Sociocultural Identification with the United States and English Pronunciation Comprehensibility and Accent Among International ESL Students

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ABSTRACT

Sociocultural Identification with the United States and English Pronunciation Comprehensibility and Accent Among International ESL Students

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Sociocultural identity is defined for this study as the element of identity affixed to a social or cultural group. Previous research on sociocultural identity has recognized the need for further study of its effect on second language performance, particularly pronunciation. Previous studies have found contradictory results when studying the relationships between sociocultural identity and various measures of second language pronunciation.

This thesis takes a quantitative correlational approach to the study of sociocultural identification with the United States and English pronunciation comprehensibility and accent in a group of 68 international students learning English in the United States. Participants completed a survey indicating the strength of their identification with the United States, after which a group of three native speaking raters rated speech samples from the participants for both comprehensibility and accent.

Scores from the identity survey were compared with those on the comprehensibility and accent ratings through a FACET analysis. Results showed no correlation between sociocultural identification with the United States and ESL pronunciation in either comprehensibility or accent. These results add further complexity to existent scholarship on identity and pronunciation and lead to a discussion of implications for future study.

Keywords: sociocultural identity, pronunciation, comprehensibility, accent, ESL, international students, United States
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Finally, I would be remiss not to acknowledge the help and support of my family, especially my mother, for her constant encouragement and many years of sacrifice for my education and opportunities; my husband, Jordan, for his endless support and confidence; and my son, Oliver, for his patience as I devoted many hours of work to this thesis.
PREFACE

In accordance with TESOL MA program guidelines, this thesis was prepared as a manuscript to be submitted to the *Journal of Multilingual and Multicultural Development*. This journal was selected for its aims and scope, to which the discussion and findings of this thesis are relevant. The *Journal of Multilingual and Multicultural Development* is a cross-disciplinary journal which focuses on topics related to social and cultural implications of language use. Specific topical categories its guidelines for contributions call for that are particularly pertinent for this study include: ethnicity and nationalism, collective identity and its markers, and language learning. This thesis offers relevant new information in these fields and can inform stakeholders—including language learners, educators, policymakers, and others—of added insight into the relationship between sociocultural identity and pronunciation comprehensibility and accent.

Requirements for submission to the *Journal of Multilingual and Multicultural Development* include a word count of no more than 7000 words (excluding references), along with an abstract of no more than 200 words; this has been the guideline for the length of this thesis. Prior to submission, minor formatting changes will need to occur. These will include changing certain words to reflect British (-ise) spelling and punctuation (particularly quotation) conventions. Also, in order to facilitate the double-blind peer review process of reviewing submissions, all identifying information will need to be removed.

Alternatively, this thesis could be an apt candidate for submission to the *Journal of Language and Social Psychology*. Articles from this journal were cited multiple times in this thesis, showing its relationship to the body of scholarship already present in the journal. *The Journal of Language and Social Psychology* is a multidisciplinary journal which publishes
articles on original empirical research in cognitive science, sociology, or linguistics that informs discussions of the relationships between language use and social psychology. This journal requires submissions to follow APA formatting guidelines, as this thesis currently does. It also allows article submissions a length of up to 25 double-spaced pages (excluding bibliography, tables, and figures) with a 150-word abstract, so the body of the thesis would fit the length requirement but the abstract would have to be edited for concision in order to prepare it for submission as a manuscript to this journal.
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Introduction

The way we speak often reflects aspects of the way we view ourselves and the world around us. Our perspective of ourselves and the world is unique to each of us and is influenced by a myriad of identities—those connected to family, gender, political affiliation, religion, racial or ethnic group, region, socioeconomic status, vocation, education, and even hobbies and interests. These and other aspects of identity influence our language both consciously and unconsciously—for example, as we negotiate relationships of power and solidarity, as we establish gender or other social roles, and as we seek to demonstrate knowledge or competence—and, in turn, linguistic discourse shapes identity (see Bucholtz & Hall, 2005; Fuller, 2007; Mercur, 2015).

This study seeks to explore how sociocultural identity and second language pronunciation influence one another for language learners. The term sociocultural identity is used to emphasize the fundamentally societal and cultural nature of identity, especially as it emerges in linguistic interaction (Bucholtz & Hall, 2005, p. 588). It relies upon a broad understanding of sociocultural theory, one in which the intersections of social and cultural identities are acknowledged as being more numerous and more significant than the distinctions between them (Norton, 2006). Naturally, sociocultural identity covers a broad array of areas of a person’s life. From a linguistic standpoint, however, sociocultural identities surrounding region and/or country of origin, residence, or other affiliation are especially salient. The way one speaks tends to most strongly elicit information about where one is “from” (see Baratta, 2016; Newmark and Stanford, 2016); therefore, elements of identity that inform or influence that question are foremost among the types of identity to be concerned with when discussing sociocultural identity in the context of language.
Sociocultural identity affects our first language use, but it plays an especial role as we learn a second language, since learning another language often challenges, augments, or otherwise alters our sense of sociocultural belonging (Norton, 1997). Pronunciation is particularly interesting in such a discussion because it is often one of the most readily noticeable and pervasive aspects of language use. By better understanding the relationship between sociocultural identity and second language pronunciation, greater insight can be gained into the challenges and opportunities second language learners encounter, both linguistically and socially.

**Literature Review**

Research and everyday experience provide ample evidence that sociocultural identity often correlates to complex and significant linguistic distinctions among human beings. These distinctions are, in large part, the result of external and unconscious or subconscious factors, but they can also indicate conscious decisions; Labov’s cornerstone sociolinguistic study in Martha’s Vineyard (1972) demonstrates that language is a tool by which individuals can draw closer to, or distance themselves from, other members of a social group. Other studies confirm this view, and extend it to the field of bilingualism and second or foreign language learning as well (Bonner, 2001; Henry and Goddard, 2015; Lefkowitz and Hedgcock, 2006).

**Sociocultural Identity and Second Language Performance**

Though it immediately makes sense that better L2 performance (particularly when the L2 is a language of prestige, such as English) is often socially, economically, and otherwise advantageous, studies show that this is not always the case. L2 learners use elements of both their L1 and L2 strategically for different purposes in specific social situations; for example, a speaker may choose to accommodate a hearer in an L2 or instead (especially in a context where a dominant L2 appears to threaten a minority L1) choose not to accommodate, valuing instead the
ingroup identity of the L1 (Martinovic-Zic, 1998; see also Campbell and Grondona, 2010; Ting, 2001). The question then emerges as to whether this is just a situational phenomenon or whether L2 acquisition is affected by sociocultural identity.

Trofimovich and Turuseva (2015) compiled an impressive synopsis of research to date on the relationship between ethnic identity, one of the elements of sociocultural identity, and second language learning. In their review, they outline four possibilities for the relationship between ethnic identity and L2 acquisition:

At least hypothetically, in line with Lambert's additive bilingualism or integration pattern, language users might embrace L2 learning to become bilingual and bicultural. In contrast, illustrating Lambert's subtractive bilingualism or assimilation pattern, language users may acquire the language of a majority group and lose their own language and culture. Or language users may refrain (overtly or covertly) from acquiring an L2, especially if they experience threat to the survival of their ethnic group. Alternatively, language users' sense of ethnic belonging to a particular group might have little bearing on the rate and ultimate success of their L2 learning (p. 238-9).

In other words, learners may…

1. Develop a new sense of identity with the target language, which they integrate with the identity tied to their native country, culture, and language. This hybrid identity allows them to acquire the L2 successfully without jeopardizing their native language and culture. This is perhaps the most optimistic possibility.

2. Undergo a process of assimilation in which they acquire their L2, along with a new sense of cultural identity, at the expense of their native language and culture.

3. Fear such an assimilative effect and therefore experience (either conscious or subconscious) stagnation in their L2 as they fight to defend their cultural and linguistic identity from the perceived threat of another.

4. Experience little relationship at all between their ethnic identity—or even broader sociocultural identity—and second language learning.
Research to this point includes evidence for each of these possibilities. The studies of Ellinger (2000) and Coupland, Bishop, Williams, Evans, and Garrett (2005), in Israel and Wales, respectively, showed a positive association between the strength of L2 learners' ethnolinguistic identification with their home country and their L2 (English) achievement levels. In these cases, the sociocultural identities tied to the native and target languages were integrative and not in conflict, so that stronger identification with one’s home country actually improved their L2 performance. For instance, native Hebrew and Russian EFL learners in Israel who answered positively to questions such as, “How important is the Russian/Hebrew language to you?” or “How important is it to you that your children speak Hebrew/Russian?” demonstrated higher English proficiency than their counterparts. This kind of relationship illustrates the case of possibility (1) above and suggests that the sociocultural identification most conducive to language learning is a “double-positive” one, or one in which the learner identifies strongly and positively with both the native and L2 language and culture. This idea is further supported by Gatbonton and Trofimovich (2008), whose research Trofimovich and Turuseva (2015) showed to demonstrate that the most proficient L2 English speakers among native French speakers in Quebec were those “who expressed willingness to be identified as both Canadian and French Canadian” (p. 239).

However, other evidence demonstrates that elements of a learner’s sociocultural identity tied to their native language and those tied to the target language can be at odds with one another (Stevick, 1978). In these situations, L2 learners are often faced with a predicament in which they face discrimination from the target language population for non-native-like language use, yet sometimes also face alienation from speakers of their native language if their second language appears too assimilated, because such assimilation can be perceived as a weakened sense of
identity with one’s native language and culture. L2 performance, particularly pronunciation, is often interpreted by others in a learner’s social group (particularly other L2-learning peers) as an indicator of sociocultural identity (Gatbonton, Trofimovich, and Magid, 2005; Gluszek, Newheiser, and Dovidio, 2011). These attitudes reflect possibilities (2) and (3) presented by Trofimovich and Turuseva, with learners having to choose whether to assimilate (possibility 2) or stagnate in their second language progression (possibility 3).

The studies discussed so far have treated learners’ L2 experience as a variable of their sociocultural identity in connection to their L1. In many instances of L2 acquisition, however, it seems that sociocultural identity related to the L1 is secondary to that of the L2. Strong, positive identification with the target language and culture can deeply enhance learners’ motivation in language learning. Negative or weak identification, on the other hand, can hinder such motivation. Polat and Schallert (2013) found among Kurdish-speaking Turkish learners in Turkey that the strongest L2 speakers were “either those who demonstrated strong identification with their home and L2 groups or those who strongly affiliated themselves with the L2 group. The [linguistically] disadvantaged group,” Trofimovich and Turuseva (2015) noted, “included the speakers who were singly oriented towards their home ethnic group” (p. 239).

Also showing the importance of sociocultural identification with the L2, Gluszek and Dovidio (2010) found that “foreign-accented” speakers of English in the United States “demonstrated greater problems in communication and greater perception of stigmatization from the L2 [English] community. Most importantly,” Trofimovich and Turuseva (2015) extrapolated from this study, “compared to other groups, foreign-accented speakers felt less affiliated with the United States, with stronger accents linked to the feeling of not belonging to the United States (p. 240).” They then cite a follow-up study by Gluszek, Newheiser, and Dovidio (2011) in which
causal modeling was employed to show that “for nonnative speakers of English, identification with the American culture was tied to perceived L2 accent strength, such that weaker identification with the L2 group was associated with more accented L2 speech (p. 240).” Moyer (2007) confirms that a speaker’s attitude toward American culture is a significant factor in English accent (though less significant than other language attitudes).

**Pronunciation’s Salience in Discussion of Identity**

In the discussion of sociocultural identity and second language acquisition to this point, pronunciation tends to be the most prominent element of L2 performance related to sociocultural identity. Due to its immediate appearance and its tendency to elicit stereotypes and other labels (Ma, Henrichsen, Cox, & Tanner, 2018), pronunciation offers a particularly salient area of language in which to examine the effects of sociocultural identity. Pronunciation, and especially accent, is one of the most immediately noticeable elements of language, providing the basis for a large portion of linguistic discrimination connected to ethnicity, region, and other elements of sociocultural identity (Lippi-Green, 1994; Munro, 2003). There are also a number of factors that could possibly affect L2 pronunciation, and the significance of many of those factors is uncertain (Flege, 2001).

Hudson (1980) noticed that “pronunciation in general seems to be more sensitive to regional and social differences than grammar and vocabulary” (p. 42), and he hypothesized that different linguistic elements (such as syntax, vocabulary, and pronunciation) related to different elements of society. For example, he suggested that syntax marks social cohesion, while vocabulary marks social divisiveness. Thus, individuals try to eliminate alternatives in syntax, but cultivate them in vocabulary. Pronunciation, the theory claims, is unique in that it reflects “the permanent social group with which the speaker identifies” Speakers use pronunciation to
identify their origins—or, as noted in Hudson’s book, to imply origins to certain groups--
Therefore, in pronunciation, “different groups suppress different alternatives in order to
distinguish themselves from each other, and individuals keep some alternatives ‘alive’ in order to
be able to identify their origins even more precisely…” (p. 45). In other words, speakers use
pronunciation foremost among linguistic elements to either draw closer to or distance themselves
from certain sociocultural groups, and these distinctions in identity are seen in speakers’
pronunciation variations.

Trofimovich and Turuseva (2015) concur that “the speech patterns of individual speakers
or groups, which are commonly described as accent and refer to dimensions associated with
linguistic attributes of spoken language (e.g., prosody, segmental accuracy), appear to be some of
the most salient markers of speakers’ ethnolinguistic belonging” (p. 237).” Therefore,
pronunciation seems to be an appropriate element of language to explore in an examination of
language learning and sociocultural identity.

**Constructs of Pronunciation Assessment**

Of course, when we speak of pronunciation proficiency, we must be specific as to what
aspect of pronunciation we are measuring: accentedness, comprehensibility, and/or intelligibility.
It is important to recognize that it is possible for a learner to demonstrate a strong foreign accent
and still be both intelligible and comprehensible. Ma (2018) cites the extensive work of Munro
and Derwing (1995, 1997, 1999, and 2001), among others, in order to offer a useful overview of
each of these pronunciation descriptors, including definitions and best measurement practices.
Such an overview is important to include because it may be that, if sociocultural identity is
correlated with L2 pronunciation, it affects these elements of pronunciation to different degrees
or in different ways.
Intelligibility refers to a speaker’s ability to pronounce the sounds of the language in such a way that they can be heard and understood by other speakers of the language. It is usually measured by transcription. Comprehensibility, though related, is distinct in that it measures listeners’ perceived ability to understand the content and meaning of a speaker. It is usually better measured through ratings by native speakers, and Ma (2018) points to a number of studies by Munro & Derwing (1995, 1997, 1999, 2001) which measure comprehensibility using a 9-point Likert scale. Accentedness, on the other hand, has little at all to do with communicative ability and is concerned only with the extent to which a speaker sounds like a native speaker of the language or local dialect. It, too, is best measured through a Likert scale.

In her discussion of these measures, Ma (2018) notes that intelligibility, comprehensibility, and accentedness are all markedly different from measures of pronunciation accuracy, which primarily includes measurement of segmentals (vowel and consonant sounds) and suprasegmentals (such as prosody and intonation). They are inextricably related, however, because pronunciation accuracy effects a speaker’s perceived intelligibility, comprehensibility, and accentedness in interactions with other speakers. The primary difference is that measures of intelligibility, comprehensibility, and accentedness are all mediated by the experiences, biases, and background knowledge of listeners, while pronunciation accuracy is concerned only with the objective facts of a speaker’s linguistic output.

This distinction should not mean, however, that pronunciation accuracy is the only valid measurement of pronunciation. Measures of intelligibility, comprehensibility, and accentedness provide constructive information about the effects of a speaker’s pronunciation on his or her communication with speakers of a target language. Especially in conversations about identity, which has already been demonstrated to both inform and emerge from social discourse, these
pronunciation effects are key to an understanding of the interchange between sociocultural factors and language.

**Sociocultural Identity and Second Language Pronunciation**

Several studies have already been cited which offer insight into the relationships between various aspects of sociocultural identity and various constructs of pronunciation. Moyer (2007) found correlation between accentedness (as measured by Likert scale ratings) and cultural attitudes (though cultural attitudes were determined to be less of a factor in accent than attitudes about the language itself). Gluszek and Dovidio (2010) and Gluszek, Newheiser, and Dovidio (2011) reported an inverse correlation among ESL speakers in the United States between accentedness (self-rated in the 2010 study and native speaker rated in the 2011 study) and feelings of affiliation, belonging, and identification with the United States and American culture.

Munro and Derwing (2009), however, raise several important issues with the idea that sociocultural identity strongly affects pronunciation—at least to the extreme degree that they have noticed in other scholarship, in which pronunciation instruction is seen as the antithesis of self-image. They note that most learners, regardless of their sociocultural affiliations, want and seek help with their pronunciation, especially their intelligibility. Many learners do not even associate their L2 pronunciation with their identity; rather, they see their L1 as a better expression of that element of their sociocultural identity (because learners can have multiple identities). Additionally, it must be recognized that some elements of accent are volitional, but others are non-volitional. In other words, there are some aspects of a learner’s accent that they simply cannot control or change, regardless of how they identify with any country, culture, or language.
The scholarship on sociocultural identity and second language accentedness is thus somewhat conflicted. The issue is further complicated if other measures of pronunciation are considered. For example, Purcell and Suter (1980) followed up a study by Suter in 1976 in which 20 potential factors were studied for their effect on pronunciation accuracy. The factors included demographic information (native language, gender, months of residence with native speakers, etc.); educational factors (years of instruction, months of intensive instruction, weeks of pronunciation instruction, proportion of native speaking teachers, etc.); affective factors (various types of motivation, cultural allegiance, and strength of concern for pronunciation,); and personality or aptitude factors (aptitude for oral mimicry, extroversion). In the original 1976 study, Suter found 12 of the variables to have significant correlation with pronunciation accuracy (as measured by 14 native-speaking judges). Cultural allegiance, an element of sociocultural identity, was among the 12. However, in the 1980 study, Purcell and Suter applied a more sophisticated statistical analysis and concluded that only four of the 20 variables actually accounted for the variance in pronunciation accuracy—native language, aptitude for oral mimicry, length of residence in an L2 environment, and strength of concern for pronunciation. This implies that cultural allegiance only affected L2 pronunciation accuracy in that, in some cases, it contributed to a speaker’s concern for pronunciation.

The Need for Further Research

In addition to the general need for further research to better understand the nuanced relationships between sociocultural identity and second language pronunciation, specific needs have been called for in researching identity. Trofimovich and Turuseva (2015) note that the scarcity of large-scale quantitative studies in this area constitutes a notable deficit: “Compared to a rich body of literature documenting identity-language links, there is relatively little research
documenting how speakers’ identification with their own ethnic group and with the target community might relate to L2 development, with most research relying on learners’ self-ratings of their L2 ability collected at a single time” (p. 238). More research is needed into the relationships between sociocultural identity and language learning where elements of language learning and performance are assessed quantitatively and through means other than self-rating.

Trofimovich and Turuseva (2015) also note that there is a need for further research on aspects of sociocultural identity for learners in a classroom setting, “with the consequence that identity issues need to be considered alongside other social, cognitive, pedagogical, and linguistic factors in classroom L2 teaching (p. 247).” Because the relationship between identity and L2 pronunciation may be different when L2 learners are actively learning English in a classroom setting compared to informal learners, there is a need to more specifically study learners in this group.

Besides these research needs, there are demographic groups that are underrepresented in research to date on sociocultural identity and language learning. For example, most of the literature documenting sociocultural identity among language learners focuses on immigrants. It would also be insightful to explore the relationship between sociocultural identity and language learning among students in a study abroad context. This difference in populations may have significant effects on learners’ sociocultural identity and how that identity affects their language learning. Most students in a study abroad context are also young adults, and it is probably that age also plays a notable role in the development of sociocultural identity among language learners. Another example of a factor that would be constructive to research further in this discussion is proficiency level. Do learners at different proficiency levels see different kinds of relationships between sociocultural identity and language learning? Finally, very little research
has been conducted on the intersections of religious identity and other aspects of sociocultural identity. In a context where language learners and native speakers share a religious identity, does that shared identity affect learners’ relationships between other aspects of sociocultural identity and language learning? These are all issues that will be raised by the current study.

**Research Questions**

Hoping to clarify the relationship between sociocultural identity and L2 pronunciation, the current study focuses on the relationships between sociocultural identification with the United States, as measured by an adaptation of the Cameron (2004) questionnaire, and English pronunciation, as measured by native speaker ratings of comprehensibility and accent. The target population is group of international students in the United States. The research questions under examination are as follows:

1. Is there a significant correlation between sociocultural identification with the United States and ESL pronunciation performance among international students learning English?

2. Is said correlation affected by either the students’ L1 background or their proficiency level?

**Methods**

**Participants**

A total of 68 (38 male, 30 female) international students participated in this study; three were students at a four-year university and the remainder were studying at an intensive English program in the same city. Those at the IEP were divided into tracks based on proficiency level; they are categorized in Figure 1. (The three university students will be referred to as level 5 for proficiency.)
Mean age among participants was 24.5 with a standard deviation of 5.13. L1 representation is displayed in Figure 2.
All participants had previously graduated from secondary school; most had also attained some postsecondary education in their home country, with 21 already having an undergraduate degree and 3 having some form of graduate degree. Occupations varied; about half of the participants identified exclusively as students, and the other half reported jobs in administrative, arts, custodial, education, engineering, finance, management, research, sales, and security fields.

**Instruments**

**Sociocultural identity questionnaire**

Measuring sociocultural identity can be difficult, because sociocultural identity is, in and of itself, a conglomeration of various subjective elements. “Besides,” note Trofimovich and Turuseva (2015, p. 242), “not all elements of the ethnic identity construct should matter to L2 development, or should matter to the same degree….Speakers might weigh certain aspects of ethnic identity more highly than others.” This acknowledgment underscores the need to examine sociocultural identity through a segmented lens, so that the aspects which most affect L2 learners may be discriminated.

In order to do just that, Cameron (2004) developed a tripartite social identity questionnaire (see Appendix A). In a series of five studies, he and his colleagues administered the questionnaire to various groups of participants and compared the results to already-established personality and identity tests. They refined the survey with each study and ultimately found the questionnaire to be a valid measure of social identity.

The questionnaire is adaptable so as to be able to measure social identity with any kind of group, whether ethnic, gender-related, or even as arbitrary as university affiliation. It utilizes a three-factor model of social identity based on…

1. Centrality, or the strength of the influence of identification with a particular group on an individual’s thoughts
2. In-group effect, or the level of positive mental and emotional effect of identification with the group, and

3. In-group ties, or the extent to which participants experience a shared identity and commonalities with other members of the group.

The three-factor social identity model fared well when compared to various previously-validated personality tests and other operationalizations: “In sum,” Cameron (2004) reported, “the three-factor model presented in this article allows efficient and reliable assessment of social identification with groups that leave a lasting impression on the self-concept and in which interpersonal ties might assume psychological importance” (p. 256). He also demonstrated that this three-factor model better represented the various factors of identification than a one- or two-factor model, since, as he noted, “group membership means not only different things to different people, but different things to the same person” (p. 252). In sum, this tool offers researchers a springboard for the further quantitative research into sociocultural identity that is needed, and for this reason it was used in this study.

The study features 12 items, four for each of the three constructs of identity mentioned above. Each item is a statement to which participants rate their agreement on a 6-point scale from “strongly disagree” to “strongly agree.” Half of the statements are oriented positively (e.g. “In general, I’m glad to be a member of this group”) and half are oriented negatively (e.g. “I don’t feel good about being a member of this group.”) After participants took the questionnaire, the positive statements were coded 1 to 6 with 6 being “Strongly Agree,” while the negative statements were coded the other way around, with 6 being “Strongly Disagree,” so that a higher total score on the questionnaire represented a higher overall sense of sociocultural identification with the United States. For the purposes of this study, Cameron’s questionnaire was adapted to
reflect sociocultural identification with the United States. (For the resulting adapted questionnaire, see Appendix B.)

**Pronunciation assessment**

Because sociocultural identity is forged through discourse and interaction with others, it seemed most fitting in the current study to assess pronunciation in a way that reflected the effects of a speaker’s pronunciation accuracy on a listener, rather than pronunciation accuracy itself. Comprehensibility and accentedness are both constructs which focus especially on this contextualized view of pronunciation, and so they were chosen as the constructs to assess for the pronunciation variable in this study.

Munro and Derwing (2009) referred to listener judgment as the “gold standard” (p. 478) when researching comprehensibility and accentedness, and cited reliable results when researching these constructs through a 9-point Likert scale. Thus, two 9-point Likert scales are also used in this study, one to rate speaker comprehensibility and another to rate accentedness. The comprehensibility scale included guiding statements ranging from “I couldn’t understand this speaker at all” to “I had no problems understanding this speaker,” with intermediate statements such as “I understood the ‘gist’ of what this speaker was saying.” Likewise, the scale for accentedness included statements ranging from “This speaker has an extremely thick accent” to “This speaker sounds like a native speaker.” The scales can be seen in Appendix C.

**Procedure**

With approval from the university institutional review board, participants were recruited through their classes at an intensive English program (IEP) or, in the case of the three university students, through flyers around campus. (The university students were sought in order to add a higher proficiency level to the population sample. Compensation in the form of a $10 gift card was offered to attract participants. Unfortunately, a low response from this segment of the
population resulted in a smaller insight added to the study than initially hoped.) Participants were instructed to complete an online version of the adapted questionnaire. Students’ responses to the questionnaire, along with responses to select demographic questions such as education, career path, length of English study, and contexts in which the participants used English, were linked to metadata which included native language, class at the IEP (to indicate proficiency level), and other demographic information such as gender and age.

Then, 30-second speech samples from each participant were collected from the speaking portion of the IEP students’ most recent placement exams. The samples required students to respond to a communicative task in which they were asked to describe a good friend of theirs. (The university students provided separate speech samples of the same length, responding to the same task.) These samples were rated for pronunciation comprehensibility and accentedness. It is important to note here that the speech samples were collected from placement exams for the IEP students. It has been demonstrated previously that pronunciation may differ in a multilingual individual in various circumstances (especially in Martinovic-Zic, 1998); this setting represents one in which targetlike pronunciation of the L2 is most advantageous. Therefore, differences in pronunciation due to sociocultural identity can be reasonably determined to be generalizable to participants’ overall ability rather than merely a reflection of situational context.

Three native speakers, who were also teachers at the IEP, rated the speech samples (and received $20 gift cards as compensation for their time and service). Raters were selected from this context because, although they would likely demonstrate the bias of sympathetic listeners, they would also be able to confidently distinguish pronunciation from other elements of speech such as grammar or vocabulary, as well as to distinguish comprehensibility and accent. These criteria resulted in a low number of raters; however, there is precedent for assessment of
comprehensibility and accentedness using only three raters (Gluszek, Newheiser, & Dovidio, 2011).

Rater training involved instruction on the definitions of and distinctions between comprehensibility and accentedness, with reference to guiding statements in the corresponding rating scales. They were then instructed to rate each speech sample according to the statement that best fit their impression of the speaker’s comprehensibility and accentedness. (The numbers between the statements offered room for more precision if the rater felt that neither statement was wholly representative of a particular speech sample.) Raters were not calibrated in the training.

It should be noted that, though each speech sample was labeled so as to be anonymous, all three of the raters occasionally recognized the voice of a current or former student. These instances were recorded, but the data showed no significant or consistent difference between their ratings and those of other raters, showing that outside influence was minimal.

Results

Analysis and Comparison of the Instruments

To analyze the data, a FACETS analysis was used. A FACETS analysis creates units of measurement (logits) by which multiple variables can be measured at once along a common scale. This was especially helpful in making it possible to treat ordinal data as interval data, allowing for better correlation between multiple variables of different measurement scales.

The responses to the sociocultural identity questionnaire yielded a few insights. First, we conducted a Rasch analysis of the questionnaire responses and discovered that while most items fit the model of the overall questionnaire reasonably well (with outlier-specific mean-square fit values ranging from 0.53 to 1.37), there were items that did not perform the way we would have
expected. Item 10 (“I often regret that I am connected to the United States of America”) was the most obvious of these, proving to underfit the model (mean-square fit value 1.72). Upon closer examination, the cause of the poor fit is that responses gravitated toward both extremes (“Strongly Agree” and “Strongly Disagree”) and away from the center, while for most items frequency of response gradually increased from options 1 to 6. In other words, for most statements in the questionnaire, participants answered options 1 to 6 in gradually increasing frequency, with some participants falling in each category of agreement but the majority demonstrating higher sociocultural identification with the United States according to the construct measured in the statement. Item 10’s separation from this tendency either suggests that it needs revision for clarification or relevance in future uses, or that this element of sociocultural identification elicits more polarized responses in English language learners.

We also discovered that a comparison of the three aspects of sociocultural identity targeted in the study yielded significant differences in mean scores. The participants, in general, scored significantly higher in cognitive centrality than in in-group effect, with in-group ties falling in the middle. If the statements in the questionnaire adequately represent their constructs, this seems to suggest that this participant sample of English language learners thinks about their association with the United States to a higher degree than they feel positive about the association. Their connections to Americans, meanwhile, tend toward the center.

A more general picture of the questionnaire responses, as measured by the FACETS analysis logits, is shown in Figure 3.
Figure 3. Frequency of scores on sociocultural identification questionnaire. Measurements are in logits.

In examining the pronunciation data, the FACETS analysis helped to normalize interrater differences, as well as differences caused by logistical errors that prevented some speech samples from being exposed to all three raters.

In the FACETS analysis report (Figure 4), the logits on the left scale from -2 to 7. Especially when compared to the 1-9 scale on the right (based off of the scales in Appendix C that raters used to score participant comprehensibility and accentedness), that the logits are evenly spaced which allowed the ability to treat the ordinal data as interval data. The other facets measured include the examinees (with each asterisk representing one participant’s score), the dual pronunciation criteria of comprehensibility and accentedness, and the three raters.
**Figure 4.** FACETS analysis of pronunciation. Variables including examinees, pronunciation criteria, raters, and the 9-point rating scale from the measurement instrument.
Immediately noticeable is that students’ scores are clustered into about three groups, with a low group around -1, a middle group between 0 and 3, and a high group around 4 (except for one outlier near 7). There is also a stark difference in placement of the pronunciation criteria, which shows that (not surprisingly) students acquire the comprehensibility construct well before the accentedness construct—students rated higher for comprehensibility than for (lack of) accentedness. The three raters are stacked in order of leniency (with the logits centered around rater 2 as the zero point), spanning approximately a full logit of difference. With these rater lenience measures taken into account, the reliability estimate (Crohnbach’s $\alpha = 0.90$) from the analysis confirmed that the procedure undertaken to measure pronunciation was successful in discriminating between participants of varying ability levels in each construct.

A more general picture of the data from the pronunciation ratings is shown in Figure 5.

Figure 5. Frequency of pronunciation ratings. Measurements are in logits.
Research Question One

To answer the first research question—whether there is a correlation between sociocultural identification with the United States and English pronunciation as measured by comprehensibility and accentedness—an analysis of the correlation between the scores on the sociocultural identification questionnaire and the pronunciation ratings was conducted. Table 1 depicts the descriptive statistics of the two sets of data together. In all tables, “pronunciation” refers to participants’ combined comprehensibility and accent ratings, while “sociocultural identity” refers to participants’ scores on the sociocultural identity questionnaire.

Table 1

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness Statistic</th>
<th>Skewness Std. Error</th>
<th>Kurtosis Statistic</th>
<th>Kurtosis Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sociocultural Identity</td>
<td>68</td>
<td>-0.90</td>
<td>2.02</td>
<td>.48</td>
<td>0.58</td>
<td>0.24</td>
<td>0.29</td>
<td>0.39</td>
<td>0.57</td>
</tr>
<tr>
<td>Pronunciation</td>
<td>68</td>
<td>-1.52</td>
<td>6.77</td>
<td>1.03</td>
<td>1.54</td>
<td>0.96</td>
<td>0.29</td>
<td>1.86</td>
<td>0.57</td>
</tr>
</tbody>
</table>

Note. Measurements are in logits.

Table two displays correlational data between participants’ sociocultural identification with the United States and their English pronunciation (again, a combined measure of comprehensibility and accent). Most notable is the Pearson correlation coefficient (r = 0.001), showing no significant correlation between the two variables.
Table 2

*Correlation Data Between Sociocultural Identification and English Pronunciation*

<table>
<thead>
<tr>
<th></th>
<th>Sociocultural Identity</th>
<th>Pronunciation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sociocultural Identity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>68</td>
<td>68</td>
</tr>
<tr>
<td>Pearson Correlation (r)</td>
<td>1.00</td>
<td>.001</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.993</td>
</tr>
<tr>
<td>Sum of Squares and Cross-products</td>
<td>22.5</td>
<td>.061</td>
</tr>
<tr>
<td>Covariance</td>
<td>.335</td>
<td>.001</td>
</tr>
</tbody>
</table>

|                     |                       |               |
| **Pronunciation**   |                       |               |
| N                   | 68                     | 68            |
| Pearson Correlation (r) | .001                  | 1.00          |
| Sig. (2-tailed)      | .993                   |               |
| Sum of Squares and Cross-products | .061                   | 160           |
| Covariance          | .001                   | 2.39          |

The lack of correlation between participants’ scores on the sociocultural identification questionnaire and their (combined) pronunciation comprehensibility and accent ratings can be even more clearly visualized in the scatter plot in Figure 6.
Research Question Two

The second research question was concerned with whether native language or proficiency level altered the correlation between sociocultural identity and pronunciation, as measured in this study. Population sizes broken down by native language were too small to effectively examine the second research question. The notable exception was Spanish, which returned a correlation coefficient of $r = -0.20$. This value means that there was a weak negative correlation between sociocultural identification with the United States and English pronunciation among Spanish-speaking participants; the correlation is too weak to extrapolate real insights into the research question.

Likewise, breaking the participant population down by proficiency level yielded few helpful insights. A moderate correlation emerged between identity and pronunciation scores.
among participants at level 2, and a weaker one for those at level 3. These correlations are interesting, but without larger sample sizes in the other proficiency levels, it is difficult to extrapolate any specific and conclusive interpretations from them.

**Discussion**

The discovery that there was no correlation between sociocultural identification with the United States and ESL pronunciation performance as measured in this study comes as a rather surprising one. It augments the findings of Purcell and Suter (1980), who negated cultural identity as an independently significant factor of pronunciation accuracy, by finding one element of sociocultural identity to be unrelated to speaker comprehensibility and accentedness as well. However, these findings contradict those of Moyer (2007) and Gluszek, Newheiser, and Dovidio (2011). A close examination of these studies, particularly the latter, shows their research methods to be quite similar to those of the current study; the question naturally arises, then, why? Several considerations are of particular note:

1. The present study enjoys the luxury of focusing solely on sociocultural identification with the United States and perceived ESL pronunciation. Most other studies which treat sociocultural identity, including the ones cited here, have treated it among a number of variables hypothesized to affect pronunciation (such as cultural or social identification with the home country or native language, length of residence in the United States, association with English speakers, or attitudes about language and language learning). These treatments, then, necessarily view some variables through the lens of others or treat multiple relationships at once.
2. The demographics of the participant population are unique in several ways that could affect sociocultural identification with the United States. The first of these is that
participants are students studying abroad in the United States. Students who are affluent enough to travel for a study abroad program, and who choose the United States for such a program, are likely to have higher identification with the United States already. This is compounded, in the case of this study, by common religious identity shared with local native speakers. Because the intensive English program and the university to which it is attached are both sponsored by a religious organization (which is headquartered in the U.S.), the majority of the student population attracted to these institutions are also members of that religious organization. It is even more likely, then, that participants have a higher than average sense of identification with the United States by nature of their shared religious identity with both the nonnative and native speakers around them.

Finally, the role of age in the formation of identity is important to note. It is possible that a younger population such as this one finds itself more malleable in its sociocultural identity, and therefore sees less conflict between elements of identity related to the home country, culture, and language, and those of the target language and study abroad context.

Each of these factors—age, religion, and situation in an immigration vs. study abroad context—requires further research in order to evaluate their impact on possible relationships between sociocultural identity and second language comprehensibility and accentedness.

3. The studies cited that indicate a relationship between cultural or social identity and ESL pronunciation are by no means out of date; however, migration and communication across sociocultural boundaries has shifted at an exponentially rapid rate in the most recent decades (Cogo, Archibald, & Jenkins, 2011). Most of the participants in this study were children or adolescents in 2007 and even 2011. The null results of this study may
offer a glimpse of the kind of world that is currently emerging for learners, especially young learners. In that world, more frequent movement and more widespread communication may mean that sociocultural identities can be more fluid and are less likely to conflict with one another. As the use of English, especially as a lingua franca, continues to spread, it is becoming less “owned” by any specific country or culture, and this may decrease the need for acculturation to produce targetlike language (Cogo, Archibald, & Jenkins, 2011). Increased access to global content online, especially movies, television shows, music, podcasts, and social media connections also increases exposure to English (and American accents in particular), perhaps having an effect on the acquisition of pronunciation in learners. In short, the landscape of sociocultural identity and second language pronunciation may be changing for English language learners today.

**Limitations of the Study**

While the sample size of the participant population was large enough to yield significant results to answer the first research question of correlation between sociocultural identity and pronunciation comprehensibility and accentedness, cell sizes for native language and proficiency level were not large enough to answer the second research question. Native language, as well as ethnicity and nationality, may have a great deal of influence on speakers’ sociocultural identity with the United States. The present study simply did not have the volume to identify those influences.

Likewise, greater representation of each proficiency level in the participant population could have yielded more insightful information about the effect of proficiency level on the relationships between sociocultural identity and comprehensibility and accentedness among English language learners. In particular, this study was limited by having such a small cell size
for the highest proficiency level it measured. Evidence exists to suggest that language learners place the greatest importance on pronunciation at the lowest and highest proficiency levels—the level at which they need to progress to be understood at a basic level, and the level at which they are comfortable with other skills of language and wish to achieve native speaker proficiency (Higgs & Clifford, 1982). A large sample size of participants at very high proficiency levels is needed to truly examine the effect of proficiency on the relationship between sociocultural identity and measures of second language pronunciation.

At the same time, the validity of the instrument used to measure sociocultural identity in this study was also limited at the lower levels of proficiency because its wording may have been too complex. The original wording of Cameron’s questionnaire was quite simple, but targets the construct of group identity for a group of which the responder is unarguably already a member. Adapting it to reflect the construct of sociocultural identification with the United States for international students proved to be more difficult than expected, and the resulting language may have rendered the questionnaire less capable of assessing true senses of sociocultural identification.

For instance, statements such as “I have a lot in common with other members of this group,” adapted as closely as possible, would turn into “I have a lot in common with other Americans.” Many learners, even with strong feelings of sociocultural identification with the United States, would likely not consider themselves “Americans,” especially learners in the study abroad context of our participant population. Therefore, statements in the questionnaire had to be adapted further to accommodate participants who might identify to one degree or another with a particular group without necessarily being in that group themselves. In the case of the example sentence just mentioned, the adaptation was simple (though potentially addresses a
slightly different construct than that originally intended by Cameron): “I have a lot in common with Americans.” In the case of some other statements, however, the resulting questionnaire item became somewhat wordy and potentially confusing (e.g. “I often regret that I am connected to the United States of America”), especially for participants at lower proficiency levels.

This confusion could have been prevented by translating the questionnaire for each of the participants, but because the researcher did not know in advance what languages would be represented among the participant population, it was not. Furthermore, though a pilot administration of the study was conducted for the sake of testing data retrieval, participants of the pilot study were not interviewed about their experience taking the questionnaire. Such interviews could have offered greater insight into the relative difficulty of understanding and responding accurately to the questionnaire items.

Finally, this study was limited by the same narrowness of scope which made it uniquely needed. The study abroad context in which most of the participants were situated, the shared religious identity among many participants, and the relatively young and narrow range of ages among participants all limit the findings of the study to very similar contexts. In the same manner, the assessments used—both to measure sociocultural identity and to measure pronunciation—further limit the study to the specific constructs they assess.

**Suggestions for Future Research**

Several limitations to the present study have already been noted. These limitations highlight a need for future research on the topic of sociocultural identity and features of second language pronunciation. First and foremost, larger sample sizes are needed to more absolutely examine the relationships between sociocultural identity and features of ESL pronunciation. This is especially true if those relationships are to be seen in context, alongside differences in
demographic backgrounds such as native language, country of origin, and proficiency level. Where larger sample sizes are not always possible, replication of the current study among other participant populations may prove insightful to contradict or support findings reported here and to lend further insight.

In future iterations of the study, the sociocultural identity questionnaire could be simplified or even translated to be more accessible to learners at lower proficiency levels and to create greater confidence in survey responses. Follow-up interviews in English or, if the language skills are available, even participants’ native languages would also provide compelling qualitative data to give context to the quantitative data. In the search for measurability in results, it cannot be forgotten that identity is a very qualitative subject, and so a mixed-methods approach might be best suited for its analysis. Additionally, the Cameron (2004) social identity questionnaire could stand to be validated for non-native English speakers, since his initial validation studies occurred primarily among native English speakers.

Lastly, there are many ways to assess pronunciation. It would be useful to conduct similar studies measuring sociocultural identity alongside intelligibility, for instance, using transcription to more precisely determine where participant pronunciation actually inhibits understanding and where it simply makes a listener work hard. Assessments of accuracy, both segmentals and suprasegmentals, would also add greatly to the discussion of identity and L2 pronunciation. Even further studies of comprehensibility and accentedness would be beneficial, especially as they improved upon research methods used in this study (for instance, by recruiting more raters and incorporating rater calibration into the training). Conducting a study similar to this one with a different approach to pronunciation assessment could bring validity or added insight to its findings.
Conclusion

Multiple possibilities have been discussed to explain possible reasons for the results of this study and their contribution to the discussion of sociocultural identity and L2 pronunciation—especially as these results are drastically contrary to those of some other studies researching similar relationships. As suggested above, there is plenty of room for additional research on this topic. In the meantime, however, it may be useful to consider the implications of the current results as they stand. What does it mean for learners, teachers, and researchers if there is truly no correlation between sociocultural identification with the United States and comprehensibility and accentedness in English pronunciation among ESL learners?

Perhaps finding a lack of correlation in this study can decrease the pressure on learners and teachers to focus on pronunciation in areas like accentedness, where intelligibility is not creating difficulties in communication. Pronunciation research may be able to shift its focus and more of its efforts toward the types of learner attitudes (such as those about language learning itself) that have more research to support their effect on language learning, including features of pronunciation. Likewise, research on sociocultural identity may be more fruitfully studied in context of other learner attitudes, with the result that it is viewed less as a direct factor of language performance and more as a factor of other attitudes which are a factor of language performance. Finally, there is an implication relating to identity and linguistic discrimination for all parties involved; two questions sum up this implication and leave room for consideration: First, why is there such strong belief that sociocultural identification with the target language country and culture is correlated with target language pronunciation (or even other elements of language performance)? Secondly, if in the changing landscape of sociocultural identity and
second language pronunciation it is becoming less the case that the way one speaks dictates the
groups to which s/he can belong, what can society at large learn from such a change?
References


Appendix A: Social Identification Questionnaire

Questionnaire as given by Cameron (2004).

Below are twelve statements that you may agree or disagree with. Using the 1-6 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responses.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Slightly Disagree</td>
<td>Slightly Agree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

___ I have a lot in common with other members of this group. **Ingroup ties**

___ I feel strong ties to other members of this group. **Ingroup ties**

___ I find it difficult to form a bond with other members of this group. **Ingroup ties**

___ I don’t feel a sense of being “connected” with other members of this group. **Ingroup ties**

___ I often think about the fact that I am a member of this group. **Cognitive centrality**

___ Overall, being a member of this group has very little to do with how I feel about myself. **Cognitive centrality**

___ In general, being a member of this group is an important part of my self-image. **Cognitive centrality**

___ The fact that I am a member of this group rarely enters my mind. **Cognitive centrality**

___ In general, I’m glad to be a member of this group. **Ingroup affect**

___ I often regret that I am a member of this group. **Ingroup affect**

___ I don’t feel good about being a member of this group. **Ingroup affect**

___ Generally, I feel good when I think about myself as a member of this group. **Ingroup affect**
Appendix B: Current Study Questionnaire

Questionnaire as administered in this study to measure participants’ sociocultural identification with the United States.

Following are twelve statements that you may agree or disagree with. Please indicate your agreement with each statement by using the scale provided. Please be open and honest in your responses.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Slightly Disagree</td>
<td>Slightly Agree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

___ I have a lot in common with Americans.
___ I feel strong ties to Americans.
___ I find it difficult to form a bond with Americans.
___ I don’t feel a sense of being “connected” with Americans.
___ I often think about how I am connected to the United States of America.
___ Overall, being connected to the United States of America does not affect how I feel about myself.
___ In general, being connected to the United States of America is an important part of my self-image.
___ How connected I am to the United States of America rarely enters my mind.
___ In general, I’m glad to be connected to the United States of America.
___ I often regret that I am connected to the United States of America.
___ I don't feel good about the idea of being connected to the United States of America.
___ Generally, I feel good when I think about myself as being connected to the United States of America.
## Appendix C: Comprehensibility and Accentedness Likert Rating Scales

<table>
<thead>
<tr>
<th>Comprehensibility</th>
<th>Accentedness</th>
</tr>
</thead>
<tbody>
<tr>
<td>This speaker</td>
<td>English</td>
</tr>
<tr>
<td>thick accent</td>
<td>has a thick accent</td>
</tr>
<tr>
<td>This speaker</td>
<td>mid accent</td>
</tr>
<tr>
<td>This speaker</td>
<td>moderate</td>
</tr>
<tr>
<td>This speaker</td>
<td></td>
</tr>
<tr>
<td>This speaker</td>
<td></td>
</tr>
<tr>
<td>This speaker</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comprehensibility</th>
<th>Accentedness</th>
</tr>
</thead>
<tbody>
<tr>
<td>I understand</td>
<td>this speaker</td>
</tr>
<tr>
<td>difficulty</td>
<td>understood</td>
</tr>
<tr>
<td>I had no</td>
<td>speaker sound</td>
</tr>
<tr>
<td>I understood</td>
<td>what this</td>
</tr>
<tr>
<td>speaker was</td>
<td>most of</td>
</tr>
<tr>
<td>I understood</td>
<td>the &quot;first&quot; of</td>
</tr>
<tr>
<td>I understood</td>
<td>a few words</td>
</tr>
<tr>
<td>I understood</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>9</td>
</tr>
</tbody>
</table>