

The Structure of Ethnic Identity of Young Adolescents From Diverse Ethnocultural Groups

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The purpose for this study was to examine the structure and construct validity of a measure of ethnic identity among young adolescents from diverse ethnic groups. Students in sixth, seventh, and eighth grades (N = 5,423) from diverse ethnic groups completed the Multigroup Ethnic Identity Measure (MEIM), measures of psychological well-being and a measure of salience of ethnicity. Factor analyses of data for the three largest ethnic groups (European American, African American, Mexican American) yielded a two-factor structure that corresponded to two theoretical approaches to ethnic identity, as hypothesized. Similar patterns in magnitude of loadings were observed across groups, indicating that the MEIM could be used as a global composite index of ethnic identity. Ethnic identity was related positively to measures of psychological well-being such as coping ability, mastery, self-esteem and optimism, and negatively to measures of loneliness and depression. MEIM scores also were moderately strong and positive with salience (the importance of a person's own ethnic background in his or her life), across ethnic groups.

Ethnic identity is recognized increasingly as a critical component of the self-concept and, like other aspects of identity, is of particular importance during

This research was supported in part by Grant No. MH51687 from the National Institute of Mental Health to the first author. Portions of this research were presented at the meeting of the Society for Research on Adolescence, Boston, March 1996.



Journal of Early Adolescence, Vol. 19 No. 3, August 1999 301-322

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adolescence. Although there is wide agreement that ethnic identity is crucial to the psychological well-being of members of an ethnic group, there has been little consensus on exactly what ethnic identity is or how it should be measured (Phinney, 1990). Until recently, ethnic identity has been studied mostly by sociologists (e.g., Royce, 1982) and anthropologists (e.g., DeVos & Romanucci-Ross, 1982; Keefe, 1992), and much of the focus has been on non-Hispanic Caucasian ethnic groups (e.g., Waters, 1990). Writers from those fields have focused on conceptual issues rather than on problems of definition and measurement. A better understanding of ethnic identity requires a clear conception of the construct and also a reliable measure of that construct. The purpose for the present study was to clarify the construct of ethnic identity through examination of the structure and validity of a widely used measure of ethnic identity (Phinney, 1992) among young adolescents from diverse ethnic groups.

Most measures of ethnic identity have been atheoretical and have focused on unique aspects of specific groups such as Mexican Americans (Felix-Ortiz, 1994; Garcia, 1982), Chinese Americans (Ting-Toomey, 1981), or Cubans (Garcia & Lega, 1979). An alternative approach could involve the examination of ethnic identity as a general phenomenon with common characteristics across ethnic groups. In a literature review that covered research on ethnic identity during the previous two decades, Phinney (1990) identified a number of components that have been considered to be central to the construct of ethnic identity and that have been used in studies with a wide variety of ethnic groups.

Those components served as the basis of a measure for ethnic identity, the Multigroup Ethnic Identity Measure (MEIM), developed to provide a way to assess ethnic identity across diverse samples (Phinney, 1992). In addition to the assessment of ethnic self-identification or ethnic self-label, the measure has three subscales: (a) affirmation and belonging (sense of group membership and attitudes toward the individual's group); (b) ethnic identity achievement (the extent to which a person has achieved a secure and confident sense of his or her ethnicity); and (c) ethnic behaviors (activities associated with group membership). The initial validation study of the scale (Phinney, 1992) indicated a single factor of ethnic identity. However, the sample size in that study was small and did not allow for examination of the factor structure within ethnic groups. The present study involved a large sample that allowed for exploratory and confirmatory factor analysis of the structure of ethnic identity both within and across ethnic groups.

Two distinct theoretical approaches have been used in most research on ethnic identity: social identity theory (Tajfel & Turner, 1986) and the developmental theory of Erikson (1968). First, the social identity approach

focused on a sense of belonging to a group and the attitudes and feelings that accompany a sense of group membership. The work of Tajfel and colleagues has been focused mostly on adults and typically has used experimental paradigms in which individuals are assigned randomly to groups. However, that work has been applied to a wide range of naturally existing social groups. Social identity theory posits that group identity is an important part of the self-concept; people generally attribute value to the group to which they belong and to derive self-esteem from their sense of belonging to that group. Ethnic identity is one type of group identity that is central to the self-concept of members of ethnic minority groups. On the basis of social identity theory, it would be expected that ethnic identity would include ethnic attitudes and a sense of group belonging. In the MEIM, the strength and valence of ethnic identity, termed *affirmation* and *belonging*, is represented by five items that assess attachment, pride, and good feelings about the person's ethnicity.

A second approach to the study of ethnic identity has been based on the Erikson (1968) theory of identity development. According to Erikson, identity formation takes place through a process of exploration and commitment that typically occurs during adolescence and that leads eventually to a commitment or decision in important identity domains. A number of researchers have developed models of ethnic or racial identity development that parallel the Erikson model, including those of Cross (1991), Helms (1990), Atkinson, Morton, and Sue (1993), and Phinney (1989, 1993). Each of those models posits a process that begins with lack of awareness or understanding of the person's ethnicity. This initial stage ends when adolescents engage as part of the identity formation process in a period of exploration to learn more about their group. Ideally, that phase leads to an achieved ethnic identity characterized by a commitment to the person's ethnicity that is based on a clear understanding of the implications of achieved ethnic identity and a secure, confident sense of group membership. This developmental approach posits that ethnic identity will vary with age; younger adolescents would be expected to have a less clear and committed sense of their ethnicity than would older adolescents. In the MEIM, this component of ethnic identity is assessed by the seven-item ethnic identity achievement scale, including four exploration items (activities to learn about the person's group) and three commitment items (a clear understanding of the person's ethnicity); it would be expected to show variability with age in samples that cover the age span from early adolescence to adulthood. The present study focused on early adolescence and therefore was not expected to show age differences.

Those two theoretical approaches, social identity and developmental, are distinct conceptually but might overlap in terms of measurement because an achieved ethnic identity is assumed to lead to positive attitudes regarding a

person's ethnicity together with a sense of belonging. Thus, a question of interest is whether items that assess commitment are part of the affirmation/belonging component or the developmental component of ethnic identity.

A third aspect of ethnic identity included in the MEIM involves behaviors associated with ethnicity such as customs, traditions, and social interactions. Although ethnic behaviors have been included in many measures of ethnic identity, including the MEIM, such behaviors are not linked clearly to the dominant theoretical views of ethnic identity, as discussed earlier. They might be more properly considered as aspects of acculturation (Phinney, 1998). Because the distinction between ethnic identity and acculturation is not clear in the literature, it would be useful to clarify the ways in which the behavioral items relate to a subjective sense of group membership.

The initial goals for the present study were to determine whether the factor structure of the MEIM would conform to the two theoretical approaches described, to identify which items were associated with each factor, and to examine whether ethnic behaviors formed a separate factor or were part of other components of ethnic identity. On the basis of the theoretical positions reviewed, examined was the hypothesis that the MEIM would reveal two factors that would correspond to the theoretical approaches. Additional questions were in regard to the position of ethnic behaviors within the factor structure, the extent to which the factors are intercorrelated, and whether the factors should be distinct scales.

Also included in the MEIM are (a) an open-ended question that elicits ethnic self-identification (self-label) and (b) a choice of an ethnic category from a list of ethnic groups. These items allow for the grouping of individuals by self-reported ethnicity but reveal nothing about the strength or valence of ethnic identity; they are not included as part of the ethnic identity scale *per se*.

In addition to the examination of the factor structure of the MEIM, a goal was to investigate the reliability and construct validity of ethnic identity as measured by the MEIM. Both of the theoretical approaches discussed are in agreement in positing that group identity plays an important role in the psychological well-being of group members. Social identity theory (Tajfel & Turner, 1986) posits that there is an underlying need to maintain self-esteem and that this need is linked to group identity. Group members are seen as differentiating their own group from other groups and evaluating their own group more favorably as a means of enhancing their own individual self-concepts. Identity as a member of a group, thus, is linked closely to self-esteem. An implication of the theory is that a favorable view of the personal group would be associated with higher self-esteem and an unfavorable view would be associated with lower self-esteem. Currently, a large body of work

has shown a consistent positive, although modest, correlation between ethnic identity and self-esteem (Belgrave, et al., 1994; Phinney, 1992; Phinney, Cantu, & Kurtz, 1997; Wright, 1985).

Developmental theory likewise posits a positive relation between psychological well-being and identity. Those individuals with an achieved ego identity show a variety of psychological strengths (Marcia, 1980), and a similar relation has been demonstrated for ethnic identity. In a review of the literature on this topic, Phinney and Kohatsu (1997) presented evidence that the earliest stage, characterized by an unexamined or diffuse ethnic identity, might be accompanied by low self-regard and feelings of inadequacy, whereas the highest stage, ethnic identity achievement, typically might be associated with a positive self-concept and absence of psychological distress. In an interview study of ethnic minority adolescents, Phinney (1989) found that students assigned to the initial or unexamined stage of ethnic identity had the poorest self-concept, whereas students with an achieved ethnic identity had the most positive self-concept.

Thus, social identity theory and developmental theory both indicate that a stronger or more committed ethnic identity would be associated positively with psychological well-being. An additional purpose of the current study was to examine the relations of ethnic identity to various indicators of psychological well-being across diverse ethnic groups. It was hypothesized that ethnic identity would be related positively to indicators of psychological well-being and related negatively to indicators of depression and loneliness.

A final question in this study concerned the relative strength and valence of ethnic identity across differing ethnic groups. According to social identity theory, when a group identity is problematic, for example when a group is subject to discrimination or negative stereotyping, group members attempt to assert a positive conception of their group through reaffirmation and revitalization (Tajfel, 1978). For European Americans in the United States, ethnicity typically is of low salience and ethnic identity is not strong (Phinney, 1989). However, the salience of ethnicity for minority group members has been demonstrated in studies both with high school (Aries & Moorehead, 1989) and college students (Phinney & Alipuria, 1990). *Salience* refers to the importance attributed to a person's own ethnic background (Alba, 1990). It was expected, therefore, that minority groups would have stronger ethnic identity than would members of the dominant majority. Examined in the present study was the strength of ethnic identity across a wide range of groups that previously have not been studied. The third hypothesis was that adolescents from ethnic minority groups would score higher on ethnic identity than would European Americans.

In summary, the aims for this study were to determine the structure and validity of ethnic identity as measured by the MEIM in a large diverse sample of early adolescents and to examine the variability of ethnic identity across ethnic groups. It was hypothesized that the MEIM would show two factors that would reflect the theoretical approaches, that the MEIM would be correlated positively with psychological well-being, and that ethnic groups would differ on ethnic identity.

METHOD

Participants and Procedures

The data presented are from a school-based survey conducted in the Houston metropolitan area in March 1994. The survey included five middle schools that enrolled about 6,400 students in grades six through eight. The questionnaires were administered in classroom settings, monitored by project field staff. Questionnaires were in English. Passive parental consent and active student assent procedures were used. Parents were sent a letter that explained the nature and purpose of the survey and asked to return a postcard declining consent if they did not want their child to participate. They also were given the name and telephone number of the principal investigator should they desire more information.

Questionnaires were obtained from 5,496 students. Missing from the sample were students who were absent during the first class period of the day when the survey was conducted (9.3%), students whose parents declined for them to participate (4.0%), and students who themselves declined to participate (1.4%). Another 73 questionnaires were eliminated due to large numbers of missing data. The final sample included 5,423 usable questionnaires.

Participants had a mean age of 12.9 years; 83% of the participants were between 12 and 14 years of age. Females made up 49% of the sample. In terms of self-chosen ethnic label, the sample was extremely heterogeneous. More than 20 distinctive ethnic groups were identified, although some of the groups were few in numbers. The largest groups were: African American ($n = 1,237$); Central American ($n = 253$); Chinese American ($n = 177$); European American ($n = 755$); Indian American ($n = 188$); Mexican American ($n = 755$); Pakistani American ($n = 155$); Vietnamese American ($n = 304$); and Pacific Islander ($n = 101$); and mixed ancestry ($n = 342$).

Measures

Ethnic group membership. Ethnic group membership was determined on the basis of ethnic self-label selected by participants from a list of broad categories (e.g., African American, Hispanic, and Asian American) and groups within these broader groupings (e.g., Cuban, Puerto Rican, and Mexican Americans), as well as categories for Mixed Ancestry, and Other. Some participants used broad categories (e.g., Asian), whereas others used more specific labels (e.g., Korean).

Ethnic identity (MEIM). Ethnic identity was assessed using the 14-item Multigroup Ethnic Identity Measure (Phinney, 1992). The measure has a reported reliability of .81 with high school students and .90 with college students. As discussed earlier, it was designed to assess three components of ethnic identity: affirmation and belonging (five items); ethnic identity achievement (seven items, including two negatively worded, four for ethnic identity exploration and three for commitment); and ethnic behaviors (two items). Items were rated on a four-point scale ranging from 1 = *strongly disagree* through 4 = *strongly agree*, so that high scores indicate strong ethnic identity. In this sample, reliability of the 14-item scale, as assessed by Cronbach's alpha, was .84. (The MEIM also includes a six-item scale to assess orientation toward other ethnic groups; this is not part of the ethnic identity scale and was not included in the present study.)

Ethnic salience was assessed using a single item that inquired how important the students' ethnic background was to them. Responses were on a four-point scale from 4 = *very important* through 1 = *not at all important*.

The following measures of psychological well-being were responded to on a five-point scale from 5 = *agree* through 1 = *disagree*. In each case, higher scores indicate stronger presence of the variable.

Self-esteem was measured by a six-item version of the Rosenberg (1986) scale. This scale had a reliability of .83 in this sample. The range was .75 through .87 across nine ethnic groups. Typical items were, "On the whole I am satisfied with myself" and "I feel that I am a failure" (reverse coded).

Coping was measured using a six-item scale selected originally from the work of Rosenbaum (1980) and Folkman and Lazarus (1980). The scale has acceptable reliability in this sample; overall α was .78; the range across ethnic groups was .71 through .79. Examples of these items are, "When I am in a

low mood I try to act cheerful so my mood will change” and “When an unpleasant thought is bothering me, I try to think about something pleasant.”

Optimism was measured using a six-item, revised version of the Life Orientation Test (LOT-R) (Scheier & Carver, 1985). Typical items are, “Overall, I expect more good things to happen to me than bad things” and “If something can go wrong for me, it will” (reverse coded). Coefficient alpha in this sample was .68, ranging from .49 (Pakistani) through .80 (European American) across ethnic groups.

Mastery was an eight-item scale from the work of Pearlin (Pearlin & Schooler, 1978). This scale had acceptable reliability levels ($\alpha = .72$) in this sample, with a range of .69 through .77 across ethnic groups. Examples of the items on this scale are, “I can do just about anything I really set my mind to” and “There is really no way I can solve some of the problems I have” (reverse coded).

Loneliness was an eight-item scale, the Roberts revision of the University of California Los Angeles Loneliness Scale (RULS-8) (Roberts, Lewinsohn, & Seeley, 1993). This scale has demonstrated good reliability and construct validity (Higbee & Roberts, 1994). Alpha for this sample was .89, with a range of .84 through .93 across ethnic groups.

Depression. The measure of depression was derived from the Diagnostic Interview Schedule for Children (Roberts, Roberts, & Chen, 1997). There are 31 items that cover *DSM-IV* diagnostic criteria. The questions are phrased in reference to how the participant felt in the past two weeks. The questions assess the following diagnostic criteria for episodes of major depression: mood, anhedonia, appetite, sleep patterns, motor, energy, guilt, cognitions, and thoughts of death. Alpha was .93 for this sample, with little variation across groups.

In addition, participants reported demographic data, including age, gender, and their type of residence. Because a large proportion of the youths could not provide data on education level of either parent, socioeconomic status was assessed with an item that asked, “Compared to other students at your school, would you say that your family is financially better off or worse off than other families (in terms of income)?” (Gore et al., 1992). Responses on a five-point scale ranged from *much worse off* through *much better off*. For this sample, about 9% reported their families were *worse off*, 51% felt their families were *about the same* financially as other families, and 40% reported their families were *better off*. More than 40% reported that they lived in

family-owned homes, whereas more than 50% lived in either rented houses or apartments. Less than 2% of these adolescents reported living in public housing.

Data Analysis

To determine the factorial structure of the MEIM, an exploratory factor analysis was conducted first with responses from a random sample of adolescents ($n = 200$) drawn from the three largest ethnic groups, European American (not African, not Mexican), African American, and Mexican American students. The exploratory factor analysis was conducted in SPSS for windows 8.0 (1997). For this analysis, cases were excluded pairwise and the analysis was carried out using principal component as the method of estimation and with an oblimin rotation.¹

The obtained factorial structure then was cross-validated with the remaining participants from the same three groups. To determine the stability of the factorial structure of the MEIM across groups, confirmatory multigroup analyses were performed using LISREL 8 procedures (Jöreskog & Sörbom, 1989b). The weighted least squares method of estimation was employed in all the analyses because the data violated both the normality and continuity assumptions and the sample was large enough for that type of estimation. Cross-validating the structure obtained with the exploratory factor analysis consisted of testing equality across groups of (a) the factorial structure, (b) the scaling units (i.e., equality of the factor loadings), (c) the structural relations (inter-factor correlations), (d) the measurement errors, and (e) the covariance matrices. The European American group served as the reference group for the multigroup comparisons.²

Bivariate correlations were used to examine the relations of the MEIM to measures of psychological well-being. Analysis of variance (ANOVA) with Tukey's post hoc test was used to examine differences in ethnic identity among ethnic groups.

RESULTS

Factorial Structure of MEIM

As discussed earlier, it was expected that the items in the MEIM would reflect the social identity and developmental components of ethnic identity. To examine that hypothesis, an exploratory factor analysis and then a confirmatory factor analysis were conducted.

Exploratory factor analysis. Initial results from this factor analysis indicated three factors. Because one factor was made up of two items, thus violating the Hatcher (1994) criteria of model fit, the factorial structure was reestimated by eliminating those two items and forcing a two-factor solution. (Those two items both were worded negatively and possibly were more difficult to understand.) The two-factor solution explained 51.2% of the total variance with Factor 1 and Factor 2 explaining 41.6% and 9.6% of the total variance, respectively. Item loadings for this two-factor solution are presented in Table 1.

Factor 1 was made up of seven items, including the five items from the original affirmation/belonging subscale and two items that indicated commitment. This factor was termed *affirmation, belonging, and commitment*. Factor 2 was made up of five items, including three items to assess exploration, from the original ethnic identity achievement subscale and two items from the original scale of ethnic behaviors.

Multigroup confirmatory analyses. Preparation for the multigroup analyses consisted of establishing well-fitting baseline models. Such models were obtained by cross-validating the factorial structure obtained with the exploratory factor analysis before conducting independent confirmatory factor analyses with each of the three largest ethnic groups (European American, African American, and Mexican American). In general, the results indicated that the residuals were high (i.e., more than 5% of the residuals were significant) and revealed that the model obtained through exploratory factor analysis did not explain adequately the observed variance (data not shown). Examination of the modification indices across groups revealed that freeing the path between the item that measured clear sense of ethnic background and Factor 2 would statistically improve the fit in all groups. Results of these analyses indicated that the fit of the baseline model improved significantly, but the residuals for the European American group remained high. To improve the fit, residuals among items were allowed to covary. In total, five error covariances for the European American group were added to the baseline model and this yielded an adequate fit.

Multigroup comparisons then were carried out to test equivalence among groups using a different baseline for the European American group. Although most multigroup hypotheses start with equivalent factorial structures, it is not a necessary condition as long as parameters within the same factors are compared (Werts, Rock, Linn, & Jöreskog, 1976). Results of the multigroup analyses are summarized in Table 2.

The fit of the factor structure test was found to be adequate across groups. The test of invariance of the factor loadings (i.e., equivalence of the scaling

TABLE 1: Factor Loadings, Exploratory Factor Analysis of the Multigroup Ethnic Identity Measure (MEIM) Items Using a Random Sample of 200 Adolescents (27.5% European American, 45.0% African American, and 27.5% Mexican American)

<i>Item</i>	<i>Factor 1</i>	<i>Factor 2</i>
Happy to be member	.88	-.16
Feel good about culture	.84	-.10
Pride in ethnic group	.79	.06
Understand group membership	.67	.13
Clear sense of ethnic background	.56	.26
Strong attachment to group	.51	.35
Sense of belonging to group	.43	.34
Active in ethnic organizations	-.16	.79
Participate in cultural practices	.02	.66
Talked to others about group	.16	.54
Think about group membership	.01	.54
Spend time to learn	.23	.53

TABLE 2: Summary of the Multigroup Analyses for European American (*n* = 662), African American (*n* = 962), and Mexican American Groups (*n* = 596)

<i>Test</i>	χ^2	df	p	Root Mean Square Error of Approximation (RMSEA)	Percentage of Residuals	χ^2 difference
Factor structure	285.57	151	.0001	0.35	European American 10.0% African American 10.6% Mexican American 6.1%	NA
Factor loadings	346.23	173	.0001	.037	European American 9.1% African American 18.0% Mexican American 7.6%	—
Factor loadings	327.49	170	.0001	0.37	European American 12.1% African American 18.1% Mexican American 3.0%	—

NOTE: Equality of structural relations, measurement errors, and covariance matrices were not tested because the equality of factor loadings test was negative.

units) yielded a $\chi^2(173) = 346.23, p < .001$. The difference in χ^2 between factor loading and factor structure test was significant, and the percentage of residuals for the Mexican American group was high, which indicated that the assumption was not tenable. An attempt to fit a less restrictive model, which consisted of freeing all paths found to be different significantly from the European American group, was unsuccessful. Although freeing these paths decreased significantly the χ^2 , the fitted residuals were not improved significantly, and the difference in χ^2 between this model and the factor structure model still remained significant, indicating that the equality of factor loading was rejected.

The standardized factor loadings for each group are presented in Table 3. Although the equality of factor loadings was rejected, meaningful group differences were observed for specific items. Using a 0.10 difference in factor loadings to represent meaningful group differences, six items for the African American group and five items for the Mexican American group, respectively, were found to have loadings that differed significantly from the European American group. Examination of the patterns of loadings across groups revealed that substantial concordance still remained: Across groups the loadings of Factor 1 were in general higher than Factor 2, and across groups items that had lower loadings on Factor 1 also were found to have the same pattern across groups. Such patterns in the item loadings indicated that Factors 1 and 2 had a uniform interpretation, but the items did have a varying level of discrimination across groups.

The correlations between the two factors were comparable and high for each of the three ethnic groups: $r = .74$ for the European Americans, $r = .70$ for the African Americans, and $r = .75$ for the Mexican Americans.

The results supported the hypothesis of two factors that corresponded to the two theoretical approaches. However, the commitment items, rather than being part of ethnic identity achievement, appeared to be part of the affirmation/belonging factor. In addition, ethnic behaviors appeared not as an independent factor but as part of the exploration component of ethnic identity. The two factors were distinct but nevertheless highly correlated. The internal consistency of the 12-item MEIM and of each factor for the 11 ethnic groups with the largest sample size were examined. Cronbach's alpha ranged from .81 through .89 across ethnic groups (see Table 4, first column). Alphas for Factor 1 and Factor 2 are shown in the second and third columns.

Because the 12-item MEIM showed the hypothesized factor structure and reliability equal to that of the earlier 14-item scale, and because the two deleted items were difficult to interpret, the 12-item scale was used in subsequent analyses. (See Appendix for complete 12-item scale.)

TABLE 3: Factor Loadings, Confirmatory Factor Analysis (*n* = 200) of the Multi-group Ethnic Identity Measure (MEIM) Items for European American (Group 1), African American (Group 2), and Mexican American (Group 3)

<i>Item</i>	<i>Factor 1^a</i>			<i>Factor 2^b</i>		
	<i>Group</i>			<i>Group</i>		
	<i>1</i>	<i>2</i>	<i>3</i>	<i>1</i>	<i>2</i>	<i>3</i>
Happy to be member	.65	.77	.81	—	—	—
Feel good about culture	.76	.79	.86	—	—	—
Pride in ethnic group	.77	.85	.79	—	—	—
Understand group membership	.73	.67	.68	—	—	—
Clear sense of ethnic background	.37	.44	.37	.38	.25	.38
Strong attachment to group	.83	.77	.73	—	—	—
Sense of belonging to group	.75	.65	.69	—	—	—
Active in ethnic organizations	—	—	—	.54	.53	.45
Participate in cultural practices	—	—	—	.67	.49	.60
Talked to others about group	—	—	—	.65	.60	.63
Think about group membership	B	—	—	.61	.44	.40
Spend time to learn	—	—	—	.57	.67	.57

NOTE: Interfactor correlations of the two factors for European American, African American, and Mexican American were 0.74, 0.70, and 0.75 respectively.

a. Factor 1 reflected affirmation, belonging, and commitment.

b. Factor 2 reflected exploration of and active involvement in group identity.

TABLE 4: Reliability for 12-Item Multigroup Ethnic Identity Measure (MEIM) and the Two Subscales Reflecting the Factors

	<i>Alpha</i> <i>(12 items)</i>	<i>Alpha</i> <i>(Factor 1)</i>	<i>Alpha</i> <i>(Factor 2)</i>
Overall	.85	.84	.70
European American	.85	.85	.67
African American	.82	.83	.62
Mexican American	.81	.82	.58
Central American	.81	.82	.55
Vietnamese American	.84	.86	.61
Chinese American	.84	.81	.66
Indian American (India)	.89	.88	.76
Pakistani American	.83	.84	.57
Pacific Islander	.86	.86	.73
Mixed Ancestry	.86	.84	.70

Correlations of Ethnic Identity With Psychological Well Being

The second hypothesis was that the ethnic identity scale would show a positive relation with indicators of psychological well being and a negative relation with indicators of depression and loneliness across diverse ethnic groups.

The correlation of the 12-item MEIM with each of the psychological well-being measures across the three largest ethnic groups and for the overall sample was examined. These results are presented in Table 5. In general, overall and across groups, MEIM scores were associated positively with self-esteem, coping, sense of mastery, and optimism. Furthermore, loneliness and depression generally were related negatively to MEIM scores, although the correlations did not reach statistical significance in some cases. With the relatively large samples for the three ethnic groups, some of the correlations were quite modest, albeit statistically significant. However, in no case were the directions of the associations contrary to the hypothesis. As an additional indicator of validity, the correlation of ethnic salience with the MEIM was calculated. As shown in Table 5, those correlations all are positive and highly significant. Salience, or the importance of a person's own ethnic background in his or her life (Alba, 1990), should be associated with MEIM scores, which reflect ethnic identity achievement, affirmation, belonging, and commitment. The correlations average .40 across the three largest groups examined: European American, African American, and Mexican American. This perhaps is the strongest evidence seen for validity in Table 5.

Ethnic Group Differences

The third hypothesis was that European Americans would show the lowest scores on ethnic identity. The mean ethnic identity scores, using the 12-item MEIM, were calculated separately for each ethnic group with more than 100 participants. An analysis of variance with post hoc comparisons was used to examine differences among groups. Those results indicated that significant differences existed between ethnic groups, $F(10, 3,756) = 35.43, p < .0001$. Based on post hoc contrasts using LSD test, the European American group of adolescents scored significantly lower than all other groups. (See Table 6 for group means and standard deviations with and without adjustment for differences in socioeconomic status.)

Pearson product moment correlations of the entire scale with age revealed no meaningful correlation between age and ethnic identity scores (age with total ethnic identity score: $r = -.02$).

TABLE 5: Correlations Between Ethnic Identity Measured by 12-Item Multigroup Ethnic Identity Measure (MEIM), Selected Measures of Psychological Well Being and Salience of Ethnicity

	<i>Ethnic Group</i>			<i>Total</i>
	<i>European American</i>	<i>African American</i>	<i>Mexican American</i>	
Coping	0.27***	0.21***	0.20***	0.23***
Mastery	0.26***	0.13***	0.12***	0.19***
Self-esteem	0.24***	0.14***	0.14***	0.20***
Optimism	0.24***	0.14***	0.10**	0.19***
Loneliness	-0.08*	-0.04*	-0.08	-0.09***
Depression	-0.14***	-0.07*	-0.01	-0.09***
Salience of ethnicity	0.44***	0.37***	0.40***	0.48***

* $p < .05$. ** $p < .01$. *** $p < .001$.

TABLE 6: Ethnic Identity Item Mean Score by Ethnic Group

	<i>Item^a Mean Score (SD)</i>	<i>Item Mean Difference Without Adjustment for SES^b (SE)</i>	<i>Item^a Mean Difference With Adjustment for SES^b (SE)</i>
European American	2.71 (.59)	—	—
African American	3.07 (.56)	-.37*** (.03)	-.36*** (.03)
Mexican American	3.01 (.53)	-.31*** (.03)	-.32*** (.03)
Central American	3.03 (.52)	-.32*** (.04)	-.33*** (.04)
Vietnamese American	3.02 (.54)	-.32*** (.04)	-.33*** (.04)
Chinese American	3.04 (.50)	-.34*** (.05)	-.35*** (.05)
Indian American (India)	3.27 (.58)	-.56*** (.05)	-.57*** (.05)
Pakistani American	3.34 (.48)	-.64*** (.05)	-.62*** (.06)
Pacific Islander	3.11 (.55)	-.40*** (.06)	-.40*** (.06)
Mixed Ancestry	2.94 (.60)	-.23*** (.04)	-.24*** (.04)

a. European American as the comparison group.

b. SES = socioeconomic status.

*** $p < .001$.

DISCUSSION

The purpose for this study was to examine the factor structure, construct validity, and ethnic differences in ethnic identity using the Multigroup Ethnic

Identity Measure with an ethnically diverse sample of early adolescents. The results add to the existing literature on ethnic identity by providing evidence that ethnic identity: (a) is a valid construct with young adolescents, (b) has an identifiable structure that emerges in early adolescence, (c) can be measured reliably across groups, and (d) differentiates among adolescents from differing ethnic groups.

The two theoretical approaches proposed for understanding ethnic identity are reflected in the two factors, affirmation/belonging and exploration. A first component of ethnic identity consists of commitment and a sense of belonging to an ethnic group, together with pride and positive feelings about the group. This aspect of ethnic identity can be understood in terms of social identity theory (Tajfel & Turner, 1986), which proposes that social identity, as a general construct, involves feelings of attachment and belonging to a group and to the attitudes associated with that sense of belonging. In addition, items originally conceptualized to assess commitment to an ethnic group, and thus as part of ethnic identity achievement (Phinney, 1992), were found to be associated with affirmation/belonging. It appears that the commitment that is part of ethnic identity achievement is associated closely with affirmation of a group and is perhaps indistinguishable from such affirmation; that is, a commitment to a group necessarily carries with it a sense of belonging and positive feelings.

The second major component involves the process through which individuals explore, learn about, and become involved in their ethnic group. Behaviors that indicate involvement with an ethnic group appear to be part of the exploration process rather than either a separate component or part of the subjective sense of belonging that is associated with social identity theory. This result is consistent with descriptions by Cross (1991) and Phinney (1993) indicating that exploration often includes active involvement in the person's group.

The two factors, belonging and exploration, are distinct statistically but nevertheless highly correlated. Both on theoretical and on statistical grounds, the two factors appeared to represent distinct but related aspects of ethnic identity.

However, a number of complexities emerged when the structure was examined across groups. First, the MEIM was found to have a complex two-factorial structure, meaning that one item loaded on two factors. In practice, this complicates the ways in which a subscale score is computed. Because the loadings for that item were similar across the two factors, that item would need to be included in both scale scores. The high interfactor correlations indicated that the 12-item MEIM scale (as presented in the Appendix) can be used as a global assessment of ethnic identity. Alternatively, for some

purposes, the affirmation and belonging scale could be used as an indicator of strength of identification.

Second, similar factorial structures were obtained for the African American and Mexican American groups, but the structure did not fit as well for the European American group (and, in fact, required that five error covariances be added to the structure to obtain a model that adequately explained the observed variance). Furthermore, the measurement properties (i.e., scaling units) of the items differed by ethnic groups, but similar patterns were observed within groups. The weaker factorial structure for the European Americans might indicate that the concepts measured by the MEIM were not delineated as clearly for that group. As part of the dominant group, European Americans might not feel the need to identify themselves ethnically. This interpretation is supported by the fact that they scored significantly lower on ethnic identity than did the other two groups.

Given the fit of the two-factor structure for the European Americans, it was not surprising to observe that the scaling properties of the individual items for the African Americans and Mexican Americans differed significantly from the European Americans. However, it is important to note that similar patterns in the loadings (i.e., magnitude) were observed across the three groups and that all loadings were high enough to be significant. These results indicated that across the three groups, a similar interpretation can be given to the factors but that the items do have differing discriminating power. Overall, those differences did not affect the reliability of the MEIM by group. Indeed, reliability was similar across groups and higher than .80.

In addition to considering the structure of ethnic identity, the construct validity of ethnic identity based on the Multigroup Ethnic Identity Measure was examined. The validity of the measure was supported by the expected positive correlations with measures of psychological well-being (coping, mastery, self-esteem, optimism, and happiness) and negative correlations with loneliness and depression. In addition, there was a positive association between the MEIM scale and a single item that assessed the salience of ethnicity to these adolescents. These relations were replicated within each of the three largest ethnic groups, European American, African American, and Mexican American. However, the correlations with psychological outcomes, although consistent across all the groups examined, were relatively modest. Ethnic identity is clearly only one of many factors that contribute to well-being (Phinney et al., 1997). However, for purposes of evaluating the construct validity issue, it is believed that the pattern the correlations provide does support the conclusion that the MEIM is valid in the context of this study. That is, the direction of the associations are in general as predicted and most are statistically significant. More important, as noted in the Results, the

correlation between MEIM scores and the item on salience of ethnicity averaged .40 across the European American, African American, and Mexican American groups. This provides the clearest and strongest evidence for the validity of the MEIM scale.

In this sample of young adolescents, there was no correlation between age and ethnic identity. This is not surprising given that the participants were all in grades six through eight. However, the mean scores for these young adolescents were somewhat lower than mean scores reported for European American, Latino, and African American high school students in earlier research (Phinney, DuPont, Espinosa, Revill, & Sanders, 1994). Although those differences were not tested statistically, they were indicative of a gradual increase in ethnic identity with development. Changes in ethnic identity with age have not been studied across wide age ranges; such changes should be examined in further research, preferably using longitudinal designs that would allow for exploration of factors that influence the development of ethnic identity.

Finally, as expected, the European Americans had the lowest scores on ethnic identity. This finding is consistent with virtually all research on the topic (e.g., Phinney & Alipuria, 1990). Although the adolescents in the current study attended schools that were ethnically diverse, and in which they in fact might be in the minority, ethnicity was less important to their identity than for all other ethnically identifiable groups. However, in this sample, contrary to other research (Phinney, 1992), the African American students did not score highest. Rather, Indian (India) and Pakistani adolescents had the highest scores. An interpretation of these results would require an examination of the experience of those adolescents in the multicultural context. Further research is needed to explore whether this strong ethnic identity derives from close cultural ties within the group or from negative experience, such as discrimination from other groups, as would be posited by social identity theory. It is clear from this study that the concept of ethnic identity has meaning for young adolescents and that it is related in theoretically meaningful ways to other dimensions of the adolescent experience. However, there are several caveats. First, the data are cross-sectional and are limited in terms of the age of the adolescents. Thus, the results do not explain anything about developmental trajectories. Second, the domain of ethnicity is complex and heterogeneous. It remains to be demonstrated how ethnic identity is related to the wider ethnic experience of adolescents; for example, their ethnic socialization, the ethnic context in which they live, and the attitudes of the community toward particular ethnic groups. It also remains to be demonstrated whether and how ethnic identity of adolescents increases the understanding of the psychological functioning of this age group.

If, as is posited in social identity theory (Tajfel & Turner, 1986) and in developmental theory (Erikson, 1968; Phinney, 1989, 1993), ethnic identity arises from the ethnocultural experiences of individuals and has important implications for the ways in which adolescents come to view themselves, then it should follow that ethnic identity is important in understanding whether and the ways in which ethnic group membership might increase or decrease the vulnerability of adolescents to emotional and behavioral problems.

APPENDIX

Revised (12-item) Multigroup Ethnic Identity Measure

In this country, people come from a lot of different cultures and there are many different words to describe the different backgrounds or ethnic groups that people come from. Some examples of the names of ethnic groups are Hispanic, Black, Asian-American, Native American, Irish-American, and White. These questions are about your ethnicity or your ethnic group and how you feel about it or react to it.

Please fill in: In terms of ethnic group, I consider myself to be _____

Use the numbers below to indicate how much you agree or disagree with each statement.

(4) Strongly agree; (3) Agree; (2) Disagree; (1) Strongly disagree

1. I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.
2. I am active in organizations or social groups that include mostly members of my own ethnic group.
3. I have a clear sense of my ethnic background and what it means for me.
4. I think a lot about how my life will be affected by my ethnic group membership.
5. I am happy that I am a member of the group I belong to.
6. I have a strong sense of belonging to my own ethnic group.
7. I understand pretty well what my ethnic group membership means to me.
8. To learn more about my ethnic background, I have often talked to other people about my ethnic group.
9. I have a lot of pride in my ethnic group and its accomplishments.
10. I participate in cultural practices of my own group, such as special food, music, or customs.
11. I feel a strong attachment towards my own ethnic group.
12. I feel good about my cultural or ethnic background.

Procedures and scoring:

1. The measures should also include an appropriate list from which participants can select a self-label for themselves and each parent.

2. The affirmation/belonging subscale includes items 3, 5, 6, 7, 9, 11, and 12. The exploration subscale includes items 1, 2, 4, 8, and 10. (Item 3 loads on both subscales.)

NOTES

1. The solution was evaluated by using the McDonald (1985) and the Hatcher (1994) criteria: percentage of variance explained by each factor, in which each factor is expected to explain at least 10% of the total variance; percentage of residuals judged to be significant, where 5% are expected to be significant by chance; and number of items loading on one factor, where more than two items are considered acceptable.

2. As there are no agreed standards to assess model fit, the Hu and Bentler (1995) approach was followed. A series of indices were evaluated including chi-square goodness of fit test, chi-square test of difference, fitted residuals, standardized residuals, and the Steiger (1990) Root Mean Square Error of Approximation (RMSEA). A 0.15 level of significance was adopted to evaluate the chi-square goodness of fit test. Because the chi-square is affected highly by sample size, not much weight was attributed to this test. In addition, magnitude and distribution of the fitted and standardized residuals were evaluated. Fitted residuals that were greater in absolute value of 0.10 (McDonald, 1985) were considered significant, and normally distributed residuals indicated a good fit (Bollen, 1989). The RMSEA (Jöreskog & Sörbom, 1989a) recommended cutoff were used where a RMSEA of 0.05 with upper confidence interval values of 0.08 was indicative of a good fit. The chi-square test of difference served to assess if more restrictive models fitted the data, and a 0.05 cutoff was employed with this test. Any model modifications first were evaluated from a substance point of view and then from the examination of the residuals and modification indices.

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