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# Men Feel it too: An Examination of Body Image and Disordered Eating among Older Males

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MEN FEEL IT TOO: AN EXAMINATION OF BODY IMAGE AND DISORDERED EATING  
AMONG OLDER MALES

by

AMBER S. MEADOWS

Under the Direction of Dr. Ann Pearman

ABSTRACT

This quantitative study examined body image and disordered eating in older males. Using a series of questionnaires and demographic questions, two research questions were explored: a) What are the characteristics of older males in terms of eating and body image? and b) Are disordered eating behaviors among older males related to dissatisfaction with body image, specifically physical appearance or physical functioning? Paired samples t-tests revealed that older males rated their ideal body figure as significantly smaller than their current figure,  $t(35) = -5.53, p < .01$ , which indicates the presence of body dissatisfaction. Twenty percent of participants were found to be at risk for disordered eating attitudes and behaviors. Furthermore, a

correlation was found between disordered eating attitudes and body dissatisfaction particularly as it relates to physical appearance, ( $r(33) = -.486, p < .01$ ).

INDEX WORDS: Body image, Eating disorders, Elderly, Older adults, Older males

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by

AMBER S. MEADOWS

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of  
Master of Arts  
in the College of Arts and Sciences  
Georgia State University  
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2011

MEN FEEL IT TOO: AN EXAMINATION OF BODY IMAGE AND DISORDERED EATING  
AMONG OLDER MALES

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## DEDICATION

This thesis is dedicated to my grandfather, Bennon Dees, who inspired me to pursue a career in the field of Gerontology. It is also dedicated to the incredible elders of Little Brothers – Friends of the Elderly, Chicago Chapter who helped me to realize that this work is worthwhile.

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Amber S. Meadows



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## INTRODUCTION

In the past, negative body image and disordered eating have been thought to rarely affect older individuals (Cosford & Arnold, 1992; Harris & Cumella, 2006; Lewis & Cachelin, 2001). However, it is unlikely that the desire to embody one's cultural idea of what is attractive – a desire which often begins in adolescence – will quietly disappear with increasing age. Furthermore, when issues of body image and eating disorders begin in or carry into older adulthood, it is important that individuals have access to both psychosocial and medical support (Harris & Cumella). Unfortunately, this support cannot be obtained if the support systems available do not have a thorough understanding of these issues in relation to older adults (Harris & Cumella). A contributing factor is the fact that where older adults are concerned, existing research on body dissatisfaction and behaviors that may accompany it is sparse (Peat et al., 2008).

Gadalla (2008) points out that, "...as the population ages and the idealized images presented by the media become progressively thinner, the prevalence of eating disorders in the elderly is expected to increase and hence, there is pressing concern for a careful consideration of disordered eating in this population" (p. 357). Oberg (2003) acknowledges that within our "youthful, sexualized" (p. 114) consumer culture, older adults are marginalized with regards to their bodies. He writes that modern images of older bodies are limited to either "problem bodies" (p.103) or those that are youthful in nature - leading active lifestyles, dieting, and dressing and behaving in what can be considered a youthful manner. Bearing in mind that media images—and other factors—can influence younger generations to engage in disordered eating habits and other adverse behaviors (McCabe & Ricciardelli, 2004; Morry & Staska, 2001), how do we know that these images do not create the same response from older adults?

An eating disorder can be defined as a disturbance in eating habits that is severe and long-lasting; they are categorized as either a form of anorexia nervosa (AN), bulimia nervosa (BN), or an eating disorder not otherwise specified (ED-NOS; American Psychiatric Association [APA], 2000). Consequences of eating disorders include thinning bones, low blood pressure, and problems with kidneys (“Anorexia, Bulimia, and Binge-Eating,” 2008). Given that the aging body is naturally predisposed to various health concerns, the effects of unhealthy behaviors, such as AN, could exacerbate these concerns (Harris & Cumella, 2006).

Death is, of course, the most detrimental consequence of disordered eating. Hewitt, Coren, and Steel (2001) investigated deaths that occurred from 1986 – 1990, and in which AN was either a leading or contributing cause of death. They found that over half of the deceased individuals were over 65 years of age. Considering these results and the fact that AN is only one of three categories of eating disorders, it is possible that eating disorders acting as leading or contributing causes of death among older adults are more noteworthy than is currently thought.

Closely linked to the issue of disordered eating in older adulthood is the experience of negative body image among older adults, which has not received much attention in comparison to this type of research among younger generations. Body image can be loosely defined as the attitude an individual has toward their own body; it includes awareness of and satisfaction with the body’s functioning and appearance (Cash & Pruzinsky, 1990; Peat, Peyerl, & Muehlenkamp, 2008; Reboussin et al., 2000). Negative body image is especially important since it has been found to continue through the life course if untreated in women (Tiggemann, 2004); effects of this include disordered eating, which can have serious health consequences in older adulthood (Brandsma, 2007; Hewitt, Coren, & Steel, 2001; Lewis & Cachelin, 2001). According to Pope, Phillips, and Olivardia (2000) males, in particular, experience a catch-22 in relation to eating

disorders. If they do not address these issues they become internalized and persist; yet, if they do seek help, they are often treated as though they are behaving in a non-masculine and inappropriate manner. Consequently, most men do not speak up about disordered eating habits (Pope et al.).

Bearing this information in mind, as well as knowledge that the experience of body image and eating disorders among older women, adolescent boys, and young adult males has not been studied as extensively as that of adolescent and young adult females, how do we know that these issues are not plaguing older men too? Older males are especially at a disadvantage because their experiences with these issues are not as well documented as that of other populations. It is unfortunate that much of what we know concerning them comes from cross-sectional studies or studies that do not actually use older males in their representation of “adults” (Calasanti & Slevin, 2001; McCabe and Ricciardelli, 2004). Furthermore, in their literature review pertaining to males and eating disorders, Jones and Morgan (2010) point out the existence of a gender bias within the diagnostic criteria and assessment tools; they argue that the criteria and instruments are geared toward women. They state that:

Diagnostic criteria are aimed at the types of weight concern, shape concern and methods of weight control common to women (thinness, dieting) rather than men (low body fat, muscularity, strength, exercise) and DSM-IV-TR indicates that a diagnosis of anorexia nervosa requires that post-menarcheal women present with amenorrhea (American Psychiatric Association, 2000). Furthermore, DSM-IV-TR states that men should be excluded from this disorder and that a more accurate diagnosis of EDNOS should be made. (p. 27)

Considering the increase in the finding that both young males and older females are experiencing body dissatisfaction and disordered eating (Harris & Cumella, 2006; Jones & Morgan; Lewis & Cachelin, 2001; Peat, Peyerl, & Muehlenkamp, 2008), it is clear that the topics of body image and eating disorders among older males deserve more attention. A lack of knowledge about these topics among populations that are out of the ordinary, such as older adults, present a disadvantage to those who may be in need of a proper diagnosis of one of these disorders. Furthermore, it prevents opportunities to examine the possibility of a growing problem.

This quantitative study will help to expand the knowledge of age-related issues in body image and disordered eating. In particular, this study considers the overall question of ‘how do older males perceive their body images and are their perceptions related to the occurrence of disordered eating?’ To do so, two questions were investigated: a) What are the characteristics of older males in terms of eating and body image? and b) Are disordered eating behaviors among older males related to dissatisfaction with body image, specifically physical appearance or physical functioning? Additional knowledge of older males’ experiences with body image and eating, both positive and negative, will provide researchers and service providers with useful information regarding these topics; which in turn will benefit younger generations of males who will someday reach older adulthood.



## 1 LITERATURE REVIEW

This literature review will help put into perspective the question of ‘how do older males perceive their body images and is this related to the occurrence of disordered eating?’ This will be done through the discussion of the life course perspective, body image, and disordered eating. The life course perspective is useful in the examination of body image and disordered eating in older adulthood since it considers sociological and psychological concepts as they relate to the individual and society as a whole (Hooyman & Kiyak, 2008). Body image and disordered eating are constructs that are impacted by both the micro- and macro-levels, and both have been found to affect people across all ages and genders (Harris & Cumella, 2006; McCabe & Ricciardelli, 2004). In the past, most of the attention surrounding body image and disordered eating has focused upon females. Although males have recently been afforded more consideration, research has focused mainly upon adolescents and young adults. Nevertheless, the experiences of these populations can help to inform our understanding of older males’ experiences of body image and disordered eating, and therefore will be included in this literature review.

### *1.1 Theoretical Perspective*

The topics of body image and disordered eating can be examined through the lens of the life course perspective. Social integration is a normal part of human life and it begins in childhood. Early on, people are exposed to social and cultural structures, as well as other macro-level factors that interact (Giele & Elder, 1998). These allow the individual to learn norms and understand the attitudes of other members of their society and what is expected of them. Furthermore, these factors are internalized by the individual on the micro-level and continue to influence the individual’s point of view and choices well beyond childhood (Clausen, 1986; Giele & Elder).

As will be illustrated in this literature review, our society has expectations of how the human body should appear, function, and be used in the maintenance of one's feminine or masculine identity. Unfortunately, emphasis is placed upon the youthful body and its preservation for as long as possible. Attempting to accomplish this expectation has an influence upon body image at various stages throughout an individual's life course and plays a role in the occurrence of disordered eating.

Since these issues, particularly disordered eating, are more prevalent among adolescents and young adults, when they do occur among older individuals, they are seen as unusual (or off time). Because of this, it is important to explore the occurrence of these issues among older adults. Information gained may reveal how much of these problems are preexisting or revisited as a result of unresolved past issues on a micro-level or unresolved past issues that may stem from familial, social, or other macro-level factors. It is also worthwhile to explore if these issues occur as a result of some current influence. More importantly, because the number of young males engaging in disordered eating and experiencing trouble with body image is increasing (Pope, Phillips, & Olivardia, 2000), understanding how these issues have affected the current generation of older males will provide relevant information that will allow researchers to compare and contrast, as well as help treat this growing population of discontented young males.

### *1.2 Body Image Defined*

Body image was defined by Cash and Pruzinsky (1990) as, "the concern with internal, subjective representations of physical appearance and bodily experience" (p. xi). Perception and attitude toward body appearance and functioning are central to body image (Reboussin et al., 2000). Body image contains emotional (e.g., feelings and affect), cognitive (e.g., evaluation), behavioral (e.g., positive and negative health behaviors), and perceptual (e.g., awareness of body

size) components (McCabe & Ricciardelli, 2004). Fisher (1990) illustrates this multidimensional nature of body image by explaining that:

At any point in time, persons may be simultaneously monitoring such different aspects of their body as its apparent attractiveness, position in space, boundary security, relative prominence in the total perceptual field, variation in the size attributes of its different parts, and so forth. In addition, we know that some aspects of the body-image experience are easily available to conscious awareness whereas others are concealed at unconscious levels. Some aspects of body experience involve areas of functioning relatively free of anxiety and others are highly linked with potential threat. (p. 18)

Thus, it is clear that body image is a complex aspect of the experience of self, on both the micro- and macro-levels.

### *1.3 Influence of the Experience of Body Image*

An individual's experience of body image, either positive or negative, has some bearing on their behavior. In his discussion of negative body image and eating disorders, Rosen (1990) acknowledges that individuals who have a negative body image may develop disordered eating habits, choose clothing that are not revealing, or retreat from social events and physical intimacy. Considering this, it is possible to suppose that an individual with a positive body image may be more comfortable wearing form-fitting clothing or participating in social interactions. In addition to its influence upon behavior, body image can also impact an individual's self-esteem (Tiggemann, 2004).

Kaminski and Hayslip (2006) examined body esteem in a sample of older adults. In particular, they investigated Body-as-Process Esteem (BPE), satisfaction with how the body functions, and Body-as-Object-Esteem (BOE), satisfaction with the body's appearance. They

used questionnaires to examine gender differences in relation to Body-as-Process Esteem and Body-as-Object-Esteem. Their sample included 95 men and women (ages 60-91), half of whom had a physical disability. Body-as-Object Esteem scores were predicted by global self-esteem. Both men and women over 74 years old exhibited significantly lower Body-as-Process Esteem scores and poorer global self-esteem. Furthermore, individuals over the age of 75 who had disabilities had significantly lower Body-as-Process Esteem scores than other participants who also either had a disability or were over the age of 75. Kaminski and Hayslip speculated that these low Body-as-Object Esteem and Body-as-Process Esteem scores can be linked to positive and negative health behaviors.

#### *1.4 Gender Differences in Body Image and throughout the Lifetime*

Considering the influence that body image may have on other aspects of an individual's life, it is important to know if body image is capable of change throughout the life course. In her literature review of research involving the body image of both older males and females, Tiggemann (2004) found that body dissatisfaction remained relatively stable across the lifespan in women. She indicates that some studies have found that older males also experience body dissatisfaction; however, there exists a gender difference since body dissatisfaction occurs more often among women. Interestingly, Kaminski and Hayslip (2006) found that being older had a more negative relationship on the Body-as-Object Esteem scores of males than females. However, several authors find that males may have a more positive body image than females and that this gender difference also persists throughout the life course (Peat et al., 2008; Reboussin et al., 2000).

Reboussin et al. (2000) investigated physical function and satisfaction with appearance among men and women ages 35-75. They used questionnaires, Body Mass Index (a measure of

body fat derived from an individual's weight and height), and measures of cardio respiratory fitness. They found that men were significantly more satisfied with body appearance than women. The authors also found that among older adults who participated in the study, although there was a difference between satisfaction with body functioning and satisfaction with body appearance, they were still positively correlated with one another. These results suggest that among older adults, well-being is tied more to satisfaction with body functioning than it is to satisfaction with appearance (Reboussin et al.).

### *1.5 Influences on Body Image*

Several variables can influence body image, such as culture, social class, gender, and the media. One variable that takes affect early in life is the example set by an individual's family. Clarke and Griffin (2007) conducted qualitative interviews with women ages 50 to 70 to learn how women are taught by their mothers 'to do gender' (e.g., exemplifying socially acceptable attitudes and behaviors toward the female body), as well as influences that mothers have upon body image throughout the life course. Participants' responses were placed into one of three categories: mothers as agents of accountability (i.e., use of mother's positive or negative feedback regarding achievement of female ideals of beauty in learning 'to do gender'), mothers as role models (i.e., use of mothers as models for appearance related attitudes and behaviors), and resisting and emulating mothers' examples (i.e., participants decisions regarding their own appearance related behaviors based upon their evaluation of their mother's experience with aging).

The authors found that mother-daughter relationships are important influences upon the female body image because mothers do have a primary role in teaching their daughters 'to do gender;' they also found that mothers do influence body image throughout the life course. An

example of their findings includes positive body image in adolescence being fostered by affirmation and compliments regarding appearance from mothers. Another example is the finding that women who chose to follow their mother's example for aging in adulthood not only had positive relationships with them, but also received positive feedback about their bodies from their mothers. In contrast, women who resisted their mother's example were more likely to have had negative relationships with their mothers and to have received negative feedback from them.

Tiggemann and Lynch (2001) investigated the influence of self-objectification on the body image of females within the Western culture. Self-objectification theory states that as a result of being in a culture that sexually objectifies the female body, women of all ages learn to treat themselves like objects that are to be evaluated by someone other than themselves (Tiggemann & Lynch). In order to examine the relationship between age and several variables, such as self-objectification, eating disorders, habitual body monitoring of physical appearance, and appearance anxiety, Tiggemann and Lynch provided women between the ages of 20 and 84 with questionnaires. A figure rating scale was used to assess body dissatisfaction; results showed that women rated their current figure as being significantly larger than their ideal figure. Furthermore, dissatisfaction with the body was found to be stable across the age range of participants. Conversely, there was a significant decrease with age involving the variables of habitual body monitoring, self-objectification, eating disorders, and appearance anxiety.

Current sociocultural models also influence individuals' body images (Morry & Staska, 2001). In a study involving male and female college students, Morry and Staska examined the relationship between magazine exposure and internalization of societal ideals of the body, eating disorder symptomology, self-objectification, and body shape dissatisfaction. Females reported on their exposure to beauty magazines and males on their exposure to fitness magazines. The results

showed that internalization of societal ideals of the body significantly predicted self-objectification, eating disorder symptomology, and body shape scores among females; among males, only self-objectification and body shape scores were significantly predicted. It is worth noting that there were no gender differences in self-objectification. This indicates that societal ideals are clearly connected to body satisfaction and eating behaviors in young adults.

Young males and females are subject to similar cultural messages concerning the achievement of ideal bodies. Cultural messages about ideal body type can be conveyed through the media, such as magazines (McCabe & Ricciardelli, 2004; Morry & Staska, 2001; Tiggemann, 2004). The comparison of one's natural body to society's standard of beauty may certainly result in negative consequences. Within contemporary Western culture, the ideal female body is thin and the ideal male body is represented by a V-shape and is muscular with a well developed upper body, flat stomach, and narrow hips (Tiggemann, 2004). Reboussin et al. (2000) found that the natural female body is larger than society's ideal female body; however, most men's natural bodies more closely resemble society's ideal one. Furthermore, because body shape and weight are considered controllable, people are held accountable for them in a different manner than they are for other aspects of appearance, such as height and shoe size (Tiggemann). Additionally, Reboussin et al. maintain that the gender difference in body image noted in their study is the result of society's perception of the ideal male and female body.

What types of cultural messages are being sent to older adults, who rarely see their bodies portrayed in society's media? Oberg (2003) writes that when images of older adults are shown, they appear in one of two forms: "problem bodies" (p. 103), which embodies many negative generalizations of the older body, or bodies that are youthful in nature. As cited by Oberg in his discussion of older adults in films, older males are more likely than older women to be portrayed

as sexy; when older women are represented as sexual beings, it is comical, the woman is youthful, or sexual encounters are implied rather than illustrated. Considering this, along with findings regarding the influence of the experience of body image, it is possible that being marginalized – similar to being exposed to society’s version of the ideal figure – can lead to negative consequences, such as dissatisfaction with one’s body and disordered eating habits.

### *1.6 Eating Disorders*

Closely linked to the issue of negative body image is that of disordered eating. While eating disorders often have their origin in body image disturbances, they are a much more extreme clinical pathology (Pope et al., 2000). The definition of eating disorders, which has been adapted from the Encyclopedia of Psychology and provided on the American Psychological Association website (American Psychological Association, n.d.), is eating behaviors that are abnormal and have the potential to damage an individual’s health or threaten their life. The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) recognizes three categories of eating disorders: anorexia nervosa (AN), bulimia nervosa (BN), and eating disorder not otherwise specified (ED-NOS; American Psychiatric Association [APA], 2000; Brandsma, 2007; Pope et al.).

AN involves the restriction of eating (American Psychological Association, n.d.). There are three criteria set forth in the DSM-IV for its diagnosis: a) “Refusal to maintain body weight at or above a minimally normal weight for age and height... 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...” (APA, 2000, p. 589). In addition, the DSM-IV specifies that women who have not yet experienced menopause (i.e., post-menarcheal) must miss three or more menstrual cycles (i.e., amenorrhea) in a row (APA). There are two subtypes of AN; they are



restricting type and binge-eating/purging type (APA). Restricting type involves maintenance of body weight only by restricting intake of food; individuals with the binge-eating/purging type not only restrict their food intake but also go on eating binges (i.e., significantly overeat), in addition, they may purge themselves through the use of laxatives, vomiting, or other means (Brandsma, 2007).

The diagnostic criteria for BN have five parts: a) Frequent, uncontrollable eating binges that take place within a distinct time frame. b) Frequent behaviors intended to prevent weight gain (e.g., fasting, over exercise, and enemas). c) Both parts 'a' and 'b' take place for three months and at least twice a week. d) Body shape and weight have a serious influence on the individual's evaluation of themselves and e) during episodes of anorexia nervosa, bulimia nervosa is not the only eating disorder occurring (APA, 2000). This disorder has two subtypes, purging type and non-purging type (APA). Brandsma points out that although the two can be confused, body weight is the major difference between purging type of bulimia and binge-eating/purging type of AN. Individuals who present with BN tend to have a larger body mass index than individuals with AN; the DSM-IV specifies that an individual with AN should have a weight that is 85% of what is expected (APA; Brandsma, 2007; Pope et al., 2000).

An ED-NOS is a disorder that does not meet all of the criteria for a diagnosis of AN or BN (APA, 2000). One example of an ED-NOS, and one that is most common in males, is binge-eating disorder (BED). It involves eating excess food but not purging after (American Psychological Association, n.d.; Brandsma, 2007; Mangweth-Matzek et al., 2006). The diagnostic criteria for BED are divided into five parts: a) The frequent occurrence of binge-eating. b) The binges occur along with three or more specified criteria (i.e., consuming food more quickly than usual, consuming food until uncomfortably full, consuming too much food

even though the individual is not hungry, embarrassment of the amount of food consumed leads the individual to eat alone, and becoming upset after the binge). c) Distress over binge-eating d) Binges occur at least two days each week for six months, and e) Binge eating is not the only disorder occurring during an episode of AN or BN, and the individual does not engage in compensatory behaviors like purging or fasting (Pope et al., 2000). It is worth noting that inclusion of BED as its own category of an eating disorder within the DSM is being considered (Brandsma; Hudson et al., 2007). Furthermore, in their investigation of eating disorders, Hudson et al. found that BED is more common in America than AN and BN.

Hudson et al. (2007) used data from the National Comorbidity Survey Replication—administered between 2001 and 2003 to people ages eighteen and older—to discover important information regarding AN, BN, and BED in the United States. In particular, they investigated prevalence, age-of-onset, duration, body mass index, socio-demographic variables, and comorbidity between eating disorders and other mental disorders. The findings of Hudson et al. indicated that the lifetime prevalence for AN was 0.6%, 1.0% for BN, and 2.8% for BED. By 80 years of age, the cumulative lifetime risk for these disorders was similar to the lifetime prevalence of the disorders, with AN being 0.6%, BN being 1.1%, and BED being 3.9%. AN was found to have a shorter lifetime duration and yearlong prevalence than the other eating disorders. Furthermore, lifetime AN was related to having a current body mass index that was low, while BED was related to severe obesity. It is worth noting that due to the nature of the questionnaire used, criteria for a diagnosis of BED included only a three month duration of the disorder instead of the six month duration required in the DSM-IV.

Interestingly, one fourth of the individuals presenting with AN or BN were male. The lifetime prevalence of these disorders were higher for women than men. In addition AN, BN, and

BED, two provisional entities that do not meet criteria of the DSM-IV, subthreshold BED and any binge eating were considered in the survey. It was found that subthreshold BED was higher among men than women, and that men and women paralleled on the lifetime prevalence of any binge eating.

Hudson et al. (2007) also found that 18 to 21 years was the median age of onset for the eating disorders, and the mean number of years that the eating disorders lasted was 1.7 for AN, 8.3 for BN, and 8.1 for BED. When age, sex, and race-ethnicity variables were controlled, 56.2% of individuals with AN, 94.5% with BN, and 78.9% with BED were found to meet the diagnostic criteria for at least one of the mood, impulse-control, anxiety, or substance abuse disorders within in the DSM-IV. Although 50% of individuals affected by AN, 63.2% affected by BN, and 51.2% affected by BED received treatment (e.g., psychiatrist, general medical, human services, etc.) for some form of an emotional problem within their lifetime, only 33.8% of individuals with AN, 43.2% with BN, and 43.6% with BED received treatment for an actual eating disorder. These percentages were even lower for participants with a one year prevalence of the disorders. The findings of Hudson et al. indicate that although eating disorders do not affect a significant percentage of people in America, they do impact individuals of all ages and both genders and the treatment of eating disorders should be encouraged more.

People may develop disordered eating habits for various reasons. It is clear that eating disorders involve negative body image and that some of the factors that lead to negative body image also lead to eating disorders. For instance, internalizing cultural messages of the ideal body has a correlation with disordered eating habits (Morry & Staska, 2001). In addition, Lewis and Cachelin (2001) found that women over fifty with more disordered eating habits reported higher fears of aging.

Eating disorders in older adulthood can be particularly life threatening. Hewitt and colleagues (2001) conducted an investigation of deaths in which AN was clinically present or contributed to death. Using death certificates registered with the National Center for Health Statistics between 1986 and 1990, the authors found that there was an average rate of 145 deaths per year from AN. Females died at a rate of 11 per 100,000 people and males at a rate of 3 per 100,000 people. Although females ages 15 to 34 had the highest relative risk of death from AN, older adults had the highest mortality rate from the disorder. The median age for death from this disorder was 69 in women and 80 in men. Hewitt et al. considered their findings an indication that death due to AN occurs among all ages but may have a greater impact on older adults. It is important to note that the rate of deaths was lower than the researchers expected. They attributed this to the possibility that some deaths went unreported and that there may have been occurrences of misdiagnoses upon death.

### *1.7 Body Image and Eating Disorders among Older Women*

Most attention on negative body image and eating disorder topics has been fixed upon adolescent girls and young women. This may be due, in part, to the fact that they make up the bulk of individuals suffering with eating disorders. In 2006, 12 to 25 year olds accounted for 95% of people suffering with eating disorders, and among eleven to thirteen year old females, 50% considered themselves overweight (South Carolina Department of Mental Health, 2006). Mangweth-Matzek et al. (2006), have also made one possible explanation, “the fact that literature on EDs [eating disorders] occurring after menopause is very sparse might be due to the occurrence of aged induced weight loss and other medical illnesses that hamper the recognition of anorexia or BN” (p. 583).

Nonetheless, although eating disorders are most prevalent in young females, negative body image and eating disorders do occur in older adults (Harris & Cumella, 2006; Hewitt, Coren, & Steel, 2001; Lewis & Cachelin, 2001). Yet, when there has been research with older adults, the participants have usually been females. As indicated previously, older women may maintain a less positive body image than older males (Reboussin et al., 2000; Peat et al., 2008). Tiggemann (2004) found in her literature review that as they grow older, women continue to report a desire to lose weight and dissatisfaction with their bodies. In addition, drive for thinness does not decrease as women age (Gadalla, 2008). This lack of satisfaction with the body throughout the life course may give way to destructive behaviors, such as eating disorders.

Clinicians are finding that the incidence of eating disorders among middle aged women is increasing (Harris & Cumella, 2006). In their study of body attitude, body satisfaction, and eating habits among 60-70 year old Austrian women, Mangweth-Matzek et al. (2006) found that over half of the women's satisfaction with their weight and body shape was 'moderate' or 'low.' Although the majority of participants in the study reported having healthy eating habits on their questionnaires, 86% admitting to using methods of weight control, including weight checking (71%), physical activity (69%), fasting, laxatives or diuretics (16%), and vomiting and spitting out food (1%).

Lewis and Cachelin (2001) examined figure preferences, body dissatisfaction, and attitudes regarding eating and weight behaviors in two cohorts of female participants (ages 50-65 and 66 and over). Similar to the Reboussin et al. (2000) study with young adults, Lewis and Cachelin found that current perceived figure was significantly larger than ideal and attractive figure. Although there were no significant differences between the cohorts regarding body dissatisfaction, middle aged women had significantly higher scores on drive for thinness and

eating disorders. They also found that binge eating was the most common eating disorder among obese middle aged women. Interestingly, the drive for thinness and attitudes and behaviors related to eating among participants over the age of 66 were similar to the normal range of responses given by female college students in similar studies. This may provide evidence that disordered eating is a prolonged issue that can impact individuals throughout the life course. However, Peat et al. (2008) pointed out that there is difficulty in diagnosing eating disorders that are new to older adults rather than carry-overs from younger adulthood; the criteria for diagnosing late-onset eating disorders may be different than those used in younger adults.

### *1.8 Body Image and Eating Disorders among Young Males*

Although research in the areas of body image and eating disorders among young males is far more abundant than with older males, there is still a paucity of research pertaining to young males in this arena. As previously mentioned, many researchers have focused their attention upon adolescent and young adult females (McCabe & Ricciardelli, 2004; McCreary & Sasse, 2000). Furthermore, when young males are studied, they are often compared to young females. Nevertheless, there has been an increase in eating disorders among males (Pope et al., 2000). Pope et al. believe that this increase results, in part, from society's changing standards regarding male body image and its emphasis upon the male body having less fat and more muscle.

McCreary and Sasse (2000) used questionnaires to measure drive for muscularity and thinness, use of weight training activities, and psychological well-being (i.e., self-esteem and depression) in male and female college students. Results indicated that the drive for muscularity was unrelated to the drive for thinness. Males had a higher drive for muscularity than females, and regardless of gender, people with a higher drive for muscularity did more weight training and used special diets to gain weight. The authors also found that self-esteem and depression

were unrelated to females' drive for muscularity; however, males with high drives for muscularity had lower self-esteem and higher levels of depression. McCreary and Sasse speculated that the drive for muscularity could represent a body image disorder in males.

Concern with achieving the ideal male image seems to affect men whose body shapes are larger and smaller than the perceived societal ideal. Harris and Cumella (2006) found that young males were evenly divided between those wanting to gain weight and those wanting to lose it. As previously discussed, the desire and drive to achieve an ideal figure may lead to eating disorders (McCreary & Sasse, 2000; Morry & Staska, 2001).

McCabe and Ricciardelli (2004) indicated that disordered eating behaviors in young males may begin in adolescence and persist into adulthood. Males who struggle with eating disorders generally belong to "weight-sensitive subgroups" (Harris & Cumella, 2006). These groups often include actors and certain athletes, such as wrestlers and runners. Males are also more prone than females to choosing compulsive exercise and use of over the counter weight-loss and weight-enhancing drugs in order to achieve a more ideal physique. Males who engage in bulimia tend to be obese (Harris & Cumella). Furthermore, adult men with eating disorders also may have issues with gender identity, impulsivity, and do not have high levels of sexual activity (Harris & Cumella).

### *1.9 Body Image and Eating Disorders among Older Males*

Knowledge of how older males perceive their bodies and the occurrence of disordered eating is limited. Research on body image and eating disorders has been focused on adolescents and college students. In fact, McCabe and Ricciardelli (2004) point out that in one study they reviewed, the adult male participants were actually college males. From a research standpoint, choosing participants in their early twenties to represent "adult men" does not give other age

groups (in particular older men) a voice within the research. The level and type of body dissatisfaction and the perceived ideal in college males may not be the same as that of middle aged or older males.

Several researchers have also noted that research on both body image and eating disorders has mainly been focused upon females (McCabe & Ricciardelli, 2004; Peat et al., 2008; Tiggemann, 2004). As noted before, the majority of the research regarding body image and eating disorders among older adults is based upon women. As a result, it may not be possible for all of the information gathered to be generalized to older males (Kaminski & Hayslip, 2006).

In his qualitative study, Drummond (2003) showed that older adult males exhibit a high degree of complexity in their body image. A focus group was conducted with six retired males between the ages of 58-85 in order to investigate body image in relation to the negotiation of physical changes, role changes in society, and masculine identity. Analysis of the focus group interview revealed that the participants were particularly concerned with the functionality of their bodies rather than its appearance to others. Furthermore, the men would compartmentalize their bodies according to non-functioning body parts and when considering the body as a whole, they had difficulty accepting that it no longer had the capacity to do what it used to. Feelings of inadequacy were tied to the failure of the body to perform tasks that were previously possible, and masculine identity was negatively impacted.

In their book, Calasanti and Slevin (2001) consider the concept that body image issues among older adults stem from the intersection of expectations regarding their gender and ageism (i.e., stereotyping an individual based upon their age). The authors acknowledge a gender difference in the evaluation of the body; they point out that while women “view their bodies as objects for aesthetic evaluation” (p. 60); males stress their body’s physique and its physical



fitness. In their discussion of hegemonic masculinity and femininity, the authors explain that ideals for females are based upon their body's appearance and ideals for males are based upon their body's ability to "do" or perform. Although some overlapping may occur, it does so in gender defined ways. The examples they provide are muscularity and childbirth. While muscularity has ties to appearance, it illustrates what a man can "do," and although childbirth is something that a woman does, it illustrates her femininity. As the authors point out, older women have to fight in order to still be viewed as both feminine and not old. Older males must fight having an aging body that can no longer accomplish previous physical abilities, while also fighting being viewed as both nonmasculine and old.

Therefore, Calasanti and Slevin (2001) maintain that changes in the body's physical abilities are more important to older males than changes to its appearance. They explain that this can have an impact upon their masculinity, particularly the representation of it as physical appearance – which has ties to physical capabilities. Older males may begin to experience the intersection of gender and age at different times, and the degree to which their masculinity is affected may be different. As the authors point out, manual laborers may experience changes to their body and physical capabilities sooner than men in other occupations.

Calasanti and Slevin indicate that males may experience a variety of reactions to their physical losses – and threatened masculinity. These can include undergoing surgery for such things as penile implants. Is it not possible that in addition to cosmetic surgeries, some older males may choose to engage in disordered eating habits? Furthermore, although many of the reactions may be performance based, some of them (such as cosmetic surgeries) are also tied to appearance. Is it possible that appearance actually does play a large role in these reactions?

Considering the limited research of older males, as well as research regarding body image in both young men and older women, and the finding that negative body image remains stable in women across the life course, it is probable that some older males may also struggle with issues of body image (Lewis & Cachelin, 2001; McCabe & Ricciardelli, 2004; McCreary & Sasse, 2000; Peat et al., 2008; Tiggemann, 2004). Similarly, eating disorders have been found to affect males, and their occurrence among middle-aged and older adult females illustrates that they do develop later in the life course – which some research has shown to be due to societal and individual factors (Jones & Morgan, 2010; Lewis & Cachelin, 2001). Considering this information, it is likely that eating disorders may affect some older men as well. Furthermore, since it is possible that eating disorders and negative body image in older men are more complex than is currently understood these topics need to be explored further.

### *1.10 Current Study*

The purpose of this study is to expand the existing knowledge of body image and eating disorders by using a specific focus on older adult men. To learn more about the overall question of ‘how do older males perceive their body images and is this related to the occurrence of disordered eating?’, two research questions were explored: a) What are the characteristics of older males in terms of eating and body image? and b) Are disordered eating behaviors among older males related to dissatisfaction with body image, specifically physical appearance or physical functioning? Because existing research regarding disordered eating among older males is limited, no specific hypotheses were made about the directionality of the results.

## 2 METHOD

### 2.1 *Participants*

Participants recruited for this study were 44 males with various ethnic backgrounds. Age ranged from 65 to 86 years, with a mean age of 73 ( $SD = 6.02$ ). Data from eight participants were discarded due to participants' ages, missing data, and questionnaires returned without consent forms – leaving data from a total of 36 participants to be analyzed. Participants were recruited from Chattanooga, Tennessee; Tucson, Arizona; Atlanta, Georgia; and Columbus, Georgia.

Participants from Atlanta, Georgia were recruited from two DeKalb County and three Cobb County neighborhood senior centers; as well as two senior residences in the Atlanta metro area. Recruitment was conducted through the use of flyers posted throughout the neighborhood senior centers and senior residences advising participants to contact the researcher by phone or email, as well as appeals made to residents and center participants in classes and other activities. During appeals, potential participants were informed that the study involved providing information regarding their experiences with body image and their eating habits, as well as information about why this study is important. In addition, participants were given the opportunity to take part in the study immediately, set up an appointment to complete the questionnaire or do so by mail. Participants from other cities and states were recruited through the use of snowball sampling and appeals made in person, all of which followed the same format as appeals made in Atlanta.

### 2.2 *Setting*

Participants in Atlanta, Georgia ( $n = 20$ ) completed the questionnaire in private rooms located in the neighborhood senior centers and senior residences. One participant in

Chattanooga, Tennessee completed the questionnaire in his home. The remaining participants from all other cities and states ( $n = 15$ ) completed the questionnaire by mail.

### 2.3 *Measures*

A quantitative design was used for this study. All participants completed a questionnaire (see Appendix) composed of demographic questions created by the researcher. The demographic questions included age, race, marital status, and health. In addition to the demographic questions, the questionnaire contained three instruments that measured body image and the possibility of disordered eating habits. The instruments are: Figure Rating Scale (FRS; Lewis & Cachelin, 2001; Stunkard, Sorensen, & Schulsinger, 1983), Body Esteem Scale (BES; Franzoi & Shields, 1984; Thompson & van den Berg, 2002), and Eating Attitudes Test-26 (EAT-26; Garner, Olmsted, Bohr, & Garfinkel, 1982).

The Figure Rating Scale is a measure of global—overall—body image satisfaction and consists of nine male silhouettes with body sizes that range from extremely thin to obese (Lewis & Cachelin, 2001). Participants were asked to specify which figure they considered their ideal size, their current size, and the size that is most attractive to the opposite sex. Discrepancies between current and ideal figure are used to reveal body dissatisfaction. The scale was tested for reliability and validity using a sample of 125 males and 204 females and it has been found to have adequate validity and good test-retest reliability (Thompson & Altabe, 1991). In addition to its use involving children and young adults, the Figure Rating Scale has been used with older adults for research of body image (Lewis & Cachelin, 2001).

The Body Esteem Scale is also a global measure of satisfaction and was used to assess specifics about body image. It contains 35 items that measure body parts and functions based on how the participant feels about the specified part or function of their body (Reboussin et al.,

2000). This instrument includes three subscales: physical attractiveness, general physical condition, and upper body strength. It uses a 5-point Likert scale where one represents having strong negative feelings and five represents having strong positive feelings. Participants can score between 35 and 175; those with lower scores are revealed to have negative body esteem (Tiggemann & Lynch, 2001). Sample items used for this instrument included: face, body build, and biceps.

The Body Esteem Scale has been validated using 257 male and 366 female college students (Franzoi & Shields, 1984; Thompson & van den Berg, 2002). It has also been shown to be reliable. In regards to internal consistency for males in particular, the alpha coefficients were 0.81 for the physical attractiveness subscale, 0.86 for the physical condition subscale, and 0.85 for the upper body strength subscale (Franzoi & Shields). The Body Esteem Scale has previously been used to investigate body esteem in physically disabled older adults (Kaminski & Hayslip, 2006) and body dissatisfaction in older women (Tiggemann & Lynch, 2001).

EAT-26 is a widely used self-report questionnaire that measures behaviors, attitudes, and emotions associated with disordered eating; however, it does not permit the diagnosis of a specific eating disorder (Gallada, 2008; Morry & Staska, 2001). This instrument contains three subscales: dieting, bulimia and food preoccupation, and oral control (Garner, Olmsted, Bohr, & Garfinkel, 1982). It includes a 6-point scale (i.e., never to always) for participants to rank the frequency of the 26 behaviors that are listed. Possible scores range from 0 to 78, with scores above 20 indicating a risk for an eating disorder (Gallada). This scale has been validated and shown to be reliable using a sample of women ages 20-25 who suffered from anorexia nervosa (Garner et al.). Researchers have used this measure to explore disordered eating habits in older adults as well (Davies, Whelan, & King, 2000; Gadalla). However, some caution is advised in

applying the oral control subscale of this test to older adults, as well as subscales of other tests such as the body dissatisfaction subscale of the Eating Disorder Inventory, due to the fact that no tests of eating disorders have been specifically designed for older adults (Davies et al.).

The three instruments and demographic questions worked together to inform this study by answering the question, ‘what are the characteristics of older males in terms of eating and body image?’ This was made possible through the provision of information regarding particular characteristics of the participants from the demographic questions; as well as information regarding the level of dissatisfaction with body image and possibility for disordered eating attitudes and behaviors provided by the measures of body image and the EAT-26.

By assessing body dissatisfaction, the FRS and BES helped to address the research question, ‘are disordered eating behaviors among older males related to dissatisfaction with body image, specifically physical appearance or physical functioning?’ They did so through the revelation of differences in participants’ level of satisfaction or dissatisfaction with their body’s appearance and functioning. This was made possible because the FRS, BES, and physical attractiveness subscale of the BES provide global examinations of satisfaction with body image. The general physical condition and upper body strength subscales of the BES particularly examine body image as it relates to physical functioning.

The EAT-26 contributed to this research study by revealing whether participants showed signs of disordered eating attitudes or behaviors. Examining correlations between the EAT-26 and the measures of body image helped answer the question of, ‘are disordered eating behaviors among older males related to dissatisfaction with body image, specifically physical appearance or physical functioning?’ by assessing the degree of a relationship between disordered eating symptoms and level of satisfaction with physical appearance, as well as physical functioning.

## 2.4 *Analyses*

Predictive Analysis Software (PASW) 18 was the software program chosen to conduct analyses of the data. All measures were analyzed using descriptive statistics. The means and standard deviations of participants' scores on the three instruments were compared to those of similar research studies that utilized these same instruments. Paired t-tests were used to reveal discrepancies between participants' current, ideal, and attractive sizes and to reveal body dissatisfaction on the FRS (Lewis & Cachelin, 2001; Tiggemann and Lynch, 2001), as well as discrepancies between current and ideal weight on the EAT-26. Pearson correlation coefficients were conducted to examine correlations between the EAT-26 and satisfaction with physical appearance and functioning – as determined by the FRS and BES.

## 2.5 *Procedure*

Participation in the study began with participants going through the process of informed consent either verbally and/or in writing, and then signing a consent form. Participants were given the option to self-administer the questionnaire ( $n = 27$ ) or have it administered by the researcher ( $n = 9$ ). Participants then completed the questionnaire which assessed their body image and the possibility of disordered eating attitudes and behaviors. Completion of the questionnaire lasted thirty minutes to one hour. Upon review of the questionnaire, any participants found to have severe negative body image or disordered eating behaviors were contacted by phone or in person and advised to seek professional counseling services through Grady Memorial Hospital's Crisis Intervention Service – a total of six individuals, all from the Atlanta area, needed to be referred and one individual from Chattanooga was advised to discuss his behavior with a doctor.

## 3 RESULTS

### 3.1 *Sample Characteristics*

Demographic and physical characteristics of the sample are presented in Table 1. Participants were primarily Black (50%) and none of them considered themselves Hispanic or Latino. The majority of participants was married (58.3%), had attended some college (27.8%), and was retired from a variety of occupations. Their former job positions included such positions as a teacher, farmer, accountant, and truck driver. Most participants had an annual income of less than \$15,000 (30.6%) and on average, considered themselves to be in good health (50%). Participants' BMI was calculated using a standard BMI calculator provided by the U.S. Department of Health and Human Services' National Heart, Lung, and Blood Institute (2011). According to their BMI, 22.9% of participants were considered normal weight, 48.6% were overweight, and 28.6% of participants were considered obese. While the mean of participants' ideal weight was 177.97 lbs. ( $SD = 26.28$ ), the mean of their current weight was 198.86 lbs. ( $SD = 47.28$ ), about 20.89 lbs. heavier than their mean ideal weight. Thirty-six percent of participants reported that their doctors sometimes discussed their weight with them while 25% reported that their doctors never had such discussions.

### 3.2 *Body Image and the Figure Rating Scale*

Using male body types on a scale of one to nine, the Figure Rating Scale (Figure 1) required participants to identify their perceived current and ideal figure, as well as the figure they perceived that women consider most attractive. The mean ratings and standard deviations for the Figure Rating Scale's current, ideal, and attractive figures are provided in Table 2. The minimum and maximum figures choices are also provided. Paired samples *t*-tests revealed differences between current, ideal, and attractive figures and the presence of body dissatisfaction was



Table 1.

*Demographic and Physical Characteristics of Participants*

Characteristic	M or Valid Percentage	SD	Range
Age in Years	73.00	6.02	65.00-86.00
Race			
Black or African American	50.00%		
White	36.10%		
Asian	11.10%		
American Indian or Alaska Native	2.80%		
Marital Status			
Single	11.11%		
Married	58.33%		
Divorced	11.11%		
Widowed	19.44%		
Level of Education			
Less than high school	16.70%		
High school graduate	22.20%		
Some college	27.80%		
College graduate	25.00%		
Post graduate	8.30%		
Income			
Less than \$15,000	33.30%		
\$15,000 - \$24,999	15.20%		
\$25,000 - \$34,999	12.10%		
\$35,000 - \$44,999	9.10%		
\$45,000 - \$54,999	9.10%		
\$55,000 - \$64,999	3.00%		
\$65,000 - \$74,999	6.10%		
\$75,000 - \$84,999	9.10%		
\$85,000 - \$94,999	0.00%		
\$95,000 or more	3.00%		
Self-Reported Rate of Overall Health			
Excellent	5.60%		
Very Good	13.90%		
Good	50.00%		
Fair	22.20%		
Poor	8.30%		
Discussion about Weight with Physician			
Always	16.70%		
Usually	5.60%		
Often	8.30%		
Sometimes	36.10%		
Rarely	8.30%		
Never	25.00%		
Height (Inches)	69.63	3.83	61.00-81.00
Current Weight (Lbs)	198.86	47.28	118.00-370.00
Highest Weight (Lbs)	219.32	59.65	118.00-395.00
Lowest Adult Weight (Lbs)	169.80	27.79	110.00-235.00
Ideal Weight (Lbs)	177.97	26.28	120.00-230.00

Table 2.

*Means and Standard Deviations for Figure Rating Scale, Body Esteem Scale, and Eating Attitudes Test-26*

Instrument	Minimum-Maximum	<i>M</i>	<i>SD</i>
FRS Current Figure	1 - 8	5.31	1.69
FRS Ideal Figure	1 - 7	4.03	1.30
FRS Attractive Figure	1 - 5	3.66	1.14
FRS Attractive-Ideal	-3 - 2	-0.34	1.00
FRS Ideal-Current	-5 - 2	-1.28	1.39
FRS Attractive-Current	-5 - 2	-1.66	1.59
BES-UBS	18 - 45	31.28	7.20
BES-PC	20 - 65	44.08	10.12
BES-PA	30 - 55	37.92	5.63
BES Total	81 - 175	119.86	21.61
EAT-26 Total	0 - 37	7.74	7.48

Note:  $n=35$  for FRS Attractive and EAT-26 Total. UBS refers to Upper Body Strength Subscale, PC refers to Physical Condition Subscale, and PA refers to Physical Appearance Subscale.

revealed. Results showed that older males rated the attractive figure ( $M = 3.66$ ) as significantly smaller than both their ideal figure ( $M = 4.03$ ),  $t(34) = -2.03$ ,  $p = 0.05$  and current figure ( $M = 5.31$ ),  $t(34) = -6.17$ ,  $p < 0.01$ . Discrepancies between current and ideal figure were used to determine body dissatisfaction. It was revealed that participants rated their ideal figure ( $M = 4.03$ ) as significantly smaller than their current figure ( $M = 5.31$ ),  $t(35) = -5.53$ ,  $p < 0.01$ .

### 3.3 Comparison of Current Study FRS Results to Similar Studies

Table 3 provides a comparison of the means on the FRS to two similar studies conducted by Tiggemann and Lynch (2001) and Lewis and Cachelin (2001). Tiggemann and Lynch investigated body image in a sample of women ages 20 to 84. Similar to the current study, a paired samples t-test found that across all the age groups, women's ideal figure was significantly smaller than their current figure. Lewis and Cachelin found the same result in their investigation of middle aged and older adult women's eating attitudes, body image, and drive for thinness.

Table 3.

*Comparison of Current Study FRS and BES Means and Standard Deviations to Similar Studies' Means and Standard Deviations*

Study	FRS Current	FRS Ideal	FRS Attractive	FRS Current-Ideal	BES Total
Current Study (Ages 65-86)					
<i>M</i>	5.31	4.03	3.66	1.28	119.86
<i>SD</i>	1.69	1.30	1.14	1.39	21.61
Tiggemann and Lynch					
Ages 60-69					
<i>M</i>	4.79	3.80	3.45	0.93	115.85
<i>SD</i>	1.17	0.68	0.75	0.85	20.94
Ages 70-85					
<i>M</i>	5.18	4.05	3.34	1.14	109.92
<i>SD</i>	1.13	0.65	0.82	0.92	19.20
Lewis and Cachelin (Ages 66 and older)					
<i>M</i>	4.30	3.40	3.00		
<i>SD</i>	1.30	0.69	1.00		

Note: Adjusted means and standard deviations reported for Tiggemann and Lynch study FRS results. Authors originally used a scale of 10-90 instead of 1-9; therefore reported scores were divided by 10 and rounded.

Although the mean current, ideal, and attractive scores for older males in the current study were larger than or equal to that of women in the Lewis and Cachelin and Tiggemann and Lynch studies, there was not a large difference between the means (the difference was less than one). This indicates that men and women in these studies had similar levels and direction of body dissatisfaction.

### 3.4 *Body Image and the Body Esteem Scale*

Descriptive statistics revealed that out of a possible score between 35 and 175, participants scored a mean of 119.86 ( $SD = 21.61$ ) on the BES. For males, the BES contains three subscales. Possible scores on the upper body strength subscale ranged from 9 to 45. A

mean score of 31.28 ( $SD = 7.20$ ) was revealed for this subscale. While scores on the physical condition subscale (i.e., body image as it relates to physical condition) could range from 13 to 65, the mean score for this subscale was 44.08 ( $SD = 10.12$ ). The physical appearance subscale (i.e., body image in relation to physical appearance) had a mean of 37.92 ( $SD = 5.63$ ), out of a possible score ranging from 11 to 55. Since positive body image is represented as higher scores on the BES, these results indicated that overall, participants had a positive body image.

### 3.5 *Comparison of Current Study BES Results to Similar Studies*

Tiggemann and Lynch (2001) also used the BES to investigate body dissatisfaction among females. The 60-69 age group had a mean score of 115.85 and the 70-85 age group had a mean of 109.92. Although the older males in the current study had a slightly higher mean score ( $M = 119.86$ ), the means differed by less than ten; indicating that older males and females had similar body images as determined by the BES. Table 3 provides information regarding standard deviations found in the Tiggemann and Lynch study. Means of the BES' subscales cannot be compared between males and females because they are based on different items.

### 3.6 *Correlations between the Figure Rating Scale and Body Esteem Scale*

Table 4 has correlations between eating attitudes and behaviors and body image. Besides the significant correlations the BES and its subscales had between one another, several significant correlations occurred involving the BES and FRS. In particular, the current figure from the FRS was involved in each correlation. Pearson correlation coefficients revealed that body dissatisfaction (i.e., ideal and current figures discrepancy on the FRS) has a significant correlation to the BES. Higher body dissatisfaction tends to result in lower scores on the BES ( $r(34) = .499, p < .01$ ), as well as the Upper Body Strength ( $r(34) = .412, p < .05$ ), Physical Appearance ( $r(34) = .436, p < .01$ ), and Physical Condition ( $r(34) = .523, p < .01$ ) subscales.

Table 4.

*Correlations between Eating Attitudes and Behaviors and Body Image (i.e., Global, Physical Appearance, and Physical Functioning)*

Instrument (Subscale)	1	2	3	4	5	6	7	8
1. EAT-26 Total	--	-.123	-.022	-.213	-.158	.452**	-.029	-.486**
2. BES Total		--	.873**	.898**	.902**	-.305	-.236	.499**
3. BES (PA)			--	.724**	.676**	-.312	-.158	.436**
4. BES (UBS)				--	.798**	-.209	-.272	.412*
5. BES (PC)					--	-.323	-.224	.523**
6. FRS Current-Attractive						--	-.503**	-.783**
7. FRS Attractive-Ideal							--	-.144
8. FRS Ideal-Current								--

Note: UBS refers to Upper Body Strength Subscale, PC refers to Physical Condition Subscale, and PA refers to Physical Appearance Subscale. \*\*  $p < .01$ ; \*  $p < .05$

Also, a significant correlation was found between the difference scores of the current and attractive figures and body dissatisfaction ( $r(33) = -.783, p < .01$ ). This indicates that individuals who have more body dissatisfaction tend to have larger discrepancies between their current figure and attractive figure ratings. In addition, the significant correlation between the attractive figure and ideal figure difference scores and the current figure and attractive figure difference scores revealed that the smaller the discrepancy between attractive and ideal figures, the larger the discrepancy between current and attractive figures,  $r(33) = -.503, p < .01$ .

### 3.7 *Disordered Eating and the Eating Attitudes Test-26*

A paired samples t-test was conducted on the current and ideal weights reported by participants' on the EAT-26. Participants' current weight ( $M = 198.83$ ) was significantly larger than their ideal weight ( $M = 177.97$ ),  $t(34) = 3.71, p < .01$ . In addition, a strong correlation was found between current weight and ideal weight ( $r(33) = .748, p < .01$ ), which indicates that participants with higher current weight had higher ideal weight as well.

As mentioned previously, the EAT-26 allows participants to rate the frequency (i.e., never to always) with which they engage in 26 actions. To receive scores indicative of adverse eating attitudes and behaviors, participants had to respond either “often”, “usually” or “always” on 25 of the items and “never”, “rarely” or “sometimes” on one of the items. Table 5 illustrates the percentage of participants who chose one of these responses. Participants had the ability to score between 0 and 78 on the EAT-26; scores above 20 indicated that participants should seek advice from their physicians regarding the possibility of disordered eating habits. Results showed that overall, participants did not suffer from severe disordered eating attitudes ( $M = 7.74$ ,  $SD = 7.48$ ). Only two participants scored above 20, their scores were 23 and 37.

In addition to the 26 items on the EAT-26, participants answered five questions on the behavioral portion of the EAT-26. Seven participants (20% of the sample) had scores which indicated the possibility of unhealthy behaviors related to disordered eating. Two of these participants were the same individuals who scored above 20; one of which made two selections on the behavioral portion of the EAT-26. Behaviors adopted by the individuals and the number of participants who engaged in each are provided in Table 6. The use of laxatives, diuretics, or diet pills was chosen most often by participants.

### *3.8 Comparison of Current Study EAT-26 Results to a Similar Study*

Gadalla (2008) used the EAT-26 to investigate rates of eating disorder symptoms; as well as their connections to alcohol abuse and mood and anxiety disorders. Of the 3,978 women over age 65 who completed the EAT-26, 73 had scores over 20. Women over the age of 50 with scores above 20 either usually or always engaged in 12 of the EAT-26 behaviors/attitudes; this is illustrated in Table 5. 90% of women remained aware of the calorie content of their foods compared to only 22.9% of older males in the current study who always, usually, or often did so.

Table 5.

*Comparison of Current Study Percentage of Always through Often Responses on EAT-26 Items to Always and Usually Responses in Gadalla (2008) Study*

EAT-26 Items	Valid Percent of Always, Usually, and Often Responses (Current Study)	Percent of Always and Usually Responses (Gadalla Study)
<b>Dieting Subscale Items:</b>		
Am terrified about being overweight.	31.40%	68.30%
Aware of the calorie content of foods that I eat.	22.90%	90.00%
Particularly avoid food with a high carbohydrate content (i.e. bread, rice, potatoes, etc.).	37.20%	35.00%
Feel extremely guilty after eating.	0.00%	
Am preoccupied with a desire to be thinner.	5.80%	76.10%
Think about burning up calories when I exercise.	25.70%	55.00%
Am preoccupied with the thought of having fat on my body.	11.40%	80.10%
Avoid foods with sugar in them.	34.30%	62.80%
Eat diet foods.	14.60%	
Feel uncomfortable after eating sweets.	11.50%	
Engage in dieting behavior.	8.82%	41.80%
Like my stomach to be empty.	8.60%	
Enjoy trying new rich foods.	62.90%	
<b>Bulimia and Food Preoccupation Subscale Items:</b>		
Find myself preoccupied with food.	2.90%	
Have gone on eating binges where I feel that I may not be able to stop.	5.80%	
Vomit after I have eaten.	0.00%	
Feel that food controls my life.	0.00%	
Give too much time and thought to food.	11.50%	33.50%
Have the impulse to vomit after meals.	2.90%	
<b>Oral Control Subscale Items:</b>		
Avoid eating when I am hungry.	8.60%	
Cut my food into small pieces.	11.40%	48.10%
Feel that others would prefer if I ate more.	5.80%	
Other people think that I am too thin.	2.90%	
Take longer than others to eat my meals.	14.30%	30.40%
Display self-control around food.	51.50%	66.10%
Feel that others pressure me to eat.	5.80%	

Note: Scoring for “Enjoy trying new rich food” is reversed scored (i.e., Sometimes, Rarely, and Never are examined).

Table 6.

*Number and Percentage of EAT-26 Behavioral Items Responses Indicative of Possible Disordered Eating Behaviors*

EAT-26 Behavioral Items	Number and Valid Percentage of Responses Indicative of Possible Disordered Eating Behaviors
Gone on eating binges where you feel that you may not be able to stop? (At least 2-3 times a month)	2 (5.70%)
Ever made yourself sick (vomited) to control your weight or shape?	1 (2.90%)
Ever used laxatives, diet pills or diuretics (water pills) to control your weight or shape?	3 (8.60%)
Exercised more than 60 minutes a day to lose or to control your weight? (At least once a day or more)	2 (5.70%)
Ever been treated for an eating disorder?	0 (0.00%)

Eighty-one percent of women were always or usually preoccupied with the thought of having fat on their bodies compared to only 11.4% of older males who reported being this way always, usually or often. Similarly, only 5.8% of older males reported always to often being preoccupied with a desire to be thinner compared to 76.1% of women who usually or always did so. The only items that similar percentages of men and women engaged in were avoiding food with high carbohydrate contents (i.e., 35.0% of women and 37.2% of men) and displaying self control around food (i.e., 66.1% of women and 51.5% of men). Of the other seven items, half or less than half as many older males engaged in the same behaviors as females.

### *3.9 Body Image and Disordered Eating*

As illustrated in Table 4, Pearson correlation coefficients were conducted to investigate the correlation between disordered eating and body image as it relates to physical appearance and physical functioning. There was a significant correlation between the EAT-26 and body



dissatisfaction (i.e., discrepancies between the ideal and current figure ratings) as determined by the FRS,  $r(33) = -.486, p < .01$ ; more disordered eating attitudes and behaviors were associated with higher levels of body dissatisfaction. In addition, a significant positive correlation was revealed between scores on the EAT-26 and the difference between FRS current and attractive figures ( $r(32) = .452, p < .01$ ), indicating that more disordered eating attitudes and behaviors are associated with larger differences between current and ideal figure.

A weak correlation that was not significant was found between the EAT-26 and BES total ( $r(33) = -.123, p = .482$ ). These findings are interesting because both measures investigate body image globally; yet, one correlation is significant and larger than the other. Furthermore, no relationship was found between EAT-26 and the Physical Appearance subscale of the BES ( $r(33) = -.022, p > .899$ ). This indicates that as determined by this subscale, physical appearance as measured by the BES is unrelated to disordered eating attitudes and behaviors – which counters the finding derived from the FRS.

Weak, insignificant correlations were found between the EAT-26 and the upper body strength subscale of the BES  $r(33) = -.213, p = .220$ , as well as the physical condition subscale  $r(33) = -.158, p = .364$ . This revealed that lower disordered eating attitudes and behaviors were only minimally associated with increasing body esteem as it relates to upper body strength and physical condition. As determined by the FRS (a global measure), this study revealed the presence of a significant correlation between the EAT-26 and body dissatisfaction, as well as the EAT-26 and discrepancies between current and ideal figures. This indicates that in response to the second research question, disordered eating behaviors among older males are more related to dissatisfaction with body image as it relates to physical appearance than physical functioning.

## 4 DISCUSSION

### 4.1 *Overview*

This study investigated the experiences of older males in regards to body image and eating. Two research questions were addressed: a) What are the characteristics of older males in terms of eating and body image? and b) Are disordered eating behaviors among older males related to dissatisfaction with body image, specifically physical appearance or physical functioning? As previously stated, disordered eating among older males appears to be related to body dissatisfaction as it relates to physical appearance. In regards to the characteristics of older males in terms of eating and body image, the majority of older males did not engage in disordered eating attitudes and behaviors. Characteristics of those who did are provided in Section 4.4. In this sample most of the older men reported that their current weight was significantly higher than their ideal weight or the weight that women find attractive. Yet, only 30.6% of participants reported that they talk with their physicians about their weight often, usually, or always.

### 4.2 *Body Image*

Findings in the current study are similar to those found in other studies (Kaminski & Hayslip, 2006; Tiggemann, 2004) concerning body image and older adults, thus supporting the idea that older males do experience body dissatisfaction. Results of the FRS showed that among older males in this study, the figure they perceive women to consider most attractive is significantly smaller than their current and ideal figures. Furthermore, their perceived current figure is significantly larger than their ideal figure. This is supported by the finding that their current weight is also significantly larger than their ideal weight and the significant correlation between the two. Thus, it is not unexpected that a significant correlation revealed that individuals

with more body dissatisfaction (i.e., the discrepancy between ideal and current figures) tend to have larger discrepancies between their FRS current figure and attractive figure ratings. In addition, participants with more body dissatisfaction tended to have lower scores on the BES and its subscales.

Furthermore, comparison of participants' mean scores on the FRS and BES to other studies indicated minimal differences between the scores of older males and females. Nonetheless, the mean scores of older males were higher and do signify that they have a more positive body image than older women. This is a finding that supports the argument of other authors (Peat et al., 2008; Reboussin et al., 2000); as mentioned in the Literature Review, this gender difference has also been found to persist throughout the life course.

Anecdotal information gathered during data collection revealed that some participants were very concerned about their physical appearance and body shape as young males but have since focused less on their appearance. Anecdotally speaking, those with the most concern about their physical appearance were men who considered themselves to be overweight or significantly larger in size than they were in their younger years. Although weight was often mentioned as a concern during interviews administered by the researcher, participants' concerns mostly involved performance. Interestingly, older males' scores on the physical condition subscale of the BES had the highest range, with participants scoring as low as 20 and as high as 65. All the same, individual scores on each subscale varied and no one score was obtained by a particularly high percentage of respondents. The highest score possible was obtained once on each subscale – and all by the same person.

### 4.3 *Disordered Eating*

Although only two participants were found to have possible disordered eating behaviors according to the EAT-26 and seven participants had scores that resulted in some concern on the behavior questions on the EAT-26, most participants had no signs of disordered eating habits. Individuals with disordered eating symptomology accounted for 20% of the participants. This indicates that like women and young males, older males are susceptible to disordered eating behaviors – albeit, not on as grand a scale.

It was mentioned in the literature review that as women age they continue to experience body dissatisfaction and the drive for thinness does not decrease (Gadalla, 2008; Tiggemann, 2004); this may be associated with the fact that items on the EAT-26 affected women in Gadalla's study more than men in the current study. Participants in the current study who scored above 20 on the EAT-26 items also indicated disordered eating behaviors as determined by the behavioral component of the EAT-26. Interestingly, the five remaining participants whose scores on the behavioral component resulted in concern had scores on the other EAT-26 items of "1," "2," "3," "5" and "15."

Three males who were found to be at risk of disordered eating attitudes and behaviors reported "always," "usually," or "often" being terrified of being overweight, aware of the calorie content in food, avoiding food with a high carbohydrate content, and thinking about burning up calories when they exercise. It is worthwhile to note that these are the same behaviors that a high percentage of women in the study conducted by Gadalla engaged in. This indicates that it may be worthwhile to investigate the possibility that for older males who do experience disordered eating attitudes and behaviors, body dissatisfaction and the desire to be thin does not decrease with age. Indeed, it may increase with age as metabolism slows and the distribution of fat and

muscle in bodies changes. In addition, there remains the possibility that this scale, which was developed for women, did not pick up on all the possible disordered eating patterns that may be seen in older men (see Section 4.6). Future work should include a qualitative exploration of eating behavior in older men as a way of identifying other possible types of eating issues in older men.

#### *4.4 Connection between Body Image and Disordered Eating*

Participants who did exhibit disordered eating attitudes and behaviors were mostly African Americans and in their age of 60s (one participant was in his 70s and another in his 80s). Most rated their health as fair or good, and discussion of weight with their physicians varied from always to never occurring. Using BMI as a guide, one participant was considered to be of normal weight, two were overweight and the remaining four were considered obese. Six of the participants considered their current figure to be larger than their ideal figure and the figure they perceived women to consider most attractive. These participants' mean scores on the BES, physical appearance, upper body strength, and physical condition subscales closely resembled the means of the entire sample. In addition, their mean score on the physical appearance subscale was higher than the samples' mean score. Nonetheless, one participant with disordered eating attitudes and behaviors considered his current figure to be smaller than both his ideal and attractive figures. This lends itself to Harris and Cumella's finding that young males were evenly divided between those wanting to lose and those wanting to gain weight (Harris & Cumella, 2006).

As Jones and Morgan (2010) mention in their article about males and eating disorders, concern over one's body image is a risk factor for the development of an eating disorder and this study shows that this may also be true of older males in that more disordered eating attitudes and

behaviors were associated with higher levels of body dissatisfaction. In addition, more disordered eating attitudes and behaviors were found to be associated with larger differences between attractive figure and current figure ratings.

Interestingly, there were only weak or nonexistent correlations between the EAT-26 and the BES, as well as its subscales. The lack of correlation between eating attitudes and behaviors and body image as it relates to physical functioning is counter to the conclusions of other studies and researchers who have maintained that older males are more concerned with physical functioning than physical appearance. A possible explanation for the lack of correlations between the EAT-26 and the BES and its subscales may involve limitations concerning the ability of the EAT-26 to assess attitudes and behaviors of older adults; this is discussed further in Section 4.6. It was noted during data collection that some participants considered each body part on the BES in terms of its functional ability; this includes items from the physical appearance subscale that should have been considered in terms of physical appearance. This may have affected these participants' scores on the physical appearance subscale. Furthermore, the BES was validated using a sample of male college students. As discussed in the Literature Review, the attitudes of young adults may differ from that of middle aged and older adults.

#### *4.5 Implications of the Results*

In this study, the sample of older males displayed body dissatisfaction and 20% of them exhibited symptoms of disordered eating attitudes and behaviors - as determined by the Eating Attitudes Test-26. These attitudes and behaviors appear to be related to body image as it relates to physical appearance. Similar to other studies concerning older women, body image, and disordered eating, the current study illustrates that older males can have experiences with these issues too. They, like older women, deserve more attention.

In conjunction with the finding that males in the current study experienced body dissatisfaction, it is important to note that over 75% of them were considered overweight or obese – as determined by their BMI. Therefore, their body dissatisfaction was warranted to an extent. However, concern is necessary when the presence of body dissatisfaction becomes destructive to the point where an individual begins to engage in adverse behaviors, such as disordered eating attitudes and behaviors (as was the case with men in this study whose scores on the EAT-26 were unfavorable). A fine line exists between body dissatisfaction that is destructive and body dissatisfaction that acts as a motivator for improving one's health. The fact that only 30% of men in the current study discuss their weight with their physicians often, usually, or always indicates that the line needs to be made especially clear where older adults are concerned because the impact of behaviors like disordered eating can be detrimental to them (Hewitt et al., 2001).

Steps toward helping individuals to recognize the significance of negative body image among older adults involves first acknowledging its presence among both older men and women, and working to remove the taboo label that has been assigned to it. As with any age group, developing environments in doctor's offices, senior centers, and among family and friends where older adults feel comfortable discussing their body image and weight concerns is crucial. This is especially necessary where men are concerned because of the stigma that can be attached to their coming forward (Pope et al., 2000). Additionally, providing successful exercise and weight management programs, nutrition counselors, and counseling services in senior centers, churches, and other places that are accessible to older adults is important.

Another reason why addressing body dissatisfaction is important is that twenty percent of the current sample having disordered eating attitudes and behaviors is actually larger than

previous studies with younger men. Morry and Staska (2001) studied the connection between exposure to fitness and beauty magazines and disordered eating symptomology, as well as other variables. Five percent of their samples' 61 males had scores on the Eating Attitudes Test (i.e., the extended version of the EAT-26) which indicated the possibility of disordered eating attitudes and behaviors. The current study results combined with growing research that younger males are increasingly having negative experiences with their body image and eating disorders indicates that young males' experiences may not be a modern day phenomenon. On the other hand, it may indicate that at some point between young adulthood and older adulthood, males are able to abandon these negative feelings and unhealthy eating habits. Further research is needed to explore links among the experiences of young, middle aged, and older males with these issues.

#### *4.6 Limitations*

A larger sample size may have presented more individuals who experience more attitudes and behaviors related to body image and disordered eating. Participants were not offered compensation for participation in this study; consequently, several potential participants declined to take part in the study. Although some participants were eager to speak about their past and present experiences with their bodies, other participants may have been impacted by the effects of having a female researcher investigate topics that could be considered sensitive to males. To manage this, the researcher behaved in a professional manner and encouraged participants to speak openly about their experiences.

Additionally, this study may have been impacted by the possibility that individuals who did agree to participate were mainly those who had fairly positive body images and were unlikely to engage in adverse eating habits. As Pope, Phillips, and Olivardia (2000) have pointed out, men who seek assistance for issues with negative body image and disordered eating may be



treated as though they are behaving in a nonmasculine manner. Thus, many men may choose not to come forward and may choose not to participate in studies such as this one.

Another limitation to this study is the fact that no measures of disordered eating (or body image) have been specifically designed for older adults. Although the EAT-26 has been used in studies involving samples of older adults, limitations resulting from its ability to assess the eating behaviors of older adults were noted throughout the study. As discussed in an article by Jones and Morgan (2010), many such measures have been validated using female populations. Furthermore, they acknowledge that the diagnostic criteria used are often geared toward concerns and weight control methods that are common among women. Davies, Whelan, and King (2000) suggest that caution must be used in the application of disordered eating inventories upon older adults.

Several participants' indicated that some of their responses (such as avoiding foods with sugar in them and using diuretics) were influenced by prescribed medications, health (such as being diabetic), and exercise programs available at their senior centers. These factors have to be considered in the analyses of participants' scores on the EAT-26. Of the 36 individuals who participated in this study, seven were determined to be at risk of disordered eating attitudes and/or behaviors and of these, four were known to be affected by these factors in some way (nevertheless, they were treated as having disordered eating symptomology). The need to consider factors such as these where older adults are concerned is further supported when thought is given to the fact that two of these participants' had low scores on the other EAT-26 items.

#### 4.7 *Future Research*

The majority of individuals in the current study who were affected by disordered eating attitudes and behaviors were overweight and obese. This fact implies that it is worthwhile for future studies to investigate the role of BMI in body dissatisfaction and disordered eating among older males. It is certainly possible that having a large BMI could lead to negative body image and/or negative health behaviors aimed at weight management.

Findings from this study illustrate a need for the development of disordered eating measures specifically designed for older adults. It is essential for measures of disordered eating to take into account health conditions that often affect older adults and the influence they may have upon their eating habits. Health conditions such as diabetes, hypertension, heart disease, high cholesterol, stroke and other illnesses all need to be taken into consideration. Bearing in mind the limitation of current measures of disordered eating in relation to older adults, as well as the prevalence of older women and younger males experiencing this issue, a measure of disordered eating specific to older adults would be useful in accurately identifying older adults who are at risk for disordered eating habits. Until such a measure is developed, it may be useful for studies involving older adults (especially older males) to include two measures of disordered eating (such as the Eating Disorder Inventory or the Eating Attitudes Test-40) so that the presence of disordered eating symptomology can be verified through the use of a within subjects design.

To gain a more comprehensive understanding of body image and the prevalence of disordered eating among older males, future researchers should consider using cross-sectional studies (that are both quantitative and qualitative) involving samples that are representative of adulthood in its entirety (i.e., young adults, middle-aged individuals, and older adults). Besides

expanding insights regarding older males, better understanding of the increasing prevalence of negative body image and disordered eating among younger males will be gained through an investigation of these issues throughout adulthood.

## CONCLUSIONS

As illustrated in this study, older males can and do have negative experiences with body image and disordered eating. 20% of the sample exhibited disordered eating attitudes and behaviors. Also, participants rated their ideal body figure as significantly smaller than their current body figure, as well as their current weight as significantly larger than their ideal weight. Furthermore, a strong positive correlation was found for scores on the disordered eating measure and the discrepancy between current and attractive figure, as well as ideal and current figure. Along with older women and younger males, older males have not received as much attention regarding these issues as adolescent girls and young women. Older males' experiences with body image and disordered eating attitudes and behaviors may be more complex than is currently understood. Perhaps the future development of body image and disordered eating measures developed with older adults in mind will make professionals and the public more aware of the experiences of older adults with these issues.

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## APPENDIX

## Participant Questionnaire

**TO BE FILLED OUT BY RESEARCHER**

Date \_\_\_\_\_

Participant # \_\_\_\_\_

Researcher \_\_\_\_\_

## INTRODUCTION TO QUESTIONNAIRE

Thank you for your willingness to participate in this interview. This should take no more than 30 minutes of your time. You will give some basic information about yourself, your body, and eating habits. Please let the researcher know if you have any questions about anything.

## DEMOGRAPHIC INFORMATION

1. **Age:** What was your age on your last birthday? \_\_\_\_\_2. **Race:** Do you consider yourself to be Hispanic/Latino? (Circle One)

Yes

No

In addition, circle one or more of the following racial categories to describe yourself:

Black or African American

White

Native Hawaiian or Pacific Islander

Asian

American Indian or Alaska Native

3. **Marital Status:** What is your current marital status? (Circle One)

Single

Married

Separated

Divorced

Widowed

Never Married

Other (Please Specify) \_\_\_\_\_

\_\_\_\_\_

4. **Education Level:** What is your highest level of education? (Circle One)

Less than High School    High School Graduate    Some College

College Graduate    Post Graduate

5. **Occupation:** What was/is your job? \_\_\_\_\_  
\_\_\_\_\_

6. **Income:** What is your approximate yearly income? (Circle One)

Less than \$15,000    \$55,000 - \$64,999

\$15,000 - \$24,999    \$65,000 - \$74,999

\$25,000 - \$34,999    \$75,000 - \$84,999

\$35,000 - \$44,999    \$85,000 - \$94,99

\$45,000 - \$54,999    \$95,000 or more

7. **Health:** How would you rate your overall physical health in the past 30 days? (Circle One)

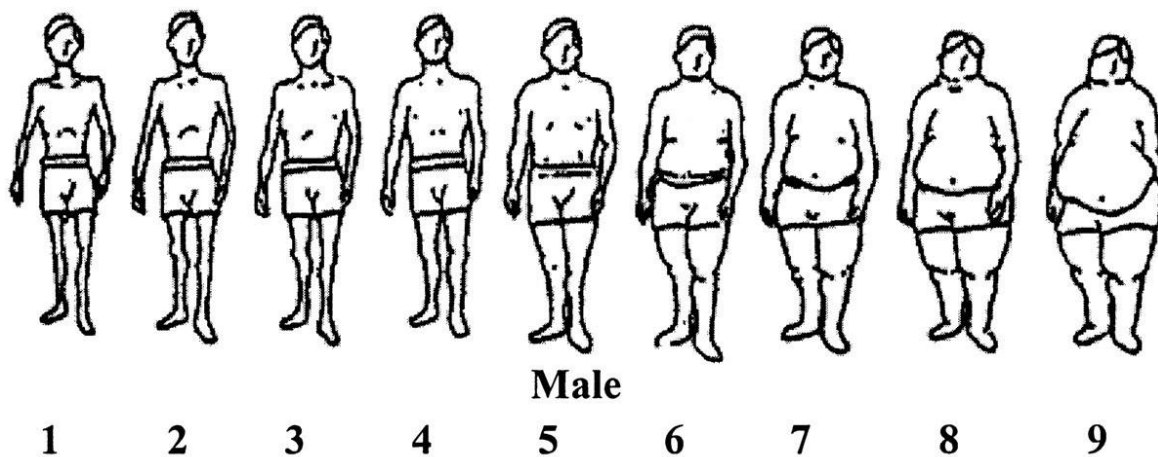
Excellent    Very Good    Good    Fair    Poor

8. **Weight:** Has your physician talked to you about your weight? (Circle One)

Always    Usually    Often    Sometimes    Rarely    Never

## FIGURE RATING SCALE

Please look at the following pictogram when answering the next set of questions.



*Figure 1.* Figure Rating Scale

1. Please indicate your current size and shape from the scale ranging from 1 (one) to 9 (nine), with 1 (one) being the thinnest body type and 9 (nine) being the largest.

**Current Figure (Circle One):** 1   2   3   4   5   6   7   8   9

2. Please indicate the size and shape you would most like to be.

**Ideal Figure (Circle One):** 1   2   3   4   5   6   7   8   9

3. Please indicate the size and shape you feel women in general find most attractive.

**Attractive Figure – (Circle One):** 1   2   3   4   5   6   7   8   9

## THE BODY-ESTEEM SCALE

Please indicate how you feel about each of the following parts or functions of your own body using the following scale:

**1 = Have strong negative feelings**

**2 = Have moderate negative feelings**

**3 = Have no feeling one way or the other**

**4 = Have moderate positive feelings**

**5 = Have strong positive feelings**

- |                                 |                                     |
|---------------------------------|-------------------------------------|
| 1. body scent _____             | 19. arms _____                      |
| 2. appetite _____               | 20. chest _____                     |
| 3. nose _____                   | 21. appearance of eyes _____        |
| 4. physical stamina _____       | 22. cheeks/cheekbones _____         |
| 5. reflexes _____               | 23. hips _____                      |
| 6. lips _____                   | 24. legs _____                      |
| 7. muscular strength _____      | 25. figure or physique _____        |
| 8. waist _____                  | 26. sex drive _____                 |
| 9. energy level _____           | 27. feet _____                      |
| 10. thighs _____                | 28. sex organs _____                |
| 11. ears _____                  | 29. appearance of stomach _____     |
| 12. biceps _____                | 30. health _____                    |
| 13. chin _____                  | 31. sex activities _____            |
| 14. body build _____            | 32. body hair _____                 |
| 15. physical coordination _____ | 33. physical condition _____        |
| 16. buttocks _____              | 34. face _____                      |
| 17. agility _____               | 35. weight _____                    |
| 18. width of shoulders _____    | Totals: PA _____ UBS _____ PC _____ |

## EATING ATTITUTDES TEST-26

What is your approximate height? \_\_\_\_\_feet \_\_\_\_\_inches

What is your current weight (lbs)? \_\_\_\_\_

What is your highest weight? \_\_\_\_\_

What is your lowest adult weight? \_\_\_\_\_

What is your ideal weight? \_\_\_\_\_

Please indicate the extent to which each statement applies to you by placing an 'X' in the box

for: **Always, Usually, Often, Sometimes, Rarely, or Never.**

	Always	Usually	Often	Some- times	Rarely	Never	Score
1. Am terrified about being overweight.							
2. Avoid eating when I am hungry.							
3. Find myself preoccupied with food.							
4. Have gone on eating binges where I feel that I may not be able to stop.							
5. Cut my food into small pieces.							
6. Aware of the calorie content of foods that I eat.							
7. Particularly avoid food with a high carbohydrate content (i.e. bread, rice, potatoes, etc.).							
8. Feel that others would prefer if I ate more.							

	Always	Usually	Often	Some- times	Rarely	Never	Score
9. Vomit after I have eaten.							
10. Feel extremely guilty after eating.							
11. Am preoccupied with a desire to be thinner.							
12. Think about burning up calories when I exercise.							
13. Other people think that I am too thin.							
14. Am preoccupied with the thought of having fat on my body.							
15. Take longer than others to eat my meals.							
16. Avoid foods with sugar in them.							
17. Eat diet foods.							
18. Feel that food controls my life.							
19. Display self-control around food.							
20. Feel that others pressure me to eat.							
21. Give too much time and thought to food.							
22. Feel uncomfortable after eating sweets.							

	Always	Usually	Often	Some-times	Rarely	Never	Score
23. Engage in dieting behavior.							
24. Like my stomach to be empty.							
25. Have the impulse to vomit after meals.							
26. Enjoy trying new rich foods.							
Total Score							

Please answer the following questions by placing an 'X' in the box for: **Never, Once a month or less, 2-3 times a month, Once a week, 2-6 times a week, or Once a day or more.**

Behavioral Questions						
In the past 6 months have you:	Never	Once a month or less	2-3 times a month	Once a week	2-6 times a week	Once a day or more
A. Gone on eating binges where you feel that you may not be able to stop? (Eating much more than most people would eat under the same circumstances)						
B. Ever made yourself sick (vomited) to control your weight or shape?						
C. Ever used laxatives, diet pills or diuretics (water pills) to control your weight or shape?						
D. Exercised more than 60 minutes a day to lose or to control your weight?						
E. Ever been treated for an eating disorder? If yes, when:	Yes      No					

Would you be willing to participate in a follow-up study? (Circle One)      Yes      No