Culturally Related Anxiety and Ethnic Identity in Navajo College Students

DANIEL W. McNEIL  
MARVIN KEE  
MICHAEL J. ZVOLENSKY  
West Virginia University

The Cultural Involvement and Detachment Anxiety Questionnaire (D. W. McNeil, C. A. Porter, M. J. Zvolensky, & J. M. Chaney, 1998) and the Multigroup Ethnic Identity Measure (J. S. Phinney, 1992) were administered to 160 Navajo college students to explore the relation between ethnic identity and culturally related anxiety, compare level of ethnic identity in reference to standardized samples, and test for gender differences. Correlations indicated a notable lack of relation between ethnic identity and cultural anxiety. This particular Navajo sample evidenced significantly higher levels of ethnic identity in comparison to students of Caucasian, Asian, Hispanic, or mixed ethnicity. There were no significant gender differences in culturally related anxiety. Results are discussed in relation to culturally related anxiety and ethnic identity in the Navajo, with implications for better understanding the nature of cultural anxiety in other American Indians and Alaska Natives.

- anxiety  
- ethnic identity  
- American Indians  
- culture

Daniel W. McNeil, Marvin Kee, and Michael J. Zvolensky, Department of Psychology, West Virginia University.

Marvin Kee is now with the United States Army, Fort Bliss, El Paso, Texas.

Some data from this investigation were presented at the 105th Annual Convention of the American Psychological Association, Chicago, August 1997. We thank Bernice Causas, director of Navajo Communication Studies at Diné College, for helpful background information for the preparation of this article. In addition, appreciation is expressed to Thomas Bennett, Dean of Instruction, Diné College, Shiprock Campus, for his assistance and support. We also thank many others—faculty, students, and staff—at Diné College who were helpful with this project.

Correspondence concerning this article should be addressed to Daniel W. McNeil, P.O. Box 6040, Department of Psychology, West Virginia University, Morgantown, West Virginia 26506-6040. Electronic mail may be sent to dmcmuel@wvu.edu.
At present, there is a relative absence of systematic scientific efforts to explore problems of anxiety and fear in American Indians and Alaska Natives. In fact, a recent national convention on anxiety disorders in Native Americans (National Center for American Indian and Alaska Native Mental Health Research, 1994) highlighted the fact that there is very little empirical information regarding the nature, assessment, and impact of anxiety in Native peoples. This paucity of information is unfortunate given the well-established finding that anxiety-related problems often seriously negatively affect quality of life and are associated with increased health care costs (cf. Rachman, 1985).

Given that Native Americans have been subjected to more than two centuries of ethnic discrimination and cultural abuses such as forced relocation and acculturation, systematic genocide, and societal prejudice (Paniagua, 1994), there is good reason to suspect that unique manifestations of culturally related anxiety may be particularly relevant to Native peoples. Indeed, an intergenerational posttraumatic stress disorder related to decades of cultural abuses has been reported to be a problem for some American Indians (Choney, Berryhill-Paapke, & Robbins, 1995). For example, Long (1983) reported that Crow Indian children who have experienced traumatic losses of family and friends evidence life-disrupting anxiety-related responding, including such behaviors as avoidance of social interactions and decreased activity. Additionally, levels of general (trait) anxiety may be higher in American Indian college students than in their majority-culture peers (McDonald, Jackson, & McDonald, 1991). Acculturation experiences also may be related to culturally related manifestations of anxiety and fear as well as their pathological manifestations in anxiety disorders. As an example, the levels of acculturation and deculturation for American Indians and Alaska Natives may mediate the degree of anxiety that can occur as a result of interacting with the majority culture (Renfrey, 1992).

One psychological construct that may relate to acculturation experiences is ethnic identity (Phinney, 1996). Ethnic identity is defined as part of an individual's self-concept that derives from knowledge of social group membership and the emotional response to that membership (Tajfel, 1981). At present, it is unclear whether ethnic identity is associated with culturally related anxiety in American Indians. It is possible, for example, that a strong sense of ethnic identity may be related to increased access to tribal social support systems, thereby decreasing the likelihood of problems with anxiety (cf. Barlow, 1988). On the other hand, a strong sense of ethnic identity could be related to culturally related anxiety in American Indians, such that individuals may experience distress (e.g., anxiety, fear, depression) and life disturbance about maintaining a strong tribal identity and interacting outside of their primary (tribal) identification group (McNeil, Porter, Chaney, & Steinberg, 1995). Culturally related anxiety may be particularly salient for American Indians, given the potentially overwhelming influence of the majority culture (Sue & Sue, 1990) and history of cultural abuses within the United States (Trimble, 1990), as well as the importance of tribal identity to psychological well-being in tribal groups (Red Horse, 1982). In particular, American Indians and Alaska Natives may fear losing contact with their tribal group if they become "too acculturated," worry about integrating into the majority (Caucasian) culture, and experience anxiety about the demands of cultural integration in itself (McNeil et al., 1995; Oetting & Beauvais, 1991). Some American Indians, for example, may fear that they will not be accepted in professional settings, which contributes to anxiety about interacting with the majority culture in both vocational and avocational arenas.

There are approximately 525 American Indian and Alaska Native tribal groups (La-Fromboise, 1994). Naturally, this variation makes the examination of culturally related issues in American Indians complex. Indeed, life factors such as geographic loca-
tion, relation with the majority culture, and cultural practices underscore the uniqueness of tribal-specific learning histories. It is necessary to examine culturally related anxiety both in a pan-Indian approach as well as in a tribal-specific fashion to best elucidate its nature and impact (cf. Matthews, 1983).

The Navajo, the primary focus of the present investigation, are the largest American Indian tribal group in the United States. The Navajo reservation is located in the southwestern United States and, at 17 million acres, is the largest in the country; it extends over parts of three states (Iverson & Porter, 1990). The Navajo follow a clan system in which the extended family is the principal family unit (Iverson & Porter, 1990). Within the clan system, females typically take primary responsibility for instructing and maintaining cultural practices (Landar, 1962; Terrell, 1970; e.g., addressing one another by kin terms rather than names), although all people within the clan are involved with cultural practices (Iverson & Porter, 1990). Because of the matrilineal family system, Navajo females are particularly likely to be aware of both traditional tribal practices and the sociocultural demands produced by the majority (Caucasian) culture (Iverson & Porter, 1990; see Kluckhohn & Leighton, 1946, and Shepardson & Hammond, 1970, for a thorough discussion of Navajo cultural practices). As such, similar to Caucasian populations, in which males generally record lesser levels of anxiety on standardized self-report measures and females indicate greater anxiety (cf. Fritz, McNeil, & Kogan, 1998), Navajo females may be prone to experience greater culturally related anxiety relative to males, because females take primary responsibility for maintaining cultural practices.

It also is possible that culturally related anxiety may arise from other arenas (e.g., McDonald et al., 1991; McNeil et al., 1997). For instance, the Navajo have made a concerted effort to educate their people in both traditional practices as well as in areas of “Western” knowledge (see Willetto, 1997), including subjects—such as mathematics—that are often particularly important for successful adaptation (e.g., economic stability) in the majority culture (McNeil, Rabalis, Porter, Masia, & Fox, 1996). Therefore, Navajo people may feel torn between traditional cultural standards and practices imposed by the majority (Caucasian) culture (cf. Iverson & Porter, 1990). Griffin-Pierce (1997) suggested that Navajo also experience anxiety and other distress when dislocated from the sacred geographic area that includes the Navajo reservation, which is specifically bounded by the holy mountains, because they believe that they were created in and intended to live within this specific region (Roessel, 1973). Taken together, this information suggests that some Navajo people, like other American Indians and Alaska Natives, may experience unique forms of anxiety that are specifically related to cultural factors.

In a preliminary effort to gather empirical information regarding acculturation anxiety and ethnic identity in American Indians, particularly in the Navajo, we administered the Cultural Involvement and Detachment Anxiety Questionnaire (CIDAQ; McNeil, Porter, Zvolensky, & Chaney, 1998) and the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992) to 160 Navajo college students attending their tribal college. Specifically, we sought to (a) clarify the nature of culturally related anxiety by examining its relation to ethnic identity; (b) examine whether these particular Navajo college students would report greater levels of ethnic identity in comparison to other college student samples of people with different ethnic backgrounds; and (c) given that Navajo females take primary responsibility for cultural practices, determine whether female Navajo college students would report greater and males lesser culturally related anxiety.

Method

Participants
Participants were 160 undergraduate students (116 women and 44 men; M = 25.7
years of age, \(SD = 8.0\) recruited from classes at the Shiprock, New Mexico, campus of Diné College (formerly Navajo Community College; see Willeto, 1997). All participants were Navajo Indian. They completed a written consent form that explained the study’s intent prior to completing the questionnaires and were debriefed at the end. In total, 171 student volunteers originally completed the self-report indexes. Eleven students from the original sample were excluded from data analyses as a result of either incomplete or inaccurate questionnaire data.

**Measures**

**CIDAQ.** The CIDAQ is a 20-item self-report instrument that assesses anxiety about involvement in or detachment from American Indian and majority cultural groups. Items are rated on 9-point Likert-type (0–8) scales, with total scores ranging from 0 to 160. Higher scores indicate greater levels of culturally related anxiety.

On the basis of a principal-components factor analysis with varimax rotation of the original version of the CIDAQ in a sample of American Indians, there appear to be three factors, with the content areas of anxiety concerning Social Involvement with Native Americans and Cultural Knowledge, Economics, and Social Involvement with the Majority Culture (McNeil, Porter, Zvolensky, & Chaney, 1998). In total, 84% of the variance was accounted for by this three-factor solution; only items with the highest item-total correlations were retained in the final 20-item version of the questionnaire. There is evidence to support the construct validity of the CIDAQ, with low positive correlations being noted between the CIDAQ and standard measures of fear and anxiety (i.e., Fear Survey Schedule–III, Wolpe & Lang, 1977; trait form of the State–Trait Anxiety Inventory, Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983). These results indicate that anxiety about cultural involvement and detachment as measured by the CIDAQ has some independence from other fears and anxieties, as typically conceptualized (McNeil et al., 1995). In terms of reliability, internal consistency for the total scale and subscales are high, but no test–retest data are yet available.

**MEIM.** We used the 20-item MEIM to judge degree of ethnic identity. The instrument provides subscale scores concerning positive ethnic attitudes and sense of belonging (5 items), ethnic identity achievement (7 items), and ethnic behavioral practices (2 items), as well as a total Ethnic Identity factor score. There are 6 additional items that comprise an Other-Group Orientation factor (Phinney, 1992). Items are rated on 4-point Likert-type scales that range from **strongly agree** to **strongly disagree**; scores range from 1 (low ethnic identity) to 4 (high ethnic identity). Although there are additional MEIM items that assess self-identification and ethnicity of the respondents’ parents, these items are not computed as part of the total or subscale scores. Cronbach’s alphas for the MEIM subscales range from .74 to .86 (Phinney, 1992), with overall (total) reliability for the scale being .90. On the basis of a principal-components factor analysis, the scale has distinct factors for both Ethnic Identity \((n = 14\) items) and Other-Group Orientation \((n = 6\) items; Phinney, 1992). Given that the MEIM has proven to be a sound measure of ethnic identity in other groups (i.e., African American, Asian American, Hispanic, and Caucasian), we used the instrument to assess ethnic identity in this group of Navajo. In this way, comparison of ethnic identity levels across different samples of ethnic groups was possible.

Because the MEIM has not been studied in regard to American Indians and Alaska Natives, we conducted reliability and factor analyses of it using our sample of 116 Navajo college students. Similar to Phinney (1992), internal consistency was adequate, with Cronbach’s alphas ranging from .54 to .76 across subscales; the overall (total) reliability for the scale was .92. Additionally, following Phinney (1992), we conducted an unrotated principal-axis factor analysis with squared multiple correlations, specifying two factors.
The results showed that all items loaded significantly on either the factors of Ethnic Identity or Other-Group Orientation, consistent with Phinney (1992), with the exception of Item 17, which loaded on the former factor instead of the latter. These findings generally support the presumed two-factor structure of the scale (Phinney, 1992). Thus, as recommended by Phinney (1992), we used the 14-item scale comprising positive ethnic attitudes and sense of belonging, ethnic identity achievement, and ethnic behavioral practices to assess ethnic identity. Nonetheless, it is necessary for future research to further explore the psychometric properties of the MEIM in different samples of American Indians and Alaska Natives.

Procedure

Participants completed a written consent form and the questionnaires in classrooms at the Diné College campus in Shiprock, New Mexico. The second author, who is a full-blood Navajo and a former student of Diné College, administered the questionnaires and was available throughout the testing time to answer participants’ questions. After they had completed the questionnaires, all participants received a debriefing that explained the study’s intent.

Results

Relation Between Ethnic Identity and Culturally Related Anxiety

We calculated zero-order correlations between each subscale and the total score of the MEIM and the CIDAQ to examine the relation between cultural anxiety and ethnic identity. On the basis of the correlations, all of which were nonsignificant (range: -.06-.12), the MEIM and CIDAQ were not significantly related to one another.

Ethnic Group Comparisons for the MEIM

The MEIM comparisons were based on Phinney’s (1992) samples (n = 136), which consisted of 47 male and 89 female college students from an ethnically diverse large urban university. The total MEIM score for the Navajo sample was 3.28 (SD = 0.45), which was significantly higher than the Asian, African American, Hispanic, Caucasian, and mixed ethnic group respondents’ combined mean score of 3.04 (SD = 0.59), t(159) = 6.77, p < .01. To elucidate ethnic group variability, we then compared identity scores by each sample, as shown in Table 1; we adjusted alpha levels using the Bonferroni procedure to control for familywise error rate for these five MEIM comparisons. This Navajo sample reported significantly greater ethnic identity than college students who were Asian, t(159) = 7.33, p < .01; Hispanic, t(159) = 5.94, p < .01; Caucasian, t(159) = 11.70, p < .01; or from a mixed ethnic background, t(159) = 18.42, p < .01. It is interesting that Phinney’s (1992) African American college student group recorded significantly greater ethnic identity scores than this Navajo sample, t(159) = 4.87, p < .01.

We then conducted analyses for each of the subscale scores of the MEIM between the Navajo sample and the same groups of other respondents, averaged across ethnic group. We used the Bonferroni procedure to adjust reported alpha levels to control for familywise error rate for these three MEIM comparisons. The Navajo sample reported significantly greater levels of affirmation/

TABLE 1 MEIM Total Ethnic Identity Score by Ethnic Group

<table>
<thead>
<tr>
<th>Ethnic group</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navajo (American Indian)</td>
<td>160</td>
<td>3.2</td>
<td>0.4</td>
</tr>
<tr>
<td>African American*</td>
<td>11</td>
<td>3.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Asian American*</td>
<td>35</td>
<td>3.0</td>
<td>0.4</td>
</tr>
<tr>
<td>Caucasian*</td>
<td>23</td>
<td>2.8</td>
<td>0.6</td>
</tr>
<tr>
<td>Hispanic American*</td>
<td>58</td>
<td>3.0</td>
<td>0.6</td>
</tr>
<tr>
<td>Mixed*</td>
<td>8</td>
<td>2.6</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Note. MEIM = Multigroup Ethnic Identity Measure (Phinney, 1992).
*Sample is from Phinney’s (1992) investigation.
belonging, $t(159) = 4.85, p < .01$; ethnic identity achievement, $t(159) = 6.78, p < .01$; and ethnic behaviors, $t(159) = 5.44, p < .01$.

Examination of Gender Differences for the MEIM and CIDAQ

We evaluated ethnic identity and culturally related anxiety by gender within the Navajo sample. In contrast to the original hypothesis, there were no significant gender differences for either the total or subscale MEIM scores (all $t < 1.0$; all $p > .10$). Additionally, no significant differences for CIDAQ scores between men and women in the Navajo sample were observed for the total or subscale scores (all $t < 0.8$; all $p > .10$).

Discussion

In the present investigation we examined the nature of ethnic identity and culturally related anxiety in college students from the Navajo’s Dine College. The findings suggest a lack of relation between ethnic identity and culturally related anxiety. As expected, these Navajo participants, from a tribal college, reported levels of ethnic identity that were significantly higher than normative samples of Asian Americans, Caucasians, Hispanics, or individuals of mixed ethnic descent. Although in Caucasian samples, females generally report more fear and anxiety and males less in many areas (Fritz et al., 1998), there were no gender differences for culturally related anxiety in this sample of Navajo.

There was no evidence of a relation between culturally related anxiety and ethnic identity in this study, indicating that culturally related anxiety and ethnic identity may be psychological constructs that are independent of one another. This finding, in conjunction with previous findings that suggest that the CIDAQ is not a measure of general fearfulness or trait anxiety (McNeil et al., 1995, 1998), further validate the CIDAQ as an instrument that measures a distinct form of culturally related anxiety. In a similar way, the lack of relation between ethnic identity and cultural anxiety underscores that both constructs need to be independently examined to elucidate how these characteristics relate to acculturation experiences in American Indians and Alaska Natives as well other ethnic minority groups.

These Navajo participants reported significantly higher levels of total ethnic identity compared to total scores for people with either a Caucasian or certain minority (i.e., Asian, Hispanic, or mixed) ethnic backgrounds. Navajo participants, for example, had significantly higher scores for all three subscales of the MEIM in comparison to other minority groups, suggesting that these Navajo college students maintain high levels of ethnic identity. It is interesting that the African American sample was the only group that reported levels of ethnic identity that were higher than those of the Navajo.

The differential levels of ethnic identity observed among groups may be affected by environmental factors that influence whether people have the opportunity to engage in ethnic-related behaviors. In particular, social and life factors such as educational setting and geographic location (i.e., rural reservation vs. urban setting) may increase or decrease the importance placed on ethnic-related behaviors and possibly the level of ethnic identity experienced. In this study, for example, the Navajo students, who attended one of the campuses of their own tribal college on the Navajo reservation, may have been more likely to have experiences with ethnic-related cultural practices compared to some of the participants from the ethnically diverse, large university (i.e., the University of California, Los Angeles) in Phinney’s (1992) investigation. Students who choose to attend a college that is specifically oriented to their own ethnic (or tribal) group seem very likely to have high levels of ethnic identity, although many other factors (e.g., economics) are likely to affect such decisions as well. Given these findings, future research with the MEIM
might focus on exploring antecedents of varying levels of ethnic identity, based on subgroup membership and environmental factors (e.g., urban vs. rural residence, reservation vs. nonreservation residence).

Although in Caucasian populations males typically record lesser levels of anxiety on most standardized self-report indexes and females report greater anxiety (cf. Fritz et al., 1998), there were no gender differences in culturally related anxiety in this group of Navajo. The lack of gender differences for culturally related anxiety underscores that certain types of anxiety may occur at different levels and in varying proportions across disparate populations (Good & Kleinman, 1985). Self-reported culturally related anxiety, like many social fears, may be more equivalent between genders compared to fears of other environmental stimuli, such as small animals (Agras, Sylvester, & Oliveau, 1969). In the case of the Navajo, it may be that cultural abuses (Paniagua, 1994), which have been associated with anxiety and worry about such concerns as forced acculturation (Griffin-Pierce, 1997), affect the Navajo tribe generally and pervasively rather than primarily in one gender. In the future, researchers could examine whether similar culturally related anxiety patterns are evident in male and female Navajo from different age ranges (e.g., adolescents, young adult, adult, and elders). In this way researchers could begin to understand whether tribal-specific historical factors affect the relative contributions of culturally related manifestations of anxiety. In all cases, however, it is important to note that because heightened anxiety levels on standardized self-report indexes may indicate an increased risk for clinical anxiety (e.g., Reiss, Peterson, Gursky, & McNally, 1986), it is necessary for future research to examine how culturally related anxiety relates to overall psychological health. For instance, researchers could examine whether culturally related anxiety is more pronounced in Navajo who interact with the majority culture directly (i.e., attending predominantly Caucasian universities) or indirectly (i.e., attending predominantly tribal universities), compared to counterparts who do not have such experiences (i.e., cohorts not attending college and living solely on the reservation). In a similar way, it is necessary to further explore the nature of culturally related anxiety in American Indians and Alaska Natives by comparing anxiety levels in different groups with other self-report and interview-based methodologies.

Given the recent recognition that historical abuses against American Indians and Alaska Natives may lead to intergenerational posttraumatic stress disorder (Choney et al., 1995), it is important for future research also to explore whether culturally related anxiety and ethnic identity relate to this manifestation of pathological anxiety. For instance, similar to other measures that assess anxious responding (e.g., anxiety sensitivity; Reiss et al., 1986), elevated levels of culturally related anxiety may contribute to an increased risk for certain anxiety disorders. Thus, it may prove useful for health professionals in such settings as tribal universities and in such organizations as the Indian Health Service to assess and treat clinically significant levels of culturally related anxiety. Prevention activities would also be of great importance to help promote good quality of life for American Indians and Alaska Natives.

This investigation examined the nature of ethnic identity and culturally related anxiety in a sample of Navajo college students. This sample of Navajo students, from their tribal college, reported greater levels of ethnic identity compared to some normative minority group samples from Phinney's (1992) study. Furthermore, both ethnic identity and cultural anxiety appear to be experienced to the same degree across genders in Navajo students. Results indicate that ethnic identity and culturally related anxiety may be independent psychological constructs. Although intertribal variability precludes generalizing these findings directly to other American Indian and Alaska Native populations, the findings from this investi-
CULTURALLY RELATED ANXIETY

gation further support the contention that culturally related anxiety is distinct and not identical to ethnic identity.

References


