

# **Eating Attitudes of Native American and African American Women: Differences by Race and Acculturation<sup>1</sup>**

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Thirty-four Native American and twenty-eight African American women responded to eating disorders and acculturation measures. African Americans appeared to have greater concern about their body weight and shape than Native Americans. Among all, those who were more acculturated to the U.S. white culture reported more concerns than those who were less acculturated. Also, normal weight women tended to have higher anorexia scores than overweight women as well as a diagnosed anorexic group. Open-ended questions elicited feelings about U.S. symbols of beauty, one's physical self, and usage of standard English. The conceptualization of acculturation to white society and acculturative stress is used to understand the study.

## **Introduction**

The white dominant culture of the United States (U.S.) has led the way in decreeing that being very thin is a necessary component to being considered an attractive woman.<sup>2</sup> While some cultures have traditionally found plumpness and even obesity in women to be attractive,<sup>3</sup> the emergence of thinness as a symbol of beauty for U.S. white women may be affecting non-white minorities in the United States as well.<sup>4</sup>

The Western cultural phenomenon of judging thinner women more attractive has been accompanied by an increase in the incidence of anorexia nervosa and bulimia.<sup>5</sup> At first, these eating disorders were seen only in young white middle and upper-middle class U.S. women.<sup>6</sup>

However, Gray, Ford and Kelly<sup>7</sup> and White, Hudson and Campbell<sup>8</sup> implied that African American women who tended to endorse strongly the U.S. dominant white culture were at risk of developing anorexia nervosa and bulimia. Some other authors have been even more emphatic about this assumption regarding African Americans.<sup>9</sup> Garb, Garb and Stunkard<sup>10</sup> and Rosen, Shafer, Dummer, Cross, Deuman and Malmberg<sup>11</sup> found that Native Americans too were susceptible to developing anorexia nervosa and bulimia.

Silber<sup>12</sup> noted that adolescent Hispanic girls who learned English more quickly than their parents and took on the role of language brokers for their mothers as well as a parental function were found to have a tendency for anorexia nervosa. Leon and Finn<sup>13</sup> stated that as Hispanic women become more attuned to North American preferences about physical beauty and more vulnerable to subsequent problems of low self-esteem, distorted body image, and feelings of loss of control, they become more vulnerable to anorexia nervosa and bulimia. Such discussions led to this investigation on the effects of high and low levels of acculturation on the eating attitudes of Native American and African American women.

### Constructs of Acculturation

Acculturation has numerous theoretical underpinnings. Currently in psychology, Sodowsky and her colleagues<sup>14</sup> understand acculturation as a U.S. immigrant group's stress reduction process of adaptation, as it attempts to reduce the majority-minority group conflict over cultural value and power differences. Use of the concept of acculturation appears as early as 1880. Acculturation has traditionally been used by anthropologists and sociologists as a means to describe a process that occurs at a group level as opposed to at an individual level. An example of this is provided by Redfield, Linton and Herskovits' anthropological definition in 1936.

Acculturation comprehends those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original cultural patterns of either or both groups. . . . under this definition acculturation is to be distinguished from culture change, which is at times a phase of acculturation.<sup>15</sup>

Narrowing this wide, sweeping perspective, the Social Science Research Council (SSRC) in 1954 defined acculturation as

. . . . culture change that is initiated by the conjunction of two or more autonomous cultural systems.

Acculturative change may be the consequence of direct cultural transmission; it may be derived from noncultural causes, such as ecological or demographic modifications induced by an impinging culture. . . . Its dynamics can be seen as the selective adaptation of value systems, the processes of integration and differentiation. . . .<sup>16</sup>

Although SSRC referred to "internal adjustments following upon the acceptance of alien traits" and "the generation of developmental sequences and the operation of role determinants,"<sup>17</sup> its definition continued to be group-centered, with the individual seen as a structural part in systemic change.

It was Berry<sup>18</sup> who said that just as cultural and extracultural systems influence the individual, the individual influences these systems too. Berry began to look at psychological acculturation of the individual whose cultural group is experiencing acculturation. He pointed to the individual's acculturation responses in six psychological areas: language usage, cognitive style, personality, cultural identity, relationship attitudes towards the dominant group, and acculturative stress. These factors, as well as many others that continue to be identified,<sup>19</sup> all interact to create a multidimensional profile related to acculturation. Cuellar, Harris and Jasso have argued, "One cannot assume that a minority is highly acculturated simply because he or she is fluent in English".<sup>20</sup>

### Acculturative Stress

In psychology, as proposed by Berry, one way to understand the individual experience of acculturation is to measure a person's acculturative stress. While the first five psychological responses are "shifts" or behaviors that are variations of precontact (that is, prior to meeting the dominant group) behaviors, acculturative stress stems from the very process of acculturation and is "mildly pathological and disruptive to the individual and the group."<sup>21</sup> The stress elicited is a coping response to drastically new life events and cues the acculturating individual to possible dangers or opportunities. While a certain amount of stress may be necessary or helpful in alerting the individual to respond to new situations, too much stress can threaten healthy adaptation. Thus, Berry, Kim, Minde and Mok state acculturative stress could be a "reduction in health status (including psychological, somatic and social aspects) of individuals who are undergoing acculturation, and for which there is evidence that these health phenomena are related systematically to acculturation phenomena."<sup>22</sup> For instance, studies have related frequent, high maximum alcohol consumption of Mexican American men to level of acculturation and acculturative stress.<sup>23</sup> One study,<sup>24</sup> using a statistical

model, showed that for an Asian immigrant sample, level of acculturation, extent of ethnic friendships, and age were significantly related to acculturative stress, while age at the time of immigration and years of residence in the U.S. were significantly related to acculturation.

However, individuals undergoing acculturation do not necessarily experience mental health problems. The level of acculturative stress can vary considerably depending on a number of individual and group characteristics. Berry et al's<sup>25</sup> understanding of the probabilistic impact of mediating variables upon acculturation and stress was used for conceptualizing the present study. According to Berry, the first mediating variable includes the nature of the dominant society which includes factors such as its pluralistic or assimilationist ideology. Acculturative stress is less predominant in multicultural societies than in monocultural societies. Multicultural societies tend to accept diversity and encourage support structures for diverse groups. Monocultural societies, such as the predominantly white society of a midwestern city which was the setting of the present study, are more likely to expect diverse groups to assimilate the dominant group's standards.

The second mediating variable, according to Berry, refers to the nature of the acculturating group. Individuals who voluntarily participate in the acculturation process, such as voluntary immigrants, and who are more permanently established in their communities, such as ethnic groups, experience less stress than those whose contact with the dominant group is involuntary historically (Native Americans and African Americans, the subjects of this study), who are refugees, or sojourners making temporary contact.

The third mediating variable is the mode of acculturation adaptation chosen: assimilation, integration, rejection, or deculturation. Berry<sup>26</sup> found that among nine groups of "Amerindians" in northern Canada, those communities with the highest stress levels were those a) with the least cultural similarity to the dominant group, b) who had some contact, and c) who preferred the rejection mode of adaptation. Conversely, those minorities in Canada with the least amount of stress had more initial cultural similarity to the dominant group, had experienced more contact, and preferred the integration mode of adaptation. For these minorities acculturation was a choice and not an imposition.<sup>27</sup>

In the present study, we conceptualized variations of the above combination. We thought that Native American and African American women, while having low cultural similarity with a midwestern dominant group of German and North European origins, would have frequent contact with the monocultural dominant group through common education, work, and neighborhood settings. This unavoidable and perhaps enforced frequent contact would influence higher acculturation in some subjects and less in others. We wished to find out who between the two groups would experience more emotional difficulties. While

findings have shown that high acculturation for immigrants has a converse relationship with adjustment difficulties,<sup>28</sup> we were not convinced that higher acculturation would always imply less difficulty in all mental health areas, especially for minorities who are native to the U.S. Sadowsky et al.<sup>29</sup> showed supportive evidence for this argument in their review of the literature on the acculturation of Hispanics and Asians.

The study of acculturative stress is relatively new, with recent investigations into the acculturative stress of US-born and immigrant Hispanics<sup>30</sup> and Asians.<sup>31</sup> Some other authors,<sup>32</sup> in addition to referring to the effects of values-conflicts and racism, have recently tried to identify mainstream disorders in Hispanics and Native Americans, such as substance abuse and dependence, eating disorders, post traumatic stress disorder, sense of hopelessness, loss of identity, inability to express strong feelings, and truancy. Although they have used a framework of acculturation, these authors have not shown a systematic relationship between levels of acculturation or Berry's modes of acculturation adaptation with any of the mental health disorders identified by them. Also these articles tended not to consider gender differences in psychological difficulties. These articles are thought-pieces and applied in nature and, while very useful clinically and for hypothesis-generation, they are not empirical.

We hoped that the present study would make a distinct contribution to the mental health literature on U.S. minorities because we were empirically investigating whether differences in the acculturation of Native American and African American women would be related to disordered eating attitudes that have been shown to be prevalent among white middle class girls and women. The study's objectives to investigate a) the presence of an observable psychological health status disorder and b) the way this disorder is related to the way the individual is experiencing the acculturation process are primary aspects of the definition of acculturative stress.<sup>33</sup>

### Psychological Dimensions of Eating Disorders

A distinctive feature of anorexia nervosa appears to be an inability to identify one's own feelings and a profound sense of ineffectiveness, which the women try to compensate for through strict control of their weight.<sup>34</sup> Some research has suggested that bulimic women suffer from a particular stress associated with wanting to fulfill many separate roles in their lives and with sex-role conflict.<sup>35</sup> Minority women in the U.S., whose lives are characterized by acculturative stress, in addition to racial inequity, lack of power, and low socioeconomic status, may also be unable in their struggles to feel and name their diverse feelings of ineffectiveness. These women too experience a role overload as mothers, single parents, and primary family wage earners as well as the pressures of strong

gender role expectations of their cultural groups which, additionally, come into conflict with the woman's role favored by white feminists.

One definition of being overweight is the state of having a minimum of 10 to 20% excess over the ideal body weight, as determined by the Metropolitan Life Height and Weight Tables, United States Public Health Service.<sup>36</sup> People being overweight is a major problem in the United States today where 35% of the population is overweight.<sup>37</sup> In this study, we attempted to find out whether race, acculturation, and overweight versus normal weight were related to anorexic and bulimic eating attitudes of Native American and African American women. Additionally, in order to understand personal concerns, we asked the women through open-ended questions to express their individualistic feelings about beauty, body image, and the need to speak standard English.

## **Method**

### Subjects

Thirty-four Native American and 28 African American women participated in the study. These women were contacted at two minority social service organizations in Lincoln, Nebraska: the Indian Center and the Malone Center.

Tribal self-designations of Native Americans. The Native Americans represented a number of different bands of one nation. Sixteen Native American women said that they belonged to the Omaha tribe, and eight said that they belonged to the Sioux. The remaining women indicated the following or a combination of the following: Santee Sioux, Lakota Sioux, Rosebud Sioux, Yuchi Creek, Choctaw, North Cheyenne, Winnebago, Omaha Sioux, Cherokee, and Oglala. Thus, the Native Americans were representative of one nation.

Racial self-designations of African Americans. Twenty African American women called themselves black, and five called themselves African American. One called herself Negro American, and one Negro. Thus, the majority of African Americans called themselves black and African American, which terms imply political and racial consciousness in African Americans.

Age. The Native Americans ranged between the ages of 12 and 62, and the African Americans ranged between the ages of 12 and 68. Thus, the Native Americans and African Americans covered a wide age range.

Weight. The subjects reported their weight. Thirty-eight percent of the Native Americans were determined to be overweight, judging by the 1983 Metropolitan Height and Weight Tables. Three percent were determined to be underweight, while 59% were considered to be of normal weight.

Forty percent of the African Americans were determined to be overweight. Ten percent were considered to be underweight, while 50% were considered to be of normal weight. Thus, both the African Americans and the Native Americans had a relatively high rate of being overweight.

Education. The average educational level for the Native Americans was a high school diploma or a GED. The average educational level for the African Americans was a high school education plus hours at a community college or university, which was somewhat higher than that for the Native Americans.

Annual income. The average annual income for the Native Americans was \$7,100, which at the time of the study was below the poverty level of \$10,989 set for the United States.<sup>38</sup> The average annual income for the African Americans was \$12,000, which was higher than the average income for the Native Americans.

### Procedures

All the women were given the Eating Disorders Inventory (EDI),<sup>39</sup> two subscales of the Majority-Minority Relations Survey (MMRS),<sup>40</sup> three open-ended questions, and demographic items. The researchers personally handed out the survey to each subject. A cover letter stated that participation was voluntary and anonymous. There was a 95% return rate.

### Instruments

The Eating Disorders Inventory (EDI). The EDI is a 64-item self-report measure with eight subscales that help determine whether an individual has either anorexic and/or bulimic eating attitudes. Its authors<sup>41</sup> report a full scale internal consistency reliability of .94, and a range of .76 and .87 for subscale internal consistencies.

In addition to the subscale Drive for Thinness, only three other EDI subscales were analyzed: Ineffectiveness, Interpersonal Distrust, and Interoceptive Awareness. These three subscales were specifically chosen (from among the other subscales which the subjects also answered) because the characteristics that they measure, such as feelings of worthlessness and not being in control, feelings of distrust of others, and a lack of awareness of emotions and sensations, may help to measure important acculturative stress experiences of U.S. minority women. Drive for Thinness was also included because we wanted to find out whether the minority women also experienced the white cultural pressure to be thin.

Majority-Minority Relations Survey (MMRS). The MMRS is an acculturation instrument that has been previously used to measure the acculturation attitudes of Hispanics and Asian Americans.<sup>42</sup> Only two

subscales, Perceived Prejudice and Social Customs, consisting of 31 items, were used. The seven-item Language subscale was not used because we assumed that the sample spoke primarily English in a monocultural white environment.

For both Likert and multiple choice items, the lowest value indicates strong affiliation with the majority group, suggesting assimilation or high acculturation; and the highest value indicates strong affiliation with one's minority group, suggesting rejection of the dominant culture or low acculturation. The authors report internal consistency reliabilities for Perceived Prejudice, Social Customs, and the full scale as .92, .89, and .95, respectively.<sup>43</sup>

Open-ended questions. Three open-ended questions were asked. The first question asked respondents how they felt when they saw slender white women on television and in magazines depicted as the typical symbol of beauty. The second question asked subjects to explain how much their feelings about their physical self affected their feelings about themselves overall. The third question asked subjects whether they spoke the same English as preferred by the white dominant group. A second part to the third question was that if the subjects spoke differently with different groups, how did this feel to them.

### Data Analysis

Cronbach coefficient alphas were determined for the full scales and the subscales of the instruments used. The Native American and African American groups were compared, with racial self-designation as the independent variable. A multivariate analysis of variance (MANOVA) was performed on the four EDI subscale scores, the dependent variables. A significant MANOVA F ratio for race at the .01 level was followed up with univariate analyses of variance (ANOVAs) for each of the four EDI subscales. The Bonferroni adjustment procedure, utilized to correct for Type 1 error owing to multiple univariate analyses, set the significance level at .01 for each ANOVA.

Native Americans and African Americans were then combined as one minority sample and placed into two groups, one representing more acculturated women and the other representing less acculturated women. Frequency distributions were studied to categorize subjects as less acculturated or more acculturated. On the Perceived Prejudice subscale, those subjects ( $n = 22$ ) who had scores equal to or greater than 72 were determined to be less acculturated. Those subjects ( $n = 24$ ) who had scores equal to or less than 63 were determined to be more acculturated. On the Social Customs subscale, those subjects ( $n = 24$ ) whose scores were equal to or greater than 40 were determined to be less acculturated. Those subjects ( $n = 19$ ) whose scores were equal to or less than 30 were determined to be more acculturated. The



intermediate groups (Perceived Prejudice subscale:  $n = 16$ , range 71-62; Social Customs subscale:  $n = 19$ , score range 39-29) were dropped from the analyses of acculturation group comparisons. A MANOVA was performed, with acculturation as the independent variable for each dimension, a) Perceived Prejudice and b) Social Customs; the dependent variables for both MANOVAs were the three EDI subscales: Ineffectiveness, Interpersonal Distrust, and Interoceptive Awareness. A significant MANOVA F ratio for each acculturation variable at the .05 level was followed up with univariate analyses of variance (ANOVAs) for each of the three EDI subscales. The Bonferroni adjustment procedure, utilized to correct for Type 1 error owing to multiple univariate analyses, set the significance level at .01 for each ANOVA.

The assumption of homogeneity of variance-covariance matrices was tested by Box M ( $p > .20$ ) for the three MANOVAs performed, and there was no violation of the assumption. A table of mean scores of overweight and normal weight Native American and African American women on all the EDI subscales was developed and considered against the mean scores of an anorexia nervosa criterion group studied by the authors of the EDI.<sup>44</sup>

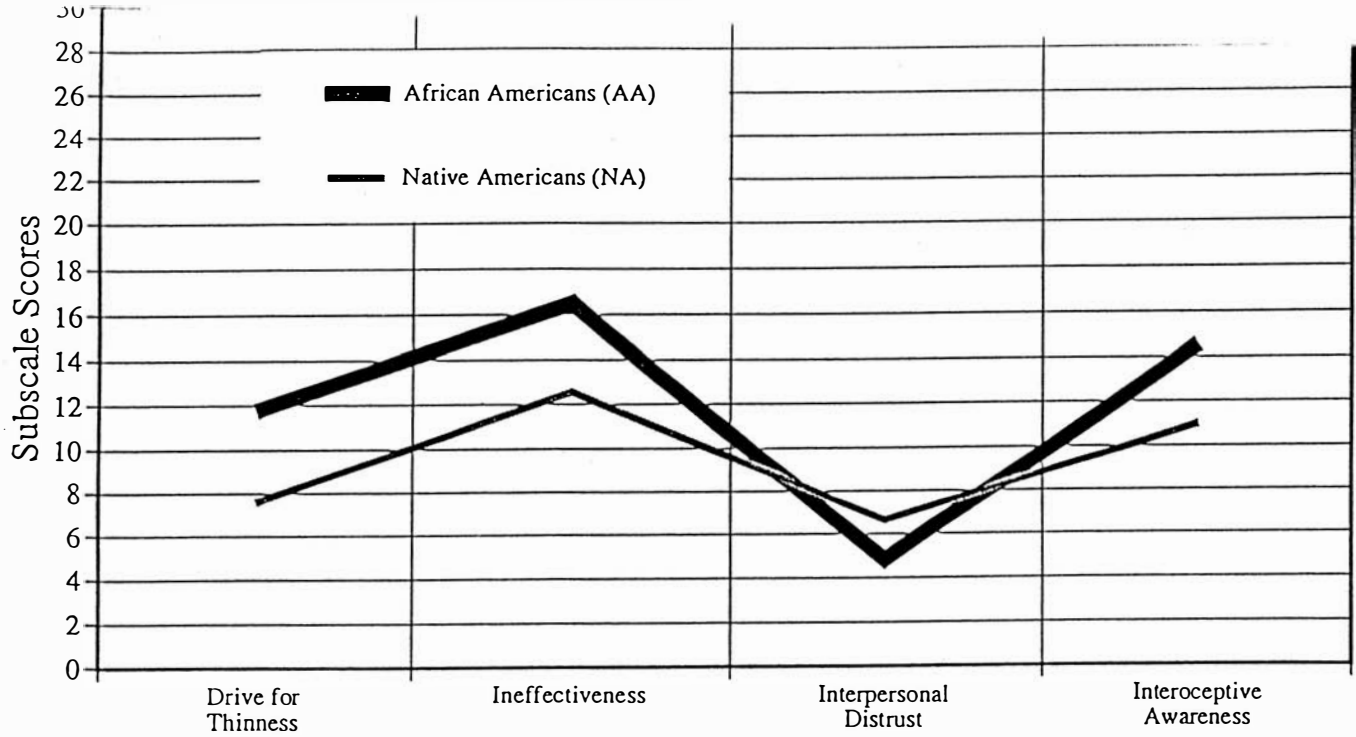
Subjects' responses to three open-ended questions were content analyzed to identify recurring themes for each question across all subjects. The percentage of subjects expressing each theme was determined.

## **Results**

Cronbach coefficient alphas for the EDI were as follows: full scale alpha = .94; subscales: Drive for Thinness alpha = .81; Ineffectiveness: alpha = .87; Interpersonal Distrust alpha = .72; and Interoceptive Awareness alpha = .82. The Cronbach coefficient alphas for the MMR subscales were as follows: Perceived Prejudice alpha = .82; and Social Customs alpha = .69.

### Comparison Between Native Americans and African Americans

A significant MANOVA for race,  $F(4,53) = 8.79$ ,  $p < .01$ , was followed by univariate analyses (ANOVAs) on the four EDI subscales. A significant difference was found for Drive for Thinness,  $F(1,60) = 11.37$ ,  $p < .001$ . The African Americans ( $M = 11.75$ ) showed a significantly higher Drive for Thinness than the Native Americans ( $M = 7.59$ ). Figure 1 provides profile of mean differences between the two groups on the four subscales. Examination of the mean scores of both groups revealed that African Americans additionally had higher scores on Ineffectiveness ( $p < .02$ ) and Interoceptive Awareness ( $p < .05$ ). Native Americans had a higher score on Interpersonal Distrust ( $p < .05$ ). (The Bonferroni adjustment required probability level of .01 to achieve significance.)



AA $\bar{x}$ =	11.75	16.50	4.82	14.57
NA $\bar{x}$ =	7.59	12.56	6.65	11.00
	p<.001	p<.02	p<.05	p<.05

Note: The probability values indicate the differences between mean scores of African Americans and Native Americans.

More Acculturated and Less Acculturated Women

Significant MANOVAs were found for more acculturated and less acculturated women: (a) Perceived Prejudice,  $F(3,42) = 3.85, p < .03$ ; and (b) Social Customs,  $F(3,39) = 2.36, p < .04$ . Significant ANOVAs were found on three EDI subscales for the Perceived Prejudice acculturation dimension:  $F(1,44) = 7.8, p < .003$  (Ineffectiveness);  $F(1,44) = 4.1, p < .01$  (Interpersonal Distrust); and  $F(1,44) = 4.93, p < .01$  (Interoceptive Awareness). Significant ANOVAs were found on the same three EDI subscales for the Social Customs acculturation dimension:  $F(1,41) = 6.2, p < .01$  (Ineffectiveness);  $F(1,41) = 6.3, p < .01$  (Interpersonal Distrust); and  $F(1,41) = 4.3, p < .01$  (Interoceptive Awareness).

For the Perceived Prejudice acculturation dimension, more acculturated subjects ( $M = 17.0$  for Ineffectiveness;  $M = 8.42$  for Interpersonal Distrust;  $M = 15.58$  for Interoceptive Awareness) showed more problematic attitudes than less acculturated subjects ( $M = 11.59$  for Ineffectiveness;  $M = 5.70$  for Interpersonal Distrust;  $M = 11.73$  for Interoceptive Awareness). For the Social Customs acculturation dimension, more acculturated subjects ( $M = 16.10$  for Ineffectiveness;  $M = 8.99$  for Interpersonal Distrust;  $M = 14.95$  for Interoceptive Awareness) showed more problematic attitudes than less acculturated subjects ( $M = 11.83$  for Ineffectiveness;  $M = 6.04$  for Interpersonal Distrust; and  $M = 11.77$  for Interoceptive Awareness). Table 1 provides the means and standard deviations of the more acculturated and less acculturated groups on the three EDI subscales.

Overweight and Normal Weight Native Americans and African Americans

Table 2 provides all EDI mean scores of Native American and African American overweight versus normal weight women. Table 2 also includes the mean scores of the anorexia criterion group presented by the test developers.<sup>45</sup> For both minority groups, normal weight women showed a tendency for higher scores on the EDI than the overweight women as well as the anorexia nervosa criterion group.

Open-ended Questions

A total of 33 Native Americans (97%) and 25 African Americans (89%) answered at least one of two open-ended questions. The percentages given are based on these totals (that is  $n = 33$  and  $n = 25$ ).

Thirty-two Native Americans (97%) and all 25 African Americans (100%) responded to the question: How do you feel when you see slender white women on TV and in magazines exhibited as the traditional symbol of beauty? Responses were divided into three groups, those which indicated a negative or critical reaction, those which indicated a neutral reaction, and those which indicated a positive reaction.

**Table 1**  
Means and Standard Deviations on Select EDI Subscales for Less Acculturated and More Acculturated Groups

Acculturation Groups	Ineffectiveness			Interpersonal Distrust		Interoceptive Awareness	
	n	M	sd	M	sd	M	sd
Perceived Prejudice Subscale							
More Acculturated (Scores $\leq$ 63)	24	17.00	7.2	8.42	4.5	15.58	6.0
Less Acculturated (Scores $\geq$ 72)	22	11.59	5.3	5.70	4.6	11.73	5.8
Social Customs Subscale							
More Acculturated (Scores $\leq$ 30)	19	16.10	6.6	8.99	4.7	14.95	6.1
Less Acculturated (Scores $\geq$ 40)	24	11.83	6.4	6.04	3.7	11.77	6.2

Note: Higher cut-off scores on the Perceived Prejudice and Social Customs subscales of the MMRS indicate less acculturation, and lower cut-off scores indicate more acculturation. On the EDI subscales, Ineffectiveness, Interpersonal Distrust, and Interoceptive Awareness, the higher the scores, the more problems in eating attitudes and behaviors are indicated.

Table 2

Mean Scores on All EDI Subscales of Overweight and Normal Weight Native Americans and African Americans and an Anorexia Criterion Group

	Native Americans		African Americans		Anorexia
	Overweight	Normal Weight	Overweight	Normal Weight	Criterion Group
Drive for Thinness	5.40	8.72	8.50	13.30	13.80
Bulimia	12.20	14.67	9.13	13.70	8.10
Body Dissatisfaction	5.60	8.39	4.13	13.20	15.50
Ineffectiveness	12.20	13.78	16.25	15.70	12.10
Perfectionism	6.80	6.61	3.63	4.50	8.60
Interpersonal Distrust	6.80	7.56	8.88	9.80	6.40
Interoceptive Awareness	10.70	14.72	11.88	15.80	11.40
Maturity Fears	9.60	8.89	10.38	10.80	5.60

Note: Mean scores of the anorexia nervosa criterion group have been provided by the authors of the EDI (Garner & Olmstead, 1984).

Among the Native Americans, 66% of the women wrote negative or critical comments (e.g., "I feel fat and ugly."). Also in the negative category, 24% of the women used the words "jealous" or "envious" in their responses. Twenty-five percent made neutral comments (e.g., "I feel okay."), and 9% made a positive remark (e.g., ". . . . I think they're beautiful!").

Among the African Americans, 80% wrote responses that could be categorized as negative or critical (e.g., "It's limiting what beauty is . . ."). Twenty percent of the subjects wrote responses categorized as neutral (e.g., "It doesn't bother me."). There were no positive responses.

Thirty-two Native Americans (97%) and twenty-four (96%) African Americans answered the question: How much do your feelings about your physical self affect overall how you feel about yourself? These subjects were grouped into five categories. Those who had misunderstood the question; those who believed their physical self did not at all affect how they felt about themselves; those who believed their physical self affected somewhat how they felt about themselves; those who believed that their physical self affected a great deal how they felt about themselves; and those who did not know.

Among the Native Americans, 34% wrote responses that indicated that their feelings about their physical self affected a great deal how they felt about themselves (e.g., "My physical appearance affects my mood almost always."). Thirty-one percent misunderstood the question (e.g., "I feel I need to lose weight."). In the given example, the subject expressed a negative feeling, but did not inform how much that negative feeling affected her feelings about her self overall. Nineteen percent of the women indicated that their feelings about their physical self affected somewhat how they felt about their overall self (e.g., "25%"); 13% of the women indicated that their physical self did not at all affect how they felt about themselves (e.g., ". . . . there are more important things than physical self."); one woman wrote, "I really can't say, because I don't know."

Among the African Americans, 54% wrote responses that indicated that they had misunderstood the question (e.g., "Physically, I am not satisfied with all of my body parts, but emotionally I am very confident in myself and things that I do."). This statement expressed a negative feeling but did not inform how much importance the subject placed on her physical appearance.). Twenty-one percent indicated that their physical appearance affected somewhat their overall feeling about themselves (e.g., "A small portion of my physical appearance decides how I feel about myself."); 21% indicated that their physical appearance affected a great deal how they felt about themselves overall (e.g., "A great deal, because it is a key component in development of one's self-esteem."); one woman indicated that her physical appearance did not at all affect how she felt about herself overall (e.g., "I feel good about

myself regardless of my physical self." ). No one indicated that they did not know.

Most acculturation instruments and studies in psychology measure self-reported preference of and proficiency in English language usage versus usage of one's ethnic language or language of one's original culture. A great amount of English usage is considered an indicator of high acculturation.<sup>46</sup> We expected the Native Americans and African Americans of this study, as opposed to immigrants, to speak English most of the time. However, owing to the fact that the English language has been modified by linguistics of many former colonized nations, as can be seen in the case of West African pidgin and Indian English, and is spoken in many forms in the U.S., such as, Hawaiian English and black English or ebonics, we asked "Do you speak the same English as that preferred by the white majority group?" The subjects were asked to mark one of the following response choices: only, most of the time, when with members of the white majority group, rarely, never. All 33 Native Americans (100%) and 24 African Americans (96%) answered the question.

Among the Native Americans, 47% indicated that most of the time they spoke the type of English preferred by the white majority group; 41% indicated that they only spoke that type of English; and 12% indicated that they spoke that type of English when with members of the white majority group. No subjects indicated "rarely" or "never" with regard to speaking the type of English preferred by the white majority group.

Among the African Americans, 71% indicated that most of the time they spoke the type of English preferred by the white majority group; 13% indicated that they only spoke that type of English; 8% indicated that they rarely spoke that type of English; one person indicated that she spoke that type of English when she was with members of the white majority group; and one person indicated that she never spoke the type of English preferred by the white majority group.

Twelve Native Americans (36%) and 11 African Americans (44%) responded to the second part of the third question, "If you speak English differently (examples: accent, word order, grammar, vocabulary, slang) with different groups, please describe this experience." Responses were grouped into three categories: those who expressed a positive experience, those who were neutral in their responses, and those who expressed a negative experience.

Of the Native Americans, 58% expressed a neutral experience, 33% expressed a negative experience, and one person expressed a positive experience. Among the African Americans, 82% expressed a neutral experience; 18% expressed a negative experience, and no one expressed a positive experience.

## **Discussion**

Much of the research on anorexic and bulimic eating attitudes has studied young white females from the middle and upper middle classes. This study investigated whether U.S. minority women, Native Americans and African Americans, who live in a midwest unicultural white society would also report anorexic and bulimic attitudes. John Berry's<sup>47</sup> psychological constructs of acculturation adaptation and acculturative stress were used as a framework to understand minority women's attitudinal reactions to the power status and social customs of white society and their stress-related response of problematic eating attitudes.

### Comparisons Between African American and Native American Women

The African American subjects generally showed more problems on the select EDI subscales than the Native Americans and scored significantly higher on Drive for Thinness. Since a higher socioeconomic status has been shown to correlate with the likelihood of developing an eating disorder,<sup>48</sup> the African Americans' relatively higher average income (\$12,000) compared to that of the Native Americans (\$7,100) could have predisposed them to developing more troublesome attitudes around food. The African Americans also had a relatively higher average educational level (high school education plus hours at a college or university) when compared to the Native Americans (a high school education). The African Americans also appeared to report less strong emotions than the Native Americans about the need to speak one way with whites and another way with their own cultural group. Therefore, minority women who attain increasing socioeconomic status may approximate the attitudes of white middle class women.

The sociopolitical experience of being oppressed by whites for more than 200 years may have forced many African Americans to adopt white attitudes<sup>49</sup> and forego their own culture or be less engaged with it. One could argue that Native Americans were also forced to assimilate with the white culture at the expense of their own culture. However, it appears that African American women have been more successful than Native American women in working within the establishment. Nonetheless, this proximity to white attitudes is not necessarily reciprocated by acceptance from the white reference group and this, no doubt, is a stressful experience. It is ironical that while educational and income equity needs to be established for minority women, those that access it may be exposing themselves to a whole lot of new problems.



### More Acculturated and Less Acculturated Women

In their study of the Hispanic Stress Inventory, a measure of stress related to cultural issues, Cervantes et al.<sup>50</sup> found that native-born Hispanics showed stress as they felt increased pressure to assimilate with the U.S. dominant culture. Maladaptive behaviors such as excessive drinking may be used by some Mexican American males to cope with acculturative stress, and increased drinking by both male and female Mexican Americans has been related to increasing levels of acculturation.<sup>51</sup> Feelings of marginality, that is, feeling that one does not belong to either group, are problematic,<sup>52</sup> as are feelings of pressure to conform.<sup>53</sup> However, the acculturation findings appear somewhat different for Asians. While findings show that first-generation Asian immigrants and sojourners perceive more prejudice than Hispanics,<sup>54</sup> level of stress and level of external locus of control both decrease and self-esteem increases with succeeding generations of Asians who were more acculturated. Similarly, in their study of the Cultural Adjustment Difficulty Checklist, Sodowsky and Lai<sup>55</sup> showed that higher acculturation of Asian immigrants was related to lower acculturative stress.

The majority of Native American and African American women in this study reported that they were acculturated to standard English, and many showed pragmatic acceptance of situations requiring language flexibility. However, even though the majority of women was acculturated to the English language, and many showed high acculturation in other assessed dimensions (i.e., Perceived Prejudice and Social Customs), responses to open-ended questions (i.e., how the media represents female beauty, and how their feelings about their body affected their self-esteem) indicated that more than half showed a lack of a close relationship with the white dominant group, anger at the dominant group, alienation, poor self-esteem, and identity confusion, characteristics identified by Berry et al.<sup>56</sup> and Sodowsky and Lai<sup>57</sup> as components of acculturative stress. Identity confusion, such as, subjects wondering which group they belong to, is an effect in psychological acculturation's variable of cultural identity,<sup>58</sup> which recently has begun to be investigated by the ethnic identity literature.<sup>59</sup>

Native American and African American women who reported more acculturation also showed more distress on Ineffectiveness, Interpersonal Distrust, and Interoceptive Awareness than those women who reported less acculturation. The implication may be that as minority women become more acculturated to the white American culture, they may be at risk for endorsing attitudinal problems of white American society. We propose that more acculturated minority women do not feel empowered in white American society. A higher score on Ineffectiveness may signify that as the non-white women attempt to adapt to the dominant white culture, they may become increasingly aware of their outgroup

status, and thus may manifest stronger feelings of ineffectiveness than those women who reject the white culture. Also, the more acculturated group's higher score on Interpersonal Distrust may suggest that minority women associating more frequently with the dominant white group may be distrusting because they have personally experienced institutional, cultural, and individual racism. Finally, the more acculturated women may score higher on Interoceptive Awareness owing to possible feelings of confusion and ambiguity that may arise out of their experiencing conflicts of values of two cultures. The acculturative stress of trying to cope constantly with cultural conflicts may cause the women to lose touch with and to fail to identify accurately their intimate sensations.

### Overweight and Normal Weight Women

The subjects in this study had a slightly higher proportion of being overweight (40% among African Americans and 38% among Native Americans) than the general population (35%).<sup>60</sup> Eating attitudes of U.S. minority women that lead to their being overweight need to be studied. It is to be noted that given the low income of both Native American and African American women, ranging between below the U.S. poverty level and slightly above, becoming overweight may be a reaction to earlier deprivations. The second author, an immigrant, has noticed that many "Third World" immigrants fleeing economic deprivation gain weight in the U.S. owing to the abundant availability of food and the fat contents of such food. In a number of Plains Indian cultures, being overweight has traditionally been seen as being representative of greed. Greed is considered the opposite of generosity, a highly valued characteristic. Greed is considered to harm not only the individual but also the entire community. Thus the overweight of minority women may also need to be studied from the acculturation point of view.

Even though this was a study of self-reported attitudes and not a diagnostic study, we would like to point to the relatively high scores on the EDI of both Native American and African American normal weight women, when compared to the overweight women in the two groups and to the anorexia nervosa criterion group.<sup>61</sup> The higher EDI scores of the normal weight U.S. minority women warrant some concern about the stresses of these women. Apparently these minority women doubt or find fault with their normal condition.

### Future Research

Since anorexia nervosa and bulimia appear to be affecting more Native American women and African American women than before, it is becoming increasingly important to do research on this topic with these two minority women's groups. An important study would be to administer

the EDI to groups of African American and Native American women, so as to develop minority norms in comparison to a minority anorexic and bulimic criterion group and not to overlook the differences of minority women from white women.

Future research needs to pay attention to this study showing that acculturation and acculturation-related difficulties differ both between racial groups and within racial groups. Individuals of the same race or ethnicity with different experiences may have different acculturation processes and different difficulties. Also, it would be important to identify variables that may be helpful in reducing acculturative stress. Suggestions that acculturative stress may be reduced by a belief in one's inner resources, voluntary close relationships with individuals of the dominant group,<sup>62</sup> high self-esteem, a sense of personal control,<sup>63</sup> extensive family network/support, and a reduction of prejudice in the dominant society<sup>64</sup> needed to be further investigated. However, some of these stress-mediators may be conditions of the privileged in a racist society.

### Notes

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