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Developmental Considerations and Acculturation of Children: Measures and Issues

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Developmental Considerations and Acculturation of Children: Measures and Issues

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Abstract: This article presents the secondary validation of the Brief Acculturation Rating Scale for Mexican Americans-II (Brief ARSMA-II) for use with children—carried out using two samples of Mexican-descent children (ages = 9-11) from two states (N = 295). The Brief ARSMA-II was originally normed on adolescents and adults but has been validated and used with children. Ethnic identity development perspectives suggest that the interpretation of scores derived from acculturation measures normed on adolescents and adults may not extend accurately to children. Convergent validity and differential discrimination between groups were examined using scores on the Brief ARSMA-II; scores on an acculturation measure designed for the present study, the Things About Me (TAM); and traditional proxy measures of acculturation. Results from this study do not support the use of the Brief ARSMA-II with children. The importance of considering contextual effects in the interpretation of scores of children's acculturation experience is discussed.

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Acculturation models have evolved from early melting-pot perspectives, to the examination of cultural changes that occur in one or both groups that come into contact (Redfield, Linton, & Herskovits, 1936), to more recent incorporations of the psychological perspectives involved (Berry, 1980; Padilla & Perez, 2003; Teske & Nelson, 1974; Tropp, Erkut, Coll, Alarcon, & Vazquez Garcia, 1999). Researchers interested in exploring the disadvantages faced by minority populations often use acculturation models to understand further the dynamics between dominant and minority cultures (Born, 1970; Padilla, 1980; Williams & Berry, 1991). One of the measures used often to measure acculturation, as well as develop similar instruments to measure acculturation, is the Acculturation Rating Scale for Mexican Americans (ARSMA; Cuéllar, Harris, & Jasso, 1980). Cuéllar, Arnold, and Maldonado (1995) later modified the ARSMA to measure Mexican and Anglo-cultural orientation separately, and to result in four modes of acculturation: traditional, low biculturals, high biculturals, and assimilated (Acculturation Rating Scale for Mexican Americans II [ARSMA-II]). The ARSMA and ARSMA-II instruments were normed on adolescent and adult samples and included items designed to assess language preferences, ethnic identity, cultural heritage, and ethnic interaction (Cuéllar et al., 1995). More recently, Cuéllar (2004) developed an abbreviated instrument based on the ARSMA-II (Brief Acculturation Rating Scale for Mexican Americans-II [Brief ARSMA-II]) that maintains the acculturation construct while providing the researcher with brevity (Bauman, 2005). Cuéllar found that the language-based and peer-based items in the Brief ARSMA-II served as proxy measures for the excluded ethnic identity and cultural heritage factors among young adults, making their inclusion redundant and time consuming. The application of these three measures in the examination of physiological health (e.g., Campos, Dunkel Schetter, Walsh, & Schenker, 2007), mental health (e.g., Gamst et al., 2002), and academic achievement (e.g., Hurtado-Ortiz & Gauvain, 2007) has contributed to the understanding of the dynamic processes that can often result in deleterious effects among adolescent and adult Latinos.

Purpose of the Study

To extend the understanding of the impact of acculturation, researchers have attempted to develop and validate acculturation measures for children (Bauman, 2005; Martinez, Norman, & Delaney,

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1984). As useful as it may be to apply the acculturative trajectory to children, Phinney's (1992) ethnic identity development perspectives suggested that the interpretation of scores derived from acculturation measures used with adolescents may not be applicable to children. To determine whether acculturation measures reflect the same construct among children as among adolescents and adults, I examined the evidence of convergent validity and differential discrimination between groups using scores on the Brief ARSMA-II and scores on an acculturation measure developed for the present study designed to assess a child's cultural preferences, the Things About Me (TAM). I also examined whether the relationship between traditional proxy measures of acculturation and scores from each of the two acculturation measures used in the present study were robust across different samples of children of Mexican descent. Finally, I determined whether traditional proxy measures of acculturation are indeed accurate proxies of acculturation.

Developmental Perspectives

Acculturation and ethnic identity are constructs that have been treated as orthogonal in some studies and interchangeable in others. Perhaps most accurately, acculturation and ethnic identity development can be described as interrelated (Cuéllar, Nyberg, Maldonado, & Roberts, 1997) and occurring simultaneously during adolescence (Phinney, 1992; Spencer & Markstrom-Adams, 1990). Because ethnic identity is treated as an essential component of acculturation in the various versions of the ARSMA (Cuéllar et al., 1995), ethnic identity development considerations must be applied in the interpretation of scores derived from all three instruments. Like most acculturation measures, the ARSMA, ARSMA-II, and Brief ARSMA-II rely on the self-reporting of preferences regarding cultural behaviors and, as such, function on the assumption that respondents have a preference that has resulted from the internalization and discernment of influences. For children, the limitations of assessing level of acculturation include developmental factors (e.g., the trajectory of identity development) and the dependence on self-reported preferences that may not be autonomous. Namely, although children may explore precursors to ethnic identity during middle childhood, they do not develop ethnic identity until late adolescence (Aboud & Doyle, 1993; Phinney, 1992). Thus, one of the obstacles in

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attempting to measure acculturation among children lies in the ways in which scores are interpreted and used (i.e., validity).

Phinney (1989, 1992) delineated the ways in which ethnic identity development changes across the developmental spectrum from adolescence to adulthood. Attributing her theoretical framework to the work of Erikson (1968) and Marcia (1980), Phinney explained that ethnic identity is rooted in the examination and challenge of attitudes (i.e., a developmental crisis). It begins with a period in which children give ethnicity little, if any, conscious thought and progresses to an exploration of the ways in which their ethnic group differs from others. During the final stage of ethnic identity development, individuals who successfully resolve their preceding challenges come to terms with who they are in terms of ethnicity.

Traditional Proxy Measures of Acculturation for Validation

Some researchers use language and cultural behaviors to derive level of acculturation (Cuéllar et al., 1980; Cuéllar et al., 1995). Other researchers assert that level of acculturation is contingent on the amount of exposure to the dominant culture, and thus refer to generational status or place of birth as proxy measures of acculturation (Ryder, Alden, & Paulhus, 2000). Although measures of acculturation have traditionally used these and other proxy measures in validation procedures, some assert that this practice may be problematic. Measures that reflect behavioral components of acculturation (e.g., language) tend to exclude affective components that are an integral part of an individual's acculturation process (Tropp et al., 1999). Moreover, Tropp et al. (1999) asserted that the amount of exposure to the dominant culture one has had is quite distinct from the sense of belonging one may have toward the dominant culture. It has been argued that proxy measures do not measure acculturation, but exposure to cultural behaviors, and that reliance on proxy measures can create validity issues (Matsudaira, 2006). Some, consequently, have recommended that acculturation measures move away from proxy measures given the limitations of relying on isolated dimensions that are only fragments of an individual's acculturation experience (Cabassa, 2003; Matsudaira, 2006).

When acculturation instruments developed for children rely on proxy measures that are imposed (e.g., language acquisition

methods), resulting scores may not portray accurately an individual's level of acculturation. In the case of children who are English language learners (ELLs) receiving disparate methods of language acquisition (e.g., immersion or bilingual education), the use of acculturation measures may reflect the language used in instruction rather than the child's affective preference. Hence, those who interpret scores from acculturation measures that are designed to assess acculturation should consider internal validity threats that may provide competing hypotheses for the resulting scores.

An underlying assumption of the Brief ARSMA-II is that language provides an accurate proxy for acculturation. Language may not be a behavioral preference inherent among language minority children but one that is influenced by the language acquisition policies of their respective states. The TAM instrument was designed to measure personal cultural choices that more closely align with internalized preferences common among children, but those were absent from the Brief ARSMA-II. Although there are many different acculturation measures, there should be a concordance between scores on acculturation measures if they both indeed assess a child's acculturation. In the first validation procedure, I explored the convergent validity of the Brief ARSMA-II with TAM among Mexican-descent children in middle childhood (i.e., ages 9-11). Convergent validity between the Brief ARSMA-II and TAM would provide evidence in favor of the Brief ARSMA-II for use as acculturation measure that portrays children's developmentally appropriate preferences despite its focus on linguistic and social preferences. In addition, both instruments should discriminate acculturation levels to a corresponding degree and result in similar classification scores among participants on both instruments.

Proxy measures have traditionally correlated highly with acculturation scores when used with adults and adolescents (e.g., Unger et al., 2002). Construct validation for measures of acculturation among children have used socioeconomic status (SES) and bilingualism (Martinez et al., 1984) and language and geographic proximity (Bauman, 2005). In the second validation procedure, I correlated traditional proxy measures (generational status, place of birth, length of time living in the United States) with resulting acculturation scores on the Brief ARSMA-II and TAM for each group to evaluate further the construct validity of the acculturation measures

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when used with children. Acculturation measures should be robust in terms of generalizability within the populations for which the measures were designed. In the present study, the correspondence between the acculturation measures and proxy measures should be similar between the two samples. In addition, to explore the utility of proxy measures, I explored the contribution made by each proxy measure in the relationship between proxy measures and Brief ARSMA-II scores.

Method

Participants

Although some researchers have used divergent validation with minority group and majority group samples to determine whether acculturation measures accurately discriminate between groups, there are potential internal validity threats (i.e., selection) in that practice. Acculturation instruments are designed to determine a minority's level of acculturation; construct validation and evidence of discrimination among groups should be carried out with a sample reflective of those for whom the instrument was created. To evaluate whether acculturation measures are appropriate for use with children, I selected two samples of demographically homogenous Mexican-descent children aged 9 to 11, who were in disparate contextual situations. One sample was located in El Paso, Texas, which borders Mexico, and the second sample was located in Tucson, Arizona, which is 64 miles from the Mexico border. Texas mandates bilingual education for ELLs; Arizona mandates structured English immersion (SEI). A total of 37 teachers and 730 Mexican-descent ELL children and their parents were recruited to participate. Teachers, parents or legal guardians, and children gave voluntary, informed consent. In Texas, 45% (n = 166) of the recruited children participated, and 36% (n = 129) of the recruited children in Arizona participated. Overall, 54% of the participants were female. In addition, 71% (n = 135) of the recruited parents in Texas participated, and 32% (n = 59) of the recruited parents in Arizona participated. In the Texas school district, 91.2% of the student population was Hispanic, 24.4% were ELLs, and 79.2% were economically disadvantaged (using eligibility in the free/reduced lunch program as the criteria). In the Arizona school district, 87.7% of the student population was Hispanic, 20.5% were ELLs, and 77.1% were economically disadvantaged.

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Measures

Demographic information

Parents and guardians completed a questionnaire created in both Spanish and English for the study. Most respondents answered that they were the child's biological mother (Texas, 91%; Arizona, 94%). In Texas, 89% of the parents reported their place of birth as Mexico; in Arizona, 70% of the parents reported the same. In Texas, 71.2% of the respondents reported that their child was born in the United States; in Arizona, 71.3% reported the same. In Texas, 99% of the respondents reported that Spanish was the primary language spoken at home whereas 77% of the respondents in Arizona reported the same. In Texas, parents reported having lived in the United States for a median of 12 years; in Arizona, parents reported having lived in the United States for a median of 13 years.

Brief ARSMA-II

Twelve items written in both Spanish and English comprise the Brief ARSMA-II (Cuéllar, 2004), with six items from the Anglo-Oriented Scale (AOS) and six items from the Mexican-Oriented Scale (MOS). Items are scored from 1 (*not at all*) to 5 (*almost always/extremely often*); the authors provide three scoring algorithms. For the present study, I selected the orthogonal method of scoring wherein individual children's MOS raw score means were subtracted from their respective AOS raw score means, resulting in a total acculturation score. Resulting scores were then classified according to the acculturation rubric provided by Cuéllar et al. (1995). For the present study, the overall stratified alpha coefficient was .73, for the Texas sample it was .74, and for the Arizona sample .75. Table 1 illustrates descriptive statistics for the present study.

TAM

The TAM is an instrument developed for the present study to assess children's perspectives of cultural artifacts (language and food) that are absent from the Brief ARSMA-II. Given that socially desirable response bias is associated with self-report measures (e.g., Zerbe & Paulhus, 1987) and questions about personally or socially sensitive topics (e.g., Fisher, 1993), and that younger respondents are more likely to give socially desirable responses than older respondents (e.g.,

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Park & Lessig, 1977), the TAM eliminated potential priming included in the Brief ARSMA-II (i.e., affiliations toward Anglo or Mexican American) and elicits salient personal preferences (Fisher, 1993) via constructed responses (Kalton & Schuman, 1982). One item asks children about their music preferences and prompts them to report up to five of their favorite music artists. The item responses were coded according to music genre (0 = other, 1 = American, 2 = Latin), which were verified by genre labels specified by recording companies. The other two acculturation items ask children about their preferences in food and snacks. The item responses were coded using school menus to eliminate food choices that may be related to the foods served at school rather than personal choices related to culture (0 = food served at school); the remaining responses were coded either 1 (American), 2 (Mexican), or 0 (neutral foods that cannot be determined to be either Mexican or American).

To determine the reliability of the scoring for children's constructed responses, the principal investigator and two graduate students in a doctorate-level educational psychology program coded a total of 25% of child responses for each item. After the principal investigator explained the rules for scoring, scorers coded one measure independently. Coders discussed discrepancies in codes and continued to code independently five sample items until attaining exact agreement. Scorers then independently coded 25% (n = 37) of the child responses to assess interscorer reliability with the principal investigator. This resulted in 98.0% and 96.9% exact agreement between the principal investigator and each coder.

Individual TAM item scores were the means of the five possible responses for each of the three acculturation items. For ELLs in Arizona, the snacks item resulted in M = 0.71, SD = .53; food, M = 0.14, SD = .41; and music, M = 1.24, SD = .34. For ELLs in Texas, the snacks item resulted in M = 0.59, SD = .61; food, M = 0.23, SD = .40; and music, M = 1.5, SD = .40. Composite TAM scores were calculated by taking a grand mean of the three individual acculturation item means. Composite TAM scores resulted in M = 0.70, SD = .28 for ELLs in Arizona and M = 0.80, SD = .28 for ELLs in Texas.

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Procedure

The school districts' institutional review boards granted permission to conduct the study. I contacted all elementary school principals (N = 38) in the school districts via telephone, e-mail, and regular mail to request their permission to recruit teachers, parents, and children in their schools for the study. Initially, 11 principals in the Texas school district and 6 principals in the Arizona school district agreed to participate; however, one principal in each school district reconsidered and decided not to participate in the study.

Parents who agreed to participate completed the rating scale and demographic questionnaires at home and returned the instrument and questionnaire with their child to school. I administered child and parent instruments and questionnaires in both English and Spanish. I read directions to the children and answered questions before children began to fill out the instruments. Teachers and children completed the instruments during regularly scheduled classes.

Statistical Analyses

The first step in the validation was to determine the level of discrimination between groups using scores on the Brief ARSMA-II and the TAM. I conducted a z test for proportions to examine whether there were differences in the proportion of ELLs in SEI and bilingual education meeting the criteria for assimilation. The directional h value was determined as the effect size measure. I also conducted a test to examine whether there are differences in the acculturation scores on the TAM between children in both samples, and determined the effect size using Cohen's d. To examine the discrimination of the Brief ARSMA-II and TAM, I transformed the effect size measures (h and d) to correlation coefficients and conducted a test of independent correlations to determine whether the correlations were different. Given that acculturation measures should correlate highly if they measure the same construct, the next step in the validation process was to correlate the acculturation scores on TAM with the scores on the Brief ARSMA-II.

To further support the construct validity of the Brief ARSMA-II, I correlated the length of time parents reported having been in the United States, child place of birth, and parent place of birth (i.e., generational status) with their cultural orientation according to the Brief ARSMA-II and TAM for each group. To determine whether the

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acculturation measures are robust in terms of generalizability, I conducted a test of independent correlations to determine whether the correlations between the acculturation measures and proxy measures were different for the two groups.

To explore the contribution of various proxy measures on acculturation scores, I conducted a single multiple regression analysis with proxy measures (parent place of birth, child place of birth, length of time living in the United States, language spoken at home, and geographic location) as predictors of level of acculturation. Parent and child place of birth, language spoken at home, and geographic location were dummy coded (0, 1) to provide a baseline comparison. For the present study, place of birth variables are coded as 1 for Mexico, 0 for the United States; home language as 1 for Spanish, 0 for English; and geographical location coded as 1 for Texas and 0 for Arizona.

Results

Convergent Validity and Differential Discrimination Between Groups

More ELLs in SEI (39%; Φ = 1.35) met the criteria for assimilation based on Brief ARSMA-II scores than ELLs in bilingual education (9%; Φ = .61), resulting in an effect size measure of =.74. ELLs in bilingual education had higher scores on the TAM (*M* =.80, *SD* =.28) than did children in SEI (*M* =.70*, SD* =.28), resulting in a medium standardized difference between the means (d = .34). Although scores from both instruments resulted in more children classified as assimilated in Arizona, there was no support for accurate discrimination between groups when I examined whether there were differences in the discrimination rates of the two instruments. I converted the resulting effect size measures to correlation coefficients and conducted a test of the difference between two independent correlation coefficients resulting in a difference between coefficients (z = 1.67, = .04). It appears that the Brief ARSMA-II and TAM do not discriminate acculturation and assimilation concordantly, suggesting that they are assessing different constructs. Although it was known that the Brief ARSMA-II is a language-based measure and that the TAM was a cultural artifacts preference measure, acculturation theories support the notion that language-based measures should reflect

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cultural artifacts. In the present study, this argument does not appear to hold.

Although the scores for the acculturation subset of TAM were moderately correlated with Brief ARSMA-II scores (r = .24), there should have been a higher correspondence between scores on both measures given that both instruments were designed to measure acculturation. That is, the assumption of the Brief ARSMA-II was that excluding cultural preferences that were originally included in the ARSMA-II would not affect scores. Cuéllar (2004) had found that the language-based measure had served as an adequate proxy for the excluded factors, making their inclusion redundant. It is important to note that the norming sample for the ARSMA-II and Brief ARSMA-II were college-age individuals. Thus, the lack of convergent validity between the Brief ARSMA-II and TAM suggests that the Brief ARSMA-II may not portray children's developmentally appropriate preferences because of its focus on linguistic and social preferences.

Traditional Proxy Measures

Brief ARSMA-II

The correlations between the length of time parents reported having been in the United States and their child's cultural orientation according the Brief ARSMA-II were large for the Arizona sample (r = -.451) and moderate for the Texas sample (r = -.242). The results suggest that the longer parents reported having been in the United States, the more assimilated their children were on the Brief ARSMA-II. The correlations for children in Texas and Arizona were different from one another, resulting in a z = 2.02, p = .02. That is, the correlations between length of time parents reported having been in the United States and their child's cultural orientation according to the Brief ARSMA-II was stronger for the Arizona sample than for the Texas sample. The correlations for child and parent place of birth with the Brief ARSMA-II were small for both the Texas sample (r = .008 and r = .109, respectively) and moderate for the Arizona sample (r = .233 and r = .299, respectively). A test of the difference between two independent correlation coefficients resulted in confirmation of different correlations with a z = 1.93, p = .03 for children and a z = 1.68, p = .05 for parents. Once again, the correlations between the

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proxy measures and Brief ARSMA-II scores were stronger for the Arizona sample than for the Texas sample.

TAM

The correlations between the length of time parents reported having been in the United States and their child's cultural orientation according to the TAM were small for both the Texas sample (r = -.185) and for the Arizona sample (r = -.167). The correlations were not different from one another, resulting in a z = 0.02, p = .49. The correlations for child and parent place of birth with the TAM were small for both the Texas sample (r = -.068 and r = .141, respectively) and for the Arizona sample (r = .250 and r = .250, respectively). The correlations were not different from one another, resulting in a z = 1.58, p = .06 for children; and a z = 0.96, p = .17 for parents.

In the examination of the linear relationship between various proxy measures as predictors and level of acculturation as the outcome measure, the single multiple regression analyses resulted in an overall fit of adjusted R^2 = .51. When the effects on level of acculturation was examined, only parent-reported length of time living in the United States and location were significant predictors of acculturation level with p < .01. Children living closer to Mexico were more likely to be traditional (an increase of 1.48 points out of a total of 5 points in comparison to children living in Arizona), as were children whose parents had spent less time in the United States (a decrease of .04 points with each additional year reported as having lived in the United States), consistent with some acculturation theories. After inspection of the standardized coefficients, the effect of location is a little less than twice as strong as the effect of length of residence after controlling for other factors; none of the other variables in the model came close to achieving statistical significance (see Table 2).

Discussion

One of the reasons proxy measures of acculturation are problematic is that they ignore the multiple factors that contribute to an individual's acculturation experience. To illustrate, the proportion of children born in Mexico is the same across samples (h < .01). Based on the Brief ARSMA-II scores, however, children in the Texas sample

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are more traditional in terms of cultural affiliations than are children in the Arizona sample. Also according to the distribution of the Brief ARSMA-II scores, the difference in the proportion of traditional children between samples results in h = .98. This finding contributes evidence against birthplace as a proxy measure because other factors such as the proximity of Mexico (64 miles from the Arizona school district from which children were recruited, and 2 miles from the Texas school district from which children were recruited) and method of language acquisition (the use of Spanish in Texas and English only in Arizona) are not taken into account—yet could potentially influence acculturation. Accordingly, the Brief ARSMA-II uses language as the primary proxy for acculturation, and while it provides information regarding language preferences, it fails to provide information regarding an individual's multidimensional acculturation level. Moreover, although more ELLs in SEI met the criteria for assimilation than ELLs in bilingual education (h = .74) on the Brief ARSMA-II, only a small difference between Arizona and Texas ELLs was found using the exploratory TAM measure (d = .34). Namely, children in the Texas sample enjoy culturally related foods and music only a little more than do children in the Arizona sample, but the children in the Arizona sample appear to be assimilated to a much higher degree according to the Brief ARSMA-II scores. The scores on the Brief ARSMA-II are suspect given that a measure that includes child choice (music and food) results in a different picture of child affiliation toward culture. The underlying assumption of the Brief ARSMA-II is that language provides an accurate proxy for acculturation. For the samples in the present study, however, language is not a personal choice but one that is influenced by the language acquisition policies of their respective states. Hence, it is important to make the distinction between acculturation based exclusively on a language-based measure and the impact of language policies on language preferences that influence variables related to acculturation.

The low correspondence between Brief ARSMA-II scores and TAM scores with traditional proxy measures suggests that the acculturation measures do not measure the same construct among children as that measured among adults and adolescents. This is not surprising given the developmental trajectory of ethnic identity and the age of the participants. Although research on acculturation has contributed to our understanding of variables that influence health,

academic achievement, and other life-altering situations, attempting to interpret acculturation among children will result only in limited information. The findings in the present study underscore the importance of considering individuals and their context before exploring dynamics and interpreting results that may simply not apply.

For an acculturation measure to be interpreted with confidence, it should provide evidence that it can be used with the population for whom it was intended without extraneous factors influencing the resulting scores. The different correlations (Brief ARSMA-II with each proxy measure) between groups suggest that extraneous factors influence the acculturation scores. In the present study, the level of correspondence between the proxy measures and the Brief ARSMA-II was dependent on the sample (i.e., the correlation for the Brief ARSMA-II and each proxy measure was stronger for Arizona participants than for Texas participants). Given that the samples were demographically homogenous and differed only in terms of geographic location, it appears that Brief ARSMA-II results are not generalizable within the population of interest. Interestingly, the correlations between TAM and each of the proxy measures were not different between the two samples. This suggests that instruments that consider children's perspectives may be more generalizable than those assessing cultural behaviors that children do not have the autonomy or experience to prefer. The Brief ARSMA-II addresses only a limited set of behaviors based primarily on language to assess acculturation (e.g., reading, television, film, speaking), with the exception of the two items that ask the extent to which an individual associates with Anglos. The TAM included a set of exploratory items that were designed to contribute to the understanding of acculturation at the individual child level because SEI and bilingual education children are not in a position to choose their preferred language. That is, children's language and peers are dependent on the social and cultural context of the school setting (e.g., homogenous versus heterogeneous demographics). Although the acculturation measures may not provide scores that are valid for interpreting acculturation per se, the scores do provide information about different pressures on culture and identity through children's preferences.

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Predictability of Acculturation From Proxy Measures

As a final consideration, it seems that for the children who participated in the study, geographic location and the length of time parents reported living in the United States predicted scores on the Brief ARSMA-II. It must be noted that both geographic location and the length of time parents have lived in the United States influence a child's context, but it should not be interpreted as providing support for the use of proxy measures of acculturation among children. The length of time parents have lived in the United States will likely influence the cultural traditions they incorporate and/or maintain in their daily lives; children in Arizona are likely to speak English because of English only influences in the schools. Thus, although the proximity of Mexico and length of time parents have lived in the United States predict Brief ARSMA-II scores, they are more reflective of the child's environment than the child's internalized psychological cultural preferences. As such, they do not reflect acculturation but influences that may predict acculturation in late adolescence.

Future Directions

The focus of this article was that acculturation is not a construct that can be measured in children because of the developmental considerations that must play a part in the interpretation of scores. Rather than focus on measures of acculturation for children, it may prove useful to focus on variables that may potentially predict acculturation and assimilation in late adolescence. To understand better the influences that may alter the context for minorities, it would be beneficial to explore the trajectory of identity development longitudinally. Thus, acculturation measures may not provide researchers with accurate acculturation levels for children, but they may provide insight regarding the context of the child's influences that may influence acculturation in late adolescence.

Notes

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Appendix

Table 1. Brief ARSMA-II Descriptive Statistics

	Stratified Alpha	*M*	*SD*	Mexican Orientation		Anglo Orientation		*N*
				M	*SD*	*M*	*SD*	
Combined samples	.73	38.33	8.26	19.91	7.05	18.41	5.65	295
Texas	.74	38.75	8.20	22.18	6.30	16.57	5.83	166
Arizona	.75	37.78	8.33	16.99	6.91	20.78	4.39	129

Note: Brief ARSMA-II = Brief Acculturation Rating Scale for Mexican Americans-II.

Table 2. Summary of Proxy Measures as Predictors of Brief ARSMA-II Acculturation Scores

	B_1	SE	β	t	p
Parent place of birth	0.010	.338	.002	0.030	.98
Child place of birth	0.014	.218	.004	0.065	.95
Length of time in the United States	-0.039	.011	-.263	-3.623	<.01
Language spoken at home	0.065	.280	.016	0.233	.82
Location	1.481	.219	.450	6.779	<.01

Note: Brief ARSMA-II = Brief Acculturation Rating Scale for Mexican Americans-II.