STANFORD CENTER
FOR RESEARCH AND DEVELOPMENT
IN TEACHING

Research and Development Memorandum No. 106

JUDGING PERSONALITY FROM SPEECH: A PILOT STUDY OF THE EFFECTS OF BILINGUAL EDUCATION ON ATTITUDES TOWARD ETHNIC GROUPS

Robert L. Politzer and Arnulfo Ramirez

School of Education
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Introductory Statement

The Center's mission is to improve teaching in American schools. Too many teachers still employ a didactic style aimed at filling passive students with facts. The teacher's environment often prevents him from changing his style, and may indeed drive him out of the profession. And the children of the poor typically suffer from the worst teaching.

The Center uses the resources of the behavioral sciences in pursuing its objectives. Drawing primarily upon psychology and sociology, but also upon other behavioral science disciplines, the Center has formulated programs of research, development, demonstration, and dissemination in three areas. Program 1, Teaching Effectiveness, is now developing a Model Teacher Training System that can be used to train both beginning and experienced teachers in effective teaching skills. Program 2, The Environment for Teaching, is developing models of school organization and ways of evaluating teachers that will encourage teachers to become more professional and more committed. Program 3, Teaching Students from Low-Income Areas, is developing materials and procedures for motivating both students and teachers in low-income schools.

This study was conducted in two schools serving primarily Mexican-American and Anglo-American students from low-income areas. The main goal of the study was to investigate pupils' attitudes toward ethnic groups as inferred from their reactions to representative speech samples and to determine whether pupils in a bilingual education program had attitudes different from those held by pupils in a traditional type of program.

Acknowledgments

We wish to acknowledge the help and cooperation of the teachers and administrators of the Redwood City School District who made the research reported here possible. In particular, we owe our thanks to Mr. D. Trujillo, who coordinated the bilingual education program and, to the principals of the schools at which the study was conducted, Mr. Cesar Muñoz-Plaza (Hoover Elementary School) and Mr. Richard Cochran (Garfield Elementary School).

Abstract

The purpose of this investigation was to gather information about the attitudes held by Mexican-American and Anglo-American ("Anglo") children toward members of specific social and ethnic groups (Mexican-Americans, Anglos, speakers of Spanish) and to determine whether children who had taken part in a bilingual education program had different attitudes than children who had been exposed solely to a monolingual (English) program.

The subjects of this study were 27 children (17 Mexican-American, 10 Anglo) who were in the third grade of a bilingual education program and 31 children (20 Mexican-American, 11 Anglo) who were in the third grade of a monolingual education program in the same school district.

The children were asked to react on a semantic-differential scale to three guises of four speakers. The guises were English with Spanish proper names pronounced in Spanish, English with Anglicization of Spanish proper names, and Spanish. In addition the subjects were asked to judge the single guise of four different speakers who spoke English with a marked Spanish accent. The characteristics for which the children judged the voices were nice, handsome, happy, hardworking, friendly, strong, smart, clean.

English spoken with a Spanish accent was downgraded relative to the other three speech varieties by all subjects. The upgrading of English by Anglo students was less pronounced in the bilingual education program than in the monolingual education program. Spanish was upgraded over the other varieties by the Mexican-American students in the bilingual education program, evidently as the result of their exposure to bilingual education.

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JUDGING PERSONALITY FROM SPEECH: A PILOT STUDY OF THE EFFECTS OF BILINGUAL EDUCATION ON ATTITUDES TOWARD ETHNIC GROUPS

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The purpose of this investigation was to gather information about the attitudes held by Mexican-American and Anglo-American ("Anglo") children concerning members of specific social and/or ethnic groups (Mexican-Americans, Anglos, speakers of Spanish) and to determine whether the attitudes developed by children who had taken part in a bilingual education program were different from those developed by children who had been exposed solely to a monolingual (English) education. Improved self-concept and better understanding between ethnic and social groups are two of the avowed aims and rationales of recent bilingual education efforts (see Anderson & Boyer, 1970, Ch. 4). Thus it seemed timely and appropriate to investigate the possible effects of bilingual education on attitudes toward ethnic groups.

Design

Subjects

The investigation was carried out in the Redwood City School District in California. In this district a bilingual education program has been in operation in the Garfield Elementary School for several years. The program (described in detail by Cohen, 1971), in which Mexican-American and Anglo children are mixed in the same classroom approximately on a 2:1 ratio, has undergone several changes during the past years, but it essentially aims at developing balanced bilinguals. Of the 58 third graders who were the subjects of this investigation, 27 had been in this program ever since kindergarten. The remaining 31, who constituted a control group, were in a monolingual program at Hoover Elementary School in the same district. The control group had been selected by the internal evaluator of the bilingual education program to match the subjects in

the bilingual program with respect to socioeconomic status and English proficiency upon entrance in the school program. Table 1 summarizes the sample population.

TABLE 1

Subjects of the Study

	Bilingual Program (Garfield School)		Monolingual Program (Hoover School)	
	Mexican-American	Anglo	Mexican-American	Anglo
Male	12	4	10	4
Female	5	6	10	7
Total	17	10	20	11

Procedures

The technique used in this study to measure the subjects' views toward a social or ethnic group was primarily based on the so-called matched-guise method developed and refined by Wallace Lambert and some of his associates (see Lambert, 1967; Lambert, Frankel, & Tucker, 1966). In this method each of several bilingual or bidialectal speakers reads several different passages in different languages or dialects. The subjects whose attitudes are being investigated evaluate the speakers' voices, which are presented to them randomly except that different guises of the same speaker never follow each other. The subjects are never told that they are listening to the same speaker more than once but are led to believe that they are listening to different speakers each time. They are usually asked to evaluate the voices by rating them according to a scale based on semantic-differential type bipolar adjectives. The subjects' differential attitudes toward different social or ethnic groups are indicated by the different ratings they give to the same speakers using different languages or dialects. The passages read by the different speakers are chosen in such a way that differences in reaction due to the content of the passages are not likely to occur.

In an alternative method, also used in this investigation, the subjects are asked to evaluate the voices of different speakers representing specific languages or dialects; that is, the matched-guise deception is not employed. This method is based on the assumption that the characteristics of an individual speaker's voice, aside from the language or dialect he is speaking, are not a significant factor in the subjects' reactions (see, e.g., Markel, Eisler, & Reese, 1967).

A total of four speech guises were used in this investigation: three were spoken by the same group of four speakers in a matched-guise approach, and the fourth was spoken by four different speakers who spoke a dialect that the first group was unable to produce. (For the exact passages read by the eight speakers, see Appendix A.) The speakers used for the three matched guises were bilingual Mexican-American college students. The other speakers were people recently arrived from Mexico speaking fairly fluent but rather heavily accented English. The types of speech used in the study were thus the following:

Guise I: English (Spanish). In this guise the speakers, who were Stanford students, used perfectly normal colloquial English. They attempted, however, to give a hint of their Spanish (Mexican) origin by pronouncing Spanish proper names in Spanish rather than in English. The rejection of the Anglicized pronunciation of Spanish proper names appears to be characteristic of most educated Mexican-Americans within the Stanford University community. The experimenters felt, therefore, that it would be of interest to determine whether the children reacted to the use of the Spanish pronunciation of Spanish proper names differently than to the use of the Anglicized pronunciation.

Guise II: English (Anglicized Spanish). This guise was differentiated from Guise I only in that the speakers used an Anglicized pronunciation of Spanish proper names. In a sense, then, the most Anglicized (or most "Anglo") pronunciation used in the experiment occurred in Guise II.

Guise III: (Colloquial) Spanish. In this guise the speakers used their Spanish dialect, namely colloquial Mexican Spanish.

Speech Variety IV: Hispanicized English. Speech Variety IV did not represent a guise of the same speakers used for the first three guises but was provided by Mexican-Americans born in Mexico and speaking English with an easily recognizable Spanish accent.[1]

The answer sheet on which the subjects registered their reactions to the different recorded speech samples is reproduced in Appendix B. As can be seen, it is based on the semantic-differential principle. A trial run had shown, however, that it was preferable to attach specific labels to each step of the differential scales because some children seemed somewhat confused by unlabeled semantic-differential intervals. The trial experiment had also shown that children were not comfortable with a scale involving more than four steps. The characteristics used in the answer sheet (nice, handsome, happy, hardworking, friendly, strong, smart, clean) were adapted from a semantic-differential scale that had been used previously to determine the attitudes of children in the bilingual education program (Cohen, 1970). They were chosen because they represented relatively simple concepts that would not be beyond the linguistic and conceptual sophistication of the subjects rather than because they were assumed to have some relationship to specific attitudes or stereotypes.

The children were asked to listen to a recording of the speakers' voices. Each passage was presented only once. The children had one minute to record their reactions to each passage. Separate rating sheets were provided for each of the 16 passages.

Method of Analysis

A score of 4, 3, 2, or 1 was assigned to each rating (4 being the most positive, 1 the most negative). The maximum score that each subject could give to the four speakers of each guise or of Speech Variety IV on

---

[1]Note that throughout this report the different types of speech produced by the same speaker are referred to as Guises I, II, III, while Hispanicized English, which is not included in the matched guises, is referred to as Speech Variety IV.

each of the eight characteristics was therefore 16, and the minimum score was 4. In addition, a total score for each guise and for Speech Variety IV was calculated by adding up the scores given on each of the eight characteristics. Thus the maximum total score a subject could give to each guise or to Speech Variety IV was (16 x 8) 128. (See Appendix C for a sample of the rating sheet.)

For purposes of analysis the subjects were divided into four groups: monolingual program Mexican-Americans, bilingual program Mexican-Americans, monolingual program Anglos, and bilingual program Anglos. To establish the effects of the matched guises within each group a multivariate analysis of variance was used. The analysis measured the effects of sex differences within each group on the three dependent variables (the three matched guises) and simultaneously measured the effects of the three guises as sources of variance (treating the guises as effects of repetition of the same measure). Since the main purpose of the matched-guise method is to determine the effect of different guises of the same speaker, Speech Variety IV was not included in this analysis.

The scores assigned to each of the matched guises and to Speech Variety IV were subjected to a univariate analysis of variance in order to determine whether the different groups of children assigned significantly different ratings to each of the three guises or to Speech Variety IV. In this univariate analysis of variance the three independent variables (sources of variances) were school (monolingual vs. bilingual), ethnic background (Mexican-American vs. Anglo), and sex.

Results

The results of the investigation are shown in tables D-1 to D-9 (Appendix D). Tables D-1 to D-8 show the mean ratings received by Guises I, II, and III, and Speech Variety IV for each of the eight characteristics on which they were judged. Table D-9 shows the mean ratings for the total scores received by Guises I, II, and III, and Speech Variety IV for all eight characteristics. The means are presented for the monolingual and bilingual school subjects broken down by ethnic background and sex.

While the multivariate analysis of variance used to determine the effects of the matched guises (see Appendix E) included an analysis of sex differences, only the main effects of the matched guises will be discussed here. If any guise (I, II, or III) received a significantly higher ($p < .05$) rating than another by any of the groups included (bilingual vs. monolingual, Mexican-American vs. Anglo), the mean ratings given by that particular group are enclosed in solid-line boxes in the tables in Appendix D.

In discussing the univariate analysis of variance employed to ascertain the effects of school, ethnic background, and sex on the evaluation of Guises I, II, and III and Speech Variety IV (see Appendix F), we shall again consider only main effects. Significantly higher ratings ($p < .05$) assigned to any of the matched guises or to Speech Variety IV by monolingual- vs. bilingual-school students, or Mexican-American vs. Anglos, or boys vs. girls are indicated in Appendix D by a broken-line box around the mean scores of the particular group.

To summarize, a solid-line box indicates significantly higher scores assigned by the same subjects to different matched guises (I, II, III), whereas a broken-line box indicates significantly higher scores assigned by different subjects to the same guise (I, II, or III), or to Speech Variety IV. Or to put it still another way, in Appendix D a solid-line box indicates a significant difference between the vertical columns I, II, or III along the horizontal dimension of the tables. A broken-line box indicates a significant difference within each of the vertical columns I, II, III, or IV.

Turning our attention first to the significant effects of the matched guises, we find the following:

Table D-1: Mexican-Americans in the bilingual school rated Guise III (Spanish) highest of the three guises on Characteristic 1 (Very nice-Not nice at all). However, Anglos in the monolingual school rated Guise II (English/Anglicized Spanish) the highest on the same characteristic.

Table D-2: Mexican-Americans in the bilingual school rated Guise III highest on Characteristic 2 (Very handsome-Ugly).

Table D-3: Mexican-Americans in the bilingual school rated Guise III

highest on Characteristic 3 (Very happy-Sad). Anglos in the monolingual school rated the two English guises (I and II) higher than Guise III on the same characteristic.

Table D-4: No matched-guise effects appeared on Characteristic 4 (Works hard-Very lazy).

Table D-5: Mexican-American students in the bilingual school rated Guise III highest on Characteristic 5 (Very friendly-Frem However, Anglos in the monolingual school rated Guise II (Eng. nglicized Spanish) highest on he same characteristic.

Table D-6: No matched-guise effects appeared on Characteristic 6 (Very weak-Strong).

Table D-7: Mexican-Americans in the bilingual program rated Guise III highest on Characteristic 7 (Very smart-Dumb).

Table D-8: No matched-guise effects appeared on Characteristic 8 (Very dirty-Clean).

In summary, then, the matched-guise effects shown on the eight characteristics are the following:

Mexican-Americans in the bilingual program rated Guise III (Spanish) nicer (Table D-1), handsomer (Table D-2), happier (Table D-3), friendlier (Table D-5), and smarter (Table D-7), than Guises I and II (the two English guises).

Anglos in the monolingual program rated Guises I and II happier (Table D-3) than Guise III, and they rated Guise II (English/Anglicized Spanish) nicer (Table D-1) and friendlier (Table D-5) than Guises I and III.

Neither the Anglos in the bilingual program nor the Mexican-Americans in the monolingual program indicated any main effects due to the different guises.

Table D-9: When the total ratings are considered, Anglos in both the monolingual and the bilingual program gave higher ratings to Guises I and II (the English guises), whereas the Mexican-Americans in the bilingual program gave higher ratings to Guise III (Spanish). The Mexican-Americans in the monolingual program showed no total preferences due to the effect of any one guise.

Though the ratings assigned to Speech Variety IV (Hispanicized English) were not included in the analysis, they are presented in tables D-1 to D-9 for the sake of comparison. A glance at the tables--especially D-9--w uf ce to indicate the very obvious fact that Speech Variety IV was by and large rated lower than Guises I, II, and III by most subjects. The same finding is confirmed by Table D-10, which summarizes the total mean scores given to Guises I, II, and III and Speech Variety IV by Mexican-American and Anglo students in the two schools. The only group that did not give the lowest rating to Speech Variety IV were the Anglos in the bilingual school, who evidently gave Speech Variety IV approximately the same rating as Guise III (Spanish).

Figures D-1 to D-4 summarize the main results of the investigation. Again, our concern for the time being is only with the differences along the horizontal dimension, which show the effects due to the matched guises (I, II, and III) and the comparative rating of Speech Variety IV. Thus, Figure D-3 indicates clearly the upgrading of Guise III (Spanish) by the Mexican-Americans in the bilingual (but not the monolingual) school and the relative downgrading of Speech Variety IV (Hispanicized English) by Mexican-Americans in both schools. Figure D-4 shows the relative upgrading of Guises I and II (the English guises) over Guise III by the Anglos and their relative downgrading of both Guise III and Speech Variety IV.

The results of the analysis that determined whether the same guise or variety was viewed differently by different subjects may be stated as follows:

Table D-1: Guise III (Spanish) was rated nicer by the Mexican-Americans than by the Anglos. Speech Variety IV (Hispanicized English) was rated nicer by the bilingual-school students than by the monolingual-school students.

Table D-2: All Mexican-Americans and the bilingual-school students rated Guise III handsomer than did the Anglo monolingual-school students. The bilingual-school students also rated Speech Variety IV handsomer than did the monolingual-school students.

Table D-3: The bilingual-school students rated both Guise II

(English/Anglicized Spanish) and Guise III happier than did the monolingual-school students. The Mexican-Americans rated Speech Variety IV happier than did the Anglos.

Table D-4: Females rated Guise I (English/Spanish) as working harder than did males.

Table D-5: Mexican-Americans rated Guise III friendlier than did the Anglos.

Tables D-6, D-7, D-8: No main effects.

To summarize: Guise III (Spanish) was rated nicer (Table D-1) by Mexican-Americans, handsomer (Table D-2) by bilingual-school students, happier (Table D-3) by bilingual-school students, and friendlier (Table D-5) by Mexican-Americans.

Speech Variety IV (Hispanicized English) was rated nicer (Table D-1) by bilingual-school students, handsomer (Table D-2) by bilingual-school students, and happier (Table D-3) by Mexican-Americans.

Guise II (English/Anglicized Spanish) was rated happier by bilingual-school students, and Guise I (English/Spanish) was rated as working harder by females.

Table D-9: In the overall ratings the Mexican-Americans rated Guise III (Spanish) higher than did the Anglos. In other words, the only significant differences that appear in Table D-10 or in figures D-1 to D-4 along the vertical dimension are the ratings given to Guise III by the Mexican-Americans as opposed to those given by the Anglos.

Discussion

To draw too many conclusions from the rating given Speech Variety IV (Hispanicized English) as opposed to those given Guises I, II, and III is probably hazardous simply because Speech Variety IV was represented by a different group of speakers. Nevertheless it seems quite obvious that at least the Mexican-American subjects did not evaluate Hispanicized English the same as Spanish. Of the four speech varieties used in this study, it was evidently Hispanicized English that was perceived as the "lower-class" dialect. The relative downgrading of Hispanicized English

by Mexican-Americans on such characteristics as nice (Table D-1), happy (Table D-3), and handsome (Table D-2) is quite obvious.

As far as the matched-guise effects are concerned, we find a very definite upgrading of Spanish by Mexican-Americans in the bilingual school and a somewhat less pronounced upgrading of English by Anglos in the monolingual school. For two characteristics (nice, friendly) this upgrading was reserved for Guise II (English/Anglicized Spanish), the more "English" of the two English guises. The upgrading of English by Anglos in the bilingual school appears only in total scores. Somewhat surprising is the total absence of any significant matched-guise effects among the Mexican-Americans in the monolingual school.

The analysis of the subjects' evaluation of each guise and Speech Variety IV, in which the matched-guise method was not used, shows a general tendency on the part of the Mexican-Americans and the bilingual-school students to rate Spanish and in some instances Hispanicized English somewhat more favorably than either Anglos or monolingual-school students.

It is interesting to note that no speech variety was rated with a mean score lower than 8 by any group on any single characteristic (on a scale on which scores could vary from 4 to 16). Thus it is perhaps more accurate to speak of the relative upgrading of one variety than of the downgrading of the others. The relative upgrading of the more "English" varieties by Anglos and of "Spanish" by Mexican-Americans for characteristics like nice, handsome, happy, and friendly is probably to be expected among third graders. No doubt it reflects their positive self-image and their sense of belonging to the group they are upgrading. It should be noted also that genuine matched-guise effects were not obtained on such characteristics as works hard-very lazy (Table D-4), strong-very weak (Table D-6), or clean-very dirty (Table D-8), the three characteristics most likely to reflect stereotypes and prejudices held by the subjects.

Two facts are particularly noteworthy: (a) the upgrading of the speech varieties characteristic of the subject's own ethnic group seems somewhat less pronounced among the Anglos in the bilingual program (matched-guise effects appear only in total scores and not in individual characteristics); and (b) the matched-guise effects show no upgrading of

Spanish whatsoever among the Mexican-Americans in the monolingual school. In other words, there seems to be indeed some evidence that the Mexican-American children in the bilingual school have a positive attitude toward Spanish and Spanish-speaking people that is absent among the Mexican-Americans in the monolingual school. The results of this study also seem to be confirmed by the findings of the internal evaluator of the bilingual program, who used the Cross-cultural Attitude Inventory (Jackson & Klinger, 1971) to assess the attitudes of this study's Mexican-American subjects toward Mexican-American culture. He reports that "the findings of the Cross-cultural Attitude Inventory showed differences in favor of the bilingual group with respect to attitude toward Mexican-American culture" (Cohen, forthcoming).

The more positive attitude toward Spanish among the Mexican-Americans in the bilingual school could, of course, be the result of factors that led them initially to choose a bilingual program rather than a result of the bilingual program itself. Above all, it could be the result of parental attitudes toward Spanish, parental consent having been one of the prerequisites for a student's assignment to the bilingual program. It is, therefore, of particular interest that a survey of language orientation undertaken in 1971 by the internal evaluator of the bilingual education program (Cohen, 1971; Cohen, forthcoming) showed that originally there were no significant differences in attitudes toward the use of Spanish between the parents of the Mexican-American children in the bilingual school and the parents of those in the monolingual school. In other words, we seem justified in positing bilingual education as the cause for the greater appreciation of Spanish by the Mexican-American children in the bilingual school.

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APPENDIX A

Scripts Recorded by the Speakers of Guises I, II, and III, and Speech Variety IV

SPEAKER 1

Guise I: English and Spanish

My cousin is coming from Los Angeles to visit me this Saturday. I plan to take him to Las Vegas. We will probably spend several days there and then drive to Santa Fe, New Mexico, to see our grandparents.

Guise II: English/Anglicized Spanisn

I am going to San Jose to see my friends Bill and Maria. Bill is a student at San Mateo High School, and Maria teaches Spanish at the high school. Then, I will drive down to Santa Barbara to see a football game.

Guise III: Spanish

Este fin de semana vamos mis amigos y yo a una fiesta de quince años. La fiesta es de mi prima Elena. Habrá música y un ambiente muy alegre. También habrá mucho para beber y comer.

SPEAKER 2

Guise I: English and Spanish

My uncle from Arizona will come to California this Christmas for my sister's wedding. My grandparents from El Paso will also be coming. My sister is very excited because nearly all of the family will be at her wedding.

Guise II: English/Anglicized Spanish

Charles was born in Monterey, California. When he was in high school, his family moved to San Mateo. He attended Aragon High School, and after he graduated he decided to go to college and study biology.

Guise III: Spanish

Viene mi primo de Texas para pasar las vacaciones conmigo. Pienso llevarlo a conocer a San Francisco. Él se interesa en conocer el Barrio Chino, la Universidad de California en Berkeley, y el famoso puente "Golden Gate."

SPEAKER 3

Guise I: English and Spanish

Tomorrow is my birthday, and my grandparents from Santa Cruz are coming to visit me. My married sister, who lives in San Diego, will not be able to come. My older brother, who lives in Sacramento, will not be able to come either.

Guise II: English/Anglicized Spanish

I am going fishing this weekend with my cousin Daniel from San Carlos. The last time we went we only caught three fish. Maybe this time we'll have better luck when we go deep sea fishing off the Monterey coast.

Guise III: Spanish

Después de mis clases voy con mi primo a cenar en casa de Alberto. Vamos mucho a su casa porque su madre nos estima mucho, y aparte de eso, ella es una cocinera muy buena. Esta noche va a preparar carne asada.

SPEAKER 4

Guise I: English and Spanish

Next week is the big rodeo in San Mateo. There will be many participants from various states, but most of them will be from California and Arizona. The rodeo will last one week, and there will be square dancing every night.

Guise II: English/Anglicized Spanish

My sister is getting married this Sunday in Santa Barbara. My mother and I will drive down on Friday and spend some time with my brother, who is in the army and is stationed in Monterey.

Guise III: Spanish

Siempre me ha gustado la música, sobre todo la música folklórica. Como sé tocar la guitarra, aprecio mucho la música latina especialmente la música popular de Veracruz. Tengo una colección muy grande de discos de casi todos los paises de Latinoamérica.

Speech Variety IV: Hispanicized English

SPEAKER 5

Several of my friends are going to a dance this Saturday in San Bruno. Two new groups from San Francisco will be playing. I'm very disappointed because I can't go since I sprained my ankle yesterday playing football. The doctor said that I had to stay in bed for several days.

SPEAKER 6

I hope to spend Christmas this year with my brother and his wife Marta in Pasadena. My mother and father would also like to go, but they have to stay at home with my grandfather because he has been ill recently.

SPEAKER 7

My sister Carmen enjoys helping my mother in the kitchen. She says that she wants to be a good cook when she gets married. Tonight she is preparing enchiladas and a surprise dish from Puerto Rico. I trust that her surprise will not be too surprising.

SPEAKER 8

I will not be able to go to see my friends in San Carlos this weekend. I have to stay and help my father paint the house. We will probably finish the work in three or four days if the weather permits us.

APPENDIX B

Answer Sheet Used by Subjects

1.	Very Nice	Nice	Not So Nice	Not Nice At All
2.	Very Handsome	Handsome	Not So Handsome	Ugly
3.	Very Happy	Happy	Not So Happy	Sad
4.	Very Lazy	Lazy	Not So Lazy	Works Hard
5.	Very Friendly	Friendly	Not So Friendly	Enemy
6.	Very Weak	Weak	Not So Weak	Strong
7.	Very Smart	Smart	Not So Smart	Dumb
8.	Very Dirty	Dirty	Not So Dirty	Clean

Note: On the answer sheet, in line with usual semantic-differential test practice, the sequence from positive to negative connotation was not kept uniform for all items.

APPENDIX C: SAMPLE OF SUMMARY RATING SHEET

Student_____ Race_____ Sex_____ School_____ Grade_____

Characteristic:	Guise I Eng.(Span.) Speaker 1	2	3	4	Total	Guise II Eng.(Ang.Span.) Speaker 1	2	3	4	Total	Guise III Spanish Speaker 1	2	3	4	Total	Speech Variety IV Hispan.Eng. Speaker 1a	2a	3a	4a	Total
1	3	4	4	4	15	3	3	4	4	14	3	4	4	4	15	2	3	4	2	11
2	2	2	3	3	10	2	2	3	3	10	3	3	3	3	12	2	2	1	2	7
3	4	3	3	3	13	3	3	3	1	10	3	3	3	3	12	1	2	1	1	5
4	3	2	2	1	8	3	4	2	2	11	2	2	1	1	6	4	2	3	1	10
5	4	4	1	4	13	3	3	4	2	12	1	3	4	3	11	3	2	2	3	10
6	1	1	1	2	5	2	4	1	2	9	3	3	3	2	11	3	4	3	3	13
7	4	4	3	4	15	3	3	4	2	12	3	3	3	3	12	3	3	4	2	12
8	4	4	4	4	16	3	3	4	2	12	3	3	4	4	14	3	3	4	3	13
Total Score:					95					90					93					81

APPENDIX D: MEAN SCORES AND STANDARD DEVIATIONS FOR GUISES I, II, AND III, AND SPEECH VARIETY IV BY EIGHT CHARACTERISTICS

Table D-1

Characteristic 1 (Very nice - Not nice at all)

		I Eng.(Span.)	II Eng.(Ang.Span.)	III Spanish	IV Hispan.Eng.
Bilingual School					
Mexican-American					
Male (N=12)	$\bar{X}$	13.25	13.33	14.17	12.58
	SD	2.01	1.92	1.70	1.88
Female (N=5)	$\bar{X}$	12.80	14.40	14.40	12.00
	SD	1.09	1.52	1.34	1.58
Anglo					
Male (N=4)	$\bar{X}$	13.50	13.75	11.50	11.00
	SD	1.73	1.50	3.32	1.41
Female (N=6)	$\bar{X}$	12.67	13.50	11.67	11.50
	SD	1.21	1.05	1.63	1.64
Monolingual School					
Mexican-American					
Male (N=10)	$\bar{X}$	11.90	12.30	12.90	10.60
	SD	1.85	1.49	1.37	2.50
Female (N=10)	$\bar{X}$	11.50	11.80	12.60	10.50
	SD	2.37	2.90	3.10	2.46
Anglo					
Male (N=4)	$\bar{X}$	11.00	13.00	9.50	9.75
	SD	3.16	3.46	3.11	2.50
Female (N=7)	$\bar{X}$	13.00	14.14	12.57	11.29
	SD	1.00	1.77	2.37	1.38

Table D-2

Characteristic 2 (Very handsome - Ugly)

		I Eng.(Span.)	II Eng.(Ang.Span.)	III Spanish	IV Hispan.Eng.
Bilingual School					
Mexican-American					
Male	$\bar{X}$	10.42	11.33	12.50	9.42
(N=12)	SD	2.35	2.64	2.32	1.68
Female	$\bar{X}$	12.20	14.20	14.00	11.40
(N=5)	SD	0.84	1.48	1.58	0.89
Anglo					
Male	$\bar{X}$	12.50	11.50	10.00	10.50
(N=4)	SD	1.29	1.73	2.71	1.91
Female	$\bar{X}$	11.50	12.17	10.83	10.83
(N=6)	SD	0.84	1.47	1.47	1.47
Monolingual School					
Mexican-American					
Male	$\bar{X}$	11.20	10.40	11.20	9.00
(N=10)	SD	2.90	2.91	2.82	1.76
Female	$\bar{X}$	10.70	10.30	10.80	9.10
(N=10)	SD	2.26	2.21	2.39	1.79
Anglo					
Male	$\bar{X}$	10.75	12.00	8.50	10.00
(N=4)	SD	2.36	2.16	3.42	2.71
Female	$\bar{X}$	11.14	11.29	10.43	9.71
(N=7)	SD	1.86	1.89	3.10	1.80

Table D-3

Characteristic 3 (Very happy - Sad)

	I Eng.(Span.)	II Eng.(Ang.Span.)	III Spanish	IV Hispan.Eng.
Bilingual School				
Mexican-American				
Male $\bar{X}$	11.83	12.17	14.00	8.75
(N=12) SD	2.82	2.52	2.26	1.48
Female $\bar{X}$	12.00	13.20	14.20	9.40
(N=5) SD	0.71	2.17	1.30	1.14
Anglo				
Male $\bar{X}$	12.00	12.25	10.50	8.50
(N=4) SD	2.45	1.50	3.00	2.38
Female $\bar{X}$	10.83	12.67	11.33	7.50
(N=6) SD	0.75	1.63	2.25	1.52
Monolingual School				
Mexican-American				
Male $\bar{X}$	11.40	11.40	11.90	9.00
(N=10) SD	1.78	2.22	2.18	2.21
Female $\bar{X}$	11.40	11.20	10.40	9.30
(N=10) SD	2.55	2.35	2.22	1.95
Anglo				
Male $\bar{X}$	10.50	11.50	8.25	8.00
(N=4) SD	2.89	2.38	1.71	1.63
Female $\bar{X}$	12.71	10.43	10.14	7.86
(N=7) SD	2.56	2.37	2.48	2.27

Table D-4

Characteristic 4 (Very lazy - Works hard)

		I Eng.(Span.)	II Eng.(Ang.Span.)	III Spanish	IV Hispan.Eng.
Bilingual School					
Mexican-American					
Male	$\bar{X}$	13.08	12.17	12.92	12.17
(N=12)	SD	1.98	2.95	1.83	2.59
Female	$\bar{X}$	13.60	13.60	13.20	13.80
(N=5)	SD	3.91	3.91	4.09	3.19
Anglo					
Male	$\bar{X}$	11.50	12.75	9.75	12.00
(N=4)	SD	1.00	0.50	3.50	0.82
Female	$\bar{X}$	14.17	13.67	12.33	13.00
(N=6)	SD	1.47	0.82	1.63	2.00
Monolingual School					
Mexican-American					
Male	$\bar{X}$	12.30	12.40	12.20	11.70
(N=10)	SD	2.45	2.59	1.48	2.06
Female	$\bar{X}$	13.10	12.30	12.60	13.10
(N=10)	SD	2.02	3.68	2.63	2.56
Anglo					
Male	$\bar{X}$	12.25	12.75	12.75	12.25
(N=4)	SD	2.63	1.71	1.71	1.71
Female	$\bar{X}$	14.14	13.57	12.29	12.43
(N=7)	SD	1.95	2.07	1.50	1.99

Table D-5

Characteristic 5 (Very friendly - Enemy)

	I Eng.(Span.)	II Eng.(Ang.Span.)	III Spanish	IV Hispan.Eng.
Bilingual School				
Mexican-American				
Male $\bar{X}$	12.50	12.17	14.25	11.17
(N=12) SD	2.15	1.53	1.76	2.21
Female $\bar{X}$	13.20	13.80	14.80	12.20
(N=5) SD	1.48	0.84	1.64	1.92
Anglo				
Male $\bar{X}$	13.00	12.00	10.25	11.75
(N=4) SD	1.41	2.00	2.63	1.50
Female $\bar{X}$	12.50	13.67	12.33	12.00
(N=6) SD	2.07	1.37	1.03	2.10
Monolingual School				
Mexican-American				
Male $\bar{X}$	12.50	12.90	12.40	9.90
(N=10) SD	2.01	2.77	2.32	2.56
Female $\bar{X}$	12.30	11.80	12.00	12.00
(N=10) SD	1.83	2.35	2.83	1.76
Anglo				
Male $\bar{X}$	11.25	12.50	10.75	10.75
(N=4) SD	0.96	2.65	4.50	1.89
Female $\bar{X}$	12.86	13.57	12.14	11.43
(N=7) SD	1.95	1.27	2.03	2.37

Table D-6

Characteristic 6 (Very weak - Strong)

	I Eng.(Span.)	II Eng.(Ang.Span.)	III Spanish	IV Hispan.Eng.
Bilingual School				
Mexican-American				
Male $\bar{X}$	12.50	11.17	11.67	11.08
(N=12) SD	2.07	3.04	2.31	2.06
Female $\bar{X}$	11.80	11.60	11.60	11.00
(N=5) SD	3.83	5.68	4.28	4.42
Anglo				
Male $\bar{X}$	11.00	11.50	10.00	11.50
(N=4) SD	2.71	0.58	2.16	1.91
Female $\bar{X}$	13.33	14.33	11.83	12.00
(N=6) SD	2.50	0.52	2.32	1.26
Monolingual School				
Mexican-American				
Male $\bar{X}$	11.90	12.60	12.30	11.90
(N=10) SD	2.18	1.84	1.95	1.97
Female $\bar{X}$	12.20	11.40	12.20	12.00
(N=10) SD	2.30	3.34	3.19	1.89
Anglo				
Male $\bar{X}$	15.00	14.25	13.75	14.00
(N=4) SD	1.41	2.87	1.89	1.41
Female $\bar{X}$	13.71	13.00	12.71	11.00
(N=7) SD	1.89	1.83	1.89	2.16

Table D-7

Characteristic 7 (Very smart - Dumb)

	I Eng.(Span.)	II Eng.(Ang.Span.)	III Spanish	IV Hispan.Eng.
Bilingual School				
Mexican-American				
Male $\bar{X}$	10.50	11.25	12.00	10.50
(N=12) SD	1.57	1.86	1.65	1.45
Female $\bar{X}$	12.60	13.00	13.40	12.60
(N=5) SD	1.14	1.73	2.41	1.82
Anglo				
Male $\bar{X}$	11.75	11.25	10.25	10.75
(N=4) SD	1.71	2.63	3.20	2.06
Female $\bar{X}$	12.00	12.83	11.67	12.67
(N=6) SD	1.09	0.98	1.86	2.66
Monolingual School				
Mexican-American				
Male $\bar{X}$	11.80	12.20	11.50	9.80
(N=10) SD	2.15	1.62	2.88	2.04
Female $\bar{X}$	10.20	11.30	10.50	10.20
(N=10) SD	2.49	2.58	1.96	2.39
Anglo				
Male $\bar{X}$	11.75	11.75	10.00	11.25
(N=4) SD	2.87	2.50	2.94	3.30
Female $\bar{X}$	13.43	12.29	11.86	10.57
(N=7) SD	1.27	1.98	2.34	3.10

Table D-8

Characteristic 8 (Very dirty - Clean)

	I Eng.(Span.)	II Eng.(Ang.Span.)	III Spanish	IV Hispan.Eng.
Bilingual School				
Mexican-American				
Male $\bar{X}$	12.58	13.75	14.25	13.00
(N=12) SD	2.31	2.14	1.91	3.19
Female $\bar{X}$	13.00	13.20	12.20	12.40
(N=5) SD	3.67	4.21	5.21	3.78
Anglo				
Male $\bar{X}$	13.00	13.50	12.75	13.50
(N=4) SD	2.58	1.29	0.96	1.91
Female $\bar{X}$	13.17	14.33	12.17	13.00
(N=6) SD	2.86	1.63	2.48	2.00
Monolingual School				
Mexican-American				
Male $\bar{X}$	13.30	14.00	13.40	11.80
(N=10) SD	2.31	2.00	3.27	1.55
Female $\bar{X}$	12.70	13.90	14.10	12.50
(N=10) SD	3.13	3.07	2.13	2.46
Anglo				
Male $\bar{X}$	14.25	14.00	11.75	13.50
(N=4) SD	1.71	3.37	3.20	1.29
Female $\bar{X}$	14.86	14.00	14.14	12.57
(N=7) SD	1.46	1.29	2.19	2.15

Table D-9

Total Scores for Eight Characteristics

		I Eng.(Span.)	II Eng.(Ang.Span.)	III Spanish	IV Hispan.Eng.
Bilingual School					
Mexican-American					
Male	$\bar{X}$	96.75	97.33	104.92	88.67
(N=12)	SD	11.30	7.91	7.27	9.42
Female	$\bar{X}$	101.20	107.00	107.80	94.80
(N=5)	SD	9.52	15.86	15.85	10.71
Anglo					
Male	$\bar{X}$	98.25	98.25	85.25	89.50
(N=4)	SD	4.79	9.81	19.86	8.43
Female	$\bar{X}$	100.17	107.17	94.17	92.50
(N=6)	SD	8.33	5.78	8.93	8.94
Monolingual School					
Mexican-American					
Male	$\bar{X}$	96.30	98.20	97.80	83.70
(N=10)	SD	11.69	11.42	11.82	8.62
Female	$\bar{X}$	93.10	94.00	95.20	88.70
(N=10)	SD	15.78	16.11	12.99	11.23
Anglo					
Male	$\bar{X}$	96.50	101.75	85.00	89.50
(N=4)	SD	14.93	20.02	21.23	12.48
Female	$\bar{X}$	105.86	102.29	96.29	86.86
(N=7)	SD	7.78	9.96	13.88	14.31

Table D-10

Total Mean Scores for Eight Characteristics

	Guise I	Guise II	Guise III	Speech Variety IV
Bilingual School				
Mexican-American	98.06	100.18	105.76	90.47
Anglo	100.94	103.60	90.60	91.30
Monolingual School				
Mexican-American	94.70	96.10	96.50	86.20
Anglo	102.45	102.09	92.18	87.82

Figs. D-1 to D-4. Comparison of Total Mean Scores for Eight Characteristics: Mexican-Americans and Anglos in Monolingual and Bilingual Schools

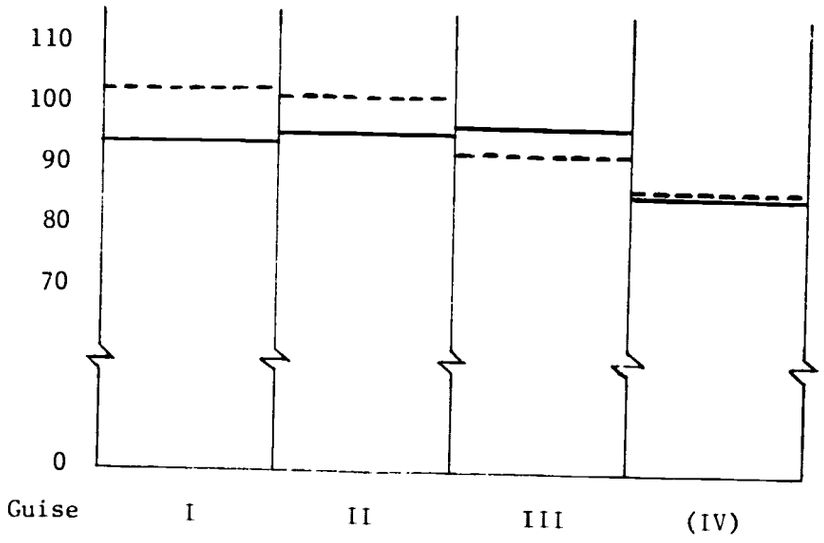

Fig. D-1. Monolingual School: Mexican-Americans and Anglos.

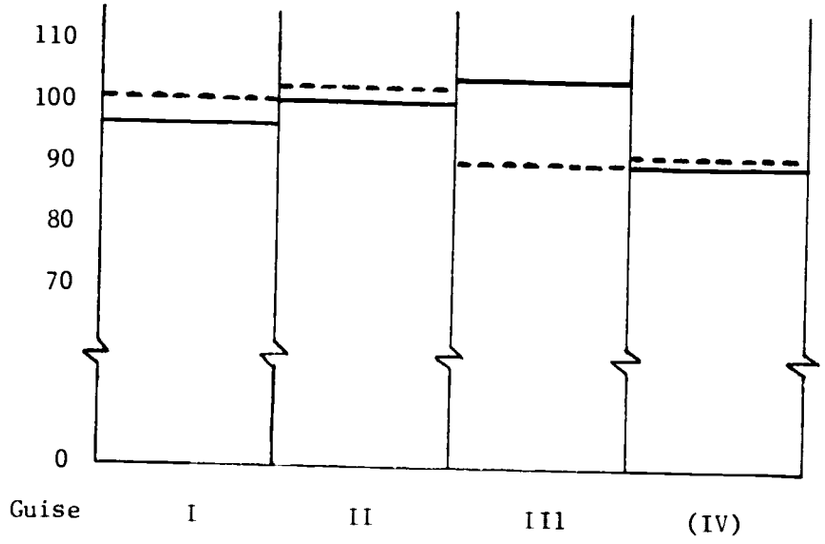

Fig. D-2. Bilingual School: Mexican-Americans and Anglos.

——— Mexican-American

– – – – Anglo

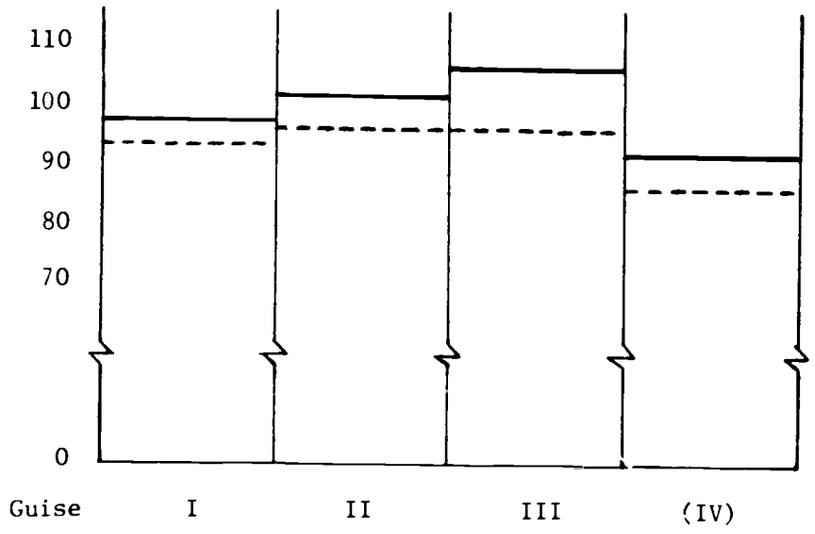

Fig. D-3. Mexican-Americans: Monolingual and Bilingual School

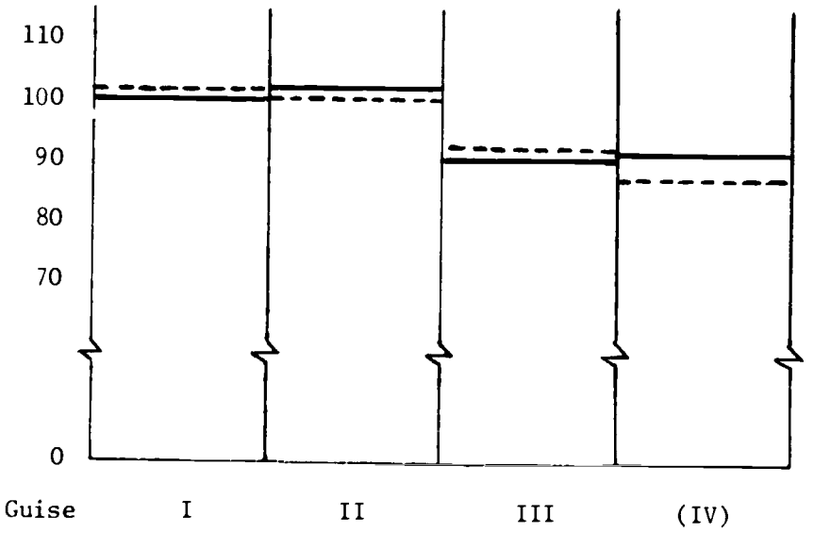

Fig. D-4. Anglos: Monlingual and Bilingual Schools

——— Bilingual School

– – – – Monolingual School

APPENDIX E

Table E-1

Multivariate Analysis of Variance: Effects of Guise and Sex on Ratings (8 Characteristics and Total Score) by Mexican-American Students

Source	Sum of Squares Error Term	Sum of Squares Factor	df	F
1 (Very nice--Not nice at all)				
Sex		2.55	1,15	0.12
Guise	668.80	552.79	2,14	5.79*
Sex and Guise	668.80	225.26	2,14	2.36
2 (Very handsome--Ugly)				
Sex		133.49	1,15	3.93
Guise	1595.73	2389.15	2,14	10.48**
Sex and Guise	1595.73	217.38	2,14	0.95
3 (Very happy--Sad)				
Sex		6.92	1,15	0.21
Guise	2956.73	5775.21	2,14	13.67**
Sex and Guise	2956.73	104.62	2,14	0.25
4 (Very lazy - Works hard)				
Sex		17.60	1,15	0.30
Guise	3666.03	848.91	2,14	0.27
Sex and Guise	3666.03	931.74	2,14	0.42
5 (Very friendly--Enemy)				
Sex		29.34	1,15	1.61
Guise	1264.33	1638.20	2,14	9.07*
Sex and Guise	1264.33	179.37	2,14	0.99
6 (Very weak--Strong)				
Sex		0.39	1,15	0.00
Guise	1679.13	374.69	2,14	1.56
Sex and Guise	1679.13	176.57	2,14	0.74
7 (Very smart--Dumb)				
Sex		97.28	1,15	5.83*
Guise	1251.60	1157.58	2,14	6.47*
Sex and Guise	1251.60	107.22	2,14	0.60
8 (Very dirty--Clean)				
Sex		16.82	1,15	0.25
Guise	861.93	121.54	2,14	0.99
Sex and Guise	861.93	570.48	2,14	4.63*
9 (Total Score)				
Sex		1020.00	1,15	1.23
Guise	495895.07	564983.99	2,14	7.98*
Sex and Guise	495895.07	145120.58	2,14	2.05

*$p < .05$

**$p < .01$

Table E-2

Multivariate Analysis of Variance: Effects of Guise and Sex on Ratings (8 Characteristics and Total Score) by Anglo Students

	Sum of Squares			
Source	Error Term	Factor	df	F
1 (Very nice--Not nice at all)				
Sex		2.02	1,8	0.12
Guise	507.33	499.67	2,7	3.45
Sex and Guise	507.33	48.47	2,7	0.33
2 (Very handsome--Ugly)				
Sex		0.60	1,8	0.04
Guise	276.00	350.40	2,7	4.44
Sex and Guise	276.00	113.60	2,7	1.44
3 (Very happy--Sad)				
Sex		0.02	1,8	0.00
Guise	310.96	378.64	2,7	4.26
Sex and Guise	310.96	183.44	2,7	2.06
4 (Very lazy--Works hard)				
Sex		91.27	1,8	8.61**
Guise	374.50	498.10	2,7	4.65
Sex and Guise	374.50	458.90	2,7	4.29
5 (Very friendly--Enemy)				
Sex		25.35	1,8	1.42
Guise	552.79	590.01	2,7	3.73
Sex and Guise	552.79	324.41	2,7	2.05
6 (Very weak--Strong)				
Sex		117.60	1,8	7.81*
Guise	1651.50	1879.50	2,7	3.98
Sex and Guise	1651.50	129.90	2,7	0.27
7 (Very smart--Dumb)				
Sex		25.35	1,8	1.44
Guise	1273.50	359.10	2,7	0.99
Sex and Guise	1273.50	167.90	2,7	0.46
8 (Very dirty--Clean)				
Sex		0.42	1,8	0.02
Guise	2218.79	1095.21	2,7	1.73
Sex and Guise	2218.79	281.21	2,7	0.44
9 (Total Score)				
Sex		936.15	1,8	1.52
Guise	418480.00	684499.20	2,7	5.72*
Sex and Guise	418480.00	116659.20	2,7	0.97

*$p < .05$

**$p < .01$

APPENDIX F

Table F-1

Univariate Analysis of Variance by Ethnic Background (Race), Sex, and School for Ratings Given to Guises I, II, III, and Speech Variety IV on Characteristic 1 (Very nice - Not nice at all)

	Guise and source	Sum of squares	df	Mean square	F
I	Eng.(Span.)				
	Mean	7675.62	1	7675.62	2099.65
	Race	0.40	1	0.40	0.11
	Sex	0.08	1	0.08	0.02
	School	17.94	1	17.94	4.91*
	RXS	3.14	1	3.14	0.86
	RXSC	0.18	1	0.18	0.05
	SXSC	6.43	1	6.43	1.76
	RXSXSC	5.99	1	5.99	1.64
	Error	182.78	50	3.65	
II	Eng.(Ang.Span.)				
	Mean	8727.96	1	8727.96	2051.96
	Race	5.07	1	5.07	1.19
	Sex	1.65	1	1.65	0.39
	School	10.82	1	10.82	2.54
	RXS	0.08	1	0.08	0.02
	RXSC	9.62	1	9.62	2.26
	SXSC	0.02	1	0.02	0.00
	RXSXSC	6.77	1	6.77	1.59
	Error	212.67	50	4.25	
III	Spanish				
	Mean	7627.63	1	7627.63	1518.15
	Race	60.29	1	60.29	12.00**
	Sex	7.78	1	7.78	1.55
	School	13.40	1	13.40	2.67
	RXS	8.45	1	8.45	1.68
	RXSC	3.01	1	3.01	0.60
	SXSC	4.35	1	4.35	0.86
	RXSXSC	9.14	1	9.14	1.82
	Error	251.21	50	5.02	
IV	Hispan.Eng.				
	Mean	6156.93	1	6156.93	1469.47
	School	18.93	1	18.93	4.52*
	Race	3.57	1	3.57	0.85
	Sex	1.41	1	1.41	0.34
	SCXR	3.15	1	3.15	0.75
	SCXS	1.78	1	1.78	0.42
	RXS	5.72	1	5.72	1.36
	SCXRXS	0.24	1	0.24	0.06
	Error	209.49	50	4.19	

*$p < .05$

**$p < .01$

Table F-2

Univariate Analysis of Variance by Ethnic Background (Race), Sex, and School for Ratings given to Guises I, II, III, and Speech Variety IV on Characteristic 2 (Very handsome - Ugly)

	Guise and source	Sum of squares	df	Mean square	F
I	Eng.(Span.)				
	Mean	6322.34	1	6322.33	1365.37
	Race	1.46	1	1.46	0.32
	Sex	0.35	1	0.35	0.08
	School	6.17	1	6.17	1.33
	RXS	2.76	1	2.76	0.60
	RXSC	1.49	1	1.49	0.32
	SXSC	0.61	1	0.61	0.13
	RXSXSC	10.45	1	10.45	2.26
	Error	231.52	50	4.63	
II	Eng.(Ang.Span.)				
	Mean	6716.58	1	6716.58	1285.57
	Race	0.40	1	0.40	0.08
	Sex	5.72	1	5.72	1.09
	School	21.03	1	21.03	4.02
	RXS	6.13	1	6.13	1.17
	RXSC	15.33	1	15.33	2.93
	SXSC	14.62	1	14.62	2.80
	RXSXSC	1.94	1	1.94	0.37
	Error	261.23	50	5.22	
III	Spanish				
	Mean	6025.54	1	6025.54	948.16
	Race	59.06	1	59.06	9.29**
	Sex	11.53	1	11.53	1.81
	School	31.73	1	31.73	4.99*
	RXS	2.14	1	2.14	0.34
	RXSC	5.21	1	5.21	0.82
	SXSC	0.50	1	0.50	0.08
	RXSXSC	6.94	1	6.94	1.09
	Error	317.75	50	6.35	
IV	Hispan.Eng.				
	Mean	4945.86	1	4945.85	1602.90
	School	14.54	1	14.54	4.71*
	Race	3.51	1	3.51	1.14
	Sex	3.51	1	3.51	1.14
	SCXR	0.93	1	0.93	0.30
	SCXS	4.84	1	4.84	1.57
	RXS	3.20	1	3.20	1.04
	SCXRXS	1.24	1	1.24	0.40
	Error	154.28	50	3.08	

*$p < .05$

**$p < .01$

Table F-3

Univariate Analysis of Variance by Ethnic Background (Race), Sex, and School for Ratings Given to Guises I, II, III, and Speech Variety IV On Characteristic 3 (Very happy - Sad)

	Guise and Source	Sum of squares	df	Mean square	F
I	Eng.(Span.)				
	Mean	6644.01	1	6644.01	1269.26
	Race	0.26	1	0.26	0.05
	Sex	1.14	1	1.14	0.22
	School	0.33	1	0.33	0.06
	RXS	0.60	1	0.60	0.11
	RXSC	1.55	1	1.55	0.29
	SXSC	7.99	1	7.99	1.53
	RXSXSC	9.73	1	9.73	1.86
	Error	261.73	50	5.23	
II	Eng.(Ang.Span.)				
	Mean	6953.05	1	6953.05	1372.69
	Race	0.97	1	0.97	0.19
	Sex	0.02	1	0.02	0.00
	School	25.61	1	25.61	5.06*
	RXS	1.71	1	1.71	0.34
	RXSC	0.04	1	0.04	0.01
	SXSC	5.73	1	5.73	1.13
	RXSXSC	0.05	1	0.05	0.01
	Error	253.26	50	5.06	
III	Spanish				
	Mean	6366.71	1	6366.70	1283.40
	Race	81.64	1	81.64	16.46**
	Sex	1.57	1	1.57	0.32
	School	67.48	1	67.48	13.60**
	RXS	12.54	1	12.54	2.53
	RXSC	4.68	1	4.68	0.94
	SXSC	0.32	1	0.32	0.06
	RXSXSC	5.89	1	5.89	1.19
	Error	248.04	50	4.96	
IV	Hispan.Eng.				
	Mean	3608.96	1	3608.96	1031.68
	School	0.00	1	0.00	0.00
	Race	16.32	1	16.32	4.66*
	Sex	0.03	1	0.03	0.01
	SCXR	0.07	1	0.07	0.02
	SCXS	0.20	1	0.20	0.06
	RXS	3.39	1	3.39	0.97
	SCXRXS	1.13	1	1.13	0.32
	Error	174.91	50	3.50	

*$p < .05$

**$p < .01$

Table F-4

Univariate Aanalysis of Variance by Ethnic Background (Race), Sex, and School for Ratings Given to Guises I, II, III, and Speech Variety IV on Characteristic 4 (Very lazy - Works hard)

Guise and source		Sum of squares	df	Mean square	F
I	Eng.(Span.)				
	Mean	8388.97	1	8388.96	1660.80
	Race	0.00	1	0.00	0.00
	Sex	26.71	1	26.71	5.29*
	School	0.24	1	0.24	0.05
	RXS	8.13	1	8.13	1.61
	RXSC	3.12	1	3.12	0.62
	SXSC	0.19	1	0.19	0.04
	RXSXSC	0.86	1	0.86	0.17
	Error	252.56	50	5.05	
II	Eng.(Ang.Span.)				
	Mean	8238.51	1	8238.51	1090.00
	Race	3.99	1	3.99	0.53
	Sex	7.30	1	7.30	0.96
	School	1.04	1	1.04	0.14
	RXS	0.13	1	0.13	0.02
	RXSC	0.73	1	0.73	0.10
	SXSC	2.05	1	2.05	0.27
	RXSXSC	1.60	1	1.60	0.21
	Error	377.91	50	7.56	
III	Spanish				
	Mean	7433.92	1	7433.92	1440.80
	Race	11.15	1	11.15	2.16
	Sex	6.07	1	6.07	1.18
	School	2.07	1	2.07	0.40
	RXS	1.59	1	1.59	0.31
	RXSC	14.10	1	14.10	2.73
	SXSC	6.64	1	6.64	1.29
	RXSXSC	7.74	1	7.74	1.50
	Error	257.98	50	5.16	
IV	Hispan.Eng.				
	Mean	7803.84	1	7803.83	1467.27
	School	1.71	1	1.71	0.32
	Race	0.91	1	0.91	0.17
	Sex	13.72	1	13.72	2.58
	SCXR	0.55	1	0.55	0.10
	SCXS	0.86	1	0.86	0.16
	RXS	2.66	1	2.66	0.50
	SCXRXS	0.27	1	0.27	0.05
	Error	265.93	50	5.32	

*$p < .05$

Table F-5

Univariate Analysis of Variance by Ethnic Background (Race), Sex, and School for Ratings Given to Guises I, II, III, and Speech Variety IV on Characteristic 5 (Very friendly - Enemy)

	Guise and source	Sum of squares	df	Mean square	F
I	Eng.(Span.)				
	Mean	7751.39	1	7751.39	2159.07
	Race	0.62	1	0.62	0.17
	Sex	2.00	1	2.00	0.56
	School	4.07	1	4.07	1.13
	RXS	0.28	1	0.28	0.08
	RXSC	0.19	1	0.19	0.05
	SXSC	1.13	1	1.13	0.31
	RXSXSC	6.99	1	6.99	1.95
	Error	179.51	50	3.59	
II	Eng.(Ang.Span.)				
	Mean	8111.29	1	8111.28	2037.86
	Race	0.89	1	0.89	0.22
	Sex	8.28	1	8.28	2.08
	School	0.57	1	0.57	0.14
	RXS	3.76	1	3.76	0.94
	RXSC	2.16	1	2.16	0.54
	SXSC	8.57	1	8.57	2.15
	RXSXSC	3.53	1	3.53	0.89
	Error	199.01	50	3.98	
III	Spanish				
	Mean	7569.58	1	7569.58	1365.66
	Race	49.18	1	49.18	8.87**
	Sex	10.17	1	10.17	1.83
	School	14.57	1	14.57	2.63
	RXS	8.56	1	8.56	1.54
	RXSC	19.02	1	19.02	3.43
	SXSC	2.08	1	2.08	0.37
	RXSXSC	0.05	1	0.05	0.01
	Error	277.14	50	5.54	
IV	Hispan.Eng.				
	Mean	6432.71	1	6432.71	1407.10
	School	7.14	1	7.14	1.56
	Race	0.34	1	0.34	0.07
	Sex	12.76	1	12.76	2.79
	SCXR	0.01	1	0.01	0.00
	SCXS	1.73	1	1.73	0.38
	RXS	3.76	1	3.76	0.82
	SCXRXS	0.31	1	0.31	0.07
	Error	228.58	50	4.57	

**$p < .01$

Table F-6

Univariate Analysis of Variance by Ethnic Background (Race), Sex, and School for Ratings Given to Guises I, II, III, and Speech Variety IV on Characteristic 6 (Very weak - Strong)

	Guise and source	Sum of squares	df	Mean square	F
I	Eng.(Span.)				
	Mean	7960.37	1	7960.37	1436.57
	Race	16.71	1	16.71	3.01
	Sex	0.32	1	0.32	0.06
	School	13.52	1	13.52	2.44
	RXS	1.62	1	1.62	0.29
	RXSC	16.23	1	16.23	2.93
	SXSC	5.30	1	5.30	0.96
	RXSXSC	16.50	1	16.50	2.98
	Error	277.06	50	5.54	
II	Eng.(Ang.Span.)				
	Mean	7711.62	1	7711.62	943.32
	Race	30.86	1	30.86	3.77
	Sex	0.51	1	0.51	0.06
	School	5.43	1	5.43	0.66
	RXS	4.27	1	4.27	0.52
	RXSC	0.03	1	0.03	0.00
	SXSC	25.28	1	25.28	3.09
	RXSXSC	4.64	1	4.64	0.57
	Error	408.75	50	8.17	
III	Spanish				
	Mean	7137.95	1	7137.94	1079.61
	Race	0.22	1	0.22	0.03
	Sex	0.31	1	0.31	0.05
	School	26.60	1	26.60	4.02
	RXS	0.72	1	0.72	0.11
	RXSC	8.93	1	8.93	1.35
	SXSC	6.51	1	6.51	0.98
	RXSXSC	6.22	1	6.22	0.94
	Error	330.58	50	6.61	
IV	Hispan.Eng.				
	Mean	6904.94	1	6904.94	1410.23
	School	8.51	1	8.51	1.74
	Race	4.90	1	4.90	1.00
	Sex	4.77	1	4.77	0.97
	SCXR	0.08	1	0.08	0.01
	SCXS	8.51	1	8.51	1.74
	RXS	4.90	1	4,90	1.00
	SCXRXS	10.49	1	10.49	2.14
	Error	244.82	50	4.90	

Table F-7

Univariate Analysis of Variance by Ethnic Background (Race), Sex, and School for Ratings Given to Guises I, II, III, and Speech Variety IV on Characteristic 7 (Very smart - Dumb)

	Guise and source	Sum of squares	df	Mean square	F
I	Eng.(Span.)				
	Mean	6838.63	1	6838.63	1914.36
	Race	11.34	1	11.34	3.17
	Sex	4.56	1	4.56	1.28
	School	0.08	1	0.08	0.02
	RXS	1.58	1	1.58	0.44
	RXSC	4.94	1	4.94	1.38
	SXSC	3.99	1	3.99	1.12
	RXSXSC	20.34	1	20.34	5.69*
	Error	178.61	50	3.57	
II	Eng.(Ang.Span.)				
	Mean	7108.96	1	7108.96	1762.16
	Race	0.10	1	0.10	0.03
	Sex	6.82	1	6.82	1.69
	School	0.49	1	0.49	0.12
	RXS	1.24	1	1.24	0.31
	RXSC	0.38	1	0.38	0.09
	SXSC	10.57	1	10.57	2.62
	RXSXSC	1.99	1	1.99	0.49
	Error	201.71	50	4.03	
III	Spanish				
	Mean	6429.68	1	6429.68	1194.48
	Race	10.17	1	10.17	1.89
	Sex	10.44	1	10.44	1.94
	School	9.26	1	9.26	1.72
	RXS	6.39	1	6.39	1.19
	RXSC	8.63	1	8.63	1.60
	SXSC	2.97	1	2.97	0.55
	RXSXSC	6.24	1	6.24	1.16
	Error	269.14	50	5.38	
IV	Hispan.Eng.				
	Mean	6035.95	1	6035.94	1143.40
	School	17.05	1	17.05	3.23
	Race	3.53	1	3.53	0.67
	Sex	10.81	1	10.81	2.05
	SCXR	1.75	1	1.75	0.33
	SCXS	14.27	1	14.27	2.70
	RXS	1.23	1	1.23	0.23
	SCXRXS	0.62	1	0.62	0.12
	Error	263.95	50	5.28	

*$p < .05$

Table F-8

Univariate Analysis of Variance by Ethnic Background (Race), Sex, and School for Ratings Given to Guises I, II, III, and Speech Variety IV on Characteristic 7 (Very dirty - Clean)

	Guise and source	Sum of squares	df	Mean square	F
I	Eng.(Span.)				
	Mean	8831.95	1	8831.95	1331.89
	Race	10.53	1	10.53	1.59
	Sex	0.27	1	0.27	0.04
	School	8.72	1	8.72	1.31
	RXS	0.71	1	0.71	0.11
	RXSC	4.93	1	4.93	0.74
	SXSC	0.26	1	0.26	0.04
	RXSXSC	1.64	1	1.64	0.25
	Error	331.56	50	6.63	
II	Eng.(Ang.Span.)				
	Mean	9475.76	1	9475.75	1557.06
	Race	0.75	1	0.75	0.12
	Sex	0.03	1	0.03	0.00
	School	0.96	1	0.96	0.16
	RXS	1.70	1	1.70	0.28
	RXSC	0.47	1	0.47	0.08
	SXSC	0.11	1	0.11	0.02
	RXSXSC	1.27	1	1.27	0.21
	Error	304.28	50	6.08	
III	Spanish				
	Mean	8488.61	1	8488.60	1118.27
	Race	7.63	1	7.63	1.00
	Sex	0.16	1	0.16	0.02
	School	3.17	1	3.17	0.42
	RXS	7.72	1	7.72	1.02
	RXSC	0.00	1	0.00	0.00
	SXSC	25.36	1	25.36	3.34
	RXSXSC	0.04	1	0.04	0.00
	Error	379.54	50	7.59	
IV	Hispan.Eng.				
	Mean	8090.18	1	8090.17	1309.03
	School	1.81	1	1.81	0.29
	Race	6.38	1	6.38	1.03
	Sex	1.36	1	1.36	0.22
	SCXR	0.35	1	0.35	0.06
	SCXS	0.59	1	0.59	0.09
	RXS	1.81	1	1.81	0.29
	SCXRXS	2.31	1	2.31	0.37
	Error	309.01	50	6.18	

Table F-9

Univariate Analysis of Variance by Ethnic Background (Race), Sex, and School for Ratings Given to Guises I, II, III, and Speech Variety IV

	Guise and source	Sum of squares	df	Mean square	F
I	Eng.(Span.)				
	Mean	480439.11	1	480439.06	3593.15
	Race	139.38	1	139.38	1.04
	Sex	121.32	1	121.32	0.91
	School	16.43	1	16.43	0.12
	RXS	77.72	1	77.72	0.58
	RXSC	120.67	1	120.67	0.90
	SXSC	0.03	1	0.03	0.00
	RXSXSC	176.14	1	176.14	1.32
	Error	6685.49	50	133.71	
II	Eng.(Ang.Span.)				
	Mean	502463.07	1	502463.06	3368.60
	Race	129.09	1	129.09	0.86
	Sex	172.16	1	172.16	1.15
	School	141.26	1	141.26	0.95
	RXS	12.29	1	12.29	0.08
	RXSC	89.42	1	89.42	0.60
	SXSC	382.84	1	382.84	2.57
	RXSXSC	23.28	1	23.28	0.16
	Error	7458.03	50	149.16	
III	Spanish				
	Mean	454341.11	1	454341.06	2687.79
	Race	1567.29	1	1567.29	9.27**
	Sex	324.60	1	324.60	1.92
	School	246.38	1	246.38	1.46
	RXS	306.89	1	306.89	1.81
	RXSC	360.40	1	360.40	2.13
	SXSC	7.50	1	7.50	0.04
	RXSXSC	47.69	1	47.69	0.28
	Error	8451.93	50	169.04	
IV	Hispan.Eng.				
	Mean	394564.59	1	394564.56	3557.18
	School	215.96	1	215.96	1.95
	Race	4.80	1	4.80	0.04
	Sex	102.12	1	102.12	0.92
	SCXR	22.75	1	22.75	0.20
	SCXS	35.51	1	35.51	0.32
	RXS	89.82	1	89.82	0.81
	SCXRXS	15.73	1	15.73	0.14
	Error	5546.02	50	110.92	

**$p < .01$