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A COMPARISON OF BODY IMAGE BETWEEN SORORITY WOMEN AND
INDEPENDENT WOMEN AT COLLEGES/UNIVERSITIES IN
CENTRAL PENNSYLVANIA

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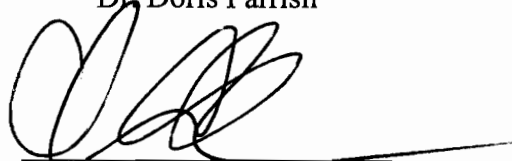
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Requirements for Departmental Honors in Nursing

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A Comparison of Body Image Between Sorority Women and Independent Women at Colleges and/or Universities in Central Pennsylvania

Body image disturbance is a growing problem among women at colleges and universities. Among women, strong body dissatisfaction can lead to concerns about weight and dieting. The desire for a "better body" is attributed to the fact that individuals see themselves from others' perspectives. Women on college campuses may perceive body image in relation to peer influence. The purpose of this study was to determine the differences in body image between Sorority Women and Independent Women at colleges and universities in Central Pennsylvania. Dorothea E. Orem's Self-Care Theory and H. Markus' Schema Model of the Self -Concept were used as the framework for this study. Body image was related to the theoretical nursing concepts of human beings, nursing, health, and environment. A comparative research design was used to study a sample of 258 women at colleges and universities in Central Pennsylvania. The sample for this study, selected through nonrandom convenience sampling, consisted of 108 women who were affiliated with a sorority and 144 independent women. The settings for this study were Lycoming College, a small, liberal arts college located in Williamsport, Pennsylvania, and Bloomsburg University, a state-funded university located in Bloomsburg, Pennsylvania. A demographic questionnaire devised by the researchers and The Body Shape Questionnaire were administered to the participants. Data was analyzed using an Independent Sample's t-Test, Levene's Test for Equality of Variances, and Pearson's Correlation with a predetermined level of significance of $p < 0.05$. The

results indicated that there were no statistically significant differences in body image between sorority women and independent women at colleges and/or universities in Central Pennsylvania ($p=0.281$). Levene's Test for Equality of Variances revealed a statistically significant difference in the amount of variation when comparing scores of Sorority Women and Independent Women ($p=0.047$). The results of this study can be utilized to relate the topic of body image to peer groups on college and/or university campuses. Recommendations for future studies include using a population that is more representative of women at colleges and/or universities across the United States.

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Chapter I

Introduction

Cash, Ancis, and Strachan (1997) describe body image as “a multi-dimensional self-attitude toward one’s body, particularly its size, shape, and aesthetics.” (p. 433). In turn, body image disturbance is defined as intense negative feelings about the body (Wolszon, 1998). Among women, strong body dissatisfaction can lead to concerns about weight and dieting. Even among normal-weight women, dissatisfaction with body image, preoccupation with weight, and unhealthy management of weight are prevalent (Schwitzer, Bergholz, Dore, & Salimi, 1998).

This desire for a “better body” is attributed to the fact that individuals see themselves from others’ perspectives; thus, women are influenced by their peers’ ideals of a “perfect body” (Tantleff-Dunn & Thompson, 1995). Womens' feelings of dissatisfaction with their bodies can also stem from mass media messages (Turner, Hamilton, Jacobs, Angood, & Dwyer, 1997). Due to the combined pressure from peers and the media, many women desire a body weight that can be both physically and emotionally unhealthy (Turner et al., 1997).

Because women are dissatisfied with their size and shape more than men are, body image disturbance is recognized as a growing problem among women at colleges and universities. According to Harris (1995), women on college campuses perceive body image in relation to peer influence. These influences may then lead to either healthy or unhealthy practices which can lead to positive or negative thoughts on body image. Consequently, dissatisfaction with body image has been linked to eating-related problems and the use of unhealthy methods to lose

weight, such as diuretics, laxatives, fasting, self-induced vomiting, and rigorous exercise.

Sometimes a combination of these behaviors is used by a woman in an attempt to alter her body to meet societal norms (Harris, 1995).

The purpose of this study was to answer the research question, what are the differences in body image between Sorority Women and Independent Women at colleges and/or universities in Central Pennsylvania? For purposes of this study, a sorority is a woman's student organization at a college or university which is formed primarily for the sake of social purposes and has a name formed by Greek letters (Webster's Dictionary). A sorority woman is one who belongs to a sorority, and an Independent woman is one who does not belong to a sorority. Body image is a multidimensional attitude toward one's own body, as measured by the use of *The Body Shape Questionnaire* (Cooper, Taylor, Cooper, & Fairburn, 1987).

Assumptions made for this study included: (1) the subjects studied answered the questionnaires honestly and (2) peer groups influenced a member's body image. It was also assumed that participation in this study would cause little, if any, emotional harm to the participants.

Major limitations of this study include: (1) the time commitment involved; (2) the money commitment involved; (3) the researchers' expertise; (4) the availability of subjects; (5) the cooperation of others; and (6) the small sample size. Since this study was completed within a three month time frame, the ability to collect data from a large sample size is inhibited. There was no sponsorship for this study, and there were no funds available to aid in conducting the research. The lack of funds resulted in hindering the ability to gain materials and resources.

This was the first expanded study conducted by the researchers, and their expertise was minimal,

which may have impeded proper technique and limited insight.

The study is significant to nursing because current estimates by college health experts conclude that as many as 70 percent of all women on college campuses admit to body-image issues significant enough to affect their daily lives (Davis, 1998). “Given the centrality of body image in clinical and subclinical eating disturbances that are so prevalent among women, research on gender and body image has substantial importance” (Cash, Ancis, & Strachan, 1997, p. 433).

Similarly, Mazzeo (1999) documents that more than 60 per cent of college women have some intermediate form of an eating disorder. The researchers believe this study will benefit Sorority and Independent Women on college campuses, family members of college women, and health service personnel on college campuses, because study findings will increase the awareness of the inaccurate perceptions college women have concerning their bodies. This information will permit health service personnel to see warning signs of potentially dangerous problems, which will allow them to formulate preventative strategies to decrease or eliminate these problems. This study will also allow other researchers to investigate the impact of social groups on a woman’s body image; thus setting the stage for a larger replication study.

Since body image disturbances are recognized as a growing problem among college women, it is necessary to explore this problem to determine possible causes. The next section provides a comprehensive review of the literature pertaining to existing research studies on body image and body image disturbances. It also provides a theoretical framework for the present study.

Chapter II

The purpose of this paper was to answer the question, what are the differences in body image between Sorority Women and Independent Women at colleges and/or universities in Central Pennsylvania? This section presents a review of the literature, including studies that provided the groundwork for the present study. The theoretical framework for the study is based on Dorothea E. Orem's Self-Care Theory, Markus' Schema Model of the Self-Concept.

Review of Literature

Reviewing the literature revealed that there were several studies that focused on gender attitudes as they relate to body image. Falon and Rozin (as cited in Monteath & McCabe, 1997) conducted a study in 1985 which operationalized body satisfaction through an assessment of the difference between an individual's perceived and ideal body size. This technique was used to investigate body satisfaction in a sample of males and females who completed the *Stunkard Body Shapes Figure Scale* (SBSFS). In this study, the participants chose the figure which best represented their current and ideal body sizes. Typically, females expressed a desire to be thinner, and the researchers identified that a significant discrepancy existed between their perceived, actual, and ideal body sizes (as cited in Monteath & McCabe, 1997).

Similarly, Cash and associates (1997) studied the relationship between body image and gender attitudes and ideologies. Cash and associates (1997) investigated 122 college women to assess various parameters of body image such as evaluation, investment, and affect, and "different facets of gender attitudes and feminist identity development" (p.433). Measurement of gender attitude was accomplished using *The General Attitude Inventory* (GAI), *The Male-Female Relations Questionnaire* (MFRQ), and *The Feminist Identity Development Scale* (FIDS). Tools

used to measure body image included *The Multi-Dimensional Body-Self Relations Questions* (MBSRQ) ($r=0.26$), *Situational Inventory of Body-Image Dysphoria* (SIBID) ($r=0.86$), *Appearance Schemas Inventory* (ASI) ($r=0.50$), and *The Sociocultural Attitudes Towards Appearance Questionnaire* (SA-TAQ) ($r=0.40$). The results of the study showed minimal relationships between attitudes toward body image and “either feminist identity or adherence to traditional gender beliefs at individual/stereotypic or societal levels” (Cash et al., 1997, p.143) (no r-value presented). However, the researchers concluded that more dysfunctional investments in appearance standards were associated with traditional gender attitudes at the level of male-female social interactions (Cash et al., 1997).

Given traditional values regarding heterosocial relations, it is not unreasonable that women invest in their physical appearance to conform to standards of beauty (Cash et al., 1997). However, Wolszon (1998) believes this attitude has gone too far and that “women act as if they believe that the shape of their lives depends on the shape of their bodies” (p. 542). Thus, body image is composed of both a perceptual and attitudinal component. Monteath and McCabe (1997) believe a disturbance in the perceptual component is usually reflected in distorted perceptions of body appearance, shape, and size; whereas, a disturbance in the attitudinal component is usually reflected in dissatisfaction with the appearance and functional capacity of the body.

Body image disturbance, including concerns about weight and dieting are common among women; in fact, it is so common that many believe that feeling fat is a “normative” discontent for women (Wolszon, 1998). Three-fourths of normal-weight women in the United States feel fat, and over one-half of the adult female population in the United States report being

on a diet. Body image disturbance is present in college women as they have a notably high incidence of eating disorders and eating-related problems (Koff & Benavage, 1998). Thirty-five to 45 per cent of college women report difficulties with weight control, see themselves as too fat, or want to become thinner. Thirty per cent are extremely worried about body image. Dyer and Tiggemann (1996) stated that highly competitive environments contribute to both academic competition and competition concerning the achievement of a thin body.

A review of the literature found several studies that related social stereotypes to body image. Societal body ideals are conveyed to the public through stereotypes related to appearance (Monteath & McCabe, 1997). For example, Larkin and Pines (as cited in Monteath & McCabe, 1997) studied perceived body appearance in the general public to provide evidence for these stereotypes. Participants were asked to read and evaluate written descriptions of people who differed in terms of sex and weight. They found that participants rated overweight people more negatively than they rated people of average weight (as cited in Monteath & McCabe, 1997).

Another stereotype described in the literature is that beauty is equated with goodness. This was reflected in the 1972 work of Dion, Berscheid, and Walster (as cited in Monteath & McCabe, 1997) in which the researchers asked participants to evaluate pictures of attractive, neutral, and unattractive individuals. Those pictures that were rated attractive by the participants were assigned positive personality traits. Consequently, it was assumed that the individuals in the pictures lead more happy, successful lives.

The fashion industry also impacts women's satisfaction with their body. Turner and associates (1997) investigated the impact of fashion magazine exposure on body image satisfaction of women. Forty-nine subjects participating in this study were undergraduate

women. Half of the women viewed fashion magazines (i.e., *Vogue*, *Bazaar*, *Elle*, and *Allure*) before completing a survey on body image satisfaction. The remaining half of the participants read news magazines (i.e., *Time*, *Newsweek*, *U.S. News & World Report*, and *Business Week*) prior to completing the body image survey. The assessment tool was a three-part questionnaire consisting of adult figure drawings designed by Stunkard, Sorenson, and Schulsinger, 31 items which assessed participants' perceptions of their bodies and their attitudes and their behaviors concerning dieting, plus several questions concerning actual and perceived height and weight. The results showed that women who looked at the fashion magazines wanted to weigh less, were less content with their bodies, were more frustrated about their weight, were more obsessed with the desire to be thin, and were more anxious about getting fat than were their peers who read news magazines (Turner et al., 1997).

Likewise, a study conducted by Altabe and Thomson (1996) was designed to determine whether the discrepancy of physical appearance, which is a measure of body image schema, was associated with traditional body image measures. Undergraduate females (n=117) completed the *Physical Appearance Selves Questionnaire*, *The Body Image Measures Scale*, and *Mood Measures Checklist*. A significant correlation was found between actual-own ideal discrepancy and body image anxiety (Pearson's $r=0.22$; $p<0.05$). Actual-own ideal discrepancy was significantly correlated with body dissatisfaction ($r=0.21$; $p<0.05$). The researchers concluded that a property of body image representation is related to the idea that involvement in social comparison seems to increase activation of the negative body schema which leads to shifts in mood. "In real-world terms, the schema activation effect may behave as follows: certain activating events in the environment can interact with an individual's own perceived deficits to

elicit a negative mood and body image distress” (p. 188).

Societal norms influence young women to physically and emotionally regard their appearance (Cash et al., 1997). This can alter their well-being and lead to problems, such as eating disorders, low self-esteem, and depression. It is not surprising that many American women desire a thinner body and, typically, are dissatisfied with their body because of the messages aimed at them through the mass media (Turner et al., 1997). Diet advertisements and articles appear ten times more frequently in women’s than men’s magazines (Cusumano & Thompson, 1997). Even women who are within or slightly below the normal weight range for their height will perceive themselves as being overweight and are uncomfortable with their bodies (Turner et al., 1997). Magazine and television advertisements have contributed to the perception of the ideal woman as being tall, thin, and toned (Rabak-Wagener, Eickhoff-Shemek, & Kelly-Vance, 1998). Seventy percent of adolescent women who read fashion magazines on a regular basis consider the magazines as relevant sources of beauty and fitness, which leads to a negative effect on body image perception (Rabak-Wagener et al., 1998).

One study in the review of the literature explored the difference between dependent and independent personalities in relation to body image. Gendebien and Smith (as cited in Monteath & McCabe, 1997) compared levels of body size distortion and body satisfaction in women who were independent to those women who were dependent on others. The researchers found that dependent women overestimated their sizes more and held distorted images in an unfavorable direction to those parts of the body that were most relevant to their current societal body ideal (as cited in Monteath & McCabe, 1997).

McAllister and Caltabiano (1994) conducted a study comparing self-esteem, body image,

and weight in non-eating disordered women and found that self-esteem was significantly related to satisfaction with present weight ($p < 0.01$). Using the nonparametric Kruskal-Wallis analysis of variance, statistical analysis showed that women who have high self-esteem are happy with their current weight and those who have low self-esteem are not happy with their current weight ($H = 8.97$; $p = 0.05$).

Monteath and McCabe (1997) found an additional relationship between locus of control and the perceptual component of body image. The term “locus of control” refers to the center of influences in a person’s life. College women who have an external locus of control have a tendency to overestimate the size of their bodies to a greater extent than college women who have an internal locus of control. College women who have an external locus of control also tended to experience a greater dissatisfaction with their bodies' appearance than did college women with an internal locus of control. Therefore, the researchers concluded that peer groups, such as sororities on college campuses, serve as an external locus of control.

It is interesting to note that clinically diagnosed eating disorders are relatively uncommon among college women (Mazzeo, 1999). Subclinical eating disorders, however, are far more commonplace. Up to 20 per cent of college women admit that they have been involved in disordered eating behaviors. Over 60 per cent of college women have been determined to have an intermediate form of an eating disorder, such as bingeing and/or purging, chronic dieting, or subclinical bulimia. Prior studies have suggested that body image disturbance is one of the most prevalent features of eating disorders. Mazzeo (1999) stated that, “body image disturbance is a significant factor in both the development and outcome of clinical and subclinical eating disorders” (p. 42). Individuals with eating disorders are not the only group that suffers from

body image disturbances, but they are also common in non-eating disordered women (Mazzeo, 1999).

This review of the literature provided a number of studies about social influences on body image. It did not, however, provide specific literature regarding the impact of social organizations (such as sororities) on body image. In fact, a comprehensive review of the literature failed to reveal studies relating social organizations, such as sororities, to body image. Consequently, the following theoretical framework relates environmental factors to body image and provide the basis for relating social organizations to body image.

Theoretical Framework

Introduction. Theory is defined as, “a set of interrelated concepts, definitions, and propositions that present a systematic way of viewing facts/events by specifying relations among the variables, with the purpose of explaining and predicting the fact/event” (Hickman, 1995, p. 2). A theory of nursing adds context, content, and process to the idea that nursing consists of nursing, health, environment and person. This study describes the differences in body image between Sorority Women and Independent Women at Colleges and/or universities in Central Pennsylvania. Dorothea E. Orem is a nursing theorist whose work can be related to this body image study, because her theory of man can be related to college women, and her theory of environment can be related to peer groups (i.e., college sororities). In addition, the theoretical framework also includes Markus’ Schema Model of the Self-Concept as it relates to this study.

Dorothea E. Orem. Orem’s theory (as cited in Foster & Bennet, 1995) is centered around the concept of self-care. She is considered to be the pioneer of the Self-Care Framework (as cited in Fawcett, 1995). According to Orem (as cited in Foster & Bennet, 1995), the Self-Care

Deficit Theory of Nursing is made up of the three integrated theories: Self-Care, Self-Care Deficit and Nursing Systems (as cited in Foster & Bennet, 1995). Self-Care involves performing activities to maintain life, health, and well-being. A self-care deficit occurs when a person is incapable or limited in the functions needed to maintain effective self-care. Nursing Systems refers to the practice of nursing as it relates to self-care (as cited in Foster & Bennet, 1995).

Presuppositions for the theory of self-care (as cited in Fawcett, 1995) are as follows:

(1) all things are equal and human beings are capable of developing intellectual and practical skills and sustaining the motivation necessary for self-care; (2) self-care conditions include cultural elements, and ways of meeting these vary between individuals and larger social groups; (3) the ability to care for oneself is based on actions taken in previous similar circumstances; and (4) investigation and development of ways to accomplish known requisites and to establish care habits can be gained by identifying recurrent requisites for self-care. According to Orem, to engage in self-care requires an individual to be capable of managing self-care in a stable or dynamic environment. She also contends that participating in self-care is influenced by the person's valuation of measures of care with regard to development, health, life and well-being. The standard of self-care is affected by cultures, including social groups and education of group members. Engagement in self-care is also influenced by a person's limitations and knowledge of how to handle current conditions (as cited in Fawcett, 1995).

With regard to the four concepts of nursing, Orem defines humans beings, health, environment, and nursing (Orem, 1971). Orem's concept of human beings (as cited in Fawcett, 1995) suggests that a human being has an intrinsic activity rather than passivity or strict reactivity to stimuli. Thus, human beings: (1) appraise situations based on consequences; (2)

know directly by sensing; and (3) are able to perform self-determined actions.

According to Orem (1971), nursing is "a contributed effort toward designing, providing, and managing systems of therapeutic self-care for individuals within their environments of daily living" (p. 41). Nursing's health dimension comes from Orem's focus on self-care. Positively therapeutic self-care helps to maintain life processes, sustain integrated functioning, foster normal growth and development, and prevent or diminish disability and disease. According to Orem (1971), "a community is defined as a group of individuals and families who share not only a common geographic area and environment, but a common interest in the institutions that govern and regulate their way of life" (53).

According to Orem (1971), "Self-care is the practice of activities that individuals personally initiate and perform on their own behalf in maintaining life, health, and well-being" (p. 13). It is a societal norm for healthy adults to take care of themselves; however, infants, children, adolescents, elderly, ill, and disabled require complete care or assistance with their activities of daily living. Individual factors of age and health may determine what self-care activities a person can perform. Each adults' ability to respond to internal and external stimuli has an impact on his decision-making in reference to self-care. Values and goals will also impact self-care (Orem, 1971).

When considering self-care, social interaction and solitude may be therapeutic if they allow for a quality and balance of practices which (1) give social warmth and closeness required for development as well as conditions that allow use of individual talents; (2) stimulate continuing development and adjustment of the person's self-concept, which will be expressed in what he values; (3) promote both autonomy and group involvement; and (4) prevent personality

impairments (Orem, 1971). As long as self-care allows for a balance of solitary and social experiences, the impulse to use others for selfish purposes is eliminated (Orem, 1971).

According to Orem (1971), individuals often compare themselves to others in terms of appearance and functioning. Beliefs about what is the norm varies between social groups. There are three standards for what is considered human: (1) the trend of the moment for achieving human potential; (2) standards for promoting human growth and development based on theories in the health-related sciences; and (3) culturally established beliefs about health and normal human structure. Self-care in response to demands for normality can have personal and social implications. Those who deviate from the established norms for weight are at risk for being rejected by social peers. Therefore, if these individuals cannot accept their own appearance, their self-care is not therapeutic (Orem, 1971).

Orem's Self-Care framework is pertinent to the differences of body image between sorority and Independent Women. Her theory of human beings suggests that man evaluates situations based on consequences (Orem, 1971). This relates to women evaluating their weight in terms of peer group acceptance. Orem's theories of nursing and health approach self-care as therapeutic because an individual should be able to accept himself based on self-care. Women with a disturbed body image are unable to accept themselves in a positive light; therefore, they are unable to therapeutically care for themselves. Her theory of environment includes those who have common interests in the regulation of their way of life. Orem's theory (as cited in Fawcett, 1995) gives the rationale that self-care is influenced by social groups and the education of those groups. Since sorority organizations often live in a common community, the way they regulate their environment impacts individual members of the group.

In order to address self-care, it is important to consider the relationship that exists between self-care and self-schema. H. Markus' Schema Model of the Self-Concept provides a basis for self-schema as it relates to body image among members of social groups.

The Schema Model of the Self-Concept. The Schema Model of the Self-Concept devised by H. Markus (1977) is based on the belief that behavioral responses to stimuli are compromised through an internal knowledge system called schemas. Schemas are defined as "organizations of knowledge that are constructed through interaction with the environment and reflect the person's construal of an object or events" (as cited in Stein, 1996, p. 100). Although schemas can be based on any environmental aspect, whether it is social or non-social, Markus (1977) theorizes that in order to arrange stimuli relevant to the self, individuals construct knowledge structures about themselves, or self-schemas. Self-schemas are long-lasting memory structures about an individual that combine a person's thoughts, feelings, and experiences related to the self in a particular environment. Self-schemas can be developed around any aspect of an individual, such as competencies, skills, interests, physical characteristics, social roles, and personality traits (Markus, 1977).

Self-schemas are established in the environments that the person places value on, and they show how much time and effort the person has invested in the environment (Markus, 1977). Self-schemas are "highly elaborated, well-organized, and enduring organizations of knowledge" (as cited in Stein, 1996, p. 101). Not only do self-schemas provide the self with a declarative knowledge of what the self is, but they also provide rules, strategies, and routines that direct and regulate behavior within the environment. These functional properties of an individual's self-schemas link them to behavior (Markus, 1977).

The self-schema model contributes to the definition of self-concept (Markus, 1977).

Within the self-schema model, self-concept is considered to be a complex system of thoughts about the self. A self-concept can contain a number of schemas, and this number is directly related to emotional and behavioral outcomes, including depression, poor self-esteem, and an inability to adapt to stressful situations. Self-concept also varies according to the content of the self-schemas. People differ based on whether the environment of health, exercise, and body weight are included as a part of their self-definition. This individual difference has been linked to a number of health-related behavioral outcomes (Markus, 1977).

It is important to consider whether the individual is positive or negative in his/her self-evaluation (Markus, 1977). A person's attitude reflects his/her feelings of worth in each of the behavioral environments which make up his/her self-concept. These environment-specific self-evaluations are the basis of what gives bearing to an individual's level of self-satisfaction. Self-schemas play a large role in determining the processing of social information. According to Markus (as cited in Stein, 1996):

Individuals with an accessible schema in a domain are not only more likely to selectively attend to aspects of a social stimulus that are consistent with it but in addition, when a stimulus is vague, are likely to use the accessible cognition to interpret and assign meaning to the event (p. 102).

The Schema Model of the Self-Concept relates to this study because it supports the notion that social influences have an impact on an individual's body image. When a person has a lasting relationship with a social group, that social group can impact the individual's self-schema, either positively or negatively. If a person has a negative self-schema, then he/she will

be inclined to follow the schema's rules which will lead to unhealthy practices, such as self-starvation, excessive exercise, or bingeing and purging.

In this section, the researchers discussed Dorothea Orem's Self-Care Theory and its relation to body image. The Schema Model of the Self-Concept as it pertains to body image. These theories facilitated the methodological design and instrumentation used in this study, reflected in the following chapter which describes the methodology used to conduct the study.

Chapter III

Methodology

The purpose of this study was to answer the question, what are the differences in body image between Sorority Women and Independent Women at colleges and/or universities in Central Pennsylvania. This section explains the researchers' design and instrumentation selection.

Design. This study utilized a comparative design, in order to examine and describe differences in variables in two groups, Sorority Women and Independent Women. Because comparative designs are useful in comparing two or more independent groups, a comparative design was an appropriate choice (Burns and Grove, 1997).

The population for this study consisted of women at colleges and/or universities in Central Pennsylvania. There were two samples from this population in the study. The first sample consisted of freshmen, sophomore, junior, and senior college women between the ages of 18 and 24 who were affiliated members of a sorority at a college and/or university in Central Pennsylvania (n=108). The second sample consisted of freshmen, sophomore, junior, and senior college women between the ages of 18 and 45 who were not affiliated members of a sorority at the colleges and/or universities participating in the study (n=150). Six questionnaires from the Independent Women were eliminated because the women were older than 24 years (n=252).

The researchers obtained permission to conduct the campus-wide study at Lycoming College from Dr. Doris Parrish, Chair of the Nursing Department at Lycoming College (see Appendix B). Permission to conduct the study at Bloomsburg University was obtained through submission of requested materials through the university IRB committee (see Appendix B). An

informed consent was attached to the front of each questionnaire, which guaranteed the subjects' anonymity and confidentiality (see Appendix B). By signing the informed consent and giving it to the researchers with the completed questionnaire, the subjects gave their implicit consent to participate in the study.

The Sorority Women and Independent Women in the study were selected through convenience sampling. Subjects who participated in this study were between the ages of 18 and 24 years. All of the participants were enrolled in college courses. Some subjects were members of a sorority (n=108), and other subjects were not members of a sorority (n=152). Subjects for both samples were enlisted on a voluntary basis.

It should be noted that those subjects enlisted from the introductory psychology classes were given extra credit from their professors for participation in this study. The extra credit was a result of the professors' wanting to help the students as well as the researchers. None of the other subjects were given anything in return for participating in the study.

All participants were verbally informed that the study involved research before the completion of the survey. They were given an explanation of the purpose of the research, which delineated the expected duration of participation. Subjects were given the phone number of the college counselor in case any emotional disturbance resulted from completing the survey. A means to contact the researchers in the event of questions or uncertainties regarding the questionnaires was provided. The subjects were informed that participation was voluntary, and they could discontinue their participation at any time.

Instrumentation. The purpose of this study was to determine the differences in body image between Sorority Women and Independent Women at colleges and universities in Central

Pennsylvania. This section describes the two instruments used in this study, the demographic questionnaire and *The Body Shape Questionnaire*.

The demographic questionnaire was developed by the researchers to obtain specific information about the participants (see Appendix C). The demographic questionnaire focused on gender (female, male), age, race (African American, Asian, Caucasian, Hispanic--White and Non-White, Other), educational level (freshmen, sophomore, junior, senior), residence (off-campus--commuter and apartments, on-campus--dormitories), where the subjects regularly ate meals (with parents, by themselves, in the college cafeteria, in restaurants, other), how many hours per week the subjects exercised, whether or not the subjects were currently dieting (no, yes), if the subjects considered themselves as having a disturbed body image (no, yes), affiliation with a sorority (no, yes), and if so, number of months and/or years affiliated with that sorority. It should be noted that an undetermined number of questionnaires contained an error by giving the option of selecting White--Hispanic or Non-Hispanic instead of Hispanic--White and Non-White. This may have lead to some uncertainty to choose between Caucasian or White--Non-Hispanic. Those who chose White--Non-Hispanic were assumed to be Caucasian.

The instrument selected to measure body image was entitled *The Body Shape Questionnaire* (Cooper et al., 1987) (see Appendix C). *The Body Shape Questionnaire* contained 34-questions with responses on a Likert Scale, designed to measure how individuals have been feeling about their appearance over the past four weeks. The instrument was selected after comparing it to various other questionnaires relating to body image. The researchers found it to be a reasonable measure of body image disturbance. In turn, Mazzeo (1999) reported that *The Body Shape Questionnaire* is the only self-report measure of body image currently available.

Examples of the questions include, "Have you noticed the shape of other women and felt that your own shape compared unfavorably?" and "Have you felt ashamed of your body?"

When compared with *The Body Dissatisfaction Subscale of the EDI*, *The Body Shape Questionnaire* demonstrated concurrent validity (Cooper et al., 1987). Cooper and associates (1987) tested instrument validity by rating a group of women who were concerned about weight and shape and a group of women who were not concerned about weight and shape. The mean Body Shape Questionnaire (BSQ) score of the concerned group was 109.0, and the mean for the unconcerned group was 55.9. Consequently, the difference between these scores was statistically significant ($p < 0.001$) (Cooper et al., 1987). Reliability, however, was not reported by the authors.

The Body Shape Questionnaire was first validated on three samples of non-eating disordered, college-age women and 38 patients with bulimia nervosa ($n=535$) (Mazzeo, 1999). Its internal consistency was found to be 0.93. *The Body Shape Questionnaires* test-retest reliability was found to be high (0.88). However, no information was available on the scoring of the instrument, nor was any information available regarding norming. Completion of the questionnaire took a maximum of 35 minutes.

Despite the shortfalls of *The Body Shape Questionnaire*, such as no reported reliability and no scoring information, the researchers chose this instrument because it was determined to be a reasonable measure of body image disturbance. Also, it was the only self-report measure of body image available.

Procedure. As was previously stated, the Sorority Women in the study were selected through convenience sampling. The researchers provided the questionnaires to Sorority Women

at the colleges and/or universities participating in this study to be completed at the weekly house meetings. Verbal consent was obtained through the chapter presidents to present the questionnaire to each sorority. Both researchers solicited volunteers; however, a written script was not used by either of the researchers.

The Independent Women in the study were also selected through convenience sampling. Some questionnaires were hand-delivered to Independent Women by the researchers, and later returned to the researchers in person. Other questionnaires were delivered by the researchers during introductory psychology lectures at the participating schools. Each respondent was assigned an identification number in order to maintain anonymity and confidentiality. Both researchers solicited volunteers from college classes; however, a written script was not used by the researchers.

Once all of the questionnaires were returned to the researchers, each was randomly assigned an identification number. The data was entered into a computer utilizing the SPSS system. The SPSS system was used to analyze data and produce tables and graphs.

Treatment of data. The question addressed in this study was, what are the differences in body image between Sorority Women and Independent Women at colleges and universities in Central Pennsylvania? This section of the paper provides an explanation of the treatment of the data. Each returned questionnaire was assigned an identification number by the researchers. All data was analyzed utilizing the SPSS computer program. Descriptive statistics were used to describe and analyze demographic data, and inferential statistics were used to describe and analyze *The Body Shape Questionnaire*.

Since The Body Image Questionnaire utilized a Likert scoring system, each question was

given a score of one for never, two for rarely, three for sometimes, four for often, five for very often, and six for always. Each question was worded so that no reverse scoring was necessary (see Appendix C). The scores for the 34 questions were summed to determine a total score, which could range from 34 to 204. A score of 34 indicated the most positive body image; whereas, a score of 204 indicated the most negative body image. A mean total score was obtained for Sorority Women and for Independent Women. An Independent Sample t-Test was used to see if the difference between means was statistically significant. A t-test was considered appropriate because the total score was the sum of 34 items, each with responses varying from one to six, and the sample size was over 100 for each of the two groups being compared. Any questionnaires that were not completely filled out or those respondents who were older than 24 years of age were disregarded. Two-hundred fifty-two questionnaires were evaluated in the results.

The data was collected from a sample of Sorority Women (n=108) and a sample of Independent Women (n=150) (see Appendix A). Six of the Independent Women were eliminated because they were older than 24 years old. A 0.05 significance level was chosen for hypothesis testing. In the following chapter, the researchers report the results.

Chapter IV

Results

The researchers' purpose was to answer the question, what are the differences in body image between Sorority Women and Independent Women at colleges and/or universities in Central Pennsylvania? The level of significance was chosen by the researchers to be 0.05.

One-hundred forty-four women in the study were not affiliated with a sorority and 108 were affiliated with a sorority. The ages of the participants ranged from 18 to 45 years, but those older than 24 years were eliminated from the study. From the women who were included in the study (n=252), seven were African American, one was Asian, 178 were Caucasian, 15 were Hispanic (white), 48 were Hispanic (non-white), and two were other. Regarding college educational level, 84 participants were freshmen, 73 were sophomores, 23 were juniors, and 72 were seniors. Of the participants, 26 lived off campus as commuters, seven lived off campus in apartments, and 219 lived in campus dormitories. Ten of the participants normally eat meals at home with their parents, 17 normally eat at home by themselves, 215 eat at a college cafeteria, five eat at restaurants, and five eat at other locations. The number of workout hours per week ranged from zero to 20. Of the participants, 193 were not currently dieting, whereas 59 were currently dieting. Of the participants, 158 did not consider themselves to have a poor body image, and 93 did perceive their body image as disturbed. One participant wrote in that she was "in between" on her body image rather than selecting a yes or no response (see Appendix A).

Since the total score was the sum of 34 items, each with responses varying from one to six, this total score was treated as continuous. Also, since the sample sizes were both larger than 100 (n=108, n=144) after eliminations were made, the t-test was considered appropriate to

compare Sorority Women and Independent Women (see Appendix A).

The mean total score for Sorority Women was 89.63 with a range of scores from 39 to 171, and the mean total score for Independent Women was 94.18 with a range of scores from 34 to 194. The independent sample t-test, which does not assume equal variances, showed no significant difference in mean total score between Sorority Women and Independent Women ($t(232)=1.080$; $p=0.281$) (see appendix A).

It was interesting to note that Levene's Test for Equality of Variances showed a significant difference ($f=3.982$; $p=0.047$) in the amount of variation of scores between Sorority Women and Independent Women. The standard deviation for Sorority Women was 29.52, and the standard deviation for the Independent Women was 35.20. The lowest score obtained for Sorority Women was 39, and the highest score was 171. The lowest score for Independent Women was 34, and the highest score was 194. There was more variation among Independent Women than Sorority Women (see Appendix A).

The researchers performed additional analyses to explore some interesting ancillary results. The Pearson Product-Moment Correlation between workout hours and total score was obtained to see if there was any significant relationship between the variables. The correlation was not statistically significant ($r=0.039$; $p=0.545$; $n=252$) at the 0.05 level. An Independent Sample t-Test showed a significant difference in total score from the Body Image Questionnaire between those with and without perceived body image disturbance ($t=13.09$; $p=0.545$; $n=252$). There was also a significant difference in total score, as determined by an Independent Sample t-Test, between those who were dieting and those who were not ($t=6.77$; $p<0.01$; $n=252$). These serendipitous findings suggest that differences in body image between Sorority Women and

Independent Women at colleges and/or university in Central Pennsylvania may be dependent on many other factors.

This section presented the results of the demographic questionnaire and *The Body Shape Questionnaire*. An Independent Sample t-Test showed that there was not a statistically significant difference in body image between Sorority Women and Independent Women at colleges and/or universities in Central Pennsylvania. Ancillary findings did show that there were statistically significant differences between the amount of variation of scores between Sorority Women and Independent Women, between dieting and total score, and between perceived body image disturbance and total score. The next section provides an analysis and discussion of the results.

Chapter V

Discussion

The purpose of this study was to determine the differences in body image between Sorority Women and Independent Women at colleges and/or universities in Central Pennsylvania. The Independent t-Test showed no significant difference in body image between Sorority Women and Independent Women at colleges and/or universities in Central Pennsylvania ($p=0.281$). Cash and Associates (1997) determined that societal norms influence young women to physically and emotionally regard their appearance. However, given the lack of significant findings in this study, it was difficult to support their findings.

According to Monteath and McCabe (1997), locus of control may influence body image. They found that college women with an external locus of control overestimate the size of their bodies. In the case that a sorority or peer group would act as an external locus of control, this study was unable to replicate their findings. This study may not have been able to detect statistically significant results, due to a number of limitations. These included: (1) the population to which the findings were generalized was restricted to only one region within the whole state, which limited the generalizability of the results; (2) time was limited; (3) funds were not available; (4) the expertise of the researchers was minimal, which effected data collection and analysis; and (5) the subjects enlisted through introductory psychology classes were given extra credit to fill out the questionnaires, whereas the other participants were not, and this might have lead to inconsistencies.

One further limitation to this study was that the sample size may have been insufficient to detect significant results. An effect size was calculated to determine if the sample size was large

enough ($d=0.070$); therefore, the sample size was determined to be insufficient because the calculated effect size value was less than one. Other possible explanations for the insignificant results stem from the lack of control relating to threats to validity.

Threats to validity. History, maturation, testing, and statistical regression did not pose a threat to internal validity. The researchers minimized the threat to history and maturation by conducting the study within a short time frame. Testing and statistical regression were minimized because a pre-test was not administered. Selection, experimental mortality, and instrumentation did pose a threat to internal validity. Selection was a threat to internal validity because the researchers used convenience sampling, and there was no control group. Experimental mortality was minimized due to the short time period of the study; however, six questionnaires were eliminated on the basis of age. Instrumentation was a threat to internal validity because consistency in administration of the questionnaire between the researchers was not ensured. For futures studies, the use of a script is recommended.

Testing and history did not pose a threat to external validity in this study. Testing was minimized because a pre-test was not administered, and history was minimized because the study was conducted within a small time frame. The Hawthorne Effect, the Rosenthal Effect, novelty, selection, and setting all posed a threat to external validity. The Hawthorne Effect and novelty are present by virtue of participation in a study. The Rosenthal Effect posed a threat to external validity because of the researchers' "friendships" with some of the Sorority Women and Independent Women. Selection was a threat to external validity because convenience sampling was used, thus limiting the generalizability of the results. The setting was a threat to external validity because the setting for conducting of the study was not clearly defined. Subjects were

approached in a variety of settings to complete the questionnaire. It was concluded that the threats to internal and external validity were at an acceptable level.

Recommendations for future research include studying a sample that is more representative of college women across the United States. With a more representative sample, more conclusive results may be determined, thus broadening the implications for nursing education and practice. Future studies should utilize a population that delineates between sophomore, junior, and senior college women. This adjustment may show that a longer affiliation with a sorority produces different results. The results of this study can be utilized to increase awareness of body image and body image disturbances at colleges and/or universities in Central Pennsylvania. Information about this study should be disseminated to the generalized population through student health services on Lycoming College's campus. A presentation should also be given to Sorority organizations as well as Independent Women on campus.

In this section, the researchers discussed the results of the study suggesting that there were no statistically significant differences in body image between Sorority Women and Independent Women at Lycoming College. Threats to internal and external validity were also discussed. Recommendation for further research and implications for nursing practice were identified.

Conclusion

The purpose in conducting this study was to determine the differences in body image between Sorority Women and Independent Women at colleges and/or universities in Central Pennsylvania. The basis for this study was presented in the review of literature and theoretical framework. Methodology, results, and discussion of the results were also presented. Although

the results were not statistically significant, further research utilizing a population more representative of women at colleges and/or universities in the United States is recommended to test for statistically significant results. An oral presentation of this study was given by the researchers on Friday, April 16, 1999, in the Heim Science Building at Lycoming College.

References

Altabe, M. & Thompson, K. J. (1996). Body image: A cognitive self-schema construct.

Cognitive Therapy & Research, 20 (2), 171-193.

Bemporad, J. (1996). Self-starvation through the ages: reflections on the pre-history of

anorexia nervosa. International Journal of Eating Disorders, 19 (3), 217-237.

Burns, N., & Grove, S. K. (1997). The practice of nursing research: Conduct, critique,

& utilization (3rd ed.). Philadelphia, PA: W. B. Saunders.

Cash, T. F., Ancis, J. R., & Strachan, M. D. (1997). Gender attitudes, feminist identity,

and body images among college women. Sex Roles: A Journal of Research, 36 (7-8), 433-444.

Cooper, P. J., Taylor, M. J., Cooper, Z., & Fairburn, C. G. (1987). The development and

validation of *The Body Shape Questionnaire*. International Journal of Eating Disorders, 6 (4), 485-494.

Cusumano, D. L., & Thompson, J. K. (1997). Body image and body shape ideals in

magazines: Exposure, awareness, and internalization. Sex Roles: A Journal of Research, 37 (9-10), 701-721.

Dyer, G., & Tiggemann, M. (1996). The effect of school environment on body concerns

in adolescent women. Sex Roles: A Journal of Research, 34 (1-2), 127-138.

Fraser, L. (1998, October). Glamour survey results: Body love, body hate. Glamour,

280+.

Harre, R., & Lamb, R. (1984). The encyclopedia dictionary of psychology. Cambridge,

MA: The MIT Press.

Harris, S. M. (1994). Body image attitudes and the psychosocial development of college

women. The Journal of Psychology, 129 (3), 315-329.

Koff, E., & Benavage, A. (1998). Breast size perception and satisfaction, body image, and psychological functioning in Caucasian and Asian American college women. Sex Roles: A Journal of Research, 38 (7-8), 655-667.

Markus, H. (1977). Self-schemas and processing information about the self. Journal of Personality and Social Psychology, 35, 63-78.

Mazzeo, S. E. (1999). Modification of an existing measure of body image preoccupation and its relationship to disordered eating in female college students. Journal of Counseling Psychology, 46 (1), 42-50.

McAllister, R., & Caltabiano, M. L. (1994). Self-esteem, body-image, and weight in noneating-disordered women. Psychological Reports, 75, 1339-1343.

Minuchin, S. (1974). Families and Family Therapy. Cambridge, MA: Harvard University Press.

Monteath, S. A., & McCabe, M. P. (1997). The influence of societal factors on female body image. The Journal of Social Psychology, 137 (6), 708-721.

Orem, D. E. (1971). Nursing: Concepts of Practice. New York: McGraw-Hill.

Rabak-Wagener, J., Eickhoff-Shemek, 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), 29-39.

Schwitzer, A. M., Bergholz, K., Dore, T., & Salimi, L. (1998). Eating disorders among college women: Prevention, education, and treatment responses. Journal of American College Health, 46 (5), 199-210.

Tantleff-Dunn, S., & Thompson, J. K. (1995). Romantic partners and body image

disturbance: further evidence for the role of perceived-actual disparities. Sex Roles: A Journal of Research, *33* (9-10), 589-599.

Turner, S. L., Hamilton, H., Jacobs, M., Angood, L. M., & Dwyer, D. H. (1997). The

influence of fashion magazines on the body image satisfaction of college women: An exploratory analysis. Adolescence, *32* (127), 603-610.

Wolszon, L. R. (1998). Women's body image theory and research: A hermeneutic

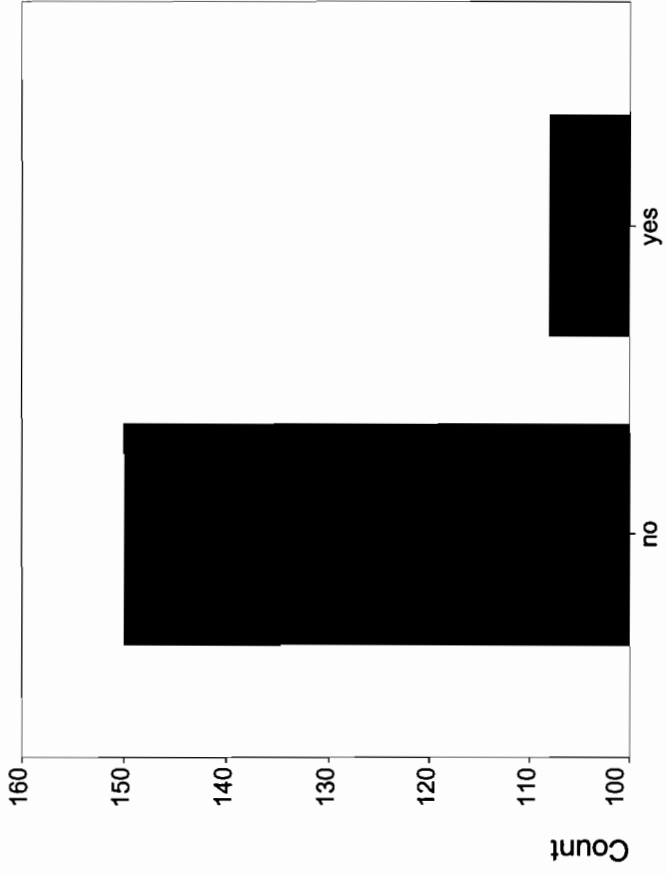
critique. American Behavioral Scientist, *41* (4), 542-553.

Woolly, S. C. (1995). Feminist influences on the treatment of eating disorders. In K. D.

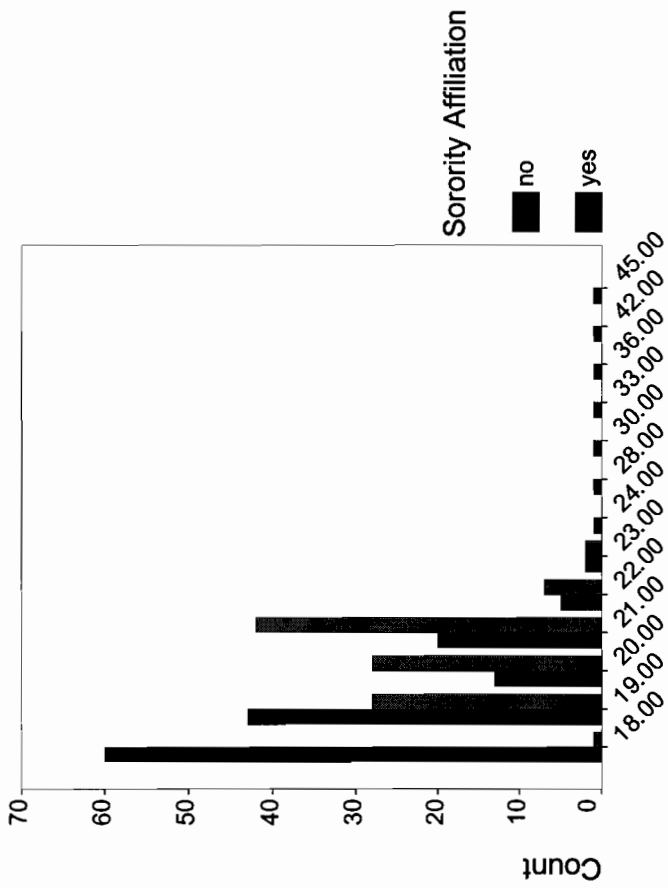
Browned and C. G. Fairburn (Eds.), Eating disorders and obesity: A comprehensive handbook (pp. 294-298). New York: Guilford Press.

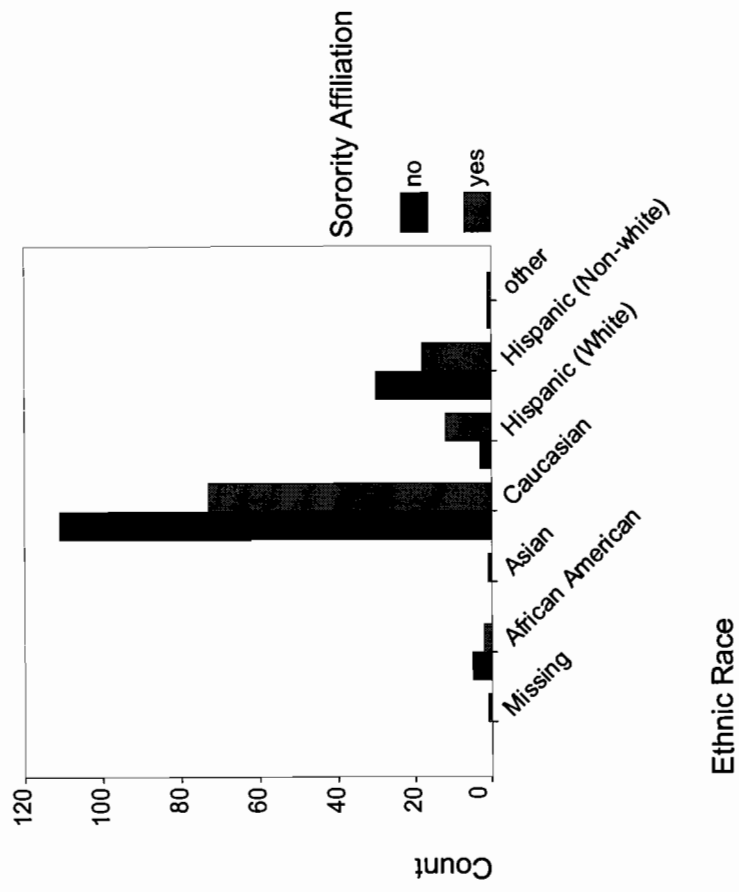
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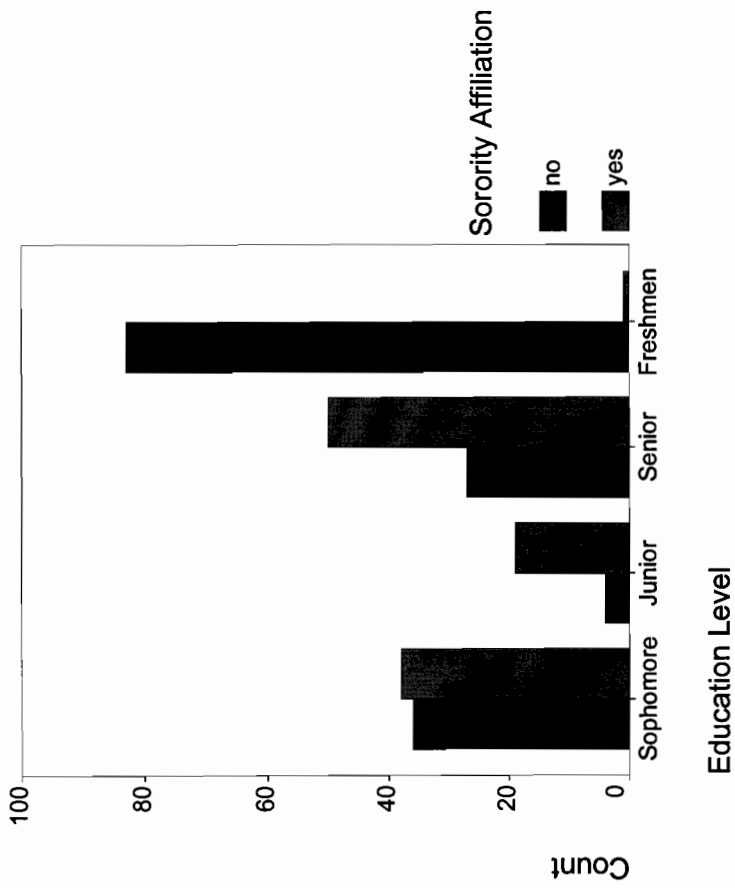
Appendix A
Tables and Graphs

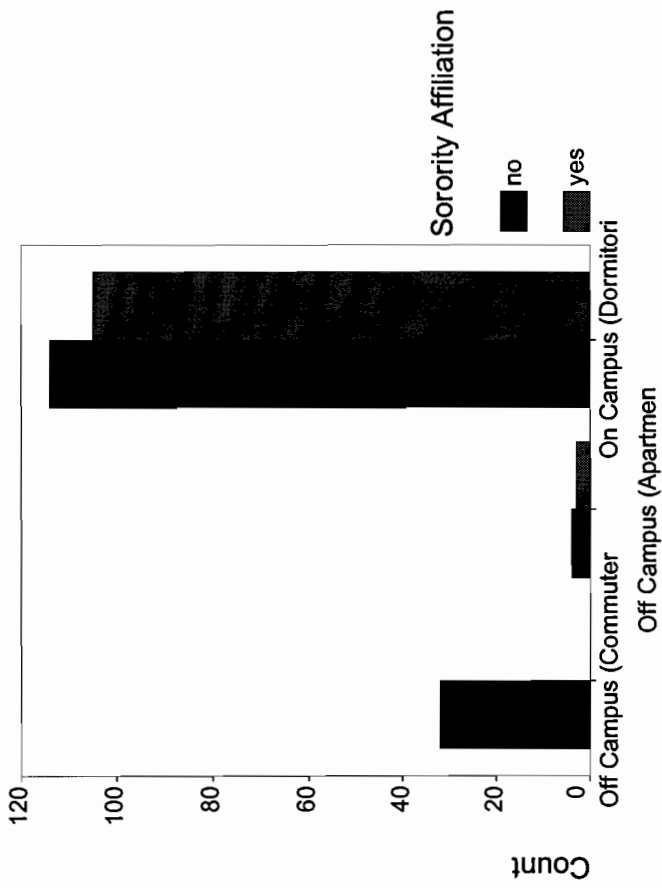


Affiliation with a sorority

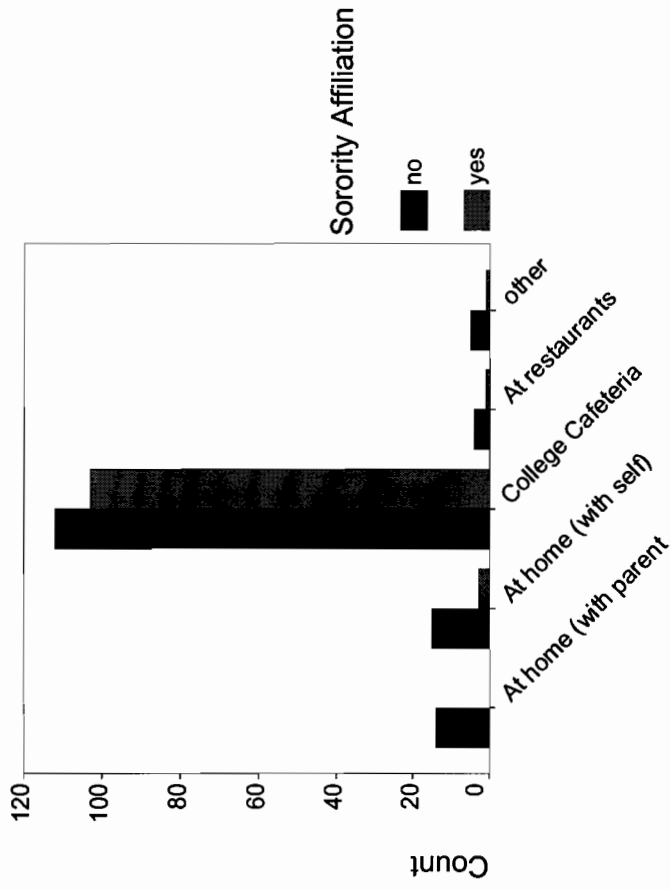




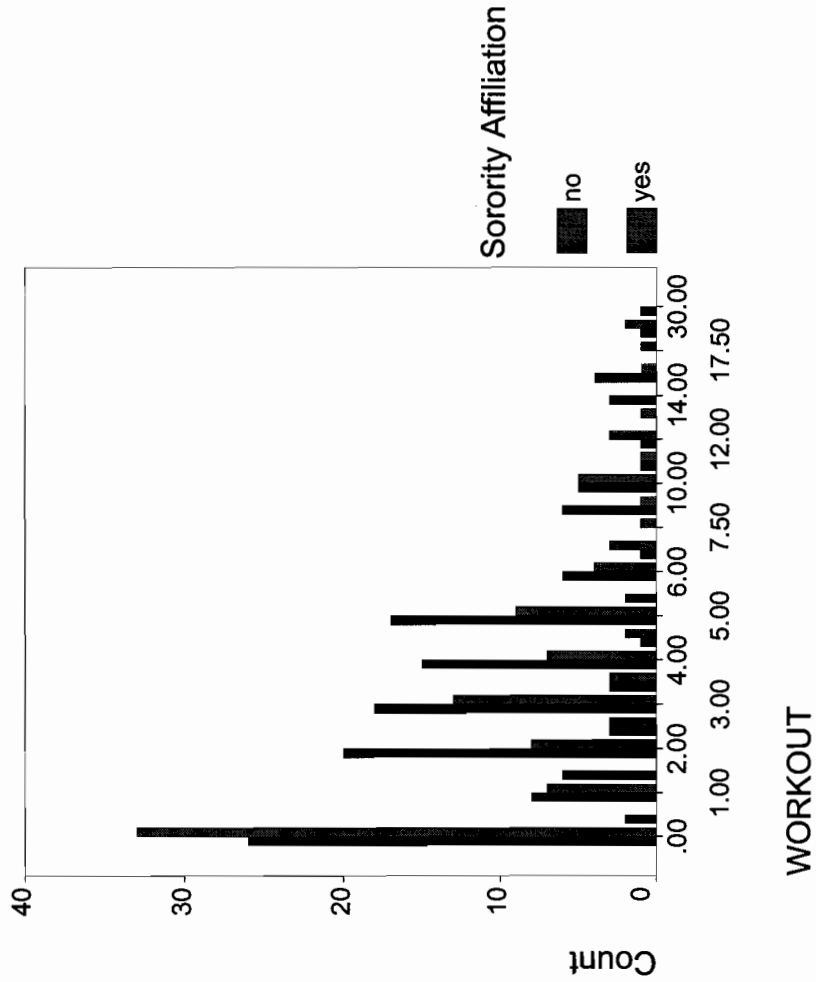


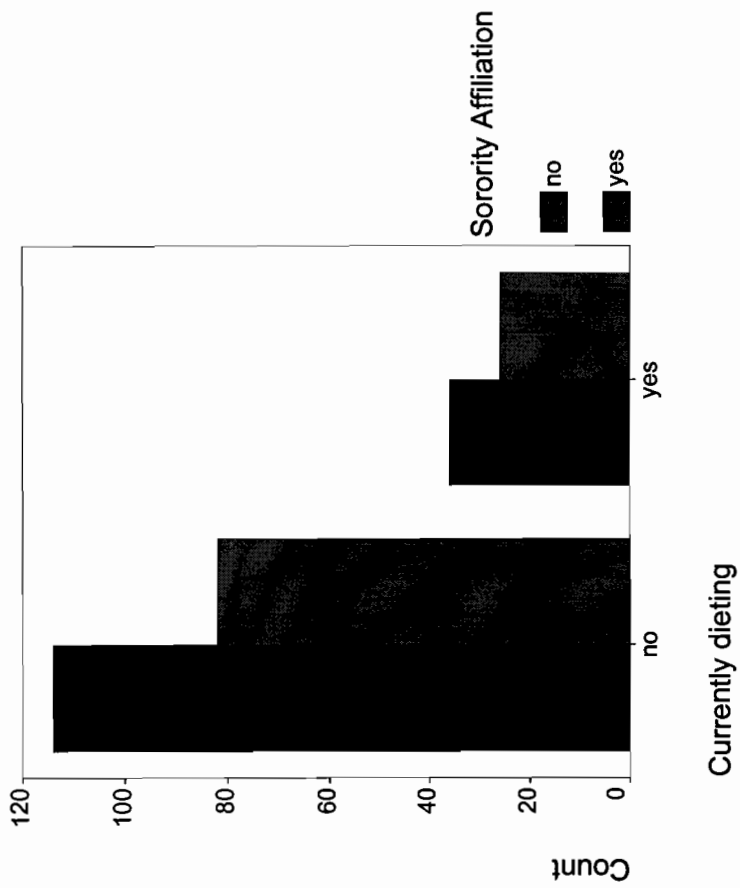


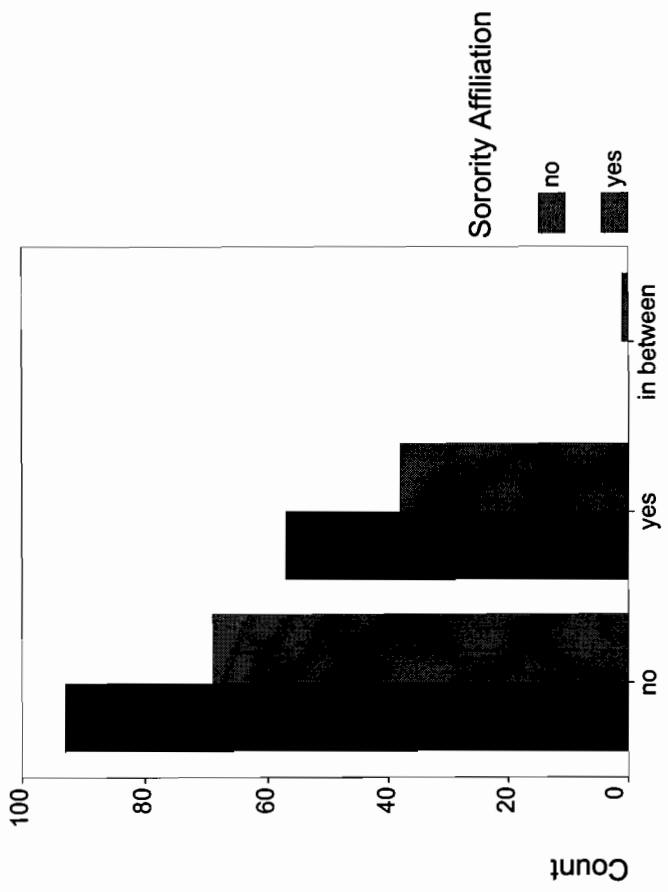
Place of Residence



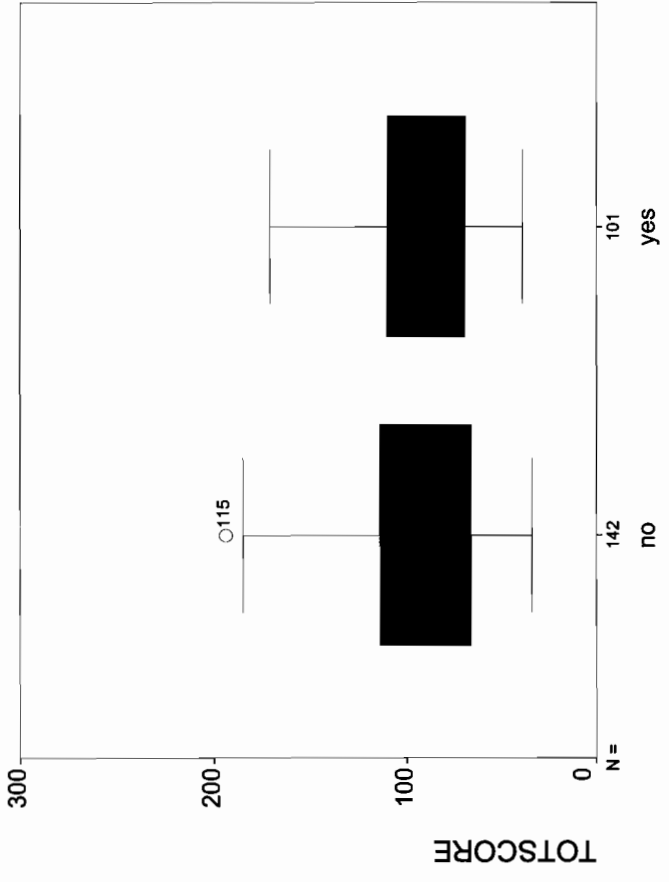
Where subject normally eats meals



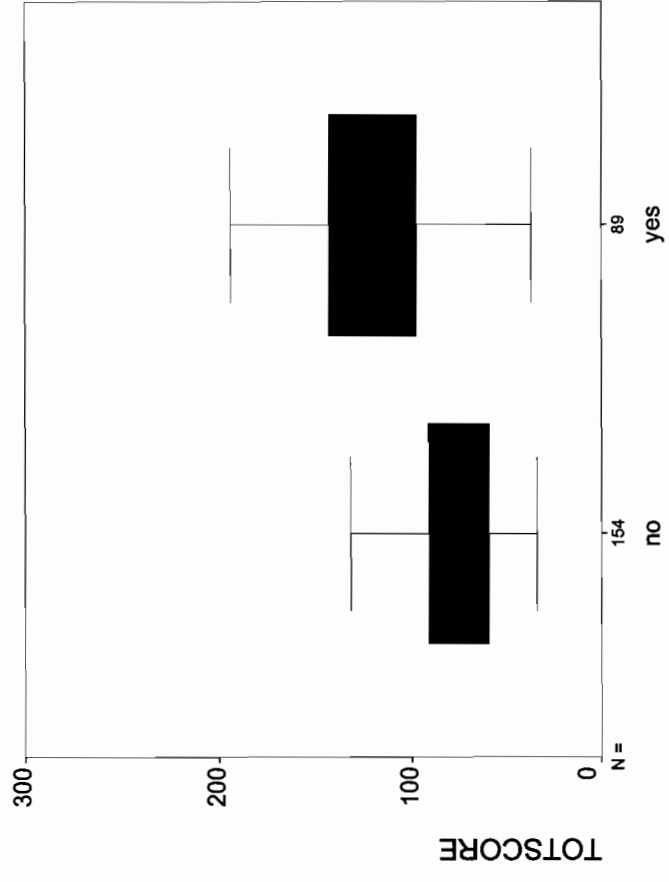




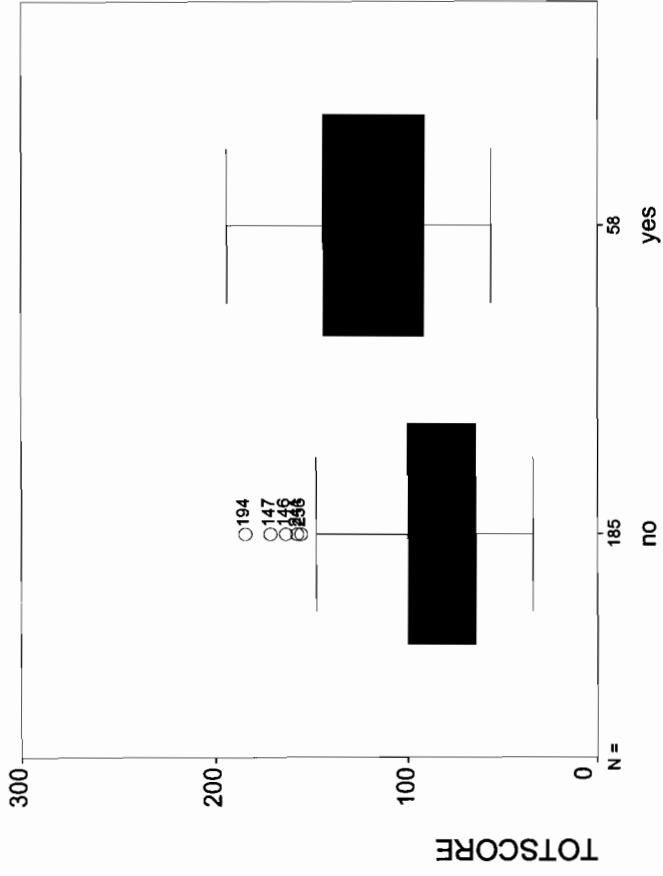
Disturbed body image



Affiliation with a sorority



Disturbed body image



Appendix B

Letters

January 25, 1999

Dr. Doris Parrish
Lycoming College Nursing Department
Lycoming College
Williamsport, PA 17701

Our Names are Lisa Phillips and Megen Roof, and we are senior-year nursing students at Lycoming College. We are conducting a research study to complete the requirements for graduating with honors in nursing.

We are asking for permission to conduct a study utilizing sorority and independent women at colleges and/or universities in Central Pennsylvania. Subjects will be asked to complete a demographic questionnaire, consisting of 10 questions, and The Body Shape Questionnaire, which consists of 34 questions and will require a maximum of 35 minutes to complete. We will code all of the surveys that are completed, and all human rights will be protected, as anonymity and confidentiality will be guaranteed.

We are asking that you or your committee consider the attached request, as any results that develop will be shared with the population at the studied universities. Thank you in advance for your consideration. Please notify us by mail at Campus Box #1344, Lycoming College, Williamsport, PA 17701, or by phone at (570) 321-4567.

Sincerely,

Lisa D. Phillips

Megen R. Roof

Proposal

1. The researchers are senior nursing majors at Lycoming College who are conducting this study for nursing departmental honors. The question that is being asked is what are the differences in body image between Sorority women and independent women at colleges and/or universities in Central Pennsylvania?
2. The purpose of this project is to determine the differences in body image between Sorority women and Independent women at Colleges and/or universities in Central Pennsylvania.
3. Data will be collected from Independent Women through the campus health centers. Data collection from the Sorority Women will be coordinated upon being given permission to conduct the study on the college and/or university campuses.
4. a) The target population is women at Colleges and/or universities in Central Pennsylvania.
b) The sampling technique used is convenience sampling, however the projected sample size has not yet been determined.
c) The samples will be assessed by their affiliation with a sorority, and consent will be gained through informed implied consent.

5. A copy of the cover letter for the questionnaire is attached. Anonymity, privacy, and freedom to withdraw at any time are ensured. Protection of all the rights of human subjects will be maintained.
6. The instrument to be used in this study is The Body Image Questionnaire, which consists of 34 Likert-like questions and will require a maximum of 35 minutes to complete. The researchers will use a non-probability sampling design in the form of convenience sampling. The Body Shape Questionnaire has reported concurrent validity, but reliability is not reported by the authors.
7. Comparing body images of Sorority women and independent women is important because body image disturbances seem to be a growing problem with college women. It is, therefore, necessary to explore this problem and the possible effect peer pressure has on body image.



LYCOMING COLLEGE

WILLIAMSPORT, PA 17701-5192

February 9, 1999

Lisa D. Phillips
Megen R. Roof
Lycoming College
Williamsport, PA 17701

Dear Lisa & Megen

I have received your request to expand your original study entitled *A comparison of body image between sorority women and independent women at Lycoming College* to include students from other colleges and universities in the area.

After careful consideration, the Department of Nursing has determined this to be a valid request, is backed by sufficient planning and organization, supervision and expertise and can, in fact, be conducted on other campuses. It is our understanding that your original study will serve as a pilot for this expanded study, that the results will be communicated in the form of group data for the purposes of fulfilling the requirements for your honors/scholars project to be submitted on or before April 30, 1999.

I wish you continued success in this endeavor.

Sincerely,

Doris P. Parrish, PhD, RN
Chairperson & Associate Professor

ay



February 18, 1999

TO: Lisa D. Phillips
Megen R. Roof
Campus Box # 1344
Lycoming College
Williamsport, PA 17701

FROM: James Matta
IRB Administrator and
Director of Research and
Sponsored Programs

Serial Number: 453

SUBJECT: Request for Exemption from Human Subjects Research Review

TITLE: A Comparison of Body Image between Sorority Women and Independent Women at Colleges and / or Universities in Central Pennsylvania.

I have reviewed the proposal submitted by Lisa D. Phillips and Megen R. Roof (Lycoming College, Department of Nursing) and find that it meets the following exemption criteria: 45CRF46.101(b) 2.

Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) Information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

c. IRB chair
Ms. Lori S. Lauver
Professor of Pediatric Nursing
Lycoming College
Williamsport, PA 17701-5192

Dear College Student:

Our names are Lisa Phillips and Megen Roof. We are senior nursing majors at Lycoming College. We are currently enrolled in the Nursing Honors Program. A requirement for this course is to conduct a research study, and we are conducting a research study to determine the differences in body image between Sorority women and independent women at Colleges and/or universities in Central Pennsylvania.

We invite you to participate in our study. By completing the attached *Body Shape Questionnaire*, it is assumed that you have consented to participate in our study. We will ensure anonymity and confidentiality by assigning random identification numbers to each questionnaire.

There is a minimal risk of experiencing adverse emotional effects by participating in this study. Therefore, the researchers will provide you with name and telephone number of the campus counselor available to you. If you have any questions, please contact via e-mail Lisa Phillips at philisa@lycoming.edu or Megen Roof at roomege@lycoming.edu.

We would like to thank you in advance for your cooperation and participation.

Sincerely,

Lisa Phillips

Megen Roof

Appendix C
Questionnaires

INFORMED CONSENT FORM

I, _____, hereby willingly consent to participate in the "Comparison of Body Image Between Sorority Women and Independent Women at Colleges and/or Universities in Central Pennsylvania" research project of Lisa Phillips and Megen Roof of Lycoming College.

We are conducting research to determine the differences in body image between Sorority Women and Independent Women on college and/or university campuses in Central Pennsylvania. Your participation should take approximately 30 minutes, and you will be asked to complete a demographic questionnaire developed by the researchers and The Body Shape Questionnaire.

The only risk to you includes the possibility of emotional discomfort relating to personal feelings about your own body image. This risk, however, is minimal. The benefits to you include a actualization of how you perceive your body.

All information will be handled in a strictly confidential manner, so that no one will be able to identify you when the results are recorded/reported.

Please feel free to contact Lisa Phillips or Megen Roof via e-mail at philisa- or roomege@lycoming.edu if you have any questions or require further information on the research.

Your participation in this study is totally voluntary, and you may withdrawal at any time without negative consequences.

I understand that if anything occurs to me while participating in this study that is not caused by the treatment or personnel involved, I cannot hold Lycoming College responsible.

I understand the study described above and have been given a copy of the description as outlined above. I am 18 years of age or older, and I agree to participate.

Signature of Participant

(Date)

Demographic Questionnaire

1. Gender: Female
Male

2. Age: _____

3. Race: African American
Asian
Caucasian
White (Hispanic)
White (Non-Hispanic)
Other: _____

4. Educational Level: Sophomore
Junior
Senior

5. Residence: Off-Campus (commuter)
Off-Campus (apartments)
On-Campus (dormitories)

6. Where do you regularly eat?: At home with parents
At home by yourself
In the college cafeteria
At restaurants
Other: _____

7. How many hours a week do you work out? _____

8. Are you currently dieting? No
Yes

9. Do you consider yourself to have a disturbed body image? No
Yes

10. Are you affiliated with one of the sororities on your campus? No
Yes

If yes, how many months or years have you been affiliated with the sorority? _____

We would like to know how you have been feeling about your appearance over the PAST FOUR WEEKS. Please read the questions and circle the appropriate number to the right. Please answer all the questions.

Over the Past Four Weeks:	Never	Rarely	Sometimes	Often	Very Often	Always
1. Has feeling bored made you brood about your shape?	1	2	3	4	5	6
2. Have you ever been so worried about your shape that you have been feeling you ought to diet?	1	2	3	4	5	6
3. Have you ever thought that your thighs, hips, or bottom are too large for the rest of you?	1	2	3	4	5	6
4. Have you ever been afraid that you might become fat (or fatter)?	1	2	3	4	5	6
5. Have you ever worried about your flesh being not firm enough?	1	2	3	4	5	6
6. Has feeling full (e.g., after eating a large meal) made you feel fat?	1	2	3	4	5	6
7. Have you ever felt so bad about your shape that you have cried?	1	2	3	4	5	6
8. Have you avoided running because your flesh might wobble?	1	2	3	4	5	6
9. Has being with thin women made you feel self-conscious about your shape?	1	2	3	4	5	6
10. Have you worried about thighs spreading out when sitting down.	1	2	3	4	5	6
11. Has eating even a small amount of food made you feel fat?	1	2	3	4	5	6
12. Have you noticed the shape of other women and felt that your own shape compared unfavorably?	1	2	3	4	5	6
13. Has thinking about your shape interfered with your ability to concentrate (e.g., while watching TV, reading, listening to conversation)?	1	2	3	4	5	6
14. Has being naked, such as when taking a bath, made you feel fat?	1	2	3	4	5	6
15. Have you avoided wearing clothes which make you particularly aware of the shape of your body?	1	2	3	4	5	6
16. Have you ever imagined cutting off fleshy areas of your body?	1	2	3	4	5	6
17. Has eating sweets, cakes, or other high-calorie food made you feel fat?	1	2	3	4	5	6
18. Have you not gone out to social occasions (e.g., parties) because you have felt bad about your shape?	1	2	3	4	5	6
19. Have you felt excessively large and rounded?	1	2	3	4	5	6
20. Have you felt ashamed of your body?	1	2	3	4	5	6
21. Has worry about your shape made you diet?	1	2	3	4	5	6
22. Have you felt the happiest about your shape when your stomach has been empty?	1	2	3	4	5	6
23. Have you thought that you are the shape you are because of lack of self-control?	1	2	3	4	5	6
24. Have you worried about other people seeing rolls of flesh around your waist and stomach?	1	2	3	4	5	6
25. Have you felt that it is not fair that other women are thinner than you?	1	2	3	4	5	6
26. Have you vomited in order to feel thinner?	1	2	3	4	5	6
27. When in company have you worried about taking up too much room (e.g., sitting on a sofa or a bus seat)?	1	2	3	4	5	6
28. Have you worried about your flesh being lumpy?	1	2	3	4	5	6
29. Has seeing your reflection (e.g., in a mirror or shop window) made you feel bad about your shape?	1	2	3	4	5	6
30. Have you pinched areas of your body to see how much fat there is?	1	2	3	4	5	6
31. Have you avoided situations where people could see your body (e.g., communal changing rooms or swimming baths)?	1	2	3	4	5	6
32. Have you taken laxatives to feel thinner?	1	2	3	4	5	6
33. Have you been particularly self-conscious about your shape when in the company of other people?	1	2	3	4	5	6
34. Has worry about your shape made you feel you ought to exercise?	1	2	3	4	5	6