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# Body Dissatisfaction and Other Sociocultural Factors as Predictors of Body Image Perceptions in Sorority and Non-Sorority Women

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BODY DISSATISFACTION AND OTHER SOCIOCULTURAL FACTORS AS  
PREDICTORS OF BODY IMAGE PERCEPTIONS IN SORORITY  
AND NON-SORORITY WOMEN

by

KILEY ELIZABETH WINSTON

(Under the Direction of Joanne Chopak-Foss)

ABSTRACT

The purpose of this study was to explore body dissatisfaction and other sociocultural factors as predictors of body image perceptions in college-aged sorority and non-sorority women. The Social Attitudes Towards Appearance Questionnaire (SATAQ-3) (Thompson et al, 2004), the Body Dissatisfaction subscale of the Eating Disorders Inventory-3 (EDI-3) (Garner, 2004), the Body Image Assessment (BIA) (Williamson et. al., 1985), the Mother Influence Scale, Parent Involvement Scale and the Peer Influence Scale (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1998) were used. The sample for this study included a total of 502 college age women  $N_{\text{sorority}} = 322$  and  $N_{\text{non-sorority}} = 180$ . Data analysis includes independent sample t-tests, Pearson correlations were conducted on EDI-3 and Body Image Assessment scores (BIA) by Greek membership. Multiple regression was used to analyze sociocultural influences and EDI-3 Body Dissatisfaction scores by Greek membership. Results indicated that body image perceptions of both sorority and non-sorority women were significantly affected by peer and media influences. The level of statistical significance was set at  $\alpha = .05$ .

INDEX WORDS: Body image, Body dissatisfaction, Sociocultural influences

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B.S., University of Alabama, 2004

A Thesis Submitted to the Graduate Faculty of Georgia Southern University in Partial  
Fulfillment of the Requirements for the Degree

MASTER OF PUBLIC HEALTH

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IMAGE PERCEPTIONS IN SORORITY AND NON-SORORITY WOMEN

by

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## DEDICATION

This thesis is dedicated to my wonderful parents who have provided me with a positive outlook throughout the duration of this project and who have encouraged me every-step of the way. It was with your constant support that this goal has been accomplished. I am very blessed to have the two of you in my life.

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## CHAPTER 1

### INTRODUCTION

For the past three decades, society has been preoccupied with how they look (Garner, 1997). While as individuals we are becoming heavier, our body preferences have grown thinner. Research suggests that perceptions about body size are shaped by our experiences throughout childhood and it has been found that children start to favor thin body shapes by the time they enter school (Cavior & Lombardi, 1973).

Furthermore, overall body size and image concerns have been recorded to be more prevalent among girls than boys (Stuhldreher & Ryan, 1999). In fact, studies have shown that girls have a harder time maintaining a positive body image when compared to boys and that a negative perception of body image usually stems from social conditioning (Freedman, 1986; Kelson, Kearney-Cooke, & Lansky, 1990).

According to the National Eating Disorders Association, individuals with negative body image perceptions convince themselves that only other individuals are attractive and that their body shape and size is a sign of personal failure. People with a negative body image have a greater likelihood of developing an eating disorder and are more likely to suffer from feelings of depression, isolation, low self-esteem, and obsessions with weight loss (National Eating Disorders Association [NEDA], 2004). A study conducted by Mossavar-Rahmani, Pelto, Ferris and Allen (1996) found that the more inaccurate a woman's perception of her body size, the more likely she was to be dieting. Because dieting and self-esteem can influence body image perceptions and body dissatisfaction, it has been suggested that several sociocultural factors can influence individuals, especially in young adult women. These factors include but are not limited

to peer, parental, and media influences. This sociocultural model identifies social pressures and serves as the momentum behind an individual's desire to succumb to body shape ideals and standards. Hence it has become the widest supported approach to the development and maintenance of body image disturbance, which can lead to body dissatisfaction and negative body image perceptions (Fallon, 1990; Stormer & Thompson, 1996).

For college females, the college environment can also have a powerful influence on body image perceptions, representing a critical development period from late adolescence and into early adulthood (Chickering, 1969). For many young people, college is usually the first time in their lives when he or she is leaving home and entering a new social environment, forced to question new social norms and build new relationships (Lee, Keough, & Sexton, 2002). This contextual environment not only plays an important role in the way individuals interact with each other, but it provides a variety of influences on them from the organizational, community and societal levels. Of particular importance in this context is membership in a campus wide student organization. Prominent student organizations such as fraternities and sororities, therefore known as the "Greek system", represent part of this organizational structure.

The Greek system has many positive attributes and membership can offer socialization, leadership opportunities, and philanthropy involvement. According to Allison and Park (2003) sorority membership can become an integral part of a college woman's identity. It has also been found that the culture within the sorority has a strong impact on the structure and shaping of college women's actions (Berkowitz & Padavic, 1999).

Previous studies have considered the influence of sororities on young women (Alexander, 1998; Atlas & Morier, 1994; Crandell, 1988; Schulken, Pinciario, Sawyer, Jensen, & Hoban, 1997), these studies have examined the role that sororities play in influencing eating disorders, body dissatisfaction and body image perceptions. Schulken et al. (1997) found that sorority women had significantly higher mean scores on the Eating Disorder Inventory (EDI) Drive for Thinness and Body Dissatisfaction subscales than their non-sorority counterparts. Findings also suggest that sorority women reported higher levels of body dissatisfaction, fears of becoming fat, and more weight preoccupation and concern with dieting when compared to women from other college samples. Schulken et al. (1997) also reported that thinness was the ideal among sorority women with a majority (62.1%) who selected underweight silhouettes to represent the size women should be as well as the size they would like to be (81.0%). Crandell (1988) found that within the sorority environment, groups of friends who modeled certain eating behaviors, overtime, came to accept those behaviors as normative. The vigor with which women pursue weight-reduction methods may be influenced by the emphasis that their sorority sisters place on achieving and maintaining a slender ideal and the individual member's own desire to maintain her status within the sorority setting (Shulken et. al., 1997).

Within the college setting, different subgroups appear to be at a greater risk for body dissatisfaction and developing and maintaining negative body image perceptions. Groups whose members emphasize image, weight, and shape tend to be at the greatest risk (Halmi, 1994) previous studies suggest that sorority women and female athletes from cheerleading, gymnastics, and diving appear to be at the greatest risk (Chopak, 1987).

### Purpose of the Study

The purpose of this study was to explore body dissatisfaction and other sociocultural factors as predictors of body image perceptions among sorority and non-sorority affiliated women and to determine the extent to which selected sociocultural influences (parental, peer, and media) are predictors of body image disturbances.

### Significance of the Study

The results of this study will be of value to all college women regardless of sorority membership. College administrators, parents, health educators, and panhellenic member organizations will also benefit from this study. It is important to increase the awareness of how body dissatisfaction and body image perceptions affect college women's attitudes and behaviors. The results will also be used to educate administrators about differences that exist within the sorority environment that may contribute to negative body image perceptions.

### Research Questions

To explore body dissatisfaction and other sociocultural factors as predictors of body image perceptions in college-aged sorority women and non-sorority women.

1. Do significant differences exist in body image perceptions between sorority and non-sorority women?
2. What factors influence body image perceptions among sorority and non-sorority women?
3. Do sociocultural influences differ significantly for sorority and non-sorority women?



4. Are sociocultural influences a strong predictor of negative body image perceptions?

#### Objectives of the Study

In examining the questions stated, this investigation was undertaken to accomplish the following objectives.

1. Determine if there was a significant difference between sorority women and non-sorority women in response to the survey instrument.
2. Identify body image perceptions within the sorority and non-sorority environments as perceived by the respondents.
3. Identify sociocultural factors that may contribute to body image perceptions within the sorority and non-sorority settings.

#### Delimitations

This study will be delimited in the following way:

1. Subjects for this study will be delimited to sorority and non-sorority women between the ages of 18 and 22 attending a mid-sized Southeastern university.
2. Subjects for this study were delimited to Caucasian females, due to the availability of sorority participants and the small membership numbers of historically black National Panhellenic sororities on campus.

#### Basic Assumptions

The following assumptions were made concerning the conduct of this investigation.

1. Any influence by sorority members would have been evidenced by the time of testing.

2. The testing took place at a point in time during which body image perceptions would have already been established.
3. The surveys administered were valid and reliable.
4. All participants answered all items on the survey instruments completely and honestly.

### Limitations

The following were identified as limitations of the study:

1. Sorority participation was limited to those individuals willing to participate.
2. Non-sorority participation was limited to those individuals willing to participate.

### Definition of Terms

The following terms are offered to promote a better understanding of the terminology used through the study:

Body Dissatisfaction: Refers to negative subjective evaluations of one's physical body, such as figure, stomach, hips, and weight (Stice & Shaw, 2002)

Body Image: How we perceive our physical appearance, as well as how we think others perceive us. It can also be defined as a person's subjective concept of his or her physical appearance (Sloan, 2003). This internalized image, whether realistic or unrealistic, is created from self-observation, the feedback from outside sources, and a complex interaction of attitudes, emotions, memories, and experiences, both conscious and unconscious (Stuhldreher & Ryan, 1999).

Body Image Silhouettes: A contour drawing rating scale, consisting of nine male and/or nine female contour drawings. Drawings are designed as detailed features, are of

precisely graduated sizes, and are easily split at the waist for accurate upper and lower body comparisons. Body image silhouettes are designed to measure body-size perceptions. (Thompson & Gray, 1995).

Eating Disordered Behavior: Behaviors such as skipping meals, crash dieting, fasting for short or long periods of time, bingeing and purging, and excessive exercise. Those behaviors that are nutritionally unstable and can eventually lead to criteria for an eating disorder (Wilson & Blackhurst, 1999).

Negative Body Image Disturbances: A negative, distorted perception of body size and shape which can lead to emotional distress, low self-esteem, anxiety, eating disorders and depression (U.S. Department of Health and Human Services, 2006).

Sorority: A social club made up of college women whose focus is on community service and career networking (Berkowitz & Padavic, 1999).

## Summary

The purpose of this study was to explore body dissatisfaction and other sociocultural factors as predictors of body image perceptions in sorority and non-sorority females. The significance of this study, assumptions, delimitations, definition of terms, research questions, and objectives were also presented in this chapter. In Chapter II a review of literature relating to body image, sorority women, and sociocultural influences such as parent, peer and media influence is presented. Chapter III contains the procedures and methodology used to accomplish the purpose of this study. The results and a discussion of the results are presented in Chapter IV. Chapter V contains the summary, the conclusions drawn as a result of the study, implications for health education, and recommendations for further study.

## CHAPTER 2

### REVIEW OF RELATED LITERATURE

The purpose of this study was to explore body dissatisfaction and other sociocultural factors as predictors of body image perceptions among sorority and non-sorority affiliated women and to determine the extent to which selected sociocultural influences (parental, peer, and media) are predictors of body image disturbances among sorority and non-sorority women.

The review of literature presented in this chapter will include an introduction to studies involving body image perceptions, eating disordered behaviors, sorority women, media influences, parental influences, and peer influences.

#### Background

For many women in today's society, thinness is equated with attractiveness and the standards of beauty have become unattainable for most women (Walsh & Devlin, 1998) with current standards based on a body weight that is often unrealistic (Schulken et al., 1997). The sociocultural emphasis on thinness in contemporary America is thought to play an important role in the development of eating disorders (Schulken et al., 1997) and in order to achieve ultimate beauty, many women resort to drastic measures to obtain their goal (Guzman, 2003). The failure to achieve society's aesthetic ideal often leads people to feel dissatisfied with their bodies and that dissatisfaction in turn is associated with chronic dieting (Schulken et al., 1997; Brownell, 1991; Polivy & Herman, 1995) and negative perceptions about their body.

Of all the qualities of appearance and attractiveness, body shape and weight are the aspects that women, men, and children express the most dissatisfaction (Sloan, 2003).

A study of grade school children revealed that 80% of girls as young as the fourth grade reported being on a diet (Sloan, 2003). Dieting when combined with other behaviors can serve as a precipitating factor that leads to the development of clinically diagnosed eating disorders, body image disturbances, and negative body image perceptions.

Body dissatisfaction and disordered eating behaviors appear to be widespread among college women (Schulken et al., 1997; Mintz & Betz, 1988). Body dissatisfaction refers to negative subjective evaluations of one's physical body, such as figure, stomach, hips, and weight (Stice & Shaw, 2002). The prevalence of body dissatisfaction and disordered eating behaviors are not surprising in university women when one considers the university from organizational, community, and societal perspectives (Schulken et al., 1997). According to Schulken et. al. (1997), at the organizational level, the university provides individuals with an important context within which weight related behaviors are enacted; the college serves as a community, providing students with a context in which they live and on the societal level, the university setting provides social values that shape students' choices and decisions about eating attitudes and weight control. Because college students are constantly surrounded by the attitudes and values of the university setting, their ideas concerning eating attitudes, weight control, body dissatisfaction and body image can be greatly impacted.

### Body Image

As described by the National Eating Disorders Association (2004), body image is what a person believes about his/her own appearance, including their memories, assumptions, and generalizations. It also includes how a person feels about his/her body and how he/she senses his/her body while in movement (NEDA, 2004). Body image is

central to us as human beings, affecting how we feel, how we hold ourselves, how we interact with those around us, ultimately affecting how we live our lives.

Gender related body image differences have also been documented among teens (Feldman, McGrath, & O'Shaughnessy, 1986; Leichner, Arnett, Rallo, Srikameswaran, & Vulcano, 1986; Maloney, McGuire, Daniels, & Specker, 1989; Nylander, 1971) suggesting that the teenage years are a time in which individuals are greatly concerned with weight. Fallon and Rozin (1985) found that college women, when given a body image silhouettes survey, perceived their figure to be heavier than the figure that they identified most attractive to men, ultimately identifying their ideal figure as leaner than the female figure men found attractive (Stuhldreher & Ryan, 1999). Adding to this, Cohn and Adler (1992) also found that women perceived men to be attracted to body shapes and sizes much thinner than the average female. A recent survey showed that 57% of women between the ages of 20 and 29 are dissatisfied with their body image (Garner, 1997).

The National Eating Disorders Association (2004) states individuals with negative body image perceptions convince themselves that other individuals are attractive and that their body shape and size is a sign of personal failure. People with a negative body image, have a greater likelihood of developing an eating disorder and are more likely to suffer from feelings of depression, isolation, low self-esteem, and obsessions with weight loss (NEDA, 2004). A study conducted by Mossavar-Rahmani et al. (1996) found that the more inaccurate a women's perception of her body size, the more likely she was to be on a diet. Stuhldreher and Ryan (1999) also found similar patterns, showing

that a distorted body image was significantly associated with the desire to lose weight, dieting, fat food/high fat food avoidance, use of laxatives and diet pills to lose weight.

### Body Image Perceptions and Its Effect on College Women

Another reason that college women may be at an increased risk of developing eating disordered behaviors and negative body image perceptions is due to social comparison. Festinger (1954) suggested in the Theory of Social Comparison Processes that individual differences in the tendency to compare oneself with others accounts for different levels of body image disturbance. Miller, Turnbull, and McFarland (1988) suggested that we as individuals select comparison targets, universalistic and particularistic, to whom we compare ourselves to. They suggest that a universalistic comparison is determined by comparing oneself to a target based on a specific attribute (e.g. a female comparing her hips to that of another woman). A pluralistic comparison is assessed by comparing ourselves with others with whom we share a bond (e.g. a female comparing her hips to that of her best friend) (Miller et al., 1988). In a series of five studies, Miller et al (1988) found that individuals preferred to compare themselves to individuals who were distinctively similar rather than to individuals who were non-distinctively similar.

Wood (1989) suggested that people like to make upward comparisons to improve themselves. Research indicates that upward comparisons with others who are superior are associated with an increase in emotional distress and decrease in self-esteem. For an example, a sorority member may compare herself to the president of the sorority, but this upward comparison may remind her of her own faults and inferiority and lower her self-esteem. Wood (1989) also found that an upward comparison may be particularly



threatening when the superior other is a close friend or companion to the individual doing the comparing. In support of this, Striegel-Moore, McAvay, and Rodin (1986) found that a woman's level of comparing her weight to that of other individuals was significantly correlated with body dissatisfaction. Heinberg and Thompson (1995) had female and male undergraduate students rate the importance of six groups (family, friends, classmates, other university students, celebrities, and average U.S. citizens) as comparison targets for seven attributes (attractiveness, athletic ability, figure-physique, intelligence, confidence, fashion-clothes, and popularity) and found that importance ratings for appearance was highest for the friends target. They also found that for female students, the importance rating was significantly associated with body dissatisfaction and eating disturbance. This type of social comparison, helps support the idea that college women, especially those in groups with similar attributes such as sororities, are at risk for developing eating disordered behaviors, body dissatisfaction, and negative body image perceptions.

### Sorority Women

Sorority women make up a subgroup of the college population that is associated with appearance and image. Schulken et al. (1997) found that students who are involved in university activities find that certain organizations reinforce specific weight or size for continued participation and that the subgroup of students at greatest risk of developing and maintaining eating related problems are sororities. Although research on body image perceptions, body dissatisfaction, disordered eating behaviors and sorority women is limited, evidence concerning group norms and social pressure related to binge eating suggest that these behaviors can be acquired through modeling and may be responsive to

social control (Crandell, 1988). Crandell (1988) tracked the influence of societal norms on binge eating in two college sororities, his results showed that norms are good predictors of the extent of binge eating in college sorority women. Sorority women appear to be at risk for developing and maintaining negative body image perceptions and body dissatisfaction because social pressures towards uniformity-competition, emotional support, and disapproval-are most influential when the social group is valued and consists of established friendships (Crandell, 1988; Festinger, Schacter, & Black, 1950). Festinger et al. (1950) and Crandell (1988) also propose that women who have chosen their fellow group members will share more similar eating attitudes, depression, and anxiety levels than those women who chose not to follow a group. Schulken et al. (1997) suggests that the lack of research concerning sorority women is a serious omission, due to the size and scope of the Greek system. In 1996, there were 2,938 sorority chapters with an undergraduate enrollment of 293,608 women in the United States and Canada. In 2006, the National Panhellenic Conference (NPC) reported that there are 3.6 million sorority women in the world that are represented on 556 college and university campuses in the United States and Canada (National Panhellenic Conference [NPC], 2006).

A study of characteristics of women who rushed sororities found that they were more attractive, had higher family incomes, were more willing to try to “fit in” in party situations, and used alcohol more frequently than women who did not rush (Atlas & Morier, 1994). Another study suggests that sorority women, when placed in new social surroundings, can exhibit signs of low-energy, cognitive difficulties, irritability, sad mood, guilt, low self-esteem, social introversion, pessimism, and instrumental helplessness (Wilcox & Sattler, 1996). Crandell (1988) found that among groups of

friends in sororities, those who binged a moderate amount were listed as most popular and among cohesive friendships, a sorority member who binged tended to do so like that of her friends. Paxton, Schutz, Wertheim, and Muir (1999) found that similarity in body image concerns, dieting, and weight loss behaviors tended to be greater within friendship cliques in sororities than between friendship cliques in adolescent females. Behaviors such as these can push a sorority woman towards trying to control her body and food intake in order to feel in control of herself (Hubbard, O'Neil, & Cheakalos, 1999).

Several studies (Allison & Park, 2003; Alexander, 1998; Atlas & Morier, 1994; Crandell, 1988; Meilman, Von Hippel, & Gaylor, 1991; Schulken et al., 1997) have examined the role that sororities play in influencing eating disorders. Schulken et al. (1997) found that sorority women reported higher levels of body dissatisfaction and fears of becoming fat when compared to previously reported college samples. One survey of sorority women found that groups of friends who modeled certain eating behaviors overtime, came to accept these behaviors as normative (Crandell, 1988). Another study found that 80% of the sample's high-frequency purgers were affiliated with a sorority chapter (Meilman et al., 1991). Allison and Park (2003) examined disordered eating prospectively in sorority and non-sorority women. They surveyed women during their first, second and third undergraduate years and measured depression, disordered eating, self-esteem, body mass index (BMI), and ideal weight. Allison and Park (2003) found that women who joined a sorority gained significantly more weight over their first three undergraduate years than their non-sorority counterparts. They also found that sorority women reported higher levels of the Eating Disorders Inventory Drive for Thinness subscale than non-sorority women (Allison & Park, 2003).

## Media Influences

The media has a massive amount of influence on our culture and uses its beliefs regarding body image and shapes to influence the American public. The emergence of a slender body type as a beauty standard for women is especially prominent in the mass media and several researchers have shown how the female demonstrated in the media has become increasingly thinner (Garner, Garfinkel, Swartz & Thompson, 1980; Ogletree, Williams, Raffeld, Masson, & Frike, 1990; Silverstein, Perdue, Peterson, & Kelly, 1986; Wiseman, Gray, Mosimann, & Ahrens, 1992). It has been estimated that two-thirds of women are unhappy with and / or dissatisfied with their body size, shape, appearance, or condition (Rabak-Wagener, Eikoff-Sherman & Kelly-Vance, 1998). Recent studies indicate that media exposure does not just influence the dieting behavior of adolescent girls, but the initiation of an exercise program (Thompson, 2004). It has been noted that “exercise is promoted as an optimal means to achieve the ideal physique” (Lindeman, 1999). While societal ideals of beauty shift over time, the focus on exercise, muscularity, and athleticism for both men and women does not appear to be a transient fad (Thompson et. al., 2004). Levine, Smolak and Hayden (1994) found that a majority of young women reported receiving strong messages through fashion magazines conveying the message that slenderness and thinness are important and attainable through dieting. Research has indicated that media use and significant magazine reading, could be used to predict disordered eating behaviors (Harrison & Cantor, 1997).

Recently, it has been suggested that the mass media, particularly women’s magazines, contribute to the development of body image disturbance and eating disorders by emphasizing the importance of beauty and external appearance in girls and women by

making them question more substantive issues, such as identity and independence (Levine & Smolak, 1996; Stice, 1994).

Several correlational and survey studies have shown that there is an influence on magazine consumption, body image perceptions, and eating behaviors. A study in 1999 found that 68% of university women reported feeling worse about their physical appearance after reading women's magazines. While, 33% of undergraduate women reported that fashion advertisements made them feel less satisfied with their appearance, and 50% reported that they wished they looked more like models in cosmetic advertisements (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999).

Studies suggest that the link between media exposure and women may be mediated by the tendency to internalize messages regarding ideals for thinness and attractiveness (Heinberg & Thompson, 1995; Heinberg, Thompson & Stormer, 1995). To investigate the relationship, Cusumano and Thompson (1997) assessed several aspects of socio-cultural influences on appearance. Print media exposure, awareness of societal ideals, and internalization of sociocultural messages were examined in a group of undergraduate women. The findings from this study revealed that internalization was the most important correlate of body image disturbance. Therefore, individuals may vary in their regards to their level of acceptance of the ideals propagated by the media (Cusumano & Thompson, 1997).

Few studies have been able to examine the immediate impact of exposure to the mass media on body image. Waller, Hamilton, and Shaw (1992) found that women diagnosed with eating disorders tended to significantly overestimate their body size following exposure to photographs of female models from popular magazines. In a

similar study, bulimic participants were shown pictures of thin, average, and oversized models and when asked about body size, regardless of the severity of the bulimic symptomatology, the participants who viewed pictures of thin models reported lower self-esteem (Irving, 1990). Media exposure to non-eating disordered individuals has also been examined. Kalodner (1997) examined the influence of thin models on a group of college men and women. She found that college women exposed to photographs of thin models from *Cosmopolitan* and *Vogue* magazines reported significantly higher levels of private body self-consciousness, body competence, and state anxiety (Kalodner, 1997). There was no effect on the male participants.

While the perceptions of the ideal body shape have shifted over the years, so have the articles represented in the mass media. Garner et al. (1980) examined the changing body shapes of *Playboy* centerfolds and found that over a 20 year span (1959-1978), centerfold models weighed significantly less than the average woman of that time period and that there was a decrease in the centerfold's bust and hip measurements. Smaller measurements were noted to occur as the height of the models increased. The authors also examined the content of six women's magazines (*Harper's Bazaar*, *Vogue*, *McCalls*, *Good Housekeeping*, *Ladies Home Journal*, and *Women's Day*) across the same 20 year span and found a significant increase in the number of articles pertaining to diets (Cusumano & Thompson, 1997). Wiseman et al. (1992) extended and replicated the Garner (1980) study to a more current ten year span (1979-1988) and found that waist to hip measurements continued to decrease throughout the 30 year period (1959-1988) and that the weight reported for *Playboy* centerfolds was 13%-19% lower than the weight assessed as normal based on actuarial tables. Nemeroff, Stein, Diehl, and Smilack (1994)

found that women's magazines (Good Housekeeping, Ladies Home Journal, Glamour, Cosmopolitan, Ms. and New Woman) had significantly more weight loss, beauty, fitness, and health related areas of interest and more body oriented topics than did men's magazines.

The majority of past research conducted has examined the influence of print media and television on body image and appearance. Recent research suggests that individuals are internally aware of the sociocultural pressures of appearance as well as the acceptance of others (Cusumano et al., 1997). The Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ) was developed by Heinberg et al. (1995) to address both the awareness and internalization of cultural pressures on appearance, with each factor relating to measure of body image and eating disturbance (Cusumano et al., 1997).

According to Heinberg (1996), the sociocultural explanation of body image disturbance is the most discussed and most empirically validated of the body image theories. The extant literature shows us the pervasiveness of the thin ideal through the changes in body shape and size over time and the impact of the mass media on body image in women (Rodin, Silberstein, & Striegel-Moore, 1985). Although women in America are presented with the thin ideal through a variety of media outlets, American women often fall into the continuum of normative discontent (Rodin et al., 1985), with some women reporting very little body image disturbance and others experiencing extreme dissatisfaction.

#### Parental Influences

Although researchers have closely attended to the fact that cultural ideals have become unrealistically thin, there has been little emphasis on understanding the

mechanism by which social pressures to achieve the ideal figure affect body image and eating disturbances (Murray, Touyz, & Beaumont, 1995). Benedikt, Wertheim, and Love (1998) suggested that it may be important to examine the “more immediate sub-cultural influences, such as parents who may transmit sociocultural messages to their daughters.” It has been suggested that parents may knowingly or unwittingly influence their children from infancy when their body ideals and eating-related beliefs may affect their eating practices (Birch, 1990; Klesges et al., 1983; Stein & Fairburn, 1989). In fact, some mothers only give their babies skim milk because of their worry about them becoming “chubby,” and it has become apparent parents appear to invest an extraordinary amount of time, energy, and money in their children’s appearances (Heinberg & Thompson, 1995; Heinberg et al., 1995). It has been found that two main modes affect body image include: 1) The effect of parents’ own body image and eating behaviors on their own children, and 2) the influence of parents through their attitudes toward their children’s weight, shape, and diet. To assess these influences, researchers have studied the families of patients with eating disorders, the children of mothers with eating disorders, and body image and eating behavior in non-eating disordered individuals (Heinberg & Thompson, 1995; Heinberg et al. 1995).

Although researchers have explored the relationship between mother-daughter eating behaviors, the results have shown to be inconsistent (Heinberg & Thompson, 1995; Heinberg et al., 1995). It seems that mothers may or may not have a modeling effect on their daughters’ diet and weight concerns. One of the problems with the research linking mothers and daughters with respect to disordered eating behavior is that many of the studies are correlational (Moreno & Thelen, 1993). Demonstrating an associative



relationship rather than one of cause and effect, Benedikt et al. (1998) hypothesized that the modeling effect may be moderated by the types of diet behaviors modeled and by the degree to which mothers actively encourage the daughters to lose weight. Results indicated that the daughters weight loss attempts and body dissatisfaction were significantly associated with their mother's desire for them to be thin and their mother's encouragement to lose weight. Interestingly enough, only 14% of the daughters in this study sample proved to be overweight, while 51% of mothers in the sample encouraged their daughters to lose weight, and 39% of the mothers reported wanting their daughters to be thinner. Results from this study also suggest that a mother's influence and impact on a daughter's weight appear to be through direct encouragement and not from modeling (Benedikt et al., 1998).

It can be disputed however, that in more extreme cases of body dissatisfaction, a mother's own dissatisfaction, and use of extreme dieting and weight loss measures can predict her daughter's behavior through modeling. Many researchers have examined the influence that a mother has on eating disorders and body image and the role that mothers play in shaping their daughter's perceptions of themselves and dietary behaviors. This may be due in part that researchers have often assumed that fathers are less concerned with their daughter's appearance and are less likely to directly model dieting behaviors and directly influence their daughter to lose weight (Thompson et al., 1999). However, a growing number of researchers have begun to examine parental influences and have actively included fathers in their investigative efforts.

Moreno and Thelen (1993), Rozin and Fallon (1988), and Thelen and Cromier (1995) have all included fathers in their studies of the relationship between parents

weight concerns and their children's weight loss efforts, body image, and weight concerns. Striegel-Moore and Kearney-Cooke (1994), studied the relationship between parent's concerns about their own body image and their perceptions and attitudes about the physical appearance, eating, and exercise habits of their children. The results from their study indicated that both mothers and fathers place a moderate amount of importance on their child's level of appearance. The authors of this study concluded that it is normal for parents to view their children as physically attractive (Striegel-Moore & Kearney-Cooke, 1994). This study also found that when compared to fathers, mothers felt significant pressure by others to improve their child's physical appearance. Efforts to improve appearance have and can range from acne treatment to orthodontic treatment for children. Findings also show that parents tend to emphasize appearance in females and athletic ability in boys (Rodin et al., 1985).

#### Peer Influences

Burns and Farina (1992) indicate that there is a high consensus among individuals in evaluating the level of physical attractiveness of others. This, in turn, may lay the foundation for the development and maintenance of negative body images and unhealthy attempts to try and increase one's level of attractiveness/physical appearance. Peer influences can be powerful, particularly during the adolescent period.

Similarly, Oliver and Thelen (1996) found that girls were more likely than boys to report sharing body and eating related interactions and to believe that thinness increases likability. They found that the degree to which this has been held identified predictors of weight and body image concerns.

The influence of peers can continue from adolescence to early adulthood. Schwartz, Thompson, and Johnson (1981) found that college women who purge usually know other women who purge and run in the same social circle. This suggests that women who do not purge, generally do not know other women who do. Their study also found that women who diet are more likely to have friends that diet and have eating disorder symptoms. Crandell (1988) found that the amount that a university sorority woman purged was associated with her immediate peer group. In addition, binge eating behavior among one's individual peer group was related to the individual's own bingeing behaviors (Crandell, 1988).

Current research suggests that there are two aspects of peer experiences that contribute to internalization and body image. These aspects include appearance conversations with friends and appearance criticism of peers (Jones, Vigfodotler, & Lee, 2004). Conversations with friends about appearance are important to the increased intimacy during adolescence and helps to shape the social context of those friendships (Berndt & Keefe, 1995). Appearance conversations help to direct attention to appearance related topics and reinforce the construction of body ideals. Everyday conversations with friends help to solidify appearance ideals, expectations, and norms in a comfortable, interpersonal setting,

Research concerning the criticism of peers on appearance is well-documented, especially during the adolescent time period (Eder, Evans & Parker, 1995). It has been found that there is a significant linkage between critical appearance comments and negative body image. This direct link, has been documented in females from elementary through college years (Levine, et al., 1994; Thompson, Coovert, & Stormer, 1999; Oliver

& Thelen, 1996). The experience of being a target of peer criticism can reinforce the value of appearance to peers and emphasize desirable appearance attributes, thus peer criticism not only generates a negative experience with one's own body, it contributes to the internalization of the important features of acceptable cultural appearances (Jones et al., 2004).

Researchers have also found that the "group" atmosphere may encourage restrictive eating beyond normal limits (Vaismann, Voet, Akivis, & Sivener, 1996), and the labeling of friends and peer groups as "potential sources of sub-cultural influence" (Wertheim et al., 1997). It has been found that friendship group members resemble one another in their attitudes (Fang et al., 1998), physical and social attributes- including physical appearance and behaviors - such as drug and alcohol use (Geckova & van Dijk, 2001). These sociocultural influences are inherently true according to social psychology. Festinger (1954) found that group members are most likely to share attitudes and behaviors that are deemed important to the group and for young women the concept of the social ideal is of considerable societal importance (Griesz, Levine, & Murnen, 2002).

The idea that peers can influence the way in which we perceive and feel about ourselves is evident in research. Festinger (1954) hypothesized that we, as human beings, have a tendency to gather information about ourselves based on our own self reflections. Festinger hypothesized that when an individual is uncertain about a certain attribute he or she will clarify his or her standing by examining the attribute in regard to others. An example of attributes would include the character, strengths and capabilities of an individual. The process of evaluating one's self in regard to others in the social environment was the basis of Festinger's Theory of Social Comparison Process. This

theory along with the substantial research that it has generated, suggests that social comparison may be a primary information-gathering phenomenon (Marsh & Parker, 1984; Ruble, 1983). This suggests that when an objective standard (e.g. a chart that specifies healthy weights) is available, individuals may instead rely on their standing within their social environment to define themselves (Thompson et al. 1999).

### Instrumentation Used to Assess Body Image

The field of body image has grown tremendously over the past 50 years which has led to the development of new measurement indices (Thompson, 2004). New and revised measures used to assess one or more of the multiple dimensions of body image have been well documented (Cash, 2002; Gardner 2002; Stewart & Williamson, 2004; Thompson, 1996; Thompson & Gardner, 2002; Thompson et. al., 1999; Thompson & van den Berg, 2002). Today, there are over 50 measures available to researchers and clinicians that concern body image and body image perceptions (Thompson, 2004).

Weight-size discrepancy is described as one of the simplest measures used to address overall weight satisfaction and is used to compare an individual's "ideal" weight with his/her "current" weight. The discrepancy between the two levels is an indication of weight dissatisfaction (Thompson et al., 1999; Thompson, 1992; 1995; Williamson, Davis, Bennett, Goreczny, & Gleaves, 1989). Several questionnaire measures have been constructed and used to measure body satisfaction. One of the most widely used measures has been the Eating Disorders Inventory-2 (EDI-2)—a nine item measure -used to assess satisfaction with weight-related body sites (Garner, 1991). This measure was designed to make valid comparisons among diverse samples including anorexic and overweight individuals (Garner, Garner, & Van Egeren, 1992). Body image and body

dissatisfaction instruments should be selected based upon the characteristics of the target population or the individual client (Thompson et al., 1999). The background, ethnic makeup, age, and body size of the target population should also be taken into account since many measures have been validated based on Caucasian females (Faith & Allison, 1996; Tantleff-Dunn & Thompson, 1998).

Thompson (2004) suggests that upon deciding to measure body image, the researcher must be specific in labeling the dimension of body image that he or she wishes to investigate and choose a measure that assesses this dimension. Body image instruments can be used to assess a variety of areas ranging from subjective satisfaction, affective, cognitive, behavioral, or perceptual components of body image (Stewart & Williamson, 2004; Thompson 1996; Thompson et al., 1999; Thompson & van den Berg, 2002).

Thompson (2004) also suggests that when measuring body image, multiple measures of body image should be used. Problems occur when there is a disparity between the body image construct that has been selected and the dimension that is being measured. Multiple dimensions of body image should be represented with administering an instrument, allowing the researcher to take care of a broad range of the dimensions that are represented in each scale (Thompson, 2004). Thompson suggests that this idea is especially useful in exploratory studies and can be used when gauging the effects of a treatment. Multiple measures will ensure that misleading interpretations regarding the outcome of the study are minimized (Thompson, 2004). It is suggested that measurements that try to capture one dimension of body image can be misleading unless it is a specific scale that captures one specific aspect of body image. Thompson suggests

that in order to prevent measurement overlap it is necessary to evaluate the shared variance between or among the measures. If  $R^2 \geq 0.50$  then there is a substantial overlap between the measures, and a composite score of the variables should be used to conduct the data analysis (Thompson, 2004).

Thompson (2004) also suggests that researchers select measures with established reliability and validity and that are tested on samples similar to the research that is being conducted. Thompson (2004) suggests that it is important for researchers to have the right scale to test the research question: if alterations were made to valid and reliable instruments, then second or third scales should be included to provide normative comparisons. He also suggests that researchers conducting body image research should assess the reliability and validity of the measures being used and make them appropriate to the sample (Thompson, 2004). Thompson suggests that the selection of body image measures for clinical and research settings is a complicated task due to the multidimensionality of the construct and the number of assessment tools available to researchers and clinicians.

## Summary

In this chapter, specific studies that dealt with body dissatisfaction, body image, and sociocultural factors such as parent, peer, and media influence are discussed. Specifically, studies that concentrated on college-aged women and in particular, sorority women, were reviewed. Research concerning body dissatisfaction and the sociocultural influences on college women is limited. Beneficial understanding of this topic, and more specifically sororities, can come from research such as this.

In Chapter III the methods and procedures that were utilized to conduct this study are presented. Chapter IV provides the results and a discussion of the results. Chapter V will contain a summary of the study, conclusions derived from the study, implications for health education, and recommendations for further study.



## CHAPTER 3

### METHODOLOGY

The purpose of this study was to explore body dissatisfaction and other sociocultural factors as predictors of body image perceptions among sorority and non-sorority women. In this chapter the various measures and procedures utilized to accomplish the purpose of this study are set forth. Survey methodology was chosen as the most appropriate means for achieving the goals of this investigation.

#### Subject Selection

The sample population for this study was delimited to sorority and non-sorority members who were Caucasian females between the ages of 18 and 22 from a mid-sized Southeastern university. A list of sorority contacts was obtained from the Greek Life office located on the university's campus. To obtain a sample from the general population, a letter explaining the significance of the study was e-mailed to professors, sorority presidents, and Panhellenic representatives. Professors in health, nutrition, child and family studies, and education were contacted regarding participation. Included in the letter was a request for their participation. The letter explained that participation would be at their convenience. The recipients were informed that the researcher would contact them to determine if they would participate and to arrange a convenient time to administer the survey.

#### Study Design

For this study, subjects were selected from a mid-sized Southeastern university. All participants were classified in one of two groups, non-sorority members and sorority members. Sorority members were selected from all five on-campus sororities, while non-sorority members were selected from the general college population. Sample size was

limited due to the amount of sororities on campus and the amount of non-sorority females willing to participate. Non-sorority females were selected from health, education, and child and family studies classes. Participants in this study were between the ages of 18 and 22.

The researcher used a non-probability, purposive sampling methodology to choose the participants who best meet the purposes of the study. This method was chosen because of its combination of both quota and convenience sampling (Neutens & Rubinson, 1997). A cross-sectional study design (Campbell & Stanley, 1966) was employed to accomplish the objectives of this study. One of the objectives of this study was to look at body dissatisfaction and other sociocultural factors of predictors of body image perceptions in sorority and non-sorority women. A cross-sectional study design allows for the measurement of these factors at a single point in time. It also allows the researcher to explore the influence of sociocultural factors as predictors of body image perceptions.

#### Data Collection

Prior to the initiation of the study, human subjects clearance was secured so that surveying could be completed before the end of the spring semester, 2006.

The investigator contacted professors on campus and sorority presidents through letters via email. The letters explained the intent of the study and solicited members who were willing to participate. Follow-up phone calls were made to establish mutually convenient survey times and dates. Permission to administer the survey was obtained from six professors and five sorority presidents, this included ten classes from Education,

Nutrition and Food Sciences, Child and Family Studies, and Health. Since there are only five Panhellenic sororities, full participation was obtained from the sorority group.

All questionnaires were hand delivered and administered by the researcher and questionnaires were administered in appropriate classroom settings and sorority chapter meetings. The researcher instructed consenting participants on procedures. Questionnaires were distributed and collected from participants in the same manner. Participants were reminded that participation in the study would not interfere with their participation in the sorority or on campus. Participants were assured of confidentiality and reminded that they could withdraw from the study at any point. Each professor and sorority president was thanked for their participation in the study.

#### Instrumentation

A four-part questionnaire and a demographic section were prepared to achieve the goals and objectives of this study. The questionnaire included the following:

1. Mother Influence Scale, Parent Involvement Scale, and Peer Dieting Scale -- developed by Levine et al. (1994).
2. Social Attitudes Towards Appearance Scale-3 (SATAQ-3) -- developed by Thompson et al. (2004).
3. Eating Disorders Inventory-3 Body Dissatisfaction subscale (EDI-3 BD) -- developed by Garner (2004).
4. Body Image Assessment(BIA)--developed by Williamson et al. (1989).

#### *Demographic Information*

In order to receive participant demographic information, nine demographic questions were asked at the beginning of the survey and were used to classify participants

and help with data analysis. Participants were asked to indicate their age, classification in school, racial/ethnic identity, and membership in a Greek women's organization (sorority). They were also asked to indicate their father and mothers highest level of education and the combined yearly income of their parents. Participants were also asked to indicate their height and weight.

#### *Mother Influence, Parent Involvement, and Peer Dieting*

To assess parent influence, items from three different instruments were used to assess specific influences between mothers and daughters. The Mother Influence Scale (Levine, Smolak, & Hayden, 1994) consists of four items that measure daughter's perceptions of mother's investment in her own appearance. The Parent Involvement Scale (Levine, Smolak & Hayden, 1994) was created to assess the perceptions of parental attitudes and behaviors related to weight and shape. The Parent Involvement Scale consists of four items that measure daughter's perceptions of how important slenderness is to her parents. The Peer Dieting Scale (Levine, Smolak & Hayden, 1994) measures the perceptions of peer dieting and body concerns. The Peer Dieting Scale has proven to be a significant predictor of the investment in thinness, weight-management strategies, and eating disturbances. The internal consistency for the Mother Influence Scale, the Parent Involvement Scale and the Peer Dieting Scale is .73 and the test-retest reliability is .80.

Questions from the Mother Influence Scale, the Parent Involvement Scale, and the Peer Dieting Scale are listed below.

1. How concerned is your father about whether you weigh too much or are too fat or might become too fat?
2. How important is it to your mother that she be as thin as possible?

3. How important is your mother's physical appearance (shape, weight, and clothing) to her?
4. About how many of your friends would like to be thinner?
5. How many of your friends are 'on a diet' to try to lose weight or slow down weight gain?
6. How often do you and your friends talk about weight, weight loss, and dieting?
7. Other people notice right off the bat what's wrong with my body
8. People think that I am unattractive.

### *Sociocultural Influences*

The research suggests that the link with media exposure may be mediated by a third variable, the tendency to internalize messages regarding ideals for thinness and attractiveness (Heinberg & Thompson, 1995; Heinberg, Thompson, & Stormer, 1995). To investigate this relationship of media influence on body image perceptions and body dissatisfaction, the Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ) was developed (Heinberg, Thompson, & Stormer, 1995). The SATAQ contained 14 items, which established two factors: awareness, or the simple acknowledgement of societal appearance norms; and internalization, an important correlate of body image disturbance among females. A revised version—the SATAQ-R—used seven additional items for a more comprehensive understanding of these factors for both males and females (Cusumano & Thompson, 1997).

The SATAQ-3, created in 2004, was designed to extend and update the measurement of a sociocultural influence on body image and eating disturbance by (1) including a new focus on athleticism for women, (2) examining media influences beyond

internalization, such as pressures, and information, and (3) evaluating the factorial similarity/distinctiveness for the SATAQ-R internalization subscale (Thompson et al, 2004). In addition, the SATAQ-3 sought to provide normative data regarding eating disordered samples from the SATAQ-R (Thompson et al. 2004).

The SATAQ-3 (Thompson et al, 2004) is comprised of four dimensions of media influence: awareness, internalization, pressures, and information. Additional items were added to indicate a media influence related to sports, athleticism, or exercise. Items were generated by a body image research group whose members reviewed previously published indices of media influence (Thompson et al. 2004). Measures included in the SATAQ-3 are the IBIS-R (Stice & Agras, 1998) and the Eating Disorder Inventory (EDI) (Garner, 1991) Body Dissatisfaction (EDI-BD) and Drive for Thinness (EDI-DT) subscales.

The IBIS-R assesses participants' level of agreement with 10 statements concerning what attractive women look like (e.g. slender women are more attractive)' (Stice, 2001). Stice and Agras (1998) found an internal consistency of .89 and Stice (2001) found a test-retest reliability of .63.

The EDI-BD is a seven item subscale that assesses overall satisfaction with various weight-related body sites and has demonstrated good reliability (Cronbach's alpha above .80) across varied samples in previous studies (Garner, 1991). All six response items for this subscale were scored.

The EDI-DT assesses restriction of intake, the desire to be thin, and the fear of gaining weight (Thompson et al, 2004). The EDI-DT has demonstrated adequate

reliability in non-patient and eating disordered sampled (Cronbach's alpha=.85; Garner, 1991). All six response options for this subscale were scored.

Subscales for the SATAQ-3 consist of 30 items (Internalization-General, nine items; Information, nine items; Pressures, seven items; Internalization-Athlete, five items). Cronbach's alphas on these subscales include: Information (.96), Pressures (.92), Internalization-Ahtlete (.95), Internalization General (.96), and Total scale (.96).

Question from the SATAQ-3 are listed below.

1. TV programs are an important source of information about fashion and "being attractive."
2. I've felt pressure from TV or magazines to lose weight.
3. I do not care if my body looks like the body of people who are on TV.
4. I compare my body to the bodies of people who are on TV.
5. TV commercials are an important source of information about fashion and "being attractive."
7. I do not feel pressure from TV or magazines to look pretty.
8. I would like my body to look like the models who appear in magazines.
9. I compare my appearance to the appearance of TV and movie stars.
10. Music videos on TV are not an important source of information about fashion and being attractive.
11. I've felt pressure from TV and magazines to be thin.
12. I would like my body to look like the people who are in the movies.
13. I do not compare my body to the bodies of people who appear in magazines.
14. Magazine articles are not an important source of information about fashion and

- 'being attractive.'
15. I've felt pressure from TV or magazines to have a perfect body.
  16. I wish I looked like the models in music videos.
  17. I compare my appearance to the appearance of people in magazines.
  18. Magazine advertisements are an important source of information about fashion and "being attractive."
  19. I've felt pressure from TV or magazines to diet.
  20. I do not wish to look as athletic as the people in magazines.
  21. I compare my body to that of people in "good shape."
  22. Pictures in magazines are an important source of information about fashion and being attractive.
  23. I've felt pressure from TV or magazines to exercise.
  24. I wish I looked as athletic as sports stars.
  25. I compare my body to that of people who are athletic.
  26. Movies are an important source of information about fashion and "being attractive."
  27. I've felt pressure from TV or magazines to change my appearance.
  28. I do not try to look like the people on TV.
  
  29. Movie stars are not an important source of information about fashion and "being attractive."
  30. Famous people are an important source of information about fashion and "being attractive."
  31. I try to look like sports athletes.



### *EDI-3*

The Eating Disorders Inventory–3 referral form (EDI-3 RF) is a self report measure that is designed to measure “eating disorder risk and is based on diet concerns, body weight, weight history, height, and behavioral symptoms indicative of eating disorders” (Garner, 2004). The EDI-3 RF includes three scales: Drive for Thinness (DT), Bulimia (B) and Body Dissatisfaction (BD) from the Eating Disorders Inventory-3 (EDI-3) (Garner, 2004). In addition to the 25 questions from the EDI-3, the EDI-RF includes questions related to demographics, weight history, and behavioral activities (Garner, 2004). The EDI-3 RF provides administrators with referral guidelines based on self-reported information in three areas: (a) body weight and height-calculated BMI is compared to aged-matched norms; (b) BMI and problematic eating patterns; and (c) behavioral symptoms that may indicate an eating-disorder (Garner, 2004).

The EDI-3 RF is used to assess excessive concerns related to dieting, body weight, and problematic eating patterns and uses the 25 items from the Drive for Thinness (DT), Bulimia (B) and Body Dissatisfaction (BD) scales of the EDI-3. The EDI-3 RF is comprised of DT (7 items) and B (8 items) are employed (Garner, 2004). These two scales are used in the referral process. The DT and B scales are used because they are superior to the BD scale when assessing clinical and non-clinical samples. While the BD scale is not directly used in the referral algorithm, it has been found that young adults and female adolescents indicate that body dissatisfaction is highly prevalent and an important risk factor for the development of eating-disorder symptoms (Garner, 2004).

The EDI-3 RF display items in a 6-point, forced-choice format and requires respondents to answer whether each item applies *Always, Usually, Often, Sometimes, Rarely, or Never* (Garner, 2004). Each item is given a score from 0 to 4 with the most extreme responses given a 4 (*Always or Never*, depending on whether or not the item is positively or negatively keyed). The adjacent response (*Usually or Rarely*) is assigned the score of 3, with the next response (*Often or Sometimes*) assigned a value of 2, (*Sometimes or Often*) a score of 1 and the next two responses a score of 0. Scale scores are determined by summing all item scores. For the purpose of the study, the body dissatisfaction scale of the EDI-3 was used. EDI-3 body dissatisfaction questions are listed below.

1. I think that my stomach is too big.
2. I think that my thighs are too large.
3. I think that my stomach is just the right size.
4. I feel satisfied with the shape of my body.
5. I like the shape of my buttocks.
6. I think my hips are too big.
7. I feel bloated after eating a normal meal.
8. I think that my thighs are just the right size.
9. I think my buttocks are too large.
10. I think that my hips are just the right size.

#### *Body Image Assessment (BIA)*

Previous research shows that the BIA is useful to differentiate bulimia nervosa from the normal population (Williamson et al., 1989; Williamson, Davis, Goreczny, and Blouin, 1989). The BIA is comprised of nine silhouette female figures which range from thin to obese images in incremental stages. Each silhouette in the BIA is 6 inches tall and is on a 5 inch by 8 inch card. Cards are numbered 1 through 9 and participants are

instructed to “select the card that most accurately depicts their body size, as you perceive it to be” (Current Body Size) and “select the card that depicts the body size you would most prefer” (Ideal Body Size). The BIA was selected for use to demonstrate a correlation between selected measures and specific silhouettes.

### Treatment of the Data

This study explored body dissatisfaction and other sociocultural predictors of body image perceptions among sorority and non-sorority women. In order to best answer the research questions, the following data analysis was employed.

For this study, the group of interest was sorority women. The comparison group for this study consisted on non-sorority participants. Following the data collection, the investigator calculated descriptive statistics of group means and standard deviations for each measure between the two groups (sorority and non-sorority women). All statistical tests will be set at the  $\alpha \leq .05$  level of statistical significance.

Collected data was organized and analyzed through the use of parametric measures. The researcher used a non-probability, purposive sampling methodology. Independent samples t-tests were calculated for each question to determine influences and attitudes between college-aged sorority and non-sorority women.

Due to previous research concerning race and eating disorders (Abood & Mason, 1997; Abrams, Allen, & Gray, 1993), it was determined that only white women would be included in this research. Black sororities were not included for two reasons: 1) race was not a factor considered in data analysis in this study; 2) there is currently a limited number of black sororities on campus.

Body Mass Index (BMI) was calculated for all participants. Results are subsequently categorized by sorority membership and are presented in Table 2. Calculated BMI determines height to weight ratios in the following ranges: A BMI below  $18.5 \text{ Kg/m}^2$  is considered to be underweight; a BMI between  $18.5$  and  $\leq 25.0 \text{ Kg/m}^2$  is considered to be normal weight; a BMI between  $25.0$  and  $\leq 30.0 \text{ Kg/m}^2$  is considered to be overweight; and a BMI  $> 30.0 \text{ Kg/m}^2$  is obese (Centers for Disease Control and Prevention [CDC], 2005). Table 2 displays mean BMI scores by Greek membership.

To interpret the data from the present study, several methods of analysis were employed. They are presented by research question and are as follows:

1. Do significant differences exist in body image perceptions between sorority and non-sorority women?
2. What factors influence body image perceptions among sorority and non-sorority women?
3. Do sociocultural influences differ significantly for sorority and non-sorority women?
4. Are sociocultural influences a strong predictor of negative body image perceptions?

## Summary

In this chapter the methods and procedures used to accomplish the purpose of this study were presented. Subjects for this study included 502 white females, 322 of them indicated that they were members of a sorority. The data for the study was collected using a questionnaire administered by the researcher. In Chapter IV, results of the study are discussed; conclusions derived from this study, the implications for health education, and recommendations for further studies are also presented.

## CHAPTER 4

### ANALYSIS OF DATA

The purpose of this study was to explore body dissatisfaction and other sociocultural factors as predictors of body image perceptions among sorority and non-sorority affiliated women; and to determine the extent to which these selected sociocultural influences (parental, peer, and media) are predictors of body image perceptions.

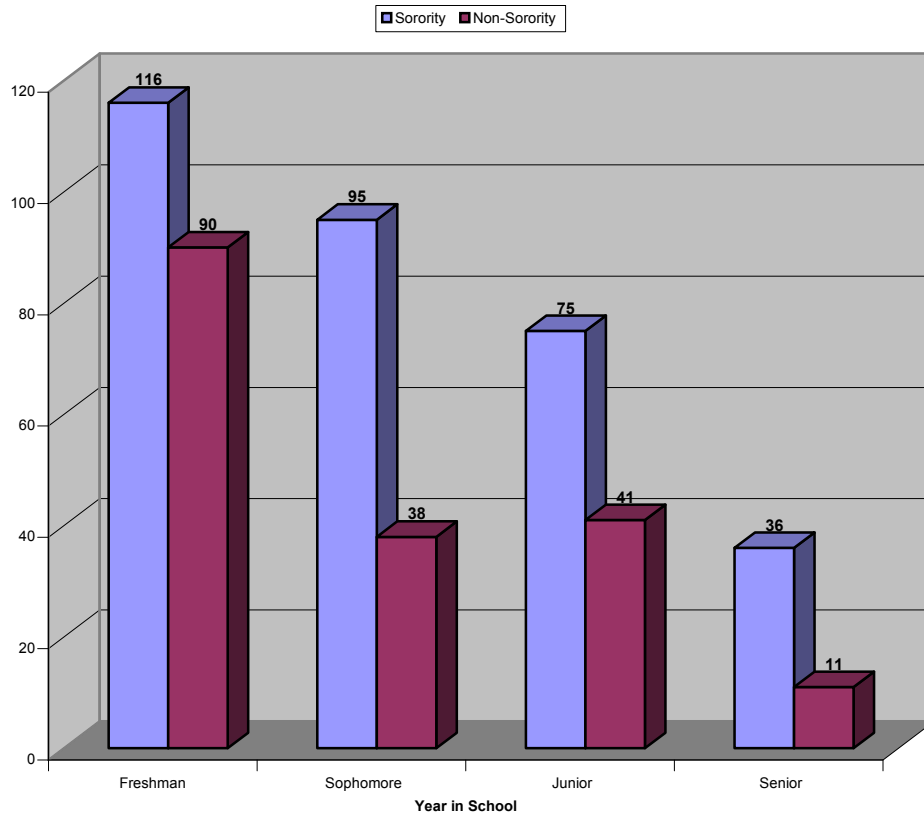
#### Description of the Subjects

Surveys were administered to 619 college-aged women. The study collected data on Caucasian sorority and non-sorority women between the ages of 18 and 22; 117 participants were excluded from the analysis due to race and age limitations. Therefore, the remaining sample for this study included a total of 502 college age women ( $N_{\text{sorority}} = 322$ ) and ( $N_{\text{non-sorority}} = 180$ ). A response rate of 81.1% was calculated. All participants were surveyed during the Spring semester, 2006.

Surveys were administered to each of the five sororities during chapter meetings. They were also administered to students in two nutrition classes, two education classes, two health classes, and two child and family studies classes.

Of the 502 females who responded, 206 were freshman, 133 were sophomores, 116 were juniors, and 47 were seniors (see Figure 1). The average age for participants was 19 with a standard deviation of 1.17.

Figure 1: Participant Year in School



Regarding parents' level of education, the participants responded as follows: for the fathers, 19% (n = 97) completed high-school only, 11% (n = 53) completed a trade/technical school, 46% (n = 232) attended college, while 24% (n=118) completed graduate school. For subject's mother's highest level of education, 15% (n = 76) completed high-school only, 9% (n = 46) attended a trade/technical school, 53% (n = 268) attended college, while 22% (n = 111) indicated that their mother had attended graduate school.

Study participants were also asked to report their parents' combined yearly household income. A total of 467 subjects responded to this question with 35 non-

responses which were deemed missing values. Parents' combined yearly income by sorority membership is displayed in Figure 2.

Figure 2 : Parents' Combined Yearly Income

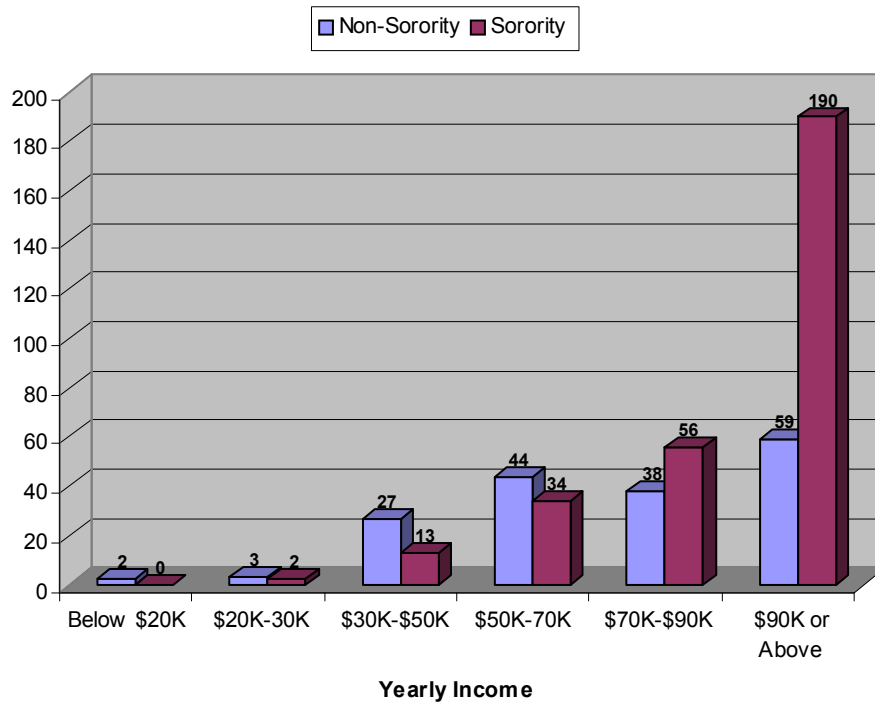


Table 1 presents survey respondents' self-reported height and weight measurements. The mean weight for all respondents was 138.6 pounds with a range from 90 pounds to 260 pounds. A total of 501 participants responded to height and weight questions, one individual did not indicate height and weight. The mean height for all respondents was 64.8 inches (approximately 5'4") with a range from 51 inches (4'1") to 72 inches (6'2").



Table 1: Height and Weight by Sorority Membership

<b>Greek Member</b>	<b>Mean Height (Inches)</b>	<b>S.D.(Height)</b>	<b>Mean Weight(Pounds)</b>	<b>S.D. (Weight)</b>
Sorority (n =322)	65.03	2.93	134.78	29.89
Non-Sorority (n = 179)	64.51	3.05	139.13	27.25
Total (n = 501)	64.80	2.98	138.6	29.01

Table 2: BMI by Sorority Membership

<b>Greek Member</b>	<b>Mean</b>	<b>S.D</b>
Sorority (n=315)	22.41	5.21
Non-Sorority (n=177)	23.51	4.23
Total (n=492)	22.81	4.90

Results indicate that the mean BMI for sorority women was 22.41 and for non-sorority women 23.51. An average BMI of 22.81 was calculated for the total sample indicating that the results are within normal range. According to the CDC, calculated BMI determines height to weight ratios in the following ranges: A BMI below 18.5 Kg/m<sup>2</sup> is considered to be underweight; a BMI between 18.5 and  $\leq 25.0$  Kg/m<sup>2</sup> is considered to be normal weight; a BMI between 25.0 and  $\leq 30.0$  Kg/m<sup>2</sup> us considered to be overweight; and a BMI  $> 30.0$  Kg/m<sup>2</sup> is obese (Centers for Disease Control and

Prevention [CDC], 2005).

In order to determine if the differences in means were statistically significant between sorority and non-sorority women, independent sample t-tests were conducted. Data analysis results in Table 3 indicate that there was a significant difference between the mean BMI scores of sorority and non-sorority women ( $p = 0.018$ ). The 95% confidence interval reveals that a significant difference does not exist between the two groups, since zero is not contained within the interval. In particular, sorority women have a significantly lower average BMI than non-sorority women.

Table 3: Independent Samples t-tests for BMI Scores by Greek Membership

<b>Greek Member</b>	<b>Mean</b>	<b>Mean Difference</b>	<b>S.E. of Mean Difference</b>	<b><i>p</i> Value</b>	<b>95% C.I.</b>
Sorority (n=315)	22.41	-1.093	0.698	0.018	(-1.99, -0.19)
Non-Sorority (n=177)	23.51	-1.093	0.670		

### Research Question 1

1. Do significant differences exist in body image perceptions between sorority and non-sorority women?

Two measures were used to examine body image perceptions. The Eating Disorder Inventory Body Dissatisfaction scale (EDI-3) was used to specifically examine body dissatisfaction among participants, while the Body Image Assessment (BIA) was used to examine body image perceptions via body type selections.

Independent sample t-tests were conducted to determine whether significant differences in participant responses to the EDI-3 Body Dissatisfaction (B.D.) subscale existed. Results from this analysis are presented in Table 4. Results indicate that sorority women were significantly more dissatisfied with their bodies ( $p = 0.001$ ) compared to their non-sorority counterparts. The 95% confidence interval also indicates that a significant difference in EDI-3 BD scores exists between sorority and non-sorority women, since the entire interval is positive. High scores on the EDI-3 BD subscale indicate larger amounts of body dissatisfaction. Scores for both sorority and non-sorority women fall within the moderate category. Categories for EDI-3 BD scores include: Low (0-7), moderate (8-30), and high (31-40).

Table 4: Independent Samples t-tests for Body Dissatisfaction (EDI-3) by Greek Membership

<b>Greek Member</b>	<b>Mean</b>	<b>Mean Difference</b>	<b>S.E. of Mean Difference</b>	<b>p Value</b>	<b>95% C.I.</b>
Sorority (n=319)	18.88	2.712	0.840	0.001	(1.06, 4.36)
Non-Sorority (n=176)	16.16	2.712	0.822		
Total (n=495)	17.91				

Participant scores were based on the discrepancy (difference) between what respondents thought their current body type was and what they ideally wanted it to be. High BIA scores represent high body dissatisfaction.

An independent samples t-test was also conducted on BIA discrepancy scores and is displayed in Table 5. Results indicate that sorority women have higher levels of body dissatisfaction (mean=1.62) on the BIA when compared to non-sorority women (mean = -0.11). The p value (0.013) indicates that a significant difference exists; this is further substantiated by the 95% confidence interval, since it is entirely positive.

Table 5: Independent Samples t-tests for BIA Discrepancy Scores by Greek Membership

<b>Greek Member</b>	<b>Mean</b>	<b>Mean Difference</b>	<b>S.E. of Mean Difference</b>	<b>p Value</b>	<b>95% C.I.</b>
Sorority (n=308)	1.62	1.734	0.443	0.013	(0.36, 3.10)
Non-Sorority (n=176)	-0.11	1.734	0.503		
Total (n=495)	0.99				

A correlation analysis was employed to explore the relationship between BMI and body dissatisfaction scores by sorority and non-sorority women. Results indicate that there was a relationship between EDI-3 Body Dissatisfaction scores and BMI. For sorority women, this relationship was significant ( $p=0.002$ ) at the 0.01 level of significance, but a correlation coefficient of 0.171 suggests that the relationship is weak. An  $R^2$  of 0.029 was calculated indicating that 2.9% of the variance in the sorority women's EDI-3 BD scores was explained by BMI. There was also a significant relationship between EDI-3 BD scores and BMI for non-sorority women. A correlation coefficient of 0.443 was calculated ( $p < 0.001$ ), with an  $R^2$  value of 0.196. Results for non-sorority women indicate that 19.6% of the variance in EDI-3 B.D. scores was explained by BMI. Results are displayed in Table 6.

Correlations were also conducted to explore the relationship between BMI and BIA scores in sorority and non-sorority women. A correlation coefficient of -0.509 for sorority women indicates a moderate negative relationship. The relationship between BMI scores and BIA scores is significant at the 0.01 level of significance ( $p < 0.001$ ).

This relationship indicates that as BMI scores decrease, BIA scores increase. An  $R^2$  value of 0.259 was calculated for the correlation of BMI and BIA discrepancy. This indicates a moderate relationship where 25.9% of the variance in BIA scores for sorority women can be explained by the variance in BMI scores. Results were not significant for non-sorority women. A correlation coefficient of -0.131 suggests a weak relationship. An  $R^2$  value of .017 suggests that there is a very weak relationship between BMI and BIA scores for non-sorority women. For non-sorority women, 1.71% of the variance in BIA scores can be explained by the variance in BMI. Results are displayed in Table 6.

Table 6: Correlation for the Relationship between EDI-3 and BIA Scores by Greek Membership

<b>Greek Membership</b>	<b>Outcome</b>	<b>Correlation with BMI</b>	<b><i>p</i> Value</b>
Sorority	EDI-3 BD	0.171	0.002
	BIA	-0.509	<0.001
Non-Sorority	EDI-3 BD	0.443	<0.001
	BIA	-0.131	0.084

## Research Question 2

2. What factors influence body image perceptions among sorority and non-sorority women?

Sociocultural influences were measured using specific questions about parent, peer, and media influences. The backwards elimination process of regression analysis was used to determine which factors influenced body image perceptions in sorority and non-sorority women.

For sorority women, results indicate that peer ( $p < 0.001$ ) and media factors ( $p < 0.001$ ) significantly influence body dissatisfaction. For both sorority and non-sorority women, parents did not significantly influence scores on the EDI-3 body dissatisfaction subscale ( $p = 0.409$ ) and ( $p = 0.215$ ) respectively. Since the 95% confidence intervals for peer and media influence do not contain zero, they are significant. Table 7 shows the positive associations that peer and media influence have on EDI-BD scores. The following are prediction equations for Table 7:

Sorority women: EDI-3 BD Score =  $1.174 \times (\text{Peer}) + 0.114 \times (\text{Media}) + (-5.25)$

Non-Sorority women: EDI-3BD Score =  $1.20 \times (\text{Peer}) + 0.096 (\text{Media}) + (-11.33)$

If a sorority woman scores high on both the Peer Dieting Scale (20) and the SATAQ-3 (145), then she would have a predicted EDI-3 BD score of 34.76, which would indicate a large amount of body dissatisfaction. If a non-sorority woman scored moderately on the on the Peer Dieting Scale (10) and on the SATAQ-3 (120), then her predicted EDI-3 BD would be 12.9, which would indicate a low level of body dissatisfaction. Categories for EDI-3 BD scores include: Low (0-7), moderate (8-30), and high (31-40).

Table 7: Multiple Regression of Sociocultural Influences on EDI-3 BD Scores by Greek Membership

	<b>Influence Type</b>	<b>Regression Coefficient</b>	<b>S.E. of Coefficient</b>	<b>p Value</b>	<b>95% C.I.</b>
<b>Sorority</b>	Peer Influence	1.174	0.144	<0.001	(0.890,1.457)
	Media Influence	0.114	0.033	<0.001	(0.049,0.180)
	Parent Influence	0.136	0.164	0.409	(-0.188,0.459)
<b>Non-Sorority</b>	Peer Influence	1.200	0.174	<0.001	(0.856,1.544)
	Media Influence	0.096	0.037	0.011	(0.023,0.169)
	Parent Influence	0.280	0.215	0.194	(-0.144,0.704)

Table 8 displays multiple regression results for BIA scores and sociocultural influences by Greek membership. Results indicate that peer (0.037) and media (0.005) influence significantly associated with BIA discrepancy scores for non-sorority women, whereas parent influence is not a significant predictor for sorority ( $p=0.469$ ) and non-sorority women ( $p=0.469$ ). For the sorority group, peer influence ( $p<0.001$ ) is the only significant predictor of BIA discrepancy scores. The following are prediction equations for Table 8:

$$\text{Sorority women: BIA Scores} = 0.507 \times (\text{Peer}) + 0.018 (\text{Media}) + (-3.78)$$

$$\text{Non-Sorority: BIA Scores} = 0.322 \times (\text{Peer}) + 0.092 (\text{Media}) + (-4.08)$$

If a Sorority woman were to have a high on the score Peer Dieting Scale (18) and a moderate SATAQ-3 (125), then her predicted BIA score would be a moderate score of 7.59. If a non-sorority woman scored those same scores, her predicted BIA score would 13.21.



Table 8: Multiple Regression of Sociocultural Influences on BIA Scores by Greek Membership

	<b>Influence Type</b>	<b>Regression Coefficient</b>	<b>S.E. of Coefficient</b>	<b><i>p</i> Value</b>	<b>95% C.I.</b>
<b>Sorority</b>	Peer Influence	0.507	0.135	<0.001	(0.240,0.773)
	Media Influence	0.018	0.034	0.605	(-0.049,0.085)
	Parent Influence	0.121	0.167	0.469	(-0.208,0.450)
<b>Non-Sorority</b>	Peer Influence	0.322	0.154	0.037	(0.019,0.626)
	Media Influence	0.092	0.033	0.005	(0.028,0.157)
	Parent Influence	0.042	0.191	0.827	(-0.335,0.418)

### Research Question 3

3. Do sociocultural influences differ significantly for sorority and non-sorority women?

Sociocultural influences were measured using specific questions about parent, peer, and media influences. The Peer Dieting Scale was used to measure peer influence and individual perceptions of peer dieting and body concerns. Independent samples t-test were conducted to determine differences in sorority and non-sorority women. Results indicate that there is a significant difference between the responses of sorority and non-sorority women ( $p < 0.001$ ). The mean score for sorority women was 9.65 out of 20 compared to 8.34 for non-sorority women, thereby indicating peers were a major source of influence for sorority women when compared to their non-sorority counterparts. Since the confidence interval for the mean difference in peer influence between groups does not contain zero, then there appears to be a significant difference between the two groups. Results for peer influence are displayed in Table 9.

Table 9: Independent Samples t-tests for Peer Influence by Greek Membership

<b>Greek Member</b>	<b>Mean</b>	<b>S.E.</b>	<b><i>p</i> Value</b>	<b>95% C.I.</b>
Sorority (n=307)	9.65	0.19	<0.001	(0.67, 1.96)
Non-Sorority (n=176)	8.34	0.26		

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Mother Influence Scale and the Parent Involvement Scales were combined and used to determine the amount of parent influence on sorority and non-sorority women. An independent samples t-test was used to determine differences on these scales between sorority and non-sorority women. Results indicate that there was not a significant

difference in the way in which parents influence this sample of sorority and non-sorority women ( $p = 0.86$ ). Neither group appeared to be highly influenced by parents in regards to their body image perceptions. The 95% confidence interval further justifies this conclusion since the interval contains zero. Parent Influence results are displayed in Table 10.

Table 10: Independent Samples t-tests for Parent Influence by Greek Membership

<b>Greek Member</b>	<b>Mean</b>	<b>S.E.</b>	<b><i>p</i> Value</b>	<b>95% C.I.</b>
Sorority (n=312)	8.66	0.17	0.86	(-0.57, 0.48)
Non-Sorority (n=176)	8.71	0.20		

The SATAQ-3 was used to measure the amount of media influence on sorority and non-sorority women. An independent sample t-test was conducted to determine if significant differences existed between sorority and non-sorority women. Results indicate that a significant difference exists between the two groups ( $p = 0.024$ ), thereby indicating that body image perceptions of sorority women were more likely to be influenced by the media than for non-sorority women. Since the confidence interval for the mean difference in parent influence between groups does not contain zero, then there appears to be a significant difference between sorority and non-sorority women. The results for media influence are displayed in Table 11.

Table 11: Independent Samples t-tests for Media Influence by Greek Membership

	<b>Mean</b>	<b>S.E.</b>	<b><i>p</i> Value</b>	<b>95% C.I.</b>
Sorority (n=301)	94.22	0.87	0.024	(0.44, 6.24)
Non-Sorority (n=173)	90.88	1.22		

#### Research Question 4

4. Are sociocultural influences a strong predictor of negative body image perceptions?

An analysis was conducted to determine if any of the sociocultural influences (peer, parent, and media influences) were predictors of negative body image perceptions in sorority and non-sorority women. Data was analyzed using only those participants who scored in the high category of the EDI-3 Body Dissatisfaction scale: high EDI-3 scores ranged from 31-40.

Regression was used to associate peer, parent, and media influences with high EDI-3 BD scores. Results indicate that peer, parent, or media influences were not strong predictors of negative body image perceptions in sorority and non-sorority women. Results displayed in Table 12 indicate that peer ( $p = 0.23$ ), parent ( $p = 0.71$ ), and media influences ( $p = 0.46$ ) are not strong predictors of negative body image perceptions. The 95% confidence interval also justifies these results since each interval contains zero. Analysis results indicate that a prediction equation is not needed since none of the variables are significant.

Table 12: Multiple Regression of Sociocultural Influences on EDI-3 BD scores (31-40)

<b>Influence</b>	<b>Regression Coefficient</b>	<b>S.E. of Coefficient</b>	<b><i>p</i> Value</b>	<b>95% C.I.</b>
Peer Influence	0.18	0.14	0.23	(-0.119, 0.479)
Media Influence	0.018	0.02	0.46	(-0.030, 0.066)
Parent Influence	-0.058	0.15	0.71	(-0.366, 0.249)

## Summary

Results indicate that both sorority and non-sorority women are significantly influenced by sociocultural factors, especially peer and media influences, but not by parents. Data also shows that sorority women have lower BMI scores and higher body dissatisfaction scores when compared to their non-sorority counterparts. Analysis also indicates that sociocultural influences do not predict high EDI-3 body dissatisfaction scores. Chapter V contains a summary of the study, the implications for health education and public health, and recommendations for further study.

## CHAPTER 5

### DISCUSSION

The purpose of this study was to explore body dissatisfaction and other sociocultural factors as predictors of body image perceptions among sorority and non-sorority affiliated women and to determine the extent to which selected sociocultural influences (parental, peer, and media) are predictors of body dissatisfaction and body image perceptions. The subjects for this study were 502 college-aged women ( $N_{\text{sorority}} = 322$ ) and ( $N_{\text{non-sorority}} = 180$ ), between the ages of 18 and 22 from a mid-sized Southeastern university. This chapter contains a summary and discussion of the results, the limitations of the study, the implications for health education and public health, and recommendations for further study.

#### Summary and Discussion

The first question that was addressed by this study was whether significant differences exist in body image perceptions between sorority and non-sorority women. Data analysis revealed that sorority women reported higher amounts of body dissatisfaction as measured by the EDI-3 Body Dissatisfaction subscale. Results showed that sorority women had a mean EDI-3 Body Dissatisfaction score two points higher than their non-sorority counterparts. Although the results were statistically significant, no practical significance was found since scores for both sorority and non-sorority women fell within the moderate range. Similarly, Schulken et al. (1997) found that when sorority members were administered that Eating Disorders Inventory (EDI) and the Body Mass Index Silhouettes Survey they were more dissatisfied with their bodies and had a greater fear of becoming fat when compared to college-aged women from previous studies. In

contrast, Allison and Park (2003) found that when college-aged women were surveyed during their first, second, and third undergraduate years, that sorority women did not differ from non-sorority women in the EDI Body Dissatisfaction subscale. Alexander (1998) also found that sorority women did not significantly differ from non-sorority women on the Body Dissatisfaction subscale of the EDI.

The first question also measured perceptions through the use of the Body Image Assessment (BIA). The body image assessment was used to measure the difference between an individual's current and ideal body shapes as an indicator of body image perceptions. Results for this study indicate that there was a significant difference between sorority and non-sorority women and that sorority women were more dissatisfied with their body shape. These findings also correspond to results reported by Shulken et al. (1997) where 61% of sorority women selected underweight silhouettes as representing the size a woman should be and the size that she would like to be (81%).

Correlation analysis was also employed to further explore that relationship between Body Mass Index (BMI) scores and EDI -3 Body Dissatisfaction scores. Although the relationship between the two variables was significant, the correlation coefficient of 0.231 suggested that the relationship between BMI and body dissatisfaction is weak. With only 5.3% of the variance in the participant's EDI body dissatisfaction scores explained by BMI, results suggest that other factors greatly influence body dissatisfaction. A correlation analysis was also conducted to explore the relationship between BMI and BIA scores. A correlation coefficient of -0.409 was found, thus indicating a significant negative relationship. These results suggest that as individual BIA scores increase, indicating high body dissatisfaction, that BMI scores decrease.



Those women who have high body dissatisfaction have lower BMI scores. The  $r^2$  value of .167 indicated that only 16.7% of the variance in BIA discrepancy is explained by the variance in BMI scores. These results also suggest that perhaps BIA scores can also be explained by additional factors such as self-esteem, sociocultural influences, and eating attitudes.

Previous studies that have explored the relationship between body image perceptions and body dissatisfaction suggest that there is no significant difference between sorority and non-sorority women. Although this study found that there were statistically significant differences in body dissatisfaction and body image perceptions between the two groups with sorority women being more dissatisfied than their non-sorority counterparts, the significance does not appear to be practical since both groups fell within the moderate range.

The second question addressed by the study examined which factors influence body image perceptions among sorority and non-sorority women. Previous research has suggested that peer influence plays a major role in the lives of college-aged women. Crandell (1988) found that social pressures towards uniformity were more influential if the social group was made up of established friends and was valued. Paxton et al. (1999) also found that the similarity in body image concerns and weight loss behaviors was greater within friendship cliques than between friendship cliques for adolescent females. The present study explored which factors influenced body image perceptions among women and through the use of multiple regression found that peer and media influences significantly influence both sorority and non-sorority women. The results indicated that parents did not have a significant influence on their daughters.

Peer influence results presented in the current study are similar to findings published by Crandell (1988) who surveyed two college sororities and found that group norms were evident and that binge eating and other like behaviors could be acquired through modeling. Festinger (1954) found that group members are most likely to share attitudes and behaviors that are deemed important to the group and for young women the concept of the social ideal is of considerable societal importance (Griesz, Levine, & Murnen, 2002). As peer influence was demonstrated to be highly correlated with body image this can be explained by peer influences in dieting behaviors and perceptions of weight and weight loss.

Media influence results are similar to results found by Levine and Smolak (1996) and Stice (1994) who found that the mass media, particularly women's magazines, contribute to the development of body image disturbance and eating disorders by emphasizing the importance of beauty and external appearance in girls and women by making them issues such as identity and independence. Previous research also suggests that the link between media exposure and women may be mediated by the tendency to internalize messages regarding ideals for thinness and attractiveness (Heinberg & Thompson, 1995; Heinberg, Thompson, & Stormer, 1995).

The finding that parents did not influence body image perceptions in the current study are in direct contrast to several studies (Heinberg & Thompson, 1995 and Heinberg et. al. 1995) which found that the two main modes which affect body image include: 1) The effect of parents' own body image and eating behaviors on their own children, and 2) the influence of parents through their attitudes toward their children's weight, shape, and

diet. The results presented by the current study indicate that other factors affect the amount of parent influence on college-aged women.

The third question addressed in this research study determines whether sociocultural influences differ significantly for sorority or non-sorority women. Results indicate that sorority women were more influenced by peers and the media about their body image perceptions and neither group was influenced by parents in regards to their body image perceptions.

The findings are supported by previous studies regarding peer and media influences. Vaisman et al. (1996) found that the “group” atmosphere may encourage restrictive eating beyond the norm and Wertheim et al. (1997) found that friends or peer groups tend to be “potential sources of sub-cultural influence.” In regards to peer influence, Fang et al. (1998) found that friendship group members resemble one another in their attitudes about physical, social attributes—including attractiveness and behaviors. They are also substantiated by previous results that indicate that sorority women appear to be at risk for developing and maintaining negative body image perceptions and body dissatisfaction because social pressures towards uniformity—competition, emotional support, and disapproval—are most influential when the social group is valued and consists of established friendships (Crandell, 1988; Festinger, Schachter, & Black, 1950).

Results concerning media influences can be supported by previous studies regarding the media and college-aged women. Several correlational and survey studies have shown that there is an influence on magazine consumption, body image perceptions, and eating behaviors. A study in 1999 found that 68% of university women reported feeling worse about their physical appearance after reading women’s magazines. While,

33% of undergraduate women reported that fashion advertisements made them feel less satisfied with their appearance, and 50% reported that they wished they looked more like models in cosmetic advertisements (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999).

The fourth question addressed by the study asked if any of the sociocultural influences (peer, parent, and media) were strong predictors of negative body image perceptions in sorority and non-sorority women. Regression analysis was used to predict high EDI-3 body dissatisfaction from peer, parent and media influences. Results from the study indicated that that these sociocultural influences were not strong predictors of negative body image perceptions.

#### Limitations

The measures that were used to address the purpose of the study were somewhat limited. The two dependent variables that were used to measure body image perceptions and body dissatisfaction in sorority and non-sorority women were limited to the use of the EDI-3 body dissatisfaction subscale and the Body Image Assessment (BIA.). Additional measures would have allowed for a deeper understating of these behaviors.

As an independent variable, the BIA was limiting in that it did not categorize scores into positive and negative body image perceptions. In order to better assess body image perceptions through the use of a silhouettes survey, it is essential that a scale be used that groups scores into categories. The EDI-3 body dissatisfaction scale was used because of its reliability and its ability to classify individuals in to categories based on their level of body dissatisfaction. The EDI-3 body dissatisfaction subscale allows researchers to place participants into low, moderate, and high categories.

Peer and parent influences were limited to the Mother Influence Scale, Parent Involvement Scale, and Peer Dieting Scale Levine et al.(1994). The Mother Influence Scale and the Parent Involvement Scale were combined into four items addressing parent influence on weight and body size. The additional use of measures would have broadened the measurement of parents' influence on daughters weight, shape, and dieting behaviors. The Parent Involvement scale was chosen because it was created to assess the perceptions of parental attitudes and behaviors related to weight and shape. The Peer Dieting Scale consisted of five items addressing peer influence on weight, shape, and dieting behaviors. This item was chosen because it has proven to be a significant predictor of the investment in thinness, weight-management strategies, and eating disturbances.

Media influence was measured by the SATAQ-3. This measurement consisted on one set of 30 items. The SATAQ-3 is comprised of four dimensions of media influence: awareness, internalization, pressures, and information and it is also used to measure attitudes towards sports, athleticism, and exercise. The SATAQ-3 was chosen because previous research suggests that the link with media exposure may be mediated by a third variable, the tendency to internalize messages regarding ideals for thinness and attractiveness (Heinberg & Thompson, 1995; Heinberg, Thompson, & Stormer, 1995).

Sorority women were limited to participants from the five campus sororities. The sororities that participated in this study were traditionally white sororities. African American women were excluded from the study due to the low number of traditional African American sororities represented on campus.

## Conclusions

The following conclusions were drawn based on the results of this investigation and are presented by research question:

1. Sorority women scored significantly higher on the EDI-3 BD subscale than their non-sorority counterparts. Results indicate that sorority women are significantly more dissatisfied with their bodies.
2. Peer and media factors are associated with body image perceptions among sorority and non-sorority women. Results indicated that parent influence was not significant.
3. Sorority women are significantly influenced by peer and media factors when compared to non-sorority women. Both groups were not significantly influenced by parents.
4. Sociocultural influences (peer, parent, and media) are not significant predictors of negative body image perceptions for sorority and non-sorority women.

## Implications for Health Education and Public Health

Due to growing concerns in health education about college-aged women, body dissatisfaction and negative body image perceptions, the results of this study will be of value to all college women regardless of sorority membership and will allow college administrators and health educators to use the findings to plan and implement programs that address these issues.

It is important to increase the awareness of how body dissatisfaction and body image perceptions affect college women's attitudes and behaviors. The results of this

study will identify the differences that exist within the sorority environment that may contribute to negative body image perceptions and allow health educators to tailor educational programs to fit the needs of the group. Campus officials, such as resident hall directors and Greek life staff, could work collectively to educate college women about body image and body dissatisfaction.

#### Recommendations for Further Study

As stated in the significance of the study, the results of this study, should be of value of college-health educators, administrators, and other health care personnel who have contact with college-aged women. Because sorority women were significantly influenced by peers and media factors when compared to their non-sorority counterparts, programs that specifically target those issues would be beneficial. Currently, health education does not stress the importance of peer influences, especially within the college setting. The role of negative peer influence can be reversed to reflect the positive aspects of friendships, and peers can be powerful role models for healthy behaviors.

It is recommended that further studies focus on other influences within the sorority and non-sorority environments and that specific influences be further addressed. Future studies should also longitudinally examine the relationships of sorority and non-sorority women. Specific measures of body image perceptions should also be included in order to assess differences more accurately. Risk groups could also be identified according to certain cut-off variables and odds ratios could be calculated. As noted previously, this study examined the sociocultural influences (peer, media, and parent) on sorority and non-sorority women. Further studies should explore these influences at a greater depth.

## REFERENCES

- Abood, D.A. & Mason, M.A., (1997). Exploring the differences in body dissatisfaction and eating attitudes and behaviors. *American Journal of Health Studies*, 13 (3), 119-128.
- Abrams, K.K., Allen, L.R., & Gray, J.J., (1993). Disordered eating attitudes and behaviors, psychological adjustment, and ethnic identity: A comparison of black and white female college students. *International Journal of Eating Disorders*, 14, (1), 49-57.
- Alexander, L.A. (1998). The prevalence of eating disordered behaviors in sororities. *College Student Journal*, 32, 66-75.
- Allison, K.C. & Park, C.L. (2003). A prospective study of disordered eating among sorority and non-sorority women. *International Journal of Eating Disorders*.
- Atlas, G. & Morier, D. (1994). The sorority rush process: Self-selection, acceptance criteria, and the effect of rejection. *Journal of College Student Development*, 35, 346-353.
- Benedikt, R., Wertheim, E., & Love, A. (1998). Eating attitudes and weight-loss attempts in female adolescents and their mothers. *Journal of Youth and Adolescence*, 27, 43-57.
- Berkowitz, A. & Padavic, I., (1999). Getting a man or getting ahead. *Journal of Contemporary Ethnography*, 27 (4), 530-558.
- Berndt, T.J. & Keefe, K. (1995). Friends' influence on adolescents' adjustment to school. *Child Development*, 66, 1312-1329.
- Birch, L.L. (1990). Development of food acceptance patterns. *Developmental Psychology*, 26, 515-519.
- Brownell, K.D. (1991). Dieting and the search for the perfect body: Where physiology and culture collide. *Behavior Therapy*, 22,1-12.
- Burns, G.L. & Farina, A. (1992). The role of physical attractiveness in adjustment. *Genetic, Social, & General Psychology Monographs*, 118, 157-194
- Campbell, D.T. & Stanley, J.C. (1966). *Experimental and Quasi-Experimental Designs for Research*. Chicago, IL: Rand McNally College Publishing



- Carter, J.A. & Eason, J. (1983). The binge-ing and purging syndrome within a college environment: Bulimarexia. *College Student Journal*, 17 (2), 107-115.
- Cash, T.F. (2002). Beyond traits: Assessing body image states. In: T.F. Cash & T. Pruzinsky (Eds.), *Body Image : A Handbook of theory, research, and clinical practice* (pp.163-170). New York: Guilford.
- CDC (2005). BMI-Body Mass Index: BMI for adults. Retrieved September 28, 2006 from, <http://www.cdc.gov/nccdphp/dnpa/bmi/bmi-adult.htm>
- Cavior, N. & Lombardi, D.A. (1973). Developmental aspects of judgment of physical \ attractiveness in children. *Developmental Psychology*, 8, 67-71.
- Chickering, A.W. (1969). *Education and Identity*. San Francisco. Jossey-Bass.
- Chopak, J.S. (1987). Eating disorder attitudes and behaviors among female college Athletes (Doctoral dissertation, the Pennsylvania State University, 1987).
- Cohn, L.D. & Adler, N.E. (1992). Female and male perceptions of ideal body shapes: Distorted views among Caucasian college students. *Psychology of Women Quarterly*, 16:69-79.
- Crandell, C. (1988). Social cognition of binge eating. *Journal of Personality & Social Psychology*(4), 588-598.
- Cusumano, D.L. & Thompson, J.K. (1997). Body image and body shape ideals in magazine: Exposure, awareness and internalization. *Sex Roles*, 37, 701-721.
- Eder, E., Evans, C.C., & Parker, S. (1995) *School talk: Gender and adolescent culture*. New Brunswick , NJ: Rutgers University Press.
- Faith, M.S. & Allison, D.B. (1996). Assessment of pshycological status among obese persons. In J.K. Thompson (Ed.), *Body image, eating disorders, and obesity: An integrative guide for assessment and treatment* (pp. 365-387). Washington, DC: American Psychological Association.
- Fallon, A.E. (1990). Culture in the mirror: Sociocultural determinants of body image. In T.F. Cash & T. Pruzinsky (Eds.), *Body Images: Development, defiance, and change*(pp. 80-109). New York: Guilford Press.
- Fallon, A.E. & Rozin, P. (1985). Sex differences in perceptions of desirable body image. In T.F. Cash & T. Pruzinsky (Eds.), *Body images: Development, deviance, and change* (pp. 80-109). New York: Guilford Press.

- Fang, X.Y., Stanton, B., Li, X.M., Feigelman, S., & Baldwin, R. (1998). Similarities in sexual activity and condom use among friends within groups before and after risk reduction intervention. *Youth and Society*, 29, 431-450.
- Feldman, W., McGrath, P., & O'Shaughnessy, M. (1986). Adolescents' pursuit of thinness. *American Journal of Diseases of Childhood*. 140:294. Abstract.
- Festinger, L. (1954). A theory of social comparison process. *Human Relations*, 7, 117-140.
- Festinger, L., Schachter, S., & Black, K.W. (1950). *Social pressures of informal groups*. New York. Harper.
- Freedman, R. (1986). *Beauty Bound*. Lexington, MA:Heath
- Gardner, R.M. (2002). Body image assessment of children. In: T.F. Cash & T. Pruzinsky (Eds). , *Body Image: A handbook of theory, research, and clinical practice* (pp.127-134) New York: Guilford.
- Garner, D.M. (1991). *Eating Disorder Inventory-2: Professional Manual*. Odessa, FL: Psychological Assessment Resources.
- Garner, D.M. (1993). Pathogenesis of anorexia nervosa. *Lancet*, 341 (8861), 1631-1636.
- Garner, D.M. (1997). Plagued by body image issues? The results of a national survey show you're not alone. *Psychology Today*. Retrieved June 29, 2005, <http://cms.psychologytoday.com/articles.index>
- Garner, D.M. (2004). *Eating Disorder Inventory-3: Referral Form Manual*. Odessa, FL: Psychological Assessment Resources.
- Garner, D.M., Garfinkel, P.E., Schwartz, P.E., & Thompson, M. (1980). Cultural expectations of thinness in women. *Psychological Reports*, 47, 483-491.
- Garner, D.M., Garner, M.V., & Van Egeren, L.F. (1992). Body dissatisfaction adjusted for weight: The body illusion index. *International Journal of Eating Disorders*, 12, 163-272.
- Geckova, A. & van Dijk, J.P. (2001). Peer impact on smoking, alcohol consumption, drug use and sports activities in adolescents. *Studia Psychologica*, 43, 113-123.
- Griesz, L.M., Levine, M.P., & Murnen, S.K. (2002). The effect of experimental presentation of thin media images on body satisfaction: A meta-analytic review. *International Journal of Eating Disorders*, 31, 1-16.

- Guzman, A., (2003). The Prevalence of Eating Disordered Behaviors Among Sorority Versus Non-Sorority Women.
- Halmi, K.A. (1994). A multimodal model for understanding and treating eating disorders. *Journal of Women's Health*(6), 487-493.
- Harrison, K. & Cantor, J., (1997). The relationship between media consumption and eating disorders. *Journal of Communication*, 47 (1).
- Heinberg, L.J. (1996). Theories of body image: Perceptual, developmental, and sociocultural factors. In J.K. Thompson (Ed.), *Body Image, eating disorders, and obesity: An integrative guide to assessment and treatment* (pp. 27-48). Washington, DC: American Psychological Association.
- Heinberg, L.J. & Thompson, J.K. (1995). Body image and televised images of thinness and attractiveness: A controlled laboratory investigation. *Journal of Social and Clinical Psychology*, 7, 335-344.
- Heinberg, L.J., Thompson, J.K., & Stormer, S. (1995). Development and validation of the Sociocultural Attitudes Toward Appearance Questionnaire (SATAQ). *International Journal of Eating Disorders*, 17, 81-89.
- Hesse-Biber, S. (1989). Eating patterns and disorders in a college population: Are college women's eating problems a new phenomenon? *Sex Roles*, 20, 71-89.
- Hubbard, K., O'Neil, A. & Cheakalos, C. (1999). Out of Control. *People Weekly*, 51, 52-64.
- Irving, L.M. (1990). Mirror Images: Effects of the standard of beauty on the self-and body-esteem of women exhibiting varying levels of bulimic symptoms. *Journal of Social and Clinical Psychology*, 9, 230-232.
- Jones, D.C., Vigfusdotler, T.H., & Lee, Y. (2004). Body image and the appearance culture among adolescent girls and boys: An examination of friend conversations, peer criticism, appearance magazines, and the internalization of appearance ideals. *Journal of Adolescent Research*, 19, 323-338.
- Kalodner, C.R. (1997). Media Influences on male and female non-eating disordered college students: A significant issue. *Eating Disorders: The Journal of Treatment and Prevention*, 5, 47-57.
- Kelson, T.R., Kearney-Cooke, A. & Lansky, L.M. (1990). Body image and body

- beautification among college female students. *Perceptual and Motor Skills*, 71, 281-289.
- Klesges, R.C., Coates, T.J, Brown, G., Sturgeon-Tillish, J., Moldenhauer-Klesges, L.M., Holzer, B., Woolfrey, J., & Vollmer, J. (1983). Parental influences on children's eating behavior and relative weight. *Journal of Applied Behavior Analysis*, 16, 371-378.
- Lee, R.M., Keough, K.A., & Sexton, J.D. (2002). Social connectedness, social appraisal, and perceived stress in college men and women. *Journal of Counseling & Development*, 80, 355-361.
- Leichner, P. Arnett, L, Rallo, J., Srikameswaran, S., & Vulcano, B. (1986). An epidemiologic study of maladaptive eating attitudes in a Canadian school age population. *International Journal of Eating Disorders*, 5: 969-982.
- Levine, M.P. & Smolak, L.,& Hayden, H. (1994). The relation of sociocultural factors to eating attitudes and behaviors among middle school girls. *Journal of Early Adolescence*, 14, (4), 471-491.
- Levine, M.P. & Smolak, L. (1996). Media as a context for the development of disordered eating. In L. Smolak & M.P. Levine (Eds.), *The developmental psychopathology of eating disorders: Implication for research, prevention, and treatment*, 235-237. Mahwah, NJ: Erlbaum.
- Lindeman, A.K. (1999). Quest for ideal weight: Costs and consequences. *Medicine and Science in Sports Medicine*, 31, 1135-1140.
- Maloney, M. McGuire, J., Daniels, S., & Specker, B. (1989). Dieting behavior and eating attitudes in children. *Pediatrics*, 84: 482-487.
- Marsh, H.W. & Parker, J.W. (1984). Determinants of student self-concept: Is it better to be a relatively large fish in a small pond even if you don't learn to swim as well? *Journal of Personality and Social Psychology*, 47, 213-231.
- Meilman, P.W., Von Hippel, F.A., & Gaylor, M.S. (1991). Self-induced vomiting in college women: Its relation to eating, alcohol abuse and Greek Life. *Journal of American College Health*, 40, 39-41.
- Miller, D.T., Turnbull, W., & McFarland, C. (1988). Particularistic and universalistic

- evaluation in the social comparison process. *Journal of Personality and Social Psychology*, 55, 908-917.
- Mintz, L.B. & Betz, N.E., (1988). Prevalence and correlates of eating disordered behavior among undergraduate women. *Journal of Counseling Psychology*. 35, 463-471.
- Moreno, A. & Thelen, M.H. (1993). Parental factors related to bulimia nervosa, *Addictive Behaviors*, 18, 681-689.
- Mossavar-Rahmani, Y., Pelto, F., Ferris, A., & Allen, L. (1996). Determinants of body size perceptions and dieting behavior in a multiethnic group of hospital staff women. *Journal of the American Dietetic Association*, 96, 252-256.
- Murray, S.H., Touyz, S.W., & Beaumont, P.J.V. (1995). The influence of personal relationships on women's eating behavior and body dissatisfaction. *Eating Disorders: Journal of Treatment and Prevention*, 4, 33-46.
- National Eating Disorders Association. (2004). Fact sheet on eating disorders and body image. Seattle, WA.
- National Panhellenic Conference. (2006). Indianapolis, IN: Author available: <http://www.npcwomen.org> Retrieved May 30, 2006.
- Nelson, W.L. & Hughes, H.M. (1999). Anorexic eating attitudes and behaviors of male and female college students. *Adolescence*, 34 (135), 621-633
- Nemeroff, C.J., Stein, R.I., Diehl, N.S. & Smilack, K.M. (1994). From the Cleavers to the Clintons: Role choices and body orientation as reflected in magazine article content. *International Journal of Eating Disorders*, 16, 167-176.
- Neutens, J.J. & Rubinson, L. (1997). *Research techniques for the health sciences* (Second Edition). Needham Heights, MA: Allyn & Bacon.
- Nylander, I. (1971). The feeling of being fat and dieting in a school population. *Acta Medica Scandinavica*. 214: 17-26.
- Ogletree, S.M. Williams, S.W., Raffeld, P., Mason, B., & Frike, P. (1990). Female attractiveness and eating disorders: Do children's television commercials play a role? *Sex Roles*, 22, 791-797.
- Oliver, K. K. & Thelen, M.H. (1996). Children's perceptions of peer influence on eating concerns. *Behavior Therapy*, 27, 25-39.

- Paxton, S.J., Schutz, H.K., Wertheim, E.H., Muir, S.L. (1999). Friendship clique on body image concerns, dietary restraints, extreme weight loss behaviors, and binge eating in adolescent girls. *Journal of Abnormal Psychology*, 108, 255-266.
- Polivy, J. & Herman, C. (1995) Dieting and its relation to eating disorders. In: Brownell, K., Fairburn, C., (Eds.). *Eating Disorders and Obesity: A Comprehensive Handbook*. New York: Guilford; 1995: 83-86.
- Rabak-Wagener, J., Eickoff-Sheman, J., & Kelly-Vance, L., (1998). The effect of media analysis on attitudes and behaviors regarding body image among college students. *Journal of American College Health*, 47 (1), 29-36.
- Rodin, J., Silberstein, L.R., & Streigel-Moore, R.H. (1985). Women and weight: A normative discontent. In T.B. Sonderegger (Ed.), *Psychology and Gender: Nebraska Symposium on Motivation*, 1984 (pp. 267-307). Lincoln: University of Nebraska Press.
- Rozin, P. & Fallon, A. (1988). Body image, attitudes, weight, and misconceptions of figure preferences of the opposite sex: A comparison of men and women in two generations. *Journal of Abnormal Psychology*, 97, 342-345.
- Ruble, D.N. (1983). The development of social comparison processes and their role in achievement-related self-socialization. In E.T. Higgins, D.N. Ruble, and W.W. Hartup (Eds.), *Social Cognition and social development: A sociocultural perspective* (pp. 134-157). Cambridge, England: Cambridge University Press.
- Schulken, E.D., Pinciario, P. J., Sawyer, R.G., Jensen, J., & Hoban, M.T. (1997). Sorority women's body size perceptions and their weight-related attitudes and behaviors. *Journal of American College Health*, 46(2), 69-74.
- Schwartz, D.M., Thompson, M.G., & Johnson, C.L. (1981). Anorexia nervosa and bulimia: The socio-cultural context. *International Journal of Eating Disorders*, 1, 20-36.
- Silverstein, B., Perdue, L., Peterson, B., & Kelly, E. (1986). The role of the mass media in promoting a thin standard of bodily attractiveness for women. *Sex Roles*, 14, 519-532.
- Sloan, B. (2003). Extension Agents, Family and Consumer Sciences/Community Development. Ohio State University Fact Sheet.

- Stein, A. & Fairburn, C.G. (1989). Children of mothers with bulimia nervosa. *British Medical Journal*, 299, 777-778.
- Stewart, T.M. & Williamson, D.A. (2004). Assessment of body image disturbances. In: J.K. Thompson (Ed.), *Handbook of eating disorders and obesity*. (pp.495-514) New York: Wiley.
- Stice, E. (1994). Review of the evidence for a sociocultural model of bulimia nervosa and an exploration of the mechanisms of action. *Clinical Psychology Review*, 14, 1-29.
- Stice, E. (2001). A prospective test of the dual pathway model of bulimic pathology: Mediating effects of dieting and negative affect. *Journal of Abnormal Psychology*, 110, 124-135.
- Stice, E. & Agras, W.S. (1998). Predicting onset and cessation of bulimic behaviors during adolescence: A longitudinal grouping analysis. *Behavior Therapy*, 29, 257-276.
- Stice, E. & Shaw, H.E. (2002). Role of body dissatisfaction in the onset and maintenance of eating pathology: A synthesis of research findings. *Journal of Psychometric Research*, 53, 985-993.
- Stormer, S.M. & Thompson, J.K. (1996). Explanations of body image disturbance: A test of maturational status, negative verbal commentary, social comparison, and sociocultural hypothesis. *International Journal of Eating Disorders*, 19, 193-202.
- Striegel-Moore, R.H. & Kearney-Cooke, A. (1994). Exploring parents attitudes and behaviors about their children's physical appearance. *International Journal of Eating Disorders*, 15, 377-385.
- Streigel-Moore R.H., McAvay, G., & Rodin, J. (1986). Psychological and behavioral correlates of feeling fat in women. *International Journal of Eating Disorders*, 5, 935-947.
- Stuhldreher, W. & Ryan, W. (1999). Factors associated with distortion in body image perception in college women. *American Journal of Health Studies*. 15 (1)
- Tantleff-Dunn, S. & Thompson, J.K. (1998). Body image and appearance-related feedback: Recall, judgment, and affective response. *Journal of Social and Clinical Psychology*, 17, 319-340.

- Thelen, M.F. & Cromier, J.F. (1995). Desire to be thinner and weight control among children and their parents. *Behavior Therapy*, 26, 85-99.
- Thompson, J.K. (1992). Body image: Extent of disturbance, associated features, theoretical models, assessment methodologies, intervention strategies, and a proposal for a new DSM-IV diagnostic category-Body image disorder. In M. Hersen, R.M. Eisler, & P.M. Miller (Eds.) *Progress in behavior modification* (Vol. 28, pp. 3-54). Sycamore.
- Thompson, J.K. (1995). Assessment of body image. In D. Allison (Ed.), *Handbook of assessment methods for eating behaviors and weight related problems* (pp.119-148). Thousand Oaks, CA: Sage.
- Thompson, J.K. (1996). Assessing body image disturbance: Measures, methodology, and implementation. In: J.K. Thompson (Ed) , *Body image, eating disorders, and obesity: An integrative guide for assessment and treatment* (pp.49-81).
- Thompson, J.K. (2004). The (mis)measurement of body image: ten strategies to improve assessment of applied and research purposes. *Body Image*, 1, 7-14.
- Thompson, J.K., Coovert, M.D., & Stormer, S.M. (1999). Body image, social comparison, and eating disturbance: A covariance structure modeling investigation. *International Journal of Eating Disorders*, 26, 43-51.
- Thompson, J.K. & Gardner, R.M. (2002). Measuring perceptual body image among adolescents and adults. In T.F. Cash and T. Pruzinsky (Eds.), *Body image: A handbook of theory, research, and clinical practice* (pp.135-141). New York: Guilford.
- Thompson, M.A. & Gray, J.J. (1995). Development and validation of a new body image assessment scale. *Journal of Personality Assessment*, 64(2), 258-269.
- Thompson, J.K., Heinberg, L.J., Altabe, M., & Tantleff-Dunn, S.T. (1999). *Exacting Beauty: Theory, Assessment, and Treatment of Body Image Disturbance*. *American Psychological Association*.
- Thompson, J.K. & van den Berg, P. (2002). Measuring body image attitudes among adolescents and adults. In: T.F. Cash and T. Pruzinsky (Eds.), *Body image: A handbook of theory, research, and clinical practice* (pp.142-154). New York: Guilford.



- Thompson, J.K., van den Berg, P., Roehrig, M., Guarda, A.S., & Heinberg, L.J. (2004). The Social Attitudes Towards Appearance Scale-3 (SATAQ-3): Development and Validation.
- U.S. Department of Health & Human Services (2006). Womenshealth.gov Loving your body inside and out. Retrieved October 13, 1006 from: <http://www.4women.gov/bodyimage/>
- Vaisman, N., Voet, H., Akivis, A., & Sivener, I. (1996). Weight perception of adolescent dancing school students. *Archives of Pediatrics and Adolescent Medicine*, 150, 187-190.
- Waller, G., Hamilton, K., & Shaw, J. (1992). Media Influences on body size estimation in eating disordered and comparison subjects. *British Review of Bulimia and Anorexia Nervosa*, 6, 81-87.
- Walsh, B.T. & Devlin, M.J., (1998). Eating disorders: progress and problems. *Science*, 280 (5368), 1387-1391.
- Wertheim, E.H., Paxton, S.J., Shutz, H.K., & Muir, S.L. (1997). Why do adolescent girls watch their weight? An interview study examining sociocultural pressures to be thin. *Journal of Psychosomatic Research*, 42, 345-355.
- Wilcox, M. & Sattler, D.N. (1996) The relationship between eating disorders and depression. *Journal of Social Psychology*, 136, 269-271.
- Williamson, D.A., Davis, C.J., Goreczny, A.J., & Blouin, D.C. (1989). Body image disturbances in bulimia nervosa: Influences of actual body size. *Journal of Abnormal Psychology*, 98, 97-99.
- Williamson, D.A., Davis, C.J., Bennet, S.M., Goreczny, A.J., & Gleaves, D.H. (1989). Development of a simple procedure for assessing body image disturbances. *Behavioral Assessment*, 11, 433-446.
- Wilson, N.L. & Blackhurst, A.E., (1999). Food advertising and eating disorders: Marketing Body dissatisfaction, the drive for thinness, and dieting in women's magazines. *Journal of Humanistic Counseling*, 38 (2), 111-122.
- Wiseman, C.V. Gray, J.J., Mosimann, J.E., & Ahrens, A.H. (1992). Cultural expectations for thinness in women: An update. *International Journal of Eating Disorders*, 11, 85-89.

Wood, J.V. (1989). Theory and research concerning social comparisons of personal attributes. *Psychological Bulletin*, 106, 231-248.

## APPENDICES

APPENDIX A  
INFORMED CONSENT FORM



JIANN-PING HSU SCHOOL OF PUBLIC HEALTH

**INFORMED CONSENT**

My name is Kiley Winston and I am a Master's degree candidate in the Jiann-Ping Hsu School of Public Health here at Georgia Southern University. I am conducting my Masters thesis entitled "Body Dissatisfaction and Other Sociocultural Factors As Predictors of Body Image and Body Dissatisfaction In Sorority and Non-Sorority Women." The purpose of this study is to investigate the differences in body image perceptions among college-aged women and examine the personal and environmental factors that contribute to body image perceptions.

Participation in this research will include the completion of a survey that contains statements and questions relevant to the beliefs and attitudes concerning one's self-image and body perceptions. The survey will also include demographic information. There are no known risks to participating in this study. By participating in this study, you will be helping researchers to understand the differences in body image perceptions among college-aged women and help to explain the personal and environmental influences with them. You will also help the community by allowing researchers to better understand the level of body image perceptions that women in the general college population display.

The completion to the survey instrument will take approximately 20 minutes to complete and this study will be conducted from September 1, 2005 until its completion. Results from the survey will be kept confidential and as a participant, your confidentiality will be ensured. As participants, you have the right to ask questions and have those questions answered. If you have questions about this study, please contact the researcher named above or the researcher's faculty advisor, whose contact information is located at the end of the informed consent.

For questions concerning your rights as a research participant, contact Georgia Southern University Office of Research Services and Sponsored Programs at 912-486-7758. Please note that you do not have to participate in this research and that you may end your participation at any time by. You also do not have to answer any questions they do not want to answer. There is no penalty for deciding not to participate in this study. You must be 18 years of age or older to consent to participate in this research study. If you consent to participate in this research study and to the terms above, please sign your name and indicate the date below.

**You will be given a copy of this consent form to keep for your records.**

**Title of Project:** “Body Dissatisfaction and Other Sociocultural Factors As Predictors of Body Image and  
Body Dissatisfaction In Sorority and Non-Sorority Women”

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\_\_\_\_\_  
Participant Signature

\_\_\_\_\_  
Date

I, the undersigned, verify that the above informed consent procedure has been followed.

\_\_\_\_\_  
Investigator Signature

\_\_\_\_\_  
Date

APPENDIX B  
INSTRUMENT

**Background Information**

The following items ask about your background and status in school. Please answer the following questions honestly and to the best of your ability.

1. What is your age? \_\_\_\_\_
2. Which best describes your classification in school?  
Freshman\_\_\_\_\_ Sophomore\_\_\_\_\_ Junior\_\_\_\_\_ Senior\_\_\_\_\_
3. Which ethical/racial group do you identify?  
Black\_\_\_\_\_ Asian\_\_\_\_\_ White\_\_\_\_\_ Hispanic\_\_\_\_\_ Pacific Islander\_\_\_\_\_  
Alaskan Native\_\_\_\_\_ Native American\_\_\_\_\_ Multiracial\_\_\_\_\_ Other\_\_\_\_\_
4. Are you currently a member of a Greek women's organization (sorority)?  
Yes\_\_\_\_\_ No\_\_\_\_\_
5. What is your father's highest grade/level of education? (Circle the highest grade or level that your father has completed)

Elementary School   Middle/Junior High School   High School   Trade/Tech School   College   Grad School  
1 2 3 4 5                    6 7 8                    9 10 11 12   1 2                    1 2 3 4   1 2 3 4+

6. What is your mother's highest grade/level of education? (Circle the highest grade or level that your mother has completed)

Elementary School   Middle/Junior High School   High School   Trade/Tech School   College   Grad School  
1 2 3 4 5                    6 7 8                    9 10 11 12   1 2                    1 2 3 4   1 2 3 4+

7. What is the combined yearly income of your mother and father?  
\_\_\_\_\_ Below \$20,000    \_\_\_\_\_ \$20,000-\$30,000    \_\_\_\_\_ \$30,000-\$50,000  
\_\_\_\_\_ \$50,000-70,000    \_\_\_\_\_ \$70,000-\$90,000    \_\_\_\_\_ Above \$90,000

8. What is your current height (in feet)? \_\_\_\_\_
9. What is your current weight (in lbs.)? \_\_\_\_\_

The next set of items asks about your mother's and father's attitudes and beliefs concerning weight and weight related behaviors. For each question, circle the number that you believe is true for you.

0	1	2	3	4
Not Applicable	Not At All Important	Important	Somewhat Important	Very Important

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 10. How concerned is your mother about whether you weigh too much or are too fat or might become too fat? | 0 | 1 | 2 | 3 | 4 |
| 11. How concerned is your father about whether you weigh too much or are too fat or might become too fat? | 0 | 1 | 2 | 3 | 4 |
| 12. How important is it to your mother that she be as thin as possible?                                   | 0 | 1 | 2 | 3 | 4 |
| 13. How important is your mother's physical appearance (shape, weight, and clothing) to her?              | 0 | 1 | 2 | 3 | 4 |

This set of questions asks you to think about those women who you socialize with and whose opinions and friendships matter. There are no right or wrong answers to these questions. We are interested in your opinion and your sense of how things are. In answering the following questions, think only of your female friends.

0	1	2	3	4
None	A Few	About Half	Most	All

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 14. About how many of your friends would like to be thinner?                                 | 0 | 1 | 2 | 3 | 4 |
| 15. How many of your friends are "on a diet" to try to lose weight or slow down weight gain? | 0 | 1 | 2 | 3 | 4 |
| 16. How often do you and your friends talk about weight, weight loss, and dieting?           | 0 | 1 | 2 | 3 | 4 |
| 17. Other people notice right off the bat what's wrong with my body                          | 0 | 1 | 2 | 3 | 4 |
| 18. People think that I am unattractive.   | 0 | 1 | 2 | 3 | 4 |

The following items related to your attitudes towards appearance. Please read each of the following items and circle the number that best reflects your agreement with each statement.

1                      2                      3                      4                      5  
 Definitely Disagree   Mostly Disagree   Neither Agree Nor Disagree   Mostly Agree   Definitely Agree

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 19. TV programs are an important source of information about fashion and “being attractive.”           | 1 | 2 | 3 | 4 | 5 |
| 20. I’ve felt pressure from TV or magazines to lose weight.  | 1 | 2 | 3 | 4 | 5 |
| 21. I do not care if my body looks like the body of people who are on TV.                              | 1 | 2 | 3 | 4 | 5 |
| 22. I compare my body to the bodies of people who are on TV.   | 1 | 2 | 3 | 4 | 5 |
| 23. TV commercials are an important source of information about fashion and “being attractive.”        | 1 | 2 | 3 | 4 | 5 |
| 24. I do not feel pressure from TV or magazines to look pretty.  | 1 | 2 | 3 | 4 | 5 |
| 25. I would like my body to look like the models who appear in magazines.                              | 1 | 2 | 3 | 4 | 5 |
| 26. I compare my appearance to the appearance of TV and movie stars.                                   | 1 | 2 | 3 | 4 | 5 |
| 27. Music videos on TV are not an important source of information about fashion and being attractive.  | 1 | 2 | 3 | 4 | 5 |
| 28. I’ve felt pressure from TV and magazines to be thin.   | 1 | 2 | 3 | 4 | 5 |
| 29. I would like my body to look like the people who are in the movies.                                | 1 | 2 | 3 | 4 | 5 |
| 30. I do not compare my body to the bodies of people who appear in magazines.                          | 1 | 2 | 3 | 4 | 5 |
| 31. Magazine articles are not an important source of information about fashion and “being attractive.” | 1 | 2 | 3 | 4 | 5 |
| 32. I’ve felt pressure from TV or magazines to have a perfect body.                                    | 1 | 2 | 3 | 4 | 5 |
| 33. I wish I looked like the models in music videos.   | 1 | 2 | 3 | 4 | 5 |
| 34. I compare my appearance to the appearance of people in magazines.                                  | 1 | 2 | 3 | 4 | 5 |



- |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| 35. Magazine advertisements are an important source of information about fashion and“being attractive.” | 1 | 2 | 3 | 4 | 5 |   |
| 36. I've felt pressure from TV or magazines to diet.  |   | 1 | 2 | 3 | 4 | 5 |
| 37. I do not wish to look as athletic as the people in magazines.                                       |   | 1 | 2 | 3 | 4 | 5 |
| 38. I compare my body to that of people in“good shape.”   | 1 | 2 | 3 | 4 | 5 |   |
| 39. Pictures in magazines are an important source of information about fashion and being attractive. .  |   | 1 | 2 | 3 | 4 | 5 |
| 40. I've felt pressure from TV or magazines to exercise.  |   | 1 | 2 | 3 | 4 | 5 |
| 41. I wish I looked as athletic as sports stars.  |   | 1 | 2 | 3 | 4 | 5 |
| 42. I compare my body to that of people who are athletic.   |   | 1 | 2 | 3 | 4 | 5 |
| 43. Movies are an important source of information about fashion and“being attractive.”                  | 1 | 2 | 3 | 4 | 5 |   |
| 44. I've felt pressure from TV or magazines to change my appearance.                                    |   | 1 | 2 | 3 | 4 | 5 |
| 45. I do not try to look like the people on TV.   |   | 1 | 2 | 3 | 4 | 5 |
| 46. Movie stars are not an important source of information about fashion and“being attractive.”         |   | 1 | 2 | 3 | 4 | 5 |
| 47. Famous people are an important source of information about fashion and“being attractive.”           |   | 1 | 2 | 3 | 4 | 5 |
| 48. I try to look like sports athletes.   |   | 1 | 2 | 3 | 4 | 5 |

The following items are related to your feelings about your body. Please read each of the following items and circle the number that best reflects your agreement with each statement.

- |   | 1      | 2       | 3     | 4         | 5      | 6     |   |   |   |   |
|---|--------|---------|-------|-----------|--------|-------|---|---|---|---|
|   | Always | Usually | Often | Sometimes | Rarely | Never |   |   |   |   |
| 49. I think that my stomach is too big.             |        |         |       |           | 1      | 2     | 3 | 4 | 5 | 6 |
| 50. I think that my thighs are too large.           |        |         |       |           | 1      | 2     | 3 | 4 | 5 | 6 |
| 51. I think that my stomach is just the right size. |        |         |       |           | 1      | 2     | 3 | 4 | 5 | 6 |
| 52. I feel satisfied with the shape of my body.     |        |         |       |           | 1      | 2     | 3 | 4 | 5 | 6 |
| 53. I like the shape of my buttocks.                |        |         |       |           | 1      | 2     | 3 | 4 | 5 | 6 |

- |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| 54. I think my hips are too big.                    | 1 | 2 | 3 | 4 | 5 | 6 |
| 55. I feel bloated after eating a normal meal.      | 1 | 2 | 3 | 4 | 5 | 6 |
| 56. I think that my thighs are just the right size. | 1 | 2 | 3 | 4 | 5 | 6 |
| 57. I think my buttocks are too large.              | 1 | 2 | 3 | 4 | 5 | 6 |
| 58. I think that my hips are just the right size.   | 1 | 2 | 3 | 4 | 5 | 6 |

The silhouettes survey is designed to assess body size perceptions. Silhouettes concerning your perceived body image, your actual body image, and the body image you hope to maintain will be selected.

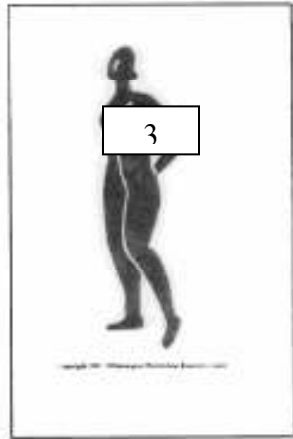
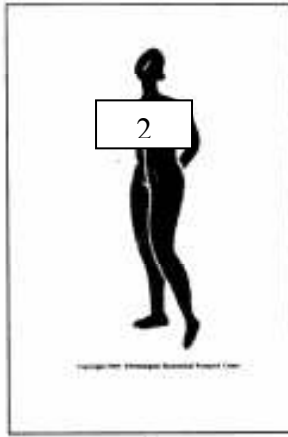
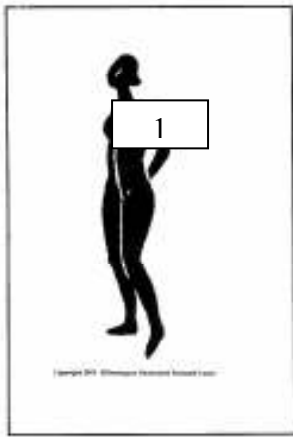
59. Select the silhouette that most accurately depicts your body size as you perceive it to be.

Indicate the corresponding number. \_\_\_\_\_

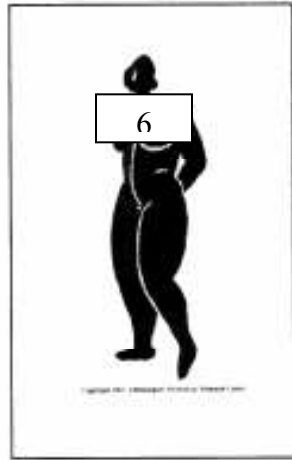
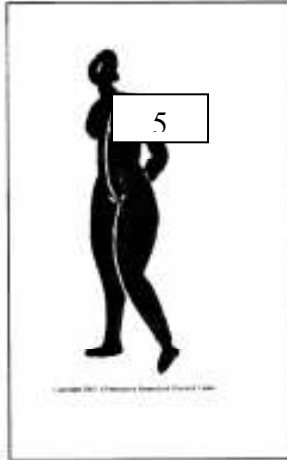
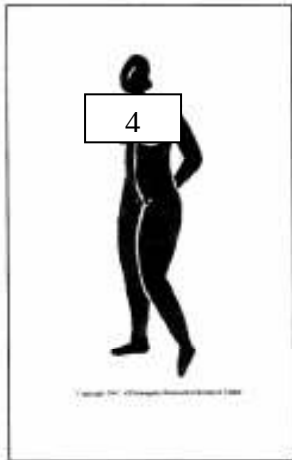
60. Select the silhouette that most accurately depicts the body size that you would most prefer.

Indicate the corresponding number \_\_\_\_\_.

61. Select the silhouette that represents a body size that you believe is realistic for you to maintain over a long period of time. Indicate the corresponding number. \_\_\_\_\_



5



7

8

9

APPENDIX C  
LETTER TO PROFESSORS  
*Body Dissatisfaction and Other Sociocultural Factors as Predictors  
Of Body Image and Body Dissatisfaction in Sorority and Non-Sorority Females*  
Georgia Southern University  
Jiann Ping-Hsu College of Public Health  
Faculty Advisor: Dr. Joanne Chopak-Foss

Dear Sir or Madam,

I am writing this letter to request your assistance in my research study. I am currently working on my thesis for the Masters of Public Health program here at Georgia Southern University. My study will examine body dissatisfaction and body image perceptions in college women. I am interested in sociocultural predictors of body image and body dissatisfaction.

The survey would be distributed and completed within the first few/last minutes of one of your class meetings. I am requesting your permission to recruit participants during one of your class meetings by administering the survey.

Participation in this study is strictly voluntary and the survey will take approximately 10 minutes to complete.

If you could please email me with the best day and time for me to survey your class, I would greatly appreciate it.

Thank you for your time and assistance. If you have any questions, please don't hesitate to call: (912) 871-3244 or (912) 486-7077, or email me at [KileyWins@aol.com](mailto:KileyWins@aol.com)

Sincerely,

Kiley E. Winston

APPENDIX D  
LETTER TO SORORITY PRESIDENTS  
*Body Dissatisfaction and Other Sociocultural Factors as Predictors  
Of Body Image and Body Dissatisfaction in Sorority and Non-Sorority Females*  
Georgia Southern University  
Jiann Ping-Hsu College of Public Health  
Faculty Advisor: Dr. Joanne Chopak-Foss

Dear \_\_\_\_\_,  
(Name of sorority President)

I am writing this letter to request your assistance in my research study. I am currently working on my thesis for the Masters of Public Health program here at Georgia Southern University. My study will examine body dissatisfaction and body image perceptions in college women. I am interested in sociocultural predictors of body image and body dissatisfaction. Having been a sorority woman myself and an instructor on this campus, I know that there are a variety of body image concerns within the college environment.

The survey would be distributed and completed within the first few/last minutes of one of your chapter meetings. I am requesting your permission to recruit participants during one of your chapter meetings by administering the survey.

Participation in this study is strictly voluntary and the survey will take approximately 10 minutes to complete.

If you could please email me with the best day and time for me to survey your chapter or group members, I would greatly appreciate it.

Thank you for your time and assistance. If you have any questions, please don't hesitate to call: (912) 871-3244 or (912) 486-7077, or email me at [KileyWins@aol.com](mailto:KileyWins@aol.com)

Sincerely,

Kiley E. Winston

APPENDIX E  
IRB FORMS

GEORGIA SOUTHERN UNIVERSITY IRB  
EXEMPT STATUS QUESTIONNAIRE

P.O. Box 8005912-681-5465      Statesboro, GA 30460  
<http://academics.georgiasouthern.edu/research/>

**For electronic submission:** Complete Exempt Status Questionnaire and “Save As” a word document to your computer or disk named “exemptapp\_yourlastname, First initial.doc”. Then, complete the [Cover Page](#) and follow its instructions for saving the document. After both the Exempt Status Questionnaire and Cover Page are completed and saved, return to the [Forms](#) webpage to submit them to the IRB.

*This questionnaire should be completed if you feel that your research satisfies the federal guidelines that would make it exempt from full or expedited IRB review. Please note that you must also complete the IRB Cover Sheet, and provide a summary of the research protocol. If the IRB decides that the investigation is exempt from full or expedited review, it will not be necessary for you to complete the IRB’s Proposal Narrative and Informed Consent Checklist.*

**Please attach an IRB Cover Sheet to the top of this form and submit to the IRB Office. Also be sure to write brief summary of the research protocol in one page or less in the space below.**

I will be   X   collecting,        receiving these samples OR,        sending these samples or data outside of GSU. (Check all that apply)

**Title of Study:**

---

**Does the study meet the following criteria?**

YES	N O  X	Does the research involve the collection or study of <i>existing data</i> , documents, records, pathological specimens, or diagnostic specimens?  <i>Existing Data: means that all the data, documents, records, or specimens are in existence prior to IRB Review. Specimens obtained prospectively from future discarded clinical samples do not qualify for exempt review.(1)</i>
YES  X	N O	Data sources are publicly available; if not, the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects (i.e. social security #s, account #s, history #s, pathology accession #s, initials, date of birth). <i>(2) If both 1&amp;2 checked: 45CFR46.101(b)(4)</i>

YES X	N O	Does the research involve the use of educational tests, survey procedures, interview procedures or observation of public behavior <u>and</u> is the data/information recorded in a manner so that human subjects cannot be identified, directly or through identifiers linked to the subjects such that any disclosure of the human subjects' responses outside the research could not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability or reputation <i>45CFR46.101(b)(2)</i>
YES	N O X	Is the research intended to assess the effectiveness of mandated educational or instructional procedures or otherwise used for program evaluation.
YES X	N O	Are the samples or data being collected for the sole purposes of this study?
YES	N O X	Are the samples or data collected by a third party and stored in a facility that will not break the code, even upon the request of a family member/ or medical emergency?

**Please answer the following two questions to the best of your ability.**

YE S	N O X	Is the <u>probability</u> of the harm or discomfort anticipated in the proposed research greater than that encountered ordinarily in daily life or during the performance of routine physical or psychological examinations or tests?
YE S	N O X	Is the <u>magnitude</u> of the harm or discomfort greater than that encountered ordinarily in daily life, or during the performance of routine physical or psychological examinations or tests?

**Does this study involve any of the following?**

YES	NO X	Non-hereditary genetic research in which samples are linked/coded or identifiable
YES	NO X	Hereditary genetic research
YES	NO X	Prisoners, Fetuses, Pregnant Women, Cognitively/Mentally Impaired, Students/Employees/ Under 18 years of age (Circle all that apply)
YES	NO	Human in-vitro fertilization (any fertilization of human ova which occurs outside the body of a female)
YES	NO X	Surveys or interviews given to minors
YES	NO X	Any procedures that may cause a subject either physical or psychological discomfort or is perceived as harassment above and beyond what the person would experience in daily life
YES	NO X	Deception
YES	NO	Observation of minors if the investigator participates in the activities

	X	being observed unless there is a federal statute covering the activity
YES	NO	The study of a rare trait/disorder such that there is some risk of exposing the identity of sample donors or the research poses risk of community or cultural harm
	X	

**1. How do you plan to access the targeted subject population?**

Georgia Southern students will be recruited to participate in research. Specifically, women enrolled in selected core classes during the fall semester will be invited. Sorority women will also be invited to participate through their respective groups and organizations.

**2. Please provide a brief summary of the study and a description of the research protocol (chronologically progressed).**

The study will examine the body image perceptions of sorority and non-sorority women. Prior to survey administration, a brief introduction will be given. Participants will be assured that their participation is voluntary and their anonymity will be assured.

**3. What kind of human samples (e.g. tissue, blood) or data will be obtained?**

**4. Informed Consent**

*Exempt research is not subject to federal regulations contained in 45 CFR 46, which include requirements for informed consent. Therefore, if the research is eligible for exemption, then “technically” informed consent is not required. It is up to the investigator to decide whether or not consent should be obtained and documented. Often the investigator will provide a letter of explanation or even a consent form. Again, this is not required, but may be the appropriate thing to do to ensure the rights and welfare of the subjects.*

**If you plan to provide a Consent Form or letter, please submit it along with this form.**

**If a questionnaire or interview will be done, please attach a copy of the questions.**

---

**Principal Investigator (printed)  
Date**

---

**Principal Investigator (Signature)**



**For Use by IRB Office Only**

Exempt Status Approved Yes No IRB Chair/Vice  
 Chair \_\_\_\_\_ Date \_\_\_\_\_

## Cover Page

### Georgia Southern University Institutional Review Board

**For electronic submission: Your proposal narrative should already be completed and saved. Next complete cover page and “Save As” a word document to your computer or disk named “Coverpage\_Year\_Month\_Date\_lastname, First initial.doc”. Then open and complete Informed Consent Checklist.**

*Application for Research Approval*

Name of Principal Investigator: Kiley E. Winston	Email: KileyWins@aol.com	<b>For Office Use Only:</b>  IRB ID _____ Date Received _____  <b>BY</b> _____
Phone: (912) 871-3244	Address: 211 Lanier Dr. Apt. 212 Statesboro, GA	
Department: Jiann-Ping Hsu School of Public Health	30458	
	Project Start Date: 05/25/05 Project End Date: 07/01/06	
*Date of IRB education completion: _____ (attach copy of completion certificate)		
Check one: <input checked="" type="checkbox"/> Student <input type="checkbox"/> Faculty/Staff <b>If student project please complete advisor’s information below:</b>		
Advisor’s Name: Joanne Chopak-Foss, Ph.D	Advisor’s email: jchopak@georgiasouthern.edu	
Advisor’s phone: (912)871-1530	P.O. Box: 8076	

Department: Jiann-Ping Hsu School of Public Health	<b>All applicants please complete all fields below:</b>	
<b>Project Information:</b>		
Title: Body Dissatisfaction and Other Sociocultural Factors As Predictors of Body Image Dissatisfaction in Sorority and Non-Sorority Females		
Project Duration (in months): 10 months	Number of Participants: 300-1500	
Brief (less than 50 words) Project Summary: The purpose of this study is to explore body image perceptions and body dissatisfaction among college-aged sorority and non-sorority women. Goals of this study include: Determining if sorority women have negative body image perceptions and body dissatisfaction when compared to their non-sorority counterparts and determining the sociocultural factors and other influences of body image perceptions.		
<b><i>Please fill in if applicable:</i></b>		
Name of Georgia Southern or External Funding Source:		
Personnel and/or Institutions Outside of Georgia Southern University:		
<b>Compliance Information:</b>		
<i>Please indicate if the following are included in the study:</i>	<b>IRB Use Only</b>	
<input checked="" type="checkbox"/> Informed Consent Document <input type="checkbox"/> Greater than minimal risk <input type="checkbox"/> Research Involving Minors <input type="checkbox"/> Deception <input checked="" type="checkbox"/> Generalizable knowledge (results are intended to be published) <input checked="" type="checkbox"/> Survey Research <input type="checkbox"/> At Risk Populations (prisoners, children, pregnant women, etc) <input type="checkbox"/> Video or Audio Tapes <input type="checkbox"/> Medical Procedures, including exercise, administering drugs/dietary supplements, and other procedures	Type of Review ( ) Full Board ( ) Expedited ( ) Exempt  1 <sup>st</sup> Reviewer: X: _____ Date: _____  2 <sup>nd</sup> Reviewer: X: _____ Date: _____	
<b>NOTE:</b> <i>All</i> thesis and dissertation work by definition is to create generalizable knowledge.	<b>IRB Use Only Comments:</b>	
<u>Signature of</u>  <u>Applicant</u>  X:	Date:	

<p style="text-align: center;"><u>Signature of</u></p> <p><u>Advisor(if student)</u></p> <p><u>/ Dept. Chair(if</u></p> <p style="text-align: center;"><u>faculty)</u></p> <p>X:</p>	<p>Date:</p>
--	--------------

Please submit this protocol electronically to the Georgia Southern University Institutional Review Board, c/o The Office of Research Services & Sponsored Programs, P.O. Box 8005. The application should contain a summary of the project, informed consent form(s), instruments, questionnaires, etc. Questions or Comments can be directed to 486-7758 or [oversight@georgiasouthern.edu](mailto:oversight@georgiasouthern.edu)

**For electronic submission: First complete the proposal narrative in entirety and “Save As” a word document to your computer or disk named “propnarr\_Year\_Month\_Date\_lastname, First initial.doc”. Then open and complete Cover page.**

*Please respond to the following as briefly as possible, but keep in mind that your responses will affect the actions of the Board. Clearly label your responses in sections that correspond to the specific information requested. You may insert your responses in each section on this page, leaving a space between the question and your answers. Narrative should not exceed 4 pages.*

The application should be submitted electronically or 2 duplicate copies sent to the Office of Research Services and Sponsored Programs, at P. O. Box 8005, Statesboro, GA 30460, and should contain, in this order: a signed cover page, the informed consent checklist page, the project proposal narrative, and the informed consent that you will use in your project. Additional information, such as copies of survey instruments, advertisements, or any instruments used to interact with participants should be attached at the end of the proposal clearly designated as an Appendix.

**Personnel.** Please list any individuals who will be participating in the research beyond the PI and advisor. Also please detail the experience, level of involvement in the process and the access to information that each may have.

Georgia Southern students will be recruited to participate in this research. Specifically, women enrolled in selected core classes during the fall semester will be invited to participate. Sorority women will also be invited to participate through their respective organizations. Prior to survey administration, a brief introduction will be given. Participants will be assured that their participation is voluntary and anonymity will be guaranteed. Any questions that the participants may have regarding the study will be fully addressed.

**Purpose.** 1. Briefly describe in one or two sentences the purpose of your research. 2. What questions are you trying to answer in this experiment? Please include your hypothesis in this section. The jurisdiction of the IRB requires that we ensure the appropriateness of research. It is unethical to put participants at risk without the possibility of sound scientific result. For this

reason, you should be very clear on how participants and others will benefit from knowledge gained in this project. 3. What current literature have you reviewed regarding this topic of research? How does it help you to frame the hypothesis and research you will be doing?

The purpose of this study is to examine body dissatisfaction and other sociocultural factors that influence body image and body dissatisfaction among sorority and non-sorority women. The questions that will be answered in this study include the following:

1. Do body image perceptions significantly predict body dissatisfaction among college-aged women?
2. Do sociocultural factors influence body image perceptions and body dissatisfaction among college-aged women?
3. Do significant differences exist in body image perceptions and body dissatisfaction between sorority and non sorority women?
4. Are sorority women at risk for negative body image perceptions due to specific sociocultural factors inherent in group membership in a sorority.

Hypothesis: Sorority women will have more negative body image perceptions and a higher level of body dissatisfaction than their non-sorority counterparts.

Participants and others will benefit from this study in the following ways: There will be more information pertaining to body image perceptions and their potential to lead to eating disordered behaviors in college aged sorority and non-sorority women. By becoming more aware of eating disordered behaviors and low body image perceptions, the University and the community will benefit from this study.

Literature regarding college women, sororities, dietary patterns, body image and eating disordered behaviors have been reviewed. Past research suggests that college women are at risk for developing low body image perceptions. Research also suggests that sorority women are at a greater risk due to environmental factors such as sociocultural influences and group affiliation.

**Describe your subjects.** Give number of participants, approximate ages, gender requirements (if any).

Describe how they will be recruited, how data will be collected (i.e., will names or social security numbers be collected, or will there be any other identification process used that might jeopardize confidentiality?), and/or describe any inducement (payment, etc.) that will be used to recruit subjects. Please use this section to justify how limits and inclusions to the population are going to be used and how they might affect the result (in general).

300 to 1500 females will be recruited to participate in this study. Subjects for this study will be comprised of college-aged women between the ages of 18 and 22 years of age. Participants will be recruited in the classroom and sorority settings. Sorority chapters will be contacted via letters and e-mails. Surveys containing demographic information and sorority affiliation along with appropriate instruments will be administered to participants. Eagle ID numbers, social security numbers, and names will not be collected and participants will be assured anonymity and confidentiality.

**Methodology (Procedures).** Enumerate specifically what will you be doing in this study, what kind of experimental manipulations you will use, what kinds of questions or recording of behavior you will use. If appropriate, attach a questionnaire to each submitted copy of this proposal. Describe in detail any physical procedures you may be performing.

This study will employ a quantitative, quasi-experimental design. The methodology will include the administration of survey questions to both sorority and non-sorority women on a college campus in southeastern Georgia. Background and demographic information along with information about body image perceptions and eating attitudes will be collected. Sorority women will be contacted through Greek Life and letters regarding participation will be sent to each sorority house. Upon agreement, the researcher will administer the survey to sorority women during one of the sorority's weekly chapter meetings. Non-sorority women will be contacted through academic classes. Letters regarding participation will be sent to professors of large academic classes. The researcher will set up a time with the professor to administer the survey.

All participants will be provided with a letter of informed consent and will be reminded that their responses will be kept confidential. Participants will also be reminded that they can withdraw from the study at any time. To ensure confidentiality, the researcher will implement a code for each sorority house and non-sorority responses.

**Research involving minors.** Describe how the details of your study will be communicated to parents/guardians. If part of an in-school study (elementary, middle, or high school), describe how permission will be obtained from school officials/teachers, and indicate whether the study will be a part of the normal curriculum/school process. Please provide both parental consent letters and child assent letters (or processes for children too young to read). Not Applicable

**Deception.** Describe the deception and how the subject will be debriefed. Briefly address the rationale for using deception. Be sure to review the deception disclaimer language required in the informed consent. **Note:** All research in which deception will be used is required to be reviewed by the full Board. Not Applicable

**Medical procedures.** Describe your procedures, including safeguards. If appropriate, briefly describe the necessity for employing a medical procedure in this study. Be sure to review the medical disclaimer language required in the informed consent. Not Applicable

**Risk.** Is there greater than minimal risk from physical, mental or social discomfort? Describe the risks and the steps taken to minimize them. Justify the risk undertaken by outlining any benefits that might result from the study, both on a participant and societal level. Even minor discomfort in answering questions on a survey may pose some risk to subjects.

This study will impose minimal risk to participants. Possible social discomfort in answering questions related to body image perceptions. These will be addressed during the informed consent portion of survey administration. (see informed consent document).

Carefully consider how the subjects will react and address ANY potential risks. Do not simply state that no risk exists, until you have carefully examined possible subject reactions.

**Cover page checklist.** Please provide additional information concerning these risk elements. If none, please state "none of the items listed on the cover page checklist apply." [Click here](#) to go to cover page for completion.

## **Amendment Request**

### Georgia Southern University Institutional Review Board

**For electronic submission:** Complete the Amendment Request form and 'Save As' a word document to your computer or disk named 'amendrequest\_yourlastname,First initial.doc'. Then, go to the [Forms](#) webpage to submit the completed Amendment Request with any other documents required in submitting your amendment request. Please submit all required documents electronically as word documents.

*Study Title* Body Dissatisfaction and Other Sociocultural Factors As Predictors of Body Image and

Body Dissatisfaction In Sorority and Non-Sorority Women

*Principal Investigator* Kiley E. Winston *Advisor/Department* Joanne Chopak-Foss, P.h.D.

Giann-Ping Hsu School of

Public Health

**Protocol Amendment #** \_\_\_\_\_

Please briefly describe each change in the protocol and its rationale. Additional pages may be used as necessary.

*Research changes:*

*Justification for changes:*

1. Instrumentation: SATAQ-3 (updated form of SATAQ-R) EDI-3 (updated form of EDI-2)	To more accurately capture the construct of body image and body dissatisfaction among sorority and non-sorority women in the new instrument
2.	
3.	
4.	
5.	

### **Consent Form Changes**

Please briefly describe and justify each change in the consent form.

*Changes to consent form:*

*Justification for changes:*

1. Change in Title	To better reflect the measurement of body image and body dissatisfaction among sorority and non-sorority women in the new instrument
2.	
3.	
4.	
5.	

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Principal Investigator's Signature

Date

**Please submit an updated application, including [proposal narrative](#), informed consent, and any instruments used with each amendment request.** Amendments to approved protocol may be submitted at any time. If only minor changes are requested, review may be expedited. Substantial amendments will be considered at a convened meeting of the full IRB.

**NOTE:** No amendment to the awarded protocol can be implemented without notification from the Georgia Southern University Institutional Review Board.

For office use only:

\_\_\_\_\_  
IRB chair's signature

Date: \_\_\_\_\_