

An Exploration of the Ethnic Identity Scale among High School and University Students

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### Abstract

Consistent with Erikson's and Tajfel's theoretical perspectives, the Ethnic Identity Scale (EIS) assesses three domains of ethnic identity formation: exploration, resolution, and affirmation. The current chapter explores the findings of three studies in which high school and university students ( $N = 1,171$ ) completed measures of familial ethnic socialization and self-esteem in addition to completing the EIS. Results provide preliminary evidence for the validity and reliability of the EIS and indicate that the measure is appropriate for use with adolescents ranging in age and ethnic background. Furthermore, when taken together, findings from the three studies highlight developmental trends and contextual influences that can be examined using the EIS.

## An Exploration of the Ethnic Identity Scale among High School and University Students

Identity formation is a critical developmental task that increases in salience during adolescence as individuals begin to grapple with the question “Who am I?” (Erikson, 1968). Given that the resolution of one’s identity during this period is thought to serve as a guiding framework in adulthood (Josselson, 1994; Spencer, Swanson, & Cunningham, 1991; Swanson, Spencer, & Petersen, 1997), there is a growing interest in exploring adolescents’ identity development. A component of global identity that has gained attention in recent years is adolescents’ ethnic identity, particularly because as the U.S. becomes more diverse, ethnic identity may emerge as a particularly salient component.

Ethnic identity has been examined in relation to numerous outcome variables such as self-esteem (for reviews, see Phinney, 1991; Umaña-Taylor, Diversi & Fine, 2002), academic achievement (Arellano & Padilla, 1996), and individuals’ ability to cope with discrimination (Chavira & Phinney, 1991; Phinney & Chavira, 1995). Findings tend to be mixed, with some studies providing evidence of significant associations between these constructs and other studies finding limited evidence regarding an association between ethnic identity and important outcome variables. A significant limitation of the existing work is the lack of a theoretically grounded measurement tool that is appropriate for use with multiple ethnic and racial groups. In fact, scholars suggest that the divergent findings, which plague the literature on this topic, are in large part due to the variation in conceptualization and measurement of ethnic identity (see Phinney, 1991, 1995; Umaña-Taylor et al., 2002 for reviews). As such, there is a great need for a valid and reliable measure of ethnic identity that is applicable to a diverse group of individuals.

The current chapter presents data from three studies, all of which provide preliminary evidence for the psychometric soundness of the Ethnic Identity Scale (EIS), which was designed

to measure the multifaceted nature of ethnic identity (see Umaña-Taylor, Yazedjian, & Bámaca-Gómez, in press).

### Theoretical Background

Ethnic identity has been conceptualized using both Tajfel's (1981) social identity theory and Erikson's (1968) identity formation theory. Social identity theory posits that identity develops from both an individual's sense of belonging to a particular group and the affective component accompanying that sense of group membership. Furthermore, Tajfel suggests that individuals' self-esteem is derived from their sense of group belonging and, consequently, those who maintain favorable definitions of group membership will also exhibit positive self-esteem (Phinney, 1992; Phinney, Cantu, & Kurtz, 1997). However, if the social climate in which individuals' lives are embedded does not place value on the ethnic group and individuals experience discrimination or prejudice, they may display lower self-esteem than members of groups who do not have these experiences.

Alternatively, Erikson's (1968) identity formation theory posits that identity development occurs through a process of exploration and commitment to important identity domains of a broader self-concept. Yet, Erikson's postulations do not articulate that one's commitment to a component identity is necessarily always positive. Rather, Erikson indicates that individuals will, as a result of exploration, resolve their feelings about the role of a particular component identity (e.g. vocational, religious, sexual, political) within their broader social self. Furthermore, Erikson's theory suggests that the culmination of such a period of exploration will lead the individual to "reconcile his *conception of himself* and his community's recognition of him" (Erikson, 1959, 120). In other words it is only through the process of exploration that individuals can come to a resolution regarding a particular identity. Thus, from an Eriksonian perspective,

there are two critical components to the process of identity formation: exploration and commitment. Note that while social identity theory focuses more on the affective components of identity and how they are related to outcomes, Erikson's theory places greater emphasis on the process of identity development.

Marcia's (1980, 1994) operationalization of Erikson's theory of identity formation allows researchers to classify individuals, based on their degree of exploration and commitment, into one of four identity statuses: *diffuse*, *foreclosed*, *moratorium*, and *achieved*. According to this typology, individuals who have not explored or committed to an identity would be considered diffuse, and those who have explored but have not yet committed would be considered to be in moratorium. In contrast, individuals who have not explored, but have committed to a particular identity would be considered foreclosed, whereas those who have both explored and committed would be considered achieved.

In terms of ethnic identity, Phinney (1989) drew on Tajfel's and Erikson's theories as well as Marcia's operationalization of Erikson's theory to develop a conceptualization of ethnic identity and eventually a measure that assessed ethnic identity. Phinney's (1992) Multigroup Ethnic Identity Measure (MEIM) includes 14 items that assess individuals' degree of exploration, commitment, participation in cultural activities, and affirmation and belonging regarding their ethnic group. Items are summed and a composite score is used to determine degree of ethnic identity achievement. Recent work (i.e., Roberts, Phinney, Masse, Chen, Roberts, & Romero, 1999) suggests that a revised 12-item version of the MEIM should be utilized; however, the scoring remains the same: a sum score is created to determine individuals' degree of ethnic identity achievement.

Because the MIEM has been the most widely used measure of ethnic identity, past research has been conducted under the assumption that an *achieved* ethnic identity implies not only a greater amount of commitment and exploration, but also a *positive identification* with the group. In such research, the process of ethnic identity (e.g., ways in which individuals have explored their identity and developed an understanding of how they feel about that group membership) has been examined but only in the context of one's positive response to one's ethnic group. Although Phinney's theoretical postulation does not assume a positive commitment to the group, the measurement tool based on that theoretical model does. Therefore, in using the MEIM, only individuals whose commitment to their ethnic identity is positive are characterized as having an achieved identity. Consequently, the measurement is incongruent with the theory, as one's commitment is confounded with one's affirmation of one's ethnic identity.

Furthermore, with current operationalizations of ethnic identity, it is difficult to understand the relationship between ethnic identity and various outcomes. For example, based on existing work with the MEIM, findings suggest that it may be unhealthy to have a low degree of identification with one's ethnic group (e.g., lower self-esteem). With the current operationalization of the construct, however, it is not possible to decipher which aspect of the ethnic identity formation process is associated with negative outcomes. With current methods, exploration, commitment, and affirmation toward one's ethnicity are examined jointly. The key to furthering our understanding of the aspects of ethnic identity formation that are associated with outcomes may lie in examining exploration, resolution, and affirmation as *distinct components* of ethnic identity as opposed to using a sum score of a measure that combines individuals' scores on the three constructs.

It is particularly important to address this issue given that current methods of assessing ethnic identity development are not entirely consistent with Erikson's original formulation of exploration and commitment. With current methods, identity resolution is examined along a continuum of exploration, commitment, and affirmation. Such a continuum precludes the possibility of creating *statuses* of ethnic identity by assuming a continuous process of identity negotiation that culminates in a positive assessment of ethnic group membership. Whereas Erikson's original conceptualization of commitment implied a resolution of how various component identities are related to the broader self, current definitions of commitment imply a positive assessment of the meaning of group membership.

As a result, the EIS was introduced (see Umaña-Taylor et al., in press) as a measurement tool that could assess a typology for examining ethnic identity statuses that was consistent with Marcia's operationalization of Erikson's theory and Tajfel's social identity theory. This typology mirrors Marcia's, by examining whether individuals' degree of exploration and resolution regarding ethnicity is high or low. Consistent with Marcia's framework, the typology uses the statuses diffuse, foreclosed, moratorium, and achieved. Furthermore, the typology adds a third dimension that is in line with social identity theory. Based on individuals' scores on a measure of affirmation, a positive or negative label is assigned to their diffuse, foreclosed, moratorium, or achieved status. Thus, an individual who scores low on both exploration and commitment but high on affirmation would be categorized as diffuse positive, whereas an individual who scores low on all three components would be categorized as diffuse negative.

By developing a measure that independently assesses the three distinct components of ethnic identity formation and thereby allows for the classification of individuals into an ethnic identity typology, the framework through which ethnic identity is examined can be refined and

can more clearly capture its variability. In other words, the proposed typology captures the experiences of individuals who feel that their ethnicity is an important component of their social selves, engage in a process of exploration, resolve their feelings, and choose to affirm the role that their ethnic identity plays in their lives. Additionally, it also can capture the experiences of individuals who have explored their ethnicity and maintain a clear sense of what that group membership means to them, yet may not ascribe positive feelings toward their ethnic group.

Two studies were conducted to develop and explore the psychometric properties of the EIS (see Umaña-Taylor et al., 2003). This chapter provides a review of the findings from these two studies, in addition to providing additional information that was not presented in Umaña-Taylor et al., such as coefficient alphas of the subscales for each pan-ethnic/racial group in the sample. In addition, findings from a third study, a longitudinal study of Latino high school students, are explored and compared with findings from the initial two studies.

## GENERAL METHOD

Initially, two studies were conducted to examine the psychometric properties of the EIS. The first study used exploratory and confirmatory analyses to examine, refine, and confirm the factor structure of the EIS among a university sample. In addition, the psychometric properties of the refined measure were examined in the first study. The second study examined the methodological properties of the three subscales that were developed in Study 1 with a sample of high school students to determine whether the measure was valid and reliable with a younger adolescent population. Finally, a third study was conducted in which the psychometric properties of the EIS were further examined with a group of Latino ninth and tenth grade students. Prior to providing a detailed description of each study, the measures that were included in all three studies are described.



In all three studies, adolescents completed a questionnaire that included the following measures: Umaña-Taylor et al.'s (in press) EIS, Rosenberg's (1979) Self-esteem Scale, and Umaña-Taylor's (2001) Familial Ethnic Socialization Measure. Questionnaires were self-administered and participation was voluntary. For high school students, written parental consent was obtained; active written consent was obtained from university students.

### *Measures*

*Ethnic Identity.* The EIS included 17 items, scored on a 4-point Likert scale, with responses ranging from *Does not describe me at all* (1) to *Describes me very well* (4). Items assessed the degree to which individuals (a) had engaged in exploring their ethnicity (e.g., I have read books, magazines, newspapers, or other materials that have taught me about my ethnicity), (b) had resolved issues related to their ethnicity (e.g., I understand how I feel about my ethnicity), and (c) felt positively about their ethnicity (e.g., I dislike my ethnicity; item was reverse scored). Negatively worded items were reverse scored such that higher scores indicated higher levels of exploration, resolution, and affirmation.

*Race/Ethnicity.* The following introduction and brief question preceded the EIS items in the questionnaire “*The U.S. is made up of people of various ethnicities. Ethnicity refers to cultural traditions, beliefs, and behaviors that are passed down through generations. Some examples of the ethnicities that people may identify with are Mexican, Cuban, Nicaraguan, Chinese, Taiwanese, Filipino, Jamaican, African American, Haitian, Italian, Irish, and German. In addition, some people may identify with more than one ethnicity. When you are answering the following questions, we’d like you to think about what YOU consider your ethnicity to be. Please write what you consider to be your ethnicity here \_\_\_\_\_ and refer to this ethnicity as you answer*

*the questions below.*” Participants’ response to this question was then used to create the variable *race/ethnicity*.

*Self-esteem.* Rosenberg’s (1979) Self-esteem Scale was used to assess participants’ global self-esteem. This measure is comprised of 10 items (e.g., “At times I think I am no good at all”) with end points of *strongly disagree* (1) to *strongly agree* (4). Items were scored such that higher scores indicated higher self-esteem. This scale has been used with ethnically diverse populations (e.g., Mexican, Dominican, Puerto Rican, African American, and White adolescents) and has obtained moderate coefficient alphas (e.g., .79 to .85) with these samples (Der-Karabetian & Ruiz, 1997; Lorenzo-Hernandez & Ouellette, 1998; Martinez & Dukes, 1997; Phinney, Cantu, & Kurtz, 1997). In the studies discussed in this chapter, the measure obtained coefficient alphas of .85 (Study 1), .88 (Study 2), and .87 (study 3).

*Familial Ethnic Socialization.* A revised version of the Familial Ethnic Socialization Measure (Umaña-Taylor, 2001) was used to assess the degree to which participants perceived that their families socialized them with respect to their ethnicity. The 12 items (e.g., “My family teaches me about our family’s ethnic/cultural background” and “Our home is decorated with things that reflect my ethnic/cultural background”) were rated on a 5-point Likert scale, with end points of *not at all* (1) and *very much* (5) and end points of *not at all* (1) and *very often* (5). Responses were coded so that higher scores indicated higher levels of familial ethnic socialization. The original version, consisting of 9 items, obtained a coefficient alpha of .82 with a sample of Mexican-origin adolescents (Umaña-Taylor, 2001). In the studies discussed in this chapter, the measure obtained coefficient alphas of .94 (Study 1), .92 (Study 2), and .94 (Study 3).

## RESULTS

## Reliability of the EIS

To examine the internal consistency of the EIS subscales, reliability coefficients were explored for each of the samples. For the first and second studies, which were ethnically and racially diverse, alphas were examined across four major ethnic/racial groups (i.e., White, Latino, Black, and Asian). Because only Latino adolescents were sampled for Study 3, alphas are presented only for Latinos in the third study. Reliability coefficients were moderately high for all samples (see Table 1). Thus, the subscales demonstrated strong internal consistency across multiple ethnic and racial groups, as well as across age groups (i.e., high school versus university).

### Study 1

Data were gathered from 615 individuals who were attending either a four-year university located in the Midwest ( $n = 297$ ) or a four-year university located on the West Coast ( $n = 318$ ). The total sample included 164 males (27%) and 445 females (72%); six respondents did not provide this information. Participants ranged in age from 18 to 56 years ( $M = 21.8$ ,  $SD = 3.91$ ) and, in total, reported 193 different ethnic backgrounds (e.g., Poland, Mexican, Irish, and Eritrean). Respondents' self-reported ethnicity was used to classify participants into six major ethnic/racial groups: White ( $n = 276$ , 45%), Latino ( $n = 71$ , 12%), Asian ( $n = 125$ , 20%), Black ( $n = 49$ , 8%), multi-ethnic/racial ( $n = 41$ , 7%; e.g., Asian and Caucasian), and other ( $n = 25$ , 4%; e.g., American). Twenty-eight participants (5%) did not report an ethnic background.

### *Validity*

Preliminary support for the measure's construct validity was provided by examining correlations among the three subscales (i.e., exploration, affirmation, and resolution), a measure of self-esteem, and a measure of familial ethnic socialization. Examination of the

intercorrelations among the three subscales indicated that the exploration and resolution subscales were moderately correlated with one another (see Table 2). Thus, individuals who reported high levels of exploration also reported high levels of resolution. Due to the correlational nature of the analyses, it is unclear whether exploration influences one's resolution or whether individuals who have resolved how they feel about their ethnicity are more apt to explore their ethnicity at greater lengths. It is possible that the relationship is bi-directional or that there is a third, unidentified, variable that could be influencing both. Theoretically, one would expect that through exploration one can come to a resolution; however, it is possible that after one has resolved issues related to ethnicity, one will continue to explore and seek out activities that will expose one to one's ethnicity.

On the other hand, the affirmation subscale was not significantly related to either the exploration or the resolution subscales, suggesting that exploration and/or resolution regarding one's ethnicity is not necessarily related to the affect that one holds toward that ethnicity. According to Umaña-Taylor et al. (in press) these findings suggest that it is inaccurate to assume that individuals will feel positively about their ethnicity just because they have explored their ethnicity and/or feel that they have resolved how they feel about their ethnicity.

Because previous research has found significant positive relationships between ethnic identity and self-esteem (see Phinney, 1995, and Umaña-Taylor et al., 2002, for reviews), as well as between ethnic identity and familial ethnic socialization (Umaña-Taylor & Fine, 2001), the construct validity of the EIS was examined by exploring the correlations among each subscale and measures of self-esteem and familial ethnic socialization. Results indicated that the exploration and resolution subscales were both positively associated with individuals' self-esteem and familial ethnic socialization. Respondents' scores on the affirmation subscale,

however, were not significantly correlated with their scores on self-esteem or familial ethnic socialization. Umaña-Taylor et al. (in press) argued that these findings may shed light on the modest relationship that has emerged between ethnic identity and self-esteem in previous studies. They argue that previous studies have combined individuals' scores on the three constructs (i.e., exploration, resolution, affirmation) and it is possible that the relationship that has emerged in previous work has been modest because the method of measuring ethnic identity introduced error by combining individuals' scores on affirmation with their scores of exploration and commitment.

In terms of familial ethnic socialization, individuals' exploration and resolution were positively related to familial ethnic socialization. Thus, individuals who reported that their families had socialized them with regard to their ethnicity also tended to report higher levels of exploration and resolution regarding their ethnicity, which is consistent with previous research (i.e., Umaña-Taylor & Fine, 2001, 2002). Finally, a significant relationship did not emerge among familial ethnic socialization and affirmation, suggesting that individuals' experiences with familial ethnic socialization are not related to the affect that they report toward their ethnicity.

*Distribution of EIS scale scores.* Because the EIS was developed with the intention of being able to categorize individuals into a typology, cut off values for each of the subscales were identified, whereby individuals could be classified into eight groups based on their scores on each of the three subscales (i.e., all possible combinations of high/low affirmation, high/low exploration, high/low resolution). A variation of a K-means Cluster Analysis was used to determine cut-off values for each of the subscales (19.5, 20.5, and 9.5 for the exploration, affirmation, and resolution subscales). Respondents who scored above the cut off value on a

particular subscale were considered to score “high” on that subscale, and those who scored at or below the cut off value were considered to score “low” on the subscale. The eight types were labeled diffuse negative, diffuse positive, foreclosed negative, foreclosed positive, moratorium negative, moratorium positive, resolved negative, and resolved positive. For example, the label *resolved positive* identifies individuals who scored above the cut-off value on all three subscales (i.e., *resolved* = high exploration and high commitment, *positive* = high affirmation). Using this categorization scheme, all individuals were classified into one of the eight types.

The distribution of scores indicated that only 10% of the sample reported low scores on the affirmation subscale (see Table 3). Furthermore, the group with the largest number of people included those who had explored, had resolved issues about their ethnicity, and felt positively about their ethnicity (i.e., 38% of the sample). It is possible that the distribution of scores was driven, in part, by social desirability and individuals felt inclined to report positive affect toward their ethnicity (i.e., affirmation). Because previous research has not examined the distribution of individuals according to typology classifications, it is not possible to determine whether this is a typical distribution for this age group.

The next two largest groups were (1) those who had not explored or resolved, and felt positively about their ethnicity (i.e., 30%), and (2) those who had not explored but reported that they had resolved issues regarding their ethnicity and that they felt positively about it (i.e., 18%). This finding is critical because it demonstrates that it is possible to distinguish individuals who are diffuse or foreclosed. Thus, according to Umaña-Taylor et al. (in press) perhaps it is inaccurate to have a combined category of diffuse and foreclosed because they involve different processes (although both involve low exploration, one refers to individuals who have resolved

issues regarding their ethnicity and the second involves those who feel that they have not resolved issues about their ethnicity).

The distribution of typology classifications was further explored with regard to ethnic minority/majority status. Examination of the distribution suggested distinct patterns for ethnic minority and ethnic majority individuals (see Table 4). A majority of ethnic majority individuals (i.e., White) tended to fall into the Diffuse Positive category, which is associated with low exploration, low commitment, but positive feelings about one's ethnic group membership. On the other hand, the majority of Latino, Asian, and Black individuals tended to fall into the Resolution Positive category, indicating that they had explored, committed, and felt positively about their ethnic group membership. These patterns supported previous findings that suggested ethnic identity to be more salient for ethnic minority group members than for ethnic majority group members (Phinney, 1989, 1992; Phinney & Alipuria, 1990; Roberts et al., 1999).

*Mean differences between types.* In addition, Umaña-Taylor et al. (in press) conducted two analyses of variance (ANOVAs) to explore whether individuals' scores on familial ethnic socialization and self-esteem varied as a function of their typology classification. Individuals' scores on familial ethnic socialization varied significantly depending on EIS type, but individuals' self-esteem scores did not vary based on EIS type (see Table 5).

Tukey's post hoc analyses indicated that (a) individuals who were classified as resolved positive reported significantly higher levels of familial ethnic socialization than individuals classified as foreclosed positive, diffuse positive, and diffuse negative ( $p < .001$  for all) and (b) individuals classified as diffuse positive reported significantly lower levels of familial ethnic socialization than individuals classified as foreclosed negative, moratorium negative, moratorium positive, and resolved negative ( $p < .01$  for all). Thus, adolescents who reported high levels of

exploration, resolution, and affirmation (i.e., resolved positive) reported higher levels of familial ethnic socialization than those who reported feeling positively but not necessarily exploring (i.e., foreclosed positive) or resolving (i.e., diffuse positive).

### Study 2

Data for Study 2 were drawn from a larger research project examining the influence of school context on ethnic identity (see Yazedjian, 2003). Data were gathered from adolescents attending a high school located in a large ethnically diverse city in the Midwest. The sample included 231 eleventh grade high school students (45.5% males, 54.5% females). Age of participants ranged from 15 to 18 ( $M = 16.6$ ,  $SD = .59$ ). Participants reported 88 different ethnic backgrounds (e.g., Polish, Vietnamese, Mexican, Native American) from which racial classifications were created. Of all participants, 64 (28%) were White, 49 (21%) were Latino, 35 (11%) were Asian, 46 (20%) were Black, 3 (1%) were Native American, 18 (8%) were multi-ethnic/racial, and 6 (3%) were classified as other. A total of 10 participants (4%) did not report their ethnic/racial background.

### *Validity*

In line with findings from Study 1, the exploration and resolution subscales were significantly positively correlated with one another. With the high school sample, however, a significant positive relationship emerged between adolescents' scores on the affirmation and exploration subscales. Thus, individuals who reported high levels of exploration regarding their ethnicity also tended to report high levels of resolution and affirmation toward their ethnicity. Similar to Study 1, the affirmation subscale was not significantly related to the resolution subscale. These findings suggest that although adolescents who report exploring their ethnicity



also tend to report feeling positively about their ethnicity, resolution regarding one's ethnicity is not necessarily related to the affect that one holds toward that ethnicity.

In addition, the intercorrelations among each subscale (i.e., exploration, affirmation, and resolution), a measure of self-esteem, and a measure of familial ethnic socialization provided preliminary evidence for the construct validity of the EIS. The findings were similar to those obtained with the university sample in Study 1: the exploration and resolution subscales were both positively correlated with adolescents' self-esteem and familial ethnic socialization, and adolescents' scores on the affirmation subscale were not related to their scores on familial ethnic socialization (See Table 2). Contrary to findings in Study 1, adolescents' scores on the affirmation subscale were positively related to their self-esteem scores. Thus, as adolescents reported higher levels of affirmation (i.e., feeling positively about their ethnicity), they also tended to report higher levels of self-esteem.

*Distribution of EIS scale scores.* In line with Study 1, the distribution of scores for each classification of the typology was explored with the high school sample (see Table 3). Because the means and standard deviations of high school students' scores on the three subscales were comparable to those of the University sample (see Table 2), the cut-offs that were developed in Study 1 were applied to these data and the distribution of the typology scores were examined. All individuals were classified into one of the eight types, as in Study 1.

The distribution of ethnic minority/majority individuals within each of the typology classifications was also examined (see Table 6) and did not appear to vary as much by minority/majority status as was the case with university students. Umaña-Taylor et al. (in press) suggest that one possibility is that differences in ethnic identity statuses between ethnic majority and ethnic minority individuals do not become evident until later developmental periods and

perhaps this trend is a result of less variability in levels of ethnic identity exploration and commitment during the high school years. This idea is in line with previous findings that suggest that exploration and commitment toward ethnicity show a developmental progression with age, with college students reporting significantly higher scores on ethnic identity achievement than high school students (Phinney, 1992).

In addition to exploring the distribution of scores, Umaña-Taylor et al. (in press) conducted ANOVAs to explore variations in self-esteem and familial ethnic socialization by typology classification. Results indicated that familial ethnic socialization and self-esteem both varied significantly depending on EIS type (see Table 7). Tukey's post hoc analyses indicated that (a) individuals classified as diffuse positive scored significantly lower on familial ethnic socialization than those classified as foreclosed positive ( $p < .05$ ), moratorium positive ( $p < .05$ ), and resolved positive ( $p < .001$ ); (b) individuals classified as foreclosed positive scored significantly lower on familial ethnic socialization than individuals classified as resolved positive ( $p < .001$ ); and (c) individuals classified as moratorium positive scored significantly lower on familial ethnic socialization than those classified as resolved positive ( $p < .05$ ).

In terms of self-esteem, Tukey's post hoc analyses indicated that (a) individuals classified as diffuse negative reported significantly lower self-esteem scores than those classified as foreclosed positive ( $p < .001$ ), moratorium positive ( $p < .05$ ), resolved negative ( $p < .05$ ), and resolved positive ( $p < .001$ ), and (b) individuals classified as diffuse positive reported significantly lower self-esteem scores than those classified as foreclosed positive and those classified as resolved positive ( $p < .05$  for both).

These findings provided support for construct validity by demonstrating that individuals who scored low on exploration and/or resolution also scored low on familial ethnic socialization.

Findings involving self-esteem also provided support for construct validity, in that those who had explored, resolved, and felt positively tended to have the highest self-esteem scores. In fact, those who had not explored or resolved issues seemed to have lowest levels of self-esteem, an idea that is consistent with social identity and Eriksonian perspectives (Umaña-Taylor et al., in press). Umaña-Taylor and colleagues argue that perhaps the relationship that emerges between ethnic identity and self-esteem during this developmental period is due to adolescents' identities being less multifaceted than young adults' identities and, therefore, the weight that their ethnic identification bears on their overall feelings about themselves is stronger than what it is in later developmental periods when other aspects of one's identity may weigh in more heavily (e.g., occupational success, intimate relationships).

A second, more contextually driven, explanation is that a change in context (from an ethnically balanced high school to a more homogenous university setting) could account for a lack of relationship between ethnic identity and self-esteem because in a university setting adolescents do not have the support for their culture that was evidenced in high school and, therefore, must derive their sense of self from other component identities. In fact, upon closer examination of exploration and resolution scores, when broken down by ethnic background, mean exploration scores increase significantly from high school to college for Latino and Black adolescents, whereas exploration scores decrease significantly for White adolescents (see Table 8). It is possible that we evidence this increase in exploration for Latino and Black adolescents because these adolescents are entering contexts where perhaps they must answer new questions (related to ethnicity) due to the ethnic homogeneity of a university setting. Additionally, the homogenous setting may increase the salience of ethnicity and, as a result, prompt increased exploration. Furthermore, and theoretically consistent with the idea that increases in exploration

may eventually lead to increased resolution, there is a parallel significant increase in resolution scores among Latino and Black adolescents in the University sample. Thus, suggesting that increases in exploration are associated with increased resolution.

### Study 3

Data for Study 3 were drawn from a longitudinal study exploring ethnic identity development and academic success among Latino high school students. Data were gathered from five high schools in the Midwest. Ninth and tenth grade students who were self-identified as Latino or Hispanic in school records were invited to participate; in total, 325 students participated in the first wave of data collection (50.8% males, 49.2% females;  $M$  Age = 15.3,  $SD$  = .75).

#### *Validity*

To further explore the validity of the EIS with a second sample of high school students, intercorrelations among the three subscales were examined. In line with findings from the previous two studies, the exploration and resolution subscales were significantly positively correlated with one another (see Table 9). In addition, similar to the high school sample from Study 2, a significant positive relationship emerged between adolescents' scores on the affirmation and exploration subscales. Unlike the previous two studies, adolescents' scores on affirmation were positively related to their scores on resolution. However, the effect size for this correlation ( $r = .12$ ) was identical to the effect size for the sample in Study 2. Thus, it is likely that the significance that emerged in Study 3 was a result of the larger sample size.

Similar to the previous two studies, the intercorrelations among each subscale (i.e., exploration, affirmation, and resolution), a measure of self-esteem, and a measure of familial ethnic socialization provided evidence for the construct validity of the EIS. The findings were

similar to those obtained in the previous studies: the exploration and resolution subscales were both positively correlated with adolescents' self-esteem and familial ethnic socialization, and adolescents' scores on the affirmation subscale were not related to their scores on familial ethnic socialization (see Table 9). Contrary to findings in Study 1, but replicating findings in Study 2, adolescents' scores on the affirmation subscale were positively related to their self-esteem scores. Thus, as adolescents reported higher levels of affirmation (i.e., feeling positively about their ethnicity), they also tended to report higher levels of self-esteem.

*Distribution of EIS scale scores.* In line with the procedure followed in the previous two studies, the distribution of scores for each classification of the typology was explored in Study 3 (see Table 10). In line with the previous two studies, the largest percentage of adolescents were classified as resolved positive. Furthermore, a small percentage of adolescents reported low affirmation scores. As previously mentioned, it is possible that adolescents do not feel comfortable reporting negative feelings toward their ethnicity and, thus, an element of social desirability may be driving the results.

Additionally, one-way ANOVAs were conducted to explore whether individuals' scores on self-esteem and familial ethnic socialization varied as a function of their typology classification. As found in Study 2, results indicated that familial ethnic socialization and self-esteem both varied significantly depending on EIS type (see Table 11). With regard to familial ethnic socialization, Tukey's post hoc analyses indicated that (a) individuals classified as diffuse negative scored significantly lower on familial ethnic socialization than those classified as foreclosed positive ( $p < .01$ ), resolved negative ( $p < .001$ ), and resolved positive ( $p < .001$ ); (b) individuals classified as diffuse positive scored significantly lower on familial ethnic socialization than those classified as foreclosed positive ( $p < .001$ ), resolved negative ( $p < .001$ ),

and resolved positive ( $p < .001$ ); (c) individuals classified as foreclosed negative score significantly lower on familial ethnic socialization than those classified as resolved negative ( $p < .01$ ) and resolved positive ( $p < .001$ ); (d) individuals classified as foreclosed positive scored significantly lower on familial ethnic socialization than individuals classified as resolved negative ( $p < .05$ ) and resolved positive ( $p < .001$ ); finally, (e) individuals classified as moratorium positive scored significantly lower on familial ethnic socialization than those classified as resolved negative ( $p < .01$ ) and resolved positive ( $p < .001$ ).

In terms of self-esteem, Tukey's post hoc analyses indicated that (a) individuals classified as diffuse negative reported significantly lower self-esteem scores than those classified as foreclosed positive ( $p < .05$ ), resolved negative ( $p < .05$ ), and resolved positive ( $p < .001$ ); (b) individuals classified as diffuse positive reported significantly lower self-esteem scores than those classified as resolved positive ( $p < .001$ ); and (c) those classified as foreclosed negative reported significantly lower levels of self-esteem than those classified as resolved positive ( $p < .001$ ).

Replicating findings from the previous two studies, findings from Study 3 provided support for construct validity by demonstrating that individuals who scored low on exploration and/or resolution also tended to score low on familial ethnic socialization. Furthermore, as in the previous studies, adolescents' scores on ethnic identity affirmation were not related to their scores on familial ethnic socialization. For self esteem, findings also provided support for construct validity. Similar to findings in Study 2, those who had explored, resolved, and felt positively tended to have the highest self-esteem scores. In fact, those who had not explored or resolved seemed to have lowest levels of self-esteem, which, as previously mentioned, is consistent with social identity and Eriksonian perspectives. It is interesting to note that in both

Studies 2 and 3, whose foci were high school students, a relationship between ethnic identity and self-esteem emerged. However, this relationship did not emerge with the university sample. It will be important for future research to explore the idea that was previously introduced suggesting that adolescents' ethnic identity may be more influential on individuals' self-esteem during earlier developmental periods, when their identities are less multifaceted.

### CONCLUSION

Previous methods of assessing ethnic identity have been based on continuous measures and do not provide information about the differential influence of each ethnic identity component on individual outcomes. Umaña-Taylor et al. (in press) developed and explored the validity and reliability of a measure (i.e., EIS) that would assess the three components of ethnic identity independently of one another (i.e., exploration, resolution, and affirmation) and would facilitate researchers' ability to classify individuals into an ethnic identity typology based on their scores on each component. In addition, the third study described in this chapter attempted to replicate the findings reported in Umaña-Taylor et al.

Taken together, the findings from the three studies provide preliminary evidence for the reliability and validity of the EIS among high school and university students. The three subscales obtained strong reliability coefficients, demonstrating good internal consistency. Moreover, support for the measure's construct validity emerged in all studies when the relationships among the subscales and measures of familial ethnic socialization and self-esteem were examined. Beyond providing evidence for the reliability and validity of the measure, these findings also highlight the importance of examining the three components of ethnic identity as individual factors, as opposed to using a sumscore of the three scales. Both the intercorrelations among the subscales and the significant differences among the typology classification groups demonstrate

the need to examine each component independently. Most importantly, the operationalization proposed in the current investigation allows the *method* of assessing ethnic identity to become congruent with both Erikson's and Tajfel's theoretical frameworks.

Although these findings provide new insights for understanding the multifaceted nature of ethnic identity formation, there are limitations to consider. Most important, before the measure can be used widely, it must be examined with other populations. For example, these samples only represent two geographical areas in the U.S. Future studies should explore this measure with individuals living in other areas of the country. Although the U.S. is ethnically diverse, the ethnic composition of the population varies by geographical locale. Salience of ethnic identity may also vary as a result of this contextual factor. Although an examination of the influence of context on ethnic identity formation was beyond the scope of this chapter, this is an area that deems further study.

On a related note, future studies should examine a broader range of developmental periods. For example, Erikson (1968) argues that identity formation is a central task during adolescence. In line with this idea, researchers have found that exploration of one's ethnicity becomes increasingly evident during this developmental period. The current studies focused on individuals in high school and those enrolled in post secondary education. However, because exploration regarding ethnicity has been evidenced in individuals as early as the 7<sup>th</sup> and 8<sup>th</sup> grades (Roberts et al., 1999), it will be important for future studies to examine the reliability and validity of this measure with younger populations.

Finally, although the studies discussed in this chapter included ethnically diverse populations, their purpose was to explore the psychometric properties of the EIS with a diverse sample, rather than to examine its validity across ethnic and racial groups. Thus, a critical next



step is to explore the factorial invariance of the EIS by ethnic group. It will be important to explore whether the factor structure of the EIS varies by ethnic group due to varied experiences and meanings associated with ethnic identity across groups. Future studies should include large enough samples of a range of ethnic groups in order to enable an analysis of whether the factor structure is comparable across groups.

Despite these limitations, the combination of findings suggest that using a typology classification may be useful for understanding how different components of ethnic identity relate to outcome variables such as self-esteem. Furthermore, the EIS appears to be reliable with multiple ethnic and racial groups, as well as with diverse age groups, and findings from the three studies provide preliminary support for the validity of the measure.

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Table 1

*Coefficient Alphas for EIS subscales by Ethnicity and Study*

	White		Latino			Black		Asian	
	Study 1	Study 2	Study 1	Study 2	Study 3	Study 1	Study 2	Study 1	Study 2
Exploration	.90	.93	.90	.88	.82	.77	.87	.87	.86
Resolution	.91	.88	.90	.91	.84	.86	.83	.90	.91
Affirmation	.85	.88	.81	.83	.72	.85	.82	.81	.86

*Note.* Study 1 = University students; Study 2 = High school students; Study 3 = Latino High school students

Table 2

*Pearson Correlations among the EIS subscales, the Rosenberg Self-esteem Scale, and the Umaña-Taylor Familial Ethnic Socialization Measure for Study 1 and Study 2*

	Study 1 - University						Study 2 – High School					
	1	2	3	4	<i>M</i>	<i>SD</i>	1	2	3	4	<i>M</i>	<i>SD</i>
1. Exploration					18.3	5.8					18.4	5.8
2. Affirmation	.08 (292)				23.0	2.2	.17* (212)				23.0	2.4
3. Resolution	.65*** (298)	.11 (292)			10.6	3.3	.46*** (214)	.12 (217)			10.9	3.5
4. Self-esteem	.16** (292)	.10 (287)	.23*** (294)		32.1	4.6	.16* (216)	.22** (219)	.30*** (221)		31.9	5.5
5. Familial ethnic socialization	.71*** (294)	-.01 (289)	.62*** (296)	.09 (294)	39.8	12.6	.66*** (213)	.05 (217)	.47*** (218)	.12 (220)	38.6	11.7

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

Table 3

*Distribution of Scores along High/Low Dimensions of Exploration, Resolution, and Affirmation subscales for Study 1 and Study 2*

	Study 1 – University				Study 2 – High School			
	Affirmation		Affirmation		Affirmation		Affirmation	
	Low	High	Low	High	Low	High	Low	High
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Diffuse (Low Exploration, Low Resolution)	11	3.8	88	30.3	6	2.9	45	21.6
Foreclose (Low Exploration, High Resolution)	10	3.4	51	17.6	3	1.0	55	26.4
Moratorium (High Exploration, Low Resolution)	3	1.0	13	4.5	2	1.0	20	9.6
Resolved (High Exploration, High Resolution)	5	2.0	109	37.6	3	1.0	74	35.6

Table 4

*Study 1 Distribution of Ethnic Groups by Ethnic Identity Classification*

Ethnic Identity Classification	Panethnic Group											
	White		Latino		Asian		Black		Multi-ethnic/racial		Other	
	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Diffuse Negative	2	1.4	1	3.3	3	5.4	1	4.3	1	5.2	1	7.7
Diffuse Positive	67	48.2	5	16.7	4	7.1	1	4.3	3	15.8	6	46.1
Foreclosed Negative	2	1.4	1	3.3	5	8.9	1	4.3	-	-	1	7.7
Foreclosed Positive	29	20.9	2	6.7	9	16.0	1	4.3	6	31.8	2	15.4
Moratorium Negative	-	-	-	-	2	3.6	-	-	1	5.2	-	-
Moratorium Positive	5	3.6	-	-	5	8.9	1	4.3	-	-	1	7.7
Resolved Negative	-	-	1	3.3	1	1.9	1	4.3	1	5.2	-	-
Resolved Positive	34	24.5	20	66.7	27	48.2	17	73.9	7	36.8	2	15.4
Total	139		30		56		23		19		13	



Table 5

*Study 1 Means And Standard Deviations Of Familial Ethnic Socialization And Self-Esteem By EIS Type*

	Familial Ethnic Socialization			Self-Esteem		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
Diffuse Negative	11	32.82 <sup>c</sup>	12.06	11	31.55	6.67
Diffuse Positive	86	29.09 <sup>bdefgh</sup>	10.90	86	31.42	4.38
Foreclosed Negative	10	42.70 <sup>h</sup>	8.734	10	31.30	3.43
Foreclosed Positive	51	37.67 <sup>ad</sup>	8.10	50	31.44	4.34
Moratorium Negative	3	51.00 <sup>g</sup>	11.27	3	31.33	4.04
Moratorium Positive	13	40.85 <sup>e</sup>	11.08	13	31.62	5.72
Resolved Negative	3	49.67 <sup>f</sup>	8.39	4	28.75	2.75
Resolved Positive	108	48.80 <sup>abc</sup>	8.28	106	33.17	4.50
<i>F</i>		32.23*** (7, 277)			1.67 (7, 275)	

*Note.* Values in same column with same superscript are significantly different from one another.

Table 6

*Study 2 Distribution of Ethnic Groups by Ethnic Identity Classification*

Ethnic Identity Classification	Panethnic Group													
	White		Latino		Asian		Black		Multi-ethnic/racial		American Indian		Other	
	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Diffuse Negative	1	1.7	4	8.5	1	3.2	-	-	-	-	-	-	-	-
Diffuse Positive	11	18.6	11	23.4	7	22.6	3	7.9	7	43.7	-	-	2	33.3
Foreclosed Negative	1	1.7	-	-	1	3.2	1	2.6	-	-	-	-	-	-
Foreclosed Positive	19	32.2	16	34.0	4	12.9	9	23.7	3	18.8	-	-	2	33.3
Moratorium Negative	1	1.7	-	-	1	3.2	-	-	-	-	-	-	-	-
Moratorium Positive	7	11.9	4	8.5	4	12.9	3	7.9	1	6.3	1	33.3	-	-
Resolved Negative	1	1.7	-	-	1	3.2	1	2.6	-	-	-	-	-	-
Resolved Positive	18	30.5	12	25.5	12	38.7	21	55.3	5	31.2	2	66.6	2	33.3
Total n	59		47		31		38		16		3		6	

Table 7

*Study 2 Means And Standard Deviations Of Familial Ethnic Socialization And Self-Esteem By EIS Type*

	Familial Ethnic Socialization			Self-Esteem		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
Diffuse Negative	6	37.33	8.55	6	23.33 <sup>bdef</sup>	4.03
Diffuse Positive	43	28.93 <sup>cde</sup>	6.81	44	29.77 <sup>ac</sup>	5.53
Foreclosed Negative	3	34.67	6.81	3	35.33	5.00
Foreclosed Positive	54	35.31 <sup>ad</sup>	10.47	54	33.30 <sup>cd</sup>	4.71
Moratorium Negative	2	37.00	7.07	2	23.50	.71
Moratorium Positive	20	38.30 <sup>be</sup>	8.81	20	31.20 <sup>e</sup>	4.89
Resolved Negative	3	42.33	10.60	3	30.00 <sup>f</sup>	5.03
Resolved Positive	73	46.93 <sup>abc</sup>	9.71	73	32.99 <sup>ab</sup>	5.35
<i>F</i>		14.50*** (7, 196)			5.57*** (7, 197)	

*Note.* Values in same column with same superscript are significantly different from one another.

Table 8

*EIS Scale Means by Ethnic Group and School Setting for Studies 1 and 2*

	White		Latino		Black	
	High School	University	High School	University	High School	University
Exploration	18.3	16.3*	17.0	20.6***	20.7	23.5**
Resolution	10.8	9.9	10.5	12.1*	11.6	12.9*
Affirmation	23.2	23.4	23.0	23.0	22.6	23.0

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

*Note.* Means were compared across school settings only. An \* indicates that within an ethnic group, the university and high school samples differed significantly from one another.

Table 9

*Pearson Correlations among the EIS subscales, the Rosenberg Self-esteem Scale, and the Umaña-Taylor Familial Ethnic Socialization Measure for Study3*

	1	2	3	4	<i>M</i>	<i>SD</i>
1. Exploration					20.14	4.8
2. Affirmation	.13* (325)				21.96	3.00
3. Resolution	.57*** (325)	.12* (325)			13.14	2.80
4. Self-esteem	.38*** (325)	.25*** (325)	.38*** (325)		29.55	5.43
5. Familial ethnic socialization	.60*** (323)	.10 (323)	.57*** (323)	.38*** (323)	44.38	11.65

Table 10

*Distribution of Scores along High/Low Dimensions of Exploration, Resolution, and Affirmation subscales for Study 3*

	Affirmation			
	Low		High	
	<i>n</i>	%	<i>n</i>	%
Diffuse (Low Exploration, Low Resolution)	11	3.4	23	7.1
Foreclose (Low Exploration, High Resolution)	22	6.8	86	26.5
Moratorium (High Exploration, Low Resolution)	0	0	4	1.2
Resolved (High Exploration, High Resolution)	34	10.5	145	44.6

Table 11

Study 3 Means And Standard Deviations Of Familial Ethnic Socialization And Self-Esteem By EIS Type

	Familial Ethnic Socialization			Self-Esteem		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
Diffuse Negative	11	29.00 <sup>abc</sup>	15.88	11	24.00 <sup>ade</sup>	6.48
Diffuse Positive	23	31.04 <sup>def</sup>	11.00	23	26.35 <sup>b</sup>	4.26
Foreclosed Negative	22	38.68 <sup>gl</sup>	8.29	22	25.91 <sup>c</sup>	4.24
Foreclosed Positive	85	41.36 <sup>adhk</sup>	10.45	86	29.42 <sup>e</sup>	5.32
Moratorium Negative	0	-	-	0	-	-
Moratorium Positive	4	28.25 <sup>ij</sup>	11.53	4	26.00	3.56
Resolved Negative	33	48.30 <sup>beilk</sup>	8.46	34	29.26 <sup>d</sup>	4.33
Resolved Positive	145	49.85 <sup>cfghj</sup>	8.81	145	31.26 <sup>abc</sup>	5.23
<i>F</i>		24.97*** (6, 316)			8.72*** (6, 318)	