

## The Structure of Cultural Identity in an Ethnically Diverse Sample of Emerging Adults

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The present study was designed to examine the structure of cultural identity in the United States, both across variables and across persons. An ethnically diverse sample of 349 emerging-adult university students completed measures of orientation toward American and heritage cultural practices, acculturation strategies, individualism-collectivism, independence-interdependence, ethnic identity, and familism. Across variables, results of factor-analytic procedures yielded three dimensions of cultural identity: American-culture identity, heritage-culture identity, and biculturalism. This factor structure was consistent across the three largest ethnic groups in the sample (Whites, Blacks, and Hispanics). Ethnic differences emerged in the associations of these cultural identity factors to familial ethnic socialization, acculturative stress, and perceived ethnic discrimination. Across persons, cluster-analytic procedures revealed two groups of participants—those who endorsed American-culture identity highly and those who endorsed both American and heritage cultures highly. Implications for theory and for further research are discussed.

As of 2003, 34 million immigrants (Larsen, 2004), and an untold number of U.S.-born children of immigrants, resided in the U.S. The present (post-1965) wave of immigration is by far the most ethnically and culturally diverse in American history. Indeed, in recent years, large numbers of people have immigrated to the U.S. from Mexico, Cuba, China, India, Haiti, and the former Soviet Union (Schmidley & Deardorff, 2001).

The increasing diversity of the U.S. has important implications for how Americans, both immigrants and non-immigrants alike, define themselves culturally.

Although the study of self-definition can be traced to classic psychological theorists such as Cooley (1902), Erikson (1950), and Mead (1934), the study of *cultural* self-definition has its roots in other works (e.g., Hofstede, 1980; Kluckhohn & Strodtbeck, 1961). A number of constructs have been used to index cultural self-definition in North America, including acculturation strategies (Berry, 1997), ethnic identity (Phinney, 1992), individualist and collectivist cultural orientations (Triandis & Gelfand, 1998), and independent and interdependent self-construal (Singelis, 1994). All of these constructs have been referred to as aspects of cultural identity (e.g., Benet-Martínez & Haritatos, 2005; Chang, Tracey, & Moore, 2005; Chirkov, Ryan, & Willness, 2005).

What has been less well studied, however, is how the various elements of cultural identity fit together. Given

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that cultural identity change may underlie acculturation (Schwartz, Montgomery, & Briones, 2006), understanding the structure of cultural identity is important. Indeed, the acculturation literature has been criticized for a lack of appropriate operational definitions (Hunt, Schneider, & Comer, 2004) and for not using the same operational definitions across studies (Rudmin, 2003). Because cultural identity captures multiple processes (e.g., individualism-collectivism, ethnic identification) that change as a result of acculturation (Jensen, 2003), an understanding of acculturation as changes in cultural identity may help to address these criticisms. Accordingly, because acculturation involves changes in both values and behaviors (Cabassa, 2003), it is important to include under the rubric of cultural identity both the values and behaviors that are assumed to change as a result of acculturation.

In the following sections, we review the various components of cultural identity that have been considered in prior research and advance hypotheses regarding how these components fit together. We focus on emerging adulthood (ages 18–30), which is when the task of developing a sense of identity—cultural or otherwise—is often addressed in Western societies (Arnett, 2000).

### Acculturation Strategies

Traditionally, acculturation represents individual-level change occurring when people from different cultural backgrounds come into contact (Gibson, 2001). Early views of acculturation were unidimensional, in that immigrants and their descendants were expected to discard the values and ideals of their heritage culture and to adopt those of the receiving culture (Redfield, Linton, & Hershkovits, 1936). The nature of acculturation has changed, however, for at least two reasons. First, technological advancements have produced an increasingly global society where immigrants can easily maintain contact with their countries of origin. Second, mass immigration from developing countries has created ethnic enclaves dominated by the culture of origin, such as Miami, East Los Angeles, Chinatown, and Spanish Harlem (Stepick & Stepick, 2002). Retention of heritage culture values has therefore become a more viable component of acculturation (Schwartz, Pantin, Prado, Sullivan, & Szapocznik, 2006).

As a result of these and other developments, acculturation has been reconceptualized as a bidimensional process (Berry, 2005; Ryder, Alden, & Paulhus, 2000), including both adopting receiving-culture ideals and behaviors and retaining heritage-culture ideals and behaviors. It is now possible, and perhaps even desirable, to do both (Berry, 1997; Phinney, Horenczyk, Liebkind, & Vedder, 2001). Such an approach, known as biculturalism, has become a viable (and common)

acculturation strategy among immigrants, especially adolescents and young adults (Benet-Martínez & Haritatos, 2005; Phinney et al., 2001).

Because adopting the receiving culture and retaining the heritage culture represent independent dimensions (Benet-Martínez & Haritatos, 2005), they can be crossed to create a typology of acculturation strategies (Berry, 1997). *Assimilation* refers to adopting the receiving culture while discarding the heritage culture. *Integration* refers to adopting the receiving culture and retaining the heritage culture. *Separation* indicates retaining the heritage culture while resisting the receiving culture. *Marginalization* refers to neither retaining the heritage culture nor adopting the receiving culture. Rudmin (2003) has cast some doubt on the validity of marginalization, questioning how one could create a cultural identity without taking elements from either the heritage or receiving culture. At the same time, however, marginalization may reflect “cultural identity confusion,” where one experiences difficulty reconciling the heritage and receiving cultures’ expectations, values, and beliefs and winds up rejecting both (Berry & Kim, 1988). Berry and Kim (1988) argue that integration represents “additive acculturation” and that marginalization represents “subtractive acculturation,” suggesting that biculturalism represents additive acculturation and the absence of subtractive acculturation.

### Ethnic Identity

Ethnic identity is a subjective experience of acculturation (Phinney et al., 2001). It refers to (a) having explored the subjective meaning of one’s ethnicity, and (b) valuing one’s ethnic group positively (Phinney, 1992). Roberts et al. (1999) found that these two aspects of ethnic identity were highly related. Ethnic identity helps immigrants retain ideals and practices from their heritage cultures despite being surrounded by receiving-culture peers, media influences, beliefs, and customs (Phinney, 2005).

Research has found that ethnic minority individuals report higher levels of ethnic identity than White Americans (Phinney, Cantu, & Kurtz, 1997; St. Louis & Liem, 2005). Because American culture is assumed to be synonymous with White American values and practices, White Americans may not perceive themselves as members of an ethnic group (DeVos & Banaji, 2005; Tsai, Mortensen, Wong, & Hess, 2002). However, the rapid increase of minorities in the U.S. (Day, 1996), and increasing globalization and the decreasing importance of national boundaries (Arnett, 2002) have rendered ethnic and cultural identity increasingly important for majority as well as minority and immigrant individuals (Berry, Poortinga, Segall, & Dasen, 2002; Jensen, 2003).

### Cultural Orientation and Self-Construal

Individuals and cultures are often characterized in terms of prioritizing the group over the individual and vice versa. Western individuals and cultures are assumed to prioritize the individual over the group, whereas the opposite is assumed for non-Western individuals and cultures (Triandis, 2001). However, the emphasis on the individual and the group may operate differently at the cultural versus individual levels (Matsumoto, 2003). Matsumoto notes that considerable individual differences may exist between people residing in a primarily individualist or primarily collectivist cultural context (cf. Watkins, Mortazavi, & Trofimova, 2000), and we take these differences to reflect variations in cultural identity.

In the present study, we examined self-construal and individual-level individualism and collectivism. Although individual-level individualism and collectivism are similar to independence and interdependence, the foci of the constructs are somewhat different. Individualism-collectivism refers to cultural values, whereas self-construal refers to how one relates to others. Individualism-collectivism and self-construal were therefore treated as related but separate constructs in the present study.

Individualism refers to prioritizing the individual over the group, whereas collectivism refers to prioritizing the group over the individual (Hofstede, 1980). Similarly, independence represents a belief that one is separate from others and primarily responsible for one's own welfare, whereas interdependence represents a belief that one is connected to others and responsible for their welfare. Until recently, both individualism and collectivism (Hofstede, 1980) and independence and interdependence (Markus & Kitayama, 1991) were viewed as opposite ends of a continuum. Recent theoretical and empirical efforts, however, have called this assumption of unidimensionality into question (e.g., Killen, 1997; Oyserman, Coon, & Kimmelmeier, 2002). Coon and Kimmelmeier (2001), for example, found that measures of individualism and collectivism are largely independent of one another and represent separate parts of a whole. Similarly, research has indicated that independence and interdependence are separate dimensions (Singelis, 1994). Individuals may endorse independence in some situations and interdependence in others (e.g., home versus school or work; Parkes, Schneider, & Bochner, 1999).

Triandis and Gelfand (1998) have further subdivided both individualism and collectivism into "horizontal" and "vertical" dimensions. Vertical individualism and collectivism refer to the ways in which one regards others of different social strata or levels of respect (e.g., parents versus children). On the other hand,

horizontal individualism and collectivism refer to how individuals are expected to relate to others in their own social stratum (e.g., in the workplace).

### Familism

Some cultural values are assumed to apply largely to specific ethnic groups. Among the most prominent of these is *familism*, which is assumed to pertain primarily to Hispanics (Sabogal, Marin, Otero-Sabogal, Marin, & Perez-Stable, 1987) but may also be applicable to other ethnic groups (Chamberlain, 2003; Schwartz, in press). Familism reflects a collectivist value orientation and implies prioritizing the needs of one's family over one's own needs (Schwartz, Montgomery, & Briones, 2006). As a result, one might conclude that familism represents an indicator of retaining heritage culture values and practices.

### Correlates of Cultural Identity

A number of variables might be considered as potential influences on cultural identity. We consider three such variables in the present study: familial ethnic socialization (Umaña-Taylor, Bhanot, & Shin, 2006), acculturative stress (Sonderegger & Barrett, 2004), and perceived ethnic discrimination (Phinney, Madden, & Santos, 1998). *Familial ethnic socialization* refers to ways in which parents and other family members "pass down" their ethnic heritage by teaching their children about and exposing them to history, traditions, symbols, historical figures, and community members from the family's heritage culture. It is generally regarded as a "transmitter" of cultural identity from one generation to the next (Hughes, 2003; Torres, 2004). *Acculturative stress* refers to negative "side effects" of acculturation such as perceived pressure toward and against assimilation into the receiving culture. Acculturative stress may impede cultural identity change when receiving-culture individuals expect one to assimilate and heritage-culture individuals expect one to remain separated from the receiving culture (Schwartz, Montgomery, & Briones, 2006). Bicultural individuals, in particular, may be vulnerable to pressures from both heritage and receiving culture individuals (Rudmin, 2003). *Perceived ethnic discrimination* refers to beliefs that one is ostracized, unfairly targeted, or unwanted in the receiving society because of one's ethnic or cultural background. Individuals closely identifying with their ethnic or cultural group may perceive ambiguous situations (e.g., being ignored by someone from the receiving society) as discriminatory (Jefferson & Caldwell, 2002), and a cultural identity that is strongly separated from the host culture may invite discrimination from receiving-society individuals (Sellers & Shelton, 2003).

## Hypotheses

We investigated clustering of cultural identity both across variables and across participants. When used together, variable-centered and person-centered analyses can be informative, especially when they lead to similar conclusions (e.g., Furr & Funder, 2004). For example, although the number of factors (in variable-centered analyses) and clusters (in person-centered analyses) may not be identical, correspondence between factors and clusters can be informative for theory. In terms of variable-centered hypotheses, we anticipated that cultural identity indices<sup>1</sup> would pattern into two major categories, (a) acquisition of American-culture values and practices (American-culture identity) and (b) retention of heritage-culture values and practices (heritage-culture identity; Benet-Martínez & Haritatos, 2005; Berry, 1997; Phinney et al., 2001). Such a hypothesis represents a logical extension of the bidimensional model of acculturation, in which heritage-culture and receiving-culture behaviors are taken as independent rather than as opposing ends of a continuum (see Berry, 2005; Ryder et al. 2000). The present study extends extant literature by examining such bidimensionality in cultural *values* as well as *behaviors*. Horizontal and vertical individualism, independence, American-culture orientation, and assimilation were hypothesized to pattern<sup>2</sup> onto an “American-culture identity” construct, whereas horizontal and vertical collectivism, interdependence, heritage-culture orientation, separation, ethnic identity, and familism were hypothesized to pattern onto a “heritage-culture identity” construct. Given that biculturalism represents a blending of heritage and receiving cultures (Benet-Martínez & Haritatos, 2005) and may represent a condition separate from endorsing either of the component cultures (Rudmin & Ahmadzadeh, 2001), biculturalism was considered as a potential third dimension of cultural identity.

In terms of person-centered hypotheses, we used Berry’s (1997) typology of acculturation strategies to formulate hypotheses. It might be plausible to hypothesize that four clusters would emerge, representing Berry’s four acculturation strategies. Again, however, given conceptual concerns (Rudmin, 2003) raised about marginalization as an acculturation strategy, it would not be surprising to find that a marginalization cluster fails to emerge. Because biculturalism represents integration within Berry’s (1997) model of acculturation, integration should pattern positively,

and marginalization negatively, on the “integration” cluster. It is more difficult to hypothesize how biculturalism indices would pattern onto clusters defined by “assimilation” and by “separation.”

We also related the empirically obtained cultural identity constructs and clusters to familial ethnic socialization, acculturative stress, and perceived ethnic discrimination. In variable-centered analyses, given research linking familial ethnic socialization to ethnic identity (Umaña-Taylor et al., 2006), we hypothesized that familial ethnic socialization would be positively related to heritage-culture identity. Given evidence that acculturative stress and perceived discrimination may impede the acculturation process (Jasinskaja-Lahti, Liebkind, Horenczyk, & Schmitz, 2003), we hypothesized that these processes would be negatively related to American-culture identity indices. In person-centered analyses, we hypothesized that familial ethnic socialization would differ between clusters defined by low and high heritage-culture retention; that pressures to acculturate would be highest in the assimilation cluster; and that pressures against acculturation would be highest in the separation cluster. No cluster differences were anticipated in perceived ethnic discrimination.

## METHOD

### Participants and Procedures

This investigation was approved by the Institutional Review Boards at the University of Miami and Florida International University. The present sample consisted of 349 emerging-adult students (71% female; *M* age = 20.1) attending a culturally diverse university in Miami. Data were collected in fall 2004. More than 95% of individuals approached agreed to participate. Participants were recruited from introductory psychology courses and received course credit for participation. Participants completed the measures (which took approximately 1–2 hours to complete) at home and returned them to their instructor.

The majority of participants (74%) were U.S.-born, whereas the majority of mothers (73%) and fathers (77%) were born abroad. Nearly half the sample (46%) was comprised of first-year students, and the remainder were mostly sophomores (24%) and juniors (22%). Consistent with the demographics of Miami, the majority of participants (57%) were Hispanic, with non-Hispanic Whites (16%), non-Hispanic Blacks (18%), Asians (7%), and mixed-ethnicity participants (2%) making up the remainder. Of Hispanic participants, 71% reported that their parents were both born in the same Hispanic country, 15% reported that their parents were from different Hispanic countries, and

<sup>1</sup>In this article, we use the terms “index” and “indices” to refer to observed indicators; and the term “factor” to refer to unmeasured latent variables.

<sup>2</sup>Following Thompson (2004, p. 19), the terms “pattern” and “pattern coefficient” are used in place of “load” and “factor loading.”

15% reported that at least one parent was born in the U.S. The most common countries of origin for Hispanic participants whose parents were from the same country were Cuba (48%), Colombia (16%), Nicaragua (10%), Peru (8%), and the Dominican Republic (5%). The non-Hispanic Blacks in the sample consisted of both African Americans ( $n = 17$ ) and Caribbean Islanders ( $n = 46$ ). Consistent with the demographics of the South Florida area, most Caribbean Islanders were Haitian (52%) or Jamaican (26%), and 57% were U.S.-born. Asian participants were primarily of Filipino (38%) or East Indian (24%) descent, and 48% were U.S.-born.

### Measures<sup>3</sup>

**Acculturation strategy.** We measured acculturation strategy both in terms of the underlying dimensions and in terms of Berry's four acculturation strategies. Orientation toward heritage (17 items) and American (15 items) cultural practices were measured using the Stephenson Multigroup Acculturation Scale (Stephenson, 2000). This measure assesses endorsement of heritage and American cultural practices in areas such as language use, food, and entertainment. Berry's acculturation strategies were assessed using the Acculturation, Habits, and Interests Multicultural Scale for Adolescents (Unger et al., 2002). This measure consists of eight items, each of which asks about a specific domain (e.g., food, language, and media). For each item, participants are asked to indicate whether their preferred way of performing the cultural practice in question is most in line with the U.S., the country of familial origin, both, or neither. The *assimilation score* is the sum of "United States" responses; the *integration score* is the sum of "both" responses and represents additive acculturation; the *separation score* is the sum of "the country my family is from" responses, and the *marginalization score* is the sum of "neither" responses and represents subtractive acculturation. Because the four scores must sum to eight for any given participant, only three degrees of freedom are available. As a result, all four scales cannot be entered together as independent variables into a single analysis (Unger et al., 2002). Excluding the marginalization subscale, which is both the least endorsed (Unger et al., 2002) and the most conceptually questioned (Rudmin, 2003), from these types of analyses may help to address this issue. Accordingly, in the present study, marginalization was used only where it could be entered as a dependent variable.

**Ethnic identity.** Ethnic identity was assessed using the Multi-Group Ethnic Identity Measure (Roberts et al., 1999). This instrument assesses two aspects of ethnic identity: achievement (7 items; e.g., "I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs"), representing having considered the subjective meaning of one's ethnicity; and affirmation (5 items; e.g., "I have a lot of pride in my ethnic group"), representing identifying with and valuing one's ethnic group.

**Individualism and collectivism.** Horizontal (e.g., "I'd rather depend on myself than on others") and vertical individualism (e.g., "It is important that I do my job better than others") and horizontal (e.g., "The well-being of my coworkers is important to me") and vertical collectivism (e.g., "It is my duty to take care of my family, even when I have to sacrifice what I want") were assessed using corresponding 4-item subscales developed by Triandis and Gelfand (1998).

**Independence and interdependence.** Independence (12 items; e.g., "Being able to take care of myself is a primary concern for me") and interdependence (12 items; e.g., "I will sacrifice my self-interest for the benefit of the group I am in") were assessed using the Self-Constraint Scale (Singelis, 1994). Singelis (1994) has provided evidence for the internal and factorial validity of this measure.

**Familism.** Familism was assessed using the 18-item Attitudinal Familism Scale (Lugo Steidel & Contreras, 2003). The measure assesses four dimensions of familism: familial support, familial interconnectedness, familial honor, and subjugation of self to family. The four subscales were summed to create a total familism score. Sample items include "A person should be a good person for the sake of his or her family."

**Familial ethnic socialization.** Familial ethnic socialization was measured using the Familial Ethnic Socialization Measure (Umaña-Taylor & Fine, 2001). This measure consists of 12 items assessing the extent to which the participant's family (a) taught her/him about their ethnic group and its values and practices and (b) exposed her/him to other people from their ethnic group. A sample item from this measure is "My family encourages me to respect the cultural values and beliefs of our ethnic/cultural background."

**Acculturative stress.** Acculturative stress was assessed using the Multidimensional Acculturative Stress Inventory (Rodriguez, Myers, Mira, Flores, &

<sup>3</sup>Internal consistency estimates from the present sample are presented in Table 1.

Garcia-Hernandez, 2002), adapted for use with diverse ethnic groups. Three of the four subscales were used for the present study: native-language competency pressures (7 items; e.g., “I feel uncomfortable being around people who only speak my family’s heritage language”); pressure to acculturate (7 items; e.g., “It bothers me when people don’t respect my family’s cultural values”); and pressure against acculturation (4 items; e.g., “People look down upon me if I practice American customs”). Although this measure was designed for use with Mexican Americans, there is considerable precedent in cultural psychology to adapt measures designed for one ethnic group for use with other groups by changing the group, language, or country referenced within each item (e.g., “Spanish” becomes “my family’s heritage language,” and “Mexico” becomes “my family’s country of origin”; Birman & Trickett, 2001).

*Perceived ethnic discrimination.* Perceived ethnic discrimination was assessed using a 7-item measure developed by Phinney et al. (1998). The items ask about

the extent to which participants have been treated unfairly (e.g., by police officers and teachers) and the extent to which participants believe that they are unwanted in American society. Sample items include “How often do teachers or employers treat you unfairly or negatively because of your ethnic background?”

## RESULTS

Descriptive statistics for all study variables, by ethnicity, are presented in Table 1. Ethnic differences emerged for all acculturation variables except heritage culture orientation and marginalization. Ethnic differences also emerged for ethnic identity, as well as for all three hypothesized correlates of cultural identity. However, no ethnic differences emerged for any of the independence-interdependence or self-construal variables. For all variables (except assimilation) for which ethnic differences emerged, non-Hispanic Whites scored significantly lower than one or more of the other ethnic groups.

TABLE 1  
Means, Standard Deviations, and Cronbach’s Alpha Estimates for Study Variables

| Variable                                  | Cronbach’s $\alpha^a$ | Whites              |         | Blacks              |         | Hispanics           |         | Asians              |         | F        | $\eta_p^2$ |
|---|-----------------------|---------------------|---------|---------------------|---------|---------------------|---------|---------------------|---------|----------|------------|
|   |                       | M                   | SD      | M                   | SD      | M                   | SD      | M                   | SD      |          |            |
| American culture identity                 |                       |                     |         |                     |         |                     |         |                     |         |          |            |
| American culture orientation              | .90                   | 62.29 <sub>a</sub>  | (8.63)  | 60.68 <sub>ab</sub> | (6.73)  | 58.38 <sub>b</sub>  | (7.73)  | 59.00 <sub>ab</sub> | (5.66)  | 4.11**   | .04        |
| Assimilation <sup>b</sup>                 | .84                   | 4.33 <sub>a</sub>   | (3.05)  | 2.62 <sub>abc</sub> | (2.65)  | 2.02 <sub>b</sub>   | (1.77)  | 3.24 <sub>ac</sub>  | (2.49)  | 9.85***  | .13        |
| Independence                              | .71                   | 43.18               | (6.25)  | 43.23               | (5.99)  | 43.68               | (5.82)  | 43.59               | (5.87)  | 0.15     | .00        |
| Horizontal individualism                  | .76                   | 16.08               | (2.49)  | 16.17               | (2.72)  | 15.81               | (2.72)  | 16.17               | (2.43)  | 0.38     | .00        |
| Vertical individualism                    | .76                   | 12.67               | (3.04)  | 12.48               | (3.10)  | 12.34               | (3.05)  | 14.18               | (3.71)  | 1.87     | .02        |
| Heritage culture identity                 |                       |                     |         |                     |         |                     |         |                     |         |          |            |
| Heritage culture orientation <sup>b</sup> | .83                   | 58.47               | (17.16) | 60.68               | (10.81) | 59.22               | (10.95) | 54.18               | (14.75) | 1.20     | .01        |
| Separation <sup>b</sup>                   | .72                   | 0.18 <sub>a</sub>   | (0.71)  | 0.90 <sub>b</sub>   | (1.46)  | 1.09 <sub>b</sub>   | (1.53)  | 0.82 <sub>ab</sub>  | (1.24)  | 12.44**  | .05        |
| Interdependence                           | .74                   | 40.14               | (6.41)  | 39.26               | (5.30)  | 39.50               | (5.82)  | 39.82               | (7.26)  | 0.23     | .00        |
| Horizontal collectivism                   | .66                   | 15.18               | (2.18)  | 14.79               | (2.05)  | 15.19               | (2.21)  | 14.65               | (2.64)  | 0.73     | .01        |
| Vertical collectivism                     | .74                   | 14.27               | (2.78)  | 14.79               | (2.87)  | 14.97               | (2.71)  | 14.00               | (3.24)  | 1.31     | .01        |
| Ethnic identity exploration               | .76                   | 12.80 <sub>a</sub>  | (3.70)  | 16.48 <sub>b</sub>  | (4.25)  | 14.88 <sub>c</sub>  | (3.90)  | 15.47 <sub>bc</sub> | (4.95)  | 7.81***  | .07        |
| Ethnic identity affirmation               | .90                   | 24.94 <sub>a</sub>  | (5.53)  | 28.78 <sub>b</sub>  | (5.66)  | 27.18 <sub>bc</sub> | (5.47)  | 25.71 <sub>ac</sub> | (4.66)  | 4.83**   | .05        |
| Familism                                  | .82                   | 61.31               | (8.92)  | 65.19               | (7.54)  | 64.36               | (8.34)  | 62.71               | (8.46)  | 2.43     | .02        |
| Biculturalism                             |                       |                     |         |                     |         |                     |         |                     |         |          |            |
| Integration <sup>b</sup>                  | .76                   | 2.75 <sub>a</sub>   | (2.81)  | 3.73 <sub>b</sub>   | (2.57)  | 4.51 <sub>c</sub>   | (2.03)  | 3.50 <sub>abc</sub> | (1.98)  | 7.28***  | .08        |
| Marginalization <sup>b</sup>              | .63                   | 0.65                | (1.28)  | 0.57                | (1.01)  | 0.37                | (0.88)  | 0.50                | (1.04)  | 1.16     | .01        |
| Cultural identity correlates              |                       |                     |         |                     |         |                     |         |                     |         |          |            |
| Familial ethnic socialization             | .89                   | 34.33 <sub>a</sub>  | (9.60)  | 41.76 <sub>b</sub>  | (10.75) | 41.61 <sub>b</sub>  | (9.40)  | 38.71 <sub>ab</sub> | (11.94) | 7.94***  | .07        |
| Perceived ethnic discrimination           | .86                   | 11.92 <sub>a</sub>  | (4.50)  | 16.38 <sub>b</sub>  | (5.69)  | 12.75 <sub>a</sub>  | (4.56)  | 16.06 <sub>b</sub>  | (6.32)  | 11.53*** | .10        |
| Native language competency pressure       | .85                   | 13.33 <sub>ab</sub> | (5.87)  | 13.75 <sub>ab</sub> | (6.03)  | 12.33 <sub>a</sub>  | (4.97)  | 15.88 <sub>b</sub>  | (6.66)  | 2.97*    | .03        |
| Pressure to acculturate                   | .82                   | 12.83 <sub>a</sub>  | (5.72)  | 16.91 <sub>b</sub>  | (6.28)  | 15.59 <sub>b</sub>  | (5.15)  | 17.24 <sub>b</sub>  | (5.54)  | 5.89**   | .05        |
| Pressure against acculturation            | .82                   | 6.98 <sub>a</sub>   | (3.70)  | 7.28 <sub>ab</sub>  | (3.62)  | 7.34 <sub>a</sub>   | (3.14)  | 9.53 <sub>b</sub>   | (4.19)  | 2.95*    | .03        |

Note. Within each row, means with the same subscript are not significantly different from one another.

$\eta_p^2$  refers to the partial eta-squared value (Pearce, Block, & Aguinis, 2004).

<sup>a</sup> Estimated on the full sample. <sup>b</sup> The assumption of homogeneity of variance was not met. As a result, the Welch corrected *F* statistic is reported (cf. Luh & Guo, 1999).

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

TABLE 2  
Correlation Matrix Among Cultural Identity Indices

| Variable                        | 1 | 2      | 3      | 4      | 5      | 6       | 7       | 8       | 9       | 10     | 11     | 12     | 13      |
|---------------------------------|---|--------|--------|--------|--------|---------|---------|---------|---------|--------|--------|--------|---------|
| 1. American culture orientation | — | .25*** | .26*** | .45*** | .17**  | .09     | -.37*** | .04     | .22***  | .31*** | .26*** | .15**  | .05     |
| 2. Assimilation                 | — | —      | -.06   | .07    | .01    | -.33*** | -.32*** | -.39*** | -.25*** | -.04   | -.11*  | -.09   | -.25*** |
| 3. Independence                 | — | —      | —      | .29*** | .22*** | .24***  | -.08    | .16**   | .26***  | .28*** | .32*** | .23*** | .22***  |
| 4. Horizontal individualism     | — | —      | —      | —      | .16**  | .03     | -.13*   | .02     | .16**   | .24*** | .22*** | -.01   | .06     |
| 5. Vertical individualism       | — | —      | —      | —      | —      | -.02    | .00     | .05     | .03     | .02    | .19*** | .14*   | .16***  |
| 6. Heritage culture orientation | — | —      | —      | —      | —      | —       | .21***  | .40***  | .46***  | .27*** | .37*** | .22*** | .37***  |
| 7. Separation                   | — | —      | —      | —      | —      | —       | —       | .27***  | .22***  | -.06   | .03    | .11    | .13*    |
| 8. Ethnic identity achievement  | — | —      | —      | —      | —      | —       | —       | —       | .64***  | .22*** | .30*** | .29*** | .34***  |
| 9. Ethnic identity affirmation  | — | —      | —      | —      | —      | —       | —       | —       | —       | .35*** | .38*** | .23*** | .39***  |
| 10. Horizontal collectivism     | — | —      | —      | —      | —      | —       | —       | —       | —       | —      | .50*** | .36*** | .32***  |
| 11. Vertical collectivism       | — | —      | —      | —      | —      | —       | —       | —       | —       | —      | —      | .41*** | .58***  |
| 12. Interdependence             | — | —      | —      | —      | —      | —       | —       | —       | —       | —      | —      | —      | .37***  |
| 13. Familism                    | — | —      | —      | —      | —      | —       | —       | —       | —       | —      | —      | —      | —       |

Note. Sample sizes within each cell range from 333 to 345 as a result of missing data.

To correct for the number of correlation coefficients estimated, only correlations significant at  $p < .001$  were interpreted as significant.

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

**Bivariate correlations.** First, we examined the bivariate correlations among the cultural identity indices (see Table 2). Because of the number of correlations estimated, we interpret here only those significant at  $p < .001$ . Examination of Table 2 indicates that “American culture identity” indices are less strongly correlated than are “heritage culture identity” indices. For example, the mean correlation among independence, vertical individualism, and horizontal individualism was .22, whereas the mean correlation among interdependence, vertical collectivism, and horizontal collectivism was .43.

It is noteworthy that the indices of American and heritage culture identity tended to be moderately and positively correlated, and 13 of these 23 positive correlations were significant at  $p < .001$ . The only significant negative correlations in the entire matrix involve (a) assimilation with heritage-culture identity indices and (b) separation with American-culture identity indices. These correlations are consistent with Berry’s (1997) model, in which assimilation implies rejecting the heritage culture and separation implies rejecting the receiving culture.

### Confirmatory Factor Analyses

Second, we evaluated the hypothesized factor structure of cultural identity in a confirmatory factor analysis (CFA). American-culture orientation, assimilation, independence, vertical individualism, and horizontal individualism were attached to an “American culture identity” factor; and heritage-culture orientation, separation, ethnic identity achievement, ethnic identity affirmation, interdependence, horizontal collectivism, and vertical collectivism were attached to a “heritage culture identity” factor. Integration was considered as

indicative of a separate construct. A post-hoc exploratory factor analysis supported this configuration, with integration patterning onto a third factor.<sup>4</sup>

The fit of the CFA model to the data was evaluated using standard structural equation modeling indices: the chi-square statistic, which compares the covariance structure of the model to the covariance structure in the data; the comparative fit index (CFI), which compares the specified model to a null model with no paths or latent variables; and the root mean square error of approximation (RMSEA), which is similar to the chi-square but is adjusted for sample size and model complexity. Because the chi-square is not adjusted for sample size or model complexity, the ratio of the chi-square to the degrees of freedom ( $\chi^2/df$ ) was used instead as a fit index. Adequate fit is represented by  $\chi^2/df < 3$ ,  $CFI \geq .95$ , and  $RMSEA \leq .08$  (Kline, 1998; Quintana & Maxwell, 1999). Additionally, a finding that the 95% confidence interval for the RMSEA falls below .08 provides additional confidence that the model fits the data (MacCallum, Browne, & Sugawura, 1996).

The CFA model fit the data well,  $\chi^2(51) = 95.78$ ,  $p < .001$ ;  $CFI = .95$ ;  $RMSEA = .066$ . Both assimilation,  $\lambda = -.18$ , and separation,  $\lambda = .04$ , were trimmed from the model because of small and nonsignificant pattern coefficients. This was not surprising given (a) the lack of strong bivariate associations between assimilation and most other indices of American culture identity and (b) bivariate associations between separation and only the ethnic identity measures. Model fit was similar when these indicators were trimmed,  $\chi^2(48) = 70.28$ ,  $p < .001$ ;  $CFI = .95$ ;  $RMSEA = .064$

<sup>4</sup>Results of this factor analysis are available from the first author.

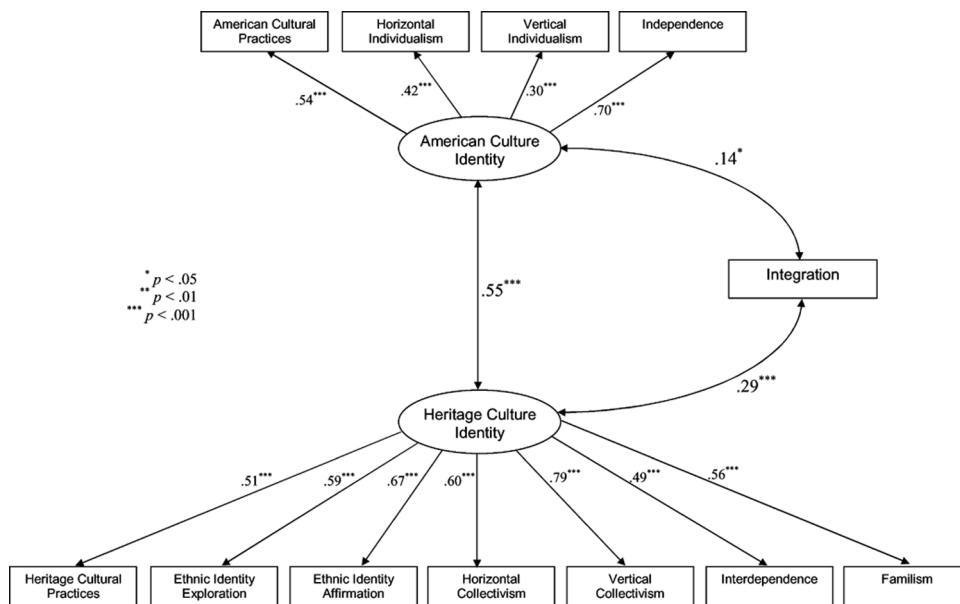


FIGURE 1 Confirmatory factor analysis model.

(see Figure 1). The 90% confidence interval for the RMSEA index ranged from .044 to .084.

Model testing includes comparing the specified model to rival models (Thompson, 2004). Therefore, to evaluate the tenability of integration as a third factor, we compared the three-factor model to (a) a model with integration attached to the American-culture identity factor and (b) a model with integration attached to the heritage-culture identity factor. Because these models are not nested, they can be compared using the Akaike Information Criterion (AIC; see Keith, 2006). With AIC differences above 8 representing meaningful differences in model fit, the three-factor model fit the data better than rival model (a),  $\Delta AIC = 10.38$ ; and fit equivalently to rival model (b),  $\Delta AIC = 1.92$ . We therefore retained the three-factor model because it is most consistent with theory.

We tested the consistency of this three-factor model across ethnic groups using multigroup CFA. In this analysis, we used only those groups with large enough sample sizes – non-Hispanic Whites, non-Hispanic Blacks, and Hispanics. We compared (a) a model in which factor pattern coefficients and covariances among factors were free to vary across ethnic groups to (b) a model in which all parameters were constrained equal across ethnic groups. A nonsignificant or trivial difference in model fit indicates that the unconstrained model fits consistently across ethnic groups. In comparing the constrained and unconstrained models, we used three indices of differences in model fit: the chi-square difference ( $\Delta\chi^2$ ), the difference in CFI values, and the difference in non-normed fit index (NNFI) values. Although the NNFI was not used in evaluating the fit

of the overall model to the data, it is especially sensitive to differences in fit between models (Little, 1997). For the assumption of invariance to be statistically rejected, the  $\Delta\chi^2$  should be significant at  $p < .05$  (Byrne, 2001); the  $\Delta CFI$  should be greater than .01 (Cheung & Rensvold, 2002); and the  $\Delta NNFI$  should be greater than .02 (Vandenberg & Lance, 2000).

Measurement invariance analyses indicated that the model fit equivalently across ethnic groups,  $\Delta\chi^2(31) = 42.52, p = .08; \Delta CFI = .004; \Delta NNFI = .020$ . As a result, we created weighted factor scores for the receiving-culture and heritage-culture identity factors by converting each of the indicator variables to standard scores, weighting each indicator by its standardized pattern coefficient, and summing the weighted and standardized scores according to the indicators attached to each factor. We created factor scores for biculturalism by conducting an exploratory factor analysis on the integration and marginalization subscales (integration,  $\lambda = .79$ ; marginalization,  $\lambda = -.79$ ) and creating a weighted factor score.

### Relations of Cultural Identity to Familial Ethnic Socialization, Acculturative Stress, and Perceived Ethnic Discrimination

To ascertain the relations of cultural identity indices to familial ethnic socialization, acculturative stress, and perceived ethnic discrimination, we computed bivariate correlations (see Table 3). Because statistical significance is a function of both effect size and sample size (Kline, 2004), and because sample sizes differed across ethnic groups, we used only effect size ( $r \geq .20$ )

TABLE 3  
Relationships of Cultural Identity to Familial Ethnic Socialization, Acculturative Stress, and Perceived Ethnic Discrimination

| <i>Variable</i>                     | <i>American Culture Identity</i> | <i>Heritage Culture Identity</i> | <i>Biculturalism</i> |
|-------------------------------------|----------------------------------|----------------------------------|----------------------|
| Familial ethnic socialization       |                                  |                                  |                      |
| Total sample <sup>a,b</sup>         | .15*                             | .59***                           | .20***               |
| White <sup>c</sup>                  | -.02                             | .49***                           | -.02                 |
| Black <sup>d</sup>                  | .41**                            | .61***                           | .26*                 |
| Hispanic <sup>e</sup>               | .15*                             | .62***                           | .15*                 |
| Perceived ethnic discrimination     |                                  |                                  |                      |
| Total sample                        | -.13*                            | .03                              | -.22***              |
| White                               | -.26                             | -.06                             | -.22                 |
| Black                               | -.01                             | .04                              | -.08                 |
| Hispanic                            | -.22**                           | .01                              | -.29***              |
| Native language competency pressure |                                  |                                  |                      |
| Total sample                        | -.12                             | -.26***                          | -.30***              |
| White                               | -.10                             | -.07                             | -.44**               |
| Black                               | -.23                             | -.25                             | -.30*                |
| Hispanic                            | -.22**                           | -.34***                          | -.22**               |
| Pressure to acculturate             |                                  |                                  |                      |
| Total sample                        | -.14*                            | -.18*                            | -.16*                |
| White                               | -.09                             | -.22                             | -.20                 |
| Black                               | -.14                             | -.04                             | -.23                 |
| Hispanic                            | -.17*                            | -.20**                           | -.19*                |
| Pressure against acculturation      |                                  |                                  |                      |
| Total sample                        | -.14*                            | -.07                             | -.24***              |
| White                               | -.21                             | -.06                             | -.39**               |
| Black                               | -.35**                           | -.13                             | -.31*                |
| Hispanic                            | -.10                             | -.13                             | -.18*                |

<sup>a</sup>Includes all participants in the sample (Whites, Blacks, Hispanics, Asians, and those identifying as Other).  
<sup>b</sup> $n = 349$ . <sup>c</sup> $n = 57$ . <sup>d</sup> $n = 63$ . <sup>e</sup> $n = 198$ . *Note:* Because sample sizes differ between ethnic groups, adjusting the significance level for the number of correlations estimated would affect the results for Whites and Blacks more than the results for Hispanics. Therefore, no adjustment was made for the number of correlations estimated. The reader should be mindful that a pattern of significant findings is the “best defense” against Type I error risk.

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

to identify meaningful correlations. We explored the relationships between cultural identity indices and hypothesized correlates separately within the White, Black, and Hispanic ethnic groups. For Whites, pressure to speak the heritage language was negatively associated with biculturalism, and pressure against acculturation was negatively associated with biculturalism. For Blacks, familial ethnic socialization and pressure against acculturation were associated with American-culture identity and with biculturalism; and pressure to speak the heritage language was negatively associated with biculturalism. For Hispanics, perceived ethnic discrimination was negatively associated with American-culture identity and biculturalism; and pressure to speak Spanish was negatively associated with all three aspects of cultural identity.

#### Cultural Identity Cluster Analyses

The final step was to conduct person-centered cluster analyses on the cultural identity indices (American culture identity, heritage culture identity, and

biculturalism), to test the hypothesis that four clusters of participants would emerge and would be similar to Berry's (1997) acculturation typology. Hierarchical cluster analyses were conducted using Ward's method, using squared Euclidean distance to identify the best-fitting cluster solution. The clusters emerging from analysis were examined for differences by age, gender, ethnicity, nativity, and age of immigration (where applicable).

A two-cluster solution emerged from analysis. Cluster 1 was characterized by relatively high scores on the American-culture identity indices and moderate scores on the heritage-culture identity indices; whereas Cluster 2 was characterized by relatively high scores on both American and heritage culture identity indices (see Table 4). To confirm the cluster solution, we conducted a discriminant function analysis predicting cluster membership from the cultural identity indices. In this analysis, 96% of cases were correctly classified.

Chi-square analyses indicated that the clusters did not differ significantly by gender,  $\chi^2(1, n = 323) = 0.01$ ,  $p = .91$ ,  $\phi = .01$ ; ethnicity,  $\chi^2(4, n = 324) = 1.98$ ,  $p = .74$ ,  $\phi = .08$ ; or age,  $F(1, 319) = 1.00$ ,  $p = .32$ ,

TABLE 4  
Cultural Identity Indices and Correlates by Cultural Identity Cluster

|                                     | Cluster      |      |               |      | F         | $\eta_p^2$ |
|-------------------------------------|--------------|------|---------------|------|-----------|------------|
|                                     | Assimilation |      | Biculturalism |      |           |            |
|                                     | M            | SD   | M             | SD   |           |            |
| American culture identity indices   |              |      |               |      |           |            |
| Multivariate test                   |              |      |               |      | 14.91***  | .19        |
| American culture orientation        | 58.80        | 7.59 | 60.77         | 7.95 | 5.15*     | .02        |
| Assimilation <sup>a</sup>           | 3.13         | 2.38 | 1.74          | 2.09 | 31.39***  | .09        |
| Independence                        | 41.97        | 5.95 | 45.63         | 5.10 | 34.08***  | .10        |
| Horizontal individualism            | 15.79        | 2.72 | 16.27         | 2.57 | 2.55      | .01        |
| Vertical individualism              | 12.46        | 3.16 | 12.46         | 3.12 | 0.41      | .00        |
| Heritage Culture Identity Indices   |              |      |               |      |           |            |
| Multivariate test                   |              |      |               |      | 64.01***  | .62        |
| Heritage culture orientation        | 51.23        | 9.46 | 69.47         | 7.44 | 353.23*** | .52        |
| Separation <sup>a</sup>             | 0.60         | 0.96 | 1.24          | 1.80 | 14.86***  | .05        |
| Interdependence <sup>a</sup>        | 37.92        | 5.17 | 41.71         | 6.21 | 34.06***  | .10        |
| Horizontal collectivism             | 14.30        | 2.15 | 16.08         | 1.93 | 59.41***  | .16        |
| Vertical collectivism               | 13.62        | 2.68 | 16.19         | 2.39 | 79.84***  | .20        |
| Ethnic identity exploration         | 13.66        | 3.68 | 16.73         | 4.04 | 50.85***  | .14        |
| Ethnic identity affirmation         | 24.65        | 5.08 | 30.23         | 4.47 | 106.27*** | .25        |
| Familism                            | 60.32        | 7.26 | 68.63         | 7.45 | 101.78*** | .24        |
| Biculturalism                       |              |      |               |      |           |            |
| Multivariate test                   |              |      |               |      | 12.02***  | .07        |
| Integration                         | 3.60         | 2.25 | 4.70          | 2.35 | 18.41***  | .05        |
| Marginalization <sup>a</sup>        | 0.62         | 1.17 | 0.26          | 0.62 | 12.75**   | .03        |
| Cultural Identity Correlates        |              |      |               |      |           |            |
| Multivariate test                   |              |      |               |      | 21.59***  | .29        |
| Familial ethnic socialization       | 36.89        | 9.17 | 44.83         | 9.77 | 55.91***  | .15        |
| Perceived ethnic discrimination     | 13.42        | 5.38 | 13.52         | 4.73 | 0.03      | .00        |
| Native language competency pressure | 14.74        | 5.41 | 10.77         | 4.96 | 45.64***  | .13        |
| Pressure to acculturate             | 15.07        | 5.24 | 15.95         | 6.00 | 1.96      | .01        |
| Pressure against acculturation      | 7.96         | 3.35 | 6.91          | 3.35 | 7.65**    | .02        |

Note.  $\eta_p^2$  refers to the partial eta-squared value (Pearce et al., 2004).

<sup>a</sup> The assumption of homogeneity of variance was not met. As a result, the Welch corrected *F* statistic is reported cf. (Luh & Guo, 1999).

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

partial  $\eta^2 < .01$ . The clusters did, however, differ significantly by participant nativity,  $\chi^2(1, n = 322) = 9.39, p < .005, \phi = .17$ . Immigrant participants comprised 19% of Cluster 1 but 34% of Cluster 2. The clusters did not differ significantly by mother's nativity,  $\chi^2(1, n = 323) = 0.65, p = .42, \phi = .05$ ; or father's nativity,  $\chi^2(1, n = 323) = 0.76, p = .38, \phi = .05$ . Among immigrant participants, those in Cluster 1 reported having immigrated at significantly earlier ages ( $M = 6.82, SD = 5.28$ ) than did those in Cluster 2 ( $M = 9.79, SD = 6.02$ ),  $F(1, 80) = 5.47, p < .03$ , partial  $\eta^2 = .06$ .

As shown in Table 4, heritage-culture identity indices differed more strongly by cultural identity cluster than did American-culture identity indices. Whereas all eight of the heritage culture identity indices differed by cluster at  $p < .001$ , only three of the five indices of American culture identity (American orientation, assimilation, and independence) differed significantly by cluster (two at  $p < .001$ ). Among American culture identity

indices, assimilation (partial  $\eta^2 = .09$ ) and independence (partial  $\eta^2 = .10$ ) differed most strongly across clusters, with assimilation higher in Cluster 1 and independence higher in Cluster 2. Heritage culture identity indices were all higher in Cluster 2 than in Cluster 1, with heritage culture orientation (partial  $\eta^2 = .52$ ), ethnic identity affirmation (partial  $\eta^2 = .25$ ), and vertical collectivism (partial  $\eta^2 = .20$ ) associated with the greatest differences between clusters. Integration (partial  $\eta^2 = .05$ ) and marginalization<sup>5</sup> (partial  $\eta^2 = .03$ ) also differed significantly by cluster, with integration higher in Cluster 2 and marginalization higher in cluster 1. As a result, the clusters were named Assimilation (Cluster 1) and Biculturalism (Cluster 2).

Among correlates of cultural identity, familial ethnic socialization was significantly higher in the Biculturalism

<sup>5</sup>Marginalization was included in this analysis because its inclusion as a dependent variable did not violate the degrees-of-freedom issue inherent in the AHIMSA acculturation measure.

cluster than in the Assimilation cluster (partial  $\eta^2 = .15$ ). Perceived discrimination did not differ significantly by cluster. Among the indices of acculturative stress, pressure to speak the heritage language (partial  $\eta^2 = .13$ ) and pressure against acculturation (partial  $\eta^2 = .02$ ) differed significantly between clusters. Both were higher in the Assimilation cluster.

## DISCUSSION

The present study was conducted to examine the structure of cultural identity and to examine familial ethnic socialization, perceptions of discrimination, and acculturative stress as correlates of cultural identity. Both variable-centered and person-centered analyses were used, given that consistency between these two sets of analyses can serve to strengthen or refine extant theory.

Across variables, three primary dimensions of cultural identity emerged in the present study—American-culture identity, heritage-culture identity, and biculturalism. This factor structure appeared to generalize across Whites, Blacks, and Hispanics. The independence of American and heritage culture identities is consistent with a bidimensional model of acculturation, where endorsing the receiving culture does not preclude also endorsing the heritage culture (Berry, 1997; Phinney et al., 2001). The inclusion of biculturalism as a third component of cultural identity is consistent with Benet-Martínez and Haritatos (2005), who have conceptualized biculturalism as a unique blending of heritage and receiving culture elements, and with Rudmin and Ahmadzadeh (2001), who have argued that biculturalism is “greater than the sum of its parts.” Although the present study was conducted in an ethnic enclave where biculturalism is common and encouraged among young people (Schwartz, Pantin, et al., 2006), cross-cultural theory and research has consistently identified biculturalism as the most adaptive acculturation strategy for young immigrants (Coatsworth, Maldonado-Molina, Pantin, & Szapocznik, 2005; Phinney et al., 2001).

It is worthy of note that significant relationships of biculturalism to familial ethnic socialization, acculturative stress, and perceived ethnic discrimination emerged when biculturalism was conceptualized as both the presence of “additive” acculturation (integration) and the absence of “subtractive” acculturation (marginalization; Berry & Kim, 1988). These relationships did not emerge when biculturalism was operationalized only as integration. It is possible that additive acculturation represents biculturalism where compatible cultural identities are combined (cf. Benet-Martínez Len, Lee, & Morns, 2002), whereas subtractive acculturation may be similar to biculturalism when opposing cultural identities are defined (cf. Rudmin, 2003). Although additive acculturation may be sufficient

to distinguish biculturalism as a separate dimension along with American-culture identity and heritage-culture identity, considering both additive and subtractive acculturation appears to bring out important relationships with cultural identity correlates.

### Relations of Cultural Identity to Familial Ethnic Socialization, Acculturative Stress, and Perceived Ethnic Discrimination

Consistent with prior research (Umaña-Taylor et al., 2006), familial ethnic socialization appears to serve as a “transmitter” of cultural identity (Hughes, 2003; Torres, 2004). Familial ethnic socialization was related to American culture identity only for Blacks, suggesting that when Caribbean or African American parents socialize their children toward the ethnic culture, the children may also gravitate toward American culture. African Americans are in a unique cultural position; they are minorities in the U.S. but do not have another country with which they or their families associate (Markus, Steele, & Steele, 2000). Although the majority of Blacks in the sample were Caribbean Islanders, second-generation Caribbean Islanders tend to acculturate to the African American cultural context (Kasinitz, Battle, & Miyares, 2001; Waters, 1999) and may therefore adopt viewpoints similar to those of African Americans.

Moreover, although the specific patterns of relationships between cultural identity and acculturative stress differed across ethnic groups, a common theme was that stressors related to American culture tended to be negatively related to American-culture identity, and stressors related to the heritage culture tended to be negatively related to heritage-culture identity. Consistent with Berry (2005), this pattern of findings suggests that acculturative stress interferes with cultural identity change, and that the interference tends to occur within the specific domain in which the stress occurs (i.e., heritage- or American-culture identity). Both types of pressures were negatively related to biculturalism. Resisting these expectations may serve as a coping response, given Rudmin’s (2003) contention that bicultural individuals are challenged with balancing incompatible cultural expectations.

The associations between perceived ethnic discrimination and cultural identity also differed across ethnic groups. Perceptions of discrimination were negatively related to American-culture identity for Whites and Hispanics but not for Blacks, and to biculturalism only for Hispanics. In Miami, which has been a Hispanic ethnic enclave for two generations (Stepick & Stepick, 2002), Hispanics may not be accustomed to experiencing discrimination and may resist American culture when they do experience it. The lack of association between perceived discrimination and cultural

identity among Blacks may be partially attributable to the “taken-for-granted” experiences of discrimination among African Americans (cf. Franklin & Boyd-Franklin, 2000). This null relationship may also be construed as supporting system-justification theory, in which individuals come to believe that the existing social structure is “just” and reflects how things ought to be (Jost, Banaji, & Nosek, 2004; Jost, Pelham, Sheldon, & Sullivan, 2003). It is also possible that members of disparaged groups may focus only on their ingroup without considering relationships with other ethnic groups or with the larger society (Oyserman, Kimmelmeier, Bryberg, Brosh, & Hart-Johnson, 2003).

### Clusters of Participants on Cultural Identity

The results of the person-centered cluster analyses suggest the presence of two distinct groups of participants in terms of cultural identity indices. The clusters were both fairly high on American-culture identity and differed primarily in terms of heritage culture identity. That both cultural identity clusters were high on American culture identity is consistent with prior research showing that, even in the most densely Hispanic areas of Miami (Coatsworth et al., 2005; Schwartz, Pantin et al., 2006) and in Mexican- and Asian-dominated areas of Los Angeles (Unger et al., 2002), young people tend to be bicultural and to strongly endorse American cultural practices. The effects of exposure to American cultural influences on young people may be pervasive regardless of the context in which they reside (Stilling, 1997). It is therefore not surprising that no marginalization or separation clusters emerged. The absence of a marginalization cluster is consistent with Rudmin’s (2003) argument that marginalization is theoretically implausible; and although separation may be a viable strategy for adults who immigrate to ethnic enclaves (Schwartz, Pantin, et al., 2006), it may not apply to young people who are inundated with American values and beliefs.

What appeared to differentiate the clusters most strongly was orientation toward the heritage culture, ethnic identity affirmation, vertical collectivism, and familism. This finding clearly illustrates that both value-based and behavior-based measures of cultural identity differentiated the two clusters. In terms of cultural identity correlates, familial ethnic socialization and pressure to speak the heritage language were most closely associated with retention versus loss of heritage-culture identity. Again, the role of familial ethnic socialization appears to be as a transmitter of heritage-culture ideals and practices. Individuals who do not identify with their heritage cultures may feel pressured to do so, although it cannot be determined from the present results whether these pressures preceded,

accompanied, or followed the loss or lack of retention of heritage-culture values and practices.

It is also interesting that independence, but not horizontal or vertical individualism, differed significantly between the cultural identity clusters. Individualism-collectivism refers to cultural *values* related to prioritizing the individual over the group or vice versa, whereas independence-interdependence refers to how one *relates* to others. Supporting this position, Le (2005) found that vertical individualism was positively related to “non-committal” relationship styles, whereas independence was negatively related to such styles. From the present results, it appears that bicultural individuals are more likely than assimilators to consider themselves separate from others, but not to prioritize themselves above the groups to which they belong. These findings suggest that measures of independence and of individualism should not be used interchangeably, as has been done in past research (e.g., Coon & Kimmelmeier, 2001).

### Convergence between Variable-Centered and Person-Centered Findings

The convergence between the variable-centered and person-centered findings focuses most closely on biculturalism. That biculturalism emerged both as a variable-centered factor and as a person-centered cluster speaks to the importance of biculturalism as a component of cultural identity. A number of other patterns can be observed from the combination of variable-centered and person-centered findings. First, the finding that bicultural individuals endorsed both independence and interdependence supports the contention that the two processes are not opposites (cf. Killen, 1997; Oyserman et al., 2002). Second, although biculturalism appears to represent a separate condition from either heritage or American culture identity, the person-centered results suggest individuals adopting a bicultural approach may selectively endorse both heritage- and American-cultural identity according to their perceptions of a given situation (Hong, Benet-Martínez, Chiu, & Morris, 2003). These results are consistent with the portrayal of biculturalism as an agentic and creative strategy that balances autonomy and relatedness (Kagitçibasi, 2005) and that balances differing cultural expectations (Tadmor & Tetlock, 2006). The variable-centered correlations between biculturalism and acculturative stress support Rudmin’s (2003) contention that bicultural individuals may be vulnerable to pressures from both the heritage and receiving cultures. The present variable-centered and person-centered findings also imply that the experience of biculturalism may vary as a function of whether the two cultural identities are regarded as oppositional or as compatible (Benet-Martínez et al., 2002).

## Limitations

The present results should be considered in light of some important limitations. First, the use of a university student sample may have resulted in an underrepresentation of low-income individuals and those with limited English proficiency. Community residents might feel less pressure to assimilate, especially in an ethnic enclave such as Miami. Second, other characteristics of the present sample may limit generalizability as well, including the relatively small numbers of Whites and Blacks, the extremely small number of Asians, and the underrepresentation of the two largest U.S. Hispanic subgroups (Mexican Americans and Puerto Ricans). Ethnic groups, and Hispanic subgroups, differ on many sociocultural variables, including history and length of stay in the U.S., socioeconomic status, visible-minority status, and political/economic power (Suárez-Orozco & Páez, 2002). It is therefore important to replicate the present results with non-Hispanic Whites and African Americans from more monocultural communities, with Asian Americans, and with Hispanics from national origins not well represented in the current sample. Third, although the present cross-sectional design allowed us to explore the structure of cultural identity, a longitudinal design would have permitted empirical examination of cultural identity change as underlying acculturation. Accordingly, it is important to follow up the present study with longitudinal investigations so that changes in cultural identity can be tracked over time. Fourth, although increasing cultural diversity and globalization underscore the importance of including native-born ethnic groups in studies of cultural identity (DeVos & Banaji, 2005; Tsai et al., 2002), we did not gather data on which heritage cultures were being rated by White American and African American participants. Although we asked participants where they and their parents were born, we have no ancestry data on participants from native-born families. Finally, the study would have benefited from the inclusion of a measure of American identity to accompany the measure of ethnic identity.

Despite these limitations, the present study has contributed to the literature on cultural identity by examining its structure, the configurations in which it may appear, and its relationships to three important correlates. Given the conceptualization of cultural identity as underlying acculturation, the structure and manifestations of cultural identity are important to examine and understand. The primary findings from the present study appear to be that (a) biculturalism represents a condition separate from heritage- and receiving-culture identity and (b) the acculturation process may take different forms for individuals who retain heritage-culture values and practices versus those who do not. It is hoped that the present findings inspire

further research on the structure of cultural identity and on the ways in which it changes as a result of acculturation.

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