

Exploring the Intersection Between Teachers' Beliefs and Research Findings in Pronunciation

Instruction

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<ABSTRACT>

This study explored teachers' beliefs about pronunciation instruction in Spanish as a second language. An online survey was used to collect data from 100 participants, grouped into four categories based on their previous training in principles and methods of pronunciation instruction. This article reports results from 15 survey items which covered participants' beliefs regarding six major themes: the importance of pronunciation, how pronunciation develops, when to teach it, what to teach, how to teach, and who can teach. Although the results revealed several areas where more methods-related coursework meant greater alignment between Spanish teachers' beliefs and findings of L2 pronunciation research, there were other topics on which instructors with more training were likely to express beliefs contrasting with the state of the art. For instance, respondents with more coursework tended to accord more value to pronunciation instruction, to set more pronunciation-related goals for language instruction, and to reject delaying a focus on pronunciation. Unexpectedly, however, some seemed to uphold the native speaker model, suggesting that teacher training and professional development programs may need to emphasize research-informed practices and the importance of pedagogical expertise over nativelylike pronunciation.

<END ABSTRACT>

Keywords: teacher cognition; teacher education; Foreign Language (FL) education; Spanish; pronunciation

Researchers in the field of instructed second language acquisition (SLA) are increasingly turning their attention to a wide variety of individual differences (IDs) among language educators, from educational background to years of teaching experience (Gurzynski–Weiss, 2014). Among these is an interest in the theoretical and practical knowledge that teachers bring to the classroom—not just because it is worthwhile to explore relationships between knowledge, beliefs, and practices to promote reflective pedagogy (e.g., Basturkmen, 2012), but also because knowing how well beliefs correspond with the findings of empirical research and the state of the art in language education can help identify ways of improving teacher training and professional development (PD) opportunities. In addition, exploring the link between teachers’ beliefs and research may suggest areas where researchers need to reconsider the ecological validity of their findings if contradicted by the perspectives of experienced teachers. While research into teacher cognition has flourished over the years, studies targeting particular areas have mostly investigated instructors’ beliefs about L2 grammar (e.g., Borg, 1999; Phipps & Borg, 2009), reading (e.g., Graden, 1996), writing (e.g., Scott & Rodgers, 1995), and feedback (e.g., Basturkmen, Loewen, & Ellis, 2004; Kamiya, 2016; Lee, 2009). Until recently, pronunciation received considerably less attention (for discussion, see Baker & Murphy, 2011). Survey findings in this area commonly indicate a lack of training and/or confidence among teachers and even teacher trainers, occasionally accompanied by skepticism about the importance or usefulness of pronunciation instruction, and—as a result—a corresponding avoidance of pronunciation in language classes (e.g., Baker, 2014; Breitzkreutz, Derwing, & Rossiter, 2002; Burgess & Spencer, 2000; Buss, 2013; Derwing & Munro, 2009; Foote, Holtby, & Derwing, 2011; Foote, Trofimovich, Collins, & Urzúa, 2016; MacDonald, 2002; Morin, 2007; Murphy, 1997). This,

combined with the recognized need for language educators to have a strong foundation in articulatory phonetics and phonology and a solid understanding of worthwhile goals for pronunciation development (e.g., Celce–Murcia, Brinton, Goodwin, & Griner, 2010), makes it especially important to explore whether instructors espouse beliefs that contradict researchers’ conclusions and pedagogical specialists’ recommendations of best practices. This study examined Spanish language instructors’ beliefs on pronunciation learning and teaching to shed light on how beliefs and research findings align with or diverge from one another, which in turn leads to suggestions regarding how to sustain and enhance teacher training in the area.

BACKGROUND

Borg defines *teacher cognition* as “an often tacit . . . practical system of mental constructs held by teachers . . . which are dynamic—i.e. defined and refined on the basis of educational and professional experiences throughout teachers’ lives” (2006, p. 35), but which also “have a strong evaluative and affective component . . . and are resistant to change” (2011, pp. 370–371).

Interestingly, while teacher education programs and in-service PD experiences often promote changes in teachers’ beliefs (e.g., Borg, 2011; and references therein) and can even play a role in teachers’ conceptualizations of their identities (e.g., Burri, Chen, & Baker, 2017), this may not always occur (e.g., Borg, 2005; Peacock, 2001)—in part, perhaps, because of the strength of the “apprenticeships of observation” teachers have internalized during their own previous educational experiences (Lortie, 1975) or because people may naturally filter academic articles and other sources of information through their existing belief systems, using them to provide further support for already-held beliefs (e.g., Kamiya, 2016). Where pronunciation is concerned, a lack of impact may make sense for other reasons as well. In many areas of SLA, researchers

warn about the limited applicability of findings from empirical research to classroom contexts, while educators report perceiving primary research as irrelevant or inaccessible (e.g., Kubanyiova & Feryok, 2015; Ortega, 2012; Tomlinson, 2017). The SLA of pronunciation is no exception. As Derwing and Munro (2005) and Baker and Murphy (2011) have pointed out, the problem is not a paucity of research; it is that much of the substantial research that exists requires sophisticated technical knowledge of phonology to understand, and even with that knowledge it might not be perceived as applicable to classroom settings due to the highly-controlled nature of the experiments that have produced the findings. Without applied linguists engaging in bidirectional conversations with teachers and highlighting the potential relevance of leading-edge research in practitioner-oriented publications, research may “continue to have little if any effect on L2 teachers’ cognitions about pronunciation or pronunciation teaching” (Baker & Murphy, 2011, p. 39).

The field of instructed SLA may also still be experiencing the after-effects of a lack of emphasis on pronunciation in teacher training due, in part, to a perceived “disjuncture between pronunciation and communicative language teaching” (CLT) (Isaacs, 2009, p. 1). Even before the advent of CLT, pronunciation was described as the “Cinderella of language teaching” (Kelly, 1969). This characterization has persisted, with multiple authors, from researchers to material developers, continuing to portray pronunciation as a neglected aspect of language learning in the communicative era (Elliott, 1997; Gilbert, 2010). To some extent, this may be because, in early justifications for CLT, comprehensible input was assumed to be sufficient for language learners’ pronunciation to improve, and when the value of a focus on form was later recognized, it did not automatically bring with it up-to-date knowledge or recommendations of productive instructional

strategies (Isaacs, 2009). For instance, in reviewing instructional materials available at the time, Levis (1999) noted that treatments of intonation were outdated and inaccurate, ignoring the findings of decades of research in that area. Even more recently, despite “an explosion in the number of teaching resources” for pronunciation over the past several years (Baker & Murphy, 2011, p. 37), Isaacs (2009) argued that “instructional materials do not fit the bill in terms of providing authentic, context-rich activities that provide focused practice for the specific area of pronunciation to be targeted, nor do they always draw on research evidence” (p. 4). Thus, pronunciation instruction still “does not always make for a comfortable fit with instructors who support communicative language teaching” (Foote et al., 2016, p. 181).

Teacher cognition research also highlights potential problems in interpreting beliefs that do not seem to match the state of the art. In a study assessing the knowledge base of experienced teachers, Saito (2014) examined how well their priorities for pronunciation instruction matched research findings. He asked 120 experienced teachers of English as a foreign language (EFL) in Japan to rate a variety of segmentals and suprasegmentals with regard to their importance in helping learners to attain intelligible pronunciation. Although the teachers’ rankings generally agreed with research findings, there were some exceptions, such as an emphasis on interdental fricatives despite their low functional load, which could be interpreted as a conceptual conflation of intelligibility and accentedness, but which could also indicate sensitivity to both linguistic and social factors (i.e., helping students avoid discrimination based on accentedness), or an orientation toward teachability and student motivation. Reminiscent of Phipps and Borg’s (2009) discussion of apparent conflicts between beliefs and practices due to tensions between core and peripheral beliefs, the variety of possible explanations here suggests that it is crucial to keep the

complexity of teachers' beliefs in mind when assessing the degree to which particular perspectives match research, especially in survey research where generically expressed items might be answered differently due to considerations specific to the respondents' own teaching contexts and experiences.

In sum, there are many reasons why educators may seem to hold beliefs incompatible with what applied linguists consider to represent the state of the art. Bearing this in mind, it becomes clear that research into teacher cognition has great potential not only to enhance the PD of pre- and in-service teachers and teacher trainers, but also to identify worthwhile avenues of collaboration among researchers and educators, particularly if questions are framed in thought-provoking ways that stimulate curiosity and awareness about which sources of knowledge correspond, which do not, and why. As one preliminary avenue of exploration, it would be valuable to know whether incompatible beliefs are more likely to exist among teachers *with* versus *without* coursework focused on various aspects of phonological development and pronunciation pedagogy. While the latter (i.e., conflicting beliefs in the absence of coursework) would make sense, the former (i.e., more conflicting beliefs with more coursework) might be cause for concern as it could suggest, for example, that teacher preparation programs may be providing teacher candidates with inaccurate or incomplete information, or at least information perceived as such.

Notably, most research on teacher cognition about pronunciation has been conducted in the context of English as a second or foreign language (EFL), whether with practicing teachers (e.g., Baker, 2014 [USA]; Breitzkreutz et al., 2002 [Canada]; Burgess & Spencer, 2000 [UK]; Buss, 2013 [Brazil]; MacDonald, 2002 [Australia]; Saito, 2014 [Japan]; Sifakis & Sougari, 2005

[Greece]) or in MA TESOL programs (Murphy, 1997 [USA]). Despite the potentially different insights that might be gained through exploring the beliefs and priorities of educators who teach a variety of other foreign and heritage languages, other L2s remain almost unexplored. Although studies dealing with French (Drewelow & Theobald, 2007) and Chinese (Hu & Tian, 2012) are noteworthy exceptions, teacher cognition about the pronunciation of Spanish—a prominent foreign, second, and heritage language in the United States—has been explored only tangentially (Thomson & Fioramonte, 2012). For this reason, this study aimed to examine Spanish teachers' beliefs about pronunciation instruction, to compare those beliefs against other sources of knowledge, and to explore how beliefs might differ for teachers with varying amounts and kinds of coursework. As such, we (a) developed a survey to probe Spanish teachers' perspectives regarding the importance of pronunciation, how pronunciation develops, when to teach, what to teach, how to teach, and who can teach; (b) considered the results in relation to the findings of L2 pronunciation research; and (c) compared the responses of teachers with and without coursework in various areas. In the Results section, before presenting response patterns for each area of the survey, we provide a brief, targeted review of some of the empirical research on pronunciation learning and teaching that is relevant to those items. In this way, respondents' perspectives can be compared against the current state of research-based knowledge as an initial step toward identifying potentially productive areas of focus for teacher preparation programs, PD opportunities for in-service teachers, and further research.

METHOD

Survey Development

The development of the survey was informed by classroom observations, focus-group discussions, and pilot participants' feedback, as well as a thorough review of the research literature on pronunciation learning, pronunciation pedagogy, and teachers' and students' beliefs on those topics. First, to generate ideas for potential items, one of the researchers observed several Accent Reduction class sessions in an intensive English as a Second Language (ESL) program and interviewed the instructor; then, two of the researchers observed a Teaching Pronunciation course in an MA TESOL program. All five students in the course volunteered to stay after class for focus-group discussions, in which they were asked, for example, about the purposes and roles of pronunciation instruction in a language program; necessary knowledge, skills, and useful activities for teaching pronunciation; and valuable areas of focus for a teacher-training program. Next, the researchers identified common themes as well as salient statements of opinion that had provoked reactions from other participants in the focus groups. Many of these were converted into survey items. For instance, the opinion, "Pronunciation teachers should be near-native to be able to produce and model for students" led to the following pair of survey items: (a) "It may not be politically correct, but I think anyone who teaches pronunciation should have a native-like accent" and (b) "In helping learners to improve their pronunciation of Spanish, it's more important to have training in teaching pronunciation than it is to have a nativelike accent."

In parallel, the researchers brainstormed an initial pool of items based on theoretical proposals and empirical results in the research literature, and also selected and adapted items from other researchers' surveys (e.g., Baker, 2014; Derwing & Munro, 2015; Drewelow & Theobald, 2007; Foote et al., 2016; Lasagabaster & Sierra, 2002; Setter & Jenkins, 2005). For

instance, from Foote et al.'s (2016) conclusion that "What is needed perhaps is . . . the inclusion of proactive, rather than just reactive, approaches to L2 pronunciation teaching" (p. 193), the following pair of items was developed: (+) "Teachers should purposely develop objectives and activities for pronunciation like they do for grammar and vocabulary" and (-) "Pronunciation is something teachers should address only as it comes up." Based loosely on Jenkins' (2002) proposals regarding the Lingua Franca Core, as well as on the current consensus regarding the value of focusing on features with high functional load for intelligibility purposes (e.g., Derwing & Munro, 2009; Trofimovich & Isaacs, 2012), the following pair was included: (+) "Even when learners come from a variety of native-language backgrounds, it's possible to identify a core set of pronunciation features that students would benefit from focusing on" and (-) "It's pointless to outline general goals for pronunciation instruction because everyone has different problems."

In line with Dörnyei's (2010) recommendations for questionnaire design, multi-item scales with an equal number of pro and con statements for each construct were developed while avoiding negatively worded items. Three experienced Spanish and English language instructors with PhDs in applied linguistics piloted and provided feedback on the roughly 350 items that emerged from this process. Based on their comments, two preliminary questionnaires were developed: one focused on beliefs about pronunciation (e.g., its importance for communication and identity, the perceived acceptability of various regional and non-native accents, appropriate models for L2 pronunciation, the importance of 'nativeness' versus teaching experience, and language learners' reasons for seeking to maintain or modify their accents in an L2) and another focused on pronunciation learning and teaching (e.g., possibilities for ultimate attainment, individual differences, context- and instruction-related factors, learning difficulties, teachability,

the usefulness of various activities, the importance of various types of knowledge and skills, and experience and confidence in those areas). Each preliminary questionnaire was developed in two forms, focusing on either L2 English or L2 Spanish, and was expected to take roughly 30 minutes to complete online along with a background survey. An initial set of participants were recruited through the researchers' networks of contacts, and the respondents (13 male, 37 female) included teacher trainers, pre-service teachers, in-service teachers, and learners of L2 English and L2 Spanish.

One striking finding that emerged from this early phase of analysis was that, although 90% of the teachers and teacher trainers had taken a course in teaching methods, just under 50% of them had taken a methods course that included information on how to teach pronunciation. With this in mind, the questionnaires were pared down to a more targeted set of 47 items with clear connections to research that could produce actionable information useful for improving teacher training. In the first section, 15 items dealt with the importance of pronunciation, how pronunciation develops, when to teach, what to teach, how to teach, and who can teach. The second section focused on the perceived usefulness of a variety of types of knowledge, tools, and classroom activities (e.g., familiarity with research on how pronunciation develops, knowledge of differences between specific sounds, terminology for describing aspects of pronunciation, International Phonetic Alphabet [IPA] transcription, repetition drills, explicit correction), as well as the respondents' confidence in making use of them. In this article, the results of the 15 items in the first section are reported and discussed.

Participants

One hundred L2 Spanish instructors completed the final version of the survey: 89 individuals who were teaching Spanish language courses at the time, three pre-service language instructors, three teacher trainers, two professors who primarily taught upper-division and graduate courses, and three individuals who did not self-identify as belonging to any of those groups. Participants (65 females) were predominantly native speakers of either English ($n = 54$) or Spanish ($n = 41$), ranged in age from 21 to 70 ($M = 37$, $SD = 12$), and had completed 3.06 courses related to language pedagogy on average ($SD = 2.45$, range: 0–15).

Procedures

To obtain data from a varied sample of instructors, snowball sampling was employed. The final version of the survey containing the 47 targeted items was reprogrammed in Qualtrics and distributed to college and university Spanish professors through the researchers' professional networks. These individuals in turn distributed the surveys to their colleagues working in Spanish language programs around the US. The survey remained open for four months, garnering 121 responses, of which 100 were complete.

Analyses

To allow for a comparison of perspectives among respondents with different amounts and kinds of coursework in teaching methods, SLA, and linguistics with relevance to pronunciation pedagogy and phonology, participants were classified according to the open-ended information they provided on the background portion of the questionnaire. From their responses, the following seven categories emerged: (a) no coursework; (b) coursework that did not include information on how to teach pronunciation; (c) coursework that included information on how to teach pronunciation, but the participant did not recall what was covered; (d) information on how

to teach pronunciation, but the participant mentioned only the basics, such as the importance of teaching pronunciation or information on articulatory phonetics; (e) information on how to teach pronunciation with some reference to theory (e.g., contrastive analysis) or broad issues related to pedagogy, such as whether to correct errors, but no specific activities; (f) information on how to teach pronunciation including an explicit mention of particular activities or techniques (e.g., audio recording, minimal pair exercises, how to provide different types of feedback); and (g) information on how to teach pronunciation including some evidence of a more advanced level of expertise or hands-on practice, such as reports of having created assignments, assessments, and/or lesson plans to target pronunciation. These were then recombined into four major groups: (a) no methods courses [NoMethods] ($n = 9$), (b + c) methods coursework without (recall of) information on teaching pronunciation [NoPron] ($n = 58$), (d + e) methods coursework with basic or limited information on teaching pronunciation [BasicPron] ($n = 13$), and (f + g) methods coursework including more advanced and/or specific information on teaching pronunciation [AdvancedPron] ($n = 20$).

RESULTS

The results are organized according to the themes covered by the survey: namely, teachers' beliefs regarding (a) the importance of pronunciation, (b) how pronunciation develops, (c) when to teach, (d) what to teach, (e) how to teach, and (f) who can teach. Before presenting the respondents' perspectives, a brief, targeted review of some relevant research in each area is provided. Finally, in order to draw overall recommendations from the findings, areas where beliefs align with or diverge from research findings are discussed.

Table 1 displays grand and group mean descriptive statistics for each of the 15 questions, with data broken down according to the teaching methods coursework factor. Frequency data are reported as percentages and so should be interpreted with respect to the cell size of each group: NoMethods, $n = 9$; NoPron, $n = 58$; BasicPron, $n = 13$; AdvancedPron, $n = 20$. Bold cells indicate the modal response on the six-point Likert scale (1 = strongly disagree; 6 = strongly agree). One-way ANOVAs with the between-subjects group factor (four levels) were run to examine whether participants' beliefs varied among groups, and post-hoc pairwise t tests were subsequently conducted employing a Bonferroni adjustment to locate between-group differences. The ANOVA results are summarized only for statistically significant findings (for the full set of analyses, see Appendix).

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TABLE 1

Descriptive Statistics for Survey Items by Group

Item	<i>Mean</i>	<i>SD</i>	Disagreement			Agreement		
			1	2	3	4	5	6
Importance of Pronunciation								
1. Pronunciation is one of the most important aspects of language for successful communication.	3.64	1.16	2	20	17	36	23	2
NoMethods (9)	2.78	0.83		44	33	22		
NoPron (58)	3.55	1.10	3	17	17	47	14	2
BasicPron (13)	3.62	1.50		38	8	15	31	8
AdvancedPron (20)	4.30	0.92		5	15	25	55	
How Pronunciation Develops								
2. Pronunciation tends to develop naturally in Spanish even for learners who don't care about improving it.	3.16	1.24	9	23	29	23	14	2
NoMethods (9)	3.44	1.33	11	11	22	33	22	
NoPron (58)	3.14	1.21	5	29	31	17	16	2
BasicPron (13)	3.46	1.20		23	31	31	8	8
AdvancedPron (20)	2.90	1.37	25	10	25	30	10	
3. With effort, learners can modify their Spanish pronunciation even if they've been pronouncing things a certain way for a long time.	5.12	0.74			4	10	56	30
NoMethods (9)	4.89	0.60				22	67	11
NoPron (58)	5.09	0.82			7	9	53	31
BasicPron (13)	4.92	0.49				15	77	8
AdvancedPron (20)	5.45	0.60				5	45	50

4. Learners' improvement in pronunciation has more to do with what they experience outside the classroom than it has to do with the instruction they receive.	3.40	1.17	6	16	31	27	19	1	
NoMethods (9)	3.56	1.13	11		22	56	11		
NoPron (58)	3.43	1.31	7	21	24	21	26	2	
BasicPron (13)	3.31	1.03		23	38	23	15		
AdvancedPron (20)	3.30	0.86	5	5	50	35	5		
5. Spanish pronunciation can be taught.	5.30	0.87	1		1	14	34	50	
NoMethods (9)	5.11	0.60				11	67	22	
NoPron (58)	5.33	0.76				17	33	50	
BasicPron (13)	5.15	0.90			8	8	46	38	
AdvancedPron (20)	5.40	1.23	5			10	15	70	
When to Teach									
6. In first- and second- year Spanish language courses, pronunciation can be skipped to focus on other skills or areas of language.	2.52	1.24	24	31	22	16	6	1	
NoMethods (9)	3.22	1.39	11	22	22	22	22		
NoPron (58)	2.50	1.27	24	33	22	12	7	2	
BasicPron (13)	2.62	1.12	15	38	15	31			
AdvancedPron (20)	2.20	1.11	35	25	25	15			
7. Teachers should target pronunciation early to prevent learners from reinforcing mistakes.	4.51	1.18	2	5	9	29	34	21	
NoMethods (9)	4.22	0.83			22	33	44		
NoPron (58)	4.41	1.14	2	5	9	36	31	17	
BasicPron (13)	4.46	1.45		15	8	23	23	31	
AdvancedPron (20)	4.95	1.23	5		5	10	45	35	

8. Since pronunciation is a sensitive issue, teachers should only address it once students feel more confident in their ability to speak Spanish.	2.86	1.22	13	29	28	22	5	3	
NoMethods (9)	3.56	1.13	11		22	56	11		
NoPron (58)	3.02	1.26	9	29	31	19	7	5	
BasicPron (13)	2.23	0.93	15	62	8	15			
AdvancedPron (20)	2.50	1.10	25	20	35	20			
What to Teach									
9. Even if a class is made up of learners with different backgrounds, it's possible to identify a core set of Spanish pronunciation features that students would benefit from focusing on.	5.13	0.72			1	17	50	32	
NoMethods (9)	5.00	0.71				22	56	22	
NoPron (58)	5.03	0.70				22	52	26	
BasicPron (13)	5.08	0.86			8	8	54	31	
AdvancedPron (20)	5.50	0.61				5	40	55	
10. People who speak the same native language will face similar challenges in learning to pronounce a foreign language such as Spanish.	3.98	1.29	5	12	12	28	37	6	
NoMethods (9)	4.44	1.13		11		33	44	11	
NoPron (58)	4.07	1.37	9	5	14	24	40	9	
BasicPron (13)	3.62	1.26		31	8	31	31		
AdvancedPron (20)	3.75	1.12		20	15	35	30		
11. Learners' pronunciation issues that don't interfere with communication should be a lower priority for teachers to address.	4.46	1.08	1	4	12	29	39	15	
NoMethods (9)	4.89	0.93				44	22	33	
NoPron (58)	4.50	1.08	2	3	9	31	40	16	

	BasicPron (13)	4.38	1.12		8	15	15	54	8
	AdvancedPron (20)	4.20	1.11		5	25	25	35	10
How to Teach									
12. Teachers should develop objectives and activities for pronunciation like they do for other language skills.		4.79	1.09	1	5	4	19	46	25
	NoMethods (9)	4.67	1.22		11		22	44	22
	NoPron (58)	4.83	1.06	2	3	3	17	50	24
	BasicPron (13)	4.23	1.36		15	15	15	38	15
	AdvancedPron (20)	5.10	0.79				25	40	35
13. Pronunciation is something teachers should address on the spot in response to students' problems.		3.64	1.14	4	14	21	38	21	2
	NoMethods (9)	3.67	0.71			44	44	11	
	NoPron (58)	3.53	1.25	5	21	16	34	22	2
	BasicPron (13)	3.54	1.20	8	8	31	31	23	
	AdvancedPron (20)	4.00	0.92		5	20	50	20	5
Who Can Teach									
14. In helping learners to improve their pronunciation of Spanish, it's more important to have training in teaching pronunciation than it is to have a nativelylike accent.		4.40	1.08		4	18	28	34	16
	NoMethods (9)	4.56	0.88			11	33	44	11
	NoPron (58)	4.41	1.14		3	22	22	33	19
	BasicPron (13)	4.15	1.28		15	15	15	46	8
	AdvancedPron (20)	4.45	0.89			10	50	25	15

15. It may not be politically correct, but I think anyone who teaches pronunciation should have a nativelike accent.	2.97	1.47	14	35	17	14	14	6
NoMethods (9)	2.67	1.12		67	11	11	11	
NoPron (58)	2.93	1.58	17	34	17	9	14	9
BasicPron (13)	3.08	1.26	8	31	23	23	15	
AdvancedPron (20)	3.15	1.50	15	25	15	25	15	5

Note. NoMethods: Participants had not taken a methods course; NoPron: Participants had taken a methods course that did not include information on teaching pronunciation, or they did not recall such information; BasicPron: Participants had taken a methods course that included a basic introduction to teaching pronunciation; AdvancedPron: Participants had completed coursework that included substantial information on teaching pronunciation, as well as practical exercises in that area. Response rates at each level of agreement are reported as percentages.

Importance of Pronunciation

Recent research has shown that multiple linguistic features, including pronunciation-based variables, contribute to comprehensibility (O'Brien, 2014; Saito, Webb, Trofimovich, & Isaacs, 2015; Trofimovich & Isaacs, 2012). In this study, on item 1 regarding the relative importance of pronunciation for successful communication (overall mean: 3.64; range: 2.78–4.30), the mean rating of 3.64 fell close to the midpoint of the scale (3.5), between *slightly disagree* (3) and *slightly agree* (4), suggesting that the respondents as a whole did not give precedence to pronunciation over other aspects of language. However, closer inspection of the results according to group shows that the mean ratings ranged from 2.78 (slight to moderate disagreement) in the NoMethods group to 4.30 (slight to moderate agreement) in the AdvancedPron group, with progressively stronger endorsement of the importance of pronunciation accompanying more coursework on (pronunciation) methods. Whereas 77% of participants in the NoMethods group displayed some level of disagreement (44% *disagree*, 33% *slightly disagree*), 80% of participants in the AdvancedPron group showed some level of agreement (55% *agree*, 25% *slightly agree*). Meanwhile, the mid-experience groups showed more variation. In the NoPron group, the modal response (47%) was *slightly agree*, but the rest of the responses were varied, including both strong agreement and strong disagreement. In the BasicPron group, respondents were split, with 46% showing some level of disagreement (38% moderate) and 54% showing some level of agreement (31% moderate). A one-way ANOVA showed a statistically significant main effect for group, $F(3, 96) = 4.33, p = .007, \eta_p^2 = .12$, and post-hoc comparisons identified a significant difference between the NoMethods and

AdvancedPron groups, $p = .005$, and a nearly significant difference between the NoPron and AdvancedPron groups, $p = .06$.

In sum, the more experience respondents had with methods- and pronunciation-related coursework, the more likely they were to consider pronunciation one of the most important aspects of language for successful communication. Considering that people who place more value on pronunciation may be more inclined to take courses in pronunciation pedagogy, we do not intend to argue that it was the coursework that influenced participants' responses; however, these results can provide some useful contextualization for the various groups' priorities regarding when, what, and how to teach.

How Pronunciation Develops

Over an initial period of more intensive L2 contact, such as the first year or so in an immersion setting, pronunciation appears to develop naturally without targeted instruction (Derwing & Munro, 2013). However, gains depend on a variety of factors, including the target structure (see, e.g., Munro & Derwing, 2008; Munro, Derwing, Thomson, 2015), and individual differences in, for example, willingness to communicate can be quite influential (e.g., Derwing & Munro, 2013; Derwing, Munro, & Thomson, 2008). In the current study, in response to item 2 (“Pronunciation tends to develop naturally in Spanish even for learners who don't care about improving it”), the mean ratings of all four groups were located around *slightly disagree* to neutral (overall mean: 3.16, range: 2.90–3.46). However, this item had one of the highest standard deviations (1.24); responses covered the full range of the scale, and within each group the range and frequency of responses across different levels of agreement seem to reflect a wide variety of perspectives on the topic. Even though the modal response of the AdvancedPron group

was *slightly agree* (30%), 60% of AdvancedPron respondents disagreed with the statement and 25% reported strong disagreement. Overall, when instructors agreed with the statement, they exhibited weak to moderate agreement (23% and 14% of the overall sample, respectively), with only 2% of respondents selecting strong agreement. Together, these results suggest that some teachers may be willing to acknowledge a certain amount of natural development in Spanish pronunciation even in the absence of motivation, while being attuned to the potential importance of IDs demonstrated by empirical research.

Turning to the issue of stabilization, although research suggests that a “window of maximal opportunity” (Derwing & Munro, 2015) may exist during the first year of intensive language contact, research has also shown that targeted training can help learners develop more comprehensible pronunciation even after years of L2 immersion (e.g., Derwing, Munro, Foote, Waugh, & Fleming, 2014). In this study, respondents’ beliefs generally aligned with the latter findings. In relation to item 3 (“With effort, learners can modify their Spanish pronunciation even if they’ve been pronouncing things a certain way for a long time”), there was moderate to strong agreement across the four groups (overall mean: 5.12, range 4.89–5.45). Ninety-six percent of participants gave a positive response to the statement, with 56% of respondents selecting *agree* and 30% *strongly agree*. In contrast, only 4% of individuals slightly disagreed, and the two lower categories, *disagree* and *strongly disagree*, were not selected.

Regarding the potential effectiveness (item 5) and relative value (item 4) of pronunciation instruction, of particular relevance is Lee, Jang, and Plonsky’s (2014) meta-analysis of 86 studies dealing with pronunciation instruction. The authors found medium to large effect sizes for pronunciation instruction (mean $d = .69$), with slightly larger effects for beginning than advanced

learners, and for learners in second as opposed to foreign language contexts. Along similar lines, Saito's (2012) research synthesis reported improvement in 13 of the 15 quasi-experimental studies reviewed (see, e.g., Couper, 2006; Derwing, Munro, & Wiebe, 1998). Focusing on Spanish more specifically, a significant body of work has tracked the development of Spanish pronunciation features cross-sectionally and longitudinally, providing benchmark data on the amount of pronunciation development that can be expected within the context of a communicative language curriculum. Accumulated findings show that classroom language learners' production of approximant allophones (i.e., [β, ð, γ]) in medial contexts (Face & Menke, 2009; Nagle, 2017b; Shively, 2008), the tap and trill (Colantoni & Steele, 2008; Face, 2006; Major, 1986; Rose, 2010), voice onset time in initial stops (Casillas, 2016; Nagle, 2017a), and some features of Spanish intonation (Zárate-Sández, 2015) tend to improve with more coursework in L2 Spanish.

Interestingly, participants' responses in the present study aligned with these research findings only partially. On the one hand, all groups agreed that Spanish pronunciation can be taught (item 5, overall mean: 5.30, range: 5.11–5.40). Modal responses were *agree* for the NoMethods and BasicPron groups and *strongly agree* for the NoPron and AdvancedPron groups, and only 2% of individuals showed any level of disagreement. On the other hand, respondents were less certain about the relative value of Spanish instruction as compared to experience outside the classroom (item 4, overall mean: 3.40, range: 3.30–3.56). The grand and group means were similar and suggested that participants in all groups were on the fence. *Slightly disagree* (31%) and *slightly agree* (27%) were the most frequent responses overall, with roughly equal percentages showing moderate disagreement (16%) or agreement (19%) and very few responses

of *strongly disagree* (6%) or *strongly agree* (1%). There was an apparent trend for respondents with more pronunciation-oriented coursework (BasicPron and AdvancedPron) to value instruction more (inclining a bit more toward slightly disagreeing), while those in the NoPron group showed a lack of consensus, with nearly equal proportions agreeing and disagreeing throughout the scale, and those in the NoMethods group tended to place more value on experience outside the classroom, with 67% agreeing that it was more important than instruction.

Summarizing the results for these items, even though all four groups agreed that learners can modify their pronunciation with effort and that Spanish pronunciation can be taught, participants with at least some coursework in pronunciation pedagogy tended to place somewhat more value on instruction, while those without any methods courses placed somewhat more value on naturalistic experience. In light of the overall positive effects of pronunciation instruction demonstrated by research, perhaps more exposure to pronunciation training techniques, focusing on practical activities that intersect with the principles of communicative language teaching, can promote teachers' self-efficacy regarding what they can help learners accomplish with the assistance of instruction.

In this regard, it also bears mentioning that technology is playing an increasingly critical role in the development and assessment of pronunciation-related pedagogical interventions, and L2 Spanish is no exception. Implementations range from web-based podcasting projects that encourage students to notice and reflect upon their pronunciation (Lord, 2008) to explicit phonetics instruction facilitated by publicly available online pronunciation training materials developed by pronunciation experts (Kissling, 2013). Likewise, activities involving speech analysis software such as Praat can help students pinpoint key differences between their

production of a target sound and a native speaker's (Olson, 2014b; for Spanish /b, d, g/), resulting in pronunciation gains that may generalize to more spontaneous speech (Offerman & Olson, 2016; for Spanish /p t k/). Moreover, when these activities are appropriately structured and avoid overly technical language, students report enjoying them, even in lower-level language courses that do not typically include targeted pronunciation training (Olson, 2014a). Perhaps especially for Spanish instructors whose professional training has not included a focus on pronunciation teaching, targeted PD opportunities could highlight the benefits offered by existing and emerging technological tools. That might, in turn, help to convince them of the value of instruction—not just above and beyond naturalistic exposure, but also in productive conjunction with the language exposure and authentic interactions that many of these technologies now enable (Petersen & Sachs, 2016).

When to Teach

In light of findings that “the bulk of perceptual and phonetic learning in late-onset SLA takes place within the first year of intensive exposure to the L2,” Darcy et al. (2012, p. 94) have argued that pronunciation instruction in second-language contexts should be interwoven into curricula from the outset, not delayed until the advanced levels. It must be acknowledged that most training studies have been conducted in a laboratory context and have targeted intermediate to advanced learners; however, there is evidence that providing early phonetic or articulatory instruction helps learners to improve their pronunciation (e.g., González López & Counselman, 2013). Although more work involving a greater variety of instructional techniques is needed to support empirically-based pedagogical practices, and to differentiate them according to levels, the state of the art argues for a systematic, integrated approach to pronunciation teaching

throughout the language curriculum. This may involve strategically and adaptively prioritizing areas of focus according to learners' needs for foundational knowledge and intelligibility at the beginning levels, and for greater awareness and self-monitoring ability at the higher levels, for example (Darcy et al., 2012).

In this study, three questionnaire items (6–8) addressed the issue of when to teach pronunciation. On average, instructors disagreed slightly to moderately with the idea of postponing a focus on pronunciation during the first two years of Spanish instruction (item 6, overall mean: 2.52, range: 2.20–3.22), and this held across groups, with the majority of Spanish teachers at each coursework level disagreeing (NoMethods 55%, NoPron 79%, BasicPron 68%, AdvancedPron 85%). None of the teachers who had taken methods courses with a focus on pronunciation agreed more than slightly that pronunciation instruction should be postponed. However, there was more variability among teachers with less coursework, a few of whom agreed moderately (NoMethods 22%, NoPron 7%) or even strongly (NoPron 2%) that pronunciation could be skipped to focus on other skills or other areas of Spanish. A similar response pattern emerged on the counterpart statement related to the timing of dealing with mistakes in pronunciation (item 7, overall mean: 4.51, range: 4.22–4.95). On average, the respondents agreed slightly to moderately that teachers should target pronunciation early to prevent learners from reinforcing mistakes, and this held across groups, with the majority of instructors at each coursework level agreeing (NoMethods 77%, NoPron 84%, BasicPron 77%, AdvancedPron 90%). Respondents with more coursework related to pronunciation pedagogy tended to agree more strongly on average; however, relatively few teachers in the groups without pronunciation coursework diverged from this trend; no one in the NoMethods group showed

more than slight disagreement, and only 7% of those in the NoPron group did so. Responses to the item concerning whether teachers should address pronunciation only once students feel more confident in their Spanish ability (item 8, overall mean: 2.86, range: 2.23–3.56) ranged from *disagree* (2.23) in the BasicPron group to neutral (3.56) in the NoMethods group, the latter being the only group in which the majority of respondents (67%) indicated some level of agreement. In all of the groups with methods courses, the majority of respondents were on the side of disagreement (NoPron 69%, BasicPron 85%, AdvancedPron 80%). The one-way ANOVA for this item reached significance, $F(3, 96) = 3.22, p = .03, \eta_p^2 = .09$; however, once a Bonferroni correction was applied for multiple comparisons, only the comparison between the NoMethods and BasicPron groups approached significance, $p = .07$.

Thus, on the whole, there was consensus that pronunciation should not be delayed or deprioritized. However, a fairly sizable portion of respondents (16–30% overall) expressed an alternative view. This result fits with participants' general agreement that learners can modify their pronunciation in Spanish even if they have been pronouncing things a certain way for a long time (item 2). However, the results also raise the possibility that additional PD opportunities might help teachers to learn more about the value of targeting pronunciation early and how they can do so in ways that will accommodate its potentially sensitive nature. This may be particularly worthwhile for instructors who have not taken methods courses since an inclination to delay or deprioritize a focus on pronunciation was most common in the NoMethods group (22–67%).

What to Teach

Closely related to the issue of when to teach pronunciation is the question of what to teach. Here, despite interesting proposals regarding a focus on core features that might help to

increase mutual intelligibility for speakers of English as an International Language with a variety of L1 backgrounds (e.g., Jenkins, 2002), it bears pointing out that while a shared L1 might predict a common set of pronunciation difficulties in the broadest sense, researchers have questioned a “one-size-fits-all” approach (Derwing & Munro, 2013; Munro, Derwing, & Thomson, 2015). Perhaps surprisingly, research has demonstrated that even speakers who share the same L1 frequently have different problems. In fact, the amount of variability Munro et al. (2015) discovered within the L1 groups in their study led them to conclude that in most cases (for the features and learners they tested) “large numbers of students might gain little or nothing if they were encouraged to practice the items on the basis of relatively weak performance of their L1 group as a whole” (p. 54).

In this study, nearly all instructors agreed that a core set of Spanish pronunciation features could be identified even for learners from different backgrounds (item 9, overall mean: 5.13, range: 5.00–5.50). There was virtually no disagreement with this statement; in fact, only one respondent indicated slight disagreement. With regard to modal responses, over half of the respondents in the NoMethods, NoPron, and BasicPron groups selected *agree*, with the remaining participants (save one) split between *slightly* and *strongly agree*. In the AdvancedPron group, over half of the respondents selected *strongly agree*, with nearly all of the remaining participants selecting *agree*. Responses were more varied for the statement regarding whether people who speak the same native language face similar challenges in learning to pronounce a foreign language (item 10, overall mean: 3.98, range: 3.62–4.44). Across groups, the modal responses clustered around *slightly agree* and *agree*, but the groups with coursework in pronunciation pedagogy tended to agree less strongly, with no one in those groups selecting

strongly agree and somewhat lower proportions of participants on the side of agreement (62–65% in the BasicPron and AdvancedPron groups, vs. 73–89% in the NoPron and NoMethods groups).

While a one-size-fits-all approach may not be advisable, instructional priorities can still be set. Research has shown that not all aspects of pronunciation are equally important to the understanding of speech; some may be linked to judgments of accentedness without compromising listeners' ease of understanding (comprehensibility) or what is actually understood (intelligibility) (Derwing & Munro, 2013; Munro & Derwing, 1995; Trofimovich & Isaacs, 2012). Substitutions of features that carry high functional load, for instance, are more likely to affect comprehensibility than those that carry low functional load (Munro & Derwing, 2006). Accordingly, over the last decade, scholars have consistently and unequivocally argued that it is more realistic and ethical for teachers to highlight comprehensibility and intelligibility, and to prioritize them over nativelikeness, as goals for L2 pronunciation instruction (Derwing, 2010; Derwing & Munro, 2009; Levis, 2005). Learners' own individual goals of sounding like native speakers should be recognized and supported, but the common curricular goals for all students should be intelligibility and comprehensibility.

On the survey employed in the present study, instructors mostly agreed that pronunciation issues that do not interfere with communication should be a lower priority for teachers to address (item 11, overall mean: 4.46, range: 4.20–4.89). Surprisingly, there appeared to be somewhat more disagreement with this statement among respondents with more relevant coursework. Although the modal response was only *slightly agree* for the NoMethods group versus *agree* for all three Methods groups, it also seems noteworthy that no one in the

NoMethods group disagreed with the statement, whereas 14–30% of instructors in the Methods groups disagreed. It is not possible to tell based on these survey results whether this might be due to a lack of understanding of state-of-the-art views on the relative importance of intelligibility or whether perhaps instructors with more pronunciation-related coursework are more attuned to complex sociolinguistic and affective issues of identity, discrimination, motivation, and learner agency, for example (cf. Saito, 2014). Nonetheless, the unexpected result might warrant some additional investigation or efforts to ensure that methods courses are conveying researchers' consensus about the prioritization of pronunciation issues that affect communication. If equipped with awareness of the issues involved, instructors can actively consider whether the features they are targeting will enhance the intelligibility and comprehensibility of learners' speech, while also taking into account learners' personal goals for pronunciation learning, which may include developing a more nativelike accent.

How to Teach

As mentioned earlier, scholars have advocated a proactive approach to pronunciation instruction, encouraging instructors to purposefully interweave a focus on pronunciation into the curriculum at all course levels (e.g., Darcy et al., 2012). With the intention of exploring teachers' beliefs about the advisability of proactive versus reactive approaches, we developed two survey items: item 12, proposing that teachers should (proactively) develop objectives and activities for pronunciation, and item 13, suggesting that teachers should (reactively) address pronunciation on the spot in response to students' problems. In relation to the latter, however, teachers' beliefs about the usefulness and/or timing of feedback may also come into play, irrespective of the importance they accord to making pronunciation a pre-planned component of Spanish classes.

Regarding the value of pronunciation-oriented feedback, research by Saito and colleagues has highlighted the effectiveness of reactive corrections, such as didactic partial recasts, coupled with form-focused instruction (Saito, 2013; Saito & Lyster, 2012a, 2012b), although in some cases the benefits may not extend to all target structures for all learners (Saito & Wu, 2014). The question of timing has received much less attention. Although some recent studies have investigated the timing of grammar-oriented feedback or form-focused instruction (e.g., Li, Zhu, & Ellis, 2016; Nakata, 2015; Quinn, 2014; Shintani, 2017; Spada, Jessop, Tomita, Suzuki, & Valeo, 2014), the results have been mixed, and no published research, to our knowledge, has investigated the developmental effects of providing prior instruction versus immediate feedback versus delayed feedback on pronunciation. Respondents in this study agreed that they should develop goals and activities for Spanish pronunciation as they do for other language skills (item 12, overall mean: 4.79, range: 4.23–5.10). The modal response for all groups was *agree*, and *slightly* and *strongly agree* were also frequent responses. None of the instructors in the AdvancedPron group with the most coursework in pronunciation pedagogy disagreed that objectives and activities should be developed; however, the fact that 30% of respondents with only basic training in pronunciation pedagogy disagreed might point to an area of improvement for methods courses that present limited information on pronunciation. Regarding the question of addressing students' pronunciation problems on the spot (item 13, overall mean: 3.64, range: 3.53–4.00), responses in the groups with less methods coursework were split (54–58% for, 42–47% against, with modal responses straddling *slightly agree* and *slightly disagree* in the NoMethods and BasicPron groups), while the AdvancedPron group tended to lean toward agreement (75% for, 25% against). Combined with the pattern of responses to the previous item, there does not seem to be

a dichotomy between instructors who would argue for more proactive versus reactive approaches; rather, in alignment with research, many seem to see value in both.

Who can Teach

In parallel with a growing non-native speaker teacher (NNST) movement (see, e.g., Selvi, 2014), a good deal of questionnaire research has been conducted on the perceptions of non-native language teachers held by both students (e.g., Butler, 2007; Cheung & Braine, 2007; Lasagabaster & Sierra, 2002; Ma, 2012) and other teachers (e.g., Nemtchinova, 2005). Most of the research has been in the context of English as a second, foreign, or international language; very few studies have investigated how NNSTs of other languages are perceived (Moussu & Llurda, 2008; though see Thompson & Fioramonte, 2012). However, many of the current arguments regarding “who can teach” resonate with the emphasis on intelligibility discussed in the “what to teach” section and are relevant to Spanish instruction as well, perhaps especially considering the use of Spanish around the world by speakers with a variety of accents. An increasing number of publications in the field emphatically reject the notion that native-speaker teachers are the ideal or the only valid models, while also seeking to raise awareness of the value of professional expertise over NS status (Mahboob, 2010; Selvi, 2014) and the potential strengths of successful bilinguals with experience in intercultural communication (Coskun, 2011) who can represent successful role models and demonstrate to students what it is possible to achieve (Nemtchinova, 2005). The limited empirical research that has been conducted to investigate the effectiveness of pronunciation instruction given by NSTs and NNSTs has not found differences in students’ comprehensibility or accentedness gains, or in the ratings they gave their teachers (Levis, Sonsaat, Link, & Barriuso, 2016). Granted, Levis et al.’s study

involved only two teachers of a 7-week course, but the results were consistent with the aforementioned arguments and led the authors to conclude that “the last bastion of native speaker privilege, pronunciation teaching, should not be a specialized club only for native-like pronouncers” (p. 918).

In the present study, when polled as to the relative importance of training in pronunciation pedagogy compared to nativelike pronunciation ability in Spanish, respondents tended to agree that the former was more important than the latter (item 14, overall mean: 4.40, range: 4.15–4.56). Modal responses were *slightly agree* and *agree*, and 78% of respondents expressed some level of agreement (range across groups: 70–90%). Notably, though, this also means that 22% of the instructors did not consider professional training to be more important than nativelikeness. When asked specifically about instructors’ accents in a way that acknowledged potentially undesirable responses (i.e., “It may not be politically correct, but...”), on average respondents rejected the idea that only individuals with nativelike Spanish pronunciation should teach it (item 15, overall mean: 2.97, range: 2.67–3.15). Yet, responses to this item were more variable, showing the highest overall standard deviation of all items (1.47), and 34% of respondents upheld the nativelike standard. Surprisingly, this was somewhat more common among respondents with more relevant coursework, with 22%, 32%, 38%, and 45% of the NoMethods, NoPron, BasicPron, and AdvancedPron instructors, respectively, expressing some level of agreement that pronunciation teachers should have nativelike accents. In the AdvancedPron group in particular, responses were spread fairly evenly throughout the range, with nearly half of instructors indicating agreement.

In light of the previously reviewed literature, the finding that many respondents displayed a bias toward nativelikeness is not unexpected. While many students have been found to acknowledge the value of NNSTs, to recognize a variety of benefits they can offer, and to give lip service to professional skills over NS status (e.g., Cheung & Braine; 2007; Lasagabaster & Sierra, 2002), they also often report wanting to attain nativelylike accents (e.g., Derwing & Munro, 2003; Scales, Wennerstrom, Richard, & Wu, 2006; Timmis, 2002) and may prefer or believe it necessary to have a NS as a teacher in order to improve their pronunciation (Buckingham, 2014; Levis et al., 2016). Meanwhile, teachers may recognize the importance of intelligibility and the value of pedagogical expertise, but nonetheless hold conformist attitudes toward NS norms (e.g., Coskun, 2011; Sifakis & Sougari, 2005). Interestingly, in Drewelow and Theobald's (2007) study on the communicative and social value of nativelylike pronunciation in L2 French, teaching assistants tended to emphasize the importance of nativelylike pronunciation more than native speakers or students did, and projected a variety of emotional responses onto NSs, including the belief that native speakers would react negatively to learners with American accents. Some NNSTs may also not perceive themselves as good pronunciation models (Ma, 2012), reflecting "the power of the nativeness principle over the intelligibility principle" (Levis et al., 2016, p. 916). Together, these trends suggest that teacher training programs need to provide more information on intelligible and comprehensible as opposed to nativelylike pronunciation models, and to place more emphasis on the value of professional expertise over native-speaker status.

DISCUSSION

To organize our remarks in the interest of making recommendations for teacher training, this section highlights areas where we found (a) alignment between teachers' beliefs and

research findings irrespective of coursework; (b) trends toward greater consistency with research findings among respondents with more pronunciation and methods coursework; and (c) surprising variability or discrepancies between beliefs and research findings among respondents with more coursework. Area (a) might be taken to suggest that teacher education programs need not spend inordinate amounts of time imparting knowledge that corresponds with existing beliefs, and (b) might imply that such programs can continue doing what they are doing, while also making efforts to include a greater focus on pronunciation instruction in foundation courses. Area (c), however, is potentially concerning and should help teacher trainers and PD specialists identify topics where more emphasis, clarity, and problematization of beliefs would be beneficial for pre- and in-service teachers. Ideally, of course, teacher education programs and professional organizations will use surveys, focus groups, and other methods to engage in needs analyses specific to their populations and contexts; however, the results of this study might help to set expectations or determine areas of focus for these endeavors. (Toward that end, the survey employed in this study is available in the IRIS digital repository of instruments for L2 research: iris-database.org; see Marsden, Mackey, & Plonsky, 2016.)

To the extent that instructors in their own contexts are similar to the respondents in this study, PD organizers may be able to rest easy with regard to the beliefs that Spanish pronunciation can be taught, that professional expertise is valuable, and that learners can continue to improve with targeted training even if their pronunciation appears to have reached a plateau. Since all groups showed consistency with research irrespective of the type of coursework they had completed (corresponding to area (a)), these topics can perhaps be addressed succinctly. That said, there were multiple cases where more training seemed to be

associated with increased consistency with research findings (corresponding to area (b)). In particular, instructors whose coursework included more information on phonetics and phonology in general or Spanish pronunciation in particular tended to see more value in pronunciation instruction, which fits with the fact that they were less likely to agree with delaying or deprioritizing pronunciation to focus on other aspects of language learning. These instructors also recognized that even if learners share the same L1, they may experience unique challenges as they learn to perceive and produce the sounds of Spanish, and were more likely to endorse a proactive approach within which Spanish pronunciation should be included in course objectives and made a part of regular lesson planning. Because more coursework seemed to be associated with greater alignment with research findings, teacher training programs should continue to highlight the potential effectiveness of early, purposeful, and targeted instruction, while offering additional PD opportunities on these topics for instructors with less coursework, and perhaps less self-efficacy, in pronunciation pedagogy.

Some of the more surprising results of this study (corresponding to (c)) involved issues of intelligibility versus nativelikeness. Notably, a sizable proportion of instructors who reported more coursework dealing with pronunciation seemed to uphold a nativelike standard both in terms of which aspects of pronunciation should be prioritized and who can serve as models, which suggests that training programs need to communicate more clearly the importance of emphasizing effective communication and pedagogical expertise. In this day and age, given the explosion of high-quality multimedia resources and opportunities for real-time interaction available online, access to NS models of a variety of world languages—and even dialects of a given language—is more feasible than ever (Petersen & Sachs, 2016), providing even more

justification for valuing teachers' professional knowledge and skills over NS status. Scholars and teacher trainers who work with Spanish should keep in mind that the region comprising central and northern Spain has been traditionally considered the source of desirable pronunciation for L2 learners (Zárate-Sández, 2018), which may predispose Spanish teachers to uphold the nativeness model. A similar situation may apply to other languages where one prestigious variety is dominant (see, e.g., Drewelow & Theobald, 2007, for French). As noted by an anonymous reviewer, this contrasts with English, which is increasingly recognized as an international language with many native and non-native realizations. Not only do multiple prestigious varieties co-exist, but there is also a strong tradition of advocating for the acceptance of diverse localized varieties, sometimes referred to as “World Englishes,” as well as growing recognition of the fact that non-native speakers (and teachers) of English vastly outnumber native English speakers (and NNSTs) (Moussu & Llurda, 2008).

Whether pronunciation develops naturally to a certain extent was another area where substantial variation both between and within groups was the norm. This variability suggests that training programs should focus on providing more information on how pronunciation develops, particularly in instructed contexts, where the quantity and quality of the input, the availability of explicit instruction and feedback, and learners' motivations and attitudes in the Spanish classroom can create paths of pronunciation development—particularly in terms of rate of acquisition—that differ from those in naturalistic settings. Teacher training and PD should emphasize the need for instructors to implement purposeful pedagogical interventions that target pronunciation development in the classroom from early stages of acquisition.

Lastly, complementing the TESOL research that has documented a lack of prioritization of pronunciation instruction (e.g., Derwing & Munro, 2009), nearly all of the instructors sampled in this study had taken a methods course, yet only 50% of those courses included information on pronunciation. Given that teachers with a background in pronunciation pedagogy might feel better equipped to implement a wider range of pronunciation techniques and strategies in the language classroom (e.g., Baker 2014), it is essential that teacher education programs integrate targeted, practical information on pronunciation for communicative purposes, which may in turn promote a more informed pedagogical approach as concerns pronunciation in Spanish language learning and teaching in particular.

A number of limitations to the present study should be mentioned. First, while it was worthwhile to conduct focus groups and design items based on comments made during those discussions, doing so sometimes resulted in double-barreled statements merging ideas that should be separated for the sake of clarity, such as the item that interwove the issues of motivation and natural pronunciation development. Secondly, while questionnaires and surveys are useful research tools for large-scale quantitative data collection, it is crucial to complement them with interviews and observations, which can lead to a deeper, more contextualized understanding of the relationship between beliefs and practices (Baker & Murphy, 2011; Baker, 2014; Burri et al., 2017; Foote et al., 2016).

CONCLUSION

This study targeted teachers' beliefs on pronunciation learning and teaching in L2 Spanish. In some cases, beliefs tended to align with research findings irrespective of coursework focused on methods of pronunciation instruction, while in others increased training was

associated with more accurate beliefs vis-à-vis research. However, important points of divergence were also identified. In particular, some Spanish instructors who had taken more pronunciation-oriented coursework seemed to uphold the nativeness principle, which is troubling since this is an area where empirical, ethical, and practical perspectives support intelligible and comprehensible pronunciation over nativelike pronunciation. This study can provide a blueprint for teacher trainers who are interested in incorporating evidence-based pronunciation findings into their methods courses, and, at the same time, offers language instructors a research roadmap with targeted references dealing with specific topics in the pronunciation literature. Designers of professional development opportunities can, of course, also use the survey as a component of needs analyses relevant to their own contexts, whether to identify potentially productive areas of focus or as a starting point for constructive discussions of the intersections between teachers' beliefs and current research findings.

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Appendix. Summary of one-way ANOVAs with between-subjects group (four-level) factor.

<i>Importance of Pronunciation</i>		
1. Pronunciation is one of the most important aspects of language for successful communication	$F(3, 96) = 4.33$	$p = .007, \eta_p^2 = .12$
<i>How Pronunciation Develops</i>		
2. Pronunciation tends to develop naturally in Spanish even for learners who don't care about improving it	$F(3, 96) = .70$	$p = .55, \eta_p^2 = .02$
3. With effort, learners can modify their Spanish pronunciation even if they've been pronouncing things a certain way for a long time	$F(3, 96) = 2.01$	$p = .12, \eta_p^2 = .06$
4. Learners' improvement in pronunciation has more to do with what they experience outside the classroom than it has to do with the instruction they receive	$F(3, 24.95) = .17$	$p = .91^1$
5. Spanish pronunciation can be taught	$F(3, 96) = .36$	$p = .78, \eta_p^2 = .01$
<i>When to Teach</i>		
6. In first- and second- year Spanish language courses, pronunciation can be skipped to focus on other skills or areas of language	$F(3, 96) = 1.45$	$p = .23, \eta_p^2 = .04$
7. Teachers should target pronunciation early to prevent learners from reinforcing mistakes	$F(3, 96) = 1.24$	$p = .30, \eta_p^2 = .04$
8. Since pronunciation is a sensitive issue, teachers should only address it once students feel more confident in their ability to speak Spanish	$F(3, 96) = 3.22$	$p = .03, \eta_p^2 = .09$
<i>What to Teach</i>		
9. Even if a class is made up of learners with different backgrounds, it's possible to identify a core set of Spanish pronunciation features that students would benefit from focusing on	$F(3, 96) = 2.31$	$p = .08, \eta_p^2 = .07$
10. People who speak the same native language will face similar challenges in learning to pronounce a foreign language such as Spanish	$F(3, 96) = .91$	$p = .44, \eta_p^2 = .03$
11. Learners' pronunciation issues that don't interfere with communication should be a lower priority for teachers to address	$F(3, 96) = .91$	$p = .44, \eta_p^2 = .03$
<i>How to Teach</i>		

12. Teachers should develop objectives and activities for pronunciation like they do for other aspects of language	$F(3, 96) = 1.80$	$p = .15, \eta_p^2 = .05$
13. Pronunciation is something teachers should address on the spot in response to students' problems	$F(3, 96) = .86$	$p = .47, \eta_p^2 = .03$
<i>Who Can Teach</i>		
14. In helping learners to improve their pronunciation of Spanish, it's more important to have training in teaching pronunciation than it is to have a nativelylike accent	$F(3, 96) = .30$	$p = .83, \eta_p^2 = .01$
15. It may not be politically correct, but I think anyone who teaches pronunciation should have a nativelylike accent	$F(3, 96) = .26$	$p = .86, \eta_p^2 = .01$

Note. 1 For item 4, Levene's test revealed that the homogeneity of variance assumption was not met, $p = .04$. Therefore, Welch F is reported. In all other cases, Levene's test was not violated.