Construct Validity of a Measure of Acculturative Stress in African Americans

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The properties of the main measure of acculturative stress have not been systematically examined. The authors conducted a study of the construct validity of the Social, Attitudinal, Familial, and Environmental Acculturative Stress Scale (A. M. Padilla, Y. Wagatsuma, & K. J. Lindholm, 1985) in a sample of 248 African American university students (156 of whom attended a historically Black college). After controlling for general life stress, the authors found that the relations of acculturative stress to depressive and anxious (but not suicidal) symptoms remained. Also, African American students at a historically Black college reported less acculturative stress than African American students at a large state university. These findings clarify the nature of a key construct and measure of acculturative stress.

Acculturative stress is defined as stress related to a move from one’s culture of origin toward another culture (Berry, 1998). Landrine and Klonoff (1996) described acculturation as the “extent to which ethnic–cultural minorities participate in the cultural traditions, values, beliefs, and practices of their own culture versus those of the dominant ‘White’ society” (p. 1). Difficulties and stressors arising as part of this adaptation process constitute the construct of acculturative stress (Anderson, 1991; Neff & Hoppe, 1993).

Interest in the role of acculturation and acculturative stress in mental health problems is growing rapidly. To date, we are aware of empirical studies examining acculturative stress and depressive–suicidal symptoms (Hovey, 1998, 2000a, 2000b; in Hispanic people), bulimic symptoms (Perez, Voelz, Pettit, & Joiner, 2002, in African American and Hispanic people), substance use (Neff & Hoppe, 1992, in African American and Hispanic people; Ortega, Rosenheck, Alegria, & Desai, 2000, in Hispanic people), and general distress (Neff & Hoppe, 1993, in African American and Hispanic people; Padilla, Wagatsuma, & Lindholm, 1985, in Japanese and Japanese American people) and general symptoms (Rogler, Cortes, & Malgady, 1991, in Hispanic people).

There have also been several conceptual treatments of this general issue in African Americans (e.g., Anderson, 1991; Berry, 1998; Landrine & Klonoff, 1996) and one empirical study on the relation of racial socialization and identity to acculturative stress among African Americans (Thompson, Anderson, & Bakeman, 2000). As Anderson (1991) persuasively argued, acculturative stress among African Americans is important to consider because in addition to and distinct from general life stress, African Americans may experience unique stressors, such as threats to racial identity and to culture-specific values and patterns of living. For people in general, salient stressors comprise risk factors for the symptoms of several mental disorders, and African American people experience symptoms of many mental disorders at similar rates as other people (e.g., Roberts, Roberts, & Chen, 1997). In fact, suicidal symptoms may be on the rise among African American people (U.S. Public Health Service, 1999). Anderson argued that although African Americans in general have adopted “American” culture, this assimilation has occurred to various degrees and with various levels of success at the individual level. Some have suggested that African Americans’ mental health may be linked to loss of community support systems and decline in church attendance, which in turn have been viewed as consequences of African American acculturation (Gibbs, 1997). Despite the potential importance of acculturative stress for African American people and the accelerating interest in acculturative stress in general, acculturative stress measures have not been thoroughly and systematically examined with regard to basic issues such as their general construct validity. Therefore, the purpose of the present study was to redress this gap in a sample of African American students.

The most commonly used measure of acculturative stress is the Social, Attitudinal, Familial, and Environmental Acculturative Stress Scale (SAFE; Padilla et al., 1985). The original version of the SAFE contained 60 items, but subsequent work has demonstrated adequate coverage of the content area with fewer items (e.g., Mena, Padilla, & Maldonado, 1987). Consistent with the general definition of acculturative stress as difficulties and stressors arising as part of the process of adapting to a new culture, SAFE items assess perceived discrimination, perceived barriers to adaptation, negative reactions of family members to one’s desire to...
adapt, feelings of isolation, difficulties in communication, and so forth.¹

Very basic questions remain regarding the construct validity of acculturative stress measurement. For example, anyone undergoing a challenging life situation might experience conflicts with friends and family, interpersonal losses, and difficulties at work and school—in other words, general life stress. Anderson (1991) argued that acculturative stress in African Americans goes beyond general life stress to include particular stressors that are relatively unique to the African American experience (perceived discrimination, negative reactions of family members to one’s desire to adapt, etc.). What is the evidence that the relation of acculturative stress to symptoms of psychopathology exists beyond the contribution of general life stress? What is the difference between acculturative stress and general life stress? These are important questions related to the discriminant validity of acculturative stress measures vis-à-vis measures of general life stress, but to our knowledge, no previous study has addressed this key point.

Similarly, what is the evidence that someone in an acculturatively challenging environment obtains higher scores on a measure of acculturative stress than someone from a less acculturatively challenging environment? Of course, such evidence is fundamental to the validity of the acculturative stress construct. Some studies have shown that recent immigrants are more acculturatively stressed than the children and grandchildren of immigrants (e.g., Mena et al., 1987; Padilla et al., 1985). It would be a reassuring complement to such studies to show that people of the same ethnicity, concurrently assessed, differ in acculturative stress as a function of exposure to different acculturative climates. In the present study, we directly evaluate this question by comparing African American students at a historically Black college (where acculturation pressures may not be especially high) with African American students at a large state university (where African Americans may be a relatively small minority and where acculturation pressures such as perceived discrimination and barriers may be salient; Thomas, 1997).

We take up these issues in the current study of African American college students (many of whom attended a historically Black college). We made the following predictions: (a) Acculturative stress would be significantly associated with depressive, suicidal, and anxious symptoms, as well as with (lower) social support; (b) these associations would remain, even after we controlled for general life stress; and (c) African American students attending a historically Black college would obtain significantly lower acculturative stress scores than African American students attending a large state university.

Method

Participants

Participants included 248 undergraduate and graduate African American university students (60% women, 40% men) who participated in this study to partially fulfill a requirement for their introductory psychology class or to gain some other academic credit and who fully completed all measures. Mean age for the total sample was 21.87 years (SD = 3.19 years). A portion of the students (n = 156) attended a historically Black college (Florida A&M University); all other participants attended a large state university (Florida State University). Sample characteristics were similar between the two university settings.

Procedure

Participants were informed that they would be administered a questionnaire packet that included questions about their behavior, views, and feelings with regard to life experiences and emotions. Participants were also given a consent form stating that consent for participation in the study was assumed on completion of the anonymous questionnaire packet. Participants completed questionnaires in groups of approximately 30 students in classrooms at their respective universities. All questionnaires were administered by an African American woman.

Measures

SAFE. Levels of acculturative stress were measured by the 24-item SAFE used in previous studies (Fuertes & Westbrook, 1996; Mena et al., 1987). The scale assesses acculturative stress in social, attitudinal, familial, and environmental contexts, including perceived discrimination. Participants were required to rate each item that applied to them on a scale ranging from 1 (not stressful) to 5 (extremely stressful). In this study, items that were “not applicable” were skipped. Skipped items were coded as 1 (all analyses were reconduted and were similar, with a total score computed such that the sum of nonskipped items was divided by the number of nonskipped items). Reasonable reliability characteristics for the total scale have been shown in a variety of populations, including Asian Americans and international students (α = .89; Mena et al., 1987), a heterogeneous group of Hispanic Americans (α = .89; Fuertes & Westbrook, 1996), Haitians and Haitian Americans (Chrispin, 1999), and African American college students (α = .87; Perez et al., 2002). A similar alpha for the total score was obtained in this sample (α = .89; alpha was very similar in the historically Black college vs. the state university sample, for this and for all measures). Table 1 shows descriptive data for the SAFE in the total sample, the historically Black college sample, and the state university sample.

Beck Depression Inventory (BDI). The level of depressive symptoms was assessed by the BDI (Beck, Rush, Shaw, & Emery 1979), a 21-item self-report inventory. Each item was rated on a scale ranging from 0 to 3. Thus, possible inventory scores ranged from 0 to 63. The BDI is not indicative of the full clinical syndrome of depression but rather is intended as an index of depressive symptomatology. Beck, Steer, and Garbin (1988) provide a review of the BDI’s properties, including its average internal consistency coefficient of .81 in nonpsychiatric populations, and its expected web of associations with various clinical indicators (e.g., consistently high associations with clinician-rated depressive symptoms). In the current study, alpha was .84.

Beck Anxiety Inventory (BAI). General symptoms of anxiety were assessed by the BAI (Beck, Epstein, Brown, & Steer, 1988), a 21-item self-report inventory. Beck et al. reported a coefficient alpha of .92 and 1-week test–retest of .75. They also found that BAI scores discriminated anxious from nonanxious diagnostic groups and that BAI scores correlated more highly with clinician-rated indexes of anxiety than of depression. Each item was rated on a scale ranging from 0 to 3; possible inventory scores ranged from 0 to 63. In the current study, alpha was .90.

Beck Suicide Scale (BSS). Suicidal ideation was measured by the BSS (Beck & Steer, 1993), a 21-item self-report inventory. Each item was rated on a scale ranging from 0 to 2. Items 1 through 19 contributed to a possible total score that ranged from 0 to 38. Items 20 and 21 referred to past suicide attempts and were optional. Beck, Steer, and Ranieri (1988) reported high internal consistency for the BSS and found that BSS scores were highly associated with clinician ratings of suicidality. In the current study, alpha was .91.

¹ Very little work has been done on other measures of acculturative stress. Sandhu and Asrabadi (1994) developed an alternative measure, but its content is very similar to that of the SAFE.
were statistically significant.

Note. Subsample differences regarding the acculturative stress total score are the majority in that setting (approximately 13% of undergraduates at Florida State University experience at least some acculturation pressures because, among several other reasons, they are a minority in that setting). We reasoned that African American students at a historically Black college may experience fewer such pressures. We reasoned that African American students at a large state university versus a historically Black college and 2 when social support, instead of general life stress, was partialed from the relations of acculturative stress to symptoms, all relations of acculturative stress to symptoms remained (including the relation of acculturative stress to suicidal symptoms).

### Table 1

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<thead>
<tr>
<th>Sample</th>
<th>M</th>
<th>SD</th>
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<tr>
<td>Total sample</td>
<td>46.35</td>
<td>13.10</td>
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<tr>
<td>Historically Black college subsample</td>
<td>44.63</td>
<td>12.71</td>
</tr>
<tr>
<td>State university subsample</td>
<td>49.26</td>
<td>13.31</td>
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#### Negative Life Events Questionnaire (NLEQ).

The NLEQ (Saxe & Abramson, 1987) was developed specifically for use with college students and includes several categories of negative life events to ensure broad coverage (i.e., 66 negative life stressors in the domains of school, work, family, friends, etc.). Items were rated on a scale ranging from 0 (never present) to 4 (always present) for how frequently they had occurred during the past 3 weeks and were summed to form a general negative life events score. In past work, the scale has been found to be reliable (e.g., Saxe & Abramson, 1987). Construct validity data are provided by several studies in which NLEQ scores related to symptoms in predicted ways and interacted with person-based risk factors to predict symptoms in expected ways (e.g., Alloy & Clements, 1992; Metalsky & Joiner, 1992; Needles & Abramson, 1990). The NLEQ was used in the present study to assess the discriminant validity of acculturative-related stress versus more general life stress.

#### Social Support Questionnaire (SSQ).

The original SSQ (Sarason, Levine, Basham, & Sarason, 1983) contains 27 items that ask participants to (a) list the people to whom they can turn and on whom they can rely in given sets of circumstances and (b) indicate their level of satisfaction with these social supports. For practical reasons (i.e., length of time to complete the questionnaire packet), the questionnaire used in the present study was an abbreviated form of the SSQ (Joiner, 1997, provided reliability and validity data for the abbreviated version). The instructions and scoring procedure were identical to those recommended by Sarason et al. (1983). For each item, respondents were instructed to list the initials of supportive people, and the number of people listed, including people listed more than once, was tallied. Scores on the SSQ measure were summed across items. Thus, a given individual’s score represented the total number of people whom the respondent listed for the six questions. It should be noted that the abbreviated SSQ performed much as has its parent questionnaire in previous research (Joiner, 1997). Sarason et al. reported alpha internal consistency coefficients in the .90s. In this study, alpha was .91.

#### Results

#### Relations of Acculturative Stress Total Scores to Depressive, Anxious, and Suicidal Symptoms and to General Life Stress and Social Support

Table 2 displays the intercorrelations of acculturative stress total scores to depressive, anxious, and suicidal symptoms; general life stress; and social support among African American students. Correlations involving the acculturative stress total score were in line with expectations and supportive of the construct validity of acculturative stress. Acculturative stress was significantly associated with higher symptom reports, lower social support, and more general life stress. The correlation of acculturative stress and general life stress was moderate ($r = .46, p < .01$), suggesting discriminant validity of acculturative stress vis-a-vis general life stress.

#### Discussion

Despite the accelerating interest in acculturative stress and mental health, relatively little is known about the discriminant validity...
Our findings regarding African American students attending a historically Black college versus a large state university also provide an important piece of construct validity data for acculturative stress. Very few researchers have examined the fundamental postulate that those facing acculturative pressures would score higher on acculturative stress than those facing fewer such pressures. Exceptions include studies showing that recent immigrants are more acculturatively stressed than the children and grandchildren of immigrants (e.g., Mena et al., 1987; Padilla et al., 1985). These studies are important but have the disadvantage of comparing samples that differ not only in acculturative experiences, but in many other ways as well (e.g., age, socioeconomic status, etc.). An advantage of our approach was to compare relatively similar people (i.e., young African American people attending college) experiencing different acculturation pressures. The supportive results complement those from studies on recent immigrants in affirming the construct validity of acculturative stress.

Because acculturative stress shows unique relations to depressive and anxious symptoms, assessment of acculturative stress in clinical settings may be indicated for ethnic minority patients. Clinicians' knowledge that symptoms occur in the context of acculturative stress may inform therapeutics. Indeed, many empirically supported treatments are geared toward negotiating life's obstacles—to take two examples from the depression literature, McCullough's (2000) cognitive behavior analysis system of psychotherapy is designed to maximize desirable outcomes despite environmental obstacles; interpersonal psychotherapy for depression (Klerman, Weissman, Rounsaville, & Chevron, 1984) is well-suited to address role transitions and conflicts with close others.

In closing, we reiterate some particular strengths and limitations of our study. First, our sample possessed some advantageous features (e.g., relatively large sample of African American students, some at a historically Black college, others at a state university). On the other hand, our findings should be interpreted with the caution in mind that results are limited to African American college students. We look forward to the future assessment of the generalizability of our results. Second, it should be noted that the time frame of the general life stress measure (past 3 weeks) differed from that of the SAFE acculturative stress measure. How might this have affected analyses examining whether acculturative stress related to symptoms beyond the effects of general stress? Interestingly, the three symptom measures (BDI, BAI, and BSS) possessed a similar time frame as the general life stress measure. The measures of symptoms and of general life stress thus shared a measurement factor (time frame) that the acculturative stress measure did not possess. The fact that, as a rule, acculturative stress nonetheless did relate to symptoms beyond general stress, even despite the handicap of the different time frame, can thus be seen as strong support for the specific relation of acculturative stress to symptoms.

Third, our findings on the relation of acculturative stress to symptoms were cross-sectional; therefore, we cannot address whether acculturative stress temporally preceded increased symptoms—a fruitful avenue for future research. In general, then, within the study's constraints, we have provided new and important findings on the general construct validity of acculturative stress, which is important in the context of increasing interest in the role of acculturative stress in mental health problems.
References


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