UNIVERSITY OF CALIFORNIA

Santa Barbara

The Effect of Sociocultural Linguistics Pedagogy on Youth Language Attitudes

A Thesis submitted in partial satisfaction of the requirements for the degree Master of Arts in Linguistics

by

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March 2016

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December 2015

ACKNOWLEDGEMENTS

Special love and thanks go to Anthony Clairmont for his careful proofreading and error-checking, as well as his guidance on the methods of Principal Components Analysis. And to my advisor, Mary Bucholtz, whose furious scribbles on previous drafts of this thesis have provided an immense amount of wisdom and counsel. I also want to gratefully acknowledge my funding source at the National Science Foundation Graduate Research Fellowships Program, without which this research would not have been possible.

ABSTRACT

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In this thesis, I explore the question of whether participation in a college-level sociocultural linguistics curriculum can change a majority-Latin@ group of California high school students' attitudes toward marginalized, ethnoracially-associated varieties of English.

I employ a standardized metric, the Speech Evaluation Instrument (Zahn and Hopper 1985), to test students' language attitudes before and after completion of UC Santa Barbara's SKILLS program, an innovative college-level sociocultural linguistics course. Language attitudes were indirectly measured using the verbal guise method (Ball and Giles 1982), wherein the same text is recorded by speakers of different speech varieties and played for participants, who then rate the speakers on 7-point semantic differential scales. Students evaluated the local White California English prestige dialect as well as African American English, Chicano English, and the Spanish-dominant English of an adult second language learner. Pre-survey and post-survey data were then subjected to statistical analysis.

Three major findings of the study merited further discussion. First, in the pre-survey data, the speaker of White California English was rated the highest across all four component variables identified by Principal Components Analysis. After completion of the SKILLS program, however, the order of rankings shifted: the speaker of Chicano English became the highest-rated on the Attractiveness component, which includes many solidarity-type items, and the speaker of African American English took first place on the Dynamism component,

which measures "speakers' social power, activity level, and the self-presentational aspects of speech" (Zahn and Hopper 1985: 119). Notably, there were no significant differences in evaluations of speakers of Chicano English and White California English between the presurvey and post-survey. This finding differs from a well-established pattern in previous studies in which Anglo speakers are evaluated more highly than Latin@ speakers, even by Latin@ raters (e.g., Carranza and Ryan 1975a, b).

Second, students' attitudes towards African American English improved significantly between the pre-survey and the post-survey on the Linguistic-Intellectual Status and Dynamism components, even rising from last to first rank on the latter variable. As part of the larger project of "sociolinguistic justice" (Bucholtz et al. 2014), the SKILLS program aims to counter language-deficit views of minoritized speech varieties. The positive shift in attitudes toward AAE suggests that this goal was achieved, at least in part. These results demonstrate that language attitudes can indeed be transformed by academic intervention.

Third, my data show that even as attitudes towards the three ethnoracially marginalized varieties of English improved, students' positive evaluations of the hegemonically powerful variety, White California English, remained relatively stable.

Opponents of the tradition of "culturally sustaining pedagogy" (Paris 2012; Paris and Alim 2014) fear that the inclusion of non-dominant cultures in curricula will lead to a zero-sum outcome in which the dominant culture is devalued. My findings, however, indicate that culturally sustaining linguistics pedagogy does not necessarily result in "reverse racist" outcomes.

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The Effect of Sociocultural Linguistics Pedagogy on Youth Language Attitudes

Introduction

Since the beginnings of the empirical study of language attitudes almost fifty years ago (Lambert et al. 1960), scholars of language and social psychology have amply demonstrated that attitudes toward linguistic varieties tend to mirror deeply entrenched social ideologies about the groups of people who speak them. Perhaps the most significant finding of the field has been that evaluations of speech varieties "do not reflect intrinsic linguistic or aesthetic qualities" so much as they reflect "the levels of status and prestige that they are *conventionally* associated with in particular speech communities" (Giles and Billings 2008: 191, emphasis original). For example, in the U.S. context, systemic bias against people of color is realized through institutional and interpersonal discrimination against speakers of linguistic varieties associated with marginalized ethnoracial groups (e.g., Lippi-Green 2012 [1997]; Purnell et al. 1999), a phenomenon known as linguistic racism (Ronkin and Karn 1999).

It is widely acknowledged that linguists, especially those whose work tends toward the sociocultural, have a particular responsibility to counter language ideologies that justify economic and sociopolitical oppression, since the discipline rests on the assumption that no linguistic variety is inherently better or worse than any other. Labov's famous "principle of error correction" exhorts linguists "who become[] aware of a widespread idea or social practice with important consequences that is invalidated by [their] own data... to bring this error to the attention of the widest possible audience" (1982: 172). According to this principle, when confronting linguistic racism, linguists have a responsibility to challenge claims about the purported negative "intrinsic linguistic or aesthetic qualities" of

marginalized varieties that Giles and Billings mention, and ultimately to expose the hegemonic logic that employs such claims of linguistic merit as justifications for ongoing oppression.

One key locus of intervention is through the teaching of linguistics to a broad population, especially young people (e.g., Reaser 2006, 2007). In this paper, I explore the question of whether participation in an innovative college-level sociocultural linguistics curriculum can change California high school students' attitudes toward marginalized, ethnoracially-associated varieties of English. I employ a standardized metric to test students' language attitudes before and after completion of the program (Zahn and Hopper 1985), focusing on evaluations of African American English, Chicano English, and the Spanish-dominant English of adult second language learners, as well as the local White California English prestige variety.

UC Santa Barbara's SKILLS (School Kids Investigating Language in Life and Society) is a community-academic partnership that is the first program to teach linguistics in California public high schools. For the most part, program participants are first-generation college-bound Mexican American youth. While the language attitudes of Latin@ youth were investigated in early research (e.g., Carranza and Ryan 1975; Ryan and Carranza 1975), the demographic shifts California has seen over the previous decades indicate the need for an updated understanding of the linguistic ideologies and attitudes of Latin@s, the state's largest ethnic group as of the 2014 census. Past work has shown that even as Mexican American youth indicate affinities to their heritage language and culture, tending to view Spanish-English bilingualism in a positive light, they simultaneously rate standard (i.e., white middle-class) English more favorably than both their own ingroup varieties of English and the

 $^{^1}$ In this thesis I use Latin@ as the conventional orthographic simplification of Latina/Latino.

varieties of other marginalized ethnic groups, such as African Americans (see overview in Carranza 1982). This study provides an updated picture of Mexican American youth's attitudes toward both standard and stigmatized varieties of English, demonstrating that such attitudes can be changed through participation in linguistic outreach programs such as SKILLS.

The SKILLS program aims to promote "sociolinguistic justice" (Bucholtz et al. 2014), that is, "self-determination for linguistically subordinated individuals and groups in sociopolitical struggles over language (2014: 145). Central components of the program, which is taught by UCSB graduate and undergraduate students, include the valorization of linguistic variation, recognizing heritage languages, and facilitating access to the "styles of sociopolitical power" (2014: 148). The curriculum centers on participants' personal experiences with language, both positive and negative. The multiple linguistic varieties used by students are welcomed into the classroom, both as tools of expression and as material for analysis. Activities employ linguistic evidence to expose and challenge dominant linguistic ideologies about marginalized groups, guided by the maxim that "there is no language without politics" (Zentella 1995: 15).

It is the hope of the program that education about the sociopolitical dimensions of language will foster sociolinguistic justice and provide students with tools to confront dominant language ideologies. However, as Paris notes regarding politically engaged pedadogy, "we must ask if a critical stance toward and critical action against unequal power relations is resulting from such... [pedagogical] practice" (2012: 94). In the five years since the inception of SKILLS, teachers have anecdotally reported that students' understandings of language and power become demonstrably more critical as a result of participation in the

program, an outcome which is also reflected in students' feedback about their experience in SKILLS. This study aims to provide empirical evidence of such a change in language attitudes.

SKILLS is designed in accordance with "culturally sustaining pedagogy" (Paris 2012; Paris and Alim 2014), an orientation to pedagogy and research that "seeks to... sustain linguistic, literate, and cultural pluralism as part of the democratic project of schooling" (Paris 2011: 95). This approach, along with its predecessor, "culturally relevant pedagogy," aims to help students become "academically successful, culturally competent, and sociopolitically critical" (Ladson-Billings 1995: 477). Despite the well-documented benefits of culturally sustaining education for students of color (Sleeter 2011), attempts to implement this perspective broadly have been met with resistance. Opponents fear that the inclusion of non-dominant cultures in curricula will lead to a zero-sum outcome in which the dominant culture is devalued. Ethnic studies classes are "commonly described as 'divisive,' un-American, and teaching racial separatism and even overthrow of the U.S. government" (Sleeter 2011: 5). In 2010, the state of Arizona went so far as to pass House Bill 2281, which was designed to ban a Mexican American studies high school course. The bill prohibits educators from teaching classes that "promote resentment toward a race or class of people," "are designed primarily for pupils of a particular ethnic group," or "advocate ethnic solidarity instead of the treatment of pupils as individuals" (Arizona House Bill 2281; Paris 2012). In essence, such legislation rests on the suspicion that ethnic studies classes teach pupils "reverse racism" – animosity toward mainstream white American culture (Bucholtz 2011b). The present study intervenes in this line of thought: the results of the following analysis clearly indicate that culturally sustaining pedagogy does not, in fact, result in "resentment" of the dominant class. The data presented below show that attitudes toward White California English remain unchanged by participation in the SKILLS program, even as evaluations of marginalized varieties improve. In the following section, I present an overview of the literature on the measurement and social implications of language attitudes.

Literature Review

Research on language attitudes

According to Preston and Niedzielski, a language attitude is "not really an attitude to a language feature; it is an awakening of a set of beliefs about individuals or sorts of individuals through the filter of a linguistic performance" (2000: 9). Attitudes thus reflect ideologies about a group of speakers, rather than about languages or dialects *per se*. However, listeners are sensitive to minute differences in sociolinguistic variables (Campbell-Kibler 2009), and attitudes may "scale" in degree toward varieties perceived as diverging from the standard (Brennan and Brennan 1981; Ryan et al. 1977). Recent research on language attitudes frequently uses mixed methods, pairing quantitative measures with the "societal treatment method" (Garrett et al. 2003: 15), a qualitative approach that involves examining metalinguistic discourse about and institutional treatment of the focal speech varieties.

Quantitative attitudinal measures may take either a direct or an indirect approach.

Direct methods frequently involve questionnaires and interviews that explicitly solicit participants' opinions on particular linguistic varieties. However, direct questioning has been criticized for its susceptibility to "social desirability bias" (Fisher 1993), an observer effect in which respondents try to tailor potentially negative answers so as to make a good impression

on the researcher (Garrett et al. 2003). Indirect approaches, on the other hand, try to bypass these "conscious, reflective processes" by "avoid[ing] a report of the attitude, inferring it from responses to samples of use" (Preston and Niedzielski 2000: 9). Often, participants are asked to provide judgments of a speaker as opposed to directly evaluating a linguistic variety. Language is treated as a cue for identifying a speaker's group membership, which is in turn thought to activate stereotypes associated with that group (Lambert 1967). Indirect methods are thus thought to access unconscious opinions more faithfully than direct questioning.

By far the most commonly used indirect attitude measure is the matched-guise technique (Lambert et al. 1960; Lambert 1967). The goal of the technique is to create a situation not unlike a phone call with a stranger, where impressions are made solely based on speech and not on physical appearance or other personal characteristics. In order to "minimize threats to internal validity" caused by interspeaker differences in pitch, rate of speech, volume, and so on, the same multidialectal or multilingual speaker records identical stimuli in each of the varieties that they speak (Cargile et al. 2006: 447). Participants listen to the recordings and rate the speakers on a number of characteristics, having been led to believe that the different guises they hear belong to separate speakers. Because the guises are in fact produced by the same speaker, linguistic variety is the sole variable, and any difference in ratings stems from the influence of that variety itself. When native speakers of all the varieties being tested are not available or when attitudes toward several dialects are elicited, as in the present study, the alternate "verbal guise technique" may be used instead, wherein speakers of different varieties are matched on as many social and vocal characteristics as possible (Ball and Giles 1982).

Across social contexts, researchers have demonstrated that standard speech tends to be rated more positively than nonstandard speech by speakers of both dominant and marginalized varieties. Attitudes are often split by two major evaluative dimensions: "status," a combination of prestige, intelligence, and socioeconomic class items, and "solidarity," which involves characteristics relating to social desirability. Prestige varieties consistently rank higher on status-type items than do stigmatized ones, a finding that is more pronounced among higher-status participants. Stigmatized speech has been shown to be highly rated on solidarity-type items, particularly when raters belong to the same social group as the speaker who recorded the stimulus, but this is not always the case (Ryan et al. 1982).

Although language attitudes studies were popular from the 1970s to the 2000s, the past decade has seen a significant slowdown in research in this area (Fuertes et al. 2010), perhaps in part due to a shift in theoretical focus toward the more constructivist, emergent phenomenon of language ideologies (Irvine and Gal 2000; Kroskrity 1998). However, the methodologies and insights developed in the language attitudes research tradition remain relevant today, especially for the evaluation of linguistic outreach programs like SKILLS.

Focus varieties

The present study elicited attitudes toward four varieties of U.S. English: Chicano English (CE), Spanish-Dominant English (SDE), White California English (WCE), and African American English (AAE). Chicano English is widely spoken in Southern California and is the variety used by many SKILLS students. CE is not the same as "Spanglish," the hybrid variety produced by intrasentential code-switching between Spanish and English, nor is it the same as the English spoken by Spanish-dominant adult learners (SDE) (Fought

2003). Rather, Santa Ana writes that "Chicano English is spoken *only* by native English speakers," who may or may not also be bilingual in Spanish (1993: 15, emphasis added). Like all dialects, CE is characterized by distinct features on multiple levels of linguistic structure, including phonology and morphosyntax. As the present study was standardized by having speakers record a pre-determined text, the auditory stimuli contained only phonological features of CE and the other varieties being tested.

In one early study, white, African American, and Latin@ students all demonstrated a preference for Standard English over "Mexican American accented English," while the latter variety was rated as low-prestige and inappropriate for a formal classroom setting by students across ethnic backgrounds (Ryan and Carranza 1975). Arthur, Farrar, and Bradford (1974), who distinguished between CE and SDE, showed that white college students downgraded speakers of Mexican American English. However, Flores and Hopper (1975) found evidence of a cultural pride or solidarity-based ingroup effect: Mexican American adults and college students in Texas who self-identified with the political term *Chicano* demonstrated a preference for "Tex-Mex" Spanish over Standard English, although all other Mexican American and Anglo participants rated Standard English more highly.

It is somewhat difficult to ascertain the status of past research on attitudes toward CE, due to the fact that studies may reference "Mexican American accented speech" without defining this term (e.g., Ryan and Caranza 1975). For example, level of "accentedness" is purported to have an effect on evaluations, with stronger-accented speakers eliciting more negative ratings (Brennan and Brennan 1981; Ryan et al. 1977). But the definition of accentedness, which presumably refers to an ethnically marked phonology (Lippi-Green

2012), does not differentiate between the speech of native English speakers of Mexican heritage – Chicano English – and the adult-learner English of Spanish-dominant speakers.

The present study disambiguates these two varieties. I measured attitudes toward SDE because it is the English spoken by many SKILLS students' family and community members. A number of students' parents immigrated to the United States from Mexico as adults and thus learned English as a second language. In class assignments, students described their parents as speaking English "with a thick accent," "still hav[ing] trouble to this day" with the language, or speaking an English that is "not the best." They nevertheless indicated a high level of respect for the difficulty of the linguistic task undertaken by their family members, which may have influenced their evaluations of this variety.

Attitudes toward African American English were chosen for study because it is often considered the most highly stigmatized and visible nonstandard variety in the U.S. AAE is often derided as "slang" or as "improper English" (Preston and Niedzielski 2000), and linguistic profiling against African American speakers, as well as speakers of CE, is well-attested (Baugh 2003; Purnell et al. 1999). Nevertheless, elements of AAE are frequently appropriated as a means of social capital (Bourdieu 1991) by people of other ethnoracial groups, including whites (Bucholtz 2011a; Bucholtz and Lopez 2011) Chican@s (Fought 2003), and Asian Americans (Chun 2001; Reyes 2005). This includes participants in this study: for example, one Mexican American student selected the pseudonym "Daquon," a stereotypically black name, in what he viewed as a humorous choice. Despite the salience of AAE to local youth, however, it is likely that most students in Santa Barbara rarely interact

with speakers of the variety: according to a 2014 census, only 2.4% of the population of the city is African American.²

The final variety examined in this study is WCE. California English has been described as a recently emergent national prestige variety, considered "good... but never proper" (Fought 2002:133). WCE is certainly the local prestige dialect in Santa Barbara, the site of the study, as it is in the broader Southern California region (Bucholtz et al. 2007). It is also the variety spoken by many SKILLS instructors (including me), who represented significant institutional and educational power. This variety was included for comparison with the more ethnoracially marked varieties in the study.

Changing language attitudes

Despite the extensive literature on language attitudes, research on language attitude change is scant. The work that does exist indicates that positive transformation is possible. The use of minoritized languages in multilingual classrooms, along with the encouragement of interethnic friendships, has been shown to change the attitudes of dominant-culture children, as demonstrated by scores on a friendship preference task (Wright and Bougie 2007). In addition, Sweetland (2004) has shown that elementary school teachers' language attitudes toward African American English became more positive after teaching a dialect awareness curriculum that centered on literature written in AAE.

While the above studies focus on attitude change in younger children and adults, youth are arguably the most important targets of language attitude change. In their study of attitudes toward Welsh in Wales, Garrett, Coupland, and Williams note that the "period of identity formation in the early teens has long been seen as a critical period in terms of

² By comparison, in 2014 45.9% of Santa Barbara residents were white and 44.4% were Latin@.

changing attitudes towards the Welsh and English languages" (2003:19). Jeffrey Reaser's (2006, 2007) study of a two-week North Carolina-based dialect awareness program for 8th graders confirms the importance of intervention in youth attitudes. His research question, "To what extent are the language attitudes of adolescents malleable or fixed?", is at the heart of this study as well (Reaser 2007:181). Reaser used original direct attitude questionnaires, completed before and after participation in the program, to measure the change in agreement with explicit metalinguistic statements such as "Dialects are sloppy forms of English" and "Some people are too lazy to learn Standard English." After completion of the Voices of North Carolina program, responses to all questions "shifted in the direction of increased knowledge or more tolerant attitudes" (Reaser 2007: 186). His results represent the clearest evidence yet to indicate that teaching sociolinguistics can measurably improve students' language attitudes.

The present study differs from Reaser's research in several ways. Instead of employing a direct attitudinal measure and using an original metric, as Reaser did, I use a standardized instrument (Zahn and Hopper 1985) to indirectly measure change in language attitudes to ensure comparability of results with a wider range of studies. The SKILLS program has a significantly longer duration than Voices of North Carolina, and the student populations differ as well: whereas Reaser worked with mostly white Southern 8th graders, SKILLS serves mostly Latin@ California 12th graders. Similar to Reaser, the results of my study show an improvement in language attitudes after completion of SKILLS, indicating the possibility that student populations in other locales could benefit from comparable interventions.

Methods

Materials

This study employed the Speech Evaluation Instrument (SEI), a subjective reaction test in the speaker evaluation paradigm of indirect language attitude measurement, created by Zahn and Hopper (1985). The Speech Evaluation Instrument is notable in that it serves as an "omnibus measure" (1985: 113) of language attitudes: its creators aggregated experimental items from a large number of previous studies in order to determine empirically which items are both valid and reliable.

To create the SEI, Zahn and Hopper compiled 152 items from previous studies, removed redundancies, and then used factor analysis to identify three distinct components: latent constructs created by covariance between multiple evaluative dimensions. Superiority, their first factor, "combines intellectual status and competence (literate-illiterate, educateduneducated, intelligent-unintelligent), social status items (upper class-lower class, whitecollar-blue-collar, rich-poor, advantaged-disadvantaged), and speaking competency items (clear-unclear, organized-unorganized, complete-incomplete, experienced-inexperienced, fluent-disfluent)" (Zahn and Hopper 1985: 119). Although this factor is similar to status or education-based dimensions, it more broadly includes judges' metalinguistic evaluations of normatively "good" versus "bad" speech. Similarly, the second factor, Attractiveness, resembles other studies' ratings of solidarity or character but is more inclusive, incorporating items that index "both social and aesthetic appeal" (1985: 119): sweet/sour, nice/awful, goodnatured/hostile, kind/unkind, warm/cold, friendly/unfriendly, likeable/unlikeable, pleasant/unpleasant, considerate/inconsiderate, good/bad, honest/dishonest. According to the authors, "the presence of an attractiveness factor indicates that evaluators regard speech

as an aesthetic object (like music) as well as a pragmatic one." Items included in Dynamism, the third component, "display raters' concern for speakers' social power, activity level, and the self-presentational aspects of speech" (1985: 119). These items include *active/passive*, *talkative/shy*, *aggressive/unaggressive*, *enthusiastic/hesitant*, *strong/weak*, *confident/unsure*, and *energetic/lazy*.

SEI participants listen to an auditory stimulus and are then asked to rate the speaker on 30 pairs of opposing descriptive adjectives, which are placed at both ends of a seven-point semantic differential scale (Osgood et al. 1957, Fishbein and Ajzen 1975). Ratings are then subjected to confirmatory factor analysis to ensure the reliability of the components for the population being studied, and analysis of variance may be used to compare evaluations of the dependent variables.

The stimulus text in my study was a 157-word children's story about a fisherman, adapted from Cargile, Takai, and Rodriguez's (2006) study of attitudes toward AAE in Japan, which was designed to be as "ethnically neutral" as possible. I modified the passage to include more phonological features characteristic of AAE, as well as others from CE and SDE. The full text can be found in Appendix A.³

The most widely used version of the matched-guise technique requires that a single multidialectal or multilingual speaker record the different guises or "voices" that listeners hear (Lambert 1960,1967). The matched-guise technique becomes difficult to implement, however, when testing attitudes toward more than two or three distinct varieties, due to the

phonological variables that are characteristic of the four varieties.

³ Although spontaneous speech is sometimes preferred in subjective reaction tests to the more careful style of read speech, "which is likely to introduce several distinctive prosodic and sequential phonological features – perhaps a more evenly modulated stress pattern, pausing at syntactic boundaries, a greater frequency of 'spelling pronunciations', and so on' (Garrett et al. 2003:54), it was decided that a standardized passage should be used in order to ensure the presence of

difficulty of finding individuals who speak all the varieties included in the study.

Furthermore, to be a speaker of certain varieties by definition excludes the possibility of being a speaker of other varieties. For example, one cannot be both a Spanish-dominant adult English learner and a speaker of Chicano English, which by definition is spoken only by native speakers of English (Fought 2003).

Due to these issues, in the present study, the alternate verbal-guise technique was employed instead of the matched-guise technique (Ball and Giles 1982). In this approach, speakers of multiple dialects are closely matched on as many factors as possible (e.g. age, gender, and level of education). Speakers of each of the target varieties – AAE, SDE, CE, and WCE – were recruited through social networks and snowball sampling. Speakers were matched on gender, student status, and age. All four were female students at UC Santa Barbara during the time of recording. The speakers of AAE and SDE were graduate students, and the CE and WCE speakers were undergraduates. Their ages ranged from early to midtwenties. All speakers had resided in California for several years at the time of recording.

Each speaker recorded the stimulus text multiple times. The most fluent recording of each variety was selected, the sound quality was digitally enhanced, and volumes were equalized. To confirm the suitability of the recordings as stimuli, they were informally played for a group of eight high school juniors from the same general geographic region and ethnic backgrounds as the SKILLS students, who were asked to subjectively determine the speakers' ethnicities based only on their voices. All eight were able to correctly identify the four speakers. Stimuli were also analyzed phonologically to verify the presence of linguistic features characteristic of each of the varieties being tested.

Participants

Respondents to the SEI were first-generation college-bound seniors from two high schools in the greater Santa Barbara area who participated in the SKILLS program during the Spring 2015 semester. Approximately one-third attended the school at which I taught as an instructor in the program, and the rest were students at another SKILLS partner site. 95 students took the pre-test, while 82 took the post-test. This decrease in participation can be attributed to a combination of program attrition and absence on the day the survey was administered. As there were no known commonalities among the participants who did not participate in the post-survey, findings are unlikely to have been influenced by attrition bias. 51% of participants were female, 48% were male, and 1% identified as having a non-binary gender identification or declined to state their gender. Ethnoracially, 94% of students identified as Hispanic or Latin@, 7% as white, 3% as Arab or Middle Eastern, 2% as Native American, 2% as Black or African American, and less than 1% as Asian or Pacific Islander. 7.6% of students identified as being of mixed heritage, including all participants who identified as African American.

The SKILLS program's own internal evaluation instrument determined that approximately 75% of participants use Spanish with their families, compared to 60% who use English at home (Clairmont 2015). 47% spoke their heritage language (largely Spanish, with a few Arabic speakers) up until entering preschool. A large number of participants' parents were first-generation immigrants who came to the United States from Mexico and thus began to learn English as adults.

⁴ Pre-survey data from 4 of the students were ultimately excluded due to incomplete responses, for a final total of 91.

Procedure

The pre-surveys and post-surveys were administered during the first and last weeks of SKILLS instruction, respectively, in campus computer labs during regularly scheduled SKILLS class time. Students were seated at individual computer terminals and provided with a pair of headphones for the listening portion of the survey.

For both surveys, each participant was randomly and anonymously assigned one of the four speech varieties to evaluate. Such a design precluded the use of a paired-samples analysis, which would have allowed for a more precise exploration of the attitudinal changes between the pre-survey and the post-survey. Whenever possible, future iterations of this study should employ pairwise analysis of this type. For the present study, however, it was decided that the assurance of anonymity was important in order to avoid the effect of "social desirability bias" on elicited attitudes (Fisher 1993). Especially when evaluating "socially sensitive variables" of the type measured in this study, it has been shown that "removing anonymity increases the pressure on subjects to respond in a socially acceptable manner" (1993:304). Because the expression of overtly discriminatory views is no longer socially acceptable in many parts of U.S. society, if participants' identities were known to the researcher, responses would be expected to be biased in a tolerant, linguistically pluralist direction. However, the reliability of such socially tailored results would be questionable. Thus, the use of anonymity to minimize social desirability bias is thought to allow researchers to better access participants' authentic, undistorted attitudes (Garrett et al. 2003:28).

Auditory stimuli were presented and participants' evaluations were collected via the online Survey Monkey software package (www.surveymonkey.com). Before the survey

began, students heard a test tone to ensure proper calibration of their computer's sound system. To familiarize them with the question format, participants also saw a sample item asking them to rate the speaker on a scale from "1 – Short" to "7 – Tall." They then listened to the recording and evaluated the speaker on the 30 adjective pairs specified in the SEI. The text "Please rate the speaker on a scale of 1 to 7" appeared before each item, with the negative bipolar adjective (e.g., *illiterate*) above the "1" and its positive counterpart (e.g., *literate*) above the "7." The survey software generated the test questions in a randomized order for each participant.

After completing the 30 semantic differential scales, participants responded to the open-ended question "What are the first three words or phrases that come to mind to describe this speaker?" Demographic information, including ethnicity, was collected at the end of the test in order to avoid inadvertently influencing results. At no point before or after the survey were students given any identifying or demographic information about the speakers. The survey took no longer than 15 minutes per group.

After students completed the post-SKILLS SEI, responses from both the pre-surveys and post-surveys were aggregated into a single data file totaling 176 participants.

Participants' responses were not counted if they skipped one or more sets of test items. 5 sets of responses were therefore excluded from the data set (4 from the pre-survey and 1 from the post-survey), for a final total of 171 participants.

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⁵ Because the number of possible evaluations on such a scale is odd, the middle value can be ambiguous: a score of 4 on a particular item could represent either a judge's neutral feeling about that item or their careful equivocation (Garrett et al. 2003: 41). Nevertheless, the majority of research on language attitudes accepts such ambiguity and employs a five- or seven-point scale.

Results

Principal Components Analysis

Participants' responses to the SEI were subjected to Principal Components Analysis (PCA) as part of a composite dataset comprising both pre- and post-test responses (N = 171). PCA was chosen for the initial phase of analysis in order to reduce the dimensionality of the data, following Zahn and Hopper's (1985) protocols. Mean composite variables were created from each of the components identified using principal component scores, and these variables were used as dependent measures for all further analyses to lessen the Type 1 error rate. The suitability of PCA was assessed prior to analysis, with the data meeting all assumptions. The overall Kaiser-Meyer-Olkin (KMO) measure was 0.935, a "marvelous" score according to Kaiser's (1974) classification, indicating adequacy of sampling. The individual KMO measures of all items were all greater than 0.8, scores rated "meritorious" to "marvelous" on Kaiser's scale. Bartlett's test of sphericity was highly significant (p < 0.001), further indicating that PCA would likely be possible.

PCA revealed four components with eigenvalues greater than one. Inspection of the scree plot, included in Appendix B, indicated that all four components should be retained (Cattell 1966). Seven items loaded onto multiple components and were therefore not included in the final solution: *experienced/inexperienced, considerate/inconsiderate, good/bad, honest/dishonest, confident/unsure, energetic/lazy.* Upon inspection of the correlation matrix, it was found that 23 of the remaining 24 test items had at least one correlation coefficient greater than 0.3. Because it did not correlate with any other item, the final evaluative adjective pair, *aggressive/unaggressive*, was removed from the data before the PCA was conducted.

The final four-component solution, presented in Table 1, explains 70.86% of the total variance, with individual components accounting for 49.63%, 10.47%, 5.67%, and 5.06% of the variance. The components were rotated using the Varimax orthogonal method, resulting in a "simple structure" that met the interpretability criterion (Thurston 1947). Cronbach's coefficient alpha indicated high levels of internal reliability for each component, with scores of 0.95, 0.84, 0.8, and 0.78.

This solution is largely consistent with those found in previous implementations of the SEI, but it differs from the findings of Zahn and Hopper (1985) in two main ways. First, their Superiority variable split into two distinct components: (1), what I call "Linguistic-Intellectual Status," which combines "intellectual status and competence" items (literate/illiterate, educated/uneducated, intelligent-unintelligent) with "speaking competency" items (clear/unclear, complete/incomplete, organized/unorganized, fluent/disfluent) and (2), "Socioeconomic Status," made up of Zahn and Hopper's "social status items" (upper class/lower class, white-collar/blue-collar, advantaged/disadvantaged, rich/poor). This split also appears in the findings of Gundersen and Perrill (1989), who label the two separate components Competence and Status, respectively. The above fourcomponent solution also differs from Zahn and Hopper's in the ordering of the component loading. Dynamism remains the weakest-loading component in the present data, but the Attractiveness component emerged as the strongest-loading variable, as opposed to its second-place ranking in Zahn and Hopper's data. This shift likely reflects the SEI's sensitivity to the context of its implementation, perhaps indicating that Attractiveness items are highly socially salient for this participant population. Additionally, these four

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 $^{^6}$ A PCA solution shows simple structure if each variable loads strongly on only one component (with a score of 0.5 or higher), and each component has at least three variables that load strongly on it.

components accounted for much more of the variance (70.86%) than Zahn and Hopper's three components (64.6%). A communalities table showing the proportion of each item's variance accounted for by this solution is included in Appendix C.

 Table 1
 Results of Principal Components Analysis (Varimax rotation)

	I	II	III	IV
		Linguistic-	Socio-	
Variable	Attractiveness	Intellectual	economic	Dynamism
		Status	Status	
1. Kind/Unkind	0.850	0.241	0.155	0.098
2. Friendly/Unfriendly	0.848	0.172	0.108	0.045
3. Warm/Cold	0.809	0.156	0.086	0.230
4. Nice/Awful	0.794	0.346	0.138	0.115
5. Pleasant/Unpleasant	0.789	0.304	0.122	0.129
6. Likeable/Unlikeable	0.782	0.219	0.155	0.213
7. Sweet/Sour	0.757	0.190	0.194	0.239
8. Good-natured/Hostile	0.739	0.294	0.105	0.085
9. Clear/Unclear	0.348	0.763	0.187	0.185
10. Fluent/Disfluent	0.091	0.754	0.254	0.247
11. Literate/Illiterate	0.276	0.742	0.297	0.184
12. Educated/Uneducated	0.310	0.737	0.347	0.245
13. Organized/Unorganized	0.414	0.711	0.151	0.203
14. Complete/Incomplete	0.408	0.706	0.114	0.143
15. Intelligent/Unintelligent	0.404	0.636	0.298	0.231
16. Upper class/Lower class	0.151	0.325	0.793	-0.062
17. White-collar/Blue-collar	0.077	0.111	0.760	0.312
18. Advantaged/Disadvantaged	0.265	0.234	0.682	0.162
19. Rich/Poor	0.156	0.359	0.583	0.290
20. Active/Passive	0.035	0.094	0.178	0.807
21. Talkative/Shy	0.175	0.365	0.194	0.655
22. Enthusiastic/Hesitant	0.312	0.199	0.180	0.654
23. Strong/Weak	0.299	0.358	0.027	0.617
Eigenvalue	11.41	2.41	1.30	1.16
% of variance accounted for	49.63	10.47	5.67	5.06
Reliabilities	0.95	0.94	0.80	0.78

Table 2 presents descriptive statistics for each component, including the mean evaluation score, divided by speaker for both the pre-surveys and post-surveys.

 Table 2
 Descriptive statistics for the four-component solution

Component	Speaker	Test	N	Mean	Standard Deviation	Standard Error Mean
Attractiveness	4.4.5	Pre-Survey	27	4.9598	1.23325	.23306
	AAE	Post-Survey	22	5.2955	1.01883	.21722
	WCE	Pre-Survey	23	5.6522	1.12308	.23418
		Post-Survey	21	5.4940	1.06395	.23217
7 ttractiveness	SDE	Pre-Survey	22	5.1477	1.17996	.25157
	SDE	Post-Survey	18	5.3264	1.63270	.38483
	CE	Pre-Survey	19	5.4539	1.14277	.26217
		Post-Survey	19	5.8684	.95149	.21829
	AAE	Pre-Survey	27	4.6582	1.20489	.22770
	TITL	Post-Survey	22	5.3961	1.10387	.23535
	WCE	Pre-Survey	23	5.8137	1.09004	.22729
Linguistic-	WCE	Post-Survey	21	5.7143	1.15264	.25153
Intellectual Status	CDE	Pre-Survey	22	4.3377	1.37911	.29403
	SDE	Post-Survey	18	4.7698	1.21628	.28668
	OF.	Pre-Survey	19	5.2030	1.23196	.28263
	CE	Post-Survey	19	5.6617	.97846	.22448
	A A E	Pre-Survey	27	3.9018	1.00999	.19087
	AAE	Post-Survey	22	4.3182	.87008	.18550
	WCE	Pre-Survey	23	4.9457	.89174	.18594
Socioeconomic		Post-Survey	21	4.7857	.84884	.18523
Status	SDE	Pre-Survey	22	3.5682	1.15517	.24628
		Post-Survey	18	3.4167	1.03611	.24421
	CE	Pre-Survey	19	4.3553	.93287	.21402
		Post-Survey	19	4.2632	.91467	.20984
	AAE	Pre-Survey	27	3.8571	1.20268	.22728
Dynamism		Post-Survey	22	4.7841	.86015	.18338
	WCE	Pre-Survey	23	4.4783	.98544	.20548
		Post-Survey	21	4.7619	1.04725	.22853
	SDE	Pre-Survey	22	4.1023	1.30169	.27752
		Post-Survey	18	4.4028	1.08512	.25577
	CE	Pre-Survey	19	4.4342	1.05357	.24171
		Post-Survey	19	4.6053	.89875	.20619

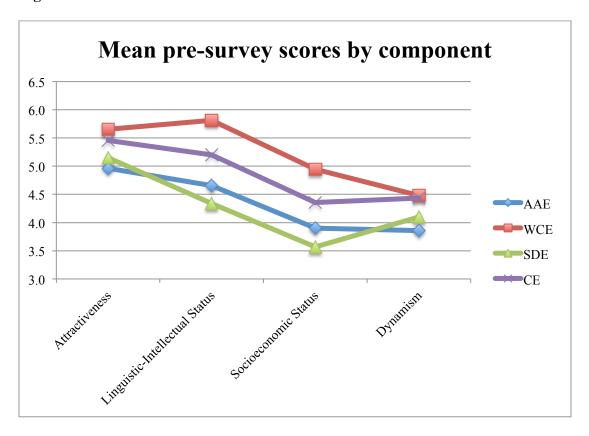
Analysis of pre-program survey responses

Pre-survey data, collected during the first week of SKILLS instruction, reflect students' language attitudes upon beginning the SKILLS program. Each of the four speakers was rated by an independent group of participants (n = 91): AAE (n = 27), WCE (n = 22), SDE (n = 23), CE (n = 19).

On all four components on the pre-survey, the WCE speaker was ranked the highest. These results align with a multitude of prior studies (e.g., Carranza and Ryan 1975; Purnell et al. 1999; Cargile et al. 2006) in which a dialect associated with whiteness is rated more highly than varieties used by people of color. The speaker of CE, the variety spoken by many of the raters, was consistently ranked second-highest.

A one-way ANOVA was conducted within the pre-test data to determine if speakers were evaluated in significantly different ways on the four components identified by the PCA. Results showed statistically significant differences in speaker evaluations on the Linguistic-Intellectual Status (F(3, 88) = 6.40, p = .001) and Socioeconomic Status components (F(3, 88) = 8.09, p < .001). Levene's test confirmed homogeneity of variances for the relevant components. Mean ratings for each component are visualized in Figure 1 below.

Figure 1



Post-hoc analyses using Tukey HSD of all pairwise comparisons from the pre-test revealed that for Linguistic-Intellectual Status, the WCE speaker was rated significantly higher than the AAE speaker (p = .007). The WCE speaker was also evaluated as significantly higher-status than the SDE speaker (p = .001). There were no significant differences between the mean scores of the AAE or SDE speakers on this component. Evaluations of the CE speaker, the second most highly ranked, were not significantly different than those of either the WCE speaker or the AAE and SDE speakers. Post-hoc analysis of the Socioeconomic Status component revealed a similar pattern, with the WCE speaker having a significantly higher mean rating than both the AAE speaker (p = .002) and the SDE speaker (p < .001). No other group differences are statistically significant.

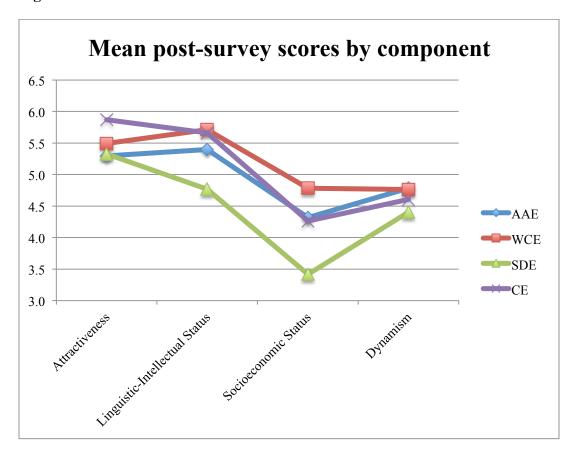
On the Attractiveness component, WCE ranked the highest, followed by CE, SDE, and AAE. Although the difference in means is not significant, it is still noteworthy that the WCE speaker was ranked slightly higher than the CE speaker on this component, given that raters tend to upgrade speakers of nonstandard dialects on solidarity-type items, particularly when speakers and evaluators speak the same dialect (e.g., Carranza and Ryan 1975). Although there were no statistically significant differences between means, the Dynamism component exhibited the same ordering of preferences as the Attractiveness component.

To summarize, before beginning the SKILLS program, students ranked the WCE speaker as having significantly higher intellectual, linguistic, and socioeconomic status than both the AAE speaker and the SDE speaker (the variety spoken by many of their parents). The speaker of CE, the variety spoken by a large percentage of the raters themselves, was consistently rated lower than the WCE speaker, but not at a statistically significant level. The CE speaker, in turn, was rated higher than either the AAE or SDE speaker across components, but not statistically significantly so.

Analysis of post-program survey responses

The post-test data, collected after students had completed the SKILLS program, were subjected to a second one-way ANOVA. A total of 80 students completed the post-survey: AAE (n = 22), WCE (n = 21), SDE (n = 18), CE (n = 19). Speaker ratings exhibited statistically significant differences on the same two components as the pre-survey, Linguistic-Intellectual Status (F(3, 76) = 2.82, p = .045) and Socioeconomic Status (F(3, 76) = 7.40, p < .001). Figure 2 shows mean ratings for each component on the post-survey.

Figure 2



The Linguistic-Intellectual Status component maintained an identical order of evaluator preference, with WCE ranking the highest, followed by CE, AAE, and SDE. However, the distribution of scores on the post-survey Linguistic-Intellectual Status component exhibits a compression effect relative to pre-survey scores, with a statistically significant decrease in overall standard deviation from 1.33 to 1.15 across speakers, F(1, 170) = 4.79, p = .03. In other words, while the rating order of language varieties examined for this component did not change from the pre-survey to the post-survey, the overall distribution of evaluations of the Linguistic-Intellectual Status component exhibited a statistically significant increase in the mean score coupled with a tightening of the distribution, with the evaluation of WCE falling slightly as the scores of the speakers of other varieties increased.

On the Dynamism component, post-surveys patterned differently than their presurvey counterparts. The AAE speaker rose from last to first place, a statistically significant mean difference of .93 higher than on the pre-survey (p < .01). The WCE speaker dropped from first into second place, while the CE speaker moved into third place and the SDE speaker moved from third place to last. Like the Linguistic-Intellectual Status component, the Dynamism component saw a contraction in the standard deviation of the distribution from 1.16 to .97 and a statistically significant change in the mean of the overall distribution from 4.18 to 4.65 (F(1, 170) = 7.84, p < .01). As indicated by the standard deviation of all the components, the scores on Dynamism in the post-survey were the most tightly clustered of all, with all speaker means within approximately two-thirds of one standard deviation of one another.

Although the ANOVA revealed no significant differences between post-survey group means on the Attractiveness component, it is worth noting that the preference order again changed: WCE dropped from the highest rated to the second-highest, following CE, with the ordering of SDE and AAE remaining constant. All four ratings fall within .56 of each other, roughly one-half of a standard deviation, and all are ranked at least one point above neutral.

On the Socioeconomic Status component rankings also changed, although no statistically significant mean score changes occurred between the pre-survey and post-survey. While on the pre-survey the speaker of WCE took the first rank, followed by the speakers of CE, AAE, and SDE, on the post-survey the speaker of AAE and CE switched places, while the speaker of SDE remained at the lowest rank. Within post-survey data, as in the pre-survey data, the mean differences between speakers were statistically significant, with the

SDE speaker scoring significantly lower than the speaker of WCE (p < .01), the speaker of AAE (p = .01), or the speaker of CE (p = .03).

Overall, the standard deviations for each component decreased, indicating a tighter clustering of scores, even as the means of each component increased, indicating generally more positive language attitudes towards all speakers. On the post-survey, students tended to upgrade marginalized speech varieties: speakers of AAE, SDE, and CE all scored higher on every component in the post-survey than on the pre-survey (with the exception of the Socioeconomic Status component for the SDE and CE speakers, although these decreases were not statistically significant.) The ratings of the WCE speaker, by contrast, saw a drop in every category but Dynamism. WCE was the only variety with an overall, albeit small, drop in mean ratings across components from the pre-survey (M = 5.22) to the post-survey (M = 5.19). In interpreting this trend, one should keep in mind that the decline in mean evaluations for this dialect should not be mistaken for a shift to explicitly negative attitudes.

Comparison of pre-survey and post-survey data

Figures 3 through 6 below visualize pre-survey and post-survey means for each component, with mean differences (post-survey score minus pre-survey score) indicated below each point. Significant changes are shown in red, with *p*-values above. After the completion of the SKILLS curriculum, students' mean evaluations of speakers of politically subordinated varieties (AAE, SDE, and CE) increased for 10 out of the 12 possible component/speaker mappings. Mean scores for the AAE speaker increased across all four components, with significant changes on the Linguistic-Intellectual Status and Dynamism ratings. The significant results are discussed in further detail below. For both the SDE and CE speakers, mean ratings on the Attractiveness, Linguistic-Intellectual Status, and

Dynamism components increased, while scores on the Socioeconomic Status component decreased slightly (mean changes of -0.16 and -0.10, respectively). The opposite occurred for the speaker of WCE, whose mean scores dropped across three of the four components.

Figure 3

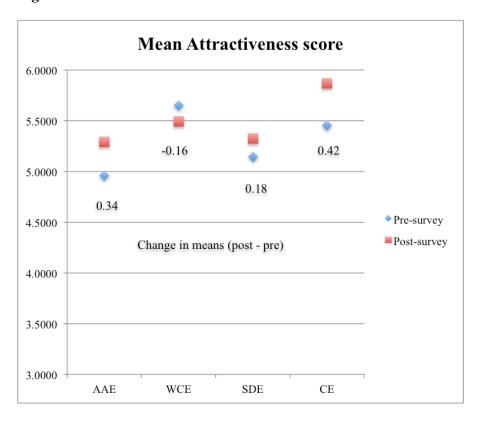


Figure 4

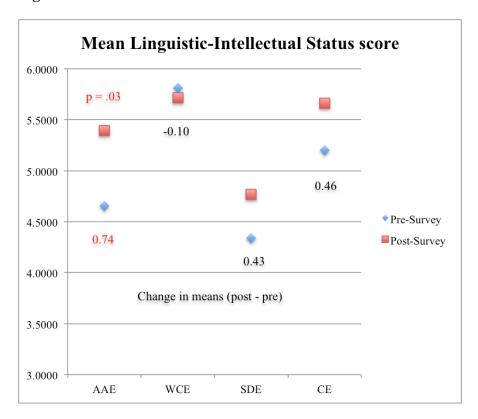


Figure 5

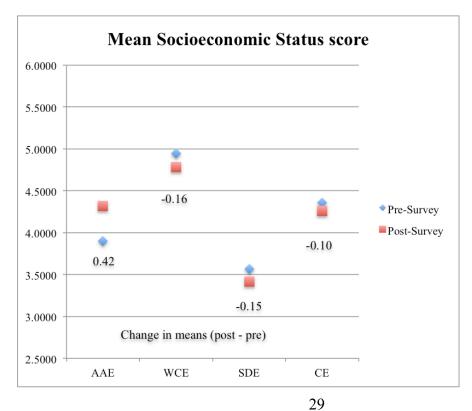
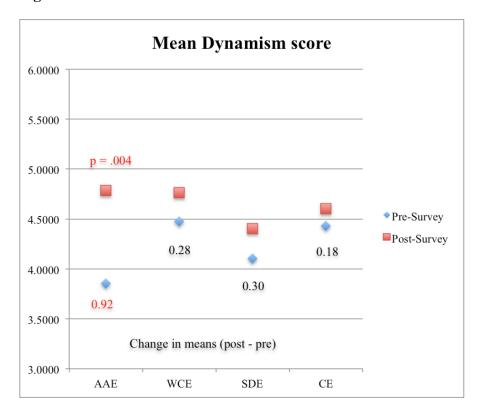


Figure 6

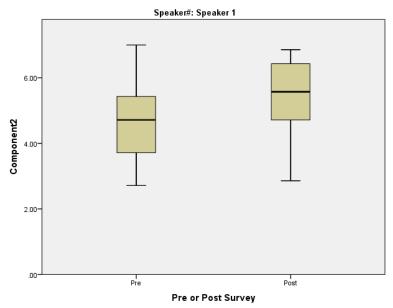


Because students were anonymously assigned to rater groups for survey administration in order to facilitate the elicitation of their private attitudes, independent samples t-tests were used to compare the means of pre-survey and post-survey ratings of the four components. The data met all of the major assumptions to run t-tests. Component scores for each speaker were normally distributed, as assessed by Shapiro-Wilk's test (p > .05), with the exception of pre-survey Linguistic-Intellectual Status scores for WCE and post-survey Attractiveness scores for AAE, SDE, and CE. As t-tests are robust to violations of normality, analysis proceeded nevertheless. Levene's test for homogeneity of variances was not significant for any component except for post-survey Attractiveness (p = .018). Equal variances were assumed for all other components. As the post-survey data for the Attractiveness component violated the assumptions both of normality and of homogeneity of

variances, it was submitted to the non-parametric Mann-Whitney U test instead of the independent samples t-test.

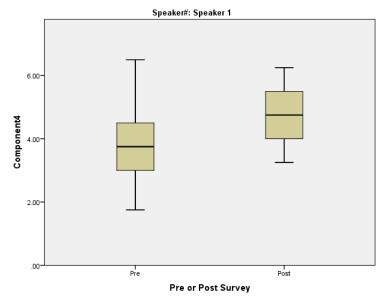
Two score differences were found to be significant between the pre-surveys and the post-surveys. There were no statistically significant changes in the Attractiveness component or the Dynamism component. For Linguistic-Intellectual Status, the AAE speaker's score improved significantly from 4.66 to 5.40, an increase of 0.74 (p = .03, d = 0.64), a medium effect size (Cohen 1988). Figure 7 shows boxplots for pre-evaluations and post-evaluations of this speaker.

Figure 7 Boxplots of Linguistic-Intellectual Status ratings for pre-survey and post-survey (AAE)



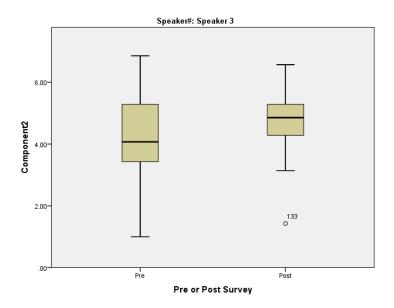
On the Dynamism component, the AAE speaker's score improved by 0.93, an increase from 3.86 to 4.78 (p = .004, d = 0.87), a large effect size.

Figure 8 Boxplots of Dynamism ratings for pre-survey and post-survey (AAE)



Even where differences in scores between the pre-surveys and post-surveys were not found to be statistically significant, a comparison of the distribution of responses between the surveys nevertheless suggests an attitudinal shift. For example, the SDE speaker's Linguistic-Intellectual Status scores exhibit a compression effect, visualized in Figure 9. Whereas a full 50% of responses on the pre-survey fell below the midpoint score of 4, on the post-survey less than 25% of scores fell below this mark, with the lowest scores ranking as outliers.

Figure 9 Boxplots of Linguistic-Intellectual Status ratings for pre-survey and post-survey (SDE)



To summarize these results, while the WCE speaker was ranked in first place across all four components on the pre-survey, on the post-survey the CE speaker became the highest-ranked on the Attractiveness component and the AAE speaker jumped from last to first position on Dynamism. Although the WCE speaker remained the highest-rated on Linguistic-Intellectual Status and Socioeconomic Status, scores for this speaker increased only on the Dynamism component, coupled with slight decreases in mean scores on Attractiveness, Linguistic-Intellectual Status, and Socioeconomic Status. Ratings on all four components improved for the AAE speaker, with statistically significant increases on the Linguistic-Intellectual Status and Dynamism components. Mean evaluations of both the SDE and CE speakers also rose on Attractiveness, Linguistic-Intellectual Status, and Dynamism, with a very slight decrease in scores on the Socioeconomic Status component. Although none of these changes were statistically significant, the pattern of overall increase is nonetheless striking and points to the realization of one of the central goals of the SKILLS program and

the project of sociolinguistic justice more broadly: "challenging language ideologies that devalue minoritized linguistic varieties and their speakers" (Bucholtz et al. 2014:146).

Discussion

Three key findings of this study merit further consideration: (1), the shift in rankings on the strongest-loading component, Attractiveness; (2), the statistically significant improvement in attitudes toward African American English; and (3), the stability of attitudes toward White California English from the pre-survey to the post-survey.

Shift on Attractiveness component rankings

On the Attractiveness component, which includes many solidarity-type items, the highest-ranked variety shifted from WCE on the pre-survey to CE on the post-survey. While this change was not statistically significant, it is important to note that the participants already had high evaluations of the CE speaker on the pre-survey, even before completion of the SKILLS program, particularly on the Attractiveness (M = 5.45) and Linguistic-Intellectual Status (M = 5.20) components. In fact, a one-way ANOVA showed that the CE scores were not significantly different from the top-ranking WCE speaker on any component on either the pre-survey or the post-survey. In essence, CE scored no differently than WCE on any component, statistically speaking, a finding which differs from prior studies showing that Latin@ youth tend to rate Anglo speech more positively than Latin@ speech on statustype measures (Carranza and Ryan 1975; Carranza 1982). This finding may be attributable to an in-group affinity, a kind of "local preference factor" (Preston 1989: 67; Bucholtz et al. 2008) that encourages students to upgrade their own linguistic variety.

Improvement of AAE scores

Second, after completion of the SKILLS program, students' evaluations of AAE saw a statistically significant increase in scores on the Linguistic-Intellectual Status and Dynamism components, with mean improvements of 0.74 and 0.92, respectively. This positive shift in attitudes towards AAE demonstrates that language attitudes may indeed be transformed by academic intervention. Further analysis of attitudinal change would benefit from pairwise testing of pre-survey and post-survey scores, as well as an exploration of the longevity of the attitudinal effects.

A core goal of the SKILLS program is to counter language-deficit views of minoritized speech varieties, including students' own, through education about those varieties' cultural and linguistic merit. It appears from these data that this goal was achieved, at least in part. Certain program activities aimed to help students untangle the conflation of dialect and intellect, underscoring the point that a speaker's linguistic repertoire has no bearing on their intelligence. Students were asked to analyze the ways that negative linguistic ideologies can be a product of racial discrimination, and SKILLS teachers fostered class discussions on the naturalness of language change and variation, the rule-governed nature of AAE grammar, and the power dynamics inherent in the social construction of Standard English – all of which may have led to the increase in AAE's Linguistic-Intellectual Status scores. Furthermore, students listened to spoken word poems about artistic uses of AAE and read essays about its crucial role in community identity (e.g., Jordan 1988), which likely contributed to the sharp increase in Dynamism scores on the post-survey. Direct effects of the SKILLS curriculum are thus visible from a comparison of pre-survey and post-survey ratings.

In addition to providing evidence that education can shift language attitudes in a positive direction, the significant improvement in evaluations of AAE also demonstrates that this change was not merely a self-interested one. The increase in scores did not exclusively affect ingroup varieties (CE, spoken by many participants themselves, and SDE, spoken by many participants' family members). Rather, over the course of the SKILLS program, students' attitudes toward AAE, the speech of an ethnolinguistic outgroup, improved as well. Previous research on reducing language-based discrimination has focused on fostering intergroup contact between speakers of multiple ethnolinguistic varieties (Wright and Bougie 2007), but such a strategy would be difficult to attempt in the context of this study, which takes place in a city and school with very few African American students. These results suggest that reducing linguistic prejudice may be accomplished through education as well as through fostering cross-group friendships.

Stability of WCE scores

A third finding of this study is that attitudes toward White California English, the local prestige variety, did not change in any statistically significant way as a result of participation in the SKILLS program. The stability of scores is notable because the curriculum did not shy away from naming racist linguistic ideologies as such, frequently emphasizing the structural power relations behind the institutional enshrinement of white middle-class speech norms as the standard prestige variety.

The consistency in WCE scores from the pre-survey to the post-survey demonstrates that divestment from ideologies of linguistic racism is not a zero-sum proposition. As participants exhibited more positive attitudes about stigmatized varieties of English, their

attitudes toward the local prestige variety were not diminished by participation in SKILLS. Indeed, attitudes towards WCE remained positive on every measure. In a course designed to engage students in the process of actively questioning their personal views on language varieties, it is perhaps surprising that student attitudes towards the local prestige variety did not significantly change. This result is particularly noteworthy in light of mainstream discourses of so-called "reverse racism" (e.g. Bucholtz 2011b), which frequently claim that culturally responsive pedagogy that valorizes the culture, language, or history of people of color will necessarily have a corresponding effect of devaluing white mainstream culture. Findings like those of the current study, however, indicate that culturally sustaining linguistics pedagogy does not necessarily result in "reverse racist" outcomes.

Conclusion

By testing language attitudes before and after the completion of a sociocultural linguistics academic outreach program, this study has shown that it is possible for culturally sustaining linguistics pedagogy to positively change attitudes toward marginalized varieties of English, including dialects that are not students' own.

Even as participants' attitudes towards marginalized varieties of English improved, their attitudes towards White California English remained generally positive. The increase in mean scores between the pre-survey and the post-survey on most components for most varieties coupled with the compression effect observed across all the varieties tested suggests that, while some of the ethnolinguistic rating hierarchies were unaffected, participants who took part in the SKILLS program nonetheless came to view all the language varieties tested in a less prejudiced way than before the course. This latter fact, while encouraging, should

also serve as a reminder that without direct intervention, entrenched language ideologies are unlikely to change easily or quickly, even among participants who speak marginalized varieties themselves.

These data show that for SKILLS participants, who were largely Mexican American youth, the development of "counterbiases" (Doyle and Aboud 1995: 211) that decrease linguistic bias and valorize stigmatized varieties is hardly a zero-sum game. In spite of fears like those evoked by the 2010 Arizona anti-ethnic studies bill, culturally sustaining sociocultural linguistics does not "promote resentment" toward the dominant culture. The goal of sociolinguistic justice is by no means to advance "reverse racism."

These findings indicate that interventions can be successful in changing language attitudes immediately after completion of relevant curriculum. However, it is advisable for future assessments of SKILLS and similar programs to take a longitudinal approach to see if attitudinal changes are retained after some time has passed, and that they use a paired-samples design where possible. Ethnographic and interactional research is also needed to explore the complex, emergent ways that language ideologies and attitudes are negotiated and contested in young people's everyday lives inside and outside classrooms.

As more linguists recognize the importance of transmitting scholarly work to mainstream audiences, the need for empirical evaluations of language-based academic outreach programs will become increasingly urgent. Using well-established methods from research on language attitudes, scholars of language can confirm whether such programs are indeed achieving their stated goals of sociolinguistic justice.

References

- Arizona House of Representatives (2010). House Bill 2281. http://www.azleg.gov/legtext/49leg/2r/bills/hb2281s.pdf.
- Arthur, Bradford, Dorothee Farrar, and George Bradford (1974). Evaluation reactions of college students to dialect differences in the English of Mexican Americans. *Language and Speech* 17: 255-270.
- Bailey, Guy, and Erik Thomas (1998). Some aspects of African-American Vernacular English phonology. *African American English*, eds. Salikoko S. Mufwene, John Rickford, John Baugh and Guy Bailey. London: Routledge. 85-109.
- Ball, Peter and Howard Giles (1982). Speech styles and employment selection: Use of the matched-guise technique. In Glynis Breakwell, Hugh Foot and Robin Gilmour (eds.) *Social Psychology: A Practical Manual.* London: Edward Arnold. 101-122.
- Baugh, John (2003). Linguistic profiling. In Sinfree Makoni, Geneva Smitherman, Arnetha F. Ball and Arthur K. Spears (eds.), *Black Linguistics: Language Society and Politics in Africa and the Americas*. London: Routledge.
- Bourdieu, Pierre (1991). *Language and symbolic power*. Cambridge, MA: Harvard University Press.
- Brennan, Eileen M., and John Stephen Brennan (1981). Accent scaling and language attitudes: Reactions to Mexican American English speech. *Language and Speech* 24(3): 207-221.
- Bucholtz, Mary (2011a). White Kids: Language, Race, and Styles of Youth Identity. Cambridge University Press.
- Bucholtz, Mary (2011b). "It's different for guys": Gendered narratives of racial conflict among white California youth. *Discourse and Society* 22(4): 385-402.
- Bucholtz, Mary, Nancy Bermudez, Lisa Edwards, Victor Fung, and Rosalva Vargas (2007). Hella Nor Cal or totally So Cal?: The perceptual dialectology of California. *Journal of English Linguistics* 35(4): 325–352.
- Bucholtz, Mary, Nancy Bermudez, Victor Fung, Rosalva Vargas, and Lisa Edwards (2008). The normative north and the stigmatized south: Ideology and methodology in the perceptual dialectology of California. *Journal of English Linguistics* 36(1): 62-87.
- Bucholtz, Mary, Dolores Inés Casillas, and Jin Sook Lee (forthcoming.) Beyond empowerment: Accompaniment and sociolinguistic justice in a youth research program. In Robert Lawson and Dave Sayers (eds.), *Sociolinguistic Research: Application and Impact.* London: Routledge.
- Bucholtz, Mary, Audrey Lopez, Allina Mojarro, Elena Skapoulli, Chris VanderStouwe, and Shawn Warner-Garcia (2014). Sociolinguistic justice in the schools: Student researchers as linguistic experts. *Language and Linguistics Compass* 8(4): 144-157.
- Bucholtz, Mary, and Qiuana Lopez (2011). Performing blackness, forming whiteness: Linguistic minstrelsy in Hollywood film. *Journal of Sociolinguistics* 15(5): 680-706.
- Callan, Victor J., Cynthia Gallois, and P.A. Forbes (1983). Evaluative reactions to accented English: Ethnicity, sex role, and context. *Journal of Cross-cultural Psychology* 14: 407-426.
- Campbell-Kibler, Kathryn (2009). The nature of sociolinguistic perception. *Language Variation and Change* 21: 135-156.
- Cargile, Aaron Castelan, Jiro Takai, and José I. Rodríguez (2006). Attitudes toward African-American Vernacular English: A US export to Japan? *Journal of Multilingual and*

- Multicultural Development 27(6): 443-456.
- Carranza, Miguel A. (1982). Attitudinal research on Hispanic language varieties. *Attitudes Towards Language Variation*. London: Edward Arnold Publishers Ltd.
- Carranza, Miguel A. and Ellen Bouchard Ryan (1975a). Evaluative reactions of bilingual Anglo and Mexican American adolescents toward speakers of English and Spanish. *International Journal of the Sociology of Language* 6: 83-104.
- Carranza, Miguel A. and Ellen Bouchard Ryan (1975b). Evaluative reactions of adolescents toward speakers of standard English and Mexican American accented English. *International Journal of the Sociology of Language* 8: 3-102.
- Cattell, Raymond B. (1966). The scree test for the number of factors. *Multivariate Behavioral Research*, 1, 245-276.
- Chun, Elaine (2001). The construction of White, Black, and Korean American identities through African American Vernacular English. *Journal of Linguistic Anthropology* 11: 52-64.
- Clairmont, Anthony (2015). Executive summary of the 2015 SKILLS survey data. Resaerch report, University of California Santa Barbara Department of Education.
- Cohen, Jacob (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Dailey, René M., Howard Giles, and Laura L. Jansma (2005). Language attitudes in an Anglo-Hispanic context: the role of the linguistic landscape. *Language and Communication* 25: 27-38.
- Doyle, Anna Beth and Frances E. Aboud (1995). A longitudinal study of white children's racial prejudice as a social-cognitive development. *Merrill-Palmer Quarterly* 41(2): 209-228.
- Fisher, Robert J. (1993). Social desirability bias and the validity of indirect questioning. *Journal of Consumer Research* (20): 303–315.
- Fishbein, Martin, and Icek Ajzen (1975). *Belief, Attitude, Intention, and Behaviour*. Reading: Addison-Wesley.
- Flores, Nancy de la Zerda, and Robert Hopper (1975). Mexican Americans' evaluations of spoken Spanish and English. *Speech Monographs* 42: 91-98.
- Fought, Carmen (2002). California students' perceptions of, you know, regions and dialects? In *Handbook of Perceptual Dialectology*, Vol. 2, eds. Daniel Long and Dennis R. Preston. Amsterdam: John Benjamins. 117-136.
- Fought, Carmen (2003). Chicano English in Context. New York: Palgrave MacMillan.
- Fuertes, Jairo N., William H. Gottdiener, Helena Martin, Tracey C. Gilbert, and Howard Giles (2012). A meta-analysis of the effects of speakers' accents on interpersonal evaluations. *European Journal of Social Psychology* 42: 120-133.
- Garrett, Peter, Nikolas Coupland, and Angie Williams (2003). *Investigating Language Attitudes: Social Meanings of Dialect, Ethnicity, and Performance*. Cardiff: University of Wales Press.
- Giles, Howard, and Andrew C. Billings (2008). Assessing language attitudes: Speaker evaluation studies. In Alan Davies and Catherine Elder (eds.), *The Handbook of Applied Linguistics*. Oxford: Blackwell.
- Giles, Howard, Miles Hewstone, Ellen Bouchard Ryan, and Johnson (1987). Research on language attitudes. In Ulrich Ammon, Norbert Dittmar, and Klaus J. Mattheier (eds.), Sociolinguistics: An International Handbook of the Science of Language and Society,

- vol. 1. 585-597.
- Irvine, Judith T., and Susan Gal (2000). Language ideology and linguistic differentiation. In Paul V. Kroskrity (ed.), *Regimes of language: Ideologies, Polities, and Identities*. Santa Fe: School of American Research Press. 35-84.
- Jordan, June (1988). Nobody mean more to me than you and the future life of Willie Jordan. *Harvard Educational Review* 58(3): 363-374.
- Kaiser, Henry F. (1974). An index of factorial simplicity. Psychometrika 39: 32-36.
- Kroskrity, Paul V. (1998). Arizona Tewa Kiva speech as a manifestation of linguistic ldeology. In Bambi B. Schieffelin, Kathryn A. Woolard, and Paul V. Kroskrity (eds.), *Language Ideologies: Practice and Theory*. New York: Oxford University Press: 103-122.
- Labov, William (1982). Objectivity and commitment in linguistic science. *Language in Society* 11: 165-201.
- Ladson-Billings, Gloria (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal* 32(3): 465-491.
- Lambert, Wallace E. (1967). A social psychology of bilingualism. *Journal of Social Issues* 23: 91-109.
- Lambert, Wallace E., H. Frankel, and G. R. Tucker (1966) Judging personality through speech: A French-Canadian example. *Journal of Communication* 16: 305–21.
- Lambert, Wallace E., R.C. Hodgsen, Robert C. Gardner, and Samuel Fillenbaum (1960). Evaluational reaction to spoken language. *Journal of Abnormal and Social Psychology* 60: 44-51.
- Lippi-Green, Rosina (2012 [1997]). English with an Accent: Language, Ideology, and Discrimination in the United States. New York: Routledge.
- Milroy, James, and Lesley Milroy (1985). *Authority in Language: Investigating Standard English.* London: Routledge & Kegan Paul.
- Milroy, Lesley, and Paul McClenaghan (1977). Stereotyped reactions to four educated accents in Ulster. *Belfast Working Papers in Language and Linguistics* 2(4).
- Ohala, John J. (1984). An ethological perspective on common cross-language utilization of F0 of voice. *Phonetica* 41(1): 1-16.
- Osgood, Charles, George Suci, and Percy Tannenbaum (1957). *The Measurement of Meaning*. Urbana: University of Illinois Press.
- Paris, Django (2012). Culturally sustaining pedagogy: A needed change in stance, terminology, and practice. *Educational Researcher* 41(3):93-97.
- Paris, Django, and H. Samy Alim (2014). What are we seeking to sustain through culturally sustaining pedagogy?: A loving critique forward. *Harvard Educational Review* 84(1):85-100.
- Preston, Dennis R. (1989). Perceptual Dialectology. Dordrecht: Foris.
- Preston, Dennis R., and Nancy A. Niedzielski (2000). *Folk Linguistics*. Berlin: Mouton de Gruyter.
- Purnell, Thomas, William Idsardi, and John Baugh (1999). Perceptual and phonetic experiments on American English dialect identification. *Journal of Language and Social Psychology* 18(1): 10-30.
- Reaser, Jeffrey (2006). *The Effect of Dialect Awareness on Adolescent Knowledge and Attitudes*. Unpublished Ph.D. dissertation, Duke University.
- Reaser, Jeffrey (2007). Evaluating and improving high school students' folk perceptions of

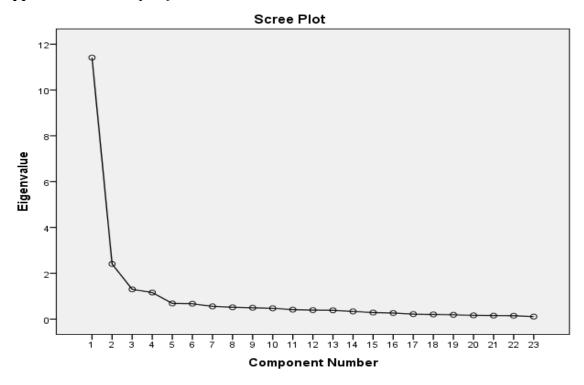
- dialects. *Penn Working Papers in Linguistics* 13(2). Philadelphia: University of Pennsylvania Press. 179-192.
- Reyes, Angela (2005). Appropriation of African American slang by Asian American youth. *Journal of Sociolinguistics* 9(4): 509-532.
- Rickford, John (1997). Unequal partnership: Sociolinguistics and the African American speech community. *Language in Society* 26: 161-197.
- Ronkin, Maggie, and Helen E. Karn (1999). Mock Ebonics: Linguistic racism in parodies of Ebonics on the Internet. *Journal of Sociolinguistics* 3(3): 360-380.
- Ryan, Ellen Bouchard, and Miguel Carranza (1975). Evaluative reactions of adolescents toward speakers of standard English and Mexican American accented English. *Journal of Personality and Social Psychology* 31: 855-863.
- Ryan, Ellen Bouchard, and Miguel Carranza (1977). Ingroup and outgroup reactions toward Mexican American language varieties. In Howard Giles (ed.), *Language, Ethnicity, and Intergroup Relations*. London: Academic Press. 59-82.
- Ryan, Ellen Bouchard, Miguel Carranza, and Robert W. Moffie (1977). Reactions toward varying degrees of accentedness in the speech of Spanish-English bilinguals. *Language and Speech* 20: 267-273.
- Ryan, Ellen Bouchard, Howard Giles, and Miles Hewstone (1988). The measurement of language attitudes. In Ulrich Ammon, Norbert Dittmar, and Klaus J. Mattheier (eds.) *Sociolinguistics: An International Handbook of the Science of Language and Society*, vol. 2. 1068-1081.
- Ryan, Ellen Bouchard, Howard Giles, and Richard J. Sebastian (1982). An integrative perspective for the study of attitudes toward language variation. In Ellen Bouchard Ryan and Howard Giles (eds.), *Attitudes towards Language Variation: Social and Applied Contexts*. London: Edward Arnold. 1-19.
- Santa Ana, Otto (1993). Chicano English and the nature of the Chicano language setting. *Hispanic Journal of Behavioral Sciences* 15(3): 3-35.
- Sleeter, Christine E. (2011). *The Academic and Social Value of Ethnic Studies: A Research Review*. Washington, D.C.: National Education Association.
- Sweetland, Julie (2004). Sociolinguistic Sensitivity in Language Arts Instruction: A Literature and Writing Curriculum for the Intermediate Grades. Teacher's Manual and Materials. Palo Alto, CA: Stanford University.
- Thomas, Erik R. (2007). Phonological and Phonetic Characteristics of African American Vernacular English. *Language and Linguistics Compass* 1(5): 450-475.
- Thurstone, Louis L. (1947). *Multiple factor analysis*. Chicago, IL: University of Chicago Press.
- Wright, Stephen C., and Évelyne Bougie (2007). Intergroup contact and minority-language education: Reducing language-based discrimination and its negative impact. *Journal of Language and Social Psychology* 26(2): 157-181.
- Zahn, Christopher, and Robert Hopper (1985). Measuring language attitudes: The Speech Evaluation Instrument. *Journal of Language and Social Psychology* 4(2): 113-123.
- Zentella, Ana Celia (1995). The "Chiquitafication" of U.S. Latinos and their languages, OR why we need an anthropolitical linguistics. *SALSA III: Proceedings of the Symposium About Language and Society at Austin*. Austin: Department of Linguistics. 1-18.

Appendices

Appendix A Text of recording stimulus

"Do you want to hear a story? There was once a fisherman who lived with his wife in a miserable little shack close to the sea. Their lives together were hard. They had good times and bad times and times where they feared the worst. But although they were poor and had lots to worry about, both kept going. At least they had each other. He went to fish every day and he fished and fished for hours, watching and hoping to catch something. Every morning he left to go to the sea, and every morning he met some other fishermen going there too. They always asked him when he'd catch a big one, but he always smiled and said nothing. The fisherman was patient, so he didn't mind. And at last one cold and windy day, as he was sitting on the beach looking deep down into the shining water, he felt something on his line."

Appendix B Scree plot for the rotated PCA solution



Appendix C Communalities for the four-component PCA solution

Component	Item	Extraction
Attractiveness	1. Kind/Unkind	0.749
	2. Friendly/Unfriendly	0.820
	3. Warm/Cold	0.761
	4. Nice/Awful	0.577
	5. Pleasant/Unpleasant	0.710
	6. Likeable/Unlikeable	0.693
	7. Sweet/Sour	0.773
Linguistic- Intellectual Status	8. Good-natured/Hostile	0.698
	9. Clear/Unclear	0.702
	10. Fluent/Disfluent	0.741
	11. Literate/Illiterate	0.617
	12. Educated/Uneducated	0.703
	13. Organized/Unorganized	0.783
	14. Complete/Incomplete	0.652
Socioeconomic Status	15. Intelligent/Unintelligent	0.814
	16. Upper class/Lower class	0.739
	17. White-collar/Blue-collar	0.762
	18. Advantaged/Disadvantaged	0.729
Dynamism	19. Rich/Poor	0.747
	20. Active/Passive	0.693
	21. Talkative/Shy	0.630
	22. Enthusiastic/Hesitant	0.597