2002

Eating Attitudes and Behaviors among African American Women

Eileen N. McCarthy

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Eating Attitudes and Behaviors Among African American Women

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Submitted in partial fulfillment of the
Requirements of the Degree of Doctor of Philosophy

Seton Hall University

2002
Abstract

This study measured the eating attitudes and behaviors of African American women utilizing the Eating Attitude Test – 26 (EAT – 26). An exploratory factor analysis was performed of the data from the African American women and compared with the factor structures of their Caucasian and Latina counterparts. Additionally, a correlational analysis between the African American women’s scores of the EAT – 26 and their scores on the African American Acculturation Scale – R (AAAS – R) was performed. The African American women’s factor structure of the EAT – 26 differed from their Caucasian and Latina counterparts. No correlation between the scores of the EAT – 26 and the AAAS – R was identified.
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CHAPTER I

Introduction

Over the last three decades eating disorders have become widespread in Western societies. The two primary diagnoses for eating disorders are anorexia nervosa. Anorexia nervosa includes symptoms such as an intense fear of weight gain, marked food restriction, and refusal to maintain normal body weight. Bulimia nervosa is marked by recurrent episodes of binge eating, followed by inappropriate compensatory behavior. These behaviors include vomiting, fasting, excessive exercise, and misuse of enemas, laxatives, and diuretics. Those suffering from both anorexia nervosa and bulimia nervosa present a disturbance in the perception of personal body shape and weight. The usual age of onset is early adolescence (American Psychiatric Association [APA], 1994). Gold (2000) reported that bulimia nervosa is now ten times more prevalent than anorexia nervosa and is replacing depression as the main way in which young women show their distress.

According to APA (1994), eating disorders are far more common in industrialized societies, especially were female attractiveness is associated with being thin. Many researchers have concluded that Western societal ideals about body size and shape have influenced the occurrence of eating disorders (Fedoroff & McFarlane, 1998; Olmsted, & Garfinkel, 1983; Cash & Brown, 1989; Freedman, 1990). This ideal body shape has become a symbol of success across various domains of life (Brownell, 1991), and particularly so in higher socioeconomic strata (Striegel-Moore, Silberstein, & Rodin,
1986). Thus, the primary diagnosed victim of eating disorders has been white, middle-
class to upper-middle class females (Crisp, Palmer, & Kalucy, 1976; Fedoroff &
McFarlane, 1998; Gray, Ford, & Kelly, 1987; Parker, Nicter, Nicter, Vuckovic, Sims,
& Ritenbaugh, 1995; Rucker & Cash, 1992). It has be speculated that as the number of
individius inflicted with eating disorders is increasing as the Western ideal for thinness
and its representation of self-discipline, control, assertiveness, competitiveness, and
success is becoming more commonplace (Garner, Olmsted, & Garfinkel, 1983; Nasser,
1988; Pate, Pumariega, Hester, & Garner, 1992). However, there is a noteworthy absence
of research on eating disorders in non-white populations (APA, 1994).

The current body of literature that focuses on African American women and their
potential for the development of eating disorders is small and contains many discrepant
opinions and findings. Hence, it remains unclear if professionals are identifying and
serving this population as best they can. The purpose of this study is to measure eating
attitudes and behaviors in African American woman, by using the Eating Attitudes Test
(EAT), and through the use of factor analysis determine if the presentation of factors
associated with disordered attitudes and behaviors presents differently within the
identified population when compared to their Caucasian and Latina counterparts.
Additionally, a correlation analysis will be conducted between the African American
women's scores on the eating attitudes and behaviors measure with an African American
acculturation measure (African American Acculturation Scale – II) to identify any
potential relationship between levels of acculturation and eating attitudes and behaviors.
The study will attempt to answer the following questions:
1. What percent of African American women present with attitudes and behaviors associated with eating disordered behaviors?

2. Do the factors of attitudes and behaviors already associated with eating disordered behaviors present differently in African American women when compared to their Caucasian and Latina counterparts?

3. Is there a correlation between levels of acculturation within the African American culture and attitudes and behaviors associated with the potential for developing an eating disorder?

**Historical Presentation of Disordered Eating Behaviors**

**Bulimia Nervosa.**

The literature available on the historical delineation of eating disordered behaviors makes a distinction between the early descriptions of these behaviors and what is presently recognized as problematic eating behaviors. The first reference to bulimia was recorded in ancient times, 2000 years ago (Stunkard, 1997) or 2500 years ago (Ziolko, 1996); however, these dates are refuted by other researchers all of whom report the existence of bulimia between 300 years ago (Stein & Laakso, 1988) to as recent as 1979 (Diebel-Braun, 1991). According to Ziolko (1996) in ancient times bulimia appeared through a variety of manifestations. The designation of bulimia appears to originate from the Greek word boulimos or boulimia, which is a combination of the word limos (hunger) with the prefix bou, which translates to steer, ox, or cow.

The first recorded clinical phenomena of extreme hunger was diagnosed by a Greek physician in the fourth century B.C. The descriptors used were magna fames or fames bovina. Following, in the first century B.C., another Greek physician practicing in
Rome recorded his first case of a patient who ate continuously throughout the day. Again in the fourth century A.D. a Roman physician practicing in North Africa used the term bulimos, “an extraordinary desire to eat”, to describe one of his patients (Ziolko, 1996). Then in the seventh century, a variant of this eating behavior, consisting of the oscillation between bulimos and anorexia, was noted by a Greek physician (Ziolko, 1996).

Beginning in 1000 A.D., the use of the term bulimos by physicians to describe a constant, insatiable hunger became widespread (Ziolko, 1996).

Ziolko (1996), also noted two other forms of eating which appeared unusual at their time that appear to have relevance to modern bulimic behaviors. The first noteworthy behavior is the coupling of eating with vomiting, which in modern times is noted as binging and purging. This behavior dates back to the time of Hippocrates. The second behavior was termed bulimia hellunum by William Cullen in 1772, and translated to mean “mere gluttony”. This term corresponds with the term polyphagia, dating back to ancient times. Polyphagia was known as a sign of fitness and strength and the rejection of “gluttons’ bellies”.

Other researches, including Habermas (1990) and Ziolka and Schrader (1985), state that present day eating disorders did not originate until the nineteenth century. What is known as modern day bulimia nervosa is thought to have originated in 1979 when Russell published a paper recognizing this particular constellation of behaviors as a distinct disorder. Additionally, it is thought that as early as 1932, Wulff described the behaviors of four patients that appear to be the forerunners of modern bulimia (Stunkard, 1997). Furthermore, what was described earlier as the coupling of eating with vomiting, or binging and purging, was not recognized as a disorder until 1980 (Stunkard, 1997).
Anorexia Nervosa.

Bemporad (1996) provided a well-developed historical outline of anorexia nervosa, in which he provided contextual accounts from various epochs. In accord with Bemporad’s work, elements of this particular eating disorder were apparent much earlier than the development of the formal medical description that was recognized in the late nineteenth century. He indicated that the illness has existed for at least the past seven centuries. Bemporad (1996) pointed out that across a variety of cultures, fasting was used as a means of religious devotion or divine enlightenment. Fasting for such purposes that have been recorded include prominent historical figures such as Moses, Jesus, Vardhamana, and Buddha.

Between the fifth and tenth centuries there was a scarce number of recorded instances of self-starvation. A variety of explanations could be offered to explain the lack of recorded self-deprivation (Skrabanek, 1990). Primarily, this time period, known historically as the Dark Ages, is poorly documented, and secondly, this era was marked by perfuse famine, plagues, and invasions, therefore, self-starvation during this time period would have been a difficult way of expressing a psychological purpose (Bemporad, 1996). One of these reports involved St. Wilgefortis, a daughter of the seventh king of Portugal, who took a vow of virginity and committed herself to the service of God. In response to an impending marriage arranged by her father, St. Wilgefortis refused to eat so she would lose her female figure (curves), furthermore, she also grew hair all over her body (lanugo) making her unattractive to her suitor who withdrew his offer of courtship. Her legacy became that of the woman who liberated herself from the physical and social discomforts of womanhood. She became the patron
saint of those who want to free themselves from the control of others; hence, her story connects self-starvation with liberating oneself, particularly, from burdens of femininity (Lacey, 1982).

Rudolph Bell published a book in 1985, *Holy Anorexia*, which delineates 261 documented cases of self-starvation occurring between the thirteenth and seventeenth centuries, after the Dark Ages. Although there is no certainty that these women were exemplifying anorexia nervosa as it is defined today, there were many similarities between their behaviors and those associated with anorexia nervosa (Bemporad, 1996). Following, a variety of cases surfaced during the Reformation era, the seventeenth through eighteenth centuries. According to Brumberg (1988), during the eighteenth century, John Reynolds followed a case study of self-starvation of a young woman. It appears that Reynolds was the first to propose a medical explanation for such behavior. Reynolds recorded that the illness of self-starvation originated from an abnormal condition of the blood (Brumberg, 1988). Following Reynolds proposal, women inflicted with anorexia nervosa began to be treated more and more within the medical realm, utilizing the prevailing thought of the time (Bemporad, 1996). Bliss and Brunch (1960) found nine doctoral dissertations written between 1685 and 1770, each ascribing the disordered behavior to various causes; however, each dissertation mentioned at least a minor role of emotional factors.

In the nineteenth century the medical description of anorexia nervosa became more precise and a constellation of symptoms was identified (Bemporad, 1996). However, the medical profession was still attempting to delineate between anorexia nervosa and other disorders or presentations of symptoms that were similar to anorexia
but not exact. In 1873, anorexia nervosa was formally separated from other disorders in which self-starvation may be evident, by both Gull and Leseque (Bemporod, 1996). In recent times, professionals and researchers continue to discuss the reasons for the ideology and prevalence of anorexia nervosa. Explanations include closer looks at emotional content and include fear of fatness, fear of maturity and sexuality, and control (Bemporod, 1996). Russell (1985) stated that the increase in diagnosis of anorexia nervosa may be due to a shift in symptom presentation in a vulnerable population, whose presentation in the past may have met the criteria for hysteria, anxiety, or other disorders.

**Diagnostic Criteria and Prevalence of Eating Disorders**

According to the DSM – IV (1994) the following are criteria for diagnosis of anorexia nervosa: (a) refusal to maintain body weight at or above a minimally normal weight for age and height (lower than 85% of what is expected), (b) intense fear of gaining weight or becoming fat, even though underweight, (c) disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, of denial or the seriousness of the current low body weight, and (d) in postmenarcheal females, amenorrhea (i.e., the absence of at least three consecutive menstrual cycles). Studies have indicated that between .5% - 1% of the female population between late adolescence and yearly adulthood present with anorexia nervosa (APA, 1994).

The DSM – IV (1994) lists the following diagnostic criteria for bulimia nervosa: (a) recurrent episodes of binge eating, characterized by both of the following: (1) eating, in a discrete period of time (two-hours), an amount of food that is definitely larger than most people would eat during a similar period of time and under similar circumstances,
(b) recurrent inappropriate compensatory behavior in order to prevent weight gain, such as self-induced vomiting, misuse of laxatives, diuretics, enemas, or other medications, fasting, or excessive exercise, (c) the binge eating and inappropriate compensatory behaviors both occur, on average, at least twice a week for 3 months, (d) self-evaluation is unduly influenced by body shape and weight, and (e) this disturbance does not occur exclusively during episodes of anorexia nervosa. According to the APA (1994), approximately 1% - 3% of adolescent and young adult females meet the diagnostic criteria for bulimia nervosa.

Treatment, Efficacy and Prognosis

Numerous approaches to the treatment of eating disorders have been developed and utilized over the years. Such approaches to treatment include behavioral, cognitive-behavioral, psychodynamic, supportive-expressive, interpersonal, family, group, psychoeducation, and a wide variety of pharmacological interventions (Kennedy & Garfinkel, 1992; Yager, 1988; Zerbe, 1992). Richards, Baldwin, Frost, Clark-Sly, Berrett, and Hardman (2000) recently performed a meta-analysis of outcome research evaluating the effectiveness of the various treatment approaches. According to these researchers, over the last decade there has been over 250 empirical studies and 28 articles or book chapters performing or analyzing such research.

Treatment, efficacy, and prognosis of anorexia nervosa. The research indicates that approximately 30 – 40% of anorexia nervosa patients recover, 30 – 35% improve, and approximately 20 – 25% suffer from a chronic state of the disorder (Steinhausen, 1995; Steinhausen, Rauss-Mason, & Seidel, 1991; Yager, 1988). Studies performed between the 1950s – 1970s indicated that the mortality rate was approximately 10%, and
dropped to 4.4% by the 1980s (Steinhausen, et. al., 1991). A study conducted by Zerbe in 1992 concluded that up to 50% of anorexic patients can be successfully treated through outpatient services. The success rate appeared dependent upon the motivational level of the patient, cooperative families, and prognostic features such as young age and brief duration of symptoms. Favorable prognostic factors include early age of onset, histrionic personality traits, conflict-free child-parent relationships, and short interval between onset of symptoms and the initiation of treatment (Steinhausen, 1995).

The efficacy of therapeutic treatments of anorexia nervosa continues to be debated. Schmidt (1989) and Yager (1988) both concluded that formal behavioral programs aimed at weight gain may not be any more effective that other programs. While Johnson, Tsoh, and Varnado (1996) concluded that behavioral interventions were effective for the promotion of weight gain among anorexic patients. Kennedy and Garfinkel (1992) found little evidence for the efficacy of cognitive behavioral therapies as treatment for anorexia nervosa. Additionally, there is agreement among researchers that there is currently no consistent evidence of the effectiveness of psychopharmacological interventions for anorexia nervosa (Hoffman & Halmi, 1993; Johnson, et. al., 1996; Kennedy & Garfinkel, 1992; Yager, 1988, 1989). A wide variety of medications have been ineffective in the treatment of anorexia nervosa including neuroleptics, appetite stimulants, anti-anxiety medications, and lithium (Richards, et. al., 2000).

Treatment, efficacy, and prognosis of bulimia nervosa. Much of the available literature reports that treatment of bulimia nervosa can be successful in outpatient settings and individual and group therapy approaches are both effective (Richards, 2000).
Various treatment approaches can serve to assist in the reduction of the frequency of binging and purging by 70 – 95%. These improvements have been shown to persist for up to one year (Griffiths, Touyz, Mitchell, & Bacon, 1987; Mitchell, 1991; Mitchell, Raymond, & Specker, 1993; Yager, 1988). However, some of the same research also indicated that the majority of patients continue to report occasional symptoms at the end of treatment (Mitchell, 1991). Yager (1989) reported that most relapse happens within six months after the cessation of treatment. The mortality rate was noted as uncertain but believed to be higher than in the general population (Hsu, 1995).

Psychotherapeutic interventions are more effective than drug treatments (Richards, 2000). Many research have concluded that cognitive-behavioral therapy has been successful in reducing binging and purging behaviors as well as psychopathology (Craighead & Agras, 1991; Johnson, et. al., 1996; Kennedy & Garfinkel, 1992; Lewandowski, Gebing, Anthony, & O’Brien, 1997; Wilson & Fairburn, 1993).

Cognitive-behavioral therapy has been indicated to be superior to other psychotherapeutic interventions, including supportive psychotherapy, behavior therapy, and psychodynamic therapy (Agras, 1997; Fairburn, Agras, & Wilson, 1992; Fairburn & Hay, 1992; Johnson, et. al., 1996; Mitchell, 1991; Yager, 1989; Zerbe, 1992). Contrary to the preceding research, Wilfrey and Cohen (1997) concluded that interpersonal psychotherapy is as effective as cognitive-behavioral therapy in assisting the reduction of binging and purging. Osterheld, McKenna, and Gould (1987), based upon their meta-analysis reported that group therapy interventions helped reduce bulimic symptoms on average by 70%.
In summary, much research is still needed to establish the efficacy of treatments with anorexia nervosa and bulimia nervosa. Many professionals specializing in this area have recommended multidimensional, multidisciplinary treatment approaches combining medical, nutritional, psychological, and spiritual interventions into a comprehensive, coordinated treatment program (American Psychiatric Association, 1993; Andersen, 1983; Kennedy & Garfinkel, 1992; Landau-West, Kohl, & Pasulka, 1993; Yager, 1988, 1989; Zerbe, 1992). Research of such already established programs is needed in order to determine if such combination programs improve the overall success rate for patients (Richards, 2000).

Pilot Study

Prior to beginning the current study, a focus group pilot study was performed, which adhered to the qualitative phenomenological research design. The purpose of the focus group was to begin to identify an African American cultural frame of reference related to eating attitudes and behaviors. The study involved a one and a half hour focus group discussion on eating attitudes and behaviors of African American women. Group members were recruited from a small private college in the Northeastern United States. Recruitment was accomplished via flyers hung around the college campus requesting African American women to participate in a group discussion related to eating attitudes and behaviors.

Nineteen women responded to the flyer and nine attended the focus group meeting. The group ranged in age from 18 to 23 years old. Six of the women described themselves as African American and the other three described themselves as Afro-Caribbean. Of important note, all nine of the group members were of average or below
average weight and size. None of the group members who participated would be considered overweight. All group members signed an informed consent that stated they could leave the group discussion at anytime without retribution and also provided them with ways to contact the researchers subsequent to the discussion if they had any concerns or questions. Additionally, the informed consent requested permission to videotape the group discussion for the purpose of data analysis. The group members were monetarily compensated $20 for their time. The discussion took place in a room equipped with video monitoring equipment that was maintained from a separate control room. The group discussion was monitored by two African American women graduate students in doctoral psychology programs. A third monitor was present in a separate room, the video monitoring control room, watching the group discussion via the monitoring system and simultaneously taking process notes.

Subsequent to the group discussion, the videotape was transcribed and copies of the transcription were sent to each focus group member with the instructions to review the transcription for accuracy and provide additional clarifications of their statements. No focus group members responded with changes they thought should be made. Then the transcription was evaluated by the three researchers for content and the emergence of themes. The evaluations by the three researchers were combined and the major themes agreed upon. Following, the transcription and identified themes were reviewed by an African American graduate student in a doctoral psychology program who was not involved with the research. The purpose of this evaluation was to check for bias on the part of the research team.
Several themes emerged from the group discussion. It is important to note that no single theme that emerged applied to all the group members. The three most prominent themes were eating with health concerns in mind, male influences on eating behaviors, and a conscious awareness of health and weight issues, however, maintaining a carefree approach towards eating. Additionally, a minor theme that arose was the influence of financial restrictions on being able to afford healthy food. Finally, several women also mentioned personal experiences with eating behaviors that are categorized as disordered (i.e., binging and purging, and excessive restricting). Three women shared these experiences, one as a recovered anorexic, one who currently engaged in excessive restrictive eating, and a third as a close friend of a woman who suffered from bulimia.

**Health concerns.** Many of the women referred to health concerns as an influence on their eating attitudes and behaviors. Within this realm, the women acknowledged awareness that African Americans are at greater risk for developing several diseases related to diet, including diabetes and heart disease. The women reported monitoring sugar and fried foods in relation to these issues.

**Male influences on eating behaviors.** A continuum of references to male influences on eating behaviors emerged during the group discussion. The continuum of influences ranged from personal relationships directly impacting their food intake and thoughts about body image, to media driven ideas the women assumed were created by men. For example, several women reported that the significant male in their life had increased or decreased their awareness of their eating behaviors depending upon his thoughts of the ideal size of a woman. Additionally, women referred to the subtle influences these men had through comments they passed about the size and shape of
other women. That is, if they commented that many other women were too fat or too thin, these women would use that information to monitor their own eating behaviors.

Media driven images were also discussed and it was assumed by the group members that men created these images of the ideal woman. The group members talked about, as well as displayed emotional frustration around these fantasy images. However, the women appeared ambivalent about the influences these media ideas had on African American women. Some of the group members felt that these ideals were created for the White culture only. However, the women all agreed that “booty and breasts” were needed and that this was an idea attained from media driven influences.

**Mild concerns about weight.** At various times, the group discussion focused on the issue of weight and its influence on eating behaviors. Many of the women spoke about their own weight concerns and reported engaging in dieting behaviors at one or numerous times in the past and present; however, many stated that it was not an obsessive concern. Some of the women referred to being “carefree” or “nonchalant” about their weight and/or calorie counting. At various times the ideas of obsessive weight monitoring and calorie counting were referred to as White women’s issues.

In summary, through the pilot study several themes emerged. The three most prominent themes were health related monitoring of food, the influence of men on eating attitudes and behaviors, and mild periodic concerns about weight and calories. Additionally, financial restrictions were noted as a barrier to having an array of food choices. Finally, several women reported personal experiences with disordered eating behaviors, either themselves or through close friends.
Disordered Eating Behaviors in Women of Color

Bruch (1965) was the first to report on the conspicuous absence of Black anorectic patients. Since then a few researchers have attempted to discover some possible explanations for their absence. For example, many researchers have presented summaries of past research, while others have organized their work around presenting the sparse numbers of women of color diagnosed with anorexia nervosa or bulimia nervosa in the United States (Pumariega, Edwards, & Mitchell, 1984; Silber, 1986; Hsu, 1987; Dolan, 1991). Much of the research that is available contains conflicting findings, as outlined by Crago, Shisslak, and Estes (1996). Additionally, most of the research that is available adhered to the assumption that Black women do not fear fat (Garner & Garfinkel, 1979), only recently have researchers looked at disordered eating behaviors among women of color. Yates (1990) pointed out that anorexia nervosa and bulimia nervosa appear to be the only forms of psychopathology in which culture influences prevalence. Following, are several examples available in the literature that together show the inconsistency in information and opinions related to the discussion of women of color and disordered eating behavior.

The first researchers to write about a Black woman who suffered from an eating disorder were Warren and Vande Wiele in 1973. Their research focused on 42 anorexic patients, one of whom was a Black female (Pate, Pumariega, Hester, & Garner, 1992). Pumariega, Edwards, and Mitchell (1984) presented a case study of two Black adolescent females with anorexia nervosa. Following, Robinson and Anderson (1985) reported in their research on five Black patients diagnosed with anorexia nervosa, who they treated
between 1976 – 1984 at John Hopkins Hospital in Maryland. Silber (1986) reported on
seven women of color, two of whom were Black and diagnosed with Anorexia Nervosa.

It is possible that the incidence of eating disorders among Black women is under-
represented for various reasons. These reasons may include poor diagnosis among Black
women because medical personnel do not expect them to present with eating disorders, as
well as, because as a group Black Americans do not receive the same level of medical
attention as White Americans (Spector, 1979, as cited in Ofosu & Lafreniere, 1998).
Additionally, cultural backgrounds may influence the types of symptoms that an
individual presents with, as well as, their view of the causality of their symptoms, their
expectations of a cure, and their level of comfort with disclosure and help seeking (Ofus

Root (1990) noted that the criteria for anorexia nervosa and bulimia nervosa set
forth by the American Psychiatric Association (1994) was derived from observing an
almost exclusively White sample. Hence, culturally influenced deviations from the
presentation of these disorders are not accounted for in the diagnostic criteria set forth
thus far. Furthermore, as aforementioned, many researchers have alluded to the idea that
misdiagnosis or non-diagnosis of women of color with eating disorders occurs due to lack
of multicultural education and adherence to stereotypes by professionals (Williamson,
1998; West, 1995; Root, 1990; Hsu, 1987). Finally, all of the instruments used to assess
for eating disorders have been developed in Europe or North America; hence, they reflect
Western ideals of abnormal attitudes towards eating and diagnostic criteria for eating
disorders (Fedoroff & McFarlane, 1998).

Research that has focused on the prevalence or non-prevalence of eating disorders
among Black women has viewed a variety of factors that could influence their susceptibility to these disorders. These factors include racism, stress, level of acculturation, educational attainment, and internalization of mainstream culture. A variety of researchers have accumulated evidence suggesting that the African American culture acts as a buffer to help prevent Black women from being vulnerable to eating disordered behaviors. That is, the African American culture has a more tolerant view of weight differences than does the mainstream culture (Bowen, Tomoyasu, & Cauce, 1991; Gray, Ford, & Kelly, 1987; Hesse-Biber, 1996; Nevo, 1985; Ofosu & Lafreniere, 1998; Rucker & Cash, 1992). The African American culture allows for a more fluid and flexible perception of beauty (Allan, Mayo, & Michel, 1993; Kumanyika, Wilson, & Guilford-Davenport, 1993; Parker, Nichter, Nichter, Vickovic, Sims, & Ritenbaugh, 1995).

Furthermore, it has been noted that in African and Caribbean cultures women with full-figures are assumed to possess high status and are considered healthy. Large bodies in these cultures are associated with competence, power, beauty, and respect (Brink, 1989; Messer, 1989; Cassidy, 1991 as cited in Ofosu & Lafreniere, 1998). For example, Brink (1989, as cited in Ofosu & Lafreniere, 1998) described a ritual of an indigenous people of Nigeria in which the young women are sent away for a duration of time on a retreat in a ceremonial “fattening room”. The length of the young women’s stay can range from 3 weeks to 7 years depending upon the wealth of her father.

A study by Molly and Herzberger (1998), concluded that women’s ethnic backgrounds influence how they perceived themselves and their bodies; however, the findings suggested that the effects of ethnic differences were based on the differences
in the ethnic perceptions of masculinity and the males’ perceptions for preference of body size and shape.

According to Williamson (1998), Black women of all backgrounds can experience preoccupations with weight concerns and engage in problematic eating behaviors. Some researchers have found evidence suggesting that African American women who have attained a higher education and a higher socioeconomic status are at greater risk for developing eating disorders (Abrams, Allen, & Gray, 1993; Anderson & Hay, 1985; Bowen, Tomoyasu, & Cauce, 1991; Hsu, 1987; Kumanyika, Savage, Beu, Henderson, Adams, Ramirez, & Watkins, 1985; Robinson & Anderson, 1985; Schultz, 1979; Thompson, 1994). Additionally, Thompson and James (1988) and Root (1990), suggest that Black women who are upwardly mobile may be susceptible to eating disorders in an attempt to distance themselves from the obese Mammy image (discussed later). Furthermore, these upwardly mobile women are at risk because they may attempt to assimilate into mainstream culture by distancing themselves for their culture of origin and the oppressive stereotypes portrayed in the media (Root, 1990). Yet, Lester and Petrie (1998) have found that internalization of mainstream cultural values and identifying with White society were not predictors of bulimic symptomology in African American college women.

Other researchers have presented a variety of possible reasons why African American women are at equal or greater risk for diagnosis of an eating disorder as are their Caucasian counterparts. Root (1990) identified psychological themes that are prevalent in disordered eating. According to Root, these themes include “the pursuit of identity, power, specialness, validation, self-esteem, and respect—themes significant in
the lives of all oppressed persons—women, sexually and/or physically abused boys and girls, the emotionally abused, disabled persons, and/or racial/ethnic/sexual minority groups." (p. 526). Furthermore, Root (1990) stated that within the process of ethnic identity development there exists a period where the adolescent attempts to be accepted by the dominant culture, at this stage they are at risk for developing eating disorders as well.

Thompson (1996) emphasized the role of trauma in the development of eating disorders. She stated that White and Black women link their eating problems to a range of traumatic experiences, including sexual, emotional, and physical abuse. In addition to these, African American women, as well as other women of color, state that racism and classism are other traumas that influence their eating behaviors. Exploring the interface between these trauma and eating disorders may explain how eating is used as a tool to numb pain and deal with social violations (Ofosu & Lafreniere, 1998). Hence, African American women might be exposed to more environmental factors that influence their susceptibility to eating problems than Caucasian women.

West (1995) took a historical look at the stereotypes of Black women in the United States. Both Root (1990) and Thompson (1994) agree that the stereotypical image of the Mammy must be reviewed when assessing eating disorders in the African American population. According to West (1995), the Mammy originated in the South during slavery. She was an obese African woman who served for long hours with little or no compensation. She was characterized as subordinate and self-sacrificing. The image of the Mammy is still pervasive of the working conditions for many poor Black women (West, 1995). Thompson (1992; 1996) offered the suggestion that bingeing for these
women may become a way of dealing with the social deprivation and stress associated with being poor.

In 1994 Essence magazine published a survey on the eating behaviors of African American women. Of the women who responded to their survey, 65.5% dieted, 18.5% fasted, 3.5% vomited, and 16.5% used laxatives (Villarosa, 1994). Although the findings of this study do not necessarily imply that a significant percentage of these women meet the criteria for an eating disorder, the percentages are high enough to determine that more research in this area with this population is needed. Williamson (1998), analyzed many of the stereotypes of Black women and environmental violations they endure under the context of the clinical mythology of eating disorders. She concluded that there is enough evidence available depicting African American women’s susceptibility to eating disorders to warrant increased attention from health and mental health professionals and educators. Additionally, she pointed out that there is a possibility that African American women may present with symptomology that differs from their Caucasian counterparts; hence, there may be problematic eating behaviors specific to African American women. The idea that atypical forms of eating disorders may develop in various cultural context was also reported by Pate, Pumarienna, Hester, and Garner (1992). Furthermore, African American women might display weight conscious concerns due to a family history of disease that is potentially exacerbated by excess body weight, hence strengthening the relationship between disease and diet (Walcott-McQuigg, 1995).

The research related to eating disorders and African American women is currently incomplete. A notably absent characteristic of this research is the potential involvement of the African Centered cultural perspective (Ofosu & Lafreniere, 1998). When assessing
the needs and experiences of African American women, this unique cultural background must be considered. The importance of a cultural perspective in research focusing on eating disorders has recently begun to be documented (Fallon, 1990; Ofosu & Lafreniere, 1998; Williamson, 1998). Others have pointed out that eating disordered behaviors are no longer unique to white middle to upper class women but are now distributed across cultures, economic groupings, and sex (Dolan, Lacey, & Evans, 1990; Hsu, 1987; Schmolling, 1988). As previously outlined, evidence exists to suggest African American women’s unique experiences may make them vulnerable to eating disordered behaviors, hence, warranting more research in this area.

The current body of literature that focuses on African American women and their potential for the development of eating disorders is small and contains many discrepant opinions and findings. Hence, it remains unclear if professionals are identifying and serving this population as best they can. Reviewing the body of literature available that focuses on Latina women and eating disorders is beyond the scope of the current study, as the Latina population is used simply as an additional comparison group for the African American group. The purpose of this study is to measure disordered eating attitudes and behaviors in African American woman and through the use of factor analysis determine if the presentation of factors associated with disordered attitudes and behaviors presents differently within the identified population when compared to their Caucasian and Latina counterparts. Additionally, a correlation analysis will be conducted between the African American women’s scores on the eating attitudes and behaviors measure with an African American acculturation measure to identify any potential relationship between levels of
acculturation and eating attitudes and behaviors. The study will attempt to answer the following questions:

1. What percent of African American women present with attitudes and behaviors associated with eating disordered behaviors?

2. Do the factors of attitudes and behaviors already associated with eating disordered behaviors present differently in African American women when compared to their Caucasian and Latina counterparts?

3. Is there a correlation between levels of acculturation within the African American culture and attitudes and behaviors associated with the potential for developing an eating disorder?
CHAPTER II

Literature Review

The purpose of this study is to explore factors associated with African American women's attitudes towards eating behaviors. Hence, it is important to determine the perspective an African centered worldview may play in the development of attitudes and values possessed by African American women. As proposed by Graham (1999), when each ethnic group is viewed through its own history and culture, general knowledge and appreciation for the human experience is expounded upon. As proposed by the African centered perspective, any analysis involving African Black people should utilize African epistemologies, ideals, and values as the foundation for their analysis (Graham, 1999). Following this idea, the literature review will provide rudimentary background information on the African centered worldview. Following, the small body of available empirical literature looking at the eating attitudes and behaviors of African American women will be presented.

African Centered Worldview

The root of the African centered worldview is planted in African philosophy (Nobles, 1991), which is a holistic system enriched with values and behaviors that are reinforced by rituals, the promotion of family, and the values of governance. The holistic conception of humans is the essence of the African worldview (Graham, 1999). The core
philosophical foundations were inherited from the classic African civilizations of Kemet, Nubia, Kush, and Axum (Abarry & Asante, 1995; Asante, 1988; Diop, 1978; Hillard, 1985; Williams, 1987). A set of conceptual categories exists that were generated from proponents of these traditional African cultures (Myer, 1992). Although there are cultural variations among the continental people of Africa, according to Mbiti (1970) there are underlying commonalities in the thought systems of all the African peoples. In summary, the African centered worldview reflects the life experiences, history, and traditions of African people. According to Noble (1990), “It is the intellectual and philosophical foundations upon which African people should create their own scientific criterion for authenticating human reality.”

Differences between the African centered worldview and that of the Eurocentric perspective are abundant. Illustrative of these differences are the main characteristics of African worldview, which according to Noble (1991) include a collective unconsciousness, kinship, a more flexible concept of time, and a unified conception of man. Others have elaborated on the principles of the African centered worldview to include an interconnectedness of all things, the spiritual nature of human beings, the collective identity and the collective inclusive nature of the family structure, and the value of interpersonal relationships (Akbar, 1976; Asante, 1987, 1990; Graham, 1999; Myers, 1988; Scheile, 1997). Intrinsic within these characteristics is the concept of balance. Within the African centered worldview the task of all living things is to attain balance regardless of adverse external forces. The psychological, social, and physical well being of an individual is at risk if this balance, or inner peace, is not attained (Graham, 1999).
The collective unconsciousness. The collective unconscious provides an environment in which everything is functionally connected and dependant upon each other (Mbiti, 1970; Nobles, 1991). As explained by Graham (1999), this connection is the cornerstone of the African centered worldview. It involves believing in the interrelatedness of all things, and it is thought that whatever you believe, through your conceptual system, is for you. Therefore, the African centered worldview is empowering by giving people the ability to define reality (Myer, 1992).

The concept of kinship. One’s individual identity is developed through his/her relationships within the community (Graham, 1999). Therefore, personhood is not a static state but an evolutionary process of development accomplished through stages of integration into the community (Karenga, 1997). An individual cannot be understood separately from other people; that is, human reality is unified (Graham, 1999; Myers, 1992). This concept serves to provide connectedness with family and community, as well as helps develop positive self-esteem (Graham, 1999).

The concept of time. Time, in the African worldview, is very elastic. It is not viewed as a mathematical concept, but instead as a phenomenon. This worldview holds two dimensions of time: the past and the present. One’s life system is directed from the present dimension backward to the past dimension. In order for time to be conceptualized, it has to have been experienced by either the individual or his/her tribe (Nobles, 1991).

Concept of the unified whole being. In African philosophy, humans are viewed as whole beings; that is, they are unified and integrated in mind, body and spirit. This concept of an integrated being contrasts the mind-body dichotomy set forth by the
Eurocentric worldview (Graham, 1999; Nobles, 1991). The hallmark of this philosophy states that the human objective is the full development of mind, body, and spirit in hopes of ascertaining divinity within self through a state of optimal health. Optimal health is considered achievable through harmony with all life forces (Graham, 1999).

In summary, the African American experience is a product of both their history in the United States, as well as, the norms and values they may carry from their native ancestry. The concepts African Americans might hold from their African traditions include many that differ from the Eurocentric concepts imposed upon them. These differences may influence a variety of life experiences, expectations, values, manifestations, and personal presentation.

The imposition of Eurocentric values on African American women may have a direct correlation to a variety of stressors experienced by this population; hence, placing them at great risk for developing an eating disorder (Root, 1990). In other words, the disharmony between Eurocentric values and concepts and those of African heritage place women who experience this disharmony in stressful situations that may increase their likelihood of engaging in eating disordered behaviors. This study does not seek to determine whether African American women experience pathologic eating attitudes or behaviors but instead is looking at how their unique background may influence the presentation of their eating attitudes and behaviors.

**Limitations of the Current Literature**

As previously noted, various notations concerning the under representation of African American women in studies of anorexia nervosa and bulimia nervosa, or disordered behaviors of eating, have been made (Brinch, 1965; Dolan, 1991; Garfinkel &
Gardener, 1982; Gray, Ford, & Kelly, 1987; Hsu, 1987; Pumariega, Edwards, & Mitchell, 1984; Silber, 1986; Striegel-Moore & Smolak, 2000). Furthermore, the small body of literature that is available is steeped in conflicting findings (Crago, et. al., 1996). Some researchers have expressed that eating disorders are higher among African American women that previously thought and that the number is continuing to increase (Hsu, 1987; Pumariega, et. al., 1984). Various reasons for the assumed increase have been presented, including better referrals, better awareness, and increased use of health care by African Americans (Crisp, Palmer, & Keley, 1976), as well as, changing demography (Andersen & Hay, 1985), and adherence to mainstream expectations about body shape (Abrams, et. al., 1993; Anderson & Hay, 1985; Bowen, et. al., 1991; Kumanyika, Savage, Beu, Henderson, Adams, Ramirez, & Watkins, 1985; Hsu, 1987; Roinson & Anderson, 1985; Schultz, 1979; Thompson, 1994). Additionally, often times, the research that has been conducted has confounded ethnicity and socioeconomic status, a mistake as such makes it impossible to make a clear appropriate interpretation regarding the effects of ethnicity on eating behaviors or attitudes (Ofosu, et. al., 1998).

Stunkard (1997) pointed out that the most prominent risk factors for eating disorders appear environmentally based, and he reported that there is strong historical evidence to support this statement. Bowen, Tomoyasu, and Cauce (1991) suggested that eating behaviors are best viewed on a continuum with anorexia nervosa and bulimia nervosa at one end and obesity at the other. They suggest that an individual’s place on the continuum may be influenced by race, ethnicity, class, and gender roles. Abood and Chandler (1997), drew a similar conclusion to that of Stunkard (1997) from their own research, stating that culture influences dieting, body image, exercise, and restrictive
behaviors. However, they point out, that although certain cultures may provide a protective barrier against eating disorders or disordered eating behaviors, there may exist within that culture certain vulnerable individuals who are not protected.

In light of the evidence suggesting that various ethnicities may be vulnerable to eating disorders or behaviors associated with them, Pate and associates (1992), reported that it may prove helpful for researchers working with nonwestern populations to identify and operationalize criteria for atypical and subclinical eating disorders that may be unique to that specific population. For example, Nasser (1994) conducted a study utilizing a population of 351 Egyptian secondary school girls located in Cairo, Egypt. Nasser utilized a translated version of the Eating Attitude Test – 40 (EAT – 40) and preformed a two-stage investigation that included scoring the EAT- 40 followed by a clinical interview of the girls who scored above the cut-off, which is indicative of the presence of eating disordered attitudes. Nasser conducted a confirmatory factor analysis to determine if the instrument was a valid screening test in this population. He compared his analysis to studies by Garner and associates (1982) and Eisler and Szmukler (1985), who both used Caucasian populations. This study closely resembled the three factors identified by Garner. There was high internal validity for all factors except those representing bulimia. Nasser’s results indicated justification for continuing to use the EAT- 40 as a screening instrument with non-western populations for certain aspects of eating behaviors, including dieting and concerns about weight and shape. However, this study also presented evidence that within this population an additional scale is necessary to screen for bulimic behaviors, and that the term “binging” and the significance of social pressure should be better understood within the population in order to better assess
statistical outcomes. Hence, understanding the significance of certain aspects of an identified population is important in appropriately interpreting the statistical outcome of a study.

As will be subsequently outlined, there appears to be evidence suggesting that African American women engage in eating disordered behaviors. Even though these numbers may at times not equate to those of their Caucasian counterparts, African American women appear vulnerable to manifestations of these behaviors and experiences of the psychological correlates.

Research of African American Women and Eating Attitudes

There is a small body of present-day literature that focuses on women other than Caucasians and their attitudes towards and presentations of eating behaviors that may be deemed as unhealthy. It appears that the primary groups that are the focus of these studies are Asian and Latina women. Very few studies conducted have focused on African American women and their perspective and manifestations of eating attitudes and behaviors. There appears to be more research, although still a relatively small amount, that focuses on African American women and body image. Although some body image studies will be discussed, body image in general is beyond the scope of this research. Therefore, research on body image related to perspectives of body weight and not other characteristics will be the only research presented.

Striegel-Moore, Schreiber, Lo, Crawford, Obarzanek, and Rodin (2000) conducted a study to provide reference data for the Eating Disorder Inventory and its use with Black and White adolescent girls. Additionally, their study examined the relationship between race, socioeconomic status, and adiposity and each of the eight
scales of the Eating Disorder Inventory. Data was collected over seven years, however for this study, data from the third, fifth, and seventh years of collection was utilized. Data was used from 2,228 girls in the third year, 2,056 girls in the fifth year, and 1,902 girls in the seventh year of data collection. The two groups of girls were not matched on socioeconomic status or parental education. The parents of the Black girls reported lower household income and lower educational attainment than did the parents of the White girls. Results indicated that Black girls scored differently from White girls on all eight scales of the Eating Disorder Inventory. Compared to Black girls, White girls scored higher on the Body Dissatisfaction and Drive for Thinness scales. Black girls scored higher than White girls on the Bulimia scale, and the personality traits of Interoceptive Awareness, Ineffectiveness, Maturity Fears, Perfectionism, and Interpersonal Distrust scales. The core features of eating disorders are measured by the Body Dissatisfaction, Drive for Thinness, and Bulimia scales. Hence, although African American girls, according to the study by Striegel-Moore and associates (2000), experience more symptoms related to eating disordered behaviors, as measured by the Eating Disorder Inventory, Caucasian girls’ scores may be higher due to the areas they experience more concern with, namely body dissatisfaction and drive for thinness. The study concluded that Black girls may be more vulnerable to developing an eating disorder when binge eating is the core element, while White girls may be more susceptible to developing an eating disorder where restraint is the core feature (Striegel-Moore, et. al., 2000). This study proved useful in identifying specific concerns that African American girls/women may experience that may make them vulnerable to unhealthy eating attitudes and behaviors; however, the study failed to mention that these factors may be manifested by
the identified population in other ways aside from eating. For example, there has been speculation that African American females, as well as females from other cultures, are beginning to act out distress in ways similar to males, such as increased violent behavior, like fighting. Additionally, there was no strong evidence presented that the differences between the two groups was related to culture in any way, since the groups differed greatly between socioeconomic status. Hence, the between group differences that were identified may be related solely to socioeconomic differences.

Ofosu and associates (1998), presented information on body image in Black women. They pointed out that the fact that approximately 49% of African American women are overweight leads to the assumption that 51% fall within the average weight range or are underweight. Additionally, they presented other research preformed by Kumanyika (1985) that entailed surveying middle class African American women between the ages of 20 – 50 years old and reported that 50% of those women who were interview considered themselves to be overweight. They also reported that a study by Allan, Mayo, and Michel (1993) reported that the Black women they interviewed described attractiveness as shapeliness, which included the fit of clothes, having hips, and being feminine. Additionally, these women reported that is was important to be attractive to men and this was accomplished by being stylish rather than skinny. These women also pointed out, that being slightly overweight is much different from being fat, flabby, or out of proportion. They emphasized that being a little overweight, like 10 – 15 pounds is acceptable, however, being blatantly overweight is not. In a separate study by Edut and Mahmoodzadegan (1996) many of the African American women that they interviewed reported that being “thick” was acceptable as long as the weight was appropriately
placed. Possessing “a big butt, chest, and hips are considered attractive.” Additionally, the African American women in Edut and Mahmoodzadagan’s (1996) study reported that presenting one’s self in a manner that reflects “you’re making it”, such as having nice clothes, along with skin color and hair texture, are more important issues than weight concerns. Rand and Kulda’s (1990) study also supported this idea, older African American women (55 – 74 years old) in this study were on average 17 – 20 pounds overweight and reported having “no weight problems.”

Altabe (1998), conducted a study on cultural diversity and body image using a sample of 335 college students; 185 were women. These college students self-identified as African, Asian, Caucasian, or Hispanic American. Altabe utilized various instruments including the Body Dissatisfaction Scale, Eating Disorder Inventory, Figure Rating Scale, Physical Appearance Discrepancy Questionnaire, and the Body Image Automatic Thoughts Questionnaire – Positive Subscale. The study reported that African American participants had the most positive outlook on their weight-related body image appearance and had higher self-ratings of attractiveness than did any of the other groups. Scoring below the African American group was the Hispanic group, followed by the Caucasian group and then the Asian group. All noted between group differences were significant at the $p < .05$ level. Furthermore, the study reported that there appeared to be specific body image correlates that were culturally determined and that further research in this area was warranted in order to develop an understanding of these specific cultural nuisances. In light of this, the significance of this study’s findings may have been limited by utilizing a generic questionnaire for all of the identified groups, which could have led to the oversight of important culturally specific data.
Schmolling (1988) performed a study utilizing 288 community college students with a significant number of these students from poor and working class families. Participants were asked to fill-out the Health Survey Questionnaire and the Eating Attitude Test – 40 (EAT – 40). Schmolling (1988) reported that on the EAT – 40 women scored significantly higher than men, and among the population of women, White women scored significantly higher than women of other ethnic origins (23.3% - African American, 7.6% - Hispanic, and 3.5% - Asian). Thirty-one percent of the White females scored above the cut-off on the EAT-40, which is indicative of eating attitudes and behaviors that may be problematic; 9.5% of the women from other ethnic origins also scored above the cut-off. Although a much high percentage of white women scored above the cut-off, almost 10% of the women from the other populations did as well. However, the study never identified the percentages of high scores for each of these other groups of women. Additionally, Schmolling reported socioeconomic status and parental education attainment; however he did so as one large population; hence, not showing any socioeconomic differences between ethnic group that may have existed. Although all participants were from poor to working class, the monetary breakdown ranged from between less than $10,000 annually to more than $40,000 annually, therefore, socioeconomic status could be a confounding factor.

A study conducted in 1988 by Thomas and James looked at body image, dieting tendencies, and sex roles traits in a sample of 102 urban Black women. These women were asked to complete a brief questionnaire assessing body image, dieting behaviors, sex role traits, and demographic background information. The results indicated that slightly more that half of the sample (greater than 50%) reported being unhappy (39.6%)
or very unhappy (14.9%) with their bodies, while 23.8% was somewhat happy and 10.9% was very happy with their bodies. The majority (60.4%) of these women considered themselves too fat, 5% considered themselves too thin, and 34.7% felt their body was just right. Many of the women reported engaging in restrictive behaviors including, crash diets (64.7%), using diet pills (74.5%), modifying food intake (55.8%), and engaging in exercise as a means of weight control (78.4%). Thomas and James (1988) also reported that although the women who considered themselves too fat were more likely to participate in dieting, in general, body weight and body image did not compel them to use extreme restrictive behaviors. Additionally, the overwhelming majority of the women reported that is was not necessary to be slim in order to be attractive to men. Thomas and James (1988) concluded their study by indicating that further examination of body image ideals should be explored within this population in order to help qualify the source of body image disturbance and also to work toward developing predictive tendencies towards eating disorders based on variations in culture. In contrast to this study, Kumanyika, Wilson, and Guilford-Davenport (1993), used a sample of 500 African American women between the ages of 25 – 64 years old. They found that about 40% of the overweight women considered their figures to be attractive or very attractive.

A study by Gray and associates (1987) utilized 507 Black college students at a Black university, 341 of these students were women. The researchers use a 34-item questionnaire designed to reflect the DSM – IV diagnostic criteria for bulimia and to also provide attitudinal information. The results of the study showed that very few Black women met the diagnostic criteria for bulimia nervosa, however, many of them engaged in certain related behaviors, and in some instances, these numbers equaled those of their
Caucasian counterparts. The study reported the following information for the Black college women: 71% reported binging, 51% reported restrictive dieting, 2% reported vomiting, 5% reported using laxatives, and 6% reported using diuretics. Hence, although very few of the Black women met the diagnostic criteria for bulimia nervosa a significant number of these women endorsed participation in eating behaviors that can be physically and psychologically damaging. The researchers then compared this group to a previously obtained sample of 339 Caucasian women. The Black women showed a significantly lower prevalence of bulimia and less frequent purging behavior. A strength of this study, is that it is one of the few studies that attempted to control for socioeconomic status as a confounding variable. A chi-square test of homogeneity was performed and indicated that the differences between the two groups was not related to socioeconomic status.

Abrams, Allen, and Grey (1993) conducted a study of 200 college women, 100 Black and 100 White. The purpose of their study was to exam differences in the nature of disordered eating behaviors between the two groups. They utilized two scales of the Eating Disorder Inventory (Drive for Thinness and Body Dissatisfaction), Racial Identity Attitude Scale for Blacks, the Hawkins’ and Clement’s Binge Scale, Rosenberg Self-Esteem Inventory, Beck Depression Inventory – 21, and the State-Trait Anxiety Inventory. The results of the study indicated that White women reported significantly greater fear of fat, drive for thinness, and body dissatisfaction than did the Black women. Sixty-five percent of the White women and 35% of the Black women reported binging behaviors, while 12% of the White women and 5% of the Black women reported self-induced vomiting for weight control. There was a significant correlation between body weight and disordered behaviors and attitudes (Restraint, Body Dissatisfaction, and Drive
for Thinness) for Black women but not for White women. Furthermore, this study reported that it was the first to evident the relationship between restrictive eating in Black women and assimilation to mainstream culture (Abrams, et. al., 1993). Reportedly, the Preencounter Stage of the Racial Identity Attitude Scale, which is the stage that reflects assimilation to white racial identity, was significantly positively correlated with dietary Restraints, Fear of Fat, and Drive for Thinness subscale scores. The study concluded that behaviors and attitudes of eating disorders are culturally bound, weight loss efforts by the Black women were significantly positively correlated with weight, and that bingeing behaviors were related to low self-esteem, anxiety, and depression in both groups of women. Finally, the study also proposed that based upon the link between actual weight and dietary practices among the Black women, that these women may not develop an eating disorder because the behavior is not based upon conflicts with dependency as seen in the White sample. This study presented statistically sound findings, as all between group differences were significant at the $p < .0001$ level and the correlations between the Eating Disorder Inventory subscales of Drive for Thinness and Fear of Fat and the Preencounter racial identity stage were significant at the $p < .0001$ level.

Dinsmore and Mallinckrodt (1996) conducted a study using 45 African American college women. The researcher hypothesized that alexithymia (a pervasive difficulty identifying and describing internal emotional states), and evidence of eating disorders would associate with each of the four racial attitude clusters of the Racial Identity Attitude Scale – B. The researchers used the Eating Attitude Test – 26 (EAT – 26), The Toronto Alexithymia Scale – 20, and the Racial Identity Attitude Scale – B – Short Form. The study concluded that there was no significant correlation between scores on the EAT
-26 and any racial identity attitudes. However, the authors acknowledged that their study did not present enough data in terms of a distribution of scores on the EAT – 26 in order to make meaningful connections between eating disorders and racial identity.

The Morbidity and Mortality Weekly Report (1991) conducted survey research of dieting behaviors and concluded that Caucasian and Hispanic girls perceived themselves as overweight even when they fell within the normal range established by the National Center for Health Statistics. Comparatively, African American females were less likely to perceive themselves as overweight. The study concluded that African American adolescents of normal and overweight stature view themselves as thinner than they actually are, while Hispanic and Caucasian adolescents view themselves as being heavier than they are. Similarly, various studies, as outlined by Striegel-Moore and Smolak (2000), report that the African American women’s ideal standard of beauty embodies a larger body size than the ideal held by White Americans (Kemper, Sargent, Drane, Valois, & Hussey, 1994; Powell & Kahn, 1995; Rucker & Cash, 1992; Thompson, Corwin, & Sargent, 1997; Wilson, Sargent, & Dias, 1994, all cited in Striegel-Moore & Smolak, 2000). In contrast, other studies have found that African American women choose a body silhouette as thin as White women do to represent the ideal for health and for women (Cachelin, Striegel-Moore, & Elder, 1998; Singh, 1994. both cited in Striegel-Moore & Smolak, 2000).

Fisher, Pastore, Schneider, Pegler, and Napolitano (1994), administered the Eating Attitude Test – 40 (EAT – 40), Rosenberg Self-Esteem Scale, and Spielberger Trait Anxiety Inventory to two populations of high school students. One group was comprised of 286 suburban females and the other group included 389 urban females and
281 urban males. Ninety-two percent of the student body from the urban school identified as Black or Hispanic. Following is a list of the percentages of students that scored over the cut-off score of 21 on the EAT – 26, which is indicative of problematic eating attitudes and behaviors: 17.5% of the suburban females, 15% of the urban females, and 6% of the urban males. Furthermore, 65% of the suburban females identified themselves as overweight, yet only 14% of them were calculated as being greater than 10% over the ideal body weight. Thirty-five percent of the urban females viewed themselves as overweight yet 45% of them were calculated as being greater than 10% over the ideal body weight. Nineteen percent of the urban males identified themselves as being overweight with 39% of them actually being greater than 10% over the ideal body weight. The study demonstrated that abnormal eating attitudes are very prevalent in suburban females. Although a higher percentage of high EAT – 26 scores was found in the suburban population there was still evidence that urban students (in this sample Hispanic and African American) have a number of concerns about weight and dieting as well: 17.5% of the suburban girls as compared to 15% of the urban girls. Furthermore, this study reveal that self-esteem and anxiety were both significantly correlated with high EAT – 26 scores in both the suburban and the urban populations, at the $p < .001$ level. However, believing oneself to be overweight was correlated with high EAT – 26 scores only in the suburban population. The data from this study indicated that abnormal eating attitudes are present in both urban and suburban students, however there are important differences in their manifestations and implications. Although this study presented significant statistical findings, one main difference between the suburban girls and the urban girls was actual body weight, so although the urban girls presented similar
concerns about weight and dieting, these ideas appear more closely related to their actual weight. Thereby, shedding light on an important difference that needs to be addressed in treatment.

Parker, Nichter, Nichter, Vuckovic, Sims, and Rittenbaugh (1995), conducted a three year study, called the Teen Lifestyle Project, which utilized a population of adolescent females, including Caucasians, Mexican Americans, and Asian Americans. During the last year of the study a second sample was added, 46 African American adolescent females. All the participants were from lower middle to middle class families. Each girl participated in one 45-minute semi-structured interview and focus group discussions with groups of four to five participants. Results for the African American girls were as follows: 12% of the normal weight girls were dissatisfied with their present weight, 30% tried to loss weight one or two times in the past year, 11% stated that they always dieted, and 54% reported that they were currently attempting to loss weight.

Sixty-three percent of the African American girls interviewed reported that there is a different standard for beauty for African American women that for White women. They reported that beauty is related to being smart, friendly, not conceited, and easy to talk to. These girls felt that one does not have to be pretty to be attractive, just well-kept; however, two percent of the African American population reported that beauty was related to looking like the ideal body and face. Another theme that was presented within the focus group discussions was the idea that African American women view beauty as something that is fluid rather than static, and stated that it is based upon how one moves rather than on how much one weights.
Abood and Chandler (1997) attempted to assess the relationship between race, weight, and desired weight change in two separate populations of college students, one from an historically Black university and the other from a neighboring predominantly White university. The participants were asked to fill-out the Eating Attitude Test – 26 (EAT – 26). The results indicated that for both Black and White women there was a strong relationship between weight, desire to lose weight, and body dissatisfaction; however, even though Black women weighed an average of 10 pounds more than their White counterparts they did not appear to experience as significant amounts of body dissatisfaction. The study reported that White women scored significantly higher than Black women on the EAT – 26 (13.9 vs. 10.6; F = 10.785, p < .05). However, body dissatisfaction accounted for the greatest proportion of the variance explained (.094) while ethnicity accounted for the least (.008). Hence, this study was unable to determine if body dissatisfaction, which accounted for the greatest variance between groups, was related to ethnicity in any way.

Epel, Spanakos, Kasl-Godley, and Brownell (1996) conducted a study to assess body shape ideals across gender, sexual orientation, race, socioeconomic status, and age. This was accomplished through an analysis of personal advertisements in seven different publications each of which targeted a specific group. Various differences were noted between genders, sexual orientation groups, and racial groups. The following differences were noted between racial groups (African American and European American): African American men used the largest number of body descriptors and reported a significantly higher BMI (body mass index) for themselves than all other groups. Fifty-six percent of the African American men reported weight. Epel and associates (1996) suggested that
this data may indicated that African American men view body shape as an important aspect of attractiveness. A higher number of African Americans reported being overweight than European Americans (10% vs. 3%). The BMI reported by African American women was similar to that reported by European American women suggesting that African American women may not be protected from the pressures towards thinness. A major limitation of this study is determining how honest the participants were in the presentation of themselves within the advertisements, especially given the fact that the purpose of these advertisements was to attract other people.

Numerous studies have delineated the potential link between self-esteem and eating problems. Striegel-Moore and Smolak (2000) pointed out that there may be differences in developmental patterns of self-esteem between various ethnic groups. A study by Brown, McMahon, Biro, Crawford, Schreiber, Similo, Waclawiw, and Stiegel-Moore (1998), reported that between the ages of 9 and 14 years old African American girls showed little decline in their self-esteem, whereas, their Caucasian counterparts showed significant declines in self-esteem. Other research, by Sadker and Sadker (1993), indicated that Latina girls experience a more global loss of self-esteem than do either of the Caucasian or African American counterparts. Striegel-Moore and Smolak (2000) postulate that the relative stability of self-esteem in African American girls may be a protective barrier against eating disorders.

Very little research has been done on the food choices of African Americans in spite of the fact that it has been noted that many aspects of eating are culturally defined (Kittler & Sucher, 1989; Murcott, 1988; Axelson, 1986, as cited in Airhihenbuwa, Kumanyika, Agurs, Lowe, Sauders, & Morssink, 1996), such as the use of foods, flavors,
preparation practices, and their use to preserve traditions or maintain group solidarity (Airhihenbuwa, et. al, 1996). Airhihenbuwa and associates (1996) conducted a semi-structured interview study of 53 African Americans, 32 females and 21 males, from low- and middle-income households to explore cultural factors that might influence the potential for dietary change with the intent to indicate the basis for and diversity of attitudes and their potential implications for future research. The results indicated that most of the participants did not know or did not think that there was any African influence in the types of foods African Americans eat. Additionally, there was a strong belief that being Black influence food choices regardless of socioeconomic status. Various participants described eating as an “intimate” or “spiritual” experience that could not be shared with or understood by everyone. Discussions pertaining to soul food echoed encouragement of the family practice of sitting and eating together, as well as using certain low fat or particularly nutritious foods. Perceived negative aspects of soul food included awareness of the fat, salt, and cholesterol content of the food. Most of the participants stated that soul food should be modified but remain part of the African American culture. One of the group discussions noted that healthier foods were usually more expensive and that food choices in the shops frequented by Blacks was often times limited. The themes that emerged from the interviews were an above-average health consciousness, racial discrimination and economic disadvantage as major influences on food choices, and African American food patterns as responsive to environmental circumstances, which is indicative of the high potential for dietary change. The responsiveness to environmental circumstances may reflect the influence of the African
centered worldview to create equilibrium within the larger environment (Airhihenbuwa, et. al., 1996).

Striegel-Moore and Smolak (2000) report that it is clearly evident that eating disorders are not solely an issue for White women and girls but that women of various ethnic backgrounds suffer from eating disorders and their symptoms. Furthermore, as pointed out by Striegel-Moore and Smolak (2000) various ethnic groups appear to show higher rates of an individual symptom than do Caucasians. Phinney (1996) stated that the ethnic groups should be closely examined in order to identify differences and the sources of these differences. Future research needs to identify ethnic group differences more thoroughly (Striegel-Moore & Smolak, 2000).

In summary, the current body of literature that focuses on African American women and their potential for the development of eating disorders and associated behaviors is small and contains many discrepant opinions and findings. Additionally, the research continues to compare African Americans to Caucasians and conclude that they do not present attitudes and behaviors connected to eating disorders as frequently as do Caucasians, therefore dismissing any risk that may be present. However, there is ample evidence to suggest that African American women have similar concerns in a variety of eating attitudes and behaviors, however, it is still unclear of how these differences present themselves.

This study will measure eating attitudes and behaviors in African American women and attempt to delineate any differences in factors associated with disordered attitudes and behaviors between African American, Caucasian, and Latina women. Additionally, a correlational analysis between the African American women’s scores on
the eating attitudes and behavioral measure and an acculturation measure will be
performed to identify potential relationships between levels of acculturation and eating
attitudes and behaviors. The study will attempt to answer the following questions:

1. What percentage of African American women present with attitudes
   and behaviors associated with eating disordered behaviors?

2. Do the factors of attitudes and behaviors already associated with eating
   disordered behaviors present differently in African American women
   when compared to their Caucasian and Latina counterparts?

3. Is there a correlation between levels of acculturation within the African
   American culture and attitudes and behaviors associated with the
   potential for developing an eating disorder?

It appears that strengths of this study include accounting for within group cultural
differences among African American women and attempting to find a factor structure that
may present as unique to this population, thereby providing a better understanding of
their eating attitudes and behaviors within a cultural context. Limitations of this study
include:

1. Difficulties controlling for possible socioeconomic differences,

2. All the women are attaining college educations, which leaves out a large
   percentage of women from all of the ethnic groups identified, and

3. The utilization of an instrument that has been developed on Caucasian
   populations. Although the study will attempt to identify a factor structure unique
   to African American women (if one exists), the fact that the questions were
developed using the attitudes and behaviors of Caucasian women should be kept in mind.
CHAPTER III

Methodology

Participants

Participants were 111 college women of Caucasian, Latina or African American descent. The ages of the participants ranged between 18 years old and 37 years old, with a mean age of 20 years old. Forty-one (36.9%) of the participants were African-American or Caribbean, 39 (35.1%) participants were Caucasian, and 31 (27.9%) participants were Latina. The participants were attained by distributing questionnaires during class periods in which the professors agree to allot class time for the purpose of this research.

Participants were asked to fill out the questionnaires and informed that the questionnaires were seeking information about their eating attitudes and cultural backgrounds. A consent form was presented along with the questionnaires, and informed the women that their participation was voluntary; hence, they would not be penalized for not participating or for choosing to drop out. Additionally, the consent form stated that if any participant felt uncomfortable after participation, she should talk to a friend or seek the guidance of a professional counselor. Additionally, the phone numbers of the researcher and research mentor were provided if the participant chose to contact them.
Instruments

**Eating Attitude Test- 26.** The Eating Attitude Test – 26 (EAT – 26) was developed by Garner, Olmsted, Bohr, and Garfinkel (1982). It is a 26-item self-report questionnaire based upon the original form, the Eating Attitude Test – 40 (EAT – 40) developed by Garner and Garfinkel (1979). The original form, EAT – 40, was administered to two groups of anorexic female patients (N = 32 and 33) and two groups of female control subjects (N = 34 and 59). The purpose of the scale was to identify a broad range of behaviors and attitudes associated with anorexia nervosa (Garner & Garfinkel, 1979). The scale format was a 6-point Likert scale utilizing the following responses: Always, Very Often, Often, Sometimes, Rarely, and Never. The preliminary items on the scale were constructed to reflect a range of reported behaviors and attitudes associated with anorexia nervosa. Twenty-three of the original items showed significant differences between the anorexic and control groups. These 23 items were attained while the other items were eliminated or reworded. For the second sample, the 40 items of the second version of the EAT, revealed a validity coefficient of 0.87 (P < 0.001); hence, the scale is a good predictor of group membership (Garner & Garfinkel, 1979).

A factor analysis of the EAT – 40 was conducted, using a varimax rotation, to identify particular symptom areas that clustered together. Seven factors were identified: (a) food preoccupation, (b) body image for thinness, (c) vomiting and laxative abuse, (d) dieting, (e) slow eating, (f) clandestine eating, and (g) perceived social pressure to gain weight. All items that were intended to represent the same symptom area showed positive communal factor loading (Garner & Garfinkel, 1979). The alpha reliability coefficient
was 0.94; hence, the scale demonstrated a high degree of internal consistency (Garner & Garfinkel, 1979).

The EAT – 40 appears to measure behaviors and attitudes associated with anorexia nervosa; however, individuals from the non-anorexic population scored as "symptomatic" on certain items. Additionally, 7% of the non-anorexic subjects' scores overlapped with the lowest scores of some of the anorexic population, and may represent a population with serious eating concerns. A total score of 30 was established as the cut-off for identifying individuals who presented as symptomatic (Garner & Garfinkel, 1979).

The EAT – 26 was developed using a population that consisted of 160 female anorexic patients and 140 female university students as a comparison group. The EAT – 40 was administered to both groups of women and analyzed by the use of a factor analysis and a correlational analysis of the total score, factor scores, and other psychometric variables. The factor analysis of the EAT – 40 scores of the 160 anorexic patients revealed that three factors accounted for 40.2% of the total variance. An oblique rotation was performed to identify items from the scale with factor loading of .40 or higher. Fourteen items did not meet this cut-off, and therefore were eliminated leaving 26 items. The correlational analysis was performed on the 26 remaining items. The intercorrelations between EAT variables suggest that EAT – 26 scores are highly predictive of EAT – 40 scores ($r = 0.98$). A total score of 20 correctly identified anorexic and control participants (Garner, Olmsted, Bohr, & Garfinkel, 1982).

**African American Acculturation Scale – R (AAAS – R)**. The 74-item African American Acculturation Scale – Revised (AAAS – R) assesses eight theoretically derived
aspects of an individual's knowledge of various African American beliefs and their practice of these beliefs. The AAAS – R was derived from the original 74-item AAAS (Landrine & Klonoff, 2000). Both forms use a 7-point Likert scale ranging from 1 (totally disagree; this is not at all true of me) to 7 (totally agree; this is absolutely true of me). Thus, high scores represent a more traditional cultural orientation and low scores indicate a more acculturated orientation (Landrine & Klonoff, 1996; 2000).

The original form was standardized on a population of 123 African American adults with various educational levels and social class backgrounds. This form contains eight subscales each representing an important theoretical area of African American culture. The eight subscales are highly reliable with alphas ranging from .71 to .90. The split half reliability has an r = .93, thus suggesting the scale, as a whole, measures acculturation in a highly consistent manner (Landrine & Klonoff, 1996).

The 74-item AAAS – R was created to address objections by a large number of participants about certain items on the original scale, all of these items have been dropped on the revised scale. Five hundred and twenty Black adults completed the original AAAS and a demographic questionnaire in exchange for 10 dollars. The first step of the revision process entailed dropping all items that were identified as objectionable based upon the number of previous participants who complained about particular questions. Twenty-six items were dropped leaving 48 items remaining. Following, a factor analysis of the remaining items was conducted so the revised subscales would reflect empirically derived factors. Using the varimax method a factor analysis was conducted yielding 10 factors; however only 8 of these factors were retained because 47 of the items loaded high on them and low on the next 2 factors. The eight subscales measure various areas of
the African American culture: preference for African things (9 items), religious beliefs and practices (10 items), health beliefs and practices (5 items), cultural superstitions (4 items), racial segregation (4 items), interracial attitudes (7 items), family values (4 items), and family practice (4 items) (Landrine & Klonoff, 2000).

For the AAAS – R the Cronbach’s alphas range from .67 to .89, indicating high internal consistency for each subscale. The overall Cronbach’s alpha was .93 with a split-half reliability of .79. Additionally, the AAAS – R correlates almost perfectly with the original form (r = .97) (Landrine & Klonoff, 2000). Furthermore, to assess the concurrent validity of the scale Landrine and Klonoff (2000) compared the scores of the participants based upon their scores on the Segregation subscale. There is a body of literature that indicates that African Americans who reside in ethnically segregated neighborhoods tend to possess more traditional cultural values than those residing elsewhere. Based upon their Segregation subscale scores, participants were divided into three groups, the low-segregated group, the moderately segregated group, and the high segregated group. The MANOVA for this analysis was significant and in the manner predicted (Hotelling’s Trace = 0.368, F (14, 952) = 12.52, p = .00005). ANOVAs were also conducted to compare differences among each subscale between the groups. The groups differed on all seven subscales. A one-way ANOVA was conducted to compare the total scores and was significant in the anticipated direction. (Landrine & Klonoff, 2000).

A second validity test was conducted comparing the scores of Blacks to the scores from other ethnic groups. This validation was done using the information attained during the original standardization (Landrine & Klonoff, 1994) with a population of 123 African Americans and 61 people from other ethnic origins. The AAAS scores were recalculated
as AAAS – R scores using only the 47 items and the new subscales. The MANOVA was significant (Hotelling’s trace = 1.403, exact $F(8, 175) = 30.69, p = .0005$) as were the ANOVAs for all eight subscales. A $t$ test compared the total scores between the two groups and that African Americans scores significantly higher, nearly 100 points (Landrine & Klonoff, 2000).

Data Analysis

An exploratory factor analysis will be conducted. Its purpose is to gather statistical information about the population being studied, that is, this study is not proposing any expectations of what will occur but rather is being conducted to help develop an understanding of the population at hand. The main purpose for conducting an exploratory factor analysis is to determine the existence of or discover potential factors. (Kline, 2000). When conducting an exploratory factor analysis, there are three fundamental assumptions, each pertaining to the existence of three separate types of variance: common variance, specific variance, and error variance. Common variance is that which is assumed to be shared with other variables in the analysis, specific variance is the portion that does not correlate with other variables, and the error variance is inherently unreliable random variance (Bryant & Yarnold, 1995). Furthermore, all observed indicators are assumed to be normally distributed as are all linear combinations of them (Bryant & Yarnold, 1995). Based upon previous studies, a 3-factor solution is most likely; however, a scree test will be conducted and the eigenvalues examined before making a final decision on the number of factors to rotate. In the present study, factor structures of the EAT – 26 for each of the three ethnicities of the population, Caucasians, Latinas, and African Americans will be determined.
As mentioned, while doing a factor analysis a Scree Test will also be requested. A Scree Test provides a stopping rule in order to determine the appropriate number of factors that are reliable for interpretation. The Scree Test was developed by Cattell in 1966 and it works by determining the line of best fit between values and factors (Bryant & Yarnold, 1995). Afterwards, the number of reliable factors, as determined through the Scree Test, will be forced to assess where the items of the EAT – 26 load in regards to only these reliable factors. In order to achieve a simple structure, both an orthogonal rotation and an oblique rotation will be performed to assess which of the two produces a more interpretable solution. An oblique rotation allows the factors to be correlated and an orthogonal rotation forces the factors to remain uncorrelated.

Finally, the zero-order correlation between the EAT – 26 and the AAAS – R full-scale scores will be examined to assess for a relationship between eating attitudes and behaviors and levels of acculturation. Through the use of a correlation coefficient the magnitude and direction of this relationship is expressed (Gall, Borg, & Gall, 1996). Conducting such an analysis may provide helpful information on a potential relationship between levels of acculturation and eating attitudes.
CHAPTER IV

Results

The purpose of this study was to explore how factors already associated with eating disordered behaviors may present in a population of African American women and how this presentation compares to Caucasian and Latina women; hence, exploratory factor analyses were conducted. Additionally, the role of acculturation in the presentation of eating attitudes and behaviors was explored for the African American group. Four separate factor analyses of the EAT – 26, an instrument measuring eating attitudes and behaviors, were conducted. The first factor analysis was performed using the data from the EAT – 26 of the entire population, to assess how factor loading occurred for the population as a whole. The other three factor analysis were completed also using the data from the EAT – 26; however, each of these three factor analysis focused on one of each of the three ethnic groups within the population as a whole. That is, separate factor analysis of the EAT – 26 were performed for the African American subgroup, the Caucasian subgroup, and the Latina subgroup in order to allow for between group comparisons of factor loading on the EAT – 26. Finally, a correlational analysis was conducted using the data gathered from the African American women to assess for any linear relationship between the scores of the EAT – 26, measuring eating attitudes and behaviors and the AAAS – R, measuring levels of acculturation. That is, the
correlational analysis was performed to identify any linear relationship between levels of acculturation and eating attitudes and behaviors within the African American population.

Utilizing Garner and associates (1982) results, suggesting that the items of the EAT – 26 load onto three factors, the analysis forced a three-factor solution to explore if the same factors arose in the current population. The three previous factors that were identified (Garner, et. al., 1982), are as follows:

1. Dieting – avoidance of fattening foods and a preoccupation with being thinner.

2. Bulimia and food preoccupation – items reflecting thoughts about food and those indicative of bulimic behavior.

3. Oral Control – self-control while eating and the perception of pressure from others to gain weight.

They reported that Factors I and II both represent the desire to restrict food intake; however, Factor II is a specific subgroup behavior of restricting, that is bulimia.

Table 1

Garner and Garfinkel’s Factor Structure of the EAT – 26

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor I</td>
<td></td>
</tr>
<tr>
<td>23. Engage in dieting behaviors</td>
<td>.72</td>
</tr>
<tr>
<td>17. Eat diet foods</td>
<td>.69</td>
</tr>
<tr>
<td>22. Feel uncomfortable after eating sweets</td>
<td>.68</td>
</tr>
<tr>
<td>25. Enjoy trying new rich foods</td>
<td>.66</td>
</tr>
<tr>
<td>16. Avoid foods with sugar in them</td>
<td>.64</td>
</tr>
</tbody>
</table>
7. Avoid foods with high carbohydrate content .58
11. Am preoccupied with a desire to be thinner .51
24. Like my stomach to be empty .48
12. Think about burning up calories when I exercise .47
10. Feel extremely guilty after eating .46
1. Am terrified about being overweight .45
14. Am preoccupied with the thought of having fat on my body .45
6. Aware of the calorie content of the food I eat .45

Factor II

26. Have the impulse to vomit after meals .78
9. Vomit after I have eaten .75
4. Have gone on eating binges where I feel that I may not be able to stop .63
21. Give too much time and thought to food .60
3. Find myself preoccupied with food .59
18. Feel that food controls my life .55

Factor III

5. Cut my food into small pieces .81
15. Take longer than others to eat meals .69
13. Other people think I am too thin .69
8. Feel that others would prefer if I ate more .62
20. Feel that others pressure me to eat .62
2. Avoid eating when I am hungry .52
19. Display self-control around food .41

For this research, the factor analysis of the EAT – 26 occurred in various stages. That is, four separate forced three-factor analyses were performed; one for the entire participant population, and three separate analyses for each of the three ethnic groups: African American, Caucasian, and Latina. The reader should keep in mind, that all findings should be viewed as suspect since the number of research participants was smaller than the number needed to perform such analysis, as such, the observed differenced could just be a function of the small n and nothing else.

The cut-off score for correctly identifying an eating disorder utilizing the EAT – 26 was determined by Garner and associates (1982) as a score of 20. Twelve percent of the participants within this study scored at or above the cut-off; hence, their scores are determined to be indicative of an eating disorder. The mean score for the population was 8.3, which is well below the cut-off point. However, there were significant between group differences. Ninety-five percent of the African American group scored below the cut-off point, while 5% scored above the cut-off point, and hence, reported attitudes and behavior similar to eating disordered individuals. Within the Caucasian population 85% of the participants scored below the cut-off score of 20, while 15% scored above that point and also reported attitudes and behaviors similar to eating disordered individuals. Finally, within the Latina participant group, 84% scored below the cut-off range; hence, leaving 16% of the population who scored within the range of eating disordered
individuals. There appears to be similarities between the percentage of women in the Caucasian and Latina group who reported thoughts and behaviors consist with individuals who were diagnosed with eating disorders. There were significantly less African American women who reported attitudes and behaviors consistent with eating disordered individuals. Chi-square analysis was performed to confirm these differences, however, the cell sizes were too small for the comparison to be valid ($\chi^2(2) = 2.946, p = .229$).

Table 2

Results of Chi-square Analysis

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>did not meet cut-off score</th>
<th>met cut-off score</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>39</td>
<td>2</td>
</tr>
<tr>
<td>Caucasian</td>
<td>33</td>
<td>6</td>
</tr>
<tr>
<td>Latina</td>
<td>26</td>
<td>5</td>
</tr>
</tbody>
</table>

Results of the Factor Analysis of the EAT - 26

Factor analysis of all the research participants’ EAT – 26 questionnaires.

The 26 items of the EAT were factor analyzed for the participant population of 111, forcing a three-factor analysis. The scores on the EAT – 26 for the entire population ranged from 0 – 41, with a mean score of 8.3. The three factors accounted for 56.90% of the total variance. A varimax rotation with a Kaiser Normalization was performed to assess for a more interpretable solution. Two items (numbers 19 and 25) did not load on
any of the factors and two items (numbers 9 and 24) loaded approximately equally on
two factors. The results of this factor analysis are presented in table 1.

Table 3
Summary of Items and Factor Loadings for Varimax Three-Factor Solution for the EAT
– 26 Questionnaire (N = 111)

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Feel extremely guilty after eating.</td>
<td>0.836</td>
</tr>
<tr>
<td>11. Am preoccupied with a desire to be thinner.</td>
<td>0.836</td>
</tr>
<tr>
<td>21. Give too much time/thought to food.</td>
<td>0.823</td>
</tr>
<tr>
<td>18. Feel that food controls my life.</td>
<td>0.788</td>
</tr>
<tr>
<td>1. I am terrified about being over weight.</td>
<td>0.723</td>
</tr>
<tr>
<td>22. Feel uncomfortable after eating sweets.</td>
<td>0.723</td>
</tr>
<tr>
<td>14. Am preoccupied with the thought of having fat on my body.</td>
<td>0.702</td>
</tr>
<tr>
<td>23. Engage in dieting behaviors.</td>
<td>0.700</td>
</tr>
<tr>
<td>4. Have gone on eating binges where I feel I may not be able to stop.</td>
<td>0.687</td>
</tr>
<tr>
<td>3. Find myself preoccupied with food.</td>
<td>0.667</td>
</tr>
<tr>
<td>26. Have the impulse to vomit after meals.</td>
<td>0.646</td>
</tr>
<tr>
<td>2. Avoid eating when I am hungry.</td>
<td>0.630</td>
</tr>
<tr>
<td>12. Think about burning up calories when I</td>
<td>0.610</td>
</tr>
</tbody>
</table>

- 61 -
exercise.

17. Eat diet food.  .619  .389  .067
24. Like my stomach to be empty.  .605  .454  .106
7. Avoid foods with high carbohydrate content.  .511  .507  .238
6. Aware of the calorie content of the food I eat.  .463  .625  .022
5. Cut my food into small pieces.  .496  .609  .044
16. Avoid foods with sugar in them.  -.040  .593  .375
20. Feel that others pressure me to eat.  .240  .511  .071
13. Other people think I am too thin.  .172  .091  .745
15. Take longer than others to eat my meals.  -.034  -.268  .738
8. Feel that others would prefer if I ate more.  .026  .264  .619
9. Vomit after I have eaten.  .502  -.184  .585
19. Display self control around food.  .137  -.267  -.393
25. Enjoy trying new rich foods.  -.104  -.395  .059

Footnote: The underlines represent the factor that the variable loaded to in the original factor analysis by Garner & Garfinkle.

The variables are grouped together well within the three factors; however, the themes of the groupings appear somewhat different than the themes of the original three factors determined by Garner and associates (1982). Factor I contains many of the original Factor I variables, including numerous variables associated with preoccupation with being thinner and the two variables reporting dieting. However, also within Factor I, were the variables measuring bulimia and a preoccupation with food, which according to Garner and associates made up a separate factor. Additionally, the original factor
analysis of the EAT – 26, reported the variables measuring avoidant behaviors under Factor I, while in this research study, these variables load on Factor II. Factor III is consistent with the original Factor III. In summary, in this research study, the variables sort to three factors that are best described as follows:

1. Dieting and bulimia – reports of dieting with a preoccupation about food and being thinner, as well as vomiting.
2. Restrictive eating behavior – avoidance of fattening foods.
3. Oral control – self control of eating and the perceived pressure from others to gain weight.

Factor analysis of the African American participants’ EAT – 26 questionnaires.

A factor analysis was then conducted for the 41 participants of African descent (i.e., African American and Caribbean), forcing a three-factor solution. The scores on the EAT – 26 for the African American population ranged from 0 – 37, with a mean score of 6.6. The three factors accounted for 57.28% of the total variance. A varimax rotation with Kaiser Normalization was performed to assess for a more interpretable solution. Five items (numbers 6, 16, 19, 20, and 25) did not load on any of the factors and none of the items loaded on more than one factor.

Table 2 displays the results of this factor analysis.
Table 4

Summary of Items and Factor Loadings for Varimax Three-Factor Solution for the EAT
- 26 Questionnaire for participants of African Decent (N = 41 )

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>10. Feel extremely guilty after eating.</td>
<td>.862</td>
</tr>
<tr>
<td>22. Feel uncomfortable after eating sweets.</td>
<td>.847</td>
</tr>
<tr>
<td>21. Give too much time/thought to food.</td>
<td>.836</td>
</tr>
<tr>
<td>1. I am terrified about being over weight.</td>
<td>.830</td>
</tr>
<tr>
<td>11. Am preoccupied with a desire to be thinner.</td>
<td>.792</td>
</tr>
<tr>
<td>14. Am preoccupied with the thought of having</td>
<td></td>
</tr>
<tr>
<td>fat on my body.</td>
<td>.762</td>
</tr>
<tr>
<td>18. Feel that food controls my life.</td>
<td>.763</td>
</tr>
<tr>
<td>3. Find myself preoccupied with food.</td>
<td>.752</td>
</tr>
<tr>
<td>23. Engage in dieting behaviors.</td>
<td>.739</td>
</tr>
<tr>
<td>7. Avoid foods with high carbohydrate content.</td>
<td>.728</td>
</tr>
<tr>
<td>24. Like my stomach to be empty.</td>
<td>.656</td>
</tr>
<tr>
<td>17. Eat diet food.</td>
<td>.650</td>
</tr>
<tr>
<td>12. Think about burning up calories when I exercise.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>.645</td>
</tr>
<tr>
<td>2. Avoid eating when I am hungry.</td>
<td>.641</td>
</tr>
<tr>
<td>4. Have gone on eating binges where I feel I may not be able to stop.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>.632</td>
</tr>
</tbody>
</table>
9. Vomit after I have eaten. .300 .808 -.055
26. Have the impulse to vomit after meals. .378 .721 -.029
8. Feel that others would prefer if I ate more. .027 .515 .473
13. Other people think I am too thin. -.093 .481 -.385
5. Cut my food into small pieces. .109 -.081 .741
15. Take longer than others to eat my meals. .019 .396 .671
6. Aware of the calorie content of the food I eat. .327 .283 -.440
16. Avoid foods with sugar in them. .130 .336 -.154
19. Display self control around food. .051 -.211 .150
20. Feel that others pressure me to eat. .061 .077 .398
25. Enjoy trying new rich foods. -.192 -.212 -.302

Within the African American population, the variables sort well to two factors, with the exception of one variable, which will be addressed. Factor I, as in Garner and associates (1982), involves variables associated with dieting and a preoccupation with being thinner. In addition, Factor I, also contains variables measuring a preoccupation with food. Garner and associates’ study had these variables (i.e., measuring a preoccupation with food) load on Factor II. Factor II measures bulimic behavior just as in the original study. Within the current study, variable 13 (i.e., others think I am too thin) also loaded to Factor II and does not seem to be related in any way. In the original study, Factor III, measured oral control and the perception of pressure from others;
however, within the African American population of the current study Factor III was not identified. In summary, the two factors for the factor analysis of the current study involving the subgroup of participants who are African American, is as follows:

1. Dieting and thoughts – avoiding fattening food and a preoccupation with food and being thinner.

2. Bulimia – the behavior of vomiting.

Two variables of the original Factor III did not load on any factor for this population. These variables were: displaying self-control around food and feeling that others pressure me to eat. Two of the other variables loaded on Factor I, and they were: aware of the calorie content of the food I eat, and avoid foods with sugar in them.

Factor analysis of the Caucasian research participants' EAT – 26 questionnaires.

A third forced three-factor analysis was conducted for 39 Caucasian participants. The scores of the EAT – 26 for the Caucasian population ranged from 0 – 41, with a mean score of 10. The three factors accounted for 62.67% of the total variance. A varimax rotation with Kaiser Normalization was performed to assess for a more interpretable solution. One of the variables (number 25) did not load on any factor and four of the variables (numbers 9, 17, 23 and 24) loaded on two factors. The factor analysis for the forced three-factors for the Caucasian population is shown in Table 3.
Table 5

Summary of Items and Factor Loadings for Varimax Three-Factor Solution for the EAT
- 26 Questionnaire for Caucasian Participants (N = 39)

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>11. Am preoccupied with a desire to be thinner.</td>
<td>.888</td>
</tr>
<tr>
<td>18. Feel that food controls my life.</td>
<td>.811</td>
</tr>
<tr>
<td>12. Think about burning up calories when I exercise.</td>
<td>.802</td>
</tr>
<tr>
<td>10. Feel extremely guilty after eating.</td>
<td>.787</td>
</tr>
<tr>
<td>1. I am terrified about being overweight.</td>
<td>.780</td>
</tr>
<tr>
<td>21. Give too much time/thought to food.</td>
<td>.776</td>
</tr>
<tr>
<td>14. Am preoccupied with the thought of having fat on my body.</td>
<td>.673</td>
</tr>
<tr>
<td>3. Find myself preoccupied with food.</td>
<td>.670</td>
</tr>
<tr>
<td>2. Avoid eating when I am hungry.</td>
<td>.663</td>
</tr>
<tr>
<td>6. Aware of the calorie content of the food I eat.</td>
<td>.646</td>
</tr>
<tr>
<td>26. Have the impulse to vomit after meals.</td>
<td>.639</td>
</tr>
<tr>
<td>17. Eat diet food.</td>
<td>.608</td>
</tr>
<tr>
<td>22. Feel uncomfortable after eating sweets.</td>
<td>.602</td>
</tr>
<tr>
<td>4. Have gone on eating binges where I feel I may not be able to stop.</td>
<td>.556</td>
</tr>
<tr>
<td>7. Avoid foods with high carbohydrate content.</td>
<td>.216</td>
</tr>
</tbody>
</table>
16. Avoid foods with sugar in them. .070 .781 -.099
23. Engage in dieting behaviors. .580 .674 -.059
24. Like my stomach to be empty. .555 .569 .250
5. Cut my food into small pieces. .035 .536 .492
8. Feel that others would prefer if I ate more. .062 .189 .815
20. Feel that others pressure me to eat. .058 .053 .783
13. Other people think I am too thin. -.204 -.205 .768
15. Take longer than others to eat my meals. .122 -.167 .695
19. Display self control around food. .254 -.482 .593
9. Vomit after I have eaten. .566 .108 .580
25. Enjoy trying new rich foods. .024 .136 -.146

For the Caucasian population, the variables loaded well to three factors. However, the factors appear slightly different from the original factors identified by Garner and associates (1982). Factor I for the Caucasian population measures a preoccupation with food and being thinner, as well as, bulimic behaviors; hence, it combines Garner and associates Factor II with the preoccupation with being thinner (originally a component of their Factor I). Factor II measures avoidance of fattening foods, which in the original study was part of Factor I. Factor III measures the perception of pressure from others and also contains one variable measuring oral control, and remains the most similar to the factors from the original study. In summary, the three
factors from the factor analysis of the current study for the Caucasian population were as follows:

1. Preoccupation and bulimia – items reflecting a preoccupation with being thinner, as well as those indicative of bulimic behavior,

2. Dieting - avoiding fattening foods, and

3. Oral control – self-control while eating and perception of pressure from others to gain weight.

Factor analysis of the Latina research participants' EAT – 26 questionnaires.

The final forced three-factor analysis was performed for the 31 Latina participants. The scores on the EAT – 26 for the Latina population ranged from 0 – 29, with a mean score of 8.3. The three factors accounted for 62.13% of the total variance. A varimax rotation with Kaiser Normalization was performed to assess for a more interpretable solution. Two of the variables (numbers 19 and 25) did not load on any factors and two variables (numbers 18 and 24) loaded on more than one factor. Table 4 shows the forced three-factor analysis for the Latina participants.

Table 6
Summary of Items and Factor Loadings for Varimax Three-Factor Solution for the EAT – 26 Questionnaire for Latina Participants (N = 31)

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>11. Am preoccupied with a desire to be thinner.</td>
<td>.886</td>
</tr>
<tr>
<td>21. Give too much time/thought to food.</td>
<td>.840</td>
</tr>
</tbody>
</table>

-69-
10. Feel extremely guilty after eating.  .785  .345  .048
6. Aware of the calorie content of the food I eat.  .759  .149  .310
1. I am terrified about being over weight.  .746  -.133  .228
3. Find myself preoccupied with food.  .729  .108  -.137
14. Am preoccupied with the thought of having
    fat on my body.  .727  -.146  .137
7. Avoid foods with high carbohdrate content.  .725  .216  .203
22. Feel uncomfortable after eating sweets.  .724  .141  .229
17. Eat diet food.  .656  .343  .130
12. Think about burning up calories when I
    exercise.  .631  -.318  .298
18. Feel that food controls my life.  .631  .581  -.190
2. Avoid eating when I am hungry.  .622  .283  .080
23. Engage in dieting behaviors.  .616  .543  .332
4. Have gone on eating binges where I feel I may
    not be able to stop.  .552  .141  -.416
24. Like my stomach to be empty.  .510  .209  .498
13. Other people think I am too thin.  -.076  .849  -.013
9. Vomit after I have eaten.  .183  .827  -.042
20. Feel that others pressure me to eat.  .192  .679  .291
8. Feel that others would prefer if I ate more.  .074  .656  .098
26. Have the impulse to vomit after meals.  .485  .630  -.305
16. Avoid foods with sugar in them.  .420  .564  .363
15. Take longer than others to eat my meals.  .140  .301  .753
5. Cut my food into small pieces.  .060  .035  .751
19. Display self control around food.  .331  -.075  -.121
25. Enjoy trying new rich foods.  .144  -.132  -.358

Again, the variables factor well to three factors and also represent a small variability from the original three factors determined by Garner and associates (1982). Factor I includes a preoccupation with food and being thinner, as well as dieting behavior. In Garner and associates’ work, Factor I did not include a preoccupation with food. Factor II measures bulimic behavior and the perception of pressure from others. In Garner and associates’ work the perception of pressure was part of Factor III and associated with behaviors of oral control. Factor III measures oral control, as it did in Garner and associates’ study. In summary, the three factors of the factor analysis of the current study for the Latina population was as follows:

1. Dieting and preoccupation with food – avoiding fat foods and preoccupation with being thinner and dieting.

2. Bulimia and perceived pressure – items reflecting bulimic behavior and the perception of pressure from others to gain weight, and

3. Oral Control -- self-control while eating.

Correlation analysis

A correlation was conducted in order to assess for the possibility of the existence of a relationship between levels of acculturation and eating attitudes and behaviors among the participants of African decent. In order to assess for such a relationship, a
correlation between the total score on AAAS-R and the total score on the EAT-26 was completed for the 41 participants of African descent. The mean score of the AAAS-R was $M = 199.12$, with a standard deviation of $SD = 46.13$. The mean score of the EAT-26, for this group of participants, was $M = 6.61$, with a standard deviation of $SD = 7.99$. A Pearson’s correlation of 2-tailed significance was used in order to assess magnitude and direction of the relationship. There was no evidence of the effects of acculturation on eating attitudes and behaviors in either a positive or negative direction ($p = .805$). Hence, the results of this research indicate that levels of acculturation for women of African decent does not influence their attitudes towards eating or their eating behaviors.
CHAPTER V

Discussion

The purpose of this study was to explore how factors already associated with eating disordered behaviors appear in a population of African American women and how this presentation compares to Caucasian and Latina women; hence, exploratory factor analyses were conducted. Additionally, the role of acculturation in the presentation of eating attitudes and behaviors was explored for the African American group. Four separate factor analyses of the EAT – 26, an instrument measuring eating attitudes and behaviors, were conducted. The first factor analysis was performed using the data of the entire population from the EAT – 26, to assess how factor loading occurred for the population as a whole. The other three factor analysis were completed also using the data from the EAT – 26; however, each of these three factor analysis focused on one of each of the three ethnic groups within the population as a whole. That is, separate factor analysis of the EAT – 26 were performed for the African American subgroup, the Caucasian subgroup, and the Latina subgroup in order to allow for between group comparisons of factor loading on the EAT – 26. Finally, a correlational analysis was conducted using the data gathered from the African American women to assess for any linear relationship between the scores of the EAT – 26, measuring eating attitudes and behaviors and the AAAS – R, measuring levels of acculturation. That is, the
correlational analysis was performed to identify any linear relationship between levels of acculturation and eating attitudes and behaviors within the African American population.

These analyzes were conducted in order to address the following three questions:

1. What percent of African American women present with attitudes and behaviors associated with eating disordered behavior?

2. Do the factors of eating attitudes and behaviors already associated with eating disordered behaviors present differently in African American women when compared to their Caucasian and Latina counterparts?

3. Is there a correlation between levels of acculturation within the African American culture and attitudes and behaviors associated with the potential for developing an eating disorder?

Findings

As already stated 5% of the African American population presented with eating attitudes and behaviors that are associated with eating disordered behaviors. As a comparison, 15% of the Caucasian population and 16% of the Latina population presented with eating attitudes and behaviors that are associated with eating disordered behaviors.

The results of the factor analyses suggest that the variables of the EAT – 26 load somewhat differently to three factors than was suggested by Garner and associates (1982). The original three factors suggested by their research were dieting, bulimia and food preoccupation, and oral control. Factor 1, dieting, included variables related to the avoidance of fatting foods and the preoccupation with being thinner. Factor 2, bulimia and food preoccupation, was made of variables reflecting thoughts about food and those
indicative of bulimic behavior, and Factor 3, oral control, included variables reflecting self-control while eating and perception of pressure from others to gain weight.

Each of the factor analysis of the current research, each of which focused on a specific cultural group (i.e., African American, Caucasian, and Latina) were slightly different from one another, suggestive of the idea that culture may influence eating attitudes and behaviors. Following, are the summaries of the factors for each group. Two factors were identified for the African American participants. They were dieting and preoccupation with food and bulimia. Factor 1, dieting and preoccupation with food, loaded for variables reflecting behaviors of avoiding fattening food and preoccupations with being thinner and with food. Factor 2, bulimia, was made of variables measuring the behavior of vomiting.

Three factors were identified for the Caucasian and Latina populations. The three factors for the Caucasian participants were preoccupation with being thinner and bulimia, dieting, and oral control. Factor 1, preoccupation with being thinner and bulimia, reflects variables measuring preoccupation with being thinner and with food, as well as, the behavior of vomiting. Factor 2, dieting, were variables measuring avoidance of fattening foods, and Factor 3, oral control, were variables measuring self-control while eating and perception of pressure from others to gain weight.

The three factors for the Latina population were dieting and preoccupation with food, bulimia and perception of pressure, and oral control. Factor 1, dieting and preoccupation with food, was made of variables measuring avoidance fattening food and preoccupations with being thinner and with food. Factor 2, bulimia and perception of pressure, were variables measuring the behavior of vomiting and the perception of pressure from others.
to gain weight, and Factor 3, oral control, was made of variables identifying self-control while eating.

Furthermore, there were two variables that did not load on any factor for any of the three cultural groups. Those variables were numbers 19 and 25. Number 19 stated: Display self-control around food, and number 25 stated: Enjoy trying new rich foods. For the African American population there were three additional variables that did not load on any factor. Those variables were numbers 6, aware of the calorie content of the food I eat, 16, avoid foods with sugar in them, and 20, feel that others pressure me to eat. For the Latina population there was one additional variable that did not load on any factor. That variable was number 23, engage in dieting behaviors. The Caucasian population did not have any additional variables that did not load.

**Between group differences.** It appears that within the African American and Latina populations that dieting behaviors, or the avoidance of fattening foods, is associated with thoughts, or preoccupations with being thinner and a preoccupation with food. While in the Caucasian population, these preoccupations appear to be associated with bulimic behaviors. Additionally, within the Latina population, bulimic behavior was associated with the perception of pressure from others, while that was not evident in either of the other two groups. Hence, it seems that bulimic behavior is present within the African American population, however, it does not appear to be associated with intrinsic or extrinsic pressures, as it appears to be in the other two populations. That is, in the Caucasian population bulimic behaviors are associated with intrinsic pressure, or preoccupations with food and/or being thinner and in the Latina population, bulimic behaviors appears to be associated with extrinsic pressure, or the perception of pressure
from others. This difference may serve as a cultural buffer that protects certain African American women from engaging in bulimic eating disordered behaviors. Furthermore, the African American women did report engaging in dieting behavior and hence, may be at risk for other types of eating disordered behaviors.

**Correlation.** A correlational analysis was done in order to identify potential relationships between levels of acculturation and eating attitudes and behaviors for the women in the study of African decent. Pearson's correlation of 2-tailed significance was used to assess the magnitude and direction of a relationship. The correlation determined that there was no evidence of the level of acculturation effecting eating attitudes and behaviors in the population of women from African decent.

**Comparison to Previous Research**

The participants of Garner and associates (1982) research most closely resembled the Caucasian population from the current research. There was a significant difference in Gardner's findings and those of the current research, in that variables measuring preoccupation with being thinner and bulimic behavior appeared to more closely related in the current research; that is they loaded to the same factor. Previously, these behaviors measured different factors and the preoccupation with being thinner was more closely associated with dieting. Hence, this may represent a variation in the trend of how young Caucasian women attempt to lose weight or reach their idealized thinness.

Interestingly, the factor analysis of the original research by Gardener and associates most closely resembles the African American group from the current research. The three factors that arose from the factor analysis of this population most closely resembled the factor analysis from the original study. However, there were five variables that did not
load on any factor for the African American population. Those variables were number 6, aware of the caloric content of the food I eat; number 16, avoid foods with sugar in them; number 19, display self-control around food; number 20, feel that others pressure me to eat; and number 25, enjoy trying new rich foods.

As previously stated, numbers 19 and 25 did not load to any factor for any of the three ethnic groups. However, the absence of the other three variables from any factor loadings may say something unique about how African American women’s attitudes or feelings towards food and eating behaviors. Additionally, the fact that this group of African American women did not perceive pressure related to eating, may reflect the cultural ideas or norms of these women in relation to food.

Schmolling’s research in 1988, had similar findings to the current research, in that more Caucasian women (23.5%) scored above the cut-off score on the EAT – 26 than did African American women (9.5%). However, in his research, the percent of Latina women (9.5%) scoring above the cut-off, was similar to the African American population, whereas in the current research, the Latina women’s scores more closely resemble those of the Caucasian women. Also similarly, Abrams and associates (1993) found that both Caucasian and African American women reported bulimic behaviors of both binging and purging; however, Caucasian women reported them in almost a 2:1 ratio when compared to African American women. Abood and Chandler (1997), also found that Caucasian women scored significantly higher on the EAT – 26 than did African American women (13.9 versus 10.6, respectively). In contrast, Fisher, Pastore, Schneider, Pegler, and Napolitano (1994), reported that on the EAT – 26, similar percentages of women of urban (African American and Latina) and suburban (Caucasian)
backgrounds scored above the cut-off score. That is 15% of the urban and 17.5% of the suburban women. This research is limited by the fact that they did not differentiate between the African American and Latina populations.

Dinsmore and Mallinckrodt (1996), utilized the EAT – 26 and Racial Identity Attitude Scale – B – Short Form within their research focusing of African American women. They conducted a correlation between the two instruments. They also concluded that there was not a significant correlation between the scores of the EAT – 26 and racial identity attitudes. Abrams and associates (1993), looked at assimilation, as opposed to acculturation, and a measure of restrictive eating. They found evidence of a relationship between restrictive eating and assimilation into mainstream culture within a population of African American women.

Implications for Future Research and Practice

The current research is suggestive of the fact that cultural difference between ethnic groups may influence there eating attitudes and behaviors. However, although differences may exist in behavioral presentations by an individual of a specific cultural group, all three of the ethnic groups represented in this research reported behaviors that are associated with eating disordered behavior; and hence, they are susceptible to behaviors and consequences that are unhealthy and damaging, such as negative self-esteem, poor eating habits and health related issues, including malnutrition. For example, bulimic behaviors appeared related to preoccupations with being thinner and with food for the Caucasian population, while in the African American and Latina populations these preoccupations were associated with dieting. Although the behavior of dieting is unlike
that of bulimia, dieting can also have negative effects of both physical and mental health, such as lack of nutrients, feeling fatigued, moodiness, and negative self-esteem.

The variables that influence eating attitudes and behaviors may differ between groups. These variations may stem from different types of stressors or buffers for individuals of different cultures. Such variations may be a product of cultural worldview or nuances, or how society views different cultural groups. For example, the African centered worldview possesses epistemologies, ideals, and values that differ from mainstream American culture (Nobles, 1991; Myer, 1992; Asante, 1995; Graham, 1999). Some researchers think that particular cultures, like African American culture, may serve as a buffer from eating disordered behaviors (Abood & Chandler, 1997; Stunkard, 1997). In contrast, Root (1990), addressed the notion that African American women may be a greater risk for the development of an eating disorder due to the variety of stressors endured by this population.

It is important that those practicing within the health and mental health fields to have an understanding of cultural differences and willingness to accept variations in presentation from individuals of various cultures. Additionally, assessing the client’s ability to express and identify feeling about their culture and potential influences may be helpful as well. There might be particular aspects of a culture than serve to increase or decrease risk of eating disorders. Nonetheless, it is important to keep in mind that there is tremendous diversity among individuals within ethnic groups. Professionals with such an understanding of cultural differences may be able to help prevent individuals from cultural backgrounds stereotyped as possessing buffers, at risk for development in a
potential eating disorder that may normally be overlooked (Abood & Chandler, 1997; Stunkard, 1997).

Much more research in the area of eating attitudes and behaviors is necessary for a better understanding of cultural influences to emerge. Both the pilot study, involving qualitative research, and the current study suggest that women of African American and Latina heritage also experience or become involved in preoccupations with thinness, preoccupations with food, and avoidant and bulimic behaviors. Although these women, and numerous Caucasian women, may not meet the criteria of the DSM – IV for the diagnosis of a specific eating disorder, their thoughts and behaviors may have negative effects on their physical and mental health. Research by Gray and associates (1987), measured the presence of bulimia in a population of Black college students using the DSM – IV criteria for this disorder. They reported that although very few of the women met the diagnostic criteria, many of the women engaged in bulimic behaviors in ratios equal to their Caucasian counterparts. Instruments measuring these behaviors, as well as, instruments accounting for cultural variations would improve our understanding and ability to conceptualized these differences. In summary, there is a need for the development of cultural specific norms on existing instruments, as well as the development of cultural specific instruments.

Women of African American culture can experience difficulties with weight preoccupation and engage in unhealthy eating practices (Abrams, et. al., 1993; Anderson & hays, 1985; Bowen, et. al., 1991; Hsu, 1985). Increased attention from health and mental health providers and educators could prove useful in identifying factors that influence women of this culture, that may be unique to them or not as prominent in other
cultural groups. Additional research in this area may help identify such factors as well. These factors may include the meaning of food, the meaning of thinness, the meaning of control, loss of control, and locus of control, and body image for these women. Mental health professionals need to be aware of cultural differences in help seeking, credibility of help, and ideas of causation. Similarly, interpretation of particular words, such as the word “binging”, may differ between groups and studies designed to better understand such difference are needed (Nasser, 1994).

Research focusing on the functionality of disordered eating behaviors instead of it’s pathology (Papp, 1983; Pate, et. al., 1992) may help to identify problem areas that place one at greater risk for eating disorders and may serve as a catalyst for the development of healthier coping skills. There is a great possibility that these problem areas will differ between cultural groups. It would also be important for health and mental health providers to have an understanding of such differences.

More research is needed studying African American women from various environments, not just predominantly white universities. Also, identifying African American women with eating disorders and determining if they developed such behaviors through the same mechanisms as white women. As a next step, the significance of ethnic differences on the EAT – 26 and their predictive values should be explored. Research should increase the use of qualitative measures to improve understanding of and information about ethnic differences in relation to eating attitudes and behaviors. Researcher need to begin to develop a more culturally sensitive definition of eating disorders (Lake, Staiger, & Glowinski, (2000). Finally, established base rates of prevalence for eating disorders for African American women is needed.
Limitations

There were several limitations in the current research; hence, the results should be interpreted with caution. These limitations include the small number of participants, the nature of the instruments, and the design of the study.

Limiting number of participants. The number of participants in the current research was lower than is necessary to view the findings as clinically significant, given the number of questions on the instruments used. Although there is much discrepancy within the literature on the correct ratio of participants to variables, Nunnally (1967) is referred to frequently, and he reported that the number of participants should be ten times the number of variables. Hence, the current research did not meet this criteria. Also, the sample of women was narrow, in that they were primarily college age and all were current college students. Future research should attempt to obtain a wider representative sample of women.

The number of African American participants in the current study was low and therefore there is not enough data available to determine clinical significance from the findings. Additionally, the distribution of scores on the EAT – 26 was minimal within this group; hence, again the data was too limited to determine meaningful conclusions in regards to the correlations between eating attitudes and behaviors and acculturation.

Limitations of the instruments. There are inherent limitations of the EAT – 26. Two such limitations are that it is a self-report questionnaire and that the original authors made the assumption about the equity of all of the variables. As with all self-report questionnaires, the usefulness of the EAT-26 is limited by it's vulnerability to inaccurate and distorted reporting by the participants. Hence, the validity of self-report
questionnaires is always questionable. Additionally, the EAT-26 is limited by the assumption made by the original authors that all of the variables of the instrument are of equal value, and hence, are weighed equally in the overall score. When in fact, it is reasonable to assume that some variables may be more important in determining abnormal eating behavior than other variables (Williams, 1987). The same can be said for the AAAS – R.

**Limitations in the design of the study.** There were several limitations related to the design of the study. First, the study’s population is not representative of the population at large. That is, the population of the study are young, college educated women; hence, they are a biased representative of the population as a whole. Additionally, the EAT – 26, was not normed on African American or Latina women; therefore, they results of their scored are limited in their interpretive quality. However, there are no instruments available that have been normed on any population aside from Caucasian women. Finally, the study did not control for such factors as socioeconomic status, which may impact an individual’s perception of social and cultural ideations, such as eating attitudes and behaviors.

**Conclusion**

The current research found that women of various cultural backgrounds, African American, Caucasian, and Latina, reported differences in eating attitudes and behaviors, and hence, had different factor loading on the EAT – 26, and instrument measuring eating attitudes and behaviors. However, although there was a difference in presentation of eating attitudes and behaviors among the three groups, each of the three groups reported attitudes and behaviors related to disordered eating. Hence, this research adds to the
body of literature suggesting it is imperative for future research to determine better
normative data related to eating disordered behavior for other cultural groups aside from
Caucasian women. Additionally, research needs to look at the differences in
presentations across cultures and develop a better understanding of these presentations in
cultural groups aside for Caucasian women. Finally, health and mental health providers
need to challenge themselves to become as educated as possible in multicultural
competency in order to effectively provide services. Furthermore, health and mental
health providers need to be cognizant of not stereotyping individuals based upon their
ethnicity of origin and treat people as individuals who function within a particular
cultural context.
Appendix A
Please place an (X) under the column which applies best to each of the numbered statements. All of the results will be strictly confidential. Most of the questions directly relate to food or eating, although other types of questions have been included. Please answer each question carefully. Thank you.

<table>
<thead>
<tr>
<th>Always</th>
<th>Very Often</th>
<th>Often</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am terrified about being overweight.</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>2. Avoid eating when I am hungry.</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>3. Find myself preoccupied with food.</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>4. Have gone on eating binges where I feel I may not be able to stop.</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>5. Cut my food into small pieces.</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>6. Aware of the calorie content of the food I eat.</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>7. Particularly avoid foods with a high carbohydrate content (e.g., bread, potatoes, rice, etc.).</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>8. Feel that others would prefer if I ate more.</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>9. Vomit after I have eaten.</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>10. Feel extremely guilty after eating.</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>11. Am preoccupied with a desire to be thinner.</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>12. Think about burning up calories when I exercise.</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>13. Other people think I am too thin.</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>14. Am preoccupied with the thought of having fat on my body.</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
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</tr>
<tr>
<td>15. Take longer than others to eat my meals.</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>Always</td>
<td>Very Often</td>
<td>Often</td>
<td>Sometimes</td>
<td>Rarely</td>
<td>Never</td>
</tr>
<tr>
<td>--------</td>
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<tr>
<td>16. Avoid foods with sugar in them.</td>
<td>( )</td>
<td>( )</td>
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<tr>
<td>17. Eat diet foods.</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
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</tr>
<tr>
<td>18. Feel that food controls my life.</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>19. Display self control around food.</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
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</tr>
<tr>
<td>20. Feel that others pressure me to eat.</td>
<td>( )</td>
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<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>21. Give too much time and thought to food.</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
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</tr>
<tr>
<td>22. Feel uncomfortable after eating sweets.</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
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<td>( )</td>
</tr>
<tr>
<td>23. Engage in dieting behavior.</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
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<tr>
<td>24. Like my stomach to be empty.</td>
<td>( )</td>
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</tr>
<tr>
<td>25. Enjoy trying new rich foods.</td>
<td>( )</td>
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</tr>
<tr>
<td>26. Have the impulse to vomit after meals.</td>
<td>( )</td>
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</tr>
</tbody>
</table>
Beliefs and Attitudes Survey
(Klonoff & Landrine, 2000)

Below are some beliefs and attitudes about religion, families, racism, Black people, White people, and health. Please tell us how much you personally agree or disagree with these beliefs and attitudes by circling a number. There are no right or wrong answers, we simply want to know your views and your beliefs.

<table>
<thead>
<tr>
<th>I Totally Disagree Not True At all</th>
<th>Sort of Agree Sort of True</th>
<th>I Strongly Agree Absolutely True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2</td>
<td>3 4</td>
<td>5 6 7</td>
</tr>
</tbody>
</table>

1. I believe in the Holy Ghost.
   1 2
   3 4 5 6 7

2. I like gospel music.
   1 2
   3 4 5 6 7

3. I believe in heaven and hell.
   1 2
   3 4 5 6 7

4. The church is the heart of the Black community.
   1 2
   3 4 5 6 7

5. I have seen people "get the Spirit" or speak in tongues.
   1 2
   3 4 5 6 7

6. I am currently a member of a Black church.
   1 2
   3 4 5 6 7

7. When I was young, I was a member of a Black church.
   1 2
   3 4 5 6 7

8. Prayer can cure disease.
   1 2
   3 4 5 6 7

9. What goes around comes around.
   1 2
   3 4 5 6 7

10. I used to sing in a church choir.
    1 2
    3 4 5 6 7

11. Most of the music I listen to is by Black artists.
    1 2
    3 4 5 6 7

12. I like Black music more than White music.
    1 2
    3 4 5 6 7

13. I listen to Black radio stations.
    1 2
    3 4 5 6 7

14. I try to watch all the Black shows on TV.
    1 2
    3 4 5 6 7

15. The person I admire the most is Black.
    1 2
    3 4 5 6 7

16. I feel more comfortable around Blacks than around Whites.
    1 2
    3 4 5 6 7
Appendix C
Dear Participants,

This study focuses on the eating attitudes and behaviors of college aged women and the potential influences of acculturation. The goal of this study is to identify how various cultural backgrounds may influence women's eating attitudes and behaviors and to help professionals better understand cultural influences on these attitudes and behaviors.

The study simply involves your participation in filling out short questionnaires related to eating attitudes and acculturation, as well as, providing some brief demographic information. The acculturation scale will ask questions related to religion, musical preferences, family living arrangements, and relations with people of other cultures. It will take approximately 15 minutes of your time.

Your participation in this study is purely voluntary. You may stop participating at any time, or you may decide not to be involved at all. Your participation or your decision not to participate will not have any negative consequences for you. Your identity will be kept confidential. If your participation in this study causes you any distress, talk with a friend, someone else you trust, or you may contact Dr. Utsey at (973) 275-2836 (E-Mail: utsevysh@shu.edu) or Eileen McCarthy at (732) 539 – 0970 (E-Mail: mccarthyel@aol.com).

The project has been reviewed by the Seton Hall University Institutional Review Board for Human Research Subjects. The IRB believes that the research procedures adequately safeguard your privacy, welfare, and civil liberties and rights. The chair of the IRB can be reached through the Office of Grants and Research. The telephone number is (973) 275-2974.

We appreciate your time and attention to this study, thank you.

Sincerely,

Shawn O. Utsey, Ph.D.
Assistant Professor
Counseling Psychology
Professional Psychology and Family Therapy

Eileen N. McCarthy, M.A.
Doctoral Student
Counseling Psychology

Name: ____________________________
Signature: ________________________
References


Williamson, L. (1998). Eating disorders and the cultural forces behind the drive for


