Chapter 2
Hispanics

Overview

The Hispanic population in 2008 included 45.5 million (15.1%) of the estimated US population (U.S. Census Bureau, 2008). Hispanics represent the largest and fastest growing minority group. Hispanics come from more than 20 countries sharing a common language. The three largest ethnic identity groups of Hispanics in the United States are Mexican, Puerto Rican, and Cuban. Hispanics, with a median age of 27.6 years, are younger than the general population as a whole at 36.6 years. Hispanics may be of any race. In 2007, most Hispanics described themselves as White while a substantial number reported some other race (U.S. Census Bureau, 2008).

With the rapid increase of Hispanic groups entering the United States and interacting with the mainstream culture, the issues associated with acculturation are very relevant. While some individuals retain the language, behaviors, and values close to their culture of origin, others identify strongly with the values and standards of the mainstream culture. Most research on Hispanic Americans has focused on these acculturation processes. However, little attention has been paid to how the contextual factors such as immigration context, individual factors, and settlement affect the acculturation experience of Hispanic Americans (Cabassa, 2003). Further, a large number of studies have examined the relationship between psychosocial variables and acculturation. A few have focused on how the perceived discrimination and racism among Hispanic Americans related to the acculturation process.

In our review of measures, we did not find any measure that specifically focuses on race-related relationships between Hispanics and other minority groups or between Hispanics and members of the majority group. Therefore, this section will focus solely on intra-group measures that assess acculturation among Hispanic Americans. In a broad sense, acculturation is defined as the psychological and social changes that groups and individuals experience when they enter a new and different cultural context. Conceptually, two major theoretical frameworks dominate the acculturation patterns: unidimensional and bidimensional. Proponents of acculturation as a unidimensional construct consider the acculturating process as a zero-sum behavior or "linear" in which individuals move along a single continuum, ranging

from the immersion in one's culture of origin to the immersion in the dominant or host culture (Cabassa, 2003; Cuellar, Arnold, & Maldonado, 1995). Those who support the bidimensional perspective argue acculturation consists of two independent dimensions: maintenance of the native culture and adherence to the host culture (Cuellar et al., 1995; Marín & Gamba, 1996). Our review of acculturation scales is organized primarily by these dimensional structures. A third section deals with acculturative stress. A total of 16 scales are reviewed in this section.

Citations

Cabassa (2003)
Cuellar et al. (1995)
Marín and Gamba (1996)
U.S. Census Bureau (2008)

Unidimensional Scales

1. Short Acculturation Scale for Hispanics (Marin, Sabogal, Marin, Otero-Sabogal, & Perez-Stable, 1987)
2. Short Acculturation Scale for Hispanic Youth (SASH-Y) (Barona & Miller, 1994)
3. A Brief Acculturation Scale for Hispanics (Norris, Ford, & Bova, 1996)
4. Acculturation Index for Mexican Americans (Mainous, 1989)
5. The Los Angeles Epidemiologic Catchment Area (LAECA) Acculturation Scale (Burnman, Hough, Telles, & Escobar, 1987)
6. Acculturation Scale for Mexican Americans (Deyo Diehl, Hazuda, & Stern, 1985)
7. Children's Acculturation Scale (CAS) (Franco, 1983)

Bidimensional Scales

1. Bidimensional Acculturation Scale for Hispanics (BAS) (Marín & Gamba, 1996)
2. American and Puerto Rican Cultural Involvement Scales (Cortes, Rogler, & Malgady, 1994)
3. The Abbreviated Multidimensional Acculturation Scale (AMAS-ZABB) (Zea, Asner-Self, Birman, & Buki, 2003)
4. Acculturation Rating Scale (Montgomery, 1992)
5. Cultural Life Styles Inventory (Mendoza, 1989)
6. Acculturation Rating Scale for Mexican Americans-II: A Revision of the Original ARSMA Scale (Cuellar, Arnold, & Maldonado, 1995)
7. Psychological Acculturation Scale (PAS) (Tropp, Erkut, Coll, Alarcon, & Vazquez-Garcia, 1999)
8. Bicultural Involvement Questionnaire (Szapocznik, Kurtines, & Fernandez, 1980)

Acculturative Stress

1. The Societal, Attitudinal, Familial, and Environmental Acculturative Stress
   Scale (Chavez, Moran, Reid, & Lopez, 1997).

Unidimensional Scales

Short Acculturation Scale for Hispanics (Marin, Sabogal, Marin, Otero-Sabogal, & Perez-Stable, 1987)

The Short Acculturation Scale for Hispanics (SASH) assesses the behavioral and
cultural values aspects of acculturation.

Description: The 12-item SASH consists of three factors: (1) language use (five
items: 1–5); (2) media (three items: 6–8); and (3) ethnic social relations (four items:
9–12). The scale utilizes a 5-point Likert scale. For items assessing language and
media preference, the score ranges from *only Spanish* (1) to *only English* (5). For
items assessing ethnic social relations, the score ranges from *all Latinos/Hispanics*
(1) to *all Americans* (5). Items are summed across the 12 items and divided by the
number of items answered to achieve an overall average score. Total scores range
from 1 to 5. An overall average of 2.99 should be used to differentiate the less
acculturated respondents and the more acculturated respondents; a respondent is
less acculturated if the average score is between 1 and 2.99 and is more acculturated
if the average score is greater than 2.99. The mid-point in the scale should not be
interpreted to represent biculturalism. The authors do not provide instructions for
scoring subscales separately. Both English and Spanish versions were developed in
the original study. The scale is a self-administered questionnaire.

Sample: The original validation study conducted by the author included a sam-
ple of 363 Hispanics and 228 non-Hispanic Whites. Sixty-two percent of the
Hispanic respondents were females and 57% of the non-Hispanics were females.
The Hispanic sample was younger (31.2 years) than the non-Hispanic sample (38.8
years). The majority (70%) of the Hispanic respondents were foreign born.

Reliability: The coefficient alpha for the 12 items was .92. The alphas for the
subscales were: .90 for language, .86 for media, and .86 for ethnic social relations.

Validity: The 12-item scale has construct validity with the respondents' gen-
eration ($r = .65$), the length of residence in the United States ($r = .70$), ethnic
self-identification ($r = .76$), and the age at arrival ($r = -.69$). The language use
factor correlated positively with the respondent's generation ($r = .69$), the length
of residence in the United States ($r = .76$), ethnic self-identification ($r = .74$), and
negatively with the age of arrival ($r = -.72$). The media factor correlated positively
with the respondents' generation ($r = .43$), the length of residence in the United
States ($r = .46$), ethnic self-identification ($r = .52$), and negatively with the age
at arrival ($r = -.58$). The ethnic social relations factor correlated positively with
the respondents' generation ($r = .53$), the length of residence in the United States

($r = .50$), ethnic self-identification ($r = .66$), and negatively with the age at arrival ($r = -.46$). Discriminant validity was established using group mean differences; non-Hispanics ($x = 4.63$) differed significantly from Hispanics ($x = 2.72$) on the 12-item scale.

Comments: Other studies have found evidence that the scale has good psychometric properties with Hispanics of different origins. For example, the language subscale has good psychometric properties with alpha coefficient of .80 and higher across various Hispanic groups including Mexican Americans, Cuban Americans, Puerto Ricans, Dominicans, and Central and South Americans (Kali, Zayas, & Malgady, 2000; Norris et al., 1996; Wallen, Feldman, & Anliker, 2002; Alvelo, Collazo, & Rosario, 2001) as well as older Hispanics (Goodman & Silverstein, 2005; Juarbe, Turok, & Perez-Stable, 2002). The scale has been adapted for other populations (e.g., Dela Cruz, Padilla, & Agustin, 2000; Yoshioka, Gilbert, El-Bassel, & Baig-Amin, 2003).

Location: Marin, G., Sabogal, F., Marin, B.V., Otero-Sabogal, R., & Perez-Stable, E.J. (1987). Development of a short acculturation scale for Hispanics. *Hispanic Journal of Behavioral Sciences, 9*, 183–205.

Selected Publications

Alvelo, J., Collazo, A. A., & Rosario, D. (2001). Comprehensive assessment tools for Hispanics: Validation of the multi-problem screening inventory (MPSI) for Puerto Ricans. *Research on Social Work Practice, 11,* 699–724.

Cruz, F. A., Padilla, G. V., & Agustin, E. O. (2000). Adapting a measure of acculturation for cross-cultural research. *Journal of Transcultural Nursing, 11*, 191–198.

Goodman, C. C., & Silverstein, M. (2005). Latina grandmothers raising grandchildren: acculturation and psychological well-being. *International Journal of Aging and Human Development, 60*, 305–316.

Juarbe, T., Turok, X. P., & Perez-Stable, E. J. (2002). Perceived benefits and barriers to physical activity among older Latina women. *Western Journal of Nursing Research, 24,* 868–886.

Kali, B., Zayas, L. H., & Malgady, R. G. (2000). Depression, acculturation, and motivations for alcohol use among young Colombian, Dominican, and Puerto Rican men. *Hispanic Journal of Behavioral Sciences*, *22*, 64–67.

Norris, A. E., Ford, K., & Bova, C. A. (1996). Psychometrics of a brief acculturation scale for Hispanics in a probability sample of urban Hispanic adolescents and young adults. *Hispanic Journal of Behavioral Sciences, 18*, 29–28.

Wallen, G. R., Feldman, R. H., & Anliker, J. (2002). Measuring acculturation among Central American women and the use of a brief language scale. *Journal of Immigrant Health, 4,* 95–102.

Yoshioka, M. R., Gilbert, L., El-Bassel, N., & Baig-Amin, M. (2003). Social support and disclosure of abuse: Comparing south Asian, African American, and Hispanic battered women. *Journal of Family Violence, 18*, 171–180.

Short Acculturation Scale for Hispanics – English Version

Response categories: *Items 1–8*: 1 = Only Spanish; 2 = Spanish better than English; 3 = Both equally; 4 = English better than Spanish; 5 = Only English

1. In general, what language(s) do you read and speak?
2. What was the language(s) you used as a child?
3. What language(s) do you usually speak at home?
4. In which language(s) do you usually think?
5. What language(s) do you usually speak with your friends?
6. In what language(s) are the TV programs you usually watch?
7. In what language(s) are the radio programs you usually listen to?
8. In general, in what language(s) are the movies, TV, and radio programs you *prefer* to watch and listen to?

Response categories: *Items 9–12*: 1 = All Latinos/Hispanics; 2 = More Latinos than Americans; 3 = About half and half; 4 = More Americans than Latinos; 5 = All Americans

9. Your close friends are;
10. You prefer going to social gatherings/parties at which the people are;
11. The persons you visit or who visit you are;
12. If you could choose your children's friends, you would want them to be.

Short Acculturation Scale for Hispanic Youth (SASH-Y) (Barona & Miller, *1994*)

The Short Acculturation Scale for Hispanic Youth (SASH-Y) is a brief self-report acculturation scale designed specifically for use with Hispanic youth.

Description: The SASH-Y includes 12 items assessing three domains: Extra-familial language use (items 2, 3, 9), familial language use (items 1, 4, 5, 6, 7, 8), and ethnic social relations (items 10–12). The scale utilizes a 5-point Likert scale. The response options for item 1 are *only Spanish* (1), *Spanish better than English* (2), *both equally* (3), *English better than Spanish* (4), and *only English* (5). The response options for items 2 through 9 are *only Spanish* (1), *more Spanish than English* (2), *both equally* (3), *more English than Spanish* (4), and *only English* (5); the response options for items 10 through 12 are *all Hispanics* (1), *more Hispanic than White* (2), *about half and half* (3), *more White than Hispanic* (4), and *all White* (5). Responses are summed across all 12 items to form a composite score ranging from 12 to 60, with higher scores indicating higher acculturation to US society. The

author recommends a single composite score be computed for the SASH-Y. The scale is a self-administered questionnaire.

Sample: The validation study conducted by the author included 141 Hispanic and 230 non-Hispanic White children. The authors did not distinguish specific ethnic groups within the Hispanic sample. The sample consisted of 194 males with a mean age of 13.2 years and 177 females with a mean age of 13 years. Of the sample, 20% were in fifth grade, 22% were in sixth grade, 22% were in seventh grade, and 35% were in eighth grade. The mean score on the SASH-Y for the total sample was 49.5 and the standard deviation was 9.9.

Reliability: The SASH-Y produced an alpha coefficient of .94 when calculated for the total sample. The alpha coefficient for the Hispanic sample was .92 while the alpha coefficient for the non-Hispanic sample was .85. The overall split-half reliability was .96; it was .95 for the Hispanic sample and .87 for the non-Hispanic sample.

Validity: To establish factorial validity, the authors used factor analysis and a chi-square test of fit. The resulting factor analysis suggested three factors. The chi-square test suggested a 4-factor solution; however, the authors decided to use the three factors suggested by the factor analysis since the three factors would be easier to interpret. The authors ran an ANOVA test that successfully discriminated between Hispanic and non-Hispanic White responses to acculturation items on the scale providing evidence for the scale's discriminant validity.

Comments: The scale demonstrates excellent internal consistency for the total sample as well as for the Hispanic and non-Hispanic samples. Similar internal consistency scores for the total scale have been found elsewhere (Guilamo-Ramos et al., 2009; Ruiz, 2009; Serrano & Anderson, 2003). Some studies have also reported adequate internal consistency scores for the three subscales (Guilamo-Ramos, Bouris, Jaccard, Lesesne, & Ballan, 2009; Serrano & Anderson, 2003). A three-factor structure has been reported elsewhere, though with different items loading on the factors suggesting that more work needs to be done to assure use of subscales. Although three-factor solutions from the exploratory analysis provide evidence for factorial validity, confirmatory factor analysis still needs to be conducted. The scale requires additional evidence for other forms of validity. In studies not focused on the psychometric properties of the scale, the acculturation construct measured by the SASH-Y has been found to be related to other constructs as hypothesized (Guilamo-Ramos et al., 2009). Younger children (fourth and fifth graders), may have difficulty with some of the questions regarding ethnic identity (Serrano & Anderson, 2003).

Location: Barona, A., & Miller, J. (1994). Short acculturation scale for Hispanic youth (SASH-Y): A preliminary report. *Hispanic Journal of Behavioral Sciences*, *16,* 155–62.

Selected Publications

Guilamo-Ramos, V., Bouris, A., Jaccard, J., Lesesne, C., & Ballan, M. (2009). Familial and cultural influences on sexual risk behaviors among Mexican, Puerto

Rican, and Dominican youth. *AIDS Education and Prevention, 21*(Suppl. B), 61–79.

Guilamo-Ramos, V., Bouris, A., Jaccard, J., Lesesne, C., Gonzalez, B., & Kalogerogiannis, K. (2009). Family mediators of acculturation and adolescent sexual behavior among Latino youth. *Journal of Primary Prevention, 30,* 395–419.

Ruiz, Y. (2009). Predictors of academic achievement for Latino middle schoolers. *Journal of Human Behavior in the Social Environment, 19,* 419–433.

Serrano, E., & Anderson, J. (2003). Assessment of a refined short acculturation scale for Latino preteens in rural Colorado. *Hispanic Journal of Behavioral Sciences, 25*, 240–253.

Short Acculturation Scale for Hispanics Youth – English Version

Response categories: *Item 1*: 1 = Only Spanish; 2 = Spanish better than English; 3 = Both equally; 4 = English better than Spanish; 5 = Only English

    1. What languages do you read and speak?

Response categories: *Items 2–9*: 1 = Only Spanish; 2 = Spanish better than English; 3 = Both Equally; 4 = English better than Spanish; 5 = Only English

    2. What languages do your parents speak to you in?
    3. What languages do you usually speak at home?
    4. In which language do you usually think?
    5. What languages do you usually speak with your friends?
    6. In what languages are the TV programs you usually watch?
    7. In what languages are the radio programs you usually listen to?
    8. In what languages are the movies, TV, and radio programs you *prefer* to watch and listen to?
    9. In what languages do your parents speak with their parents?

Response categories: *Items 10–12*: 1 = All Latinos/Hispanics; 2 = More Latinos than Americans; 3 = About half and half; 4 = More Americans than Latinos; 5 = All Americans

    10. Your close friends are;
    11. You prefer going to parties at which the people are;
    12. The persons you visit or who visit you are.

A Brief Acculturation Scale for Hispanics (Norris, Ford, & Bova, 1996)

The Brief Acculturation Scale for Hispanics (BASH) uses language use as a measure of acculturation.

Description: The 4-item Brief Acculturation Scale includes four items from Marin and Sabogal's Language Use subscale of the Short Acculturation Scale for Hispanics (see scale #1). Response options are: *Only Spanish* (1), *more Spanish than English* (2), *both equally* (3), *more English than Spanish* (4), *only English* (5). An acculturation score is created by summing the values of the item responses and dividing this sum by the number of items with responses. A dichotomous level of acculturation (low, high) can be created; scores less than or equal to 3 indicate a low level of acculturation and scores greater than 3 indicate of a high level of acculturation. The scale is administered as a structured face-to-face interview.

Sample: Respondents were recruited from a household probability sample of Hispanic adolescents and young adults, ages 15–24, from a low-income area of Detroit. The sample included 519 Mexican Americans and 165 Puerto Rican participants. Fifty-one percent of the Mexican Americans and 56% of the Puerto Ricans were female.

Reliability: The alpha coefficient for the entire sample was .90. The alpha coefficient was .92 for Mexican American respondents and .80 for Puerto Rican respondents.

Validity: To assess construct validity, scale scores were compared to generational status, length of time in the United States, a subjective measure of acculturation, place of birth, and language which respondent chose to take the scale (Spanish or English). Each of the variables was related to scale scores in the expected direction for the overall sample and the two subgroups: Generation status ($r = .67$), Length of time in the United States ($r = .50$), subjective measure of acculturation ($r = -.43$ Mexican American; $r = -.18$ Puerto Rican). The mean score for respondents born in the United States was 16.5 while the mean score for respondents born outside of the United States was 9.03. Respondents who chose to take the scale in English had a higher mean score (16.00) in contrast to those who chose to take the scale in Spanish (6.85).

Comments: This scale provides a brief measure of acculturation with evidence of reliability and validity for two groups: Mexican Americans and Puerto Ricans. In another study of Latina women, Unger and Molina (2000) report a Cronbach's alpha of .89. The brief nature of this scale makes it easy to use. There is no evidence to support the dichotomization of subject scores into a high level versus a low level of acculturation. There is a need for additional studies of the scale's validity; one report found some relationship between acculturation and use of contraception (Unger & Molina, 2000).

Location: Norris, A. E., Ford, K., & Bova, C. A. (1996). Psychometrics of a brief acculturation scale for Hispanics in a probability sample of urban Hispanic adolescents and young adults. *Hispanic Journal of Behavioral Sciences, 18*, 29–38.

Selected Publications

Unger, J. B., & Molina, G. B. (2000). Acculturation and attitudes about contraceptive use among Latina women. *Health Care for Women International, 21*, 235–49.

Brief Acculturation Scale for Hispanics

Response categories: 1 = Only Spanish; 2 = More Spanish than English; 3 = Both equally; 4 = More English than Spanish; 5 = Only English

1. In general what language do you read and speak?
2. What language do you usually speak at home?
3. In what language do you usually think?
4. What language do you usually speak with your friends?

Acculturation Index for Mexican Americans (Mainous, 1989)

The Acculturation Index for Mexican Americans (AIMA) assesses role identity or the extent to which the respondent identifies as an "outsider" or "insider" in relation to mainstream American culture (Mainous, 1989).

Description: The Acculturation Index for Mexican Americans consists of eight items measuring three dimensions of acculturation: (1) Language (three items: 1–3), (2) Self-definition as an Insider (three items: 4–7), and (3) Self-definition as an Outsider (two items: 8 and 9). The items assess language use, based on the interviewer's observations of language use during the interview, the language spoken within the family, and the language spoken with friends. The response options for the language use items are: *English only* (1), *mostly English* (2), *both languages about equal* (3), *mostly Spanish* (4), and *Spanish only* (5). Response options for self-definition as an insider include *American of Mexican descent* (1), *Mexican American* (2), *US citizen* (3), and *US native* (4). Self-definition as an outsider is defined as *Foreigne*r (1) or *Immigrant* (2). The scale is administered by interview, conducted in English or Spanish. The author does not explain how to score the scale or whether individual items or dimension scores should be used. An index was used based on the factor scores: Language use, self-definition as an insider and self-definition as an outsider.

Sample: The scale was developed and evaluated using a sample of 991 Mexican American individuals, 60% of whom were female. The respondents ranged from ages 17 to 93 years, with the median age being 20 years. Sixty-two percent of the respondents were US born and 38% were Mexican born.

Reliability: None reported.

Validity: The factor analysis yielded the three expected factors providing evidence for factorial validity. Construct validity was demonstrated as the measure correlates with previously employed indicators of acculturation such as generational distance ($r = .74$), length of time spent in the United States ($r = .45$), ratio of time in the United States divided by the age of the respondent, ($r = .75$), and discrimination ($r = -.23$).

Comments: Use of the scale is not adequately explained, particularly the scoring. There is support for the validity of the scale but no evidence of reliability. We found no additional studies of the scale's psychometric properties.

Location: Mainous, A. (1989). Self-concept as an indicator of acculturation in Mexican Americans. *Hispanic Journal of Behavioral Sciences, 11*, 178–89.

Selected Publications

None

Acculturation Index for Mexican Americans

Response categories: *Items 1–3*: 1 = English only; 2 = Mostly English; 3 = Both languages about equal; 4 = Mostly Spanish; 5 = Spanish only

    1. Language spoken with friends
    2. Language spoken with siblings
    3. Language of interview

Response categories: *Items 4–7*: 1 = American of Mexican descent; 2 = Mexican American; 3 = US Citizen; 4 = US Native

    4. Self-definition as an American of Mexican descent
    5. Self-definition as a Mexican American
    6. Self-definition as a US Native
    7. Self-definition as a US citizen

Response categories: *Items 8–9*: 1 = Foreigner; 2 = Immigrant

    8. Self-definition as a foreigner
    9. Self-definition as an immigrant

The Los Angeles Epidemiologic Catchment Area Acculturation Scale (Burnam, Hough, Telles, & Escobar, 1987)

The Los Angeles Epidemiologic Catchment Area (LAECA) Acculturation Scale is designed to measure different aspects of acculturation such as language preference and use, ethnic background and identification, culturally linked customs and habits, and ethnic interaction.

Description: The 26-item LAECA Acculturation Scale consists of three factors: (1) language, (2) social activities, and (3) ethnic background. The authors suggest using the total score composed of 26 items rather than computing subscale scores. The LAECA Acculturation Scale was conceived as a continuous scale with values ranging from completely Hispanic to equally Hispanic and Anglo (bicultural) to completely Anglo. A 5-point response scale was used. Total scale scores are created by summing item values and dividing by the number of items for which there are responses. The average total scale score may range from 1 to 5, with 5 indicating higher levels of acculturation to the host culture and 1 indicating no acculturation. Scores between 1 and 1.75 are defined as low acculturation, scores of 1.76–3.25 are defined as medium acculturation, and scores of 3.26–5 are defined as high acculturation. The scale is administered as a structured interview. Respondents can choose to have the interview conducted in either English or Spanish.

Sample: The scale was evaluated with a sample of 1,245 adult Mexican Americans residing in Los Angeles. There were 568 males and 628 females; 59% were first-generation ($N = 707$), 27% were second-generation ($N = 323$), and 15% were third- or later generation ($N = 178$).

Reliability: Cronbach's alpha for the entire scale was .97. Cronbach's alpha for males and females was .97; obtained education level ranged from .94 to .96; and language spoken by respondent ranged from .91 to .93. Corrected item-total correlations for the scale ranged from .41 (ethnicity of people in the neighborhood) to .92 (language spoken).

Validity: Findings from the factor analysis suggests that the items composing three factors are highly inter-correlated, supporting a unidimensional approach to measurement of acculturation. Construct validity was established by comparing mean LAECA Acculturation scores across generational groups. Mean level of acculturation increased from first to second to later generation groups. In addition, among the first generation, level of acculturation was positively correlated with the number of years individuals had lived in the United States. The relation of acculturation to age showed that younger persons acculturate more rapidly than older, which is consistent with acculturation theory.

Comments: The LAECA Acculturation scale demonstrated a high degree of internal reliability for the entire sample, and for specific sex, educational, and language sub-samples. High internal consistency has been reported elsewhere (Clark, 2002). The scale discriminated between generational groups. Scores on the scale were positively correlated with the number of years the respondent was exposed to Anglo-American culture.

Location: Burnam, M. A. Hough, R. L., Telles, C. A., & Escobar, J. I. (1987). Measurement of acculturation in a community population of Mexican Americans. *Hispanic Journal of Behavioral Sciences, 9*, 105–130.

Selected Publications

Clark, L. (2002). Mexican-Origin mothers' experiences using children's health care services. *Western Journal of Nursing Research, 24*, 159–179.

LAECA Acculturation Scale Items

Response categories: *Item 1*: 1 = First; 2 = Second; 3 = Third; 4 = Fourth; 5 = Fifth

1. Generation

Response categories: *Item 2–3*: 1 = Spanish only; 2 = Mostly Spanish; 3 = Both Equally; 4 = Mostly English; 5 = English only

2. Language spoken
3. Language preferred

Response categories: *Items 4–14*: 1 = Spanish only; 2 = Spanish better; 3 = Both equally; 4 = English better; 5 = English only

4. Language use with spouse
5. Language use with children
6. Language use with parents
7. Language use with co-workers
8. Language use with friends
9. Language of TV viewing
10. Language of radio listening
11. Language of thinking
12. Language reads better
13. Language used when reading
14. Language writes better

Response categories: *Items 15–17*: 1 = All Hispanic; 2 = Most Hispanic; 3 = Half Hispanic; 4 = Few Hispanic; 5 = None Hispanic

15. Ethnicity of people in neighborhood
16. Ethnicity of co-workers
17. Ethnicity of close friends

Response categories: *Items 18–20*: 1 = All of the time; 2 = Most of the time; 3 = Half of the time; 4 = Sometimes; 5 = Never

   18. Proportion of time spent eating Hispanic foods
   19. Proportion of time spent listening to Latin music
   20. Proportion of time spent celebrating Hispanic traditions

Response categories: *Item 21*: 1 = All Hispanic; 2 = Most Hispanic; 3 = Half Hispanic; 4 = Few Hispanic; 5 = None Hispanic

   21. Ethnicity of leisure time social environment

Response categories: *Items 22–24*: 1 = Mexican; 2 = Chicano; 3 = Mexican American; 4 = Latin American, other Hispanic American; 5 = Anglo American or other

   22. Ethnic background
   23. Mother's ethnic background
   24. Father's ethnic background

Response categories: *Item 25*: 2 = Other; 4 = United States

   25. Country spent childhood

Response categories: *Item 26*: 2 = Mostly Hispanic, partly United States; 3 = Equal; 4 = Mostly United States, partly Hispanic; 5 = United States only

   26. Proportion of life lived in United States versus Hispanic country

Acculturation Scale for Mexican Americans (Deyo, Diehl, Hazuda, & Stern, *1985*)

The Acculturation Scale for Mexican Americans (ASMA) is a unidimensional measure using language use.

Description: The ASMA includes four items. Items are scored by assigning 1 point for each response favoring English and 0 for each response favoring Spanish. The scale score is calculated by summing the points for the four items. Scores range from 0 to 4 with higher scores indicating higher acculturation. The scale has both English and Spanish versions. The scale is administered as a structured interview.

Sample: Two studies were conducted to develop and validate the scale. Study 1: This was a clinical study on lower back pain and included 97 Mexican American patients. Study 2: The sample included 1,685 Mexican Americans and 1,103 non-Hispanic Whites. Participants ranged from age 24 to 64 years.

Reliability: In the clinical study, the Guttman coefficient of reproducibility for the four language questions was .97 and the coefficient of scalability was .89. In the validation study, the coefficient of reproducibility was .97 and the coefficient of scalability was .90. Among Mexican Americans, the coefficient of reproducibility was .96 and the coefficient of scalability was .81.

Validity: In the clinical study, construct validity was established by correlating the language scale with patient ethnicity and the interviewer's rating of the respondent's English fluency. Non-Hispanics had a mean language scale score of 4.0, while Mexican Americans had a mean score of 1.6. Scores for Mexican Americans were compared with an interviewer's report of the respondent's English fluency on a five-point scale. The Spearman rank correlation between the two rating methods was .79. In the validation study, the authors provided evidence of construct validity by showing statistically significant associations between the scale and ethnicity, place of birth, generation within the United States, and type of neighborhood.

Comments: The scale's brevity makes it suitable for incorporation into other research instruments. There is evidence of reliability and validity of the scale. Ruiz, Dolbier, and Fleschler (2006) report strong internal consistency. The scale is associated with other constructs such as timing of sexual initiation (Gilliam, Berlin, Kozloski, Hernandez, & Grundy, 2007), birth outcome risk factors, and perceived stress (Ruiz et al., 2006) and depression (Escalante, del Rincon, & Mulrow, 2000). In some studies, the wording for Questions 1 and 4 has been shortened to just ask about language (e.g., Gilliam et al., 2007; Ruiz et al., 2006). Psychometric evaluation with other subgroups of Hispanics is needed.

Location: Deyo, R. A., Diehl, A. K., Hazuda, H., & Stern, M. P. (1985). A simple language-based scale for Mexican Americans: Validation and application to health care research. *American Journal of Public Health*, *75*, 51–55.

Selected Publications

Escalante, A., del Rincon, I., & Mulrow, C. D. (2000). Symptoms of depression and psychological distress among Hispanics with rheumatoid arthritis. *Arthritis Care and Research, 13,* 156–167.

Gilliam, M. L., Berlin, A., Kozloski, M., Hernandez, M., & Grundy, M. (2007). Interpersonal and personal factors influencing sexual debut among Mexican-American young women in the United States. *Journal of Adolescent Health, 41,* 493–503.

Ruiz, R. J., Dolbier, C. L., & Fleschler, R. (2006). The relationships among acculturation, bio-behavioral risk, stress, corticotrophin-releasing hormone, and poor birth outcomes in Hispanic women. *Ethnicity and Disease, 16,* 926–931.

Acculturation Scale for Mexican Americans

1. Some of our patients speak both English and Spanish, but many speak only one or the other. To improve our future contacts with you, we would like to know what language you prefer to speak.

   1 = English   2 = Spanish 3 = Both equally

2. What language is most often spoken in your home?

   1 = English 2 = Spanish 3 = Both equally

3. What was your first language as a child?

   1 = English 2 = Spanish 3 = Other

4. Many of our patients have difficulty reading in either English or Spanish. Do you read any English?

   1 = Yes, anything 2 = Some 3 = Very little 4 = None

   Scoring:

   Question 1: 1 point for English; 0 points for Spanish or both
   Question 2: 1 point for English or both; 0 points for Spanish
   Question 3: 1 point for English; 0 points for Spanish or other
   Question 4: 1 point for 1, 2, or 3; 0 points for Answer 4

   Summary Score = sum of points for the four items.

Children's Acculturation Scale (Franco, 1983)

The Children's Acculturation Scale (CAS) is designed to measure values and behavioral aspects of acculturation in Mexican-American children.

Description: The Children's Acculturation Scale is a 10-item scale. The scale is completed by someone who can assess the child's language usage, perceived discrimination, religion, education, parental occupation, food preferences, entertainment preferences, knowledge of Mexican and American history, and ethnic identity. The scale requires the rater (teacher or parent) to respond on a 5-point Likert scale ranging from *very Mexican* (1) to *very Anglicized* (5). The scale score is calculated by summing and averaging across the 10 multiple-choice items. The total scale score ranges from 1 to 5. A total scale score of 1 suggests the respondent is very Mexican, and a total score of 5 suggests the respondent is very Anglicized. A rating near 3 is considered to be bicultural. The scale takes approximately 5 minutes to complete.

Sample: The original validation study included an assessment by teachers and parents of 141 Mexican American and 34 White, first-, third-, and sixth-grade children. The Mexican American sample consisted of 74 males and 67 females while the Anglo sample was almost equally divided by gender.

Reliability: The coefficient alpha for the scale was .77. Inter-rater reliability was .93, *p* <.001. Test–retest reliability, assessed in a sample of 14 first graders with 5 weeks between the tests, was .97.

Validity: Construct validity was established as the CAS correlates strongly (.76) with the Acculturation Rating Scale for Mexican Americans. Using a factor analysis,

the CAS yielded three factors: (1) language proficiency, preference, and peer associations; (2) parental occupations and educational level; and (3) music preference. The mean acculturation score was highest among sixth graders, followed by third and first graders consistent with the theory that children become more acculturated the longer they are exposed to Anglo-American culture.

Comments: The scale demonstrates a moderate level of internal consistency though high-rater reliability. The author does not specify if training is required for the raters. A modified version read to participants had moderate internal consistency, alpha = .65 (Hess & D'Amato, 1996).

Location: Franco, J. N. (1983). An acculturation scale for Mexican-American children. *The Journal of General Psychology, 108*, 175–181.

Selected Publications

Hess, R. S., & D'Amato, R. C. (1996). High school completion among Mexican-American children: Individual and family background variables. *School Psychology Quarterly, 11*, 353–368.

Children's Acculturation Scale

Circle the appropriate response for this child:

Item 1: 1 = Poor; 2 = Below average; 3 = Average; 4 = Above average; 5 = Excellent

1. The student's English proficiency for a student at his/her grade level is

Items 2–3: 1 = Unemployed; 2 = Laborer; 3 = Blue collar; 4 = White collar; 5 = Professional

2. Father's occupation
3. Mother's occupation

Items 4–5: 1 = Spanish only; 2 = Mostly Spanish; 3 = Both Spanish and English; 4 = Mostly English; 5 = English only

4. To the best of your knowledge, which language is spoken at this child's home?
5. In your opinion, which language does the child prefer to use?

Item 6: 1 = Mexican; 2 = Chicano; 3 = Mexican American; 4 = Spanish American, Latin American, Hispanic American; 5 = Anglo American or White

6. In your opinion, would this child prefer to be identified as

Item 7: 1 = Hispanics only; 2 = mostly with Hispanics; 3 = Hispanics and Anglos equally; 4 = mostly Anglos; 5 = Anglos only

7. In your opinion, does this child associate with

Item 8: 1 = 1–5 years; 2 = 4–9 years; 3 = Some high school; 4 = High school graduate; 5 = Post high school

8. Educational level of head of household

Item 9: 1 = Spanish music; 2 = Mostly Spanish; 3 = Spanish and English equally; 4 = Mostly English; 5 = English only

9. In your opinion, would this child's music preference be

Item 10: 1 = Not an American citizen; 2 = A first-generation American; 3 = A second-generation American; 4 = A third-generation American; 5 = A fourth or more generation American

10. To the best of your knowledge, is this child

Bidimensional Scales

Bidimensional Acculturation Scale for Hispanics (Marín & Gamba, 1996)

The Bidimensional Acculturation Scale for Hispanics (BAS) measures acculturation to both Hispanic and non-Hispanic cultures.

Description: The BAS includes 24 items with 12 items measuring acculturation to Hispanic culture and 12 items measuring acculturation to Anglo-American culture. The 12 items that measure Hispanic or non-Hispanic acculturation are divided as Language Use (three items), Linguistic Proficiency (six items), and Electronic Media (three items). Participants rate their agreement with statements about the frequency of their language use and their proficiency using a 4-point Likert-type format. Each respondent is assigned two scores: a score for the 12 items making up the Hispanic domain (items 4, 5, 6, 13, 14, 15, 16, 17, 18, 22, 23, 24) and a score for the 12 items forming the non-Hispanic domain (items 1, 2, 3, 7, 8, 9, 10, 11, 12, 19, 20, 21). These scores are calculated by summing item values and dividing by the number of response items answered. The possible total score range is from 1 to 4 for each cultural domain. The two scores are used to define the level of acculturation

of the respondent. A score of 2.5 can be used as a cut-off score to indicate low or high level of adherence to each cultural domain. A low score (<2.5) on either 12-item domain suggests low acculturation to that culture while a high score (>2.5) on either domain suggests high acculturation to the culture in question. For example, scores above 2.5 in both cultural domains can be interpreted as indicating biculturalism on the part of the participant whereas a high score on the Hispanic domain and a low score on the Anglo-American domain would suggest low acculturation to Anglo-American culture and a high degree of acculturation to Hispanic culture. The scale has both English and Spanish versions. The scale is administered as a structured interview.

Sample: The scale was developed using a sample of 254 adult Hispanic residents of San Francisco, California. Most respondents (79.5%) were born in Central America (52.8%) or in Mexico (24%). The average age of the respondents was 37.3 years, 54% were females, and the sample averaged 10.4 years of formal education. Most of the respondents (74%) answered the questionnaire in Spanish.

Reliability: The Cronbach's alpha was .90 for the Hispanic domain and .96 for the non-Hispanic domain.

Validity: All of the language-based subscales showed high correlations with generation status, length of residence in the United States, amount of formal education, age at arrival in the United States, proportion of respondent's life lived in the United States, and ethnic self-identification demonstrating construct validity. There is evidence of convergent validity as the Hispanic and non-Hispanic domains of the scale correlate with the Short Acculturation Scale for Hispanics (SASH) (0.79 for the non-Hispanic Domain and –0.64 for Hispanic domain).

Comments: This scale measures acculturation to both Hispanic and non-Hispanic American culture. The scale has evidence of both reliability and validity. There is other evidence of internal consistency with other populations groups such as high-school students (Guinn, 1998), Hispanic women from a community sample (Rojas-Guyler, Ellis, & Sanders, 2005), immigrant men (Cabassa, 2007), women from the Dominican Republic (Dawson, 2009), and college students both with the English and Spanish versions (Singelis et al., 2006). There is also evidence of satisfactory test–retest reliability within the same language of administration and if the language of administration changes (Singelis et al., 2006). The BAS does relate as hypothesized to other variables (e.g., Christenson, Zabriske, Eggett, & Freeman, 2006; Dawson, 2009; Rojas-Guyler et al., 2005). The authors suggest that the Linguistic Proficiency items could be used separately as a quick measure of acculturation (e.g., Edwards & Romero, 2008). In its present form, the scale appears best used with Mexican Americans and Central Americans; psychometric evaluation is required with other Hispanic groups.

Location: Marín, G., & Gamba, R. J. (1996). A new measurement of acculturation for Hispanics: The bidimensional acculturation scale for Hispanics (BAS). *Hispanic Journal of Behavioral Sciences, 18*, 297–316.

Selected Publications

Cabassa, L. J. (2007). Latino immigrant men's perceptions of depression and attitudes toward help seeking. *Hispanic Journal of Behavioral Sciences, 29,* 492–509.

Christenson, O. D., Zabriske, R. B., Eggett, D. L., & Freeman, P. A. (2006). Family acculturation, family leisure involvement, and family functioning among Mexican-Americans. *Journal of Leisure Research, 38,* 475–495.

Dawson, B. A. (2009). Discrimination, stress, and acculturation among Dominican immigrant women. *Hispanic Journal of Behavioral Sciences, 31,* 96–111.

Edwards, L. M., & Romero, A. J. (2008). Coping with discrimination among Mexican descent adolescents. *Hispanic Journal of Behavioral Sciences, 30,* 24–39.

Guinn, B. (1998). Acculturation and health locus of control among Mexican American adolescents. *Hispanic Journal of Behavioral Sciences, 20*, 492–499.

Rojas-Guyler, L., Ellis, N., & Sanders, S. (2005). Acculturation, health protective sexual communication, and HIV/AIDS risk behavior among Hispanic women in a large Midwestern city. *Health Education and Behavior, 32,* 767–779.

Singelis, T. M., Yamada, A. M., Barrio, C., Laney, J. H., Her, P., Ruiz-Anaya, A., & Lennertz, S. T. (2006). Metric equivalence of the bidimensional acculturation scale, the satisfaction with life scale, and the self-construal scale across Spanish and English language versions. *Hispanic Journal of Behavioral Sciences, 28,* 231–244.

The Bidirectional Acculturation Scale for Hispanics (BAS): English Version

Response categories: *Items 1–6*: 1 = Almost never; 2 = Sometimes; 3 = Often; 4 = Almost always

Language Use Subscale

1. How often do you speak English?
2. How often do you speak in English with your friends?
3. How often do you think in English?
4. How often do you speak Spanish?
5. How often do you speak in Spanish with your friends?
6. How often do you think in Spanish?

Response categories: *Items 7–18*: 1 = Very poorly; 2 = Poorly; 3 = Well; 4 = Very well

Linguistic Proficiency Subscale

   7. How well do you speak English?
   8. How well do you read in English?
   9. How well do you understand TV programs in English?
  10. How well do you understand radio programs in English?
  11. How well do you write in English?
  12. How well do you understand music in English?
  13. How well do you speak Spanish?
  14. How well do you read in Spanish?
  15. How well do you understand TV programs in Spanish?
  16. How well do you understand radio programs in Spanish?
  17. How well do you write in Spanish?
  18. How well do you understand music in Spanish?

Response categories: *Items 19–24*: 1 = Almost never; 2 = Sometimes; 3 =
Often; 4 = Almost always
Electronic Media Subscale

  19. How often do you watch TV programs in English?
  20. How often do you listen to radio programs in English?
  21. How often do you listen to music in English?
  22. How often do you watch TV programs in Spanish?
  23. How often do you listen to radio programs in Spanish?
  24. How often do you listen to music in Spanish?

American and Puerto Rican Cultural Involvement Scales (Cortes, Rogler, & Malgady, *1994*)

The American and Puerto Rican Cultural Involvement Scales (APRCIS) measures
acculturation to both Puerto Rican and Anglo-American cultures.

  Description: To measure acculturation to both of these cultures, the items focus
on language use, values, ethnic pride, food preferences, and child-rearing practices.
The scale includes a total of 18 items. Nine items measure acculturation to and
involvement with Anglo-American culture (items 1–9) and nine items assess accul-
turation to and involvement with Puerto-Rican culture (items 10–18). Respondents
are asked to rate their agreement with a particular behavior, value, or belief on a
4-point scale ranging from *not at all* (1) to *very much* (4). Scores for each dimen-
sion are based on the average score of the items and range from 1 to 4, with
higher scores suggesting a high degree of acculturation to the culture measured in
that dimension and lower scores suggesting low acculturation to the culture mea-
sured in that dimension. No specific cut-off scores are given by the authors to
distinguish between a high versus low degree of acculturation. The scale is admin-
istered by a structured interview. The scale can be administered in either English or
Spanish.

Sample: The sample size for the validation study was 403 participants. Among them, 254 were born in Puerto Rico and 149 were born in the United States. The average age of the respondents was 38.93 and their average education was 9.8 years of school. The scale was administered in a structured interview format with both Spanish and English versions available.

Reliability: Coefficient alpha for the nine items measuring involvement in American culture was .78, and the alpha coefficient for the nine items measuring involvement in Puerto Rican culture was .73.

Validity: There is evidence for construct validity. The scale measuring involvement in American culture was inversely related to place of birth and age at arrival in the United States, and was positively related to number of years in the United States. The scale measuring involvement in Puerto Rican culture showed the opposite pattern of relationships.

Comments: The two scales demonstrate adequate internal consistency. Similar findings have been found for other Puerto Rican respondents (Contreras, 2004; Cortes et al., 2003; Lopez & Contreras, 2005) and Hispanic women with the *Hispanic* replacing *Puerto Rican* (McKee, Zayas, & Jankowski, 2004). There is additional evidence of construct validity such as the relationship of response language to scores on both scales, American cultural involvement, generation in the US, years of US residence, and years of US schooling (Lopez & Contreras, 2005). The scale has been adapted and evaluated to assess "original culture" versus "mainstream culture" for Latinos, Korean Americans, and Chinese Americans (Mezzich, Ruiperez, Yoon, Liu, & Zapata-Vega, 2009). Note that some studies include two deleted items (see scale note; see for example Mezzich et al., 2009).

Location: Cortes, D. E., Rogler, L. H., & Malgady, R. G. (1994). Biculturality among Puerto Rican adults in The United States. *American Journal of Community Psychology, 22*, 707–721.

Selected Publications

Contreras, J. M. (2004). Parenting behaviors among mainland Puerto Rican adolescent mothers: The role of grandmother and partner involvement. *Journal of Research on Adolescence, 14,* 341–368.

Cortes, D. E., Deren, S., Andia, J., Colon, H., Robles, R., & Kang, S. (2003). The use of the Puerto Rican biculturality scale with Puerto Rican drug users in New York and Puerto Rico. *Journal of Psychoactive Drugs, 35*, 197–207.

Lopez, I. R., & Contreras, J. M. (2005). The best of both worlds: Biculturality, acculturation, and adjustment among young mainland Puerto Rican mothers. *Journal of Cross-Cultural Psychology, 36,* 192–208.

McKee, M. D., Zayas, L. H., & Jankowski, K. R. B. (2004). Breastfeeding intention and practice in an urban minority population: Relationship to maternal depressive symptoms and mother-infant closeness. *Journal of Reproductive and Infant Psychology, 22,* 167–181.

Mezzich, J. E., Ruiperez, M. A., Yoon, G., Liu, J., & Zapata-Vega, M. I. (2009). Measuring cultural identity: Validation of a modified Cortez, Rogler, and

Malgady bicultural scale in three ethnic groups in New York. *Culture, Medicine, & Psychiatry, 33,* 451–472.

American and Puerto Rican Cultural Involvement Scales

Response categories: 1 = Not at all; 4 = Very much

1. How important is it to you to celebrate holidays in the American way?
2. How much are American values a part of your life?
3. How comfortable would you be in a group of Americans who don't speak Spanish?
4. How important is it to you to raise your children with American values?
5. How proud are you of being American?
6. Do you think Americans are kind and generous?
7. How much do you enjoy American TV programs?
8. How much do you enjoy speaking English?
9. How many days a week would you like to eat American food?
10. How much are Puerto Rican values a part of your life?
11. How important is it to you to celebrate holidays in the Puerto Rican way?
12. How important is it to you to raise your children with Puerto Rican values?
13. How comfortable would you be in a group of Puerto Ricans who don't speak English?
14. How proud are you of being Puerto Rican?
15. How much do you enjoy speaking Spanish?
16. How much do you enjoy Spanish TV programs?
17. How many days a week would you like to eat Puerto Rican food?
18. Do you think Puerto Ricans are kind and generous?

Deleted items:

How important would it be to you for your children to have all American friends?

How important would it be to you for your children to have all Puerto Rican friends?

The Abbreviated Multidimensional Acculturation Scale (Zea, Asner-Self, Birman, & Buki, 2003)

The Abbreviated Multidimensional Acculturation Scale (AMAS-ZABB) scale measures acculturation to both Anglo-American culture and the respondent's culture of origin by including items on language preference, cultural competence, and self-identified ethnicity.

Description: The Abbreviated Multidimensional Acculturation Scale is a 42-item scale designed to assess three factors associated with acculturation in the United

States and in the country of origin: Identity (US American and culture of origin; items 1–6 and items 7–12), Language Competence (mastery of English and mastery of Spanish or other native language; items 13–21 and items 22–30), and Cultural Competence (knowledge of United States and country of origin cultures; items 31–36 and items 37–42). The scale options for items 1–12 range from *strongly* disagree (1) to *strongly agree* (4) and the scale options for items 12–42 range from *not at all* (1) to *extremely well/like a native* (4). For each subscale and ethnic group, item scores are averaged to form a total subscale score potentially ranging from 1 to 4. The total score for the US-American dimension on the AMAS-ZABB is calculated by averaging the three US-American subscales of cultural identity, language, and cultural competence, with higher scores indicating greater US acculturation. Similarly, the AMAS-ZABB culture-of-origin dimension is calculated by averaging the equivalent three (Latino/Latina in this study) subscales, with higher scores indicating greater retention of one's culture of origin. This scale is administered in two different ways: Respondents can take the survey as a self-administered scale available only in English or the scale can be offered as a structured interview in either Spanish or English.

Sample: Two initial studies were conducted to examine the psychometric properties of the Abbreviated Multidimensional Acculturation Scale. Study 1: The sample included 156 Latino/Latina students from mid-Atlantic urban institutes of higher education. The average age of participants was 23.5 years and nearly 60% were women. Study 2: The sample included 90 Central American immigrants living in the Washington, DC; the average age of the participants was 38.92 years, the average educational attainment was 10.54 years and about 52% were women.

Reliability: In Study 1, Cronbach's alpha coefficients ranged from .90 to .97 on the subscales while in Study 2, Cronbach's alpha coefficients ranged from .83 to .97 on the subscales.

Validity: Content validity was established by conducting 15 focus groups and asking the groups to examine the relevance of each scale item. Criterion validity was established as participants born in the United States scored higher on US-American subscales and lower on culture-of-origin subscales while participants born in Latin America scored higher on the culture-of-origin subscales and lower on the US-American subscales. Discriminant and convergent validity was tested using the Bicultural Involvement Questionnaire (BIQ-B) (Birman, 1991) and the Multigroup Ethnic Identity Measure (MEIM) (Phinney, 1992). The US-American identity scale was significantly related to BIQ-B Americanism, English language; US-American cultural competence; and overall AMAS-ZABB American dimension, while the AMAS-ZABB Latino subscales were not related to the BIQ-B Americanism scale. Conversely, the AMAS-ZABB subscales were significantly positively related to the BIQ-B Hispanicism scale: Latino ethnic identity; Spanish language; and overall AMAS-ZABB culture of origin dimension. Ethnic identity measured by the Multigroup Ethnic Identity Measure (MEIM) was positively related to Latino/Latina ethnic identity. There is evidence of factor validity because both the college and the community samples indicated that the proposed six subscales emerged as six factors.

Comments: The AMAS-ZABB demonstrated good internal consistency, a finding that has been replicated in other studies with Mexican American and Latina college students (Lechuga, 2008; Schiffner & Buki, 2006), parents from a variety of Hispanic countries of origin and their children (Davidson & Cardemil, 2009; both in English and Spanish versions), Latino males with HIV-positive status (Zea, Reisen, Poppen, Echeverry, & Bianchi, 2004), and Latinos in general (Morandi & Risco, 2006). The scale shows evidence of adequate concurrent, convergent, divergent, and constructs validity. The scale is fairly long.

Location: Zea, M. C., Asner-Self, K. K., Birman, D., & Buki, L. P. (2003). The abbreviated multidimensional acculturation scale: Empirical validation with two Latino/Latina samples. *Cultural Diversity and Ethnic Minority Psychology, 9*, 107–126.

Selected Publications

Davidson, T. M., & Cardemil, E. V. (2009). Parent-child communication and parental involvement in Latino adolescents. *Journal of Early Adolescence, 29,* 99–121.

Lechuga, J. (2008). Is acculturation a dynamic construct? The influence of method of priming culture on acculturation. *Hispanic Journal of Behavioral Sciences, 30,* 324–339.

Morandi, B., & Risco, C. (2006). Perceived discrimination experiences and mental health of Latina/o American persons. *Journal of Counseling Psychology, 53,* 411–421.

Phinney, J. S. (1992). The multigroup ethnic identity measure: A new scale for use with diverse groups. *Journal of Adolescent Research, 7,* 156–176.

Schiffner, T., & Buki, L. (2006). Latina college students' sexual health beliefs about human Papillomavirus infection. *Cultural Diversity and Ethnic Minority Psychology, 12,* 687–696.

Zea, M. C., Reisen, C. A., Poppen, P. J., Echeverry, J. J., & Bianchi, F. T. (2004). Disclosure of HIV-positive status to Latino gay men's social networks. *American Journal of Community Psychology, 3,* 107–116.

Abbreviated Multidimensional Acculturation Scale

Instructions: Please mark the number from the scale that best corresponds to your answer.

Response categories: 1 = Strongly disagree; 2 = Disagree somewhat; 3 = Agree somewhat; 4 = Strongly agree

1. I think of myself as being US American.
2. I feel good about being US American.

3. Being US American plays an important part in my life.
4. I feel that I am part of US-American culture.
5. I have a strong sense of being US American.
6. I am proud of being US American.
7. I think of myself as being (a member of my culture of origin).
8. I feel good about being (a member of my culture of origin).
9. Being (a member of my culture of origin) plays an important part in my life.
10. I feel that I am part of culture (culture of origin).
11. I have a strong sense of being (culture of origin).
12. I am proud of being (culture of origin).

Please answer the questions below using the following responses:

Response categories: 1 = Not at all; 2 = A little; 3 = Pretty well; 4 = Extremely well

How well do you speak English:

13. at school or work
14. with American friends
15. on the phone
16. with strangers
17. in general

How well do you understand English:

18. on TV or in movies
19. in newspapers and magazines
20. words in songs
21. in general

How well, do you speak your native language:

22. with family
23. with friends from the same country as you
24. on the phone
25. with strangers
26. in general

How well do you understand your native language:

27. on TV or in movies
28. in newspapers and magazines
29. words in songs
30. in general

How well do you know:

31. American national heroes
32. popular American TV shows
33. popular American newspapers and magazines
34. popular American actors and actresses

35. American history
36. American political leaders

How well do you know:

37. national heroes from your native culture
38. popular TV shows in your native language
39. popular newspapers and magazines in your native language
40. popular actors and actresses from your native culture
41. history of your native culture
42. political leaders from your native culture

Acculturation Rating Scale (Montgomery, *1992*)

The Acculturation Rating Scale (ARS) was designed to measure acculturation to Mexican and Anglo-American culture and comfort with one's culture.

Description: The ARS is a 28-item scale assessing five domains including (1) comfort with Spanish language and Mexican traditions and comfort with thinking and speaking Spanish (10 items: 5, 6, 7, 11, 12, 13, 14, 15, 16, 17); (2) comfort with English language and Anglo-American tradition (7 items: 18, 19, 20, 21, 22, 23, 24); (3) one's preference for ethnic identity (5 items: 4, 25, 26, 27, 28); (4) self-rated ethnic identity (4 items: 1, 2, 3, and an item about generation in United States not on the scale), and (5) comfort with speaking English (3 items: 8, 9, 10). The items are rated on different scales depending on question (see scale for specifics). Several questions are reverse coded (items 5, 6, 7, 11, 12, 13, 14, 15, 16, and 17). The total acculturation score is calculated by summing and averaging the subject's ratings on the 28 items. Lower scores reflect a Mexican cultural orientation while higher scores reflect higher acculturation to Anglo-American culture. The authors used subscale scores in their psychometric tests, but did not provide a metric for measuring the subscales outside of these psychometric tests. The scale is self-administered and is available in both Spanish and English versions.

Sample: The scale was evaluated using a sample of 844 students enrolled in high school, college, or the English Language Institute at a local university. Fifty-five percent of the respondents were female; the average age of the subjects was 18.8, and 84% reported their surname as Mexican American.

Reliability: The alpha coefficient for the total scale score was .94. The alpha coefficients for the 5-factor subscales were .92, .86, .92, .90, and .92, respectively.

Validity: There is evidence of construct validity as significant relationships in the expected directions were found for the total acculturation score and its five subscales with subjects' surname, school, and generation status. Generational status in the United States was associated with the total acculturation scores. Anglo-surnamed individuals were more Anglo oriented than Mexican-surnamed individuals. Subjects who took the questionnaire in English had a stronger Anglo orientation than those who took the questionnaire in Spanish.

Comments: This scale assesses Anglo and Mexican orientation with separate questions. While the scale has internal consistency and construct validity, we could identify no additional studies assessing the psychometric properties. The findings are limited to a narrow sample of students.

Location: Montgomery, G. T. (1992). Comfort with acculturation status among students from south Texas. *Hispanic Journal of Behavioral Sciences, 14*, 201–223.

Acculturation Rating Scale: English Version

Response categories: *Items 1–3*: 1 = Mexican/Medicano; 2 = Chicano; 3 = Mexican American; 4 = Spanish, Hispanic, Latin American, American; 5 = Anglo American/other

  1. Which ethnic identification does (did) your mother use?
  2. Which ethnic identification does (did) your father use?
  3. How do you identify yourself?

Response categories: *Item 4*: 1 = Almost exclusively Mexicans, Chicanos, Mexican Americans; 2 = Mostly Mexicans, Chicanos, Mexican Americans; 3 = About equally Mexicans, Chicanos, Mexican Americans, and Anglos or other ethnic groups; 4 = Mostly Anglos, Blacks, or other ethnic groups; 5 = Almost exclusively Anglos, Blacks, or ethnic groups.

  4. What has been (or was) the ethnic origin of your friends from ages 6 to 18?

Response categories: *Items 5–10*: 1 = Very Uncomfortable; 2 = A Little Uncomfortable; 3 = Comfortable; 4 = Mostly Comfortable; 5 = Very Comfortable

  5. How comfortable do you feel speaking Spanish at home? (R)
  6. How comfortable do you feel speaking Spanish with friends, such as during free time at school? (R)
  7. How comfortable do you feel thinking in Spanish? (R)
  8. How comfortable do you feel speaking English at home?
  9. How comfortable do you feel speaking English with friends, such as during free time at school?
  10. How comfortable do you feel thinking in English?

Response categories: *Items 11–24*: 1 = Not at all; 2 = Very little; 3 = A little; 4 = A lot; 5 = Very much
How much do you enjoy:

11. listening to Spanish music? (R)
12. watching TV programs in Spanish? (R)
13. watching Spanish language movies? (R)
14. celebrating holidays according to Mexican tradition? (R)
15. reading books/magazines in Spanish? (R)
16. eating Mexican food? (R)
17. traveling and visiting in Mexico? (R)
18. listening to English music?
19. watching TV programs in English?
20. watching English language movies?
21. celebrating holidays according to Anglo-American tradition?
22. reading books/magazines in English?
23. eating Anglo-American food?
24. traveling and visiting in the United States?

Response categories: *Items 25–28*: 1 = Almost exclusively Mexicans, Chicanos, Mexican Americans; 2 = Mostly Mexicans, Chicanos, Mexican Americans; 3 = About equally Mexicans, Chicanos, Mexican Americans, and Anglos or other ethnic groups; 4 = Mostly Anglos, Blacks, or other ethnic groups; 5 = Almost exclusively Anglos, Blacks, or ethnic groups. Sometimes life is not as we really want it. If you could have your way, how would you like the following aspects of your life to be?

25. How would you like the ethnic identify of your friends to be?
26. How would you like your father's ethnic identify to be?
27. How would you like your mother's ethnic identity to be?
28. How would you like your own ethnic identity to be?

Cultural Life Style Inventory (Mendoza, *1989*)

The Cultural Life Style Inventory (CLSI) assesses acculturation by identifying the level at which respondents identify with their native versus their new culture.

Description: The CLSI consists of 29 items and identifies three categories of acculturation: (1) Cultural Resistance (CR) refers to clinging to native culture and refusing to adopt a new culture; (2) Cultural Shift (CS) refers to adopting the new culture and almost letting go of native culture and values; and (3) Cultural Incorporation (CI) refers to adopting customs and values from both cultures. There are five domains: intra-family language, extra-family language, social affiliation and activities, cultural familiarity and activities, and cultural identification and pride. These domains are intermixed within the three dimensions of acculturation defined above. Items are rated with a letter; an *a* or *b* response is considered as cultural

resistance, a c or d response is considered as cultural shift, and e is considered cultural incorporation. The CLSI can be used to generate two scores. The Cultural Life Style Profile is an indicator of the extent to which an individual's cultural lifestyle reflects cultural resistance, cultural incorporation, and cultural shift tendencies and is calculated by determining how many questions are answered in a resistance, incorporation or shift direction, then dividing these by the total number of valid responses. The second, Dominant and Non-dominant Cultural Life Style Tendencies is determined by statistically comparing an individual's two highest scores on the three acculturation choices (i.e., CR, CI, and CS scores); if statistically significant differences are found between the two most frequent cultural lifestyle tendencies, the individual is said to be predominantly in the acculturation pattern on which he or she scored highest. When the two proportions are not significantly different, the person is classified as culturally eclectic with respect to his or her acculturation pattern. The instrument is available in both English and Spanish, and may be administered individually or in a group setting. The interview is self-administered.

Sample: Two different samples were used to create and test the scale. One sample consisted of 97 first-generation Mexican Americans and 82 Anglo Americans ranging in age from 17 to 55. The second sample consisted of 68 first-generation, 76 second-generation, and 41 third-generation Mexican Americans ranging from age 16 to 52 years.

Reliability: Sample 2 was used to determine reliability. Cronbach's alpha for each of the five factors were .87 for intra-familial language use; .91 for extra-familial language use; .89 for social affiliation and activities; .84 for cultural familiarity and activities; and .89 for cultural identification and pride. Test–retest was assessed with a sample of 88 Mexican American and 59 Anglo Americans. The correlation across all groups was $r = .91$, for Mexican Americans who took the inventory in English; $r = .88$, for Mexican Americans who completed it in Spanish, and $r = .95$, for Anglo Americans. A test of equivalence for parallel forms yielded significant correlations between the two groups of bilingual Mexican Americans: $r = .80$ for the former group and $r = .77$ for the latter group.

Validity: There is evidence of construct validity. The study results showed that with successive generations, certain customs from the Mexican culture disappear from the respondent's habits (eta $= .54$), certain customs from the Anglo-American culture are adopted (eta $= .61$), and certain customs from both cultures coexist across generations. A significant positive correlation was found between exposure to the mainstream culture and cultural shift ($r = .66$) and significant negative correlations with cultural resistance and incorporation ($r = -.60$ and $r = -.25$). The test of the Cultural Life Styles Inventory for concordance shows a significant correlation between the self-reported responses of the target individuals and reports given by relatives ($r = .71$).

Comments: By linking the multidimensional factors and the styles of acculturation within a single instrument, the scale provides an approach to measuring different levels of acculturation. The scoring for this instrument is complicated. There is evidence of reliability. Moderate to high internal consistency for the five factors has been found in a study with Puerto Rican undergraduate students

(De Leon & Mendez, 1996). High internal consistency has been found for the total scale score, though the scale is bidimensional (Managa et al., 1996). The five factor model has been found in a study of Puerto Rican undergraduates, though the item composition is somewhat different, offering evidence of factorial validity (De Leon & Mendez, 1996). A 10-item adaptation of the scale has been evaluated by Lerman, Maldonado, and Luna (2009). Note that the scale has been modified since its original publication.

Location: Mendoza, R. H. (1989). An empirical scale to measure type and degree of acculturation in Mexican-American adolescents and adults. *Journal of Cross-Cultural Psychology, 20*, 372–385.

Selected Publications

DeLeon, B., & Mendez, S. (1996). Factorial structure of a measure of acculturation in a Puerto Rican population. *Educational and Psychological Measurement, 56*, 155–165.

Lerman, D., Maldonado, R., & Luna. D. (2009). A theory-based measure of acculturation: The shortened cultural life style inventory. *Journal of Business Research, 62,* 399–406.

Magana, J. R., Rocha, O. D., Amsel, J., Magana, H. A., Fernandez, M. I., & Rulnick, S. (1996). Revisiting the dimensions of acculturation: Cultural theory and psychometric practice. *Hispanic Journal of Behavioral Sciences, 18*, 444–468.

Mendoza, R. (1994). *Cultural life styles inventory. Version 2.0.* Author.

Cultural Life Styles Inventory (Version 2.0; Mendoza, 1994)

1. What language do you use when you speak with your *grandparents*?
   _____a. Only Spanish
   _____b. More Spanish than English
   _____c. More English than Spanish
   _____d. Only English
   _____e. Both English and Spanish about equally
   _____f. Other language (please specify:_____)
   _____g. I do not have any grandparents
2. What language do you use when you speak with your *parents*?
   _____a. Only Spanish
   _____b. More Spanish than English
   _____c. More English than Spanish
   _____d. Only English
   _____e. Both English and Spanish about equally
   _____f. Other language (please specify:_____)
   _____g. I do not have any parents

3. What language do you use when you speak with your *brothers* and *sisters*?
   ____a. Only Spanish
   ____b. More Spanish than English
   ____c. More English than Spanish
   ____d. Only English
   ____e. Both English and Spanish about equally
   ____f. Other language (please specify:_____)
   ____g. I do not have any brothers or sisters
4. What language do you use when you speak with your *spouse* or *person you live with*?
   ____a. Only Spanish
   ____b. More Spanish than English
   ____c. More English than Spanish
   ____d. Only English
   ____e. Both English and Spanish about equally
   ____f. Other language (please specify:_____)
   ____g. I am not married
5. What language do you use when you speak with your *children*?
   ____a. Only Spanish
   ____b. More Spanish than English
   ____c. More English than Spanish
   ____d. Only English
   ____e. Both English and Spanish about equally
   ____f. Other language (please specify:_____)
   ____g. I do not have any children
6. What language do you use when you speak with your *closet friends*?
   ____a. Only Spanish
   ____b. More Spanish than English
   ____c. More English than Spanish
   ____d. Only English
   ____e. Both English and Spanish about equally
   ____f. Other language (please specify:_____)
7. What language *records*, *tapes*, or *compact discs* do you own?
   ____a. Only Spanish-speaking records, tapes, and compact discs
   ____b. Mostly Spanish-speaking records, tapes, and compact discs
   ____c. Mostly English-speaking records, tapes, and compact discs
   ____d. Only English-speaking records, tapes, and compact discs
   ____e. Both English- and Spanish-speaking records, tapes, and compact discs about equally
   ____f. Records tapes and compact discs in other language (please specify: _____)
   ____g. I do not own any records, tapes, or compact discs
8. What kind of *radio* stations do you listen to?
   ____a. Only Spanish-speaking radio stations
   ____b. Mostly Spanish-speaking radio stations

_____c. Mostly English-speaking radio stations
_____d. Only English-speaking radio stations
_____e. Both English- and Spanish-speaking radio stations about equally
_____f. Radio stations in other language (please specify: _____)

9. What kind of *TV* programs do you watch?
_____a. Only Spanish-speaking TV programs
_____b. Mostly Spanish-speaking TV programs
_____c. Mostly English-speaking TV programs
_____d. Only English-speaking TV programs
_____e. Both English- and Spanish-speaking TV programs about equally
_____f. TV programs in other language (please specify: _____)

10. What kind of *newspapers* and *magazines* do you read?
_____a. Only newspapers and magazines in Spanish
_____b. Mostly newspapers and magazines in Spanish
_____c. Mostly newspapers and magazines in English
_____d. Only newspapers and magazines in English
_____e. Both newspapers and magazines in English and Spanish about equally
_____f. Newspapers and magazines in other language (please specify: _____)

11. In what language do you *pray*?
_____a. Only Spanish
_____b. More Spanish than English
_____c. More English than Spanish
_____d. Only English
_____e. Both English and Spanish about equally
_____f. Other language (please specify:_____)
_____g. I do not pray

12. In what language are the *jokes* with which you are familiar?
_____a. All are in Spanish
_____b. More are in Spanish than in English
_____c. More are in English than in Spanish
_____d. All are in English
_____e. Some are in English and some are in Spanish about equally
_____f. Other language (please specify:_____)

13. What kind of *foods* do you typically eat *at home*?
_____a. Only Mexican foods
_____b. Mostly Mexican foods
_____c. Mostly American (US) foods
_____d. Both American (US) and Mexican foods about equally
_____e. Other types of foods (please specify:_____)

14. What kind of *restaurants* do you typically eat?
_____a. Only at Mexican restaurants
_____b. Mostly at Mexican restaurants
_____c. Mostly at non-Mexican restaurants
_____d. Only at non-Mexican restaurants

_____e. Both at non-Mexican and Mexican restaurants about equally
_____f. Other types of restaurants (please specify:_____)

15. What is the ethnic background of your *closet friends*?
_____a. All are Mexican or Mexican American
_____b. Most are Mexican or Mexican American
_____c. Most are Anglo American
_____d. All are Anglo American
_____e. Both Anglo American and Mexican/Mexican American about equally
_____f. Other ethnic group (please specify:_____)

16. What is the ethnic background of the people that you have *dated*?
_____a. All are Mexican or Mexican American
_____b. Most are Mexican or Mexican American
_____c. Most are Anglo American
_____d. All are Anglo American
_____e. Both Anglo American and Mexican/Mexican American about equally
_____f. Other ethnic group (please specify:_____)
_____g. I have never dated anyone

17. When you go to *social functions* such as parties, dances, picnics, or sports events, what is the ethnic background of the people that you tend to go with?
_____a. Always with Mexicans or Mexican Americans
_____b. Mostly with Mexicans or Mexican Americans
_____c. Mostly with Anglo Americans
_____d. Always with Anglo Americans
_____e. Both with Anglo Americans and Mexicans/Mexican Americans about equally
_____f. Other ethnic group (please specify:_____)

18. What is the ethnic composition of the *neighborhood* where you *live*?
_____a. Only Mexican or Mexican American
_____b. Mostly Mexican or Mexican American
_____c. Mostly Anglo American
_____d. Only Anglo American
_____e. Both Anglo American and Mexican/Mexican American about equally
_____f. Other ethnic group (please specify:_____)

19. Which *national anthem* do you know?
_____a. Only the Mexican National anthem
_____b. Mostly the Mexican national anthem
_____c. Mostly the American (US) national anthem
_____d. Only the American (US) national anthem
_____e. Both the American (US) and Mexican national anthems about equally
_____f. Neither the American (US) nor the Mexican national anthems

20. Which *national* or *cultural heritage* do you feel *most proud* of?
_____a. Unquestionably my Mexican heritage
_____b. Primarily my Mexican heritage
_____c. Primarily my American (US) heritage
_____d. Unquestionably my American (US) heritage

_____e. Both my American (US) and Mexican heritage about equally

_____f. Other national or cultural heritage (please specify:_____)

21. What types of *national* or *cultural holidays* (such as Fourth of July and Dieciséis De Septiembre) do you typically celebrate?

_____a. Only Mexican holidays

_____b. Mostly Mexican holidays

_____c. Mostly American (US) holidays

_____d. Only American (US) holidays

_____e. Both American (US) and Mexican holidays about equally

_____f. Other national or cultural holidays (please specify:_____)

_____g. I do not celebrate any national or cultural holidays

22. What is the ethnic background of the *movie stars* and *popular singers* that you *most admire*?

_____a. All are Mexican, Mexican American, or Latino

_____b. Most are Mexican, Mexican American, or Latino

_____c. Most are Anglo American

_____d. All are Anglo American

_____e. Some are Anglo American and some are Mexican, Mexican American, or Latino about equally

_____f. Other ethnic group (please specify:_____)

23. If you had a choice, what is the ethnic background of the person that you would *marry*?

_____a. Most definitely a Mexican or Mexican American

_____b. Preferably a Mexican or Mexican American

_____c. Preferably an Anglo American

_____d. Most definitely an Anglo American

_____e. Either an Anglo American or a Mexican/Mexican American, it would not matter to me

_____f. Other ethnic group (please specify:_____)

24. If you had *children*, what types of *names* would you give them?

_____a. Most definitely Spanish or Mexican names

_____b. Probably Spanish or Mexican names

_____c. Probably English or Anglo-American names

_____d. Most definitely English or Anglo-American names

_____e. Either English/Anglo-American or Spanish/Mexican names, it would not matter to me

_____f. Other ethnic names (please specify:_____)

25. If you had children, in what language would you *teach* them to *read*, *write,* and *speak*?

_____a. Only in Spanish (with no English)

_____b. Primarily in Spanish (with some English)

_____c. Primarily in English (with some Spanish)

_____d. Only in English (with no Spanish)

_____e. Equally in both English and Spanish

_____f. Other language (please specify:_____)

26. Which culture and way of life do you believe is *responsible* for the *social problems* (such as poverty, teenage pregnancies, and gangs) found in some Mexican American communities?

    ____a. Only the Mexican culture

    ____b. Mostly the Mexican culture

    ____c. Mostly the American (US) culture

    ____d. Only the American (US) culture

    ____e. Both American (US) and Mexican cultures about equally

    ____f. Other (please specify:_____)

27. At what kind of *stores* do you *typically shop*?

    ____a. Only in stores that have Spanish-speaking workers

    ____b. Primarily at stores that have Spanish-speaking workers

    ____c. Primarily at stores that have English-speaking workers

    ____d. Only in stores that have English-speaking workers

    ____e. Both, at stores that have English-speaking workers and at stores that have Spanish-speaking workers about equally

    ____f. Other types of stores (please specify:_____)

28. How do you prefer to be *identified*?

    ____a. Most definitely as a Mexican, Mexican American, Chicano, Latino, or Hispanic

    ____b. Preferably as a Mexican, Mexican American, Chicano, Latino, or Hispanic

    ____c. Preferably as an American, Anglo American, or Caucasian

    ____d. Most definitely as an American, Anglo American, or Caucasian

    ____e. Either as an American/Anglo American/Caucasian or as a Mexican/Mexican American/Chicano/Latino/Hispanic, I have no preference

    ____f. Other group (please specify:_____)

29. Which culture and way of life would you say has had the *most positive influence* on your life?

    ____a. Most definitely the Mexican culture

    ____b. Probably the Mexican culture

    ____c. Probably the American (US) culture

    ____d. Most definitely the American (US) culture

    ____e. Both American (US) and Mexican cultures about equally

    ____f. Other culture (please specify:_____)

Acculturation Rating Scale for Mexican Americans-II (Cuellar, Arnold, & Maldonado, 1995)

The Acculturation Rating Scale for Mexican Americans-II (ARSMA-II) assesses behavioral and affective aspects of acculturation.

Description: ARSMA-II assesses four domains: (a) language use and preference, (b) ethnic identity and classification, (c) cultural heritage and ethnic behaviors, and (d) ethnic interaction. ARSMA-II consists of two scales. Scale 1 (Acculturation Scale) measures integration (how well the respondent adopts aspects of both cultures) and assimilation (degree to which respondents adopts dominant culture by dropping their Mexican culture). Scale 2 (Marginality Scale) assesses marginalization (the degree to which a respondent that tries to assimilate is rejected by the dominant group) and separation (the degree to which the respondent refuses to adopt the dominant culture.). The scales need not be used together. The ARSMA-II is a self-administered questionnaire and there are English and Spanish versions.

Scale 1 is a 30-item scale. The Anglo Orientation Subscale (AOS) includes 13 items (2, 4, 7, 9, 10, 13, 15, 16, 19, 23, 25, 27, 30) and the Mexican Orientation Subscale (MOS) includes 17 items (1, 3, 5, 6, 8, 11, 12, 14, 17, 18, 20, 21, 22, 24, 26, 28, 29). Responses range from *not at all* (1) to *extremely often or almost always* (5). The AOS score is calculated by summing the items and dividing by 13; the MOS score is the sum of the items divided by 17. The overall acculturation score is calculated by subtracting the MOS score from the AOS score. The degree of acculturation is based on cut-off scores: *very Mexican oriented* (<–1.33); *Mexican oriented to approximately bicultural* (≥ –1.33 to ≤ –.07); *slightly Anglo oriented bicultural* (> –.07 to 1.19); *strongly Anglo oriented* (≥ 1.19 to 2.45); and *very Assimilated* (> 2.45).

Scale 2 includes 18 items and includes three subscales: Anglo Marginality (ANGMAR; items 1–6), Mexican Marginality (MEXMAR; items 7–12), and Mexican American marginality (MAMARG; items 13–18). An overall marginality score is computed by summing the 18 items and subscale scores are the sum of the relevant six items.

Sample: The validation sample consisted of 379 undergraduates including Mexican, Mexican American or non-Hispanic White. The sample was almost equally divided by gender (males = 43% and females = 48% with 9% missing data). The average educational level was between 1 and 2 years of college.

Reliability: Coefficient alphas and 1-week test–retest reliabilities for the scales were .83/.94 for Anglo Orientation Scale, .88/96 for Mexican Orientation Scale, .87/.78 for Marginality Scale, .90/.72 for Anglo Marginality Subscale, .68/.80 for Mexican Marginality Subscale, and .91/.81 for Mexican American Marginality Subscale

Validity: ARSMA and ARSMA-II were correlated ($r = .89$) demonstrating concurrent validity. The correlation between acculturation and generational status was .61 and the mean differences between generations are significant, supporting the construct validity of ARSMA-II.

Comments: There is evidence of reliability and validity with a college sample both using scores and levels of acculturation. Similar findings have been found with college students and the relationship of acculturation scores (Scale 1) with ethnic identity (Cueller, Nyberg, & Maldonado, 1997) and substance abusing adults (Lessinger, 1997). There is evidence that the Marginality scale (Scale 2) is not a

valid indicator of marginality (Gutierrez, Franco, Powell, Peterson, & Reid, 2009). Scale 1 has been adapted for use with Asian American college students (Lee, Yoon, & Liu-Tom, 2006) and Asian American middle school aged youth (Schaefer et al., 2009) with satisfactory evidence of reliability and validity. A brief version using 12 items from Scale 1 has been adapted for children and adolescents with mixed results for reliability and validity (Bauman, 2005; Lopez, 2009).

Location: Cuellar, I., Arnold, B., & Maldonado, R. (1995). Acculturation rating scale for Mexican Americans-II: A revision of the original ARSMA scale. *Hispanic Journal of Behavioral Sciences, 17*, 275–304.

Selected Publications

Bauman, S. (2005). The reliability and validity of the brief acculturation rating scale for Mexican Americans-II for children and adolescents. *Hispanic Journal of Behavioral Sciences, 27*, 426–441.

Cuellar, I., Nyberg, B., & Maldonado, R. E. (1997). Ethnic identity and acculturation in a young adult Mexican-origin population. *Journal of Community Psychology, 25*, 535–549.

Gutierrez, M. A., Franco, L. M., Powell, K. G., Peterson, N. A., & Reid, R. J. (2009). Psychometric properties of the Acculturation Rating Scale for Mexican Americans-II: Exploring dimensions of marginality among a diverse Latino population. *Hispanic Journal of Behavioral Sciences, 31,* 340–356.

Lee, R. M., Yoon, E., & Liu-Tom, H.-T. T. (2006). Structure and measurement of acculturation/enculturation for Asian Americans using the ARSMA-II. *Measurement and Evaluation in Counseling and Development, 39,* 42–55.

Lessenger, L. H. (1997). Use of acculturation rating scale for Mexican Americans-II with substance abuse patients. *Hispanic Journal of Behavioral Sciences, 19*, 387–398.

Lopez, F. A. (2009). Developmental considerations and acculturation of children: Measures and issues. *Hispanic Journal of Behavioral Sciences, 31,* 57–72.

Schaefer, S. E., Salazar, M., Bruhn, C., Saviano, D., Boushey, C., & Van Loan, M. D. (2009). Influence of race, acculturation, and socioeconomic status on tendency toward overweight in Asian-American and Mexican-American early adolescent females. *Journal of Immigrant and Minority Health, 11,* 188–197.

Acculturation Rating Scale for Mexican Americans-II: English Version

Note: (B) indicates used in Brief ARSMA-II for Children.

Scale 1: 1 = Not at all; 2 = Very little or not very often; 3 = Moderately; 4 = Much or very often; 5 = Extremely often or almost always

1. I speak Spanish (B)
2. I speak English (B)
3. I enjoy speaking Spanish (B)
4. I associate with Anglos (B)
5. I associate with Mexicans and/or Mexican Americans
6. I enjoy listening to Spanish language music
7. I enjoy listening to English language music
8. I enjoy Spanish language on TV (B)
9. I enjoy English language on TV
10. I enjoy English language movies (B)
11. I enjoy Spanish language movies (B)
12. I enjoy reading (e.g., books in Spanish) (B)
13. I enjoy reading (e.g., books in English)
14. I write letters in Spanish
15. I write letters in English (B)
16. My thinking is done in the English language (B)
17. My thinking is done in the Spanish language (B)
18. My contact with Mexico has been
19. My contact with the USA has been
20. My father identifies or identified himself as 'Mexicano'
21. My mother identifies or identified herself as 'Mexicana'
22. My friends, while I was growing up, were of Mexican origin
23. My friends, while I was growing up, were of Anglo origin
24. My family cooks Mexican foods
25. My friends now are of Anglo origin (B)
26. My friends now are of Mexican origin
27. I like to identify myself as an Anglo American
28. I like to identify myself as a Mexican American
29. I like to identify myself as a Mexican
30. I like to identify myself as an American

Scale 2: 1 = Not at all; 2 = Very little or not very often; 3 = Moderately; 4 =
Much or very often; 5 = Extremely often or almost always

1. I have difficulty accepting some ideas held by Anglos
2. I have difficulty accepting some attitudes held by Anglos
3. I have difficulty accepting some behaviors exhibited by Anglos
4. I have difficulty accepting some values held by some Anglos
5. I have difficulty accepting certain practices and customs found in
   some Anglos
6. I have, or think I would have, difficulty accepting Anglos as close
   personal friends
7. I have difficulty accepting ideas held by some Mexicans
8. I have difficulty accepting certain attitudes held by Mexicans
9. I have difficulty accepting some behaviors exhibited by Mexicans

10. I have difficulty accepting some values held by some Mexicans
11. I have difficulty accepting certain practices and customs found in some Mexicans
12. I have, or think I would have difficulty accepting Mexicans as close personal friends
13. I have difficulty accepting ideas held by Mexican Americans
14. I have difficulty accepting certain attitudes held by Mexican Americans
15. I have difficulty accepting some behaviors exhibited by Mexican Americans
16. I have difficulty accepting some values help by Mexican Americans
17. I have difficulty accepting certain practices and customs commonly found in Mexican Americans
18. I have, or think I would have difficulty accepting Mexican Americans as close personal friends

The Psychological Acculturation Scale (Tropp, Erkut, Coll, Alarcon, & Vazquez-Garcia, 1999)

The Psychological Acculturation Scale (PAS) assesses individual's sense of attachment to and understanding of Anglo-American and Latino/Hispanic cultures.

Description: The PAS is a 10-item scale. Responses are offered on a 9-point Likert-type scale ranging from *only Hispanic/Latino* (1) to *only Anglo/American* (9). The midpoint represents a bicultural orientation. A mid-point score (4.5) suggests that the respondent is bicultural, that is, both Latino/a and American. Scores lower than 4.5 suggest a higher Latino/a orientation and scores higher than 4.5 suggest a greater Anglo-American identification. The scale can either be self-administered or administered through a structured interview format. The scale is available in both English and Spanish.

Sample: Three studies were performed to determine the psychometric properties of the PAS. Study 1: The sample included 36 participants who identified themselves as Latinos, 26 were women, and the respondents' average age was 28.6. Study 2: The sample included 107 Puerto Rican, of whom 64 were female and had an average age of 27.9 years. Study 3: The sample included 247 Puerto Rican adolescents, ages 13 and 14 and 228 mothers of the adolescents. The majority of the adolescent sample (52%) was female, 98 were born in Puerto Rico, and 146 were born on the US mainland. The average age of the parents was 39 years.

Reliability: In Studies 1 and 2, Cronbach's alphas were .83 and .90 for the Spanish version and .85 and .83 for the English version. In Study 1, item total correlation ranged from .22 and .68 for scores on the Spanish version and from .27 and .71 for the English version. In Study 2, item total correlations ranged from .55 to

.81 for the Spanish version, and from .36 to .67 for the English version. Cronbach's alphas for the adolescent and parent samples were .91.

Validity: There is evidence of construct validity since the PAS correlated with percentage of lifetime in the United States ($r = .43$) indicating a stronger Anglo/American orientation the longer the time spent on the US mainland. Respondents born in Puerto Rico had lower PAS scores than did respondents born on the US mainland (Studies 2 and 3). PAS also correlated positively with use of English at home during the respondent's childhood (Studies 2 and 3). Respondents who chose to complete the questionnaire in Spanish tended to have lower scores on the PAS than did respondents who completed the questionnaire in English.

Comments: The PAS measures individuals' psychological responses to cultural exposure. Overall, the scale demonstrates excellent internal consistency; this finding has been found in other studies (Beeber, Perreira, & Schwartz, 2008; Castillo, Cano, Chen, Blucker, & Olds, 2008; Cintron, Carter, & Sbrocco, 2005). There is evidence of validity across different samples and across two different modes of administration; other research finds the scale relating to other constructs as hypothesized (Castillo et al., 2008; Ghorpade, Lackritz, & Singh, 2004). The scale has been used with different ethnic groups in the United States, with excellent internal consistency (Ghorpade et al., 2004) and adapted to other ethnic groups and languages (Miglietta & Tartaglia, 2008).
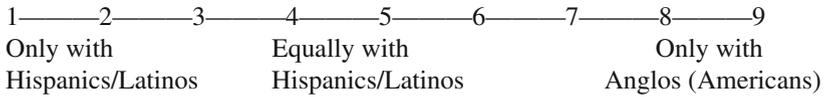
Location: Tropp, L. R., Erkut, S., Coll, C. G., Alarcon, O., & Vazquez-Garcia, H. A. (1999). Psychosocial acculturation: Development of a new measure for Puerto Ricans on the U.S. mainland. *Educational and Psychological Measurement, 59*, 351–367.

Selected Publications

Beeber, L. S., Perreira, K. M., & Schwartz, T. (2008). Supporting the mental health of mothers raising children in poverty: How do we target them for intervention studies. *Annals of the New York Academy of Science, 1136;* 86–100.

Castillo, L. G., Cano, M. A., Chen, S. W., Blucker, R. T., & Olds, S. O. (2008). Family conflict and intragroup marginalization as predictors of acculturative stress in Latino college students. *International Journal of Stress Management, 15,* 43–52.

Cintron, J. A., Carter, M. M., & Sbrocco, T. (2005). *Ataques de Nervios* in relation to anxiety sensitivity among island Puerto Ricans. *Culture, Medicine, and Psychiatry, 29,* 415–431.

Ghorpade, J., Lackritz, J., & Singh, G. (2004). Psychological acculturation of ethnic minorities into White Anglo American culture: Consequences and predictors. *Journal of Applied Social Psychology, 34,* 1208–1228.

Miglietta, A., & Tartaglia, S. (2008). The influence of length of stay, linguistic competence, and media exposure in immigrants' adaptation. *Cross-Cultural Research, 20,* 1–16.

Psychological Acculturation Scale – English Version

Response categories:

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1———2———3———4———5———6———7———8———9
Only with              Equally with              Only with
Hispanics/Latinos      Hispanics/Latinos     Anglos (Americans)
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 1. With which group of people do you feel you share most of your beliefs and values?
 2. With which group of people do you feel you have the most in common?
 3. With which group of people do you feel most comfortable?
 4. In your opinion, which group of people best understands your ideas (your way of thinking)?
 5. Which culture do you feel proud to be a part of?
 6. In what culture do you know how things are done and feel that you can do them easily?
 7. In what culture do you feel confident you know how to act?
 8. In your opinion, which group of people do you understand best?
 9. In what culture do you know what is expected of a person in various situations?
10. Which culture do you know the most about (for example: its history, traditions, and customs)?

Bicultural Involvement Questionnaire (Szapocznik, Kurtines, & Fernandez, 1980)

The Bicultural Involvement Questionnaire (BIQ) assesses the degree to which an individual participates and feels comfortable in Hispanic and American culture.

Description: The BIQ consists of 42 items (note that items 25–33 are scored twice and differently to create a 42-item scale) to assess two dimensions: (1) Biculturalism ranging from high Hispanic acculturation to high Anglo acculturation, with a middle score representing a bicultural orientation and (2) Cultural Involvement ranging from no cultural involvement with Hispanic or Anglo-American culture to cultural involvement with Hispanic or Anglo-American culture. Items are scored on a 5-point Likert scale with responses varying depending on item. The scale questions are divided into involvement in American culture, Americanism, and includes 21 questions (items 6–10, 18–24, and 25–33) and involvement in Hispanic culture, Hispanicism, and includes 21 questions (items 1–5, items 11–17, and the reverse score of items 25–33). Americanism and Hispanicism scores are calculated by summing the appropriate item responses. The Biculturalism scale score is calculated by subtracting the total Americanism scores from the total Hispanicism scores. A score of zero reflects biculturalism, less than zero reflects a tendency toward Americanism and greater than zero reflects a tendency toward Hispanicism. The Cultural Involvement scale score is calculated by

summing the Hispanic items and American items together. A higher score represents more involvement in both cultures while a lower score reflects less involvement in either of the two cultures. The scale is self-administered. There are both English and Spanish versions.

Sample: Three samples were used to assess the scale's psychometric properties. Sample 1 consisted of 93 Cuban-American youth with an average age of 13.7 years; 51 (54.8%) were males. Sample 2 included 47 non-Cuban Hispanic-American youth with an average age of 14.1; 25 (53.2%) were males. Sample 3 included 16 participants, 11 Cuban-Americans and 5 non-Cuban Hispanic-Americans. The participants' average age was 14 years and 10 (62.5%) were males.

Reliability: The combined Samples 1 and 2 alpha coefficients for the scales were .93 Hispaniscism and .89 for Americanism. The reliability of the difference scores for the Biculturalism Scale was .94, and of the composite scores for Cultural Involvement Scale was .79. Sample 3's 6-week test–retest reliability scores were .50 Hispanicism, .54 Americanism, .79 Biculturalism, and .14 (ns) Cultural Involvement.

Validity: To establish criterion validity, biculturalism of Samples 1 and 2 participants was rated by teachers. Teacher ratings of biculturalism were statistically significantly related to Biculturalism Scale scores ($r = .42$) and Cultural Involvement Scale scores ($r = .22$) for Sample 1 (Cuban Hispanics) but not for Sample 2 (non-Cuban Hispanics). Teacher ratings (Sample 1) of adjustment were also related to Biculturalism and both Biculturalism and Cultural Involvement distinguished the most adjusted from the least adjusted students.

Comments: There is evidence of reliability and validity. Excellent internal consistency has been found in other studies with broader samples of Hispanic youth (Birman, 1998; Coatsworth, Maldonado-Molina, Pantin, & Szapocznik, 2005; Martinez, 2006; Schwartz, Pantin, Sullivan, Prado, & Szapocznik, 2006), Hispanic college students (Gomez & Fassinger, 1994) and Hispanic adults (Martinez, 2006; Schwartz et al., 2006). Construct validity has been found as the scales, in particular, the Americanism, Hispanicism, and the Bicultural scales, are related to other constructs such as styles of achieving one's goals (Gomez & Fassinger, 1994), length of residence in the United States (Rivera-Sinclair, 1997; Schwartz et al., 2006), generation in the United States (Perez & Padilla, 2000), and anxiety (Rivera-Sinclair, 1997). Respondents may be classified into categories that provide meaningful differences (Coatsworth et al., 2005). There is evidence of factorial validity; Guo, Suarez-Morales, Schwartz, & Szapocznik (2009) report a four-factor structure of Spanish language, Hispanic activity, English language, and American activity.

Location: Szapocznik, J., Kurtines, W. M., & Fernandez, T. (1980). Bicultural involvement and adjustment in Hispanic-American youths. *International Journal of Intercultural Relations, 4*, 353–365.

Selected Publications

Birman, D. (1998). Biculturalism and perceived competence of Latino immigrant adolescents. *American Journal of Community Psychology, 26*, 335–354.

Coatsworth, J. D., Maldonado-Molina, M., Pantin, H., & Szapocznik, J. (2005). A person-centered and ecological investigation of acculturation strategies in Hispanic immigrant youth. *Journal of Community Psychology, 33*, 157–174.

Gomez, M. J., & Fassinger, R. E. (1994). An initial model of Latina achievement: Acculturation, biculturalism and achieving styles. *Journal of Counseling Psychology, 41,* 205–215.

Guo, X., Suarez-Morales, L., Schwartz, S. J., & Szapocznik, J. (2009). Some evidence for multidimensional biculturalism: Confirmatory factor analysis and measurement invariance analysis on the Bicultural Involvement Questionnaire-Short Version. *Psychological Assessment, 21,* 22–31.

Martinez, C. R. (2006). Effects of differential family acculturation on Latino adolescent substance abuse. *Family Relations, 55,* 306–317.

Perez, W., & Padilla, A. M. (2000). Cultural orientation across three generations of Hispanic adolescents. *Hispanic Journal of Behavioral Sciences, 22,* 390–398.

Rivera-Sinclair, E. A. (1997). Acculturation/biculturalism and its relationship to adjustment in Cuban-Americans. *International Journal of Intercultural Relations, 21*, 379–391.

Schwartz, S. J., Pantin, H., Sullivan, S., Prado, G., & Szapocznik, J. (2006). Nativity and years in the receiving culture as markers of acculturation. *Journal of Cross-Cultural Psychology, 37,* 345–353.

Bicultural Involvement Questionnaire

Response categories: *Items 1–10*: 1 = Not at all comfortable to 5 = Very comfortable

A. How comfortable do you feel speaking *Spanish*

1. at home
2. in school
3. at work
4. with friends
5. in general

B. How comfortable you feel speaking English

6. at home
7. in school
8. at work
9. with friends
10. in general

Items 11–24: 1 = Not at all; 5 = Very much

C. How much do you enjoy

11. Hispanic music

12. Hispanic dances
13. Hispanic-oriented places
14. Hispanic-type recreation
15. Hispanic TV programs
16. Hispanic radio stations
17. Hispanic books and magazines

D.   How much do you enjoy

18. American music
19. American dances
20. American-oriented places
21. American-type recreation
22. American TV programs
23. American radio stations
24. American books and magazines

Items 25–33: 1 = I would wish this to be completely Hispanic; 2 = I would
  wish this to be mostly Hispanic; 3 = I would with this to be both Hispanic
  and American; 4 = I would wish this to be mostly American; 5 = I would
  wish this to be completely American

E.   Sometimes life is not as we really want it. If you could have your way, how
       would you like the following aspects of your life to be?

25. Food
26. Language
27. Music
28. TV programs
29. Books/magazines
30. Dances
31. Radio programs
32. Way of celebrating birthdays
33. Way of celebrating weddings

Acculturative Stress

The Societal, Attitudinal, Familial, and Environmental Acculturative Stress Scale – Children (Chavez, Moran, Reid, & Lopez, 1997)

The Societal, Attitudinal, Familial, and Environmental Acculturative Stress Scale-
Children (SAFE-C) measures both general and ethnicity specific acculturative stress
in children.

Description: SAFE-C consists of 36 items measuring three domains: (1) General Social Stressors that are generally common to youth (16 items: 2, 6, 7, 10, 11, 13, 16, 17, 19, 21, 23, 25, 26, 30, 31, 36); (2) Process-oriented Stressors (14 items: 3, 4, 5, 8, 9, 14, 15, 18, 20, 22, 27, 28, 29, 35); and (3) Perceptions of Discrimination (6 items: 1, 12, 41, 32, 33, 34). The latter two domains can be combined into a single score. Each response is based on a 5-point Likert scale with response options being: *does not bother me* (1); *almost never bothers me* (2); *sometimes bothers me* (3); *often bothers me* (4); *bothers me a lot* (5). A statement that does not apply to the subject is scored as zero. A statement that does not apply to the subject response is not used to compute scores (though at least one study counted it as a *does not bother me* response). A total score for the SAFE-C is obtained by summing the individual items and subtracting 36; scores can also be generated for any of the domains in the same way. Total SAFE-C scores range from 0 to 180, higher scores indicate higher level of perceived stress. For general social stress, the possible scores range from 0 to 80; process-oriented stress scores, 0 to 70; and for perceived discrimination, 0 to 30. The scale is administered in a standardized interview format.

Sample: The scale was developed using a sample of 71 children; 45 were Euro-Americans and 26 were Latino/as. The average age of the participants was 9.43 years.

Reliability: Cronbach's alpha for the overall SAFE-C was .86. No subscale alphas were provided.

Validity: The Latino children had a mean score of 44.31 on Acculturation Process items, 14.19 on Perceived Discrimination items, 43.27 on general Social Stress items, and 101.77 on the total Safe-C. The Euro-American sample had a mean score of 27.04 on Acculturative process items; 9.36 on Perceived Discrimination items; 34.87 on General Social Stress items; and 71.27 on the Total Safe-C. Results from the comparisons of the Latino and Euro-American SAFE-C mean scores suggest that Latinos scored significantly higher than Euro-Americans in all stress domains as expected.

Comments: There is limited evidence for reliability and just for the total scale score. Other studies have found satisfactory internal consistency for the Process-Oriented Subscale (Schwartz, Zamboanga, & Jarvis, 2007) or the 20 item unique stressors domain (Hawley, Chavez, & St. Romain, 2007). There is less evidence for validity; psychometric studies have found mixed results about the hypothesized relationship of scale scores to other constructs (Hawley et al., 2007; Schwartz et al., 2007; Weisskirch & Alva, 2002). There is no evidence of factorial validity bringing into question the actual use of subscale scores. A factor analysis of the 20 items reflecting ethnic-related stressors found that only 12 of the items should be retained and some items identified as process were related to discrimination (Suarez-Morales, Dillon, & Szapocznik, 2007).

Location: Chavez, D. V., Moran, V. R., Reid, S. L., & Lopez, M. (1997). Acculturative stress in children: A modification of the SAFE scale. *Hispanic Journal of Behavioral Sciences, 19*, 34–44.

Selected Publications

Hawley, S. R., Chavez, D. V., & St. Romain, T. (2007). Developing a bicultural model for academic achievement: A look at acculturative stress, coping, and self-perception. *Hispanic Journal of Behavioral Sciences, 29,* 283–299.

Schwartz, S. J., Zamboanga, B. L., & Jarvis, L. H. (2007). Ethnic identify and acculturation in Hispanic early adolescents: Mediated relationships to academic grades, prosocial behaviors, and externalizing symptoms. *Cultural Diversity and Ethnic Minority Psychology, 13,* 364–373.

Suarez-Morales, L., Dillon, F. R., & Szapocznik, J. (2007). Validation of the acculturative stress inventory for children. *Cultural Diversity and Ethnic Minority Psychology, 13,* 216–224.

Weisskirch, R. S., & Alva, S. A. (2002). Language brokering and the acculturation of Latino children. *Hispanic Journal of Behavioral Sciences, 24*, 369–378.

Societal, Academic, Familial, and Environmental Acculturative Stress Scale: Children

Response categories: 0 = Doesn't apply; 1 = Doesn't bother me; 2 = Almost never bothers me; 3 = Sometimes bothers me; 4 = Often bothers me; 5 = Bothers me a lot

1. I feel bad when others make jokes about people who are in the same group as me.
2. It's hard for me to talk to new kids.
3. I have more things that get in my way than most people do.
4. It bothers me that people in my family who I am close to don't understand the things that I think are important, that are new to them.
5. People in my family who I am close to have plans for when I grow up that I don't like.
6. It bothers me when someone in my family is very sick.
7. It bothers me when my parents argue.
8. It's hard for me to tell my friends how I really feel.
9. I don't have any close friends.
10. It's hard for me to ask questions in class.
11. I worry about what other kids think about me.
12. Many people believe certain things about the way people in my group act, think, or are, and they treat me as if those things are true.
13. I worry about having to take tests in school.
14. I don't feel at home here in the United States.
15. People think I am shy, when I really just have trouble speaking English.
16. I worry about being sick.

17. The thought of my family and I moving to a new place bothers me.
18. I often feel that people purposely try to stop me from getting better at something.
19. I worry that other kids won't like me.
20. It bothers me when people force me to be like everyone else.
21. I worry that other kids are making fun of me.
22. I often feel like people who are supposed to help are really not paying any attention to me.
23. It bothers me when I am not with my family.
24. Because of the group I am in, I don't get the grades I deserve.
25. It bothers me when I argue with my brother/sister.
26. I worry about getting my report card.
27. It bothers me that I have an accent.
28. It's hard to be away from the country I used to live in.
29. I think a lot about my group and its culture.
30. It bothers me when some countries of the world don't get along.
31. It's hard to talk with my teacher.
32. Because of the group I am in, I feel others don't include me in some of the things they do, games they play, etc.
33. It's hard for me to "show off" my family.
34. People think badly of me if I practice customs or I do the "special things" of my group.
35. I have a hard time understanding what others say when they speak.
36. I worry about having enough money.

Original Scale References

Barona, A., & Miller, J. (1994). Short acculturation scale for Hispanic youth (SASH-Y): A preliminary report. *Hispanic Journal of Behavioral Sciences*, *16*, 155–162.

Burnam, M. A., Hough, R. L., Telles, C. A., & Escobar, J. I. (1987). Measurement of acculturation in a community population of Mexican Americans. *Hispanic Journal of Behavioral Sciences*, *9*, 105–130.

Chavez, D. V., Moran, V. R., Reid, S. L., & Lopez, M. (1997). Acculturative stress in children: A modification of the SAFE scale. *Hispanic Journal of Behavioral Sciences*, *19*, 34–44.

Cortes, D. E., Rogler, L. H., & Malgady, R. G. (1994). Biculturality among Puerto Rican adults in the United States. *American Journal of Community Psychology*, *22*, 707–721.

Cuellar, I., Arnold, B., & Maldonado, R. (1995). Acculturation rating scale for Mexican Americans-II: A revision of the original ARSMA scale. *Hispanic Journal of Behavioral Sciences*, *17*, 275–304.

Deyo, R. A., Diehl, A. K., Hazuda, H., & Stern, M. P. (1985). A simple language-based scalefor Mexican Americans: Validation and application to health care research. *American Journal of Public Health*, *75*, 51–55.

Franco, J. N. (1983). An acculturation scale for Mexican-American children. *The Journal of General Psychology*, *108*, 175–181.

Mainous, A. (1989). Self-concept as an indicator of acculturation in Mexican Americans. *Hispanic Journal of Behavioral Sciences*, *11*, 178–189.

Marin, G., Sabogal, F., Marin, B. V., Otero-Sabogal, R., & Perez-Stable, E. J. (1987). Development of a short acculturation scale for Hispanics. *Hispanic Journal of Behavioral Sciences*, *9*, 183–205.

Marín, G., & Gamba, R. J. (1996). A new measurement of acculturation for Hispanics: The bidimensional acculturation scale for Hispanics (BAS). *Hispanic Journal of Behavioral Sciences*, *18*, 297–316.

Mendoza, R. H. (1989). An empirical scale to measure type and degree of acculturation in Mexican-American adolescents and adults. *Journal of Cross-Cultural Psychology*, *20*, 372–385.

Montgomery, G. T. (1992). Comfort with acculturation status among students from south Texas. *Hispanic Journal of Behavioral Sciences*, *14*, 201–223.

Norris, A. E., Ford, K., & Bova, C. A. (1996). Psychometrics of a brief acculturation scale for Hispanics in a probability sample of urban Hispanic adolescents and young adults. *Hispanic Journal of Behavioral Sciences*, *18*, 29–38.

Szapocznik, J., Kurtines, W. M., & Fernandez, T. (1980). Bicultural involvement and adjustment in Hispanic-American youths. *International Journal of Intercultural Relations*, *4*, 353–365.

Tropp, L. R., Erkut, S., Coll, C. G., Alarcon, O., & Vazquez-Garcia, H. A. (1999). Psychosocial acculturation: Development of a new measure for Puerto Ricans on the U.S. mainland. *Educational and Psychological Measurement*, *59*, 351–367.

Zea, M. C., Asner-Self, K. K., Birman, D., & Buki, L. P. (2003). The abbreviated multidimensional acculturation scale: Empirical validation with two Latino/Latina samples. *Cultural Diversity and Ethnic Minority Psychology*, *9*, 107–126.

References

Alvelo, J., Collazo, A. A., & Rosario, D. (2001). Comprehensive assessment tools for Hispanics: Validation of the Multi-Problem Screening Inventory (MPSI) for Puerto Ricans. *Research on Social Work Practice*, *11*, 699–724.

Bauman, S. (2005). The reliability and validity of the brief acculturation rating scale for Mexican Americans-II for children and adolescents. *Hispanic Journal of Behavioral Sciences*, *27*, 426–441.

Beeber, L. S., Perreira, K. M., & Schwartz, T. (2008). Supporting the mental health of mothers raising children in poverty: How do we target them for intervention studies. *Annals of the New York Academy of Science*, *1136*, 86–100.

Birman, D. (1998). Biculturalism and perceived competence of Latino immigrant adolescents. *American Journal of Community Psychology*, *26*, 335–354.

Cabassa, L. J. (2003). Measuring acculturation: Where we are and where we need to go. *Hispanic Journal of Behavioral Sciences, 25*, 127–146.

Cabassa, L. J. (2007). Latino immigrant men's perceptions of depression and attitudes toward help seeking. *Hispanic Journal of Behavioral Sciences*, *29*, 492–509.

Castillo, L. G., Cano, M. A., Chen, S. W., Blucker, R. T., & Olds, S. O. (2008). Family conflict and intragroup marginalization as predictors of acculturative stress in Latino college students. *International Journal of Stress Management*, *15*, 43–52.

Christenson, O. D., Zabriske, R. B., Eggett, D. L., & Freeman, P. A. (2006). Family acculturation, family leisure involvement, and family functioning among Mexican-Americans. *Journal of Leisure Research*, *38*, 475–495.

Cintron, J. A., Carter, M. M., & Sbrocco, T. (2005). *Ataques de Nervios* in relation to anxiety sensitivity among island Puerto Ricans. *Culture, Medicine, and Psychiatry*, *29*, 415–431.

Clark, L. (2002). Mexican-Origin mothers' experiences using children's health care services. *Western Journal of Nursing Research*, *24*, 159–179.

Coatsworth, J. D., Maldonado-Molina, M., Pantin, H., & Szapocznik, J. (2005). A person-centered and ecological investigation of acculturation strategies in Hispanic immigrant youth. *Journal of Community Psychology*, *33*, 157–174.

Contreras, J. M. (2004). Parenting behaviors among mainland Puerto Rican adolescent mothers: The role of grandmother and partner involvement. *Journal of Research on Adolescence*, *14*, 341–368.

Cortes, D. E., Deren, S., Andia, J., Colon, H., Robles, R., & Kang, S. (2003). The use of the Puerto Rican biculturality scale with Puerto Rican drug users in New York and Puerto Rico. *Journal of Psychoactive Drugs*, *35*, 197–207.

Cuellar, I., Nyberg, B., & Maldonado, R. E. (1997). Ethnic identity and acculturation in a young adult Mexican-origin population. *Journal of Community Psychology*, *25*, 535–549.

Davidson, T. M., & Cardemil, E. V. (2009). Parent-child communication and parental involvement in Latino adolescents. *Journal of Early Adolescence*, *29*, 99–121.

Dawson, B. A. (2009). Discrimination, stress, and acculturation among Dominican immigrant women. *Hispanic Journal of Behavioral Sciences*, *31*, 96–111.

Dela Cruz, F. A., Padilla, G. V., & Agustin, E. O. (2000). Adapting a measure of acculturation for cross-cultural research. *Journal of Transcultural Nursing*, *11*, 191–198.

DeLeon, B., & Mendez, S. (1996). Factorial structure of a measure of acculturation in a Puerto Rican population. *Educational and Psychological Measurement*, *56*, 155–165.

Edwards, L. M., & Romero, A. J. (2008). Coping with discrimination among Mexican descent adolescents. *Hispanic Journal of Behavioral Sciences*, *30*, 24–39.

Escalante, A., del Rincon, I., & Mulrow, C. D. (2000). Symptoms of depression and psychological distress among Hispanics with rheumatoid arthritis. *Arthritis Care and Research*, *13*, 156–167.

Ghorpade, J., Lackritz, J., & Singh, G. (2004). Psychological acculturation of ethnic minorities into White Anglo American culture: Consequences and predictors. *Journal of Applied Social Psychology*, *34*, 1208–1228.

Gilliam, M. L., Berlin, A., Kozloski, M., Hernandez, M., & Grundy, M. (2007). Interpersonal and personal factors influencing sexual debut among Mexican-American young women in the United States. *Journal of Adolescent Health*, *41*, 493–503.

Gomez, M. J., & Fassinger, R. E. (1994). An initial model of Latina achievement: Acculturation, biculturalism and achieving styles. *Journal of Counseling Psychology*, *41*, 205–215.

Goodman, C. C., & Silverstein, M. (2005). Latina grandmothers raising grandchildren: Acculturation and psychological well-being. *International Journal of Aging and Human Development*, *60*, 305–316.

Guilamo-Ramos, V., Bouris, A., Jaccard, J., Lesesne, C., & Ballan, M. (2009). Familial and cultural influences on sexual risk behaviors among Mexican, Puerto Rican, and Dominican youth. *AIDS Education and Prevention*, *21*(Suppl. B), 61–79.

Guilamo-Ramos, V., Bouris, A., Jaccard, J., Lesesne, C., Gonzalez, B., & Kalogerogiannis, K. (2009). Family mediators of acculturation and adolescent sexual behavior among Latino youth. *Journal of Primary Prevention*, *30*, 395–419.

Guinn, B. (1998). Acculturation and health locus of control among Mexican American adolescents. *Hispanic Journal of Behavioral Sciences*, *20*, 492–499.

Guo., X., Suarez-Morales, L., Schwartz, S. J., & Szapocznik, J. (2009). Some evidence for multidimensional biculturalism: Confirmatory factor analysis and measurement invariance analysis on the bicultural involvement questionnaire-short version. *Psychological Assessment*, *21*, 22–31.

Gutierrez, M. A., Franco, L. M., Powell, K. G., Peterson, N. A., & Reid, R. J. (2009). Psychometric properties of the acculturation rating scale for Mexican Americans-II: Exploring dimensions of marginality among a diverse Latino population. *Hispanic Journal of Behavioral Sciences*, *31*, 340–356.

Hawley, S. R., Chavez, D. V., & St. Romain, T. (2007). Developing a bicultural model for academic achievement: A look at acculturative stress, coping, and self-perception. *Hispanic Journal of Behavioral Sciences*, *29*, 283–299.

Hess, R. S., & D'Amato, R. C. (1996). High school completion among Mexican-American children: Individual and family background variables. *School Psychology Quarterly*, *11*, 353–368.

Juarbe, T., Turok, X. P., & Perez-Stable, E. J. (2002). Perceived benefits and barriers to physical activity among older Latina women. *Western Journal of Nursing Research*, *24*, 868–886.

Kali, B., Zayas, L. H., & Malgady, R. G. (2000). Depression, acculturation, and motivations for alcohol use among young Colombian, Dominican, and Puerto Rican men. *Hispanic Journal of Behavioral Sciences*, *22*, 64–77.

Lechuga, J. (2008). Is acculturation a dynamic construct? The influence of method of priming culture on acculturation. *Hispanic Journal of Behavioral Sciences*, *30*, 324–339.

Lee, R. M., Yoon, E., & Liu-Tom, H.-T. T. (2006). Structure and measurement of acculturation/enculturation for Asian Americans using the ARSMA-II. *Measurement and Evaluation in Counseling and Development*, *39*, 42–55.

Lerman, D., Maldonado, R., & Luna., D. (2009). A theory-based measure of acculturation: The shortened cultural life style inventory. *Journal of Business Research*, *62*, 399–406.

Lessenger, L. H. (1997). Use of acculturation rating scale for Mexican Americans-II with substance abuse patients. *Hispanic Journal of Behavioral Sciences*, *19*, 387–398.

Lopez, F. A. (2009). Developmental considerations and acculturation of children: Measures and issues. *Hispanic Journal of Behavioral Sciences*, *31*, 57–72.

Lopez, I. R., & Contreras, J. M. (2005). The best of both worlds: Biculturality, acculturation, and adjustment among young mainland Puerto Rican mothers. *Journal of Cross-Cultural Psychology*, *36*, 192–208.

Magana, J. R., Rocha, O. D., Amsel, J., Magana, H. A., Fernandez, M. I., & Rulnick, S. (1996). Revisiting the dimensions of acculturation: Cultural theory and psychometric practice. *Hispanic Journal of Behavioral Sciences*, *18*, 444–468.

Martinez, C. R. (2006). Effects of differential family acculturation on Latino adolescent substance abuse. *Family Relations*, *55*, 306–317.

McKee, M. D., Zayas, L. H., & Jankowski, K. R. B. (2004). Breastfeeding intention and practice in an urban minority population: Relationship to maternal depressive symptoms and mother-infant closeness. *Journal of Reproductive and Infant Psychology*, *22*, 167–181.

Mendoza, R. (1994). *Cultural life styles inventory. Version 2.0*. Author.

Mezzich, J. E., Ruiperez, M. A., Yoon, G., Liu, J., & Zapata-Vega, M. I. (2009). Measuring cultural identity: Validation of a modified Cortez, Rogler, and Malgady bicultural scale in three ethnic groups in New York. *Culture, Medicine, & Psychiatry*, *33*, 451–472.

Miglietta, A., & Tartaglia, S. (2008). The influence of length of stay, linguistic competence, and media exposure in immigrants' adaptation. *Cross-Cultural Research*, *20*, 1–16.

Morandi, B., & Risco, C. (2006). Perceived discrimination experiences and mental health of Latina/o American persons. *Journal of Counseling Psychology*, *53*, 411–421.

Norris, A. E., Ford, K., & Bova, C. A. (1996). Psychometrics of a brief acculturation scale for Hispanics in a probability sample of urban Hispanic adolescents and young adults. *Hispanic Journal of Behavioral Sciences*, *18*, 29–38.

Perez, W., & Padilla, A. M. (2000). Cultural orientation across three generations of Hispanic adolescents. *Hispanic Journal of Behavioral Sciences*, *22*, 390–398.

Phinney, J. S. (1992). The multigroup ethnic identity measure: A new scale for use with diverse groups. *Journal of Adolescent Research, 7,* 156–176.

Rivera-Sinclair, E. A. (1997). Acculturation/biculturalism and its relationship to adjustment in Cuban-Americans. *International Journal of Intercultural Relations*, *21*, 379–391.

Rojas-Guyler, L., Ellis, N., & Sanders, S. (2005). Acculturation, health protective sexual communication, and HIV/AIDS risk behavior among Hispanic women in a large Midwestern city. *Health Education and Behavior*, *32*, 767–779.

Ruiz, R. J., Dolbier, C. L., & Fleschler, R. (2006). The relationships among acculturation, biobehavioral risk, stress, corticotrophin-releasing hormone, and poor birth outcomes in Hispanic women. *Ethnicity and Disease*, *16*, 926–931.

Ruiz, Y. (2009). Predictors of academic achievement for Latino middle schoolers. *Journal of Human Behavior in the Social Environment*, *19*, 419–433.

Schaefer, S. E., Salazar, M., Bruhn, C., Saviano, D., Boushey, C., & Van Loan, M. D. (2009). Influence of race, acculturation, and socioeconomic status on tendency toward overweight in Asian-American and Mexican-American early adolescent females. *Journal of Immigrant and Minority Health*, *11*, 188–197.

Schiffner, T., & Buki, L. (2006). Latina college students' sexual health beliefs about human Papillomavirus infection. *Cultural Diversity and Ethnic Minority Psychology*, *12*, 687–696.

Schwartz, S. J., Pantin, H., Sullivan, S., Prado, G., & Szapocznik, J. (2006). Nativity and years in the receiving culture as markers of acculturation. *Journal of Cross-Cultural Psychology*, *37*, 345–353.

Schwartz, S. J., Zamboanga, B. L., & Jarvis, L. H. (2007). Ethnic identify and acculturation in Hispanic early adolescents: Mediated relationships to academic grades, prosocial behaviors, and externalizing symptoms. *Cultural Diversity and Ethnic Minority Psychology*, *13*, 364–373.

Serrano, E., & Anderson, J. (2003). Assessment of a refined short acculturation scale for Latino preteens in rural Colorado. *Hispanic Journal of Behavioral Sciences*, *25*, 240–253.

Singelis, T. M., Yamada, A. M., Barrio, C., Laney, J. H., Her, P., Ruiz-Anaya, A., et al. (2006). Metric equivalence of the bidimensional acculturation scale, the satisfaction with life scale, and the self-construal scale across Spanish and English language versions. *Hispanic Journal of Behavioral Sciences*, *28*, 231–244.

Suarez-Morales, L., Dillon, F. R., & Szapocznik, J. (2007). Validation of the acculturative stress inventory for children. *Cultural Diversity and Ethnic Minority Psychology*, *13*, 216–224.

Unger, J. B., & Molina, G. B. (2000). Acculturation and attitudes about contraceptive use among Latina women. *Health Care for Women International*, *21*, 235–249.

U.S. Census Bureau. (2008). *2006–2008 American Community Survey 3-year estimates.* http://factfinder.census.gov

Wallen, G. R., Feldman, R. H., & Anliker, J. (2002). Measuring acculturation among Central American women and the use of a brief language scale. *Journal of Immigrant Health, 4,* 95–102.

Weisskirch, R. S., & Alva, S. A. (2002). Language brokering and the acculturation of Latino children. *Hispanic Journal of Behavioral Sciences*, *24*, 369–378.

Yoshioka, M. R., Gilbert, L., El-Bassel, N., & Baig-Amin, M. (2003). Social support and disclosure of abuse: Comparing south Asian, African American, and Hispanic battered women. *Journal of Family Violence*, *18*, 171–180.

Zea, M. C., Reisen, C. A., Poppen, P. J., Echeverry, J. J., & Bianchi, F. T. (2004). Disclosure of HIV-positive status to Latino gay men's social networks. *American Journal of Community Psychology*, *3*, 107–116.