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Hispanic Journal of Behavioral Sciences 2001; 23; 347
DOI: 10.1177/0739986301234001

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Methodological Implications of Grouping Latino Adolescents Into One Collective Ethnic Group

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This study examined the methodological appropriateness of categorizing Latinos as a homogenous population when assessing ethnic identity, self-esteem, emotional autonomy, and familial ethnic socialization. Reliability coefficients of Phinney's Multigroup Ethnic Identity Measure (MEIM), Rosenberg's Self-Esteem Scale (SES), Steinberg and Silverberg's Emotional Autonomy Measure, and Umaña-Taylor's Familial Ethnic Socialization Measure (FESM) were compared among Colombian, Guatemalan, Honduran, Mexican, Nicaraguan, Puerto Rican, and Salvadoran adolescents (N = 1,176) living in the United States. The measures demonstrated moderate to strong coefficients for certain Latino populations but considerably lower coefficients for other Latino groups. Furthermore, the concurrent validity of the MEIM and the FESM varied across Latino groups. Nationality, immigration history, and generational status are discussed as possible reasons for the divergent findings among groups. These findings call into question the grouping of Latino nationals into one homogenous population and have implications for researchers who study pan-ethnic populations (i.e., Latinos, Asians).

Latinos are the second largest pan-ethnic minority group in the United States (Marger, 1997), and projections indicate that by the year 2050, one out of every four Americans will be Latino (Shinagawa & Jang, 1998). As a result of this rapid growth, researchers have become increasingly interested in understanding social processes among Latinos. Unfortunately, because Latinos are often considered a homogenous population in demographic reports such as the U.S. Census, most research has focused on a collective Latino population and little distinction among Latino populations is evident in exist-

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Hispanic Journal of Behavioral Sciences, Vol. 23 No. 4, November 2001 347-362
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ing research. An area of research in which this homogenous grouping is especially evident is in research concerning Latino adolescents' ethnic identity. In many of these studies, researchers discuss the "Latino" population in their study without acknowledging the nationality differences among the Latinos included in their samples. Furthermore, regardless of the sample characteristics, the results of those studies are often generalized to all Latino populations (for a review, see Umaña-Taylor, Diversi, & Fine, in press). The grouping of Latinos into a homogenous population is of critical importance when studying ethnic identity, which is defined as individuals' interpretation and understanding of their ethnicity and the degree to which they identify with their ethnic group (Phinney, 1996). Ethnicity pertains to cultural traditions, prescribed norms, values, and a heritage that persists beyond generations (Helms, 1996; Spencer & Markstrom-Adams, 1990). Because individuals' national origin may influence their traditions, customs, values, and beliefs, ethnic identity should not be examined without considering differences in nationality.

Latino national groups differ markedly from each other on a number of dimensions. For example, Census 2000 data indicate that, whereas 36% of Mexican households are composed of five or more people, only 14% of Cuban households demonstrate that characteristic (Thierren & Ramirez, 2000). Similarly, whereas 73% of adult Cubans have graduated from high school, only 51% of adult Mexican Latinos have done so. Furthermore, the percentage of individuals who have earned a bachelor's degree varies from 7% of Mexicans to 23% of Cubans. When Latinos are examined as a pan-ethnic group, however, the following generalizations have been made: "Hispanics live in family households that are larger than those of non-Hispanic Whites. . . . More than 2 in 5 Latinos have not graduated from high school. . . . The proportion with a bachelor's degree or more was much lower for Hispanics (10.6%) than for non-Hispanic Whites (28.1%)" (Thierren & Ramirez, 2000, pp. 3-4). On careful examination of data for Latino national groups, however, the data for Cuban Latinos do not match the statements that are made for Latinos as a whole. In fact, the figures for Cubans are more similar to the figures for non-Hispanic Whites than they are to the figures for Mexican Latinos. Thus, the generalizations that are often made across Latino groups are at times inaccurate and could be misleading.

Aside from acknowledging demographic variations, special attention to nationality is needed in terms of measure development and norming. Measures that are developed for and normed with Mexican-origin populations, for example, may not necessarily demonstrate the same psychometric properties with other Latino national groups. Although Latinos are often considered a homogenous group, there are often major differences in nationality

among these groups. For example, although Latinos share a common language (Spanish), differences in dialect and pronunciation are prominent among different nationalities. Just as the English spoken in the United States is different from the English spoken in Great Britain, the Spanish spoken in Mexico is different from the Spanish spoken in Colombia. In addition to differences in the Spanish language, Latino nationals vary greatly in terms of their history in the United States. Many Central Americans migrated to the United States for political reasons, and the experiences of civil war, oppression, and trauma have contributed to the uniqueness of their experiences in the United States (Dorrington, 1995). Diversity is also evident within Central American populations. In one study, Guatemalans, compared with Salvadorans, perceived less support and visibility in the United States, were more dispersed around the Los Angeles community, and their dispersion contributed to their lack of support and resources (Dorrington, 1995). These diverse experiences are likely to influence the meaning that individuals attach to psychological constructs.

The current study examined data from a larger study that tested a theoretical model of ethnic identity development. In this study, we examined instruments that were designed to measure constructs theoretically salient to ethnic identity formation to determine whether they were reliable across multiple Latino populations and also to determine if the measures correlated in the expected direction for all Latino groups. Two critical dimensions of the psychometric properties of the measures were examined: (a) internal consistency reliability and (b) concurrent validity. Specifically, the internal consistency reliabilities of the Multigroup Ethnic Identity Measure (MEIM) (Phinney, 1992), Emotional Autonomy Scale (Steinberg & Silverberg, 1986), Self-Esteem Scale (SES) (Rosenberg, 1979), and Familial Ethnic Socialization Measure (FESM) (Umaña-Taylor, 2001) were examined. Additionally, the concurrent validity of the MEIM and the FESM was examined. Theoretical work suggests that a positive relationship exists between ethnic identity and self-esteem (Phinney, 1992); furthermore, the positive nature of this relationship has been empirically established in a number of studies (e.g., Chavira & Phinney, 1991; Lorenzo-Hernandez & Ouellette, 1998; Martinez & Dukes, 1997; Phinney, 1992; Phinney, Chavira, & Tate, 1993). To assess the concurrent validity of the MEIM with the Latino national groups in this study, we examined the correlation between the MEIM and the SES. In addition, we tested the concurrent validity of the FESM by examining the correlations between the FESM and the MEIM across the Latino national groups. Theoretically, these two measures should be positively correlated, as ethnic identity is thought to be influenced generally by social context (Erikson, 1968) and, more specifically, by socialization

experiences in the family and the community (Phinney, 1996; Phinney & Rosenthal, 1992). Moreover, empirical work provides support for this relationship; a positive relationship has been found between maternal ethnic socialization and children's ethnic identity development (Bernal, Knight, Garza, Ocampo, & Cota, 1990).

Method

Sample

Data for the current study were taken from a larger study designed to examine ethnic identity formation among adolescents. Data were gathered from three high schools in a large southwestern city. The current study included 1,176 adolescents who ranged in age from 13 to 20 years, with a mean age of 15.7 years. The adolescents were from Colombian ($n = 21$), Guatemalan ($n = 16$), Honduran ($n = 10$), Mexican ($n = 1,005$), Nicaraguan ($n = 18$), Puerto Rican ($n = 26$), and Salvadoran ($n = 80$) backgrounds. A total of 16 Latino nationalities were represented in the larger study; however, the sample sizes for some national groups were not large enough to include in the current statistical analyses.

Adolescents in this study had the choice of completing the questionnaires in English ($n = 1,176$) or Spanish ($n = 102$). This study only examined the questionnaires that were completed in English for two reasons. First, the reliability and validity of the measures used in this study were established on the English version of the questionnaires. It seemed inappropriate to include English and Spanish versions of the measures in the same analyses, when the translation of these measures may have influenced their validity and reliability. Second, there were not enough respondents within each ethnic group who had completed the questionnaire in Spanish to allow us to statistically compare the reliability and validity across national groups for the Spanish version of the measures.

Measures

In this study, adolescents completed a questionnaire that assessed various demographic factors and included a number of measures. To determine adolescents' specific ethnic group membership, a coding scheme was developed. First, adolescents' answers to the question, "What is your specific ethnic group?" were used to categorize adolescents into a specific group (e.g., Mexican, Colombian, Cuban, Salvadoran). If they did not provide an answer that

indicated a specific ethnic group for that question, their answer to the question, "In terms of ethnic group, I consider myself to be . . ." was examined. If adolescents did not answer either of those questions with a specific ethnic group (e.g., they answered "Hispanic"), their answers to their mothers' country of birth and their fathers' country of birth were examined. Adolescents were grouped into a specific ethnic group if both parents were born in the same country. For example, if both parents were born in Mexico, the adolescent was categorized as Mexican origin. If one parent was born in Mexico but the other parent was born in Colombia, the adolescent was categorized as biethnic. If both parents were born in the United States, the countries of birth for the paternal and maternal grandparents were examined. For adolescents to be categorized as Mexican origin, for example, all four grandparents had to be born in Mexico.

To assess maternal education and paternal education, adolescents were asked, "What is the highest level of school that your mother completed?" and "What is the highest level of school that your father completed?" Answer choices for both questions ranged from 1 (*some elementary school*) to 9 (*a doctoral or professional degree such as a Ph.D., M.D., or J.D.*).

The variable "familial births in the United States" was developed to assess adolescents' generational status in the United States. Adolescents were asked to report on the country of birth for themselves, each parent, each paternal grandparent, and each maternal grandparent. Familial births in the United States was calculated as a cumulative score based on how many of the individuals listed were born in the United States. This variable is a more sensitive measure of what is typically used to determine adolescents' generation in the United States. Typically, adolescents are assigned a rating of 1 to 3 to indicate their generation in the United States, based on whether themselves, one of their parents, or one of their grandparents was born in the United States. The variable used in the current study introduces more variability by assigning adolescents a score of 0 to 7, with 0 indicating that no one in their immediate family was born in the United States and 7 indicating that the adolescent, both parents, and both sets of grandparents were born in the United States.

Familial ethnic socialization was examined using the Familial Ethnic Socialization Measure from adolescents' self-reports. This measure was developed by the first author for use in the larger study from which these analyses were drawn. Adolescents were asked to answer nine questions using a 5-point Likert scale with end points of 1 (*not at all true*) and 5 (*very much true*) that assessed the degree to which adolescents perceived that their families were socializing them with regard to their ethnicity. Overt and covert aspects of familial ethnic socialization were assessed. Overt aspects of famil-

ial ethnic socialization assessed instances where adolescents' families were intentionally socializing them regarding their ethnicity (e.g., "My family teaches me about our family's ethnic/cultural background" and "My family discusses the importance of knowing about my ethnic/cultural background"). Covert aspects of familial ethnic socialization assessed instances where adolescents' families were not intentionally socializing adolescents regarding their ethnicity but were inadvertently doing so with their choice of activities or décor (e.g., "My family participates in activities that are specific to our ethnic group" and "Our home is decorated with things that reflect my ethnic/cultural background"). Responses were coded so that higher scores indicated higher levels of familial ethnic socialization.

A revised version of Steinberg and Silverberg's (1986) Emotional Autonomy Scale was used to assess emotional autonomy from parents. The original measure was composed of four subscales that assessed different components of emotional autonomy (i.e., perceives parents as people, parental deidealization, nondependency on parents, and individuation). Due to previous findings indicating that the "perceiving parents as people" aspect of emotional autonomy is slow to develop, Steinberg suggested dropping the six items that comprised that scale from the measure (Lamborn & Steinberg, 1993). The remaining 14 items were scored on a 5-point Likert scale with end points of 1 (*strongly agree*) and 5 (*strongly disagree*). Items were scored so that higher scores indicated greater emotional autonomy. The measure has been examined with male and female adolescents ranging in age from 10 to 18 years, European American and African American adolescents (Fuhrman & Holmbeck, 1995), and adolescents living in the United States and the United Kingdom (Lattimore & Butterworth, 1999). Reliability for the shortened version was reported as .82 (Lamborn & Steinberg, 1993).

Ethnic identity achievement was measured using Phinney's (1992) MEIM. The MEIM is a 14-item measure that assesses individuals' degree of identification with their ethnic group (Phinney, 1992). The measure was developed for use with ethnically diverse samples and has been examined with diverse groups such as African American, Central American, Mexican American, Dominican, Puerto Rican, Japanese, Haitian, and White adolescents and young adults. Consistent with Erikson's (1968) identity formation perspective, the measure assesses aspects of exploration and commitment toward an ethnic group. The items (e.g., "To learn more about my ethnic background, I have often talked to other people about my ethnic group" and "I feel a strong attachment toward my own ethnic group") are scored on a 4-point Likert scale, with end points of 1 (*strongly disagree*) and 4 (*strongly agree*). Items were coded so that higher values indicated greater exploration

and commitment toward one's ethnic group, more participation in ethnic behaviors or activities, and more positive feelings and preferences toward one's ethnic group. The MEIM has obtained moderately strong alpha coefficients (.81 to .92) in a number of studies (see Cuellar, Nyberg, Maldonado, & Roberts, 1997; Mack et al., 1997; Phinney, 1992; Taub, 1995).

Self-esteem was measured using Rosenberg's (1979) SES. The 10-item measure was scored on a 4-point Likert scale, with end points of 1 (*strongly disagree*) and 4 (*strongly agree*). Items included statements such as "On the whole, I am satisfied with myself" and "I certainly feel useless at times." Negatively worded items were reverse scored so that higher scores would indicate greater self-esteem. The SES has been examined with diverse populations (e.g., Mexican, Dominican, Puerto Rican, African American, and White adolescents) and has obtained moderate coefficient alphas ranging from .79 to .85 with these samples (Der-Karabetian & Ruiz, 1997; Lorenzo-Hernandez & Ouellette, 1998; Martinez & Dukes, 1997; Phinney, Cantu, & Kurtz, 1997).

Results

Group Demographic Differences

Initially, four one-way analyses of variance (ANOVA) tests were conducted with age, familial births in the United States, maternal education, and paternal education as dependent variables to determine if the Latino national groups differed on these demographic characteristics. Additionally, significant ANOVAs were followed up with Scheffé's post hoc tests to examine which groups differed significantly from each other. Although the adolescents did not significantly differ with regard to age, differences emerged among familial births in the United States, $F(6, 909) = 6.39, p < .001$; maternal education levels, $F(6, 1,083) = 21.97, p < .001$; and paternal education levels, $F(6, 1,014) = 24.03, p < .001$.

Familial births in the United States. In terms of familial births in the United States, Mexican adolescents reported significantly more family members who were born in the United States than did Salvadoran adolescents (see Table 1). None of the other groups differed significantly from each other.

Maternal education. Colombian adolescents reported significantly higher maternal education levels than Guatemalan and Salvadoran adolescents. Puerto Rican adolescents reported significantly higher maternal education

Table 1. One-Way Analyses of Variance With Age, Familial Births in the United States, Maternal Educational Level, and Paternal Educational Level as Dependent Variables

	Age			Familial Births in the United States			Maternal Education			Paternal Education		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
All Latinos	1,176	15.67	1.32	916	1.78	2.03	1,090	3.21	1.74	1,021	3.33	1.90
Colombian	21	15.81	1.08	18	0.61	0.98	19	5.11 _{ab}	1.52	18	5.33 _{ab}	1.50
Guatemalan	16	15.94	1.44	14	0.43	0.51	16	3.19 _{bd}	1.83	15	3.87 _d	2.13
Honduran	10	16.30	1.49	6	0.67	0.82	10	4.10	2.28	9	4.56	2.24
Mexican	1,005	15.65	1.32	777	1.93 _a	2.10	931	3.11 _f	1.64	870	3.19 _{bef}	1.78
Nicaraguan	18	15.78	1.22	14	0.71	1.14	17	4.41 _g	2.32	16	5.56 _{eg}	2.13
Puerto Rican	26	15.62	1.20	23	1.78	2.02	25	6.12 _{dfh}	2.17	25	6.44 _{dfh}	1.83
Salvadoran	80	15.75	1.37	64	0.81 _a	0.75	72	2.51 _{agh}	1.21	68	2.71 _{agh}	1.56
<i>F</i>	0.64 (6, 1,169)			6.39*** (6, 909)			21.97*** (6, 1,083)			24.03*** (6, 1,014)		

NOTE: Values in the same column with the same subscript character are significantly different from each other at $p < .05$.

*** $p < .001$.

levels than Guatemalan, Mexican, Nicaraguan, and Salvadoran adolescents. In addition, Nicaraguan adolescents reported significantly higher maternal education levels than Salvadoran adolescents.

Paternal education. In terms of paternal educational attainment, Puerto Rican adolescents reported significantly higher paternal educational levels than Guatemalan, Mexican, and Salvadoran adolescents. Colombian adolescents reported higher levels of paternal education than Mexican and Salvadoran adolescents. Puerto Rican and Nicaraguan adolescents reported significantly higher levels of paternal education than Salvadoran adolescents. As also illustrated in the census data described earlier in this article, the differences among the demographic characteristics of the respondents in this study further exemplify the need to acknowledge the diversity among Latino national groups.

Internal Consistency Reliability

To determine whether the measures of interest were internally consistent among the different groups, Cronbach's alphas for the four measures were examined for each of the seven Latino national groups, as well as for the Latino sample as a whole (see Table 2). Coefficient alphas for the combined group of Latinos demonstrated moderately strong reliabilities for the four measures (α s ranged from .80 to .83). When Latinos were examined by nationality, however, alphas were considerably lower for some nationality groups than for others.

Emotional Autonomy. Steinberg and Silverberg's (1986) measure of Emotional Autonomy obtained a moderately strong coefficient alpha with the Latino adolescents as a whole ($\alpha = .81$). Among the seven Latino groups, however, coefficient alphas ranged from .69 to .83. The measure obtained the highest reliability score with the Nicaraguan adolescents ($\alpha = .83$), moderately strong reliability estimates with the Mexican adolescents ($\alpha = .81$), and acceptable reliability estimates with the Guatemalan, Puerto Rican, Colombian, and Salvadoran adolescents (α s ranged from .73 to .76). The Honduran adolescents, however, obtained the lowest reliability coefficient ($\alpha = .69$) on this measure.

SES. With the combined group of Latino adolescents, Rosenberg's (1979) SES obtained a moderately strong coefficient alpha ($\alpha = .81$). When individual groups were examined, the measure demonstrated moderately strong reli-

Table 2. Coefficient Alphas for Steinberg and Silverberg's Measure of Emotional Autonomy (EA), Rosenberg's Self-Esteem Scale (SES), Umaña-Taylor's Familial Ethnic Socialization Measure (FESM), and Phinney's Multigroup Ethnic Identity Measure (MEIM)

	All Latinos	Colombian	Guatemalan	Honduran	Mexican	Nicaraguan	Puerto Rican	Salvadoran
EA	.81 (1,042)	.75 (19)	.76 (14)	.69 (8)	.81 (889)	.83 (18)	.75 (23)	.73 (71)
SES	.81 (1,028)	.74 (18)	.82 (14)	.83 (9)	.82 (878)	.85 (14)	.71 (25)	.78 (70)
FESM	.83 (1,121)	.81 (21)	.58 (16)	.70 (10)	.82 (957)	.92 (18)	.90 (26)	.83 (73)
MEIM	.80 (985)	.81 (15)	.68 (15)	.59 (7)	.79 (839)	.88 (16)	.85 (22)	.80 (71)

NOTE: Sample sizes are in parentheses.

ability coefficients with the Guatemalan, Mexican, Honduran, and Nicaraguan adolescents (α s ranged from .82 to .85) and acceptable reliability coefficients with the Colombian and Salvadoran adolescents in the sample (α s = .74 and .78, respectively). For this measure, the Puerto Rican adolescents demonstrated the lowest reliability coefficient (α = .71).

FESM. Similar to the prior two measures, Umaña-Taylor's (2001) FESM obtained a moderately strong coefficient alpha when all Latinos were examined (α = .83), and the coefficient alphas varied considerably when individual nationalities were examined. The measure demonstrated strong coefficient alphas with the Puerto Rican and Nicaraguan samples (α s = .90 and .92, respectively); moderately strong coefficient alphas with the Colombian, Mexican, and Salvadoran samples (α s = .81, .82, and .83, respectively); and much lower coefficient alphas with the Guatemalan and Honduran adolescent samples (α s = .58 and .70, respectively).

MEIM. Finally, Cronbach's alphas for Phinney's (1992) MEIM ranged from .59 to .88 among the seven nationality groups, and the measure obtained a coefficient alpha of .80 with the Latino group as a whole. Puerto Rican and Nicaraguan samples demonstrated strong reliability coefficients (α s = .85 and .88, respectively), and Mexican, Salvadoran, and Colombian adolescents obtained moderately strong reliability coefficients (α s = .79, .80, and .81, respectively). Similar to the FESM, Guatemalan and Honduran samples demonstrated the lowest reliability scores (α s = .68 and .59, respectively).

Concurrent Validity

Concurrent validity was examined for the MEIM and the FESM by examining the correlation of each of these measures with measures of constructs that theoretically relate to ethnic identity and familial ethnic socialization. As mentioned earlier, theoretical and empirical work suggest that a positive relationship exists between ethnic identity and self-esteem.

In the current study, when Latinos as a whole were examined, the MEIM and SES were significantly positively correlated with each other; however, when the adolescents were examined by nationality, the relationship was significant only among Mexican adolescents (see Table 3). The MEIM and SES were not significantly correlated for the Colombian, Guatemalan, Honduran, Nicaraguan, Puerto Rican, and Salvadoran adolescents, although the relationship approached significance for the Puerto Rican adolescents. To examine whether the correlation for the Mexican adolescents differed significantly

Table 3. Correlations by Latino Nationality for Multigroup Ethnic Identity Measure (MEIM) and Self-Esteem Scale (SES) and for MEIM and Familial Ethnic Socialization Measure (FESM)

	MEIM and SES	MEIM and FESM
All Latinos	.17*** (882)	.58*** (955)
Colombian	.21 (13)	.65** (15)
Guatemalan	.03 (14)	.30 (15)
Honduran	.30 (6)	-.03 (7)
Mexican	.16*** (750)	.55*** (813)
Nicaraguan	.38 (13)	.86*** (16)
Puerto Rican	.42* (21)	.73*** (22)
Salvadoran	.06 (65)	.64*** (67)

NOTE: Sample sizes are in parentheses.

* $p < .06$. ** $p < .01$. *** $p < .001$.

from the correlations for the other national groups, the correlations were transformed into z scores and compared using the test statistic for independent correlations (see Myers & Well, 1995). Because the correlation for the Mexican origin adolescents was the only significant relationship found, the correlation for each national group was compared to the correlation for Mexican-origin adolescents. No significant differences emerged. Due to the small sample sizes, the ability to detect any significant differences in the correlations was limited.

In addition, to examine the concurrent validity of the FESM, correlations among the MEIM and FESM were examined. As previously mentioned, theoretical work indicates that familial socialization and ethnic identity should be positively correlated. Significant positive correlations between measures of these two constructs emerged for Colombian, Mexican, Nicaraguan, Puerto Rican, and Salvadoran adolescents, but not for Guatemalan or Honduran adolescents. To examine whether the correlations differed significantly from each other, using the same procedure described above, the correlations for the Guatemalan and Honduran adolescents were compared with the correlations for all other groups whose correlations attained significance. Findings indicated that the correlation for the Nicaraguans and Puerto Ricans were significantly higher than the correlation for Guatemalans ($z = 2.46$, $p < .01$; $z = 1.68$, $p < .05$, respectively). In addition, the correlation for Guatemalans was marginally significantly lower than the correlation for the Salvadorans ($z = 1.43$, $p < .10$). For the Honduran adolescents, their correlation was significantly lower than the correlation for the Nicaraguan adolescents ($z = 2.31$, $p < .05$) but was only marginally significantly lower than the

correlations for the Puerto Rican, Colombian, and Salvadoran adolescents (z s = 1.63, 1.29, and 1.41; p s < .10, respectively).

Discussion

The findings of this study question the methodological appropriateness of grouping Latino nationalities into one ethnic category. When the Latinos in this study were examined as a whole, the MEIM, SES, Emotional Autonomy, and FESM all demonstrated strong internal consistency and appeared to be appropriate for use with Latino adolescents. When individual Latino nationalities were examined, however, reliability coefficients were considerably lower for some national groups. Generally, Colombian, Mexican, Nicaraguan, Puerto Rican, and Salvadoran adolescents had acceptable reliability coefficients on all measures. Guatemalan and Honduran adolescents, however, demonstrated low reliability coefficients on a number of measures.

In addition, the concurrent validity of the MEIM and the FESM varied by nationality. When the concurrent validity of the MEIM was examined, the Latino group as a whole demonstrated a significant correlation with the SES in the expected direction, providing support for the concurrent validity of the MEIM. However, when examined separately by nationality, support for the concurrent validity of the MEIM was only evident with the sample of Mexican adolescents. The MEIM and SES did not correlate significantly for the other six Latino nationalities. For the Colombian, Honduran, and Nicaraguan adolescents, the effect sizes were moderate (r s = .21 to .38), and limited sample size could have contributed to low statistical power (power estimates were below .32) and the inability to attain statistical significance. In contrast, effect sizes for the Guatemalan and Salvadoran adolescents were low (.03 and .06, respectively). At least partially because of low statistical power, the correlations for the Mexican adolescents and those from other Latino nationalities were not significantly different from each other.

In terms of the concurrent validity of the FESM, correlations between the FESM and the MEIM provided support for the concurrent validity of the FESM among Colombian, Mexican, Nicaraguan, Puerto Rican, and Salvadoran adolescents, but the correlations were not significant for Guatemalan and Honduran adolescents. Moreover, the correlation for the Guatemalan adolescents was significantly lower compared to the correlations for the Nicaraguan and Puerto Rican adolescents. In addition, the correlation for the Honduran adolescents was significantly lower than the correlation for the Salvadoran adolescents, and the differences approached significance when

the Honduran adolescents' correlation was compared with the correlations for Puerto Rican, Colombian, and Salvadoran adolescents.

A limitation of this study is the small sample sizes for some of the Latino national groups. Despite the small sample sizes, these findings illustrate the importance of acknowledging the diversity among Latinos and not assuming that measures are uniformly reliable and valid across all Latino populations. However, these findings should not be interpreted as justification for excluding Latino respondents from research to achieve a homogenous sample of the dominant Latino population in the area (e.g., excluding Guatemalans from research conducted in Texas where the majority Latino population is Mexican). Rather, researchers should attempt to over-sample the Latino populations in the areas where they are conducting research to provide insight concerning the majority and minority Latino groups in the area.

In conclusion, the diversity among Latino populations is likely to affect the reliability and validity of instruments used to assess psychological constructs. Variations in nationality, immigration history, and familial generation status are factors that may influence the appropriateness of the measures examined in this study across the seven Latino national groups. For instance, unlike other Latino nationals, Mexican-origin Latinos have a long history in the United States due to the shared border between the two countries, as well as the historical relationship of land ownership between the two countries. In fact, many Mexican-origin families lived on Mexican land before it was acquired by the United States and remained on the land after the change in boundaries. Furthermore, access to the United States is facilitated for Mexican-origin Latinos, compared with other Latino groups, because of the proximity of the two countries. As a result of these factors, Mexican-origin individuals tend to have lived in the United States for more generations than other Latino nationals. These factors may help explain the variation in validity and reliability across Latino groups. Although this study had a limited number of Colombian, Guatemalan, Honduran, Nicaraguan, and Puerto Rican respondents, the differences found in the internal consistency estimates and the validity of the measures demonstrate the need to look beyond the pan-ethnic Latino group and examine individual nationalities.

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