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Development of a Short Acculturation Scale for Hispanics

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This article reports the development of a short (12-item) acculturation scale for Hispanics. Separate factor analyses of the responses of 363 Hispanics and 228 non-Hispanic whites produced three factors: "Language Use," "Media," and "Ethnic Social Relations." The 12-item scale (explaining 67.6% of the variance for Hispanics) correlated highly with the following validation criteria: respondents' generation, length of residence in the U.S., age at arrival, ethnic self-identification, and with an acculturation index. The first factor consists of only five items and explains 54.5% of the variance while maintaining strong correlations with the various criteria. The validity and reliability coefficients for this new short scale are comparable to those obtained for other published scales. Separate validations for Mexican Americans and Central Americans showed similar results.

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As a minority group, Hispanics are exposed to the mainstream cultural patterns of the United States and modifications in their values, norms, attitudes and behaviors may be expected to occur because of this contact. This process of changes in behavior and values by individuals has been labeled "acculturation" (Gordon, 1964) and refers to the culture learning that occurs when immigrants come in contact with a new group, nation, or culture (Berry, 1980; Dohrenwend & Smith, 1962).

The measurement of acculturation is important not only as a way of identifying individual or personality differences (Torres-Matruillo, 1980) but also because it has been reported to be related to other important variables. Acculturation has been found to be associated with a person's mental health status (Golding, Burnam, Timbers, Escobar & Karno, 1985; Griffith, 1983; Szapocznik & Kurtines, 1980; Szapocznik, Scopetta, Kurtines & Aranalde, 1978); levels of social support available (Griffith & Villavicencio, 1985); deviancy (Berry & Annis, 1974); alcoholism and drug use (Graves, 1967; Padilla, Padilla, Ramirez, Morales & Olmedo, 1977); political and social attitudes (Alva, 1985; Kranau, Green & Valencia-Weber, 1982); risk of coronary heart disease (Reed, McGee, Cohen, Yano, Syme, & Feinleib, 1982) and, suicide (Hatcher & Hatcher, 1975).

Several acculturation scales for Hispanics are already available in the literature but they have a number of limitations. Most have been created for use with one specific Hispanic subgroup (e.g., Deyo, Diehl, Hazuda & Stern, 1985 for Mexican Americans; Szapocznik et al., 1978 for Cubans; Cuellar, Harris & Jasso, 1980 for Mexican Americans; Olmedo, Martinez & Martinez, 1978 for Chicanos) or they lack appropriate or extensive psychometric analyses (e.g., Triandis, Kashima, Hui, Lisansky & Marin, 1982; Deyo, Diehl, Hazuda & Stern, 1985). An additional problem of these scales has been the use of sociodemographic characteristics as a measurement rather than as a correlate of acculturation. This latter problem is found in scales where the validation criterion (e.g., generation) is included in the actual scale that is being validated producing spuriously high correlations between criterion and scale. Furthermore, some authors (e.g., Gordon, 1964, 1978; Olmedo, 1979; Teske & Nelson, 1976) suggest that those sociodemographic indices measure only one aspect of acculturation (assimilation—or the total identification with the dominant culture).

This article reports the steps taken in the development of an acculturation scale for Hispanics that obviates the problems of the previous scales while maintaining good levels of validity and re-

liability. A shortened version of this acculturation scale that can be used in other research involving Hispanic subjects is also discussed.

METHOD

Subjects

Respondents were 363 Hispanics and 228 non-Hispanic whites who agreed to be interviewed or to answer the questionnaire. Of our Hispanic sample, 44% ($N=160$) were Mexican Americans, 6% ($N=21$) were Cuban Americans, 47% ($N=175$) were "other Hispanics" (145 of them being Central Americans), and 2% ($N=7$) were Puerto Ricans. Hispanic and white non-Hispanic respondents were similar in terms of their sociodemographic characteristics including mean age (31.2 years for Hispanics and 38.8 years for non-Hispanics), and mean level of education (12.3 years for Hispanics and 14.7 years for non-Hispanics). A total of 62% of the Hispanic respondents and 57% of the non-Hispanics were females. On the average, the immigrant Hispanics had lived 14.7 years in the United States although a significant number of all Hispanic respondents (70%) were foreign born. The age of the Hispanic respondents ranged between 15 and 75 years (standard deviation of 11.56).

Materials

Subjects were presented with a 16-page questionnaire that included items measuring behavioral acculturation, demographic questions, and cultural values (the findings related to cultural values are reported in Marin, Sabogal, Otero-Sabogal, Marin, & Perez-Stable, 1986).

The 17 behavioral acculturation items were related to acculturative contact and participation (Berry, Trimble & Olmedo, 1986) and measured proficiency and preferences for speaking a given language in a number of settings (e.g., as a child, at home, with friends, at school/work, and while thinking); use and preference of English/Spanish language media; and preferred ethnicity of those with whom the respondent interacts (e.g., people at parties, close friends, neighbors, friends of own child). These items were selected from previous acculturation scales (e.g., Cuelar et al., 1980; Padilla, 1980; Szapocznik et al., 1978; Triandis et al., 1982) although in most cases significant changes were introduced in the wording of the items. The answering scale used by

the subjects was modified for all items in order to make it relevant to all Hispanic subgroups. Respondents answered the language items on a five-point Likert-type scale ranging from "Only Spanish" to "Only English."

Demographic questions asked for the respondent's gender, age, marital status, educational level, income, length of residence in the United States and generation. Additionally, one item was designed to measure the respondent's ethnic self identification (a five-point Likert-type scale ranging from "Very Latino/Hispanic" to "Very American").

Translation. Items were developed in either English or Spanish and were then translated into the other language through the double-translation procedure (Brislin, Lonner & Thorndike, 1973) with the help of two translators. Versions were also decentered (Werner & Campbell, 1970) and pretested in English and in Spanish. The Spanish version was also reviewed by Spanish-speakers of different nationalities in order to eliminate parochial wording.

Procedures

The questionnaires were self-administered and respondents answered them individually or in groups in various locations of San Francisco, California; with a small number coming from Miami, Florida and Green Bay, Wisconsin. Convenient samples of approximately equal sizes were obtained from schools and colleges, clinic waiting rooms, places of employment, and during meetings of religious associations. Most respondents were sampled in the Mission District of San Francisco, a heavily Hispanic area with large concentrations of Mexican and Central Americans. All respondents answered anonymously and could answer the questionnaire in English or in Spanish. Thirty of the Hispanic subjects received the questionnaire in the mail and sent their answers back also by mail. The study was described to the participants as a survey of people's general opinions and ways of behaving.

RESULTS

Factor Analyses

The responses given by our Hispanic respondents to the behavioral acculturation items were submitted to an exploratory principal components factor analysis (Anastasi, 1982; Berry, Lon-

ner & Thorndike, 1973) with varimax rotation and 15 iterations. The same analysis was also conducted with the non-Hispanic responses. This is a procedure similar to those utilized by previous researchers when developing acculturation scales for Hispanics (e.g., Szapocznik et al., 1978; Triandis et al., 1982).

The Hispanic factor analysis produced three factors with eigenvalues higher than 1.0 that together accounted for 67.6% of the total variance. The first factor accounted for 54.5% of the variance and was labelled "Language Use and Ethnic Loyalty." This first factor was made up of seven items that measured language use as an adult and as a child, language used when interacting with friends or at work, the ethnicity of lovers, and the ethnicity of neighbors when growing up. The second factor ("Media") accounted for 7% of the variance and included four items measuring use of and preference for electronic and printed media. The third factor ("Ethnic Social Relations") accounted for 6.1% of the variance and included four items measuring the ethnicity of friends for self and for one's children.

The non-Hispanic factor analysis also produced three factors with eigenvalues greater than 1.0 that accounted for 64.4% of the total variance. The first factor accounted for 40% of the variance and was labelled "Language Use" and included items similar to those of the Hispanic first factor. The second factor ("Ethnic Social Relations") accounted for 14.1% of the variance and included six items measuring preferred ethnicity of friends, neighbors, lovers, etc. The third factor ("Media") accounted for 10.3% and included three items dealing with preferences in the electronic media.

Using a weight of .60 as a cutoff score and deleting items that loaded heavily in more than one factor, we identified 12 items that have similar factor structures for Hispanics and for non-Hispanics: five items from the "Language Use" factor; three items from the "Media" factor; and, four items from the "Ethnic Social Relations" factor. Table 1 presents the loadings for these 12 items among Hispanics and non-Hispanics and Appendix A shows the actual wording of all items (in both Spanish and English).

Subsequent psychometric analyses are reported here only for the 12 items that show similarity of factor structures for our two ethnic groups. Although most authors have only considered the Hispanic factor structure in developing previous acculturation scales, comparisons between Hispanics and Anglos as a validation procedure should only be made between items that share the same factor structures (Brislin et al., 1973; Olmedo, 1979; Triandis, 1972).

Table 1
Factor Analyses Weights for Hispanics and Non-Hispanics on the 12 Common Items

Item theme	"Language Use/ Ethnic Loyalty"		"Media"		"Ethnic Social Relations"	
	Hispanics	Non- Hispanics	Hispanics	Non- Hispanics	Hispanics	Non- Hispanics
1. Language spoken	.70	.64	.50	.09	.18	.31
2. Language as child	.71	.63	.12	.16	.13	-.26
3. Language at home	.66	.88	.36	.15	.10	.13
4. Thinking Language	.69	.85	.48	.11	.18	.19
5. Language with friends	.68	.64	.49	.35	.22	.47
6. Language TV	.34	.24	.78	.81	.19	.23

7. Language radio	.27	.02	.78	.76	.23	.28
8. Preferred media	.21	.09	.81	.85	.25	.10
9. Ethnicity friends	.53	.15	.22	.13	.61	.81
10. Ethnicity parties	.36	.01	.22	.02	.69	.84
11. Ethnicity visitors	.51	.19	.13	.17	.66	.78
12. Ethnicity children's friends	-.07	.00	.34	.04	.71	.73

Reliability

The Alpha coefficient for the 12 common items was .92. The five common items loading heavily on the first factor ("Language") had an alpha of .90. The three items in the second factor ("Media") had an alpha of .86 while the four items in factor three ("Ethnic Social Relations") had an alpha of .78. Table 2 presents a summary of the alpha coefficients.

Validity

A number of analyses were conducted in order to check the validity of the 12-item scale and of each factor in measuring acculturation. The subject's total score on the scale and on each factor were correlated with the subject's generation, proportion of time spent living in the United States, and the subject's own evaluation of his or her level of acculturation. The power of the scale or of each factor in discriminating between Hispanics and non-Hispanics was also evaluated as part of the analysis of its validity. Table 2 presents a summary of the results discussed below.

Generation. Most previous acculturation scales (Cuellar et al., 1980; Deyo et al., 1985; Olmedo & Padilla, 1978; Padilla, 1980; Szapocznik et al., 1978; Triandis et al., 1982) have utilized the respondent's generation as a validation criterion of acculturation. The assumption (Olmedo, 1979) is that "individual acculturation should be a direct function of amount of exposure to the host culture for . . . the particular subgroup to which the individual belongs (e.g., generational distance from time of immigration)." (p. 1068).

Generation was computed by asking respondents to indicate their place of birth together with that of their parents and maternal and paternal grandparents (a procedure similar to that utilized by Cuellar et al., 1980). Our sample included 251 (70%) first generation Hispanics (respondent and all parents and grandparents born outside the United States—coded as one); 73 (20%) second generation Hispanics (respondent born in the U.S. and all parents and grandparents in Latin America—coded as two); 26 (7%) second generation mixed (respondent and one parent born in the United States all other born in Latin America—coded as three); 3 (0.8%) third generation mixed (respondent, parents and at least one grandparent born in the U.S.—coded as four); and, 9 (2.5%) third generation Hispanics (respondent and all parents and grandparents born in the U.S.—coded as five).

The correlation between the subject's total score on the 12

items making up the acculturation scale and the respondent's own generational level was .65 ($p < .001$). Correlations were also computed between the individual's overall score on the items making up each of the factors and the respondent's generation. The results showed a correlation of .69 ($p < .001$) for the items in the first factor ("Language"); .43 ($p < .001$) for the items in the second factor ("Media"); and .53 ($p < .001$) for the third factor ("Ethnic Social Relations").

A *t*-test was also conducted on the respondent's total acculturation score for subjects in their first ($N = 251$) and second generation ($N = 99$). Third generation respondents were excluded because of their low numbers ($N = 12$). The results showed that the 12-item scale significantly discriminated between first and second generation Hispanics. First generation Hispanics obtained a mean score of 2.37 while second generation Hispanics scored a mean of 3.42 ($t(303) = 13.74, p < .001$). The five common items of the first factor ("Language") also showed a significant difference between first ($M = 1.89$) and second ($M = 3.30$) generation Hispanics ($t(346) = 17.34, p < .001$). Similar analyses with the items making up the second ("Media") and third factors ("Ethnic Social Relations") showed equally significant results. First generation Hispanics scored differently ($M = 3.22$) from second generation respondents ($M = 4.29$) ($t(341) = 8.86, p < .001$) for the "Media" factor and for the "Ethnic Social Relations" factor ($M = 2.41$ for first generation and $M = 3.00$ for second generation, $t(309) = 8.09, p < .001$).

Length of residence in the United States. Another common way of testing the external validity of an acculturation scale is to assess the relationship between the acculturation score of the respondents and their length of residence in the United States (e.g., Szapocznik et al., 1978; Triandis et al., 1982). Since the actual length of residence in the U.S. varies as a function of the respondent's age, we preferred (like Triandis et al., 1982) to use as a validation criterion an index made up of the respondents' length of residence in the U.S. divided by their actual age. (This proportion showed a range between .028 and .972 with kurtosis = -1.40 and skewness = .36).

The responses to the 12-item scale showed a correlation of .70 ($p < .001$) with the residence index; .76 ($p < .001$) for the five items in the first factor ("Language"); .46 ($p < .001$) for the items in the second factor ("Media"); and, .50 ($p < .001$) for the items making up the third factor ("Ethnic Social Relations").

Subject's own evaluation. An additional criterion often used in

Table 2
Summary of Validity and Reliability Analyses

Criterion	all items	Factor 1 "Language"	Factor 2 "Media"	Factor 3 "Social Relations"
Reliability alpha	.92	.90	.86	.78
Validity				
Generation	.65	.69	.43	.53
Length of residence	.70	.76	.46	.50
Self-evaluation	.76	.74	.52	.66
Acculturative index	.83	.86	.60	.66
Age of arrival	-.69	-.72	-.58	-.46

Note: All correlations significant at $p < .001$.

the validation of acculturation scales is the correlation between the respondents' own evaluation of their level of acculturation and their responses to the actual scale. All respondents were asked to indicate how they would describe themselves on a Likert-type scale anchored as "Very Latino/Hispanic" (scored as 1) and "Very American" (scored as 5) and with "More Latino than American," "Almost fifty-fifty," and "More American than Latino" as intermediate points. Although some Hispanics may use a national referent (e.g., Mexican, Cuban) when asked to identify themselves in an open-ended question, it can be assumed that respondents with low levels of acculturation would choose the "Latino / Hispanic" label rather than the "American" pole when presented with this item.

The responses to the 12 items of the scale showed a correlation of .76 ($p < .001$) with the answers to this item. The five common items of factor one ("Language") correlated .74 ($p < .001$) with the same item while the items of factors two ("Media") and three ("Ethnic Social Relations") correlated .52 ($p < .001$) and .66 ($p < .001$) respectively.

Acculturative Index. The above three variables were combined into an acculturative index by multiplying the length of residence proportion by 4 and adding (generation-1) + (self-identification-1), so that each variable in the index had a range between 0 and 4 making the range of possible scores for the index between 0 (lowest) and 12 (highest). The 12 items of the scale correlated .83 ($p < .001$). The five common items of factor one ("Language") correlated .86 ($p < .001$) with this same index while the factor two items ("Media") correlated .60 ($p < .001$) and the factor three items ("Ethnic Social Relations") correlated .60 ($p < .001$).

Discrimination between ethnic groups. A fourth analysis of the validity of our acculturation scale consisted in establishing if it would differentiate between Hispanics and non-Hispanics on their responses to the various items. This procedure has been utilized in other validation studies (e.g., Cuellar, et al., 1980; Montgomery & Orozco, 1984; Triandis et al., 1982).

A *t*-test was conducted on the responses given by Hispanics and non-Hispanics to the 12 items of the scale. Results showed that non-Hispanics ($M = 4.63$) differed significantly from Hispanics ($M = 2.72$) in their answers to those items ($t(455) = 26.42$, $p < .001$). The five common items of factor one ("Language") also discriminated significantly between non-Hispanics ($M = 4.87$) and Hispanics ($M = 2.35$), ($t(582) = 36.27$, $p < .001$). The items making up factor two ("Media") also showed a statistically signif-

icant difference between Hispanics ($M = 3.57$) and non-Hispanics ($M = 4.87$) ($t(573) = 17.59, p < .001$). Finally, the factor three items ("Ethnic Social Relations") again showed statistically significant differences between Hispanics ($M = 2.62$) and non-Hispanics ($M = 4.15$) ($t(462) = 22.40, p < .001$).

Age of arrival in the United States. Another validation criterion often used is the age at which an immigrant arrived in the United States which is expected to correlate negatively with actual acculturation. The 12 items of the scale correlated $-.69$ ($p < .001$) with this variable. The five common items of factor one ("Language") correlated $-.72$ ($p < .001$) with age of arrival while the correlations were $-.58$ ($p < .001$) with the factor two items ("Media") and $-.46$ ($p < .001$) with the factor three ("Ethnic Social Relations") items.

Additional Analyses

Separate validation analyses were carried out for Mexican Americans and for Central Americans, the two largest Hispanic subgroups in our sample. Table 3 summarizes the results of these analyses which show that the 12 items in the scale as well as those items making up the first factor ("Language") produce strong correlations with the validation criteria in both Mexican American and Central American subjects.

Acculturation scores were computed separately for Hispanic males and females in order to test the acculturation model proposed by Szapocznik et al. (1978) that suggests that males and females acculturate at different levels. A t -test with the 12-item scale showed no significant differences between males ($M = 2.79$) and females ($M = 2.69$) ($t(315) = 1.07, n.s.$).

DISCUSSION

The acculturation scale for Hispanics presented in this study showed levels of reliability and validity comparable to those reported for previously published scales. With respect to reliability, for example, our scale produced an alpha coefficient of .92, which is similar to Cuellar et al.'s alpha of .88 with Mexican Americans or Szapocznik et al.'s .97 with Cubans in Miami. Validity coefficients of the various scales are difficult to compare because of differential methodologies but limited comparisons are possible. The correlation between the score on the acculturation scale and generation was .65 in this study which compares favorably with

Table 3
Summary of Validation of Scales for Mexican Americans and Central Americans

Criterion	Mexican Americans		Central Americans	
	all 12 items	Factor One items	all 12 items	Factor One items
Generation	.70	.72	.68	.71
Length of Residence	.73	.78	.72	.78
Self-Evaluation	.74	.74	.75	.74
Acculturative Index	.84	.86	.82	.85
Age of Arrival	-.72	-.73	-.72	-.75

Note: All correlations are significant at $p < .001$.

Montgomery and Orozco's (1984) work with the Cuellar et al. scale ($r = .62$). Furthermore, we used four different validation criteria and in general our scale does very well in each of them. It is important to note that by using more than a single validity indicator we have avoided many of the conceptual difficulties of previous studies (Garza & Gallegos, 1985).

As shown in Tables 2 and 3, the five items of factor one have reliability and validity coefficients that are basically the same as those of the 12-item scale as a whole. These results suggest that the five items of factor one (preceded by an asterisk in Appendix A) could be valid and reliable short acculturation scale that can be used with Hispanics within the context of a large study where acculturation is one of many measures to be included. A more complete understanding of acculturation can of course be obtained by using the 12 common items which include additional variables involved in acculturation and explain a larger proportion of the variance than the five common items of factor one.

The factors we extracted from these data are very similar to those of previous studies. For example, the significance of language in acculturation is also found in Cuellar et al.'s original study, where the language factor explains approximately 65% of the variance; in Montgomery and Orozco's (1984) work with the Cuellar et al. scale, where language explains approximately 45% of the variance; as well as in Padilla's (1980) scale, where language preference and use accounts for 74% of the larger factor labelled "Ethnic Loyalty." In our study, this language-based factor accounted for approximately 55% of the variance. This homogeneity of factor structures across studies can of course be due to the similarity in items utilized in the various scales, but it may also represent a significant variable (in terms of the high levels of variance explained) in the acculturation process of Hispanics. Furthermore, these findings should not be surprising in view of the reported significance of language in the self-identification of Hispanics (e.g., Giles, Llado, McKirnan & Taylor, 1979 for Puerto Ricans; Lopez, 1978 for Chicanos).

Another common factor in most studies consists of items measuring the preferred ethnicity of friends, neighbors, and significant others. This fact and the differences we found between Hispanics and non-Hispanics, are consistent with the hypothesized construct of allocentrism/ collectivism (e.g., Marin & Triandis, 1985) that characterizes Hispanics as particularly concerned with the needs, values, goals and points of view of members of the ingroup in contrast to individualistic cultures where the emphasis

is placed around the individual and his or her personal goals and needs. The fact that basic cultural values are being measured by these items, as opposed to behaviors as is the case in the language items, probably results in the lower amount of variance explained. These findings, however, are still of interest: 5% of variance explained in Cuellar et al.'s (1980) study, approximately 7% in Montgomery & Orozco's (1984) research, 6% in Padilla's (1980) study and 6% in the present study. It is noteworthy that this factor of preferred ethnicity for friends and other social relationships was also found to be of importance in the acculturation process of Hungarian immigrants in the Detroit area (Weinstock, 1964).

The preference for Spanish or English media was a significant factor in Triandis et al.'s (1982) study and was also important in our data (explaining 7% of the variance). This finding is not surprising since printed and electronic media can be perceived as helping maintain language fluency and Hispanic cultural traditions.

The lack of significant differences in acculturation between the genders is of interest since it contradicts Szapocznik et al.'s (1978) findings among Cubans in Miami. As suggested by Szapocznik (1986, personal communication) these differences may be due to variations in length of residence in the United States (in general longer for our sample than for Szapocznik, et al.'s) or to societal changes rapidly taking place among Hispanics. Our findings, however, agree with those of Montgomery and Orozco (1984) among Mexican Americans in Texas and with Padilla's (1980) findings among Mexican Americans in California.

The relationship between age and acculturation may also require further analysis since our data showed a fairly low negative correlation with age ($-.19$) while Montgomery and Orozco's (1984) data with Mexican Americans showed a somewhat stronger positive correlation ($.22$). The Szapocznik et al. (1978) results with Cubans, on the other hand, agree with our findings.

A final comment needs to be added regarding the limitations of our study. The Hispanic sample was primarily Mexican American and Central American in origin. We were unable to study Cubans, Puerto Ricans and South Americans in sufficient numbers and this fact limits the generalizability of the results. Our scale, however, was equally valid and reliable for Mexican Americans and for Central Americans (as shown in Table 3), which tempers the significance of this methodological shortcoming. Further research with other Hispanic subgroups is of course warranted to substantiate our results. An additional limitation that we

share with other studies that have developed acculturation scales for Hispanics, is the fact that the respondents were volunteers from a convenient sample, a fact that limits the representativeness of the findings in a given population. Nevertheless and irrespective of the above limitations, our scale is a very promising instrument to measure the acculturation levels of Hispanics given its brevity, its reliability, and its validity by at least four different criteria.

RESUMEN

Este artículo presenta los resultados del desarrollo de una escala de aculturación de 12 reactivos para hispanos. Se condujeron análisis factoriales por separado para 363 hispanos y 228 anglosajones. Los análisis arrojaron tres factores: Uso de Idioma, Medios de Comunicación y Relaciones Sociales Etnicas. La escala de 12 reactivos que explica un 67.6% de la varianza produjo índices altos de correlación con los siguientes criterios de validación: generación inmigracional del sujeto, número de años residiendo en los Estados Unidos, edad en la que llegó a los Estados Unidos, autoevaluación étnica y un índice de aculturación. El primer factor, que solo contiene cinco reactivos, explicó un 54.5% de la varianza y produjo correlaciones altas con los varios criterios de validación. Los coeficientes de validez y confiabilidad para esta escala son comparables a los que se encuentran en otras escalas publicadas de aculturación. Los análisis de validación con sujetos mexicoamericanos y centroamericanos produjeron resultados igualmente favorables.

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Appendix A
Wording of Items in Acculturation Scale

A. English

- * 1. In general, what language(s) do you read and speak?

1	2	3	4	5
Only Spanish	Spanish better than English	Both Equally	English better than Spanish	Only English

- * 2. What was the language(s) you used as a child?

1	2	3	4	5
Only Spanish	More Spanish than English	Both Equally	More English than Spanish	Only English

- * 3. What language(s) do you usually speak at home?

1	2	3	4	5
Only Spanish	More Spanish than English	Both Equally	More English than Spanish	Only English

- * 4. In which language(s) do you usually think?

1	2	3	4	5
Only Spanish	More Spanish than English	Both Equally	More English than Spanish	Only English

- * 5. What language(s) do you usually speak with your friends?

1	2	3	4	5
Only Spanish	More Spanish than English	Both Equally	More English than Spanish	Only English

Appendix A (continued)
Wording of Items in Acculturation Scale

6. In what language(s) are the T.V. programs you usually watch?

1	2	3	4	5
Only Spanish	More Spanish than English	Both Equally	More English than Spanish	Only English

7. In what language(s) are the radio program you usually listen to?

1	2	3	4	5
Only Spanish	More Spanish than English	Both Equally	More English than Spanish	Only English

8. In general, in what language(s) are the movies, T.V. and radio programs you *prefer* to watch and listen to?

1	2	3	4	5
Only Spanish	More Spanish than English	Both Equally	More English than Spanish	Only English

9. Your close friends are:

1	2	3	4	5
All Latinos/Hispanics	More Latinos than Americans	About Half & Half	More Americans than Latinos	All Americans

10. You prefer going to social gatherings/parties at which the people are:

1	2	3	4	5
All Latinos/Hispanics	More Latinos than Americans	About Half & Half	More Americans than Latinos	All Americans

Appendix A (continued)
Wording of Items in Acculturation Scale

11. The persons you visit or who visit you are:

1	2	3	4	5
All Latinos/ Hispanics	More Latinos than Americans	About Half & Half	More Americans than Latinos	All Americans

12. If you could choose your children's friends, you would want them to be:

1	2	3	4	5
All Latinos/ Hispanics	More Latinos than Americans	About Half & Half	More Americans than Latinos	All Americans

Spanish

* 1. Por lo general, qué idioma(s) leé y habla usted?

1	2	3	4	5
Solo Español	Español mejor que Inglés	Ambos por igual	Inglés mejor que Español	Solo Inglés

* 2. Cuál fué el idioma(s) que habló cuando era niño(a)?

1	2	3	4	5
Solo Español	Más Español que Inglés	Ambos por igual	Más Inglés que Español	Solo Inglés

* 3. Por lo general, en qué idioma(s) habla en su casa?

1	2	3	4	5
Solo Español	Más Español que Inglés	Ambos por igual	Más Inglés que Español	Solo Inglés

Appendix A (continued)
Wording of Items in Acculturation Scale

* 4. Por lo general, en qué idioma(s) piensa?

1	2	3	4	5
Solo Español	Más Español que Inglés	Ambos por igual	Más Inglés que Español	Solo Inglés

* 5. Por lo general en qué idioma(s) habla con sus amigos(as)?

1	2	3	4	5
Solo Español	Más Español que Inglés	Ambos por igual	Más Inglés que Español	Solo Inglés

6. Por lo general, en qué idioma(s) son los programas de televisión que usted ve?

1	2	3	4	5
Solo Español	Más Español que Inglés	Ambos por igual	Más Inglés que Español	Solo Inglés

7. Por lo general, en qué idioma(s) son los programas de radio que usted escucha?

1	2	3	4	5
Solo Español	Más Español que Inglés	Ambos por igual	Más Inglés que Español	Solo Inglés

8. Por lo general, en qué idioma(s) *prefiere* oír y ver películas, y programas de radio y televisión?

1	2	3	4	5
Solo Español	Más Español que Inglés	Ambos por igual	Más Inglés que Español	Solo Inglés

Appendix A (continued)
Wording of Items in Acculturation Scale

9. Sus amigos y amigas mas cercanos son:

1	2	3	4	5
Solo Latinos	Más Latinos que Americanos	Casi mitad y mitad	Más Americanos que Latinos	Solo Americanos

10. Usted prefiere ir a reuniones sociales/fiestas en las cuales las personas son:

1	2	3	4	5
Solo Latinas	Más Latinas que Americanas	Casi mitad y mitad	Más Americanas qué Latinas	Solo Americanas

11. Las personas que usted visita o que le visitan son:

1	2	3	4	5
Solo Latinas	Más Latinas que Americanas	Casi mitad y mitad	Más Americanas qué Latinas	Solo Americanas

12. Si usted pudiera escoger los amigos(as) de sus hijos(as), quisiera que ellos(as) fueran:

1	2	3	4	5
Solo Latinos	Más Latinos que Americanos	Casi mitad y mitad	Más Americanos que Latinos	Solo Americanos

Note: An asterisk indicates items making up the first factor (short scale)