

ACCULTURATION AND SOCIOCULTURAL INFLUENCES AS PREDICTORS OF  
FAMILY RELATIONSHIPS AND BODY IMAGE DISSATISFACTION IN  
AFRICAN AMERICAN, HISPANIC AMERICAN, AND  
EUROPEAN AMERICAN WOMEN

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Ethnic differences in etiological factors linked to body image dissatisfaction and eating disorders were examined. In addition, the interaction of acculturation and body image dissatisfaction in influencing minority women's relationships with their parents was investigated. Participants consisted of 302 undergraduates from three ethnic groups: Caucasian, Hispanic American, and African American women who were administered self-report measures. Differences were not found between the groups in body image dissatisfaction. Low self-esteem, internalization of the thin ideal, and family emphasis on weight and appearance were all related to more body image dissatisfaction for each of these groups; however, differences in degree of endorsement were also noted between the ethnic groups on these factors. Based on the interaction findings (body image x acculturation) separation from one's mother was found in the area of attitudes and emotions for the Hispanic sample but not for the African American sample on any of the parent scales. Areas for future research and implications for diagnosis and treatment of minority populations are also discussed.

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## CHAPTER 1

### LITERATURE REVIEW

#### Introduction

Literature reviews and research on the etiology of eating disorders repeatedly suggest that particular aspects of one's family environment and personality characteristics of the individual play a role in risk factor development for these types of disorders (Twamley & Davis, 1999). The biopsychosocial emphasis on eating disorders and body image problems has mainly focused on upper to middle-class Caucasian women and has typically ignored individuals of other cultural groups, particularly ethnic minority women. It might be a mistake to assume that the same risk and protective factors are typical of women of different ethnicities, or that eating disorders follow the same developmental pathways in women from all cultures. However, the etiological factors of eating disorders and how they might apply to minority women have not been the focus of many research studies, and authors within the field have emphasized the need for further evaluations within these populations (Striegel-Moore & Cachelin, 2001). Likewise, theoretical reasoning has attributed the recent increase in minority women affected with eating disorders to elements within the Anglo culture. Emphasis has been placed on factors that have been shown to lead to eating disturbances in Caucasian women, such as a media saturated with images of thin, beautiful, and youthful women. Some researchers have thus inferred that eating disorders are "culture-bound" syndromes and that if an individual is exposed to a society that values such aesthetic qualities they are more susceptible to eating pathology (Wildes, Emery, & Simons, 2001).

The purpose of this study is to explore whether body image dissatisfaction, one element shown to be related to eating disorders, differs based on individual differences in race and culture. For instance, this study will examine whether one's degree of acculturation or ethnic identity influences minority women's perceptions of their bodies. In addition, this study focuses on whether variations in the family environment and attachment styles will be exhibited in ethnic minority women as a result of the influence of acculturation and body image dissatisfaction. These factors will be explored using a sample of University of North Texas (UNT) undergraduate women of three different ethnicities: Caucasian, Hispanic American, and African American.

### Eating Disorders

Eating disorders such as anorexia nervosa and bulimia nervosa typically have been found to have an onset in adolescence and early adulthood. The same is true for subclinical forms of these disorders that may include body image dissatisfaction and repeated dieting or weight management techniques. Subclinical syndromes occur more often than diagnosable or purer eating disorders within populations of women and girls (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). Individuals with subclinical forms of eating pathology or body image concerns typically do not meet all criteria for a specific eating disorder as outlined in the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR)* (American Psychological Association, 2000). One trait that seems to characterize most of these women is some degree of dissatisfaction or unhappiness with their current body size and/or appearance. Rodin, Silberstein, & Striegel-Moore (1986) coined the term "normative discontent" to describe this commonly espoused sentiment of women within the general population. The fact that these



clusters of symptoms are undiagnosed or below the threshold of clinical diagnoses, however, does not mean they are not a problem nor that they do not pose a risk for those who experience them. Eating disorders and body image disturbances affect people within multiple domains of their lives, physically, emotionally, cognitively and socially. These conditions have been shown to create long-standing problems in daily functioning, and the relapse percentage for women has been shown to be high (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999).

Diagnostically it is difficult to get reliable information in order to classify individuals with eating disorders without utilizing a structured interview or research techniques that are more in depth than a self-report measure. Diagnostic criteria are highly restrictive; for instance, in order to be diagnosed with anorexia nervosa, an individual must have achieved a body weight less than 85% of that which is expected for their age and height, and must be experiencing amenorrhea. That means that women who are significantly underweight and are still having menses cannot be classified as having that eating disorder (Kashubeck-West & Mintz, 2001). Therefore, as mentioned previously a number of women are being undiagnosed that may be in need of treatment. It would be interesting to review how researchers have utilized cut-off scores on self-report measures, or how they classified sub-threshold individuals with eating disorder symptoms. There are also limitations in comparing body image self-reports across different cultural groups that should be taken into consideration, such as inadequate normative data (Striegel-Moore & Smolak, 1996)

All these issues are especially relevant to research that investigates cultural group differences, particularly within the area of eating disorders and an individual's

body image evaluation. Kashubeck-West, Mintz, & Sauders (2001) suggested that it would be more pertinent to study subthreshold eating disturbance behavior, such as body image dissatisfaction, rather than comparing individuals who meet eating disorder criteria, because the etiology of subthreshold eating disorders is more likely to be influenced by cultural factors. Also, by examining subthreshold behaviors or women who do not meet full criteria for eating disorders researchers would be more likely to identify and hopefully treat these unrecognized groups. All of these topics will be explored further within this dissertation.

We live in a culture where great importance and emphasis is placed on the physical attractiveness of women in comparison to men. Eating disorders have been proposed to become more prevalent in Anglo women during adolescence and young adulthood due to changes that the female body undergoes at puberty in conjunction with the sociocultural emphasis that women conform to particular standards of femininity (Striegel-Moore, Silberstein, & Rodin, 1986) These Anglo-cultural ideals are usually encompassed in such traits as beauty, youthfulness, and a slender body frame. It is during the time of adolescence that young Caucasian women begin to adopt and become more cognizant of these gender role themes that are reflected in the media and endorsed by other members of our society (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). However, it is unlikely that members of other ethnic groups maintain or follow the same developmental pathways that have been thought to be etiologically tied to eating disorders. Although they are exposed to the same sociocultural environment, there are also inherent cultural differences in peer and family reactions to body shape and size. For example, weight does not play as important a role for minority groups in

their evaluation of attractiveness (Miller, Gleaves, Hirsch, Green, Snow, & Corbett, 2000). Differences have also been noted in the diagnostic criteria that are exhibited by individuals of various ethnic groups (Crago, Shisslak, & Estes, 1996; Kashubeck-West, Mintz, & Saunders, 2001). As suggested in the aforementioned examples, the generalizability of causative factors of eating disorder in women of different cultural groups is still unclear. Therefore, the need for future research to be conducted within the area of etiological differences is warranted (Striegel-Moore & Smolak, 1996).

### Self-esteem

Social pressures to be thin play an enormous role in women's self-evaluation and body-esteem. Women with low self-esteem have been shown to have an increased vulnerability to body image dissatisfaction and eating disorders. Leung, Schwartzman, and Steiger (1996) found dissatisfaction with one's body and appearance was directly related to low self-esteem, and this in turn was indirectly related to eating disorder symptomatology. Regardless of causal direction, whether it be that low self-esteem leads to body dissatisfaction or vice versa, these individuals may be more likely to be negatively influenced by cultural standards of beauty and attractiveness as a result of internalizing these ideals. Regardless of one's ethnic group classification, self-esteem has been negatively correlated with body image dissatisfaction (Striegel-Moore, Silberstein, & Rodin, 1986). Self-esteem has also been identified as a protective factor against sociocultural influences, supporting the rejection of the body image ideals that are promoted within our society (James, Phelps, & Bross, 2001).

Self-esteem is important to a woman's perception of her social identity and interpersonal identity. Women might be susceptible to weight concerns as a result of

trying to maintain the acceptance of their peers, family, and society (Sharpe, Killen, Bryson, Shisslak, Estes, Gray, Crago, & Taylor, 1998). One's family plays an integral role not only in an individual's positive views of themselves as a person but also in how they think about their body and appearance. Related to this is the idea that dysfunctional families breed self-esteem problems, and as some researchers who study eating disorders have suggested, women with these difficulties may have acquired negative eating patterns or body image problems in response to a caustic family environment (Strober & Humphrey, 1987). Therefore, in general it is important to acknowledge the role that self-esteem might play within the area of eating disorders and body image satisfaction and the role of family in self-esteem.

In sum, low self-esteem has been shown to be closely related to women's dissatisfaction with their bodies. Self-esteem has also been found to be impacted by one's sociocultural environment, the media, and relationships with family and peers. Given the multifaceted nature of the construct, it would be expected that self-esteem's link to the development of body image dissatisfaction and eating disorders would vary between individuals and cultural groups.

#### Caucasian Women

Striegel-Moore and Smolak (1996) theorize that three factors play a crucial role in why Caucasians have body image problems in relation to eating disorders. These women tend to have a conscious drive to obtain a thin ideal, to endorse dissatisfaction in their current body weight, and to feel that their weight and appearance is central to their identity. Likewise, dieting has been highly linked with the development of eating disorders. Caucasians are more likely to endorse dieting behaviors and be concerned

with areas of the body most influenced by weight loss and exercise (Miller, Gleaves, Hirsch, Green, Snow, & Corbett, 2000). Measures of body dissatisfaction that have been utilized in most research to date tend to focus on areas of the body considered to be the main focus of individuals with eating associated disorders: the stomach, thighs, arms, and hips. These are areas of the body that are most directly affected by weight loss and gain, and are typically areas of focus for women with anorexia nervosa and bulimia nervosa. Likewise, these are the sites that are more often cited by Caucasians, more so than minority women, as “problem areas” (Thompson, Heinberg, Altabe, & Hantleff-Dunn, 1999). Another commonly assessed component of body image dissatisfaction is preference to have a thinner body frame. This characteristic or drive has also been found to more typical of Caucasian women (Thompson & Sargent, 2000).

Anorexia nervosa and bulimia nervosa and body dissatisfaction in general typically have been considered “white woman’s disorders,” as reflected in the literature and based on the assumption that this psychological condition only affects this demographic segment of the population. However, researchers have begun to find examples of eating disorder symptomatology not only within other racial groups in the United States, but also within other countries which were believed not to be affected by these disorders.

In a meta-analytic review conducted by Wildes, Emery, & Simons (2001) on ethnicity and body image disturbances, it was determined by analyzing the effect sizes of the cumulative studies that Caucasians as a racial group experience more body dissatisfaction than African American and Hispanic women. Their study also found that acculturated women and nonacculturated women did not differ significantly within the

area of body dysphoria or negative appearance evaluation. However, one has to be cautious when interpreting this study because it grouped studies of body image satisfaction and body size satisfaction with studies of individuals identified as anorexic and bulimic. Therefore, they were combining constructs from various studies that measured eating pathology and body dissatisfaction as though this were a homogenous classification.

Etiological theories about the development of eating disorders in relation to separation-individuation from one's family of origin have also been postulated within Caucasian samples (Smolak & Levine, 1993). For example, it has been hypothesized that eating disorders, such as anorexia, or less pathological forms of weight loss represent a woman's desire for control and autonomy. Lack of control over family environment or relationships with family members is expressed through one's relationship with food. Separation-individuation difficulties may also be true for minority women, especially since acculturation and adoption of Anglo values will likely be influenced by one's relationships with one's family and ethnic identity. These issues will be discussed further throughout the course of this paper.

#### African American Women

Research on the prevalence of eating disorders and body image concerns in African Americans has mainly focused on comparing these individuals to Caucasian samples. The results of this type of research typically conclude that African American women experience lower prevalence rates of eating disorders and more body image satisfaction when compared to Caucasians and members of other ethnic groups (Miller, Gleaves, Hirsch, Green, Snow, & Corbett, 2000).

With regard to perceptions of one's body image, African American women are less likely than Caucasian or Hispanic women to make gross overestimations of their actual weight and size, and this is believed to be related to the ideal body size for African American women being larger than the Anglo ideal (Parker, Nichter, Nichter, Vuckovic, Sims, & Ritenbaugh, 1995). A larger frame within the African American community is more acceptable and even at times encouraged because it represents such things as femininity and good health. For instance, African Americans tend to view overweight women as more attractive than those with a petite body frame, and larger frames may be associated with more positive connotations such as sexy, warm, protective, fertile, and healthy (Grogan, 1999).

African American women are also less likely to engage in dieting behaviors because they do not feel that their weight is central to their identity or personality (Thompson, 1992). If one has a strong sense of racial identity or has exposure to a sub-cultural unit which does not focus on weight concerns, then they are less likely to develop disordered eating habits or strive for a lower body weight. For instance, Cassidy (1991) found that some African Americans who score high in endorsement of their racial identity purposefully reject and defy white middle class norms which are encouraged in the media and general culture. These include attitudes about weight and beauty. African American women are more likely to identify eating disorders as a "white woman's disease" (Williamson, 1998). Classifying eating disorders in this way may serve as a protective factor, making an individual less susceptible, because it further differentiates them from the disorder.

In general, African Americans may score lower on measures of body image disturbance because an individual's body size is not a standard basis for determinations of attractiveness and visual aesthetics for these women. African Americans have been shown to have more flexible concepts of what is considered beautiful and sexually attractive (Thompson & Sargent, 2000). Furthermore, African Americans may differ from Caucasians in the areas of the body that they tend to be dissatisfied with, and these areas may not be addressed specifically in scales intended to measure body image distortions or dissatisfaction. It is possible that African Americans could be experiencing similar levels of dissatisfaction with their physical appearance as Caucasian women, but their areas of concern may be the color of their skin, texture of hair, or the size of their facial features. For example, African American women may treat their hair with chemicals in order to straighten or bleach their hair for a desired effect. This fashionable procedure may also represent a more acceptable Anglo ideal of beauty. Bond & Cash (1992) found that degree of satisfaction with skin color directly affected African American women's scores on appearance satisfaction and they tended to prefer a lighter complexion.

It is interesting to note that the areas that African American women may report dissatisfaction with are also visible areas of stigmatization, being features that the Anglo culture may identify as race specific. Therefore, researchers may be incorrectly classifying African American women as high in body image satisfaction and inferring that they are more psychologically healthy in this area and satisfied with their external appearance than other racial groups, which may not necessarily be the case. Although African American women may exhibit a great deal of dissatisfaction with their coloring or



other areas of the body, they could be endorsing satisfaction with their overall body shape and weight.

When African American women do report dissatisfaction in their body shape or weight, this displeasure was usually related to being overweight by medical standards, rather than being adversely influenced by society's value on thinness or a discrepancy between perception of actual and ideal body size (James, Phelps, & Bross, 2001). Obesity has been found to be two to three times higher in black women than in the general population, and researchers are beginning to recognize that symptoms of disordered eating are becoming more prevalent within these overweight populations (Striegel-Moore & Smolak, 1996). For example, Crago, Shisslak, & Estes (1996) found that being overweight has been identified as a risk factor for the development of eating disorders within minority populations more so than for Caucasians. Caucasians regardless of weight classification have been shown to display more dissatisfaction. Therefore, body image dissatisfaction within minority women could be based on realistic weight concerns rather than cognitive distortions, whereas the latter may be more prevalent within Caucasian women reporting body image dissatisfaction. Within their own communities African American women may feel a greater sense of acceptance about their weight; however, within the predominately Anglo-culture they may be subjected to teasing and intolerance. Intolerance may take the form of discrimination and negative social appraisals, which may lead to dissatisfaction when evaluating one's own weight and appearance. Those individuals who are more acculturated are more likely to adopt and be negatively affected by Anglo ideals of attractiveness. Similarly they may also be more responsive to the biases or prejudices of others.

Although African American women have been shown to possess protective factors within their environment and identity development which lessen their risk of developing eating disorders, other studies have suggested that the prevalence of anorexia, bulimia, and body image problems is actually on the rise within these populations. Sociocultural changes associated with the higher incidence include increased awareness, better detection methods established within the health care system, and higher social class standing within ethnic minority populations (Pate, Pumariega, Hester, & Garner, 1992). Hsu (1987) theorized that the recent rise in obesity in the past few decades, in addition to social role changes and white middle class values that are prevalent in our media, have increased the prevalence of eating disorders within African American communities.

Furthermore, Villarosa (1994) found that middle class African American women were at higher risk than other socioeconomic groups because they were more likely to be downplaying aspects of their racial identity in order to fit in with white middle class norms and therefore were also more likely to adopt white society's views on thinness equating with attractiveness and beauty. Some researchers have speculated that as a family's class standing changes, viewpoints of members within the family may also adjust towards more Anglo-like values. Caldwell, Brownell, & Wilfley (1997) found that when they controlled for socioeconomic status, race differences in body dissatisfaction disappeared.

One of the limitations of most studies comparing African American and Caucasian women on body image dissatisfaction is that they tend to recruit subjects from only a university population and that findings may not be generalizable to the

population at large. University samples tend to be selected out of convenience, however, characteristics of those groups may restrict the results of a study. These groups of individuals tend to share characteristics such as level of education, social class, and particular value systems. Related to this issue is that another relevant factor that these studies did not consider was the individual's degree of acculturation or adherence to ethnic identity norms.

Looking at acculturation is important because most studies comparing body images of African American and Caucasian women have not further classified the African American participants into groups distinguishing their degree of assimilation to Anglo cultural values and beliefs versus adherence to their racial group's ethnic culture. Differences in degree of acculturation may influence scores on measures of body image satisfaction. Research on ethnic identity and level of acculturation suggests that individuals who adopt the values and beliefs of the dominant culture are more likely to be susceptible to eating disorders and to the Anglo culture's viewpoint regarding a "strive for thinness" body ideal. African American women with higher scores on eating disturbances have been shown to identify more with the majority culture than with elements of their own cultural background (le Grange, Stone, & Brownell, 1998).

Another important thing to take into consideration when studying minorities is how awareness of one's racial group may influence responses on self-report measures, particularly if the researchers are not members of their own racial group (Kashubeck-West, Mintz, & Saunders, 2001). African American women may be less likely to endorse eating disorder criteria and body image concerns even if they are experiencing them because these issues are not characteristic of their racial group and not congruent with

how other member of their race think or feel (Williamson, 1998; Ponterotto, Cases, Suzuki, Alexander; 2001).

In conclusion, the research on African American women and body image disturbances has been mixed and therefore firm conclusions cannot be made about the true prevalence, etiology, and course of these types of disorders.

### Hispanic American Women

As mentioned previously, research on eating disorders and body image concerns has generally been limited in investigating populations of minority women. However, the research that has been conducted has mainly focused on African American women while avoiding in-depth investigations of Hispanic women. One important reason for studying Hispanics is that they are quickly becoming the largest minority group in the United States; therefore mental health awareness for these populations will be necessary. Overall, it appears likely that Hispanic women are more likely than African American women to engage in eating disorder behaviors and endorse experiencing body image dissatisfaction.

Similar to Garner & Garfinkel (1980), who found comparable scores between Hispanic and Caucasian girls on eating disorder symptomatology as measured by the Eating Disorder Inventory (EDI), more recent studies have also found that Hispanics have shown levels of eating disturbance similar to Caucasians, and are just as influenced as their white counterparts by pressures to be thin (Bay-Cheng, Zucker, Stewart, & Pomerleau, 2002). Other studies suggest that Hispanic women actually display more problematic body image concern than Caucasians do. For example, Smith & Krejci (1991) found that more adolescent Hispanics than Caucasians endorsed fear of

weight gain. These authors' findings also discovered that Hispanics reported more self-induced vomiting and binge eating than Caucasian adolescents. Still other studies, have found results in the opposite direction, showing that Hispanic women endorse experiencing less weight concern, having heavier body weight, and not engaging in as many weight control methods such as exercise, when compared to Caucasian women (Miller, Gleaves, Hirsch, Green, Snow, & Corbett, 2000).

Crago, Shisslak, & Estes (1996) found Hispanic women showed more weight-related concerns than African American women. Latinas showed lower self-esteem and different self-esteem development than African American women, and this likely influenced their evaluations of their bodies. Likewise, French et al. (1997) studied ethnic differences and eating disorder symptomatology and found that frequent dieting was associated with weight dissatisfaction, perceived obesity, and low body esteem in Hispanics.

Hispanic women have been shown to experience more acculturative stress than African Americans, and this has also been linked to higher ratings of body image dissatisfaction within these populations. Hispanics who experience cognitive dissonance and acculturative stress are more likely to be influenced by sociocultural pressures to be thin. Also, Latinas who were born in the United States or who had immigrated before the age of 16 are more similar to Caucasians in ideal body sizes than Latinas who arrived in the United States as adults (Perez, Voelz, Pettit, & Joiner, 2002). This finding makes sense because the longer a minority individual resides in the United States the more exposure they have to Anglo values and beliefs, and this increases the likelihood that they will adopt these viewpoints. Likewise, the period of adolescence and young

adulthood may be a factor contributing to increased body image concerns and adoption of cultural attitudes towards appearance. During adolescence both males and females undergo a period of transition from child to adult coupled with changes in their identity and belief systems. Female adolescents, more so than males, are influenced by standards for attractiveness which are ever present in their sociocultural environment. For minority adolescents this may include a desire to be similar to and accepted by the majority group. Younger individuals or minority women raised in the United States may experience more pressure to acculturate and be more susceptible to Anglo value systems. Silber (1986) investigated Hispanic women with eating disorders and found that those individuals endorsed a strong desire to assimilate to white middle class society.

As mentioned previously, information delineated from research studies on minority women and eating disorders has suggested a variety of inherent differences between African American and Hispanic American women in the areas of identity development, self-esteem, and acculturative stress. However, the role that family of origin plays in combination with the influence of sociocultural pressures has not been addressed in research, although it has been speculated in theories of eating disorder etiology in minority women.

#### Acculturation

Acculturation involves adoption of and assimilation to a different culture than one's own as a result of increasing exposure. The process of acculturation is multifaceted, involving adoption of the values, languages, and norms of the dominant society (Wildes, Emery, & Simons, 2001). The process of acculturation can also be

conceptualized as an individual's adherence to and acceptance of either their ethnic identity or that of the dominant culture.

It has been suggested that exposure to Anglo societies and ideals increases the risk of developing eating disorders. The Anglo culture has established attractiveness and a thin body frame as a standard that one should achieve in order to be successful, well-liked, and admired by one's peers. Acculturation is put forth as the goal by the Anglo-dominant culture, and ethnic minorities are supposed to assimilate the values, habits, and lifestyles endorsed by the mainstream culture. Sociocultural factors have been related to eating disorders and body image dissatisfaction in Caucasian women (Root, 1990). Likewise, minority women are assumed to be influenced to some degree by these messages as a result of being exposed to media representations and the cultural milieu. Highly acculturated individuals would likely be more negatively affected than are individuals who have not assimilated to values of the dominant Anglo culture (Williamson, 1998).

The process of acculturation can result in changes in body image ideals that may differ from those endorsed by the individual's culture of origin. When a person possesses that desire to assimilate and their body does not match the ideal, then the final result may be body image dissatisfaction, or in more severe forms, the development of eating pathology in order to change the way one's body looks (Perez, Voelz, Pettit, & Joiner, 2002). The role that our Anglo-dominant culture plays in the increase of body image problems and eating disorders within minority populations is not limited to acculturated ethnic groups within the United States and other European

countries. It has also become evident in other countries which have been influenced by our media and which have been exposed to American cultural values.

The Restraint Model by Striegel-Moore and Smolak (1996) explores how women of different ethnic backgrounds may internalize messages from the dominant culture that may ultimately develop into problems with eating. Striegel-Moore and Smolak's Restraint Model focuses on the occurrence of bulimia and binge eating disorder within the African American population. These authors believe that internalization of the "thin ideal" leads to body image dissatisfaction and changes in thoughts and behaviors which are more similar to majority values and beliefs versus their own cultural group. Factors that may put minority women at risk for eating disorders are a higher body mass index, social pressure both within and outside one's ethnic group, and low ethnic identity.

On the other hand, adoption of societal values of attractiveness that are emphasized by the Anglo culture has been shown to be directly related to eating disorder symptomatology in Mexican American women (Lester & Petrie, 1995). Likewise, Pate, Pumariega, Hester, & Garner (1992) presented evidence that Hispanic women with high acculturation scores also tended to have elevated scores on measures of eating disturbance as measured by the Eating Attitudes Test. However, Joiner and Kashubeck (1996) utilized a sample of Mexican American adolescent girls and found that an individual's level of self-esteem, not their degree of acculturation, was predictive of symptoms relating to anorexia and bulimia.

More recent immigration status (first or second generation) has been associated with higher levels of acculturative stress and lower levels of self-esteem, which may increase pressure to adapt to one's social environment, in this case the Anglo culture



(Chamorro & Florez-Ortiz, 2000). Second generation individuals may be particularly conflicted between maintaining aspects of their country, those likely endorsed by their family, or assimilating and adopting elements of the Anglo culture. Conflict may be present and encouraged by the Anglo culture's strong push to have minorities assimilate and not exhibit differences. However, acculturative stress may also arise in later generations due to changes in social and economic standing or as a result of developmental transitions. For example, Crago, Shisslak, & Estes (1996) found that minorities with higher education levels, who were younger, and who endorsed white middle class values were at higher risks for eating disorders. Therefore, it is possible that undergraduate minority women are more susceptible than minority women who do not pursue higher education, due to the transitional changes and stress associated with going to college for the first time and also because they will likely be further beset with messages that Anglo culture is the norm. Ritvo (1984) found that eating problems and bulimic symptomatology typically occur within a year of leaving home for the first time. Therefore, the transition into college and being away from one's parents is a risk.

Another reason why minority women may adopt a more acculturated stance is that it may be a method to deal with prejudice and racism within our society. The more acculturated an individual behaves, the less likely he or she is to be seen as different from the norm and thereby less likely to be stereotyped. Hispanic and African American women are targets of bias not only for being women but also due to their ethnicity. There may be a drive within more acculturated individuals to decrease as many differences between themselves and the dominant group as possible. Unlike skin color and bone structure, weight is more amenable to change. Eating disorders and extreme

methods of dieting may also be a way to contradict negative stereotypes that have been associated with African American women such as being domineering, loud, and opinionated, attributes that may further differentiate them from the white middle class cultural norms of female behavior and appearance. This process has been identified with the phenomenon of internalized racism, and has been found to be more prevalent in minorities with higher education levels and middle and upper socioeconomic standings (Williamson, 1998).

However, factors relating to racism and body image dissatisfaction have not been studied adequately within the psychological literature. Body dissatisfaction and endorsement of a thin ideal could suggest that minority women are being sent messages that their minority features are not acceptable and that the way they look further classifies or separates them from what is considered beautiful or normal. For example, African American models in the media are not representative of the typical female within that cultural group. Instead their facial features, body size, skin color, and hair texture are more Caucasian-appearing than truly African. Mulholland and Mintz (2001) have theorized that women who are low in ethnic identity and more acculturated are more prone to eating disorders, and also are more susceptible to negative self-evaluations as a result of prejudice and discrimination.

In sum, most minorities experience pressure to change their cultural difference with increasing levels of exposure to the Western culture. For more acculturated minorities this adoption of values and beliefs can include a vulnerability to pathologies that are not usually prevalent within their racial group, such as eating disorders.

## Issues in Measurement of Body Dissatisfaction

It has been suggested historically that the *Diagnostic and Statistical Manual* may be a flawed tool for diagnosing eating disorders. One current criticism directed towards the *DSM* is that the criteria that have been selected for diagnosis of anorexia nervosa and bulimia nervosa are too restrictive and severe, and therefore a large number of individuals who are now classified as subthreshold diagnostically are not receiving adequate treatment or care (Kashubeck-West & Mintz, 2001). The *DSM* also does not represent cultural differences in diagnostic presentation adequately. Instead, it advises the clinician to be culturally sensitive and to educate oneself when treating patients from other ethnic groups (American Psychiatric Association, 2000). For example, binge eating and weight control techniques such as purging and use of laxatives have been found to exist within minority populations; however, these may present in a different manner clinically than they do in Caucasian samples (Smith & Krejci, 1991). Not only is it likely that the assessment measures that are used may be flawed in diagnosing and classifying ethnic minorities, but also professionals within the field may hold stereotypes that eating disorders are only present in white women (Root, 1990). Therefore, ethnic minorities may be misdiagnosed or not diagnosed at all, thereby resulting in the lower frequency of identified eating disorders within these populations (Thompson, 1992; Silber, 1986).

One of the reasons that further investigation needs to be conducted on body image dissatisfaction with ethnic minorities is that the body image scales that are most often used are not accurately assessing the correct areas of dissatisfaction within these populations. Generally, Caucasian women rate their stomach, thighs, and buttocks as

larger than they actually are or as problem areas that they are the least satisfied with (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). These areas tend to be the main focus of body image measurement scales. However, Bond and Cash (1992) found that African American women's perception of nonweight areas such as skin color, hair texture, and facial features correlated with their overall appearance evaluations. Therefore, it is necessary to separate out these specific areas of the body that are routinely targeted by minority individuals when investigating their body image concerns.

A large number of assessment measures for eating disorder symptoms and body image dissatisfaction used with minority populations may be insufficient because they have only been normed on Caucasian samples and do not include items that are relevant to minority women (Kashubeck-West, Mintz, & Saunders, 2001). As a result it is difficult to determine whether the difference in scores between minority women and Caucasians has been truly substantiated within the research literature or whether it is due to inadequate and unrepresentative measurement tools.

A second issue is that Parker et al. (1995) posited that all ethnic groups may possess cognitive distortions with regards to their actual body weight perceptions; however, African American women tend to view these distortions in the opposite direction from Caucasians and Hispanic women. Therefore, heavier African American women will see themselves as skinnier than they actually are, while Caucasian and Hispanic women who are normal or underweight will think they are heavier than they actually are.

The body image dissatisfaction subscale of the Eating Disorder Inventory (Garner, 1991) has been used frequently as a self-report measure to identify degree of body

image dissatisfaction in Caucasian women. Therefore, when investigators began researching ethnic minority women this measure was also utilized; however representative norms are still limited. One weakness of the body image dissatisfaction subscale of the Eating Disorder Inventory is that it looks at satisfaction with the shape and size of body parts separately. On the other hand, the Multidimensional Body-Self Relations Questionnaire (Cash, 1994) assesses satisfaction with distinct body areas in addition to cognitive and affective features associated with appearance (Kashubeck-West, Mintz, & Saunders, 2001). In order to obtain a more global perspective of body image dissatisfaction Cash's instrument was utilized in this study.

Body dissatisfaction will be investigated in this study because it has been found to be the strongest predictor of eating disorder problems regardless of an individual's race. Likewise, as mentioned earlier, there are limitations associated with classifying non-Anglo individuals with certain eating disorders. For example, the content of questions associated with labeling anorexic and bulimic behaviors have been found to be interpreted differently by various cultural groups. In summary, inaccurate conclusions may have been made about the prevalence and characteristics of eating problems within minority women due to inadequate norms, measurement error or presumptions clinicians have about these groups.

### Family Factors

Early research investigating the etiological foundations of body image problems and eating disorders found that individuals who grew up in family environments characterized by dysfunction were more likely to develop psychopathology. Such families were typically identified as being low on cohesion, having difficulties with

expressing emotions, and displaying lower conflict resolution skills. Such traits encompass more specific behaviors such as communication difficulties, lack of nurturance, and problems with autonomy and self-expression (Connors, 1996). Similarly, other researchers felt that anorexics and bulimics came from families that were highly enmeshed and exerted control over their daughters that resulted in problems with individuation, and that represented a desire to impose their own needs and wants on their children (Strober & Humphrey, 1987). These early viewpoints have been criticized for being biased and overgeneralized, in particular characterizing mothers of eating disorder patients as overly intrusive, jealous, and competitive with their daughters.

In spite of some of the criticism directed at the role that family of origin plays in the etiology of eating disorders, some important contributing factors still merit further investigation. For instance, the families' emphasis on weight and appearance has been shown to affect young women's perceptions of themselves and their own eating behaviors. This in turn may result in the development of disorders such as anorexia nervosa and bulimia nervosa, or dissatisfactions with one's body shape or weight. Dolan, Lieberman, Evans, & Lacey (1990) reported that bulimics rated their relationships with their parents as less positive than did controls due to poor verbal communication and deficiencies in emotional expression, such as lack of attention and affection. These types of environments in turn led to depressive symptomatology and eating pathology. As a unit the family tends to reflect themes that are prevalent within the sociocultural environment, and traditionally to encourage their children to adhere to whatever is deemed socially acceptable. For women, these themes focus on

slenderness and beauty as a means of obtaining the feminine ideal, and what one's family says or how they act may result in internalization of the thinness ideal promoted in our society (Twamley & Davis, 1999).

An individual may learn through societal messages or through what other people say that there is something wrong with their appearance, regardless of their clinical weight. Women who are obese or slightly overweight are even more prone to comments from others than are thin women. The parents of these individuals may also make direct comments or criticisms towards people who are overweight or who do not represent societal ideals of beauty. Thompson and Heinberg (1993) found that individuals who reported a history of teasing about their weight or bodies were more likely to report dissatisfaction and disturbed eating patterns in adolescence and later adulthood. This information was found to be true regardless of whether the teasing originated from parents or peer groups. Therefore, it is possible that in order to obtain the approval of their parents these individuals may feel the need to look a certain way. Women may also develop fear or concerns about being stigmatized as a result of their weight and physical appearance, versus being judged based on personality attributes and accomplishments. Indirect forms of coercion may include parents' restricting food intake, comments about dieting, or rules about mealtime structure (Smolak, Levine, & Schermer, 1999).

Investigators have speculated about the role of families in an individual's eating behavior, and the possibility of particular family scripts that are played out at mealtimes (Strober & Humphrey, 1987). Families of women with eating disorders may be more likely to engage in routines around food and eating that are associated with awareness

of one's physical appearance and body image. The family unit plays a crucial role in one's early relationship with food and how individuals act during mealtime experiences.

Studies focusing on adolescent girls have found that negative family relations, characterized by negative comments about weight and appearance, have been related to increased dieting and problematic body image (Byely, Archibald, Graber, & Brooks-Gunn, 2000). Individual family members may also promote an ideal body image through their dieting behaviors or weight concerns. For instance, parents who diet themselves are more likely than nondieting parents to suggest weight-loss methods to their children (Connors, 1996). Social learning via either behavioral or verbal messages impacts the individual's beliefs about acceptable physical appearance and conduct. Also, family modeling is implicated in the occurrence and development of cognitive distortions, whether it be through inconsistent feedback regarding one's weight or when parents make inaccurate comments about their own weight (Strober & Humphrey, 1987).

Likewise, as a child gets older and approaches adolescence, parents have been shown to evaluate their appearance more negatively (Striegel-Moore & Kearney-Cooke, 1994). Adolescence is the time period in which a young woman's body changes (e.g., becomes more curvaceous and stores more fat) as a result of going through puberty. Coincidentally, it is also during this time that a majority of women begin to develop eating disorders or experience body dissatisfaction for the first time in their lives. During adolescence young women may be unusually sensitive to their parents' comments, and if these views are negative, they may indirectly affect their daughter's body-esteem (Hahn-Smith & Smith, 2001). Another theory is that individuals with eating disorders come from families that are enmeshed and high in cohesion and that this allows for



messages to be easily transmitted about beauty and weight. Therefore, if an individual is enmeshed with her parents, she has not fully separated herself from her family of origin and is likely to be at increased risk for psychological problems (Striegel-Moore, Silberstein, & Rodin, 1986; Holston & Cashwell, 2000)

Mothers have been the focus of many studies that indicate that a mother's concern with weight influences her daughter's perception of her own body. Daughters learn not only sociocultural norms about appearance, but also how they should look and act based on their feminine gender role. Food may be viewed as a coping mechanism; adolescents may expect to alleviate negative feelings or boredom through watching their mother utilize food for affective improvement (MacBrayer, Smith, McCarthy, Demos, & Simmons, 2001). Eating disorders have also been found to be familial syndromes, occurring more frequently within families with a history of the disorder (Steiger, Stotland, Trottier, & Ghadirian, 1996). Research has particularly focused on the roles that mothers play by transmitting messages to their daughters about their weight or appearance. These ideas have been supported by social learning theorists that speculate that mothers may model aspects related to body dissatisfaction. Hahn-Smith and Smith (2001) suggested that emphasis has been placed on mothers because of the role that they potentially play in their daughter's identification with the feminine gender role and identity development. Young women may internalize socially constructed values about the feminine gender role not only through exposure to societal ideals but also through learning processes at home with their mothers.

The Interpersonal Vulnerability Model (Striegel-Moore & Smolak, 1996) suggests that early developmental interactions with one's parents as a child can influence the

onset of eating disorders. This model posits that individuals with inconsistent attachments to caregivers may turn to eating in order to alleviate stress resulting from an unreliable environment or incomplete identity formation. Individuals with an unstable sense of self or who are unable to cope with stress are more likely to be vulnerable to negative effects if others do not accept them.

The family plays a crucial role in mental health and healthy ego development, and is also the primary source of advice and guidance the child receives before becoming more dependent on peers. Within African American and Hispanic American families an individual's weight or body size may not be a prevalent issue within the family unit. For example, Parker et al. (1995) found that African American women did not report difficulties in their relationships with family members or significant others associated with them being overweight by medical standards. Some research showed that family members of African American women are more likely to comment that they are thin even if they were obese (Streigel-Moore & Smolak, 1996). Also, African American women are more likely than Caucasian women to receive positive feedback from family members and peers, about the way they look and dress and not as likely to be encouraged to diet or eat healthily. For example, Powell and Kahn (1995) found that African American women experienced less social pressure to be thin not only from family members, but from other groups such as peers and the opposite sex. Therefore, the sense of support that they receive from the family acts as a protective factor against the development of eating disorders within the African American community. Ideals associated with women also tend to focus more on personality traits a person exhibits versus their physical appearance. However, external attributes that do play an important

role include hygiene, attitude, and image rather than one's body weight (Thompson & Sargent, 2000). In contrast to the benefits African American women receive from their families, Caucasian women do not receive as much positive social support or comments regarding their appearance during adolescence. Comparable data on the influence that family factors have on the development of body image dissatisfaction has been limited and speculative.

In conclusion, for eating disorders as with other form of psychopathology, the role of family of origin has been documented to be influential. Likewise social pressures and negative messages from one's family has been shown to be meaningful. At each stage in the course of development to adulthood the status of one's family can influence an individual's body satisfaction.

#### How Acculturation Influences Minority Families

Degree of acculturation may play an interesting role in altering family dynamics within a minority household, and has been shown to create generational strains within families (Root, 2001). Issues present during adolescence and young adulthood may become magnified such as struggles with one's identity, peer relationships, and autonomy from one's parents. Matters related to ethnic identity development may also undergo significant changes at this time. A child's desire to acculturate and become more similar to the dominant culture could possibly cause an ideological division between parent and child, because those minority offspring may feel a strong pull to adopt Anglo societal values while rejecting more traditional norms or elements of their ethnic identity. This could result in further social isolation from one's family of origin or elements associated with one's ethnicity. Within ethnic minority groups these types of

changes in cultural values and increases in acculturative stress have been suggested as playing a role in the increasing prevalence of eating disorder symptomatology (Pate, Pumariega, Hester, & Garner, 1992; Perez, Voelz, Pettit, & Joiner, 2002).

It has been speculated that adolescence through young adulthood is a time of high acculturative stress whereby an individual may feel a strong need to assimilate with the dominant culture, or during which development of ethnic identity is undergoing a period of transition or instability. Minority women may abandon traditional aspects of their culture, due to the contradictory messages they may be receiving from their family of origin and the Anglo culture into which they wish to assimilate. Changes that occur during adolescence and young adulthood, such as identity development and pressure to acculturate and conform, could explain Gross and Rosen's (1988) findings that there were minimal differences in eating disordered behaviors of ethnic minority individuals and Caucasians. Likewise, Kuba and Harris (2001) found that family rigidity, defined as the family's overconcern with food; inflexible interactions between family members; and problematic mother-daughter relationships predicted bulimic symptoms and body preoccupation in Mexican American women. They speculated in their discussion that these difficulties within the family unit led to emotional distancing which in turn led to eating pathology. Therefore, minority women who endorse Anglo sociocultural views may show increased separation from family members, whereby rejecting one's family is a way of rejecting one's ethnic identity. The family may possibly represent one's closest and most salient tie to minority group membership.

The adoption of Anglo values and subsequent self-imposed alienation from one's family may be more pronounced in the Latino community versus the African American

community. Atkinson, Morton, and Sue (1979) felt that it was during the period of adolescence and young adulthood that members of minority groups may devalue or think negatively of their own ethnic group and show an increased desire to be accepted by the dominant group. This would include internalization of both the positive and negative viewpoints valued by mainstream Anglo culture. Therefore the purpose of the present study is to investigate the role of acculturation and body image dissatisfaction within ethnic minorities and how these factors relate to family dynamics.

### The Present Study

The overall purpose of this study is to determine whether some of the common etiological factors for body image dissatisfaction that have been associated with Caucasians may also be applicable to Hispanic and African American women. Predictors previously found to influence Caucasian women include being exposed to a sociocultural environment that emphasizes thinness and attractiveness and internalizing the messages presented by society. It is also believed that women who exhibit lower self-esteem or who are influenced by female gender stereotypes are more susceptible to eating disorders. Although emphasis has been placed on societal messages, characteristics of one's family of origin may also put one at risk. For example, studies have suggested that family environments characterized by lack of healthy separation between parent and child or early messages from an individual's parents or siblings about their appearance or weight may predispose women to body image disturbances. The present study hopes to readdress these variables in Caucasian women in addition to looking at their impact on minority women as well.

The general focus of this paper is to investigate whether stressors to acculturate coupled with body image dissatisfaction will create changes in the family relationships of minority women. The process of acculturation has been hypothesized to play a role in body image satisfaction, whereby those minority women that adopt Anglo values are likely to be susceptible to psychiatric conditions that have been more prevalent among Anglo-Americans, such as eating disorders. Although minority women are exposed to similar sociocultural environment as Caucasian women, the characteristics of their family unit and ethnic identity have been suggested to be protective factors. However, does the relationship a minority woman has with her family of origin change if she is higher in acculturation, endorses Anglo values, and is currently dissatisfied with her body? Unlike Caucasian women, who tend to display enmeshed family relationships that are low in separation, this study is designed to show that minority women will display more separation from their families as a way of rejecting their ethnic identity.

### Hypotheses

#### *Factors Associated with Body Image Dissatisfaction*

- (1) Women with high body image dissatisfaction will exhibit lower self-esteem scores.
- (2) Women who endorse family emphasis on weight will report more body image dissatisfaction.
- (3) Women who score high on Anglo acculturation will report more body image dissatisfaction.
- (4) Women who score high on internalization of sociocultural views will have more body image dissatisfaction.

- (5) Women who score high on Anglo acculturation will also score high on internalization of sociocultural views of attractiveness.

#### *Ethnic Group Differences*

- (6) Caucasian women will endorse more overall body image dissatisfaction than will minority women.
- (7) Hispanic women will display more overall body image dissatisfaction than will African American women.
- (8) African American women will display higher body image dissatisfaction scores than will Hispanic and Caucasian women on items that measure non-weight body areas.
- (9) African American women will have higher self-esteem than will Caucasian and Hispanic women.
- (10) Caucasian women will endorse more family emphasis on weight than will Hispanic and African American women.
- (11) Hispanic women will endorse higher levels of Anglo acculturation than will African American women.

#### *Overall Model*

- (12) Caucasians with body image dissatisfaction will show low levels of separation from their family than will Caucasians with body image satisfaction.
- (13) Minority women who endorse acculturation and body image dissatisfaction will have higher separation from family scores than will minority women who score low on Anglo acculturation and body image dissatisfaction.

## CHAPTER 2

### METHODS

#### Participants

The 302 participants in the study were women recruited from a population of undergraduate students at the University of North Texas (UNT) who were taking courses through the Department of Psychology. The proposed number of subjects for the study was 272 participants, in order to detect an effect size of .40 at the .05 level. The sample included 189 Caucasians, 48 Hispanics, and 65 African American women. Women between the ages of 18 and 30, mean age 20.52 ( $SD = 2.58$ ), were recruited during this study because body image dissatisfaction is more prevalent within this age group for both Caucasian and other minority groups. Individuals at this age, regardless of their ethnicity, are most likely to be undergoing a transition into adulthood during which issues relating to separation from one's family are likely to be relevant (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999; Ritvo, 1984). Participants who did not fit these criteria or who failed to complete the questionnaires were excluded from the study. The average height of the total sample is 64.80 inches ( $SD = 2.90$ ), ranging between 57.00 inches and 73.00 inches. The mean weight of the sample was 142.12 ( $SD = 31.36$ ), ranging from 90 to 290 pounds. The average preferred weight was reported to be 126.52 ( $SD = 16.90$ ), ranging from 90 to 185, and average difference between actual and preferred weight was 15.59 pounds ( $SD = 20.77$ ).

Average body mass index (BMI), was 23.78 ( $SD = 4.91$ ), with scores ranging from 15.95 to 44.28. The Center for Disease Control (2006) classifies individuals with BMI scores under 18.5 as underweight, 18.5 - 24.9 normal, 25.00 – 29.9 overweight,



and 30.0 and over are classified as obese. According to results from this study: 7.9% of the participants could be classified as underweight, 62.3% normal, 18.9% overweight, and 10.9% as obese. Means and standard deviations for the aforementioned demographic variables are listed in Table 1.

With regard to dieting behaviors of the sample, 20.9% of participants stated that they were currently on a diet while 79.1% said they were not. Past dieting was endorsed by 66.9% of participants, while 33.1% said that they have never attempted a diet. Of the individuals who reported past or current dieting, results were: 41.4% (1 to 5 diets), 11.6% (6 to 10 diets), 5.3% (11 to 15 diets), 2.6% (16 to 20 diets), and 6% (21 or more diets). When considering the total sample on level of satisfaction with current weight, 12.6% reported being very satisfied, 23.2% satisfied, 25.2% neutral, 27.5% dissatisfied, and 11.6% very dissatisfied. 16 participants (5.3% of the sample) admitted to being diagnosed with an eating disorder either in the past or currently. The frequencies of individuals diagnosed with particular types of eating disorders are as follows: 5 anorexia nervosa, 3 bulimia nervosa, 2 anorexia and bulimia nervosa, 1 obesity, and 3 participants classified their eating disorder as other. Information was collected regarding the participants' dieting behaviors and weight loss strategies, and results of these findings can be found in Table 2.

#### Procedure

Potential participants were recruited through general psychology courses and asked if they would like to participate in a study for extra credit, participation being optional. A sign up sheet for the study was posted in the psychology department and students were also able to log on to a Website offered through the psychology

Department to register for participation at scheduled times. This experimenter arrived at preapproved University of North Texas psychology classes in order to ask individuals if they wished to participate in the study. Participants who had signed up for the study on “Acculturation, Interpersonal Relationships, and Body Image in Women” in the psychology department were met by the experimenter at the designated time.

Psychology students were given extra credit for signing up and participating in research through the psychology Department. Students were informed that the study would involve them completing several questionnaires regarding the aforementioned topics.

First, the participants were given an informed consent form to read, after agreeing to participate in the study; due to its anonymity, no signature was required (Appendix A). Participants were told the directions to be followed on the different questionnaires, and how they were supposed to rate their answers on a Likert scale. Directions for each of the scales were provided in written form on each of the questionnaires. The participants were then asked to complete several self-administered questionnaires. The total testing time for this study was approximately thirty to sixty minutes. After the participants completed the materials, the experimenter conducted a short debriefing session. For larger testing formats such as mass testing, a written debriefing form was provided for the participant at completion of testing. The informed consent also provided contact numbers and services should any of the participants have specific concerns or negative effects as a result of participating in the study.

To minimize measurement reactivity, measures were presented in the following order: the Body Self-Relations Questionnaire, the Body Image Ideals Questionnaire, the Sociocultural Attitudes Towards Appearance Questionnaire – Revised: Female Version,

the Psychological Separation Inventory, the Childhood Family Mealtime Questionnaire, the Rosenberg Self-Esteem Scale, the Minority Majority Relations Survey, and a demographic questionnaire created by this researcher. In order to give information about ethnicity, participants self-identified their ethnic group on the demographic questionnaire included in the study packet. The open-ended demographic questions that were answered by participants provided information relating to exclusion criteria, which were ethnicities other than Caucasian, Hispanic, and African American and individuals over the age of thirty. Individuals matching these exclusion criteria were not included in data analysis.

### Measures

*The Multidimensional Body Self-Relations Questionnaire - Appearance Scales (MBSRQ-AS) (Cash, 1990).*

The MBSRQ-AS consists of five subscales including Appearance Evaluation, Appearance Orientation, Overweight Preoccupation, Self-Classified Weight, and Body Areas Satisfaction Scale (BASS). The respondent is asked to rate and evaluate her satisfaction with various aspects of her appearance. Using a 5 point Likert scale ranging from "*Definitely Disagree*" to "*Definitely Agree*." High scores on the Appearance Evaluation and Body Areas Satisfaction Scale designate satisfaction with one's physical appearance while low scores indicate dissatisfaction in this area. High scores on the Appearance Orientation scales indicate preoccupation or self-awareness in one's behavior and engagement in associated grooming behaviors. High scores on the Overweight Preoccupation and Self-Classified Weight subscales suggest concerns of being overweight or identifying oneself as overweight, respectively. The Cronbach's

alpha reliability listed for women on appearance evaluation and orientation is .88 and .85 respectively. The test-retest reliability for women on evaluation and orientation is .91 and .90 (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). Cronbach's coefficient alphas were computed for the subscales resulting in internal consistency scores of .87, .85, .79, .79, and .84 respectively.

*The Body-Image Ideals Questionnaire – Expanded (BIQ-Expanded; Szymanski & Cash, 1995).*

The BIQ determines how much a person varies from their ideal on eleven different physical characteristics and also rates the importance of meeting the ideal for that individual. The items are scored on a four point Likert scale and require subjects to rate their actual and ideal self-discrepancy and then how important that characteristic is to the individual participant. High scores on this scale imply that the individual views a discrepancy between actual and ideal body image for areas that they rated of high importance to them. The internal consistency reliability of the scale is .81 - .95 (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). The Cronbach's coefficient alpha was computed for this scale resulting in an internal consistency of .80.

*The Sociocultural Attitudes Towards Appearance Questionnaire-Revised: Female Version (SATAQ; Cusumano & Thompson, 1997).*

The SATAQ is a self-report questionnaire that measures an individual's awareness and endorsement of sociocultural beliefs of thinness and attractiveness, norms are available for both males and females. The scale consists of 21 items measured on a 5 point Likert scale ranging from "Completely Disagree" to "Completely Agree." Scoring involves adding an individual's cumulative score on the Internalization

and Awareness scales; high scores indicate endorsement and acknowledgement of cultural attitudes about appearance while low scores indicate unawareness and disapproval of these views. Internal consistency for the Internalization and Awareness scales were .89 and .83 respectively (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). Cronbach's coefficient alphas were computed to measure internal consistency resulting in .87 for the Internalization subscale and .82 for the Awareness subscale of the SATAQ.

*The Psychological Separation Inventory (PSI; Hoffman, 1984).*

The PSI measures an individual's degree of psychological separation from one's family of origin, specifically one's mother and father, within four specific domains. The measure is a self-report scale that consists of 138 items that are measured on a 5-point Likert scale ranging from "Not at all true of me" to "Very True of Me." The PSI has four subscales that include Functional Independence (an individual's ability to manage their own personal affairs without parental aid), Emotional Independence (freedom from excessive togetherness or need for parental support and approval), Conflictual Independence (freedom from excessive resentment, blame, and responsibility towards one's parents), and Attitudinal Independence (an individual having beliefs, values, and attitudes different than their parents). Scores for all these scales are computed for the individual's views of their mother and father separately. The mother and father scales have sixty-nine items each. High scores on the scale designate a large degree of separation or more adaptive separation, while low scores indicate the absence of separation or more pathological separation from one's parents. The Cronbach's alpha reliability listed for the four subscales range from .84 to .92 (Hoffman & Weiss, 1987).

Cronbach's coefficient alphas were computed for the four subscales resulting in internal consistency scores for functional, emotional, attitudinal, and conflictual independence from mother were found to be .89, .90, .92, and .89 respectively. Internal consistency scores for functional, emotional, attitudinal, and conflictual independence from father were found to be .91, .93, .91, and .94 respectively.

*The Childhood Family Mealtime Questionnaire (CFMQ; Miller & McCluskey-Fawcett, 1993).*

The CFMQ is a self-report measure that assesses early mealtime experiences with family members during childhood, focusing on the period before the age of thirteen. The CFMQ is a 69 item self-report scale; items are assessed on a 5-point Likert scale ranging from "Never" to "Always." The measure consists of seven factors labeled Mealtime Communication Based Stress, Mealtime Structure, Appearance-Weight Control, Parental Mealtime Control, Emphasis on Mother's Weight, Present Parental Meal Influence, and Traditional Family. High scores indicate more problematic mealtime environment or communication growing up. The Cronbach's coefficient alpha was computed for this scale resulting in an internal consistency of .85.

*The Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965).*

The RSE is a measure that assesses an individual's self-concept and how they feel about themselves. The scale consists of ten items measured on a four point Likert scale ranging from "Strongly Agree" to "Strongly Disagree"; half are scored in the reverse direction. Scoring involves calculating an individual's cumulative score on all ten items. High scores on the scale indicate high self-esteem while low scores indicate low self-esteem; scores range from 10 to 40. Internal consistency reliability ranges from .85

to .88 (Hoge & McCarthy, 1984). The Cronbach's coefficient alpha was computed for this scale resulting in an internal consistency of .90.

*The Minority-Majority Relations Survey (Sodowsky, 1991).*

The MMRS measures an individual's degree of acculturation toward their own ethnic cultural group or Anglo culture. The survey is composed of thirty-eight items. The measure is a self-report scale that consists of three subscales: Perceived Prejudice, Acculturation (Social Customs), and Language Usage. The acculturation scores are measured on a 6-point Likert scale ranging from "Agree Strongly" to "Disagree Strongly." The form asks the participant how well each of these characteristics or behaviors best describes them. Low scores on the scale indicate assimilation and endorsement of acculturation to Anglo society and high scores represent rejection of the dominant culture. Internal consistency reliability for the Perceived Prejudice, Acculturation (Social Customs), Language Usage, and the full scale are .88, .72, and .89, respectively (Osvold & Sodowsky, 1995). Cronbach's coefficient alphas were computed for the subscales resulting in internal consistency scores of .91, .39, .92, respectively. Internal consistency scores for the acculturation subscale were investigated using only the minority participants, and the following scores were obtained, .83 for Hispanics and .76 for African Americans.

*Demographic Questionnaire*

An open-ended demographic questionnaire was utilized to measure characteristics of the participants in the study. Items included on the demographic questionnaire were the participant's: age, subject's ethnicity, ethnicity of their mother and father, number of generations in the United States for subjects and parents, years

of education, and eating disorder symptomatology. Several questions were asked regarding the participant's dieting behavior and perception of their weight such as: what is your ideal weight, what do you consider to be a healthy weight for yourself, and how many diets have you engaged in. In addition, questions relating to the participant's height and weight were used in order to calculate the individual's body mass index. The demographic questionnaire can be found in Appendix B.

Several subscales that were available for use in this study were not included in analyses because either they were repetitive, past research did not provide reason to explore the particular construct, or they were not directly relevant to the hypotheses in this study. Specifically, the MBSRQ's Body Area Satisfaction Scale was highly correlated (i.e., .81) with its Appearance Evaluation Scale. Both are measures of body image or appearance satisfaction, but only the Appearance Evaluation Scale was selected for use in this study. Only the Conflictual, Emotional, and Attitudinal Subscales of the Psychological Separation Inventory were used, while the Functional Independence Subscale was excluded. This is because research has not focused on the relationship between development of eating disorders or body image problems and financial dependence on one's parents. Finally, only several items from the Body Image Ideals questionnaire were used in order to explore dissatisfaction with nonweight body areas, specifically items one (ideal height), item two (ideal skin complexion), item three (ideal hair texture and thickness, and item four (ideal facial features). Dissatisfaction with nonweight areas was calculated by adding the items together. Therefore, total scores for the other items from this scale were omitted in exploratory analysis. However,



for the benefit of other researchers, means and standard deviations for these scales were included in the tables listed in the appendix of this work.

## CHAPTER 3

### RESULTS

#### Descriptive Analyses

First, frequency distributions of the data were conducted on continuous demographic items, using the overall sample, in order to determine if these scores were normally distributed. Review of the demographics showed that several variables, age, weight, and body mass index, were not normal in distribution. The aforementioned variables were all positively skewed and leptokurtic. A possible explanation for this finding, with regards to weight and body mass index, is that eight participants had weights which were three standard deviations above the mean (i.e., 230 lbs.) therefore skewing the distribution. There were also sixteen participants, mainly within the Hispanic population, who may be classified as nontraditional college students (i.e., above the age of 25), resulting in a skew in the age distribution of participants. The participants' height was found to be normal in distribution. In order to investigate the impact of non-normality several transformations were performed in order to determine if the inequality would negatively impact the results (Field, 2005). Transformations did not lead to correction in the sample and therefore were not utilized in data analysis. Likewise, exclusion of outliers would have reduced the sample size and may have effected representative features of the sample.

The distributions of the overall sample's scores were also investigated for the scales used in this study. The Awareness subscale of the Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ) and the Conflictual Independence from One's Father and Mother subscales of the Psychological Separation Inventory (PSI)

were found to be negatively skewed. This finding suggests that most of the participants endorsed awareness of sociocultural norms of attractiveness and freedom from feelings of guilt, anger, or distrust of both their mother and father. The Appearance Weight Control Subscale of the Childhood Family Mealtime Questionnaire (CFMQ) was found to be positively skewed, indicating that most of the participants did not report that their families were overly critical of their appearance and weight during mealtimes when they were growing up.

Next, in order to determine whether findings from the research sample were similar to those found in previous research, t-tests were conducted to compare the present study means with previous studies. These comparisons were conducted using scores from the overall sample. Means and standard deviations for the overall sample and from past research are listed in Table 4. Significant findings are also denoted on this table.

The present sample differed significantly with previous research in the Internalization subscale of the SATAQ; the present sample reported less internalization of sociocultural norms of attractiveness than did Cusumano & Thompson's (1997) sample. There was also a significant difference on the Rosenberg Self-Esteem Scale (RSE); the present sample displayed lower self-esteem scores than Mendelson, Mclean, & Gavin's (2002) previous research.

Regarding the Psychological Separation Inventory, the present sample differed significantly from Hoffman's (1984) previous research on the Emotional Independence and Conflictual Independence from One's Mother subscales. This shows that compared with Hoffman's sample the present sample said they experienced less separation from

their mothers within the domains of emotional support and conflict. The present sample was more likely to be dependent on their mothers to meet their emotional needs for approval and support, but also endorsed feelings of guilt, anxiety, or resentment in connection with their mothers. In contrast, when rating their fathers, the present sample differed significantly with Hoffman's sample on Emotional Independence and Attitudinal Independence subscales, meaning they endorsed more separation from their fathers within these domains. Therefore, they were less reliant on their fathers to meet their emotional needs or in need of their approval and they displayed more independent attitudes, beliefs and values. There was also a significant difference in the opposite direction within the area of Conflictual Independence from One's Father, indicated that the present sample displayed more anxiety, anger, and resentment in relation to this parent than did participants in Hoffman's previous research. This is similar to the findings found in the present sample for Conflictual Independence from One's Mother.

The present sample differed significantly from previous research on the Appearance-Weight Control subscale of the Childhood Family Mealtime Questionnaire, indicating that the present sample reported that their families were less likely to emphasize appearance and weight concerns while they were growing up. Finally, there was a large difference in acculturation for Hispanic women as measured by the (Minority Majority Relations Survey (MMRS), in which the present sample displayed less acculturation than Sodowsky's sample (1991). Hispanic women in this study reported more affiliation with their minority group than past research  $t(47) = 4.29, p < .001$ . Adequate norms for African Americans on the Majority Minority Relations Scale could not be found at the time of this project; however, this samples mean and standard

deviation are available on Table 4. In addition, although norms from the present study are included comparable norms could not be located for Caucasian women and scores are likely biased based on the fact that the scale is intended for minority populations.

It is possible that the observed differences between the present sample and previous research norms may be attributed to the overall sample being used while most past research utilized either Caucasian or minority samples exclusively. Representative minority norms were not available for all the scales in this study. The means and standard deviations obtained on outcome variables by the three separate ethnic groups are listed in Table 4.

#### *Demographic by Demographic Analysis*

In order to examine ethnic group differences on categorical demographic items, Chi-square analyses were conducted. The ethnic groups were found to differ significantly on endorsement of past dieting behavior,  $\chi^2 (df = 2) = 8.07, p < .05$ ; and the following weight loss strategies: exercise  $\chi^2 (df = 2) = 6.92, p < .05$ , calorie restricting diets  $\chi^2 (df = 2) = 14.41, p < .001$ , and diuretics  $\chi^2 (df = 2) = 7.72, p < .05$ , view Table 2 for respective frequencies. Caucasians and Hispanics displayed higher frequencies than African Americans on all these outcome measures. No significant differences between the ethnic groups were found for purging, laxative use, and surgery as weight loss methods.

Next, ethnic group differences on continuous demographic variables were investigated utilizing one-way analyses of variance (ANOVAS), in order to determine whether there were any unexpected significant differences based on ethnicity that were not directly assessed in the hypotheses. The ethnic groups differed significantly in age

$F(2, 299) = 8.78, p < .001$ ; height,  $F(2, 299) = 7.59, p < .001$ ; weight,  $F(2, 299) = 4.88, p < .01$ ; and body mass index,  $F(2, 299) = 6.40, p < .01$ ; according to the Games-Howell Post Hoc analysis for unequal variances was utilized as shown in Table 1. However, the group differences varied in direction in the separate analyses.

For age, Hispanics ( $M = 21.92, SD = 3.92$ ) were found to be older than both Caucasians ( $M = 20.23, SD = 2.21$ ) and African Americans ( $M = 20.34, SD = 1.99$ ). With regards to height, Caucasians ( $M = 65.18, SD = 2.71$ ) and African Americans ( $M = 64.74, SD = 3.18$ ), were taller than Hispanics ( $M = 63.90, SD = 2.84$ ). African Americans ( $M = 152.65, SD = 36.71$ ) were found to weigh more than Caucasians ( $M = 139.67, SD = 29.44$ ) and Hispanics ( $M = 137.50, SD = 28.26$ ). Finally, African Americans ( $M = 25.57, SD = 5.61$ ) were found to have higher BMI scores than Caucasians ( $M = 23.10, SD = 4.91$ ).

In addition to its use as a continuous score body mass index was classified as a categorical variable based on the criteria from the Center for Disease Control mentioned earlier, and included in analysis of demographics. A significant age difference was found for BMI groups,  $F(3, 298) = 2.96, p < .05$ , obese women ( $M = 21.52, SD = 2.39$ ) were older than women categorized in the normal range ( $M = 20.22, SD = 2.41$ ) of the BMI. Similar findings were found between age and BMI when this variable was classified as a continuous variable.

Correlations, using two-tailed tests of significance, were run on the continuous demographic variables for the overall sample and for each ethnic group, in order to assess degree of association. Table 6 lists the correlations and significance values of the overall sample and separate ethnic groups. Correlations between the demographic

variables were generally consistent between the three ethnic groups. However, the relationship between age and several demographic variables was found to vary in significance and direction when the ethnic groups were examined separately. For Caucasian and African American participants, age was positively correlated with weight and body mass index. Older Caucasian and African American women weighed more and had higher BMI scores, than did their younger counterparts. For Hispanic participants, age was positively correlated with height. Older Hispanic women were taller than younger Hispanic women.

Trends for the remaining demographic variables using the overall sample are outlined below do the consistency in results among the three ethnic groups. There was a significant positive relationship between height and weight, indicating taller women weighed more. Weight was also found to be related to body mass index and to how many times an individual had attempted a diet. Heavier women had higher body mass index scores and dieted more frequently. Finally, number of attempted diets was correlated with body mass index; women who had attempted more diets had higher body mass index scores.

#### *Demographic by Scale Analyses – Comparison of Means*

The associations between categorical demographic variables and continuous outcome variables were calculated utilizing one-way analyses of variance (ANOVAS), in order to determine if the means of the predictor variables differed for either ethnicity or body mass index. See Table 5 for results based on subject's ethnicity. Unexpected significant findings for these two demographic variables that were not assessed in the hypotheses are presented below. Ethnic groups differed significantly on internalization

of sociocultural views of appearance and emotional independence from one's mother. On the Internalization subscale of the SATAQ, using Tukey's post hoc analysis, Caucasians ( $M = 34.97$ ,  $SD = 7.56$ ) and Hispanics ( $M = 33.44$ ,  $SD = 8.52$ ) were more likely to endorse internalization of sociocultural views of beauty and thinness than African Americans did ( $M = 29.02$ ,  $SD = 8.98$ ),  $F(2, 299) = 13.26$ ,  $p < .001$ . On the Emotional Independence from one's mother subscale on the PSI, Caucasians ( $M = 39.20$ ,  $SD = 13.63$ ) endorsed more independence from their mother within the area of emotional support than African Americans did ( $M = 34.09$ ,  $SD = 15.55$ ),  $F(2, 299) = 3.22$ ,  $p < .05$ . However, when age of the participant was used as a covariate, emotional independence from one's mother no longer differed significantly between these groups.

When individuals were classified according to body mass index (i.e., underweight, normal, overweight, obese) the groups differed significantly on the Appearance Evaluation subscale of the Multidimensional Body Self Relations Questionnaire (MBSRQ), the Rosenberg Self-esteem Scale, and the Appearance Weight Control Subscale of the Childhood Family Mealtime Questionnaire. On the Appearance Evaluation subscale, Games-Howell Post Hoc analysis (used due to unequal variances) suggested that underweight ( $M = 3.54$ ,  $SD = .58$ ) and normal women ( $M = 3.68$ ,  $SD = .60$ ) were more satisfied with their appearance than overweight ( $M = 3.04$ ,  $SD = .82$ ) and obese women ( $M = 2.55$ ,  $SD = .57$ ), and overweight women were more satisfied than obese women were,  $F(3, 298) = 38.14$ ,  $p < .001$ . Results on the Rosenberg Self-Esteem scale suggested that normal weight women ( $M = 31.56$ ,  $SD = 4.84$ ) had higher self-esteem than did obese women ( $M = 27.97$ ,  $SD = 5.36$ ),  $F(3, 298) = 4.51$ ,  $p < .001$ . Finally, on the Appearance Weight Control Subscale of the CFMQ,



Games-Howell Post Hoc analysis for unequal variances suggested that overweight ( $M = 2.51$ ,  $SD = 1.06$ ) and obese women ( $M = 2.68$ ,  $SD = 1.06$ ) endorsed that their families emphasized weight and appearance at mealtimes growing up more frequently than did underweight ( $M = 1.79$ ,  $SD = .53$ ) and normal women ( $M = 1.93$ ,  $SD = .76$ ),  $F(3, 298) = 13.72$ ,  $p < .001$ . Further analysis based on BMI categories could not be conducted for the separate ethnic groups because there were not a sufficient number of participants in each category.

#### *Demographic by Scale Analyses – Correlations Using Overall Sample*

Correlations were also conducted on demographic variables and the outcome variables using the overall sample in order to determine if there was a relationship between any of these variables. Only unexpected significant findings that were not addressed in the hypotheses are discussed below. See Tables 7 thru 9 for a complete listing of correlations of demographic and outcome variables.

Age was correlated with Conflictual Independence from One's Mother and Father on the PSI,  $r = .14$ ,  $p < .05$  and  $r = .12$ ,  $p < .03$ , respectively. Older women displayed less guilt, anxiety, or resentment in connection with their parents than younger women did. Age was also correlated with Attitudinal Independence from One's Father on the PSI,  $r = .13$ ,  $p < .03$ . Older women reported attitudes and beliefs that were separate from their father's views, while younger women had attitudes similar to their fathers'.

Weight was correlated negatively with the Appearance Evaluation subscale of the MBSRQ-AE scale,  $r = -.47$ ,  $p < .001$ . High scores on the Appearance Evaluation subscale indicate satisfaction with appearance. Heavier women evaluated their appearance more negatively than did lighter weight women. Weight was also correlated

with the Appearance Weight Control subscale of the CFMQ,  $r = .29, p < .001$ . Heavier women endorsed that their families emphasized weight and appearance concerns more than women who weighed less did.

Body mass index (BMI) was correlated with the Appearance Evaluation subscale of the MBSRQ,  $r = -.50, p < .001$ . This indicates that individuals with higher BMI scores evaluated their appearance more negatively than did individuals with lower BMI scores. BMI was correlated with the Rosenberg Self-Esteem Scale,  $r = -.14, p < .05$ . Women with higher BMI scores reported lower self-esteem than women with lower BMI scores did. BMI was also correlated with the Appearance Weight Control subscale of the CFMQ,  $r = .35, p < .001$ . Women with high BMI scores endorsed that their families emphasized weight and appearance concerns more frequently when they were younger than did women with lower BMI scores.

Number of diets an individual has attempted was correlated with the Appearance Evaluation subscale of the MBSRQ,  $r = -.43, p < .001$ . This indicates that individuals who have attempted more diets in the past also tend to evaluate their appearance more negatively than did those who had attempted fewer diets. Past dieting was also correlated with the Internalization subscale of the SATAQ,  $r = .34, p < .001$ . Women who reported more past dieting were more likely to internalize cultural beliefs of appearance and beauty than were women who had dieted less. Past dieting was correlated with the Rosenberg Self-Esteem Scale,  $r = -.30, p < .001$ . Women who dieted frequently reported lower self-esteem than did women who had dieted less. Past dieting was correlated with Attitudinal Independence from One's Father on the PSI,  $r = .13, p < .05$ . Women who reported more past dieting displayed attitudes and beliefs that are

independent of their father's views more so than did women who had dieted less frequently. Finally, past dieting was correlated with the Appearance Weight Control subscale of the CFMQ,  $r = .49, p < .001$ . Women who reported more past dieting endorsed that their families emphasized weight and appearance concerns more frequently when they were younger than did women who had dieted less frequently in the past.

#### *Demographic by Scale Analysis - Caucasian Sample*

For Caucasian participants, age was correlated with Conflictual Independence from One's Mother and Father on the PSI,  $r = .21, p < .01$  and  $r = .16, p < .05$ , respectively. Older Caucasian women displayed less guilt, anxiety, or resentment in connection with their parents than younger Caucasian women did.

Weight was correlated with the Appearance Evaluation subscale of the MBSRQ,  $r = -.52, p < .001$ . Heavier Caucasian women evaluated their appearance more negatively than lighter weight women did. Weight was also correlated with the Appearance Weight Control subscale of the CFMQ,  $r = .32, p < .001$ . Heavier Caucasian women endorsed that their families emphasized weight and appearance concerns more than women who weighed less did.

Body mass index (BMI) was correlated with the Appearance Evaluation subscale of the MBSRQ,  $r = -.52, p < .001$ . This indicates that Caucasian women with higher BMI scores evaluated their appearance more negatively than did women with lower BMI scores. BMI was also correlated with the Appearance Weight Control subscale of the CFMQ,  $r = .39, p < .001$ . Caucasian women with higher BMI scores endorsed that their

families emphasized weight and appearance concerns more frequently when they were younger than did women with lower BMI scores.

Number of diets an individual has attempted was correlated with Appearance Evaluation subscale of the MBSRQ,  $r = -.42, p < .001$ . Caucasians who have attempted more diets in the past evaluated their appearance more negatively than did women who dieted less frequently. Past dieting was correlated with the Internalization subscale of the SATAQ,  $r = .41, p < .001$ . Caucasian women who reported more past dieting were more likely to internalize cultural beliefs of appearance and beauty than did women who had dieted less. Past dieting was correlated with the Rosenberg Self-Esteem Scale,  $r = -.28, p < .001$ . Women who had dieted more frequently in the past had lower self-esteem than did women who had dieted less frequently. Past dieting was correlated with the Appearance Weight Control subscale of the CFMQ,  $r = .44, p < .001$ . Caucasian women who reported more past dieting appear to endorse that their families emphasized weight and appearance concerns more frequently when they were younger than did Caucasian women who reported less past dieting.

#### *Demographic by Scale Analysis - Hispanic Sample*

For Hispanic participants weight was correlated with the Appearance Evaluation subscale of the MBSRQ,  $r = -.46, p < .001$ . Heavier Hispanic women evaluated their appearance more negatively than lighter weight Hispanic women did. Weight was correlated with Conflictual Independence from One's Father on the PSI,  $r = -.30, p < .05$ . Heavier Hispanic women reported that they experience higher levels of guilt, anxiety, or resentment in connection with their fathers than did Hispanic women who weighed less. Weight was also correlated with the Appearance Weight Control subscale

of the CFMQ,  $r = .42, p < .01$ . Heavier Hispanic women endorsed that their families emphasized weight and appearance concerns more than did women who weighed less.

Body mass index (BMI) was correlated with the Appearance Evaluation subscale of the MBSRQ,  $r = -.46, p < .001$ . This indicates that Hispanic women with higher BMI scores also tend to evaluate their appearance more negatively than Hispanic women with lower BMI scores did. BMI was also correlated with the Appearance Weight Control subscale of the CFMQ,  $r = .34, p < .05$ . Hispanic women with higher BMI scores appear to endorse that their families emphasized weight and appearance concerns more frequently when they were younger than did women with lower BMI scores.

Number of diets an individual has attempted was correlated with Appearance Evaluation subscale of the MBSRQ,  $r = -.44, p < .01$ . This suggests that Hispanic women who have attempted more diets in the past also tend to evaluate their appearance more negatively than Hispanic women who have dieted less. Past dieting was correlated with the Internalization subscale of the SATAQ,  $r = .46, p < .001$ . This suggests that Hispanic women who reported more past dieting also are more likely to internalize cultural beliefs of appearance and beauty than Hispanic women who reported dieting less often. Past dieting was correlated with the Rosenberg Self-Esteem Scale,  $r = -.39, p < .01$ . Hispanic women who endorsed more past dieting tend to have lower self-esteem than Hispanic women who dieted less frequently. Past dieting was correlated with Emotional Independence and Conflictual Independence from One's Father on the PSI,  $r = .30, p < .05$  and  $r = -.35, p < .01$ , respectively. This suggests Hispanic women who endorsed more past dieting reported being less reliant on their fathers for emotional support and they are more likely to experience higher levels of

guilt, anxiety, or resentment in connection with their fathers than Hispanic women who dieted less frequently. Past dieting was correlated with the Appearance Weight Control subscale of the CFMQ,  $r = .62, p < .001$ . Hispanic women who reported more past dieting endorsed that their families emphasized weight and appearance concerns more frequently when they were younger than Hispanic women who reported dieting less often.

#### *Demographic by Scale Analysis – African American Sample*

For African American participants height was correlated with Emotional Independence from One's Father on the PSI,  $r = .26, p < .05$ . Taller African American women appear less dependent on their fathers for emotional support as compared to shorter African American women.

Weight was correlated with the Appearance Evaluation subscale of the MBSRQ scale,  $r = -.48, p < .001$ . Heavier African American women appear to evaluate their appearance more negatively than did lighter weight women.

BMI was correlated with the Appearance Evaluation subscale of the MBSRQ,  $r = -.61, p < .001$ . This suggests that African American women with higher BMI scores also tend to evaluate their appearance more negatively than African American women with lower BMI scores. BMI was correlated with the Rosenberg Self-Esteem Scale,  $r = -.34, p < .01$ . African American women with higher BMI scores appear to have lower self-esteem than African American women with lower BMI scores. BMI was also correlated with the Appearance Weight Control subscale of the CFMQ,  $r = .34, p < .01$ . African American women with higher BMI scores appear to endorse that their families

emphasized weight and appearance concerns more frequently when they were younger than did women with lower BMI scores.

Number of diets an individual has attempted was correlated with Appearance Evaluation subscale of the MBSRQ,  $r = -.45$ ,  $p < .001$ . This suggests that African Americans who have attempted more diets in the past also tend to evaluate their appearance more negatively than African American women who had dieted less. Past dieting was correlated with the Internalization subscale of the SATAQ,  $r = .26$ ,  $p < .05$ . This suggests that African American women who reported more past dieting also are more likely to internalize cultural beliefs of appearance and beauty than African American women who had attempted fewer diets. Past dieting was correlated with the Appearance Weight Control subscale of the CFMQ,  $r = .40$ ,  $p < .001$ . African American women who reported more past dieting endorsed that their families emphasized weight and appearance concerns more frequently when they were younger than African American women who reported less past dieting. Past dieting was correlated with the Acculturation subscale on the MMRS,  $r = -.31$ ,  $p < .01$ . This suggests that African American women who reported more past dieting also endorsed higher levels of acculturation or assimilation to Anglo-culture than African American women who dieted less frequently.

#### *Scale by Scale Analysis – Overall Sample*

Correlations were also conducted on all the subscales used in the study that were not directly analyzed in the hypotheses, in order to determine if the subscales displayed a significant relationship with one another. See Table 10 through 14 for listing of correlations. Some general patterns were noted in these correlational analyses. For

all the racial groups, families that emphasized weight and appearance at mealtimes were more likely to have daughters who internalized sociocultural views of attractiveness and also exhibited lower self-esteem. Likewise, for all the racial groups internalization was associated with lower self-esteem. Finally, problems relating to conflictual independence were noted for each of the ethnic groups for families that emphasized appearance and weight concerns. This finding will be discussed in more detail below with each ethnic group separately.

For the overall sample, the Appearance Evaluation subscale was positively correlated with the Conflictual Independence and negatively with Attitudinal Independence from One's Father subscales of the PSI,  $r = .13, p < .05$ , and  $r = -.19, p < .001$ , but was not significantly related to the same scale for mothers. This result suggests that women who evaluated their appearance more negatively exhibited more guilt, anxiety, or resentment in connection to their fathers and less independence from their fathers with the domains of attitudes and beliefs. Finally, the Appearance Evaluation subscale was correlated with the Acculturation subscale of the MMRS,  $r = .18, p < .01$ . Women who evaluated their appearance more negatively endorsed higher levels of acculturation or assimilation to Anglo culture than did women who viewed their appearance more positively.

The Internalization subscale of the SATAQ was correlated with the Rosenberg Self-Esteem Scale,  $r = -.42, p < .001$ . Women who internalize sociocultural views of thinness and appearance had lower self-esteem than women who rejected these beliefs. The Internalization subscale of the SATAQ was negatively correlated with the Conflictual Independence from One's Mother but not Father subscale of the PSI,  $r = -$



.13,  $p < .05$ . This suggests that women who display more internalization of our culture's emphasis on thinness and beauty are more likely to endorse negative feelings, such as guilt, resentment, or anxiety, related to their relationship with their mother. The Internalization subscale of the SATAQ was correlated with the Acculturation subscale of the MMRS,  $r = -.20$ ,  $p < .001$ . Women who endorsed internalization of our culture's emphasis on thinness and beauty also endorsed acculturation or assimilation to Anglo-culture.

The Rosenberg Self-Esteem Scale was negatively correlated with Emotional Independence and Attitudinal Independence from One's Mother,  $r = -.16$ ,  $p < .01$  and  $r = -.18$ ,  $p < .01$ , and One's Father,  $r = -.19$ ,  $p < .001$ , and  $r = -.22$ ,  $p < .001$ , respectively. Women with higher self-esteem were less independent from both parents within the areas of needing approval, closeness, and emotional support and were less likely to endorse having beliefs and attitudes which are separate from their parents' than were women with lower self-esteem. The Rosenberg Self-Esteem Scale was positively correlated with Conflictual Independence from One's Mother,  $r = .25$ ,  $p < .001$ , and Father,  $r = .23$ ,  $p < .001$ . Women with higher self-esteem endorsed being without negative feelings, such as guilt, resentment, or anxiety, related to their relationship with their parents in comparison to women with lower self-esteem. The Rosenberg Self-Esteem Scale was correlated with the Appearance Weight Control subscale of the CFMQ,  $r = -.25$ ,  $p < .001$ , and the Acculturation subscale of the MMRS,  $r = .21$ ,  $p < .001$ . Women with higher self-esteem endorsed that their families emphasized weight and appearance concerns at mealtime more so than women with lower self-esteem did.

They also endorsed lower levels of acculturation to Anglo-values than did minority women with lower self-esteem.

The Emotional Independence from One's Mother subscale of the PSI was correlated with the Conflictual and Attitudinal Independence from One's Mother subscale,  $r = -.22, p < .001$  and  $r = .56, p < .001$ , respectively and the Conflictual Independence subscale was correlated with Attitudinal Independence,  $r = -.19, p < .001$ . This result suggests that women who are free from the need for excessive emotional support of their mother endorsed more negative feelings, such as guilt, resentment, or anxiety, related to their relationship with their mothers; however, they tend to have attitudes and beliefs independent from their mothers.

The Emotional Independence from One's Father subscale of the PSI was correlated with the Conflictual and Attitudinal Independence from One's Father subscale,  $r = -.22, p < .001$  and  $r = .61, p < .001$ , respectively, and the Conflictual Independence subscale was correlated with the Attitudinal Independence subscale,  $r = -.17, p < .01$ . This result suggests who women that are free from the need for excessive emotional support of their father endorsed more negative feelings, such as guilt, resentment, or anxiety, related to their relationship with their fathers; however, they reported having attitudes and beliefs independent from their fathers

The Emotional Independence from One's Mother subscale converged with the Emotional and Attitudinal Independence from One's Father subscales,  $r = .31, p < .001$  and  $r = .21, p < .001$ , respectively, and the Attitudinal Independence from One's Mother subscale converged with the Emotional and Attitudinal Independence from One's Father subscales,  $r = .21, p < .001$  and  $r = .55, p < .001$ . This result suggests that women who

are free from the need for excessive emotional support from their mother and endorse attitudes different from hers also display more independence from their fathers within the areas of emotional support and attitudes and beliefs. The Conflictual Independence from One's Mother subscale of the PSI covered with the Conflictual Independence from One's Father subscale,  $r = .45, p < .001$ . This result suggests that women who are free from negative feelings such as guilt, resentment, and anxiety in their relationship with their mother also appear to be free from these feelings in their relationship with their father.

The Psychological Separation Inventory scales for the two parents were also correlated with the Appearance Weight Control subscale and the Acculturation subscale (see table 14). The Conflictual Independence from One's Mother and Father subscale of the PSI was negatively correlated with the Appearance Weight Control subscale of the CFMQ,  $r = -.18, p < .01$ , and  $r = -.22, p < .001$ , respectively. Women who express more negative feelings such as guilt, resentment, and anxiety in their relationship with their parents also endorsed that their families emphasized weight and appearance concerns at mealtime growing up.

The Emotional Independence from One's Mother subscale of the PSI was correlated with the Acculturation subscale of the MMRS,  $r = -.12, p < .03$ , and so was the Attitudinal Independence from One's Mother subscale,  $r = -.16, p < .01$ . Women who are less reliant on their mothers for emotional support and who had separate beliefs and attitudes were more acculturated to Anglo values than are women who reported reliance on their mothers for support and similar beliefs systems.

*Scale by Scale Analysis – Caucasian Sample*

Correlations were also conducted separately by ethnic group on all the subscales used in the study, in order to determine whether the subscales displayed significant relationships with one another. These are correlations not directly assessed in the hypotheses. See Table 10 through 14 for listing of correlations for Caucasian participants. Some general patterns were noted in these correlational analyses. For Caucasian females family emphasis on weight and appearance was related to unhealthy conflictual relationships with both one's mother and father. Individuals whose families expressed appearance concerns were more likely to report negative feelings towards their parents. Also, Caucasian females who reported attitudes similar to their mothers also were more likely to internalize sociocultural views of attractiveness. Finally, Caucasian women with higher self-esteem reported more reliance on their fathers for emotional support, similar attitudes and beliefs as their fathers, and displayed an absence of negative affect towards both their parents. The opposite is true for Caucasian women with lower self-esteem.

The Internalization subscale of the SATAQ was also correlated with the Rosenberg Self-Esteem Scale,  $r = -.32, p < .001$ . Caucasian women with higher self-esteem are less likely to internalize sociocultural views of thinness and appearance than Caucasian women with lower self-esteem. The Internalization subscale of the SATAQ was correlated with the Attitudinal Independence from One's Mother subscales of the PSI,  $r = -.16, p < .05$ , respectively. Caucasian women who displayed more internalization of our culture's emphasis on thinness and beauty endorsed attitudes and beliefs similar to their mothers.

The Rosenberg Self-Esteem Scale was correlated with the Conflictual Independence from One's Mother subscale,  $r = .18, p < .05$ . Caucasian women with higher self-esteem endorsed being without negative feelings, such as guilt, resentment, or anxiety, related to their relationship with their mother in comparison to Caucasian women with lower self-esteem. The Rosenberg Self-Esteem Scale was also correlated with Emotional, Conflictual and Attitudinal Independence from One's Father subscale,  $r = -.24, p < .001, r = .14, p < .05, \text{ and } r = -.27, p < .001$ , respectively. This suggests that Caucasian women with higher self-esteem seem to exhibit less independence from their fathers within the areas of emotional support, and beliefs and attitudes; however, they also endorsed being without negative feelings, such as guilt, resentment, or anxiety, related to this parent in comparison to Caucasian women with lower self-esteem. The Rosenberg Self-Esteem Scale was correlated with the Appearance Weight Control subscale of the CFMQ,  $r = -.22, p < .01$ . Caucasian women with higher self-esteem endorsed that their families were less likely to emphasize weight and appearance concerns at mealtime than were Caucasian women with lower self-esteem.

The Emotional Independence from One's Mother subscale of the PSI was correlated with the Conflictual and Attitudinal Independence from One's Mother subscale,  $r = -.26, p < .001$  and  $r = .51, p < .001$ , respectively and the Conflictual Independence subscale was correlated with Attitudinal Independence,  $r = -.19, p < .01$ . This result suggests that Caucasian women who are free from the need for excessive emotional support of their mother endorsed more negative feelings, such as guilt, resentment, or anxiety, related to their relationship with their mothers; however, they tend to have attitudes and beliefs independent from their mothers.

The Emotional Independence from One's Father subscale of the PSI was correlated with the Conflictual and Attitudinal Independence from One's Father subscale,  $r = -.24, p < .001$  and  $r = .64, p < .001$ , respectively, and the Conflictual Independence subscale was correlated with the Attitudinal Independence subscale,  $r = -.22, p < .01$ . This result suggests who Caucasian women that are free from the need for excessive emotional support of their father endorsed more negative feelings, such as guilt, resentment, or anxiety, related to their relationship with their fathers; however, they reported having attitudes and beliefs independent from their fathers

The Emotional Independence from One's Mother subscale converged with the Emotional and Attitudinal Independence from One's Father subscales,  $r = .32, p < .001$  and  $r = .27, p < .001$ , respectively, and the Attitudinal Independence from One's Mother subscale converged with the Emotional and Attitudinal Independence from One's Father subscales,  $r = .15, p < .05$  and  $r = .57, p < .001$ . This result suggests that Caucasian women who are free from the need for excessive emotional support from their mother and endorse attitudes different from hers also display more independence from their fathers within the areas of emotional support and attitudes and beliefs. The Conflictual Independence from One's Mother subscale of the PSI covered with the Conflictual Independence from One's Father subscale,  $r = .48, p < .001$ . This result suggests that Caucasian women who are free from negative feelings such as guilt, resentment, and anxiety in their relationship with their mother also appear to be free from these feelings in their relationship with their father.

The Psychological Separation Inventory scales for the two parents were also correlated with the Appearance Weight Control subscale for Caucasian women (see

table 14). The Conflictual Independence from One's Mother and Father subscale of the PSI was negatively correlated with the Appearance Weight Control subscale of the CFMQ,  $r = -.18, p < .01$ , and  $r = -.18, p < .05$ , respectively. Caucasian women who express more negative feelings such as guilt, resentment, and anxiety in their relationship with their parents also endorsed that their families emphasized weight and appearance concerns at mealtime growing up.

#### *Scale by Scale Analyses – Hispanic Sample*

Some general patterns were noted in the correlational analyses for Hispanic participants (see Table 10 through 14). For Hispanic women family emphasis on weight and appearance was related to unhealthy conflictual relationships with one's father. Individuals whose families expressed appearance concerns were more likely to report negative feelings towards their fathers. Likewise, Hispanic women who displayed lack of conflictual separation from their fathers were more dissatisfied with their body image, more likely to internalize sociocultural views of attractiveness and exhibit lower self-esteem. The opposite is true for Hispanic women without conflictual ties to their fathers. Finally, Hispanic women with high self-esteem were more likely to report lack of conflict with both parents in comparison to Hispanic women with lower self-esteem.

For the Hispanic sample, the Appearance Evaluation subscale was correlated with the Conflictual Independence from One's Father subscale on the PSI,  $r = .40, p < .01$ . Hispanic women who evaluated their appearance more negatively exhibited more negative feelings such as guilt, resentment, and anxiety in their relationship with their fathers in comparison to Hispanic women who viewed their appearance positively.

The Internalization Subscale of the SATAQ was correlated with the The Rosenberg Self-Esteem Scale,  $r = -.49, p < .001$ . Hispanic women with higher self-esteem were less likely to internalize sociocultural views of thinness and appearance than Hispanic women with lower self-esteem. The Internalization subscale of the SATAQ was correlated with the Conflictual Independence from One's Father subscale of the PSI,  $r = -.32, p < .05$ . Hispanic women who displayed more internalization of our culture's emphasis on thinness and beauty endorsed more negative feelings, such as guilt, resentment, or anxiety, related to their relationship with their father than Hispanic women who did not internalize these views. The Internalization subscale of the SATAQ was correlated with the Appearance Weight Control subscale of the CFMQ,  $r = .51, p < .001$ . Hispanic women who displayed higher levels of internalization of our culture's emphasis on thinness and beauty endorsed that their families emphasized weight and appearance concerns at mealtime growing up more so than Hispanic women who did not internalize these views.

The Rosenberg Self-Esteem Scale was correlated with the Conflictual Independence from One's Mother and Father subscale of the PSI,  $r = .46, p < .001$  and  $r = .40, p < .01$ , respectively. Hispanic women with higher self-esteem were more likely to endorse being without negative feelings, such as guilt, resentment, or anxiety, related to their relationship with their mother and father than Hispanic women with lower self-esteem. The Rosenberg Self-Esteem Scale was correlated with the Appearance Weight Control subscale,  $r = -.32, p < .05$ . Hispanic women with higher self-esteem endorsed that their families were less likely to emphasized weight and appearance concerns at mealtime than Hispanic women with lower self-esteem.



The Emotional Independence from One's Mother subscale of the PSI was correlated with the Conflictual and Attitudinal Independence from One's Mother subscale,  $r = -.48, p < .001$  and  $r = .59, p < .001$ , respectively and the Conflictual Independence subscale was correlated with Attitudinal Independence,  $r = -.33, p < .05$ . This result suggests that Hispanic women who are free from the need for excessive emotional support of their mother endorsed more negative feelings, such as guilt, resentment, or anxiety, related to their relationship with their mothers; however, they tend to have attitudes and beliefs independent from their mothers.

The Emotional Independence from One's Father subscale of the PSI was correlated with the Conflictual and Attitudinal Independence from One's Father subscale,  $r = -.40, p < .01$  and  $r = .64, p < .001$ , respectively, and the Conflictual Independence subscale was correlated with the Attitudinal Independence subscale,  $r = -.38, p < .01$ . This result suggests who Hispanic women that are free from the need for excessive emotional support of their father endorsed more negative feelings, such as guilt, resentment, or anxiety, related to their relationship with their fathers; however, they reported having attitudes and beliefs independent from their fathers

The Attitudinal Independence from One's Mother subscale converged with the Attitudinal Independence from One's Father subscales,  $r = .60, p < .001$ . This result suggests that Hispanic women who attitudes and beliefs similar to their mothers also had beliefs similar to their father. While women who had beliefs separate from their mothers also had beliefs that differed from their fathers. The Conflictual Independence from One's Mother subscale of the PSI converged with the Conflictual Independence from One's Father subscale,  $r = .42, p < .01$ . This result suggests that Hispanic women

who are free from negative feelings such as guilt, resentment, and anxiety in their relationship with their mother also appear to be free from these feelings in their relationship with their father.

Finally, the Conflictual Independence from One's Father subscale of the PSI was negatively correlated with the Appearance Weight Control subscale of the CFMQ,  $r = -.36, p < .05$ . Hispanic women who express more negative feelings such as guilt, resentment, and anxiety in their relationship with their father also endorsed that their families emphasized weight and appearance concerns at mealtime growing up.

#### *Scale by Scale Analysis – African American Sample*

Some general patterns were noted in the correlational analyses for African American participants (see Table 10 through 14). For African American women family emphasis on weight and appearance was related to unhealthy conflictual relationships with one's father. Individuals whose families expressed appearance concerns were more likely to reported negative feelings towards their fathers. Also, acculturated African American women had lower self-esteem, displayed attitudes and beliefs separate from both parents, and reported a more conflictual relationship with their father. The opposite was found to be true less acculturated African American women. Finally, African American women with high self-esteem displayed attitudes and beliefs similar to their mothers and were more reliant on their mothers for emotion support; however, less reliant on their fathers for emotional support. Also, African American women with higher self-esteem did not display conflictual relationships with either parent. The opposite was found to be true for African American women with lower self-esteem.

For the African American sample, The Appearance Evaluation subscale was with the Conflictual and Attitudinal Independence from One's Father subscale on the PSI,  $r = .27, p < .05$  and  $r = -.25, p < .05$ . African American women who evaluated their appearance more negatively exhibited more negative feelings such as guilt, resentment, and anxiety in their relationship with their fathers; and are more likely to endorse attitudes independent from their fathers.

The Internalization subscale of the SATAQ was correlated with the Rosenberg Self-Esteem Scale,  $r = -.50, p < .001$ . African American women with higher self-esteem are less likely to internalize sociocultural views of thinness and appearance than African American women with lower self-esteem. The Internalization subscale of the SATAQ was correlated with the Conflictual Independence from One's Mother subscale,  $r = -.34, p < .01$ . African American women who displayed more internalization of our culture's emphasis on thinness and beauty were more likely to endorse negative feelings, such as guilt, resentment, or anxiety, related to their relationship with their mother. The Internalization subscale of the SATAQ was correlated with the Appearance Weight Control subscale of the CFMQ,  $r = .34, p < .01$ . African American women who displayed higher levels of internalization of our culture's emphasis on thinness and beauty were more likely to endorse that their families emphasized weight and appearance concerns at mealtime growing up than African American women who did not internalize these views.

The Rosenberg Self-Esteem Scale was correlated with the Emotional, Conflictual, and Attitudinal Independence from One's Mother subscale,  $r = -.25, p < .05$ ,  $r = .46, p < .001$ , and  $r = -.27, p < .05$ , respectively. African American women with

higher self-esteem were more likely to report lack of separation from their mother within the areas of emotional support and attitudes and beliefs, and endorsed being without negative feelings, such as guilt, resentment, or anxiety, related to their relationship with their mother in comparison to African American women with lower self-esteem. The Rosenberg Self-Esteem Scale was correlated with the Emotional and Conflictual Independence from One's Father subscale on the PSI,  $r = -.27, p < .05$  and  $r = .31, p < .01$ , respectively. African American women with higher self-esteem appear more likely to report lack of separation from their father within the areas of emotional support and endorse being without negative feelings, such as guilt, resentment, or anxiety, related to their relationship with their father in comparison to African American women with lower self-esteem. The RSE was correlated with the Appearance Weight Control subscale,  $r = -.29, p < .05$ . African American women with higher self-esteem endorsed that their families were less likely to emphasize weight and appearance concerns at mealtime than African American women with lower self-esteem. The Rosenberg Self-Esteem Scale was correlated with the Acculturation subscale of the MMRS,  $r = .31, p < .05$ . African American women with higher self-esteem displayed lower levels of acculturation to Anglo values than African American women with lower self-esteem.

The Emotional Independence from One's Mother subscale of the PSI was correlated with the Attitudinal Independence from One's Mother subscale,  $r = .64, p < .001$ . This result suggests that African American women who are free from the need for excessive emotional support of their mothers tend to have attitudes and beliefs independent from their mothers and African American women who are reliant on their mothers for emotional needs have attitudes similar to their mothers.

Similarly, the Emotional Independence from One's Father subscale of the PSI was correlated with the Attitudinal Independence from One's Father subscale,  $r = .55$ ,  $p < .001$ . This result suggests that African American women who are free from the need for excessive emotional support of their fathers tend to have attitudes and beliefs independent from their fathers and African American women who are reliant on their fathers for emotional needs have attitudes similar to their fathers.

The Emotional Independence from One's Mother subscale converged with the Emotional and Attitudinal Independence from One's Father subscales,  $r = .42$ ,  $p < .001$  and  $r = .39$ ,  $p < .001$ , respectively. This result suggests that African American women who are reliant on their mothers for emotional needs were also likely to report reliance on their fathers for emotional support and to have attitudes and beliefs similar to their fathers. The Attitudinal Independence from One's Mother subscale converged with the Attitudinal Independence from One's Father subscales,  $r = .52$ ,  $p < .001$ . This result suggests that African American women who endorse attitudes similar to their mothers also have attitudes similar to their fathers. The Conflictual Independence from One's Mother subscale of the PSI converged with the Conflictual Independence from One's Father subscale,  $r = .39$ ,  $p < .001$ . This result suggests that African American women who are free from negative feelings such as guilt, resentment, and anxiety in their relationship with their mother also appear to be free from these feelings in their relationship with their father.

The Psychological Separation Inventory scales for the two parents were also correlated with the Appearance Weight Control subscale and the Acculturation subscale (see table 14). The Conflictual Independence from One's Father subscale of the PSI

was negatively correlated with the Appearance Weight Control subscale of the CFMQ,  $r = -.27, p < .01$ . African American women who express more negative feelings such as guilt, resentment, and anxiety in their relationship with their fathers also endorsed that their families emphasized weight and appearance concerns at mealtime growing up.

The Attitudinal Independence from One's Mother and Father subscale of the PSI was correlated with the Acculturation subscale of the MMRS,  $r = -.25, p < .05$ , and  $r = -.28, p < .05$ , respectively. African American women who had beliefs and attitudes separate from their parents were more acculturated to Anglo than are African American women who reported similar beliefs systems as their parents. In addition, the Conflictual Independence from One's Father subscale was correlated with the Acculturation subscale,  $r = .27, p < .05$ . African American women who express more negative feelings such as guilt, resentment, and anxiety in their relationship with their fathers were more acculturated.

#### Summary of Descriptive Analyses

In conclusion, meaningful patterns were found in relation to exploring variables not directly assessed in this study. Therefore further investigation may be warranted in these areas. For instance, Caucasians and Hispanics reported more dieting and weight loss strategies. These two groups were also more likely to internalize sociocultural messages relating to appearance regardless of their body mass index score. In addition, women who weighed more and who had higher body mass index scores attempted more diets. Likewise, women with higher weights, regardless of their ethnicity, were more dissatisfied with their body image. Although it may appear in some respects that African American women are protected from weight related issues it is

important to look at differences between overweight and obese African American women as will be discussed later in this paper.

Regardless of an individual's ethnicity, family factors, specifically family emphasis on weight and appearance growing up, were related to lower self-esteem, more body image dissatisfaction, more past attempted diets, and internalization of the thin ideal. Also, overweight and obese individuals regardless of their ethnicity reported more family emphasis on appearance. Self-esteem also appears to be linked to interesting family dynamics, for all of the ethnic groups. Those women who had higher self-esteem reported lack of separation from their parents in the areas of attitudes and emotional support and being free from conflictual feelings on the Psychological Separation Inventory while those with low self-esteem endorsed more independence in attitudes and need for support, but endorsed negative feelings toward their parents.

### Tests of Hypotheses

#### *Factors related to Body Image Dissatisfaction*

Hypothesis 1: Women with more body image dissatisfaction will have lower self-esteem than will women with less body image dissatisfaction.

Body image dissatisfaction, using the Appearance Evaluation subscale on the Multidimensional Body Self Relation Questionnaire (MBSRQ), and self-esteem, using the Rosenberg Self-Esteem Scale, were related. Low scores on the AE subscale indicate body image dissatisfaction. This hypothesis was tested and supported utilizing a Pearson product-moment correlation. There was a statistically significant positive correlation between the Appearance Evaluation subscale and the Rosenberg Self-Esteem Scale,  $r = .61, p < .001$ , a very large effect size (Cohen, 1992). This indicates

that women with higher self-esteem rated themselves as generally more satisfied with their appearance, while women with lower self-esteem said they were more dissatisfied with their appearance. Similar results were found when the ethnic groups were analyzed separately. The effect size for this correlation implies that for college students at least, self-esteem is explained in a large part by one's satisfaction with their body (see Table 10).

Hypothesis 2: Women whose families emphasized weight and appearance more will report more body image dissatisfaction than will women whose families did not emphasize these areas.

This hypothesis was supported by a Pearson product-moment correlation using the Appearance Evaluation Subscale of the MBSRQ and the Appearance-Weight Control Subscale of the Childhood Family Mealtime Questionnaire (CFMQ),  $r = -.39$ ,  $p < .001$ . A medium to large effect size was observed. A family's focus on weight and appearance was associated with body image dissatisfaction. Those women who perceived that their families were judgmental concerning weight and looks reported more current dissatisfaction in their bodies. Similar results were also found for each of the ethnic groups when analyses were run separately (see Table 12).

Hypothesis 3: Minority women who are more acculturated will endorse more body image dissatisfaction than less acculturated minority women.

This hypothesis was tested using a Pearson product-moment correlation with the Appearance Evaluation Subscale of the MBSRQ and the Acculturation Subscale of the



Minority Majority Relations Survey (MMRS). Low scores on the Acculturation subscale of the MMRS indicate more acculturation or assimilation by minorities to Anglo culture. Analyses were run using only the minority participants. There was a significant positive correlation between body image and acculturation level,  $r(113) = .23$ ,  $p < .01$ , a small to medium effect size. This result indicated that minority women who endorsed acculturation or assimilation to Anglo culture reported more dissatisfaction with their appearance than women who did not report acculturation.

Further analyses were conducted on African Americans and Hispanics separately. For Hispanic women nonsignificant results were found  $r(48) = .01$ ,  $p < .94$ , showing that for this particular ethnic group there was not a relationship between body image dissatisfaction and level of acculturation. However, for African American women significant results were found between the Appearance Evaluation subscale and the Acculturation subscale,  $r(65) = .34$ ,  $p < .01$ , a medium sized effect size. African American women with body image dissatisfaction were more likely to endorse assimilation or acculturation to Anglo culture (see Table 12).

Hypothesis 4: Women who score high on internalization of sociocultural views of attractiveness will have more overall body image dissatisfaction compared to women who score low on internalization.

This hypothesis was tested using a Pearson product-moment correlation to determine how body image dissatisfaction using the Appearance Evaluation subscale of the MBSRQ was associated with the Internalization subscale from the Sociocultural Attitudes Toward Appearance Questionnaire (SATAQ). This hypothesis was

supported. There was a significant negative correlation between the Appearance Evaluation subscale and the Internalization subscale,  $r(302) = -.37, p < .001$ , a medium effect size. This result indicates that body image dissatisfaction in women is associated with higher internalization of the sociocultural views of attractiveness, while body image satisfaction is associated with rejection of these beliefs. Similar results were also found when the ethnic groups were analyzed separately (see Table 10).

Hypothesis 5: Minority women who endorse Anglo acculturation more will also score higher on internalization of sociocultural views of attractiveness than do minority women who endorse less Anglo acculturation.

This analysis was evaluated using only the minority participants and was tested using a Pearson product-moment correlation. This hypothesis was supported using the overall sample of minority participants. There was a statistically significant negative correlation between the Internalization subscale of the SATAQ and the Acculturation subscale of the MMRS,  $r(113) = -.27, p < .001$ , a medium effect size. Women who endorsed acculturation or assimilation to Anglo culture reported higher levels of internalization of sociocultural views of thinness and beauty.

Further analyses were conducted on African Americans and Hispanics separately. For Hispanics, women who endorsed acculturation also displayed more internalization of sociocultural views of thinness and beauty,  $r(48) = -.39, p < .01$ , a medium to large effect size. However, for African Americans the association between acculturation and internalization was nonsignificant,  $r(65) = -.07, p = ns$  (see Table 12).

#### *Ethnic Group Differences in Body Image Related Factors*

The following two hypotheses are related. The hypotheses tested a linear relationship for which Caucasians are hypothesized to report the most body image dissatisfaction (Hypothesis 6), followed by Hispanics; with African Americans reporting the body image dissatisfaction (Hypothesis 7). Overall findings found the groups to be relatively similar in body image dissatisfaction, with Hispanics actually displaying more dissatisfaction followed by Caucasians and lastly African Americans. Although planned comparisons were significant, the overall F-ratio was nonsignificant, therefore the overall difference between the groups may be minimal.

Hypothesis 6: Caucasian women will report more body image dissatisfaction than either Hispanic or African American women.

This hypothesis was tested using an Analyses of Variance with planned comparisons for the Appearance Evaluation subscale and was not supported. The difference between the ethnic groups was nonsignificant,  $F(2, 299) = 1.90, p = ns$ , meaning the ethnic groups did not differ and were relatively equal in body image satisfaction scores. However, planned contrasts revealed that Caucasian women ( $M = 3.39, SE = .05$ ) differed significantly from African American women ( $M = 3.58, SE = .84$ ) in body image dissatisfaction,  $t(299) = 1.77, p < .05$  (one-tailed), point biserial  $r = .10$ , a small effect size. Meaning Caucasians were more dissatisfied than African American women. Caucasians did not differ significantly from Hispanics in reported body image dissatisfaction,  $t(299) = -.40, p = ns$  (one-tailed), point biserial  $r = .02$  (see Table 5).

Hypothesis 7: Hispanic women will endorse more body image dissatisfaction than will African American women.

The results for this hypothesis were obtained from the previous ANOVA looking specifically at the planned comparison between Hispanic and African American women. There was a significant difference between African Americans ( $M = 3.58$ ,  $SE = .84$ ) and Hispanics ( $M = 3.35$ ,  $SE = .77$ ) on level of body image satisfaction utilizing the Appearance Evaluation subscale,  $t(299) = 1.67$ ,  $p < .05$  (one-tailed), point biserial  $r = .10$ , a small effect size. This hypothesis was supported; Hispanic women reported more body image dissatisfaction than African American women (see Table 5).

*Hypothesis 8: African American women will report more body image dissatisfaction on non-weight body areas than either Caucasian or Hispanic women will.*

In order to test this hypothesis several items that focused on nonweight body areas (i.e, height, skin complexion, hair texture and thickness, and facial features) were selected from the Body Image Ideals Questionnaire. This hypothesis was tested using an ANOVA with planned comparisons, and was not supported. There was not a significant difference between the ethnic groups on satisfaction with nonweight body areas,  $F(2, 299) = 1.40$ ,  $p = ns$ . African American women ( $M = 3.12$ ,  $SE = .28$ ) did not differ significantly from Caucasian women ( $M = 3.55$ ,  $SE = .13$ ) on dissatisfaction with nonweight body areas,  $t(299) = 1.60$ ,  $p = ns$ , point biserial  $r = .09$ , a small effect size. Likewise, there was not a noticeable difference between African American women and Hispanic women ( $M = 3.29$ ,  $SE = .23$ ) on nonweight body areas,  $t(299) = .48$ ,  $p = ns$ .

### *Ethnic Group Differences in Non-Body Image Related Factors*

Hypothesis 9: African American women will have higher self-esteem than either Hispanic or Caucasian women.

This hypothesis was only partially supported. Although the ethnic groups differed significantly in self-esteem using an ANOVA with planned comparisons ( $F(2, 299) = 3.86, p < .05$ ), review of planned comparisons on the Rosenberg Self-Esteem Scale showed there was only a meaningful difference between African Americans ( $M = 32.26, SE = .65$ ) and Caucasians ( $M = 30.32, SE = .36$ ) on degree of self-esteem,  $t(104.74) = 2.61, p < .01$  (one-tailed), point biserial  $r = .25$ . There was not a significant difference between African Americans and Hispanics ( $M = 31.67, SE = .92$ ) on self-esteem,  $t(89.65) = .53, p = ns$ . The Levene's test was significant for this scale, so unequal variances were noted and the corresponding value of  $t$  used (See Table 5).

Hypothesis 10: Family emphasis on weight will be higher for Caucasian women than either Hispanic or African American women.

This analysis was conducted using the Appearance Weight Control subscale of the Childhood Family Mealtime Questionnaire. The difference between the ethnic groups was significant for family's degree of emphasis on weight and appearance using an ANOVA with planned comparisons,  $F(2, 299) = 2.98, p < .05$ . The Levene's test was significant for this scale, so unequal variances were taken into consideration with these analysis. This hypothesis was not supported with regard to assumed direction. On the contrary, results showed that Hispanic ( $M = 2.38, SE = .16$ ) families appeared to focus more on weight than Caucasian families ( $M = 2.08, SE = .006$ ),  $t(60.75) = -1.75, p < .05$

(one-tailed), point biserial  $r = .22$ . Caucasian and African American women did not differ significantly in reported family emphasis on weight and appearance,  $t(99.96) = .79$ ,  $p = ns$ , point biserial  $r = .22$  (see Table 5).

Hypothesis 11: Hispanic women will display more acculturation to Anglo culture than will African American women.

This analysis was conducted using the Acculturation subscale of the Minority Majority Relations Scale. This hypothesis was supported; Hispanics ( $M = 34.82$ ,  $SE = 1.19$ ) displayed more acculturation or assimilation to Anglo-culture than African Americans ( $M = 40.62$ ,  $SE = .94$ ),  $t(111) = -3.88$ ,  $p < .001$ , point biserial  $r = .35$ , a medium effect size.

### *Overall Model*

Hypothesis 12: Caucasian women with body image dissatisfaction will show lower levels of separation from their family compared to Caucasian women who are satisfied with their body image.

This hypothesis was tested using six separate correlations, looking at the relationship between the Appearance Evaluation subscale of the MBSRQ and the Emotional, Conflictual, and Attitudinal Independence subscales from One's Mother and Father on the Psychological Separation Inventory. Appearance Evaluation was negatively correlated with Attitudinal Independence from One's Father,  $r = -.18$ ,  $p < .01$ . This suggests that Caucasian women with body image satisfaction tended to display lack of independence from their fathers within the domains of attitudes and beliefs, while

women who evaluated their appearance more negatively actually tended to exhibit more independence or separation from their fathers within this domain. Nonsignificant findings were found for Caucasian women on the Conflictual and Emotional Independence from One's Father scale and all the separation from One's Mother subscales of the PSI (see Table 11).

Hypothesis 13: Minority women who report both Anglo-acculturation and body image dissatisfaction simultaneously will have higher separation from family scores than will minority women who do not endorse both acculturation and body image dissatisfaction.

This hypothesis was tested utilizing hierarchical multiple regressions with forced entry of variables to investigate whether the interaction of body image dissatisfaction and acculturation would contribute to the outcome variable, separation from one's family, over and above any main effect of each component separately (Baron & Kenny, 1986). Analyses were run, for Hispanic and African American women separately, using each of the three subscales of the Psychological Separation Inventory for both mother and father. This resulted in a total of twelve separate analyses using the following subscales as dependent variables: emotional independence, conflictual independence, and attitudinal independence for each parent. Prior to analyses, z-scores were obtained for the subscales in order to standardize scores for the two independent variables, the Appearance Evaluation Subscale of the MBSRQ and the Acculturation subscale of the MMRS. These z-scores were then subtracted from their respective means, to render all scores in the positive range. The two resulting variables were then multiplied to produce the interaction term.

The Appearance Evaluation Subscale of the MBSRQ, the Acculturation subscale of the MMRS, and their interaction term were entered as independent variables in the following fashion. In step one, the Appearance Evaluation subscale of the MBSRQ and Acculturation subscale of the MMRS were entered into the regression, and in step two the interaction term composed of Appearance Evaluation x Acculturation was entered into the regression in order to examine the interaction effect of these two variables over and above the components separately.

For Hispanic women, the hypothesis that minority women who reported both Anglo-acculturation and body image dissatisfaction would also display separation from their families was supported in the predicted direction for emotional independence from one's mother. The finding for emotional independence indicated that Hispanic women who are dissatisfied with their bodies and Anglo-acculturated also reported less reliance on their mothers for emotional support. In contrast, Hispanic women who were less acculturated and satisfied with their bodies reported a lack of separation from their mothers within the areas of emotional independence, therefore they are more reliant on their mothers for emotional needs, such as closeness, approval and support (see Table 15).

Significant findings were also found for attitudinal independence from one's mother, but in an opposite direction than hypothesized. Hispanic women dissatisfied with their bodies and not acculturated reported attitudes and beliefs separate from their mothers, while Hispanic women who reported body image satisfaction and acculturation reported lack of independence from their mothers in the area of attitudes and beliefs



(see Table 17). Finally, the interaction of acculturation and body image dissatisfaction was not associated with conflictual independence from one's mother (see Table 16).

For the father subscales, the interaction of acculturation and body image dissatisfaction was not significantly associated with separation from one's father within the areas of emotional and attitudinal independence for Hispanic women (see Table 18 and 20). Regression findings for conflictual independence from one's father indicated a significant association for body image dissatisfaction when this variable was examined alone, displaying a positive zero-order correlation;  $r = .40, p < .01$ . However, in the context of the interaction, this effect was no longer statistically significant. This finding was also in the opposite direction of the hypothesis and suggests that Hispanic women who are dissatisfied with their bodies actually display less separation from their father within the domain of conflictual independence. Therefore, Hispanic women who are dissatisfied with body image regardless of their level of acculturation exhibit more negative feelings such as guilt, resentment, and anxiety in their relationship with their fathers. However, in the context of the interaction, this effect was no longer statistically significant (see Table 19).

The hypothesis that body image dissatisfaction and acculturation taken together would predict separation from one's parents was not supported for African American women. For African American women, acculturation and body image dissatisfaction separately and taken together were not significantly associated with separation from one's mother within the areas of emotional, conflictual, or attitudinal independence (see Tables 21 – 23). Similarly, nonsignificant findings were found for body image

dissatisfaction and acculturation and their interaction being associated with emotional, conflictual, or attitudinal independence from one's father (see Tables 24 – 26).

Overall, only one of the twelve analyses was supported for the hypotheses that minority women with body image dissatisfaction who were high in acculturation would display separation from their parents. This hypothesis was supported for Hispanic women within the area of emotional independence from their mothers. Implications and possible explanations for results are addressed in the discussion section of this paper.

### Exploratory Analyses

In order to examine the effects of possible covariates on the main hypotheses, exploratory analyses were run controlling for age and body mass index. Due to the significant group differences in the ages of participants, age was used as a covariate in the hypotheses testing to determine if controlling this variable resulted in a change in the significance of the hypothesis tests. Controlling Age did not contribute to a significant change in results. However, when body mass index was used as a covariate, changes occurred in the ethnic differences that were found in body image dissatisfaction. Body mass index was significantly related to body image dissatisfaction,  $F(1, 298) = 118.49, p < .001$ , point biserial  $r = .53$ , a large effect size. The effect for ethnicity was found to be  $F(2, 298) = 9.25, p < .001$  when BMI was controlled, therefore implying that as BMI increases so does a women's dissatisfaction with her body. Comparison between ethnicities after controlling for BMI found that African Americans were more satisfied with their body image than either Hispanics,  $t(198) = -3.02, p < .01, r = .21$  or Caucasians,  $t(198) = -4.24, p < .001, r = .29$ . Therefore, in contrast to the findings in Hypotheses six and seven, racial differences may exist in body image

satisfaction when accounting for the participant's body mass index. In sum, the aforementioned results imply that it is important to take into consideration possible covariates or differences in subgroup populations when interpreting outcomes with ethnic minority groups.

## CHAPTER 4

### DISCUSSION

Body image dissatisfactions ranging from mild body image disturbances to clinically diagnosed eating disorders have been reported more frequently among Caucasian populations than other ethnic groups. Sociocultural factors have been implicated as a source of women's negative evaluation of their bodies; and our culture in particular espouses thinness as an attractive ideal. Therefore, it is believed that women diet or display concern about their appearance because they live in a society that promotes those ideals. Another important source from which individuals adopt their beliefs and values is their family unit. Consequently, researchers have speculated that some women may develop body image concerns or eating disorders as a result of negative messages they received about their appearance from their parents or siblings. As a result research in the area of body image and eating disorders has focused on the implications of problematic family relationships. These relationships have been speculated to be either too enmeshed or emotionally distant (Miller & McCluskey-Fawcett, 1993; Holston & Cashwell, 2000).

However, minority women, both within the United States and in other industrialized nations which promote attitudes similar to our culture in the area of appearance and body image, are also displaying an increase in these reported symptoms (Lake, Staiger, & Glowinski, 2000). This suggests that cultural factors likely play a strong role in the adoption of these beliefs, and therefore the literature has focused on the process that acculturation plays and its relationship with body image dissatisfaction. Unfortunately, results overall have generally been inconclusive (Wildes,

Emery, and Simons, 2001). Also, less focus has been placed on the development of body image dissatisfaction in connection with minority women's families while strong etiological relationships have been hypothesized for Caucasian women.

The purpose of this study was to investigate whether body image in combination with acculturation would be related to certain types of family relationships among minority women. Specifically, as a minority woman attempts to assimilate or adopt Anglo-culture, within the area of body image and appearance, does she then also tend to display a separation from her family unit who may not be acquiring those same beliefs or values? Similarly, family relationships of Caucasians with body image dissatisfaction were explored in order to see if there was a pattern of enmeshment or separation. This paper also looked to replicate past research comparing minority women and Caucasian women within the areas of body image, self-esteem, parental messages directed at weight, and adoption of sociocultural views of attractiveness.

#### Factors Related to Body Image Dissatisfaction

The first group of hypotheses looked at factors that have been linked to body image dissatisfaction in women; all five hypotheses were by and large supported and consistent with past research. Similar to past research conducted by Striegel-Moore, Silberstein, and Rodin (1986), women who are dissatisfied with their bodies also tended to exhibit lower self-esteem. This finding was true for all of the ethnic groups in this study. It has been theorized that self-esteem is related to body image; body image dissatisfaction may make an individual at risk for lower self-esteem, or individuals with preexisting lower self-esteem may be more likely to develop body image problems (Leung, Schwartzman, & Steiger, 1996). Self-esteem is believed to be linked to body

image dissatisfaction because one's image of his or her body can be central to how an individual views themselves and their identity (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999).

For all groups, women who internalized societal beliefs of appearance and beauty were more dissatisfied with their appearance. Similar findings have been found by other researchers the implication being that internalization of the thin ideal is a risk factor in the production of eating and appearance concerns (Hermes & Keel, 2003; Thompson & Heinberg, 1993). For instance, Striegel-Moore and Smolak's (1996) Restraint Model suggests that ethnic minority women, particularly African American women, may become vulnerable to eating disorders if they are exposed to weight related pressures and do not have a strong racial identity or the support of their family of origin. As a result they may be more influenced by sociocultural messages and not be as benefited by the protective factors associated with their cultural group. The same is likely true of Hispanic women.

Furthermore, within this study women who endorsed that their families placed an emphasis on weight and appearance were more likely to be dissatisfied with their body image. Women within each of the cultural groups displayed this pattern. Previous research has shown that women with current body image dissatisfaction and eating disorder pathologies reported that while growing up their families tended to place emphasis on appearance, weight gain, exercise, and dieting (Smolak, Levine, & Schermer, 1999). It has been hypothesized that parental focus in these areas is linked to the future development of eating disorders or body image dysphoria, particularly if the individual was classified as overweight or displayed weight gain (Moreno & Thelen,

1993; Worobey, 2002). Within this study Hispanic women reported the most family emphasis in this area, although research is limited using their population.

Two separate hypotheses focused on the relationship between acculturation and factors relating to body image dissatisfaction and internalization of sociocultural views of attractiveness. Interestingly, results showed that acculturated African Americans were more likely to be dissatisfied with their body image while acculturated Hispanics were more likely to internalize sociocultural views of attractiveness. Nonsignificant findings were found for Hispanics on body image dissatisfaction and for African Americans on internalization. It is important to note at this time that results from this study showed that Hispanics displayed more acculturation than African Americans. Similarly to Perez, Voelz, Pettit, and Joiner's findings (2002) Hispanic women in this sample reported more body image dissatisfaction, regardless of their acculturation level, and higher levels of acculturation than African American women. These authors attributed this finding to immigration and cultural immersion being more of an issue for Hispanic women at the age of adolescence, depending on their parent's immigration status.

#### Ethnic Group Differences in Body Image Related Factors

The second group of hypotheses looked at ethnic group differences between the selected outcome variables. The sixth hypothesis, which looked at whether Caucasian women would display more body image dissatisfaction than either Hispanic or African American women, was partially supported. Caucasians reported levels of body dissatisfaction similar to Hispanic women, and Caucasians had significantly more dissatisfaction with their bodies than African American women. However, the differences between groups were minimal and planned comparisons displayed small

effect sizes. This result was consistent with a meta-analysis conducted by Wildes, Emery, and Simons (2001) on previous research concerning acculturation and body image, which showed that Hispanics and Caucasians displayed comparable amounts of eating disturbance and dissatisfaction while larger effect sizes were noted in comparison between Caucasians and African Americans. The hypothesis that Hispanics would report more body image dissatisfaction than African Americans was supported. Within this sample Hispanics ended up endorsing more body image dissatisfaction than the other two groups, and a significant difference was noted when comparing Hispanics to African Americans.

With regards to satisfaction with nonweight body areas, the ethnic groups did not differ. Past research suggested that African American women may not rate high on measures of body image dissatisfaction because the scales that are typically used do not tap into nonweight related areas that may be of concern for this group, such as hair texture, skin complexion, and facial features (Bond & Cash, 1992; Williamson, 1998). Analysis showed, although not significant, that Caucasians still were more dissatisfied with these areas than were the other two ethnic groups. When the items that composed this scale were analyzed separately the groups were not significantly different on their views of hair (item 3) and facial features (item 4). However, Hispanics reported wanting to be taller and Caucasians were more dissatisfied with their skin complexion.

#### Ethnic Group Differences in Non-Body Image Related Factors

The hypothesis that African American women would display higher levels of self-esteem than would the other ethnic groups was only supported for Caucasians. Hispanic and African American women appeared to be equivalent in self-esteem levels.



This result is consistent with past research that African American women generally score higher on measures of self-esteem in comparison to Caucasian women (Twenge & Crocker, 2002). Although African American women displayed the highest levels of self-esteem, it is interesting to note here that self-esteem does not appear to be related to reported current weight for any of the three ethnic groups.

However, for African American women an individual's body mass index was found to be related to self-esteem. African American women with higher body mass index scores appear to have lower self-esteem, although this result is somewhat deceptive for the African American group because a means plot of body mass index categories showed the association was curvilinear. African American women classified as obese displayed the lowest self-esteem scores while women classified as overweight had the highest self-esteem. Therefore, body mass index does not actually display a linear negative relationship with self-esteem for African American women.

For each of the ethnic groups taken separately, being dissatisfied with one's body was related to lower self-esteem, and overweight and obese women generally displayed the most dissatisfaction with their appearance. So for each of the ethnic groups, being at a higher reported weight was not necessarily linked to self-esteem issues according to correlational analysis, but for African American women who are obese, based on their body mass index scores, they are likely to exhibit both self-esteem and body image problems. This result is similar to findings by Petersons, Rojhani, Steinhaus, & Larkin (2000), who found that body image dissatisfaction in African American women was generally related to more serious weight problems.

Another hypothesis predicted that Caucasian women would be more likely to endorse that their families placed an emphasis on weight and appearance than would Hispanic or African American women. This hypothesis was not supported; Hispanics reported more appearance and weight concerns from their families than Caucasian women did. Lower scores on family emphasis on weight and appearance for African American women were also found by Powell and Kahn (1995) and these authors explained that as a community, including both family and peers, less social pressure is placed on thinness than other attributes. Although there is much research supporting that family emphasis on weight and appearance is connected to body image dissatisfaction in Caucasians, research within the area of minority women, particularly Hispanic females, is limited and comparable findings could not be located (Haworth-Hoepfner, 2000; Holston & Cashwell, 2000; Miller, McCluskey-Fawcett, et al., 1993).

Lastly, it was hypothesized that Hispanic women would be more likely to endorse assimilation or acculturation to Anglo culture than would African American women, this hypothesis was supported. Perez et al. (2002) reported that Hispanics were more likely to experience acculturation and hence acculturative stress than their African American counterparts would. It is suspected that Hispanic women are more likely to display acculturation than African American women because this group or their parents more frequently immigrate from another country to the United States while African Americans and their parents, and likely prior generations, already resided within this cultural environment.

## The Overall Model

The final two hypotheses proposed that family factors would be related to body image dissatisfaction, and for minority women, acculturation would also be associated. The hypothesis that Caucasians with body image dissatisfaction would display a lack of separation from their parents was not supported for any of the subscales of the Psychological Separation Inventory. However, significant findings with a small effect size were found in the opposite direction within the area of attitudes and beliefs in relation to Caucasian women's fathers. Caucasian women with body image dissatisfaction reported more independence or separation from their fathers in the area of attitudes and beliefs. Similarly, Zakin (1989) found that undergraduate women with a possible classification of binge eating reported more separation from both parents using the PSI; however, results were displayed within the area of emotional independence from one's mother. As mentioned before, the literature on family relationships and body image or disordered eating has been mixed. These relationships have been described as overly enmeshed or distant (Striegel-Moore, Silberstein, & Rodin, 1986). Although it is uncertain what types of family relationships characterize eating disordered populations, it is also important to note at this time that in this study and in previous research, family emphasis on weight and appearance was related to body image dissatisfaction in Caucasian women and the other two ethnic groups. Therefore, parental messages are likely influential in creating later body image dissatisfaction along with other factors, such as societal messages about appearance, but these are not necessarily predictive of one's later relationship with their parents. Another possibility is that the Psychological

Separation Inventory did not tap into the construct of enmeshment or separation used in previous studies of eating disorders.

The final hypothesis suggested that minority women who endorse both acculturation and body image dissatisfaction will have higher separation from family scores than will minority women who score low on Anglo acculturation and who are satisfied with their bodies. Significant associations were found for Hispanic women, but were not displayed for African American women.

For Hispanic women, body image dissatisfaction and acculturation were found to be associated with emotional independence from one's mother. This was consistent with the hypothesis. Those women who were acculturated and dissatisfied with their body image reported being less reliant on their mothers for emotional needs and support. Hispanic women who were satisfied with their bodies and did not report acculturation displayed less separation from their mothers in the area of emotional needs.

Findings for attitudinal independence from one's mother were also significant, but not in the expected direction. Results indicated that Hispanic women with body image dissatisfaction who were not acculturated reported having attitudes and beliefs independent from their mother. Hispanic women who were satisfied with their bodies and acculturated reported attitudes and beliefs similar to their mothers.

Finally, body image dissatisfaction alone was found to be associated with conflictual independence from one's father for Hispanic women. Hispanic women with body image dissatisfaction displayed lack of separation from their fathers indicating that they maintained more negative feelings such as guilt, resentment, and anxiety in

relation to this parent. Hispanic women who are satisfied with their bodies reported an absence of these types of feelings. Past research by Smolak and Levine (1993) found a similar connection between lack of conflictual independence and disordered eating behavior in college age women; however, these results were not specific to minority women and were present for both parents.

As will be mentioned in the limitations section, socioeconomic status was not assessed, and it would have been important to assess whether those Hispanic women who endorsed more acculturation and higher socioeconomic status would be more likely to exhibit psychological separation. Williamson (1998) suggested based on past research that minority women with higher education levels and higher SES are more likely to be susceptible to internalized racism in which they may reject attitudes and beliefs of their own culture while electing to adopt Anglo values and that this process may also include aspects related to appearance. In addition, as mentioned previously Hispanic women reported the highest level of family emphasis on weight and appearance and it is unknown which parent was the source of these messages.

#### Limitations

One of the main limitations of studies conducted on ethnic minority samples utilizing measures of body image dissatisfaction and eating disorder symptomatology is that the scales frequently used have not been validated for use with these groups, and that adequate normative data is not available (Kashubeck-West, Mintz, & Saunders, 2001). As witnessed in this study, comparisons of observed with previous studies' means from self-report measures could only be conducted using the overall sample because representative minority norms were not available in the literature for all the

measures. This issue is problematic because comparing the overall sample to only Caucasian based norms may have resulted in differences that would not be noticed if the study sample had consisted of only Caucasian participants. In hopes of assisting in correction of these issues, this author communicated with several authors of the scales used in this study and offered to provide information on these groups relating to her data collection at the completion of this study.

Another limitation of this particular study was that the sample size for Hispanic and African American women was not equivalent to that of the Caucasian women. This factor may have contributed to the nonnormal distribution seen on some of the demographic items and outcome variables, and also may have resulted in heterogeneity of variance among groups. Ideally, this researcher would have preferred for the ethnic groups to have had equal numbers of participants. In addition, obtaining participants from sites other than a university undergraduate population would have aided in generalizability of the findings. The current study used a university sample due to convenience factors, and also because it allowed this experimenter to gather a larger group of minority women. However, subjects were administered measures of acculturation in order to control for the influence of cultural adherence, whether it be to the majority culture or one's own cultural group. This aided in determining whether acculturation played a role in influencing an individual's body image satisfaction.

Unfortunately, an omission was made in the development of the demographic questionnaire that was provided to participants. Socioeconomic status of the participants and their parents was not assessed, therefore limiting conclusions that could be made based on social class standing. Crago, Shisslak and Estes (1996) found

that when socioeconomic status was controlled, ethnic differences on measures of body image dissatisfaction disappeared. Ogden and Thomas (1999) found that individuals with higher socioeconomic status, regardless of their ethnic classification, are more likely to display body image or eating-related problems. Also, obtaining socioeconomic status may have been important in making connections with degree of acculturation (Striegel-Moore & Smolak, 1996). Future research should obtain information about number of siblings, birth order, and marital status of parents to determine whether these factors were related to body image dissatisfaction, degree of acculturation, early family messages regarding appearance, and relationship style with one's parents.

Finally, acculturation is a broader construct than adoption or internalization of sociocultural views about appearance and weight. Therefore, using acculturation as a predictor in this study may not have tapped into body image concerns specifically for minority women. Given that the process of acculturation is multifaceted, it is possible that minority women may be selective in the areas that they choose to adopt from mainstream culture versus their own ethnic background, and this likely varies by race also.

#### Future Research

A number of women in this study acknowledged engaging in weight loss behaviors, some of which would be defined as unhealthy or problematic weight loss strategies. Although only 16 participants endorsed being clinically diagnosed with an eating disorder it is suspected that more than that meet subthreshold criteria for an eating disorder, or actually meet criteria although they had never formally received a diagnosis. In addition, according to calculations based on the participants' body mass

index scores, 33 subjects could be classified as clinically obese; however only one participant endorsed being diagnosed with this medical condition. It is important that clinicians remember that individuals, and maybe minority women in particular, may minimize body image concerns or not view their weight loss strategies as problematic (Smith & Krejci, 1991).

Significant racial differences in body image dissatisfaction were not exhibited in this study; however, an individual's body mass index was a predictor of dissatisfaction across races. Although it initially appeared that ethnic differences did not exist, further analyses showed that Hispanics and Caucasians displayed similar levels of dissatisfaction and significantly more than African American women when body mass index was controlled in exploratory analyses. Likewise, regardless of their ethnicity, individuals classified as obese regardless of their ethnicity were the most dissatisfied with their bodies. Future research may benefit by directly investigating the high numbers of women with obesity within all the racial groups and the social, emotional, and psychological consequences of dealing with this medical condition in a culture that is not necessary accepting of the overweight.

Future studies might well include blank open-ended questions on the nonweight items of the Body Image Ideals Questionnaire of similar measures of body image dissatisfaction, in order to obtain specific information about what part or aspects of that body area the individual was dissatisfied with. Although Hispanics and African Americans did not differ in satisfaction with nonweight areas in this study, it would have been interesting to do group comparisons on the content of responses. This may have



provided information on whether or not African American women may possibly display dissatisfaction in racial features, as suggested by Bond and Cash (1992).

However, the focus of this study was whether minority women would display separation from their families due to the pressure to acculturate and in particular adopt appearance ideals exposed by mainstream culture. It has been hypothesized that these image standards are likely in contrast to values held by their family of origin. The pressure and conflict an individual experiences while trying to assimilate to a new culture has been linked to acculturative stress and the process of internalized racism (Gilbert, 2003). Currently, it is unclear whether acculturation in combination with body image dissatisfaction produces influential changes in ethnic minority women's relationships with their parents. However, the results suggest these constructs may affect Hispanic women's associations with their mothers in the area of emotional support and belief systems. Further investigation is warranted in order to understand the implications of these results and to replicate findings.

In summary, based on the findings in this study, further investigation appears worthwhile in the area of parental relationships and family messages in connection with the development of body image problems in ethnic minority women. For example, future studies may explore whether the source of early negative mealtime messages, particularly regarding weight and appearance concerns is linked to a minority woman's mother or father. These topics are especially relevant since more recent research suggests that there may be more similarities rather than differences within the area of body image dissatisfaction between Caucasian and other racial groups (Grabe & Hyde, 2006). In conclusion, understanding etiological differences and factors related to eating

disorders in minorities will likely aid in earlier detection and facilitate treatment and improve the prognosis of women with these problems.

Table 1

*Means and Standard Deviations of Demographic Variables, Overall and by Ethnic Group*

Variable	Total Sample ( <i>N</i> = 302)	Caucasians ( <i>n</i> = 189)	Hispanics ( <i>n</i> = 48)	African Americans ( <i>n</i> = 65)	<i>F</i>
	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )	
Age	20.52 (2.58)	20.23 <sub>a</sub> (2.21)	21.92 <sub>b</sub> (3.92)	20.34 <sub>a</sub> (1.99)	8.78***
Height (in.)	64.80 (2.90)	65.18 <sub>a</sub> (2.71)	63.90 <sub>bd</sub> (2.84)	64.74 <sub>c</sub> (3.18)	7.59***
Weight (lb.)	142.12 (31.36)	139.67 <sub>c</sub> (29.44)	137.50 <sub>c</sub> (28.26)	152.65 <sub>d</sub> (36.71)	4.88**
BMI (Kg/m <sup>2</sup> )	23.78 (4.91)	23.10 <sub>c</sub> (4.62)	24.02 (4.44)	25.57 <sub>d</sub> (5.61)	6.40**
Preferred Weight	126.52 (16.90)	124.29 <sub>a</sub> (15.55)	122.25 <sub>a</sub> (16.34)	136.18 <sub>b</sub> (17.70)	15.11***
Weight - Preferred Weight	15.59 (20.77)	15.38 (19.18)	15.25 (16.34)	16.46 (27.41)	.70

*Note:* Means with differing subscripts (a, b) differed at  $p < .001$ , and with subscripts (c, d) at  $p < .01$ . Games-Howell Post Hoc analysis was used for age, due to unequal variances. While Tukey's was used on the remainder of the variables.

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

Table 2

*Demographic Characteristics of Overall Sample*

Variable	Frequency
Currently Dieting	20.9%
Not Currently Dieting	79.1%
Dieted in the Past	66.9%
Never Dieted	33.1%
Number of Diets Attempted	
1 to 5	41.4%
6 to 10	11.6%
11 to 15	5.3%
16 to 20	2.6%
21 or more	6.0%
Satisfaction with Current Weight	
Very Satisfied	12.6%
Satisfied	23.2%
Neutral	25.2%
Dissatisfied	27.5%
Very Dissatisfied	11.6%

Table 3

*Frequencies of Weight Loss Strategies by Ethnicity*

Variable	Overall Sample (N = 302)		Caucasians (n = 189)		Hispanics (n = 48)		African Americans (n = 65)		X <sup>2</sup>
	Yes	No	Yes	No	Yes	No	Yes	No	
Weight Loss Strategies	80.8%	19.2%	85.7%	14.3%	75.0%	25.0%	70.8%	29.2%	8.20*
Exercise	77.2%	22.8%	82.0%	18.0%	70.8%	29.2%	67.7%	32.3%	6.92*
Calorie Restricting	45.4%	54.6%	50.8%	49.2%	52.1%	47.9%	24.6%	75.4%	14.41***
Purging (Vomiting)	11.9%	88.1%	12.2%	87.8%	18.8%	81.3%	6.2%	93.8%	4.20
Diuretics	25.5%	74.5%	29.6%	70.4%	27.1%	72.9%	12.3%	87.7%	7.72*
Laxatives	8.9%	91.9%	7.4%	92.6%	14.6%	85.4%	9.2%	90.8%	2.43
Surgery	0.7%	99.3%	1.1%	98.9%	0.0%	100.0%	0.0%	100.0%	1.20

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

Table 4

*Present Sample and Previous Research Means and Standard Deviations*

<i>Variables</i>	Present ( <i>N</i> = 302)	Previous	<i>df</i>	<i>t-test</i>	<i>Cohen's d</i>
	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )			
MBSRQ-AE	3.43 (.75)	3.36 (.87)	301	1.54	.18
BIQ Total	1.71 (1.28)	1.75 (1.38)	301	-.51	-.06
SATAQ-AW	43.42 (6.08)	44.14 (5.85)	301	-2.06*	-.23
SATAQ-IN	33.43 (8.36)	37.47 (7.22)	301	-8.37***	-.94
RSE	30.95 (5.29)	32.10 (4.90)	301	-3.77***	.37
MOMEI	37.76 (14.25)	42 (13)	301	-5.18***	-.60
MOMCI	73.46 (17.47)	80 (15)	301	-6.51***	-.75
MOMAI	24.70 (11.95)	25 (11)	301	-.44	-.05
DADEI	46.19 (14.96)	44 (14)	301	2.54**	.29
DADCI	75.84 (17.31)	82 (14)	301	-6.18***	-.71
DADAI	30.57 (14.92)	27 (11)	301	4.16***	.48

*(table continues)*

(continued)

<i>Variables</i>	Present ( <i>N</i> = 302)	Previous	<i>df</i>	<i>t-test</i>	<i>Cohen's d</i>
	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )			
CFMQ-AWC	2.11 (.90)	2.62 (1.00)	301	-9.88***	-1.14
MMRS-ACL-H	3.48 (.83)	2.97 (.79)	47	4.29***	1.25
MMRS-ACL-A	4.06 (.75)	--- ---	--- ---	--- ---	--- ---

*Note:* MBSRQ-AE = Multidimensional Body Self-Relations Questionnaire – Appearance Evaluation, low scores indicate body image dissatisfaction; BIQ = Body Image Ideals Questionnaire, high scores indicate body image dissatisfaction; SATAQ-AW = Sociocultural Attitudes Towards Appearance Questionnaire – Awareness, high scores indicate awareness; SATAQ-IN = Internalization, high scores indicate internalization; RSE = Rosenberg Self-Esteem Scale, high scores indicate higher self-esteem; MOMEI & DADEI = Emotional Independence, from mother and father; MOMCI & DADCI = Conflictual Independence; MOMAI & DADAI = Attitudinal Independence, for all the independence scales high scores indicate more independence; CFMQ-AWC = Childhood Family Mealtime Questionnaire – Appearance Weight Control, high scores indicate more control; MMRS-ACL = Minority Majority Relations Survey – Acculturation, low score indicate acculturation. MMRS-ACL -H = Hispanic Sample. MMRS-ACL-A = African American Sample. Previous norms were not available for African Americans. See text for sources of previous research parameters.

\* $p < .05$ . \*\*  $p < .01$ . and \*\*\* $p < .001$  for comparisons of present and previous means.

Table 5

*Means and Standard Deviations by Ethnic Group*

Variable	Caucasian ( <i>n</i> = 189)	African American ( <i>n</i> = 65)	Hispanic ( <i>n</i> = 48)	<i>df</i>	<i>F</i>
	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )		
MBSRQ-AE	3.39 (.71)	3.58 (.84)	3.34 (.77)	2, 302	1.90
BIQ Total	1.79 (1.20)	1.44 (1.51)	1.76 (1.21)	2, 302	1.92
SATAQ-INT	34.97 <sub>a</sub> (7.56)	29.02 <sub>b</sub> (8.98)	33.44 <sub>a</sub> (8.52)	2, 302	13.26***
RSE	30.32 <sub>c</sub> (4.91)	32.26 <sub>d</sub> (5.27)	31.67 (6.38)	2, 302	3.86*
MOMEI	39.20 <sub>e</sub> (13.63)	34.09 <sub>f</sub> (15.55)	37.04 (14.19)	2, 302	3.22*
MOMCI	73.78 (17.27)	73.08 (17.88)	72.71 (18.06)	2, 302	.09
MOMAI	25.58 (12.06)	21.60 (11.43)	25.44 (11.74)	2, 302	2.82
DADEI	45.75 (14.71)	49.46 (15.88)	43.48 (14.19)	2, 302	2.45
DADCI	74.80 (17.89)	77.42 (15.10)	77.83 (17.79)	2, 302	.93
DADAI	30.16 (14.55)	31.26 (16.19)	31.23 (14.82)	2, 302	.19

*(table continues)*



(continued)

Variable	Caucasian ( <i>n</i> = 189)	African American ( <i>n</i> = 65)	Hispanic ( <i>n</i> = 48)	<i>df</i>	<i>F</i>
	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )		
CFMQ-AWC	2.08 (.82)	1.98 <sub>e</sub> (.93)	2.38 <sub>f</sub> (1.10)	2, 302	2.98*
MMRS-ACL	3.21 <sub>ae</sub> (.53)	4.06 <sub>ba</sub> (.75)	3.48 <sub>bf</sub> (.83)	2, 302	43.35***

*Note:* MBSRQ-AE = Multidimensional Body Self-Relations Questionnaire – Appearance Evaluation, low scores indicate body image dissatisfaction; BIQ = Body Image Ideals Questionnaire, high scores indicate body image dissatisfaction; SATAQ-AW = Sociocultural Attitudes Towards Appearance Questionnaire – Awareness, high scores indicate awareness; SATAQ-IN = Internalization, high scores indicate internalization; RSE = Rosenberg Self-Esteem Scale, high scores indicate higher self-esteem; MOMEI & DADEI = Emotional Independence, from mother and father; MOMCI & DADCI = Conflictual Independence; MOMAI & DADAI = Attitudinal Independence, for all the independence scales high scores indicate more independence; CFMQ-AWC = Childhood Family Mealtime Questionnaire – Appearance Weight Control, high scores indicate more control; MMRS-ACL = Minority Majority Relations Survey – Acculturation, low score indicate acculturation. Means with differing subscripts (a, b) differed at  $p < .001$ , with subscripts (c, d) at  $p < .01$ , and with subscripts (e, f) at  $p < .05$ .

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

Table 6

*Correlations between Demographic Variables for Overall Sample and by Ethnicity*

	Age	Height	Weight	BMI	Diet
Overall Sample (N = 302)					
Age	----	.09	.17**	.13*	.13*
Height		----	.34***	-.08	-.10
Weight			----	.91***	.22***
BMI				----	.28***
Caucasians (n = 189)					
Age	----	.02	.19**	.18*	.12
Height		----	.33***	-.08	-.09
Weight			----	.91***	.22**
BMI				----	.26***
Hispanics (n = 48)					
Age	----	.42***	.11	-.09	.00
Height		----	.41**	-.03	.02
Weight			----	.90***	.38**
BMI				----	.41**
African Americans (n = 65)					
Age	----	.19	.33**	.28*	.22
Height		----	.36**	-.04	-.14
Weight			----	.91***	.31*
BMI				----	.40***

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

Table 7

*Correlations among Demographic Variables and Image Scales for Overall Sample and by Ethnic Group*

	Age	Height	Weight	BMI	# Past Diets
Overall Sample ( <i>N</i> = 302)					
MBSRQ-AE	-.11	.02	-.47***	-.50***	-.43***
SATAQ-INT	-.04	-.01	.01	.39***	.39***
RSE	-.00	.05	-.11	-.14*	-.30***
Caucasians ( <i>n</i> = 189)					
MBSRQ-AE	-.12	-.06	-.52***	-.52***	-.42***
SATAQ-INT	-.07	.07	.03	-.01	.41***
RSE	.03	.02	-.10	-.11	-.28***
Hispanics ( <i>n</i> = 48)					
MBSRQ-AE	-.02	-.04	-.46***	-.46***	-.44**
SATAQ-INT	-.07	-.05	.15	.19	.46***
RSE	.01	.17	-.08	-.17	-.39**
African Americans ( <i>n</i> = 65)					
MBSRQ-AE	-.20	.20	-.48***	-.61***	-.45***
SATAQ-INT	.11	-.21	.08	.18	.26*
RSE	-.23	.15	-.24	-.34**	-.21

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

Table 8

*Correlations for the Psychological Separation Inventory and Demo by Ethnicity*

	Age	Height	Weight	BMI	# Past Diets
Overall Sample ( <i>N</i> = 302)					
MOMEI	-.04	-.03	-.08	-.07	-.05
MOMCI	.14*	.05	.07	.06	-.04
MOMAI	.08	-.07	-.07	-.05	.02
DADEI	.07	.11	.04	-.00	.02
DADCI	.12*	-.03	-.08	-.07	-.09
DADAI	.13*	.00	.02	.01	.13*
Caucasians ( <i>n</i> = 189)					
MOMEI	-.04	-.04	-.06	-.04	-.09
MOMCI	.21**	.02	.11	.10	.04
MOMAI	.07	-.02	-.02	-.01	.01
DADEI	.07	.00	-.01	-.02	-.00
DADCI	.16*	.01	.01	.01	-.03
DADAI	.06	.02	.01	-.01	.13
Hispanics ( <i>n</i> = 48)					
MOMEI	.01	-.14	-.18	-.14	.03
MOMCI	.07	.06	.02	.02	-.25
MOMAI	.15	-.12	-.16	-.12	-.07
DADEI	.08	.22	.01	-.09	.30*
DADCI	.11	-.16	-.30*	-.24	-.35*
DADAI	.26	.14	.00	-.08	.09

*(table continues)*

(continued)

	Age	Height	Weight	BMI	# Past Diets
African Americans ( <i>n</i> = 65)					
MOMEI	-.10	-.01	.02	.02	-.08
MOMCI	.07	.08	.02	-.00	-.04
MOMAI	.02	-.19	-.05	.03	.07
DADEI	.17	.26*	.09	.02	-.10
DADCI	-.04	.00	-.22	-.24	.04
DADAI	.17	-.09	.02	.08	.22

Note: \* $p < .05$ , \*\*  $p < .01$ , and \*\*\* $p < .001$

Table 9

*Correlations Among Demographic Variables and Family Scales for Overall Sample and by Ethnic Group*

	Age	Height	Weight	BMI	# Past Diets
Overall Sample ( <i>N</i> = 302)					
CFMQ-AWC	.07	-.09	.29***	.35***	.49***
MMRS-ACL	.00	-.01	-.02	-.01	-.11
Caucasians ( <i>n</i> = 189)					
CFMQ-AWC	.08	-.12	.32***	.39***	.44***
MMRS-ACL	-.01	-.16*	-.12	-.06	.09
Hispanics ( <i>n</i> = 48)					
CFMQ-AWC	.05	.22	.42**	.34*	.62***
MMRS-ACL	.04	.09	-.10	-.18	-.16
African Americans ( <i>n</i> = 65)					
CFMQ-AWC	-.13	-.18	.24	.34**	.40***
MMRS-ACL	-.08	.21	-.12	-.19	-.31*

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

Table 10

*Correlations Among Image Scales for Overall Sample and by Ethnic Group*

	MBSRQ-AE	SATAQ-INT	RSE
Overall Sample ( $N = 302$ )			
MBSRQ-AE	---	-.37 ***	.61***
SATAQ-INT		---	-.42***
RSE			---
Caucasian Sample ( $n = 189$ )			
MBSRQ-AE	---	-.31 ***	.57***
SATAQ-INT		---	-.32***
RSE			---
Hispanic Sample ( $n = 48$ )			
MBSRQ-AE	---	-.44 **	.63***
SATAQ-INT		---	-.49***
RSE			---
African American Sample ( $n = 65$ )			
MBSRQ-AE	---	-.41 ***	.68***
SATAQ-INT		---	-.50***
RSE			---

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

Table 11

*Correlations Among Image Scales and Separation Scales for Overall Sample and by Ethnic Group*

	MOMEI	MOMCI	MOMAI	DADEI	DADCI	DADAI
Overall Sample ( <i>N</i> = 302)						
MBSRQ-AE	-.03	.07	-.10	-.06	.13*	-.19***
SATAQ-INT	-.05	-.13*	-.07	-.11	-.10	-.06
RSE	-.16**	.25***	-.18**	-.19***	.23***	-.22***
Caucasian Sample ( <i>n</i> = 189)						
MBSRQ-AE	-.03	-.03	-.05	-.07	.01	-.18**
SATAQ-INT	-.09	-.05	-.16*	-.07	.01	-.03
RSE	-.10	.18*	-.12	-.24***	.14*	-.27***
Hispanic Sample ( <i>n</i> = 48)						
MBSRQ-AE	.08	.23	-.06	.02	.40**	-.13
SATAQ-INT	-.24	-.16	-.17	-.15	-.32*	-.15
RSE	-.12	.46***	-.19	.00	.40**	-.17
African American Sample ( <i>n</i> = 65)						
MBSRQ-AE	-.04	.19	-.22	-.16	.27*	-.25*
SATAQ-INT	-.00	-.34**	.05	-.07	-.20	-.05
RSE	-.25*	.32**	-.27*	.27*	.31**	-.17

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



Table 12

*Correlations Among Image Scales and Family Scales for Overall Sample and by Ethnic Group*

	CFMQ-AWC	MMRS-ACL
Overall Sample ( <i>N</i> = 302)		
MBSRQ-AE	-.39***	.18**
SATAQ-INT	.37***	-.20***
RSE	-.25***	.21***
Caucasian Sample ( <i>n</i> = 189)		
MBSRQ-AE	-.36***	.10
SATAQ-INT	.34***	.06
RSE	-.22**	.09
Hispanic Sample ( <i>n</i> = 48)		
MBSRQ-AE	-.52***	.01
SATAQ-INT	.51***	-.39**
RSE	-.32*	.17
African American Sample ( <i>n</i> = 65)		
MBSRQ-AE	-.32**	.34**
SATAQ-INT	.34**	-.07
RSE	-.29*	.31**

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

Table 13

*Correlations Among Separation Scales for Overall Sample and by Ethnic Group*

	MOMCI	MOMAI	DADEI	DADCI	DADAI
Overall Sample ( <i>N</i> = 302)					
MOMEI	-.22***	.56***	.31***	.11	.21***
MOMCI	----	-.19***	-.01	.45***	-.07
MOMAI		----	.21***	.01	.55***
DADEI			----	-.22***	.61***
DADCI				----	-.17**
Caucasian Sample ( <i>n</i> = 189)					
MOMEI	-.26***	.51***	.32***	.13	.15*
MOMCI	----	-.19**	.02	.48***	-.05
MOMAI		----	.27***	-.00	.57***
DADEI			----	-.24***	.64***
DADCI				----	-.22**
Hispanic Sample ( <i>n</i> = 48)					
MOMEI	-.48***	.59***	.26	.10	.14
MOMCI	----	-.33*	-.08	.42**	-.13
MOMAI		----	.14	-.05	.60***
DADEI			----	-.40**	.64***
DADCI				----	-.38**
African American Sample ( <i>n</i> = 65)					
MOMEI	.04	.64***	.42***	.12	.39***
MOMCI	----	-.10	-.03	.39***	-.08
MOMAI		----	.18	.16	.52***
DADEI			----	-.07	.55***
DADCI				----	.14

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

Table 14

*Correlations Among Separation Scales and Family Scales for Overall Sample And by Ethnic Group*

	MOMEI	MOMCI	MOMAI	DADEI	DADCI	DADAI
Overall Sample ( <i>N</i> = 302)						
CFMQ-AWC	-.02	-.18**	-.01	-.03	-.22***	.02
MMRS-ACL	-.12*	.03	-.16**	.00	.11	-.07
Caucasian Sample ( <i>n</i> = 189)						
CFMQ-AWC	-.01	-.18**	.00	-.06	-.18*	.04
MMRS-ACL	-.06	.05	-.10	-.02	.02	-.01
Hispanic Sample ( <i>n</i> = 48)						
CFMQ-AWC	-.03	-.26	-.03	.11	-.36*	.03
MMRS-ACL	.05	-.12	.02	-.09	.07	-.06
African American Sample ( <i>n</i> = 65)						
CFMQ-AWC	-.04	-.11	-.07	-.02	-.27*	-.03
MMRS-ACL	-.16	.16	-.25*	-.07	.27*	-.28*

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

Table 15

*Summary of Hierarchical Multiple Regression Analysis Predicting Emotional Independence from Mother for Hispanic Participants (N = 48)*

Variable	$R^2$	$\Delta R^2$	F	Zero Order	Part	Beta	t	P
<u>Step 1</u>	.01	.01	.21					
(Constant)							17.76	.00
APPEVAL				.08	.08	.08	.54	.59
MMRSACL				.05	.05	.05	.34	.74
<u>Step 2</u>	.13	.12*	2.14					
(Constant)							18.76	.00
APPEVAL				.08	.02	.02	.16	.87
MMRSACL				.05	.07	.07	.48	.64
APPEVAL X MMRSACL				-.35	-.34	-.35	-2.44	.02*

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

Table 16

*Summary of Hierarchical Multiple Regression Analysis Predicting Conflictual Independence from Mother for Hispanic Participants (N = 48)*

Variable	$R^2$	$\Delta R^2$	F	Zero Order	Part	Beta	t	P
<u>Step 1</u>	.07	.07	1.61					
(Constant)							28.25	.00
APPEVAL				.23	.23	.23	1.58	.59
MMRSACL				-.12	-.13	-.13	-.88	.74
<u>Step 2</u>	.10	.03	1.64					
(Constant)							28.43	.01
APPEVAL				.23	.25	.26	1.78	.08
MMRSACL				-.12	-.14	-.14	-.95	.35
APPEVAL X MMRSACL				.14	.18	.19	1.28	.21

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

Table 17

*Summary of Hierarchical Multiple Regression Analysis Predicting Attitudinal Independence from Mother for Hispanic Participants (N = 48)*

Variable	$R^2$	$\Delta R^2$	$F$	Zero Order	Part	Beta	$t$	$p$
<u>Step 1</u>	.00	.00	.10					
(Constant)							14.72	.00
APPEVAL				-.06	-.06	-.06	-.42	.67
MMRSACL				.02	.02	.02	.14	.89
<u>Step 2</u>	.16	.16*	2.85*					
(Constant)							15.91	.00
APPEVAL				-.06	.39	-.13	-.93	.36
MMRSACL				.02	.04	.04	.30	.77
APPEVAL X MMRSACL				-.38	-.40	-.40	-2.88	.01**

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

Table 18

*Summary of Hierarchical Multiple Regression Analysis Predicting Emotional Independence from Father for Hispanic Participants (N = 48)*

Variable	$R^2$	$\Delta R^2$	$F$	Zero Order	Part	Beta	$t$	$p$
<u>Step 1</u>	.01	.01	.19					
(Constant)							20.85	.00
APPEVAL				.02	.02	.02	.11	.92
MMRSACL				-.09	-.09	-.09	-.61	.55
<u>Step 2</u>	.03	.02	.38					
(Constant)							20.79	.00
APPEVAL				.02	.04	.04	.25	.81
MMRSACL				-.09	-.10	-.10	-.65	.52
APPEVAL X MMRSACL				.12	.13	.13	.87	.39

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

Table 19

*Summary of Hierarchical Multiple Regression Analysis Predicting Conflictual Independence from Father for Hispanic Participants (N = 48)*

Variable	$R^2$	$\Delta R^2$	$F$	Zero Order	Part	Beta	$t$	$p$
<u>Step 1</u>	.16	.16	4.35*					
(Constant)							32.39	.00**
APPEVAL				.40	.40	.40	2.90	.01**
MMRSACL				.07	.07	.07	.49	.63
<u>Step 2</u>	.16	.00	2.84*					
(Constant)							32.03	.00**
APPEVAL				.40	.39	.39	2.82	.01**
MMRSACL				.07	.07	.07	.48	.63
APPEVAL X MMRSACL				-.07	-.01	-.01	-.07	.95

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



Table 20

*Summary of Hierarchical Multiple Regression Analysis Predicting Attitudinal Independence from Father for Hispanic Participants (N = 48)*

Variable	$R^2$	$\Delta R^2$	$F$	Zero Order	Part	Beta	$t$	$p$
<u>Step 1</u>	.02	.02	.49					
(Constant)							14.44	.00
APPEVAL				-.13	-.13	-.13	-.91	.37
MMRSACL				-.06	-.06	-.06	-.40	.69
<u>Step 2</u>	.02	.00	.32					
(Constant)							14.28	.00
APPEVAL				-.13	-.13	-.08	-.89	.38
MMRSACL				-.06	.06	-.00	-.39	.70
APPEVAL X MMRSACL				.01	-.01	-.01	-.04	.97

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

Table 21

*Summary of Hierarchical Multiple Regression Analysis Predicting Emotional Independence from Mother for African American Participants (N = 65)*

Variable	$R^2$	$\Delta R^2$	$F$	Zero Order	Part	Beta	$t$	$p$
<u>Step 1</u>	.03	.03	.79					
(Constant)							17.62	.00
APPEVAL				-.04	.02	.02	.12	.91
MMRSACL				-.16	-.15	-.16	-1.22	.23
<u>Step 2</u>	.03	.01	.68					
(Constant)							16.86	.00
APPEVAL				-.04	-.00	-.00	-.03	.98
MMRSACL				-.16	-.16	-.17	-1.25	.22
APPEVAL X MMRSACL				-.07	-.09	-.09	-.68	.50

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

Table 22

*Summary of Hierarchical Multiple Regression Analysis Predicting Conflictual Independence from Mother for African American Participants (N = 65)*

Variable	$R^2$	$\Delta R^2$	$F$	Zero Order	Part	Beta	$t$	$p$
<u>Step 1</u>	.05	.05	1.55					
(Constant)							33.23	.00
APPEVAL				.19	.15	.16	1.18	.24
MMRSACL				.16	.11	.11	.84	.41
<u>Step 2</u>	.06	.01	1.35					
(Constant)							31.21	.00
APPEVAL				.19	-.11	.18	1.35	.18
MMRSACL				.16	-.11	.12	.90	.38
APPEVAL X MMRSACL				.22	.12	.12	.97	.34

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

Table 23

*Summary of Hierarchical Multiple Regression Analysis Predicting Attitudinal Independence from Mother for African American Participants (N = 65)*

Variable	$R^2$	$\Delta R^2$	$F$	Zero Order	Part	Beta	$t$	$p$
<u>Step 1</u>	.09	.09	2.92					
(Constant)							15.69	.00
APPEVAL				-.22	-.15	-.16	-1.22	.23
MMRSACL				-.25	-.19	-.20	-1.56	.12
<u>Step 2</u>	.34	.03	2.64					
(Constant)							15.45	.00
APPEVAL				-.22	-.18	-.19	-1.49	.14
MMRSACL				-.25	-.18	-.21	-1.64	.11
APPEVAL X MMRSACL				-.10	-.17	-.18	-1.41	.16

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

Table 24

*Summary of Hierarchical Multiple Regression Analysis Predicting Emotional Independence from Father for African American Participants (N = 65)*

Variable	$R^2$	$\Delta R^2$	$F$	Zero Order	Part	Beta	$t$	$p$
<u>Step 1</u>	.03	.03	.85					
(Constant)							25.06	.00
APPEVAL				-.16	-.15	-.16	-1.19	.24
MMRSACL				-.07	-.01	-.01	-.10	.92
<u>Step 2</u>	.05	.03	1.10					
(Constant)							24.28	.00
APPEVAL				-.16	-.18	-.19	-1.43	.16
MMRSACL				-.07	-.02	-.02	-.16	.87
APPEVAL X MMRSACL				-.11	-.16	-.16	-1.26	.21

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

Table 25

*Summary of Hierarchical Multiple Regression Analysis Predicting Conflictual Independence from Father for African American Participants (N = 65)*

Variable	$R^2$	$\Delta R^2$	$F$	Zero Order	Part	Beta	$t$	$p$
<u>Step 1</u>	.11	.11	3.83*					
(Constant)							43.12	.00
APPEVAL				.27	.19	.20	1.56	.12
MMRSACL				.27	.20	.21	1.63	.11
<u>Step 2</u>	.13	.02	3.03*					
(Constant)							41.41	.00
APPEVAL				.27	.17	.17	1.29	.20
MMRSACL				.27	.17	.20	1.58	.12
APPEVAL X MMRSACL				.32	-.15	-.14	-1.17	.25

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

Table 26

*Summary of Hierarchical Multiple Regression Analysis Predicting Attitudinal Independence from Father for African American Participants (N = 65)*

Variable	$R^2$	$\Delta R^2$	$F$	Zero Order	Part	Beta	$t$	$p$
<u>Step 1</u>	.10	.10	3.58*					
(Constant)							16.18	.00
APPEVAL				-.25	-.17	-.18	-1.37	.18
MMRSACL				-.28	-.20	-.22	-1.70	.09
<u>Step 2</u>	.12	.02	2.83*					
(Constant)							15.75	.00
APPEVAL				-.25	-.19	-.21	-1.58	.12
MMRSACL				-.28	-.21	-.22	-1.75	.08
APPEVAL X MMRSACL				-.07	-.14	-.14	-1.14	.26

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

APPENDIX A  
INFORMED CONSENT



## Acculturation, Interpersonal Relationships, and Body Image in Women

Dear Research Participant:

This is a study of perceptions of one's body, relationships with other people, how you think and feel about things, and some background information. The main risk for participation is minimal in that reporting on some of these items may be uncomfortable for some people. The benefits of participation in the study include helping to promote psychological understanding of the topics being studied and the participants will also receive extra credit that may be applied to a psychology course. Participation in this study is completely voluntary. You must be at least eighteen years of age to participate. We are asking you to complete the rating scales in this packet. Many people can complete this packet in about one hour.

Your confidentiality is important to us, and will be protected by using code numbers only. Please help us by not writing your name anywhere.

Returning the completed packet voluntarily to the researcher shows that you consent to participate; thus, we are not asking you to sign an informed consent form. You may change your mind at any time and stop participating without losing any benefits or services that you have now.

Please remove this form and keep it for future reference.

Should you have any questions or concerns please contact either the researcher or advisor at the address and phone numbers listed below.

Thank you for your participation.

---

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This project has been approved by the University of North Texas Committee for the Protection of Human Subjects (phone 940-565-3940).

APPENDIX B  
DEMOGRAPHIC QUESTIONNAIRE

## Demographic Questionnaire

Age: \_\_\_\_\_

Subjects (Your) Ethnicity:

- \_\_\_\_\_ African American
- \_\_\_\_\_ Asian/Pacific American
- \_\_\_\_\_ European American/White
- \_\_\_\_\_ Latina/Hispanic
- \_\_\_\_\_ Native American/Alaskan
- \_\_\_\_\_ Other (specify): \_\_\_\_\_

Ethnicity of Mother:

- \_\_\_\_\_ African American
- \_\_\_\_\_ Asian/Pacific American
- \_\_\_\_\_ European American/White
- \_\_\_\_\_ Latina/Hispanic
- \_\_\_\_\_ Native American/Alaskan
- \_\_\_\_\_ Other (specify): \_\_\_\_\_
- \_\_\_\_\_

Ethnicity of Father:

- \_\_\_\_\_ African American
- \_\_\_\_\_ Asian/Pacific American
- \_\_\_\_\_ European American/White
- \_\_\_\_\_ Latina/Hispanic
- \_\_\_\_\_ Native American/Alaskan
- \_\_\_\_\_ Other (specify): \_\_\_\_\_

Were you born in the United States: YES      NO

At what age did you move to the United States: \_\_\_\_\_

Number of generations in the United States for mother:

1      2      3      4 or more

Number of generations in the United States for father:

1      2      3      4 or more

Language spoken most frequently within the home: \_\_\_\_\_

Highest Level of Education (Subject's):

- \_\_\_\_\_ Some High School
- \_\_\_\_\_ Graduated from High School
- \_\_\_\_\_ College Freshman
- \_\_\_\_\_ College Sophomore
- \_\_\_\_\_ College Junior
- \_\_\_\_\_ College Senior
- \_\_\_\_\_ B.A. or B.S.
- \_\_\_\_\_ Doctoral or Professional Degree

\_\_\_\_\_ Other (Please Specify): \_\_\_\_\_  
Height: \_\_\_\_\_ Weight: \_\_\_\_\_ Preferred Weight: \_\_\_\_\_

Are you currently on a diet?: YES NO

Have you dieted in the past?: YES NO

How many times have you tried a diet?:

- \_\_\_\_\_ 0
- \_\_\_\_\_ 1 – 5
- \_\_\_\_\_ 6 – 10
- \_\_\_\_\_ 11 – 15
- \_\_\_\_\_ 16 – 20
- \_\_\_\_\_ 21 or more

How satisfied are you with your current weight?

- \_\_\_\_\_ Very Satisfied
- \_\_\_\_\_ Satisfied
- \_\_\_\_\_ Neutral
- \_\_\_\_\_ Dissatisfied
- \_\_\_\_\_ Very Dissatisfied

Have you ever been diagnosed with an eating disorder? YES NO  
If YES specify (anorexia nervosa, bulimia nervosa, obesity, Other): \_\_\_\_\_

Have you ever engaged in any of these weight loss strategies (Check all that apply)

- \_\_\_\_\_ Exercise (only to lose weight)
- \_\_\_\_\_ Calorie restricting diet
- \_\_\_\_\_ Purging (vomiting)
- \_\_\_\_\_ Diuretics (diet pills, supplements to loss weight)
- \_\_\_\_\_ Laxatives
- \_\_\_\_\_ Surgery

## REFERENCES

- Altabe, M. (1998). Ethnicity and body image: Quantitative and qualitative analysis. *International Journal of Eating Disorders, 23*, 153-159.
- American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders* (4<sup>th</sup> ed.). Washington, DC: Author.
- Atkinson, D., Morten, G., & Sue, D. W. (1979). *Counseling American minorities: A cross-cultural perspective*. Dubuque, IA: Brown Co.
- Baron, R. M. & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.
- Bay-Cheng, L. Y., Zucker, A. N., Stewart, A. J., & Pomerleau, C. S. (2002). Linking femininity, weight concern, and mental health among Latina, Black, and White women. *Psychology of Women Quarterly, 26*, 36-45.
- Berndt, T. J. & Hestenes, S. L. (1996). The developmental course of social support: Family and Peers. In L. Smolak, M. P. Levine, & R. Striegel-Moore (Eds.), *The developmental psychopathology of eating disorders: Implications for research, prevention, and treatment* (pp. 77-106). Mahwah, N.J.: L. Erlbaum Associates.
- Bond, S., & Cash, T.F. (1992). Black beauty: Skin color and body images among African American college women. *Journal of Applied Social Psychology, 22*, 874-888.
- Byely, L., Archibald, A. B., Graber, J., & Brooks-Gunn, J. (2000). A prospective study of familial and social influences on girls' body image and dieting. *International Journal of Eating Disorders, 28*, 155-164.

- Caldwell, M. B., Brownell, K. D., & Wilfley, D. E. (1997). Relationship of weight, body dissatisfaction, and self-esteem in African American and White female dieters. *International Journal of Eating Disorders, 22*, 127-130.
- Cash, T. F. (1997). *The body image workbook: An 8-step program for learning to like your looks*. Oakland, CA: New Harbinger.
- Cassidy, C. M. (1991). The good body: When big is better. *Medical Anthropology, 13*, 181-213.
- Chamorro, R., & Fores-Ortiz, Y. (2000). Acculturation and disordered eating patterns among Mexican American women. *International Journal of Eating Disorders, 28*, 125-129.
- Connors, M. E. (1996). Developmental vulnerabilities for eating disorders. In L. Smolak, M. P. Levine, & R. Striegel-Moore (Eds.), *The developmental psychopathology of eating disorders: Implications for research, prevention, and treatment* (pp. 285-310). Mahwah, N.J.: L. Erlbaum Associates.
- Crago, M., Shisslak, C. M., & Estes, L. S. (1996). Eating disturbances among American minority groups: A review. *International Journal of Eating Disorders, 19*, 239-248.
- Cusumano, D. L., & Thompson, J. K. (1997) Body image and body shape ideals in magazines: Exposure, awareness, and internalization. *Sex Roles, 37*, 701-721.
- Dolan, B. M., Lieberman, S., Evans, C., & Lacey, J. H. (1990). Family features associated with normal body weight bulimia. *International Journal of Eating Disorders, 9*, 639-647.
- Field, A. (2005). *Discovering Statistics Using SPSS*. London: Sage Publications.

- French, S. A., Story, M., Neumark-Sztainer, D., Downes, B. Resnick, M., & Blum, R. (1997). Ethnic differences in psychosocial and health behavior correlates of dieting, purging, and binge eating in a population-based sample of adolescent women. *International Journal of Eating Disorders, 22*, 315-322.
- Garner, D. M. (1991). *Eating Disorder Inventory-2 professional manual*. Odessa, FL: Psychological Assessment Resources.
- Garner, D. M., & Garfinkel, P. E. (1980). Socio-cultural factors in the development of anorexia nervosa. *Psychological Medicine, 10*, 647-656.
- Gilbert, S. C. (2003). Eating disorders in women of color. *Clinical Psychology: Science and Practice, 10*, 444-455.
- Grabe, S., & Hyde, J. S. (2006). Ethnicity and body dissatisfaction among women in the United States: A meta-analysis. *Psychological Bulletin, 132*, 622-640.
- Gross, J., & Rosen, J. C. (1988). Bulimia in adolescents: Prevalence and psychosocial correlates. *International Journal of Eating Disorders, 7*, 51-61.
- Hahn-Smith, A. M., & Smith, J. E. (2001). The positive influence of maternal identification on body image, eating attitudes, and self-esteem of Hispanic and Anglo girls. *International Journal of Eating Disorders, 29*, 429-440.
- Hargreaves, M. K., Schlundt, D. G., & Buchowski, M. S. (2002). Contextual factors influencing the eating behaviours of African American women: A focus group investigation. *Ethnicity & Health, 7*, 133-147.
- Haworth-Hoepfner, S. (2000). The critical shapes of body image: The role of culture and family in the production of eating disorders. *Journal of Marriage and Family, 62*, 212-227.

- Hermes, S. F., & Keel, P. K. (2003). The influence of puberty and ethnicity on awareness and internalization of the thin ideal. *International Journal of Eating Disorders, 33*, 465-467.
- Hoffman, J. A. (1984). Psychological separation of late adolescents from their parents. *Journal of Counseling Psychology, 31*, 170-178.
- Hoffman, J. A., & Weiss, B. (1987). Family dynamics and presenting problems in college students. *Journal of Counseling Psychology, 34*, 157-163.
- Hoge, D., & McCarthy, J. (1984). Influence of individual and group identity salience in the global self-esteem of youth. *Journal of Personality and Social Psychology, 47*, 403- 414.
- Holston, J. I., & Cashwell, C. S. (2000). Family functioning and eating disorders among college women: A model of prediction. *Journal of College Counseling, 3*, 5-27.
- Hsu, G. L. (1987). Are the eating disorders becoming more common in Blacks. *International Journal of Eating Disorders, 6*, 113-124.
- James, K. A., Phelps, L., & Bross, A. L. (2001). Body dissatisfaction, drive for thinness, and self-esteem in African American college women. *Psychology in the Schools, 38*, 491-496.
- Johnson, C., & Connors, M. E. (1987). *The etiology and treatment of bulimia nervosa: A biopsychosocial perspective*. New York: Basic Books.
- Joiner, G. W., & Kashbubeck, S. (1996). Acculturation, body image, self-esteem, and eating disorder symptomatology in adolescent Mexican American women. *Psychology of Women Quarterly, 20*, 419-435.



- Kashubeck-West, S., & Mintz, L. B. (2001). Eating disorders in women: Etiology, assessment, and treatment. *The Counseling Psychologist, 29*, 627-634.
- Kuba, S. A., & Harris, D. J. (2001) Eating disturbances in women of color: An exploratory study of contextual factors in the development of disordered eating in Mexican American women. *Health Care for Women International, 22*, 281-298.
- Lake, A. J., Staiger, P. K., Glowinski, H. (2000). Effects of Western culture on women's attitudes to eating and perception of body shape. *International Journal of Eating Disorders, 27*, 83-89.
- Le Grange, D., Stone, A. A., and Brownell, K. D. (1998). Eating disturbances in White and minority female dieters. *International Journal of Eating Disorders, 24*, 395-403.
- Lester, R., & Petrie, T.A. (1995). Personality and physical correlates of bulimic symptomatology among Mexican American female college students. *Journal of Counseling Psychology, 42*, 199-203.
- Leung, F., Schwartzman, A., & Steiger, H. (1996). Testing a dual-process family model in understanding the development of eating pathology: A structural equation modeling analysis. *International Journal of Eating Disorders, 20*, 367-375.
- MacBrayer, E. K., Smith, G. T., McCarthy, D. M., Demos, S., & Simmons, J. (2001). The role of family of origin food-related experiences in bulimic symptomatology. *International Journal of Eating Disorders, 30*, 149-160.
- Mendelson, B. K., McLaren, L., & Gavin, L. (2002). The relationship of self-esteem and body esteem in women with and without eating disorders. *International Journal of Eating Disorders, 31*, 318-323.

- Miller, D. A., & McCluskey-Fawcett, K. (1993). Correlates of bulimia nervosa: Early family mealtime experiences. *Adolescence, 28*, 621-636.
- Miller, K. J., Gleaves, D. H., Hirsch, T. G., Green, B. A., Snow, A. C., & Corbett, C. C. (2000). Comparisons of body image dimensions by race/ethnicity and gender in a university population. *International Journal of Eating Disorders, 27*, 310-316.
- Moreno, A., & Thelen, M. H. (1993). Parental factors related to bulimia nervosa. *Addictive Behaviors, 18*, 681-689.
- Mulholland, A. M., & Mintz, L. B. (2001). Prevalence of eating disorders among African American women. *Journal of Counseling Psychology, 48*, 111-116.
- Osvold, L. L., & Sadowsky, G. R. (1995). Eating attitudes of Native American and African American women: Differences by race and acculturation. *Exploration in Ethnic Studies, 18*, 187-210.
- Parker, S., Nichter, M., Nichter, M., Vuckovic, N., Sims, C., & Ritenbaugh, C. (1995). Bodyimage and weight concerns among African American and White adolescent women: Differences that make a difference. *Human Organization, 54*, 103-114.
- Pate, J. E., Pumariega, A. J., Hester, C., & Garner, D. M. (1992). Cross-cultural patterns in eating disorders: A review. *Journal of American Adolescence Psychiatry, 31*, 802-809.
- Perez, M., Voelz, Z. R., Pettit, J. W., & Joiner, T. E. (2002). The role of acculturative stress and body dissatisfaction in predicting bulimic symptomatology across ethnic groups. *International Journal of Eating Disorders, 31*, 442-454.

- Petersons, M., Rojhani, A., Steinhaus, N., & Larkin, B. (2000). Effect of ethnic identity on attitudes, feelings, and behaviors toward food. *Eating Disorders: Journal of Treatment and Prevention*, 8, 207-219.
- Phinney, J. S. (1991). Ethnic identity and self-esteem: A review and integration. *Hispanic Journal of Behavioral Sciences*, 13,193-208.
- Ponterotto, J. G., Casas, J. M., Suzuki, L. A., & Alexander, C. M. (2001). *Handbook of multicultural counseling*. (2<sup>nd</sup> Edition) Thousand Oaks: Sage Publications.
- Powell, A. D., & Kahn, A. S. (1995). Racial differences in women's desires to be thin. *International Journal of Eating Disorders*, 17, 191-195.
- Ritvo, S. (1984). The image and uses of the body in psychic conflict with special reference to eating disorders in adolescence. *Psychoanalytic Study of the Child*, 39, 449-469.
- Rodin, J., Silberstein, L. R., & Striegel-Moore, R. H. (1985). Women and weight: A normative discontent. In T. B. Sonderegger (Ed.), *Psychology and gender: Nebraska symposium on motivation, 1984* (pp.267-307). Lincoln: University of Nebraska Press.
- Root, M. P. (1990). Disordered eating in women of color. *Sex Roles*, 22, 525-536.
- Root, M. P. (2001). Future considerations in research on eating disorders. *The Counseling Psychologist*, 29, 754-762.
- Rorty, M., Yager, J., Buckwalter, J. G., Rossotto, E., & Guthrie, D. (year?). Development and validation of the parental intrusiveness rating scale among bulimic and comparison women. *International Journal of Eating Disorders*, 28, 188-201.

- Rosenburg, M. (1989). *Society and the adolescent self-image*. Revised Edition. Middletown, CT: Wesleyan University Press.
- Roysircar-Sodowsky, G., & Maestas, M. V. (2000). Acculturation, ethnic identity, and acculturative stress: Evidence and measurement. In R. H. Dana (Eds.), *Handbook of cross-cultural and multicultural personality assessment* (pp. 131-172). Mahwah, N.J.: Lawrence Erlbaum Associates.
- Sharpe, T. M., Killen, J. D., Bryson, S. W., Shisslak, C. M., Estes, L. S., Gray, N., Crago, M., & Taylor, C. B. (1998). Attachment style and weight concerns in preadolescent and adolescent girls. *International Journal of Eating Disorders*, 23, 39-44.
- Silber, T. J. (1986). Anorexia nervosa in Blacks and Hispanics. *International Journal of Eating Disorders*, 5, 121-128.
- Smith, J. E., & Krejci, J. K. (1991). Minorities join the majority: Eating disturbances among Hispanic and Native American youth. *International Journal of Eating Disorders*, 10, 179-186.
- Smolak, L., & Levine, M. P. (1993). Separation-individuation difficulties and the distinction between bulimia nervosa and anorexia nervosa in college women. *International Journal of Eating Disorders*, 14, 33-41.
- Sodowsky, G. R., Lai, E. W. M., & Plake, B. S. (1991). Moderating effects of sociocultural variables on acculturation attitudes of Hispanics and Asian Americans. *Journal of Counseling and Development*, 70, 194-204.
- Striegel-Moore, R. H., Silberstein, L. R., & Rodin, J. (1986). Towards an understanding of risk factors for bulimia. *American Psychologist*, 41, 246-263.

- Striegel-Moore, R. H., & Kearney-Cooke A. (1994). Exploring parents' attitudes and behaviors about their children's physical appearance. *International Journal of Eating Disorders, 15*, 377-385.
- Striegel-Moore, R. H., & Cachelin, F. M. (2001). Etiology of eating disorders in women. *The Counseling Psychologist, 29*, 635-661.
- Striegel-Moore, R. H., Schreiber, G. B., Pike, K. M., Wilfley, D. E., Schreiber, G., & Rodin, J. (1995). Drive for thinness in black and white preadolescent girls. *International Journal of Eating Disorders, 18*, 59-69.
- Striegel-Moore, R., & Smolak, L. (1996). The role of race in the development of eating disorders. In L. Smolak, M. P. Levine, & R. Striegel-Moore (Eds.), *The developmental psychopathology of eating disorders: Implications for research, prevention, and treatment* (pp. 259-284). Mahwah, N.J.: L. Erlbaum Associates.
- Steiger, H., Stotland, S., Trottier, J., & Ghadirian, A. M. (1996). Familial eating concerns and psychopathological traits: Causal implications of transgenerational effects. *International Journal of Eating Disorders, 19*, 147-157.
- Strober, M., & Humphrey, L. L. (1987). Familial contributions to the etiology and course of Anorexia Nervosa and Bulimia. *Journal of Consulting and Clinical Psychology, 55*, 654-659.
- Szymanski, M.L., & Cash, T. F. (1995). Body-image disturbance and self-discrepancy theory: Expansion of the Body-Image Ideals Questionnaire. *Journal of Social and Clinical Psychology, 14*, 134-146.
- Thompson, B. W. (1992). "A way outa no way": Eating problems among African-American, Latina, and White women. *Gender and Society, 6*, 546-561.

- Thompson, J. K., & Heinberg, L. (1993). Preliminary test of two hypotheses of body image disturbance. *International Journal of Eating Disorders, 14*, 59-63.
- Thompson, J. K., Heinberg, L. J., Altabe, M., & Tantleff-Dunn, S. (1999). *Exacting beauty: Theory, assessment, and treatment of body image disturbance*. Washington, DC: American Psychological Association.
- Thompson, S. H., & Sargent, R. G. (2000). Black and White women's weight related attitudes and parental criticism of their childhood appearance. *Women and Health, 30*, 77-92.
- Twamley, E. W., & Davis, M. C. (1999). The sociocultural model of eating disturbance in young women: The effects of personal attributes and family environment. *Journal of Social and Clinical Psychology, 18*, 467-489.
- Twenge, J. M., Crocker, J. (2002). Race and Self-Esteem: Meta-Analyses Comparing Whites, Blacks, Hispanics, Asians, and American Indians. *Psychological Bulletin, 128*, 371-408.
- Villarosa, L. (1994). Dangerous eating. *Essence, 19*. (January).
- Wildes, J. E., Emery, R. E., & Simons, A. D. (2001). The roles of ethnicity and culture in development of eating disturbance and body dissatisfaction: A meta-analytic review. *Clinical Psychology Review, 21*, 521-551.
- Williamson, L. (1998). Eating disorders and the cultural forces behind the drive for thinness: Are African American women really protected? *Social Work and Health Care, 28*, 61-73.
- Worobey, J. (2002). Interpersonal versus intrafamilial predictors of maladaptive eating attitudes in young women. *Social Behavior & Personality, 30*, 423-434.