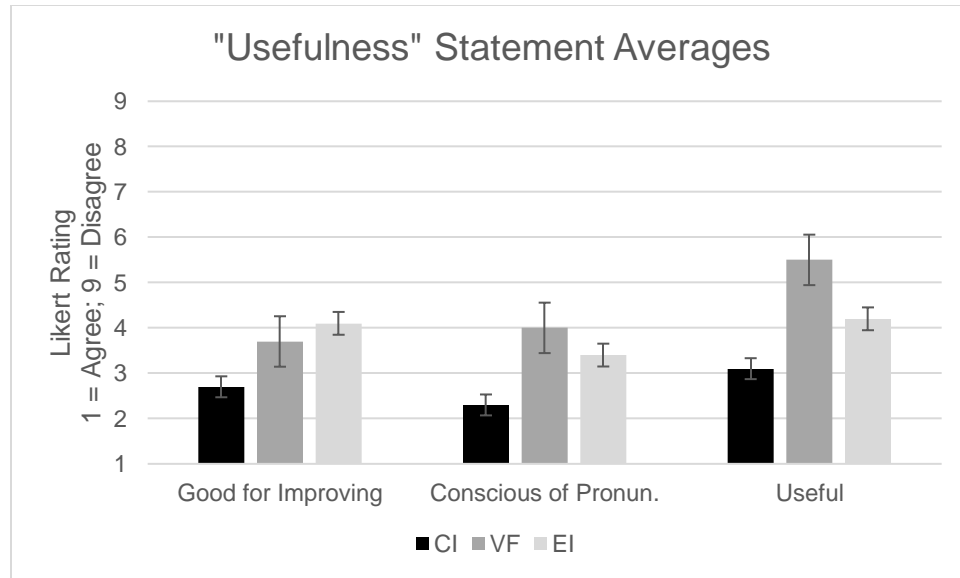


Figure 1. Averages by Group for Usefulness Construct

DISCUSSION

Concerning Usefulness, there is an apparent tendency for all groups to either Agree or Somewhat Agree that their treatment type is useful to their pronunciation learning in observing the averages of statements 2-4 from the Usefulness construct (with the exception of the VF group's response to statement 4, averaging to 5.5 which is considered Somewhat Disagree). As we can see from how the different ranges of statements are qualified numerically, we can assert that each group shows strong trends in regarding their treatment type as useful to their pronunciation learning.

Although there are not significant differences between the CI group and the VF and EI groups for every statement, it is evident that, in each of the three statements, the CI group consistently rates their type of training significantly lower (with a lower rating being more positive; Agree=1) than at least one other group (i.e. numerically rated as more useful). Therefore, it can be stated that all three types are viewed as useful by learners who participated in one of the three types: EI, VF, or CI. Additionally, the CI group shows indications for being the more positively rated instructional type in terms of being useful for improving their pronunciation, although more investigation is needed to further support this claim. In previous literature, although participants regarded pronunciation instruction as valuable, they had not had the opportunity to evaluate a specific type of training. This study begins to satisfy this gap in the literature in relation to learner attitudes towards L2 pronunciation methods.

Pedagogical Implications

With each group rating their type of pronunciation instruction as useful, this implies that L2 learners in this study collectively believe that each form of pronunciation instruction is beneficial to pronunciation learning. As previously stated, the CI group tended to rate their type of instruction more positively than the other groups with respect to usefulness, but further analysis and more

studies comparing methods are necessary to support this idea. For L2 learners, it is possible that the combination of explicit instruction involving NS productions, repetitions, IPA association of sounds, visual aids in the form of sound waves and spectrograms, as well as corrective feedback all provide varying types of teaching and feedback to L2 learners with an array of learning styles (i.e. audio, visual, and audio-visual). As L2 learners often do not demonstrate a homogenous form of learning, this type of instruction contains a range of tools for possible individual differences that exist for student learning and preferences. However, it is evident that, based on participant ratings, each form of pronunciation instruction here should be examined and considered for pronunciation curriculum by researchers and instructors.

FUTURE DIRECTIONS AND LIMITATIONS

This study was developed and forms part of a larger study in which production measurements from pretest to posttest are the focal point. Once the measurements are statistically analyzed for the production portion, it would be of particular interest to compare these results with the results of the current study. In analyzing the attitudes of these learners jointly with their production results, this considers the role that motivation can play in learner engagement and linguistic outcomes; in other words, if L2 learners in the CI group are shown to improve in their productions significantly more than the EI and VF groups, this may indicate a reciprocal relationship for the CI group. If this type of pronunciation instruction is easier to understand, use, and apply for L2 learners, this may also motivate learners to perform better. As such, a correlational analysis would couple empirically-tested pedagogical tools with the acknowledgement of student opinions of activities.

In addition to these future directions, one limitation that should be considered is each group's instructor being different. Although content and curriculum of the course were the same for each group, the instructor could also have an effect on learner attitudes and performance. In a future study, the same instructor for all groups would ideally satisfy this limitation.

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