AN EXPERIMENTAL INVESTIGATION OF SOCIAL CONFORMITY AND INTERNALIZATION OF THE SOCIOCULTURAL STANDARD OF THINNESS IN BULIMIA NERVOSA

By

NICOLE JOY SIEGFRIED

Bachelor of Science
University of Alabama
Tuscaloosa, Alabama
1991

Master of Science
Oklahoma State University
Stillwater, Oklahoma
1993

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Dissertation Approved:

Dissertation Adviser

Dean of the Graduate College

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CHAPTER I

INTRODUCTION

Bulimia nervosa is an eating disorder characterized by overconcern with body image, a decreased sense of control over eating, and recurrent episodes of binge eating followed by purging through vomiting, laxative/diuretic use, and/or excessive exercise (DSM-IV, American Psychiatric Association, 1994). Research has identified a significant increase in the prevalence of bulimia over the past few decades with current prevalence rates of the disorder ranging between 3 and 5 percent among young women (Pyle, Newman, Halvorson, & Mitchell, 1991; Striegel-Moore, Silberstein, Frensch, & Rodin, 1989; Thelen, Mann, Pruitt, & Smith, 1987). The rise in the prevalence of bulimia appears to be especially apparent on college campuses. Some research suggests that the rates of bulimic symptomatology in young women in university settings are as high as 19 percent (Halmi, Falk, & Schwartz, 1981). Evidence of widespread bulimic behaviors on college campuses has prompted researchers to identify aspects of college life that may be associated with disturbed eating patterns. Investigators have hypothesized that the stress generated by academic concerns, social pressures, and individuation issues may be associated with the increased prevalence of eating disorders among college women (Crandall, 1988; Striegel-Moore et al., 1989; Striegel-Moore, Silberstein, Grunberg, & Rodin, 1990). Others contend that the increased prevalence of bulimia in college women is the result of a heightened focus on appearance related to

dating, parties, and other social activities (Squire, 1983; Striegel-Moore, Silberstein, & Rodin, 1986). Still others assert that, as closed environments, universities magnify the sociocultural pressures of thinness to which all women are subjected. The intensification of the sociocultural standard of thinness is thought by some to be an important factor in the development of bulimia in college women (Mintz & Betz, 1988; Stice, 1994; Striegel-Moore et al., 1986). Most likely, some combination of these factors is responsible for the increased prevalence of bulimia in undergraduate women (Striegel-Moore et al., 1986). However, research in this area is inconclusive and a comprehensive conceptualization of the disorder in this population is not well developed.

One specific risk factor in the development of bulimia that may offer promise for identifying the etiological route for the disorder in undergraduate women involves the process of internalization of the sociocultural standard of thinness (Mintz & Betz, 1988; Striegel-Moore et al., 1986). Research has demonstrated a relationship between internalization of the thinness standard and the development of eating disorder symptomatology (Kendler et al., 1991; Mason, 1995; Mintz & Betz, 1988; Rodin, Silberstein, & Striegel-Moore, 1985; Heinberg, Thompson, & Stormer, 1995). However, the process by which the thinness ideal is accepted and internalized is still unclear. Determining the process by which the sociocultural standard of thinness is accepted and propagated by college women appears to be an important step in understanding the etiological and maintenance factors involved in bulimia.

Several authors have proposed risk factors that contribute to internalization of the sociocultural standard of thinness in the development of bulimia, including media

exposure (Stice, Schupak-Neuberg, Shaw, & Stein, 1994), peer pressures (Heinberg & Thompson, 1995), family pressures (Pike & Rodin, 1991), and family environment (Mason, 1995). Recently, Mason and Chaney (1996) proposed an etiological route that outlines the role internalization of the sociocultural standard of thinness in bulimia in undergraduate women. Mason and Chaney suggest that women from families that encourage consensus and unity among family members are more likely to adopt the beliefs and values of others, potentially including the sociocultural standard of thinness. That is, women who develop bulimia may be more vulnerable to social pressures in general and acceptance of the thinness ideal may be a specific manifestation of this vulnerability. To date, no published research has experimentally investigated the direct relationship between social conformity and bulimia.

The present paper reviews the relevant literature regarding the sociocultural standard of thinness, social conformity, and bulimia. First, evidence for the relationship between internalization of the thinness ideal and bulimia will be presented. It will be argued that acceptance of our culture's standards of attractiveness predisposes certain women to develop bulimia nervosa. Second, an argument will be presented suggesting that internalization of the thinness ideal patterns the process of internalization described in the social conformity literature (Kelman, 1961). Specifically, evidence will be presented suggesting that initial compliance with the beliefs of others leads to acceptance of these beliefs for certain individuals. Similarly, it will be suggested that women who publicly conform to the thinness ideal are at greater risk for internalizing this standard, and, in turn, are at greater risk for developing bulimia. Finally, evidence that supports the

relationship between social conformity and bulimia will be presented. Research has indicated that social pressures are instrumental in the perpetuation of bulimic symptomatology (Crandall, 1988). Further, studies have found that individuals with bulimia are more approval-seeking (Katman & Wolchick, 1984) and more concerned with self-presentation (Striegel-Moore, Silberstein, & Rodin, 1993), individual characteristics that comprise social influence (Froming & Carver, 1981). However, the direct relationship between social conformity and bulimia has not been experimentally investigated.

Based on the presented literature, an experimental investigation of the relationships among social conformity, internalization of the thinness standard, and bulimia is presented. This study utilized a simulated conformity paradigm similar to those that have been previously utilized in the literature to demonstrate the effects of social influence (See Tanford & Penrod, 1984 for a review). The results of this study are expected to have a significant influence on future research and on the direction of prevention and treatment programs for bulimia nervosa. Specifically, significant results may further define and conceptualize the process by which the sociocultural standard of thinness is internalized in undergraduate women. A clearer understanding of the risk factors for accepting the thin ideal will assist in the development of more targeted and accurate treatment plans and will lead to a better understanding of the etiology and maintenance of bulimia nervosa in undergraduate women.

CHAPTER II

REVIEW OF THE LITERATURE

The Sociocultural Standard of Thinness

Researchers have noted that the sudden rise in the prevalence of bulimia (Pyle et al., 1991) parallels Western culture's movement toward an aesthetic preference for thinness (Bruch, 1978; Hsu, 1989; Mazur, 1986). Indeed, whereas contemporary culture associates thinness with success, beauty, and higher socioeconomic status (Hsu, 1989; Striegel-Moore et al., 1986), obesity is linked to unattractiveness, laziness, and lower socioeconomic status (Boskind-White & White, 1987; Stunkard, 1975; Buckmaster & Brownell, 1988). Americans seemingly have become obsessed with being thin and fit, and have come to value thinness and attractiveness and to stigmatize obesity, especially in women (Boskind-White & White, 1987).

In studying America's recent shift to a thinner ideal, researchers observed that the figures of women in the media (e.g., fashion models and Miss America contestants) have approached a much thinner, noncurvaceous appearance in the last few decades with the bust-to-waist ratio for models decreasing from 2 at the beginning of this century to 1.1 in the mid 1990's and the waist-to-hip ratio decreasing from 2 at the beginning of the century to 1.5 in the mid 1990's (Garner, Garfinkel, Schwartz, & Thompson, 1980; Silverstein, Peterson, & Perdue, 1986; Wiseman, Gray, Mosimann, & Ahrens, 1992, Barber, 1998). Thus, the thin ideal is defined as our society's progression toward a preference for smaller waist-to-hip ratios and bust-to-hip ratios in women over the last few decades. Although the ideal body for women has become thinner over the century,

the actual height to weight ratio has increased among women in the general population (Garner, et al., 1980), suggesting that the recent progression toward a thinner ideal for women in Western society cannot be explained simply by an overall decrease in the average body weights of women. Thus, the sociocultural standard of thinness is defined as our society's tendency to make the thinness ideal the expectation for women regardless of weight or body type.

In light of the discrepancy between American women's actual body weights and their ideal body weights as set by the cultural standard, it is not surprising that young women are dieting at unprecedented rates. Research has indicated that between 31 and 82 percent of young women indicate current dieting behaviors (Rosen, Tacy, & Howell, 1990; Rand & Kuldau, 1991; Striegel-Moore et al., 1989). This dieting frenzy has been fueled by a mass media that encourages dieting in women through the circulation of books and articles promoting weight loss. For example, Wiseman et al. (1992) found a significant increase in the number of diet articles in six popular women's magazines from 1959 to 1988. Furthermore, books have been published that explicitly instruct women to diet by employing bulimic and anorexic behaviors. For instance, the bestseller *Beverly Hills Diet Book* (Mazel, 1981) marketed a form of bulimia in which a person compensates for binges by eating massive quantities of fruit to induce diarrhea. This observed heightened concern for thinness and weight loss is particularly salient because research indicates a relationship between dieting behaviors and bulimia (Rand & Kuldau, 1991; Hsu, 1989; Rodin, et al., 1985). Some research further indicates that dieting

precedes disordered eating and that restricted food intake may be a precursor to bulimia (Lowe, 1993; Polivy & Herman, 1985).

Internalization of the Sociocultural Standard of Thinness and Bulimia. The sociocultural pressures on women to achieve a thinner body shape and the subsequent influence that this pressure has on dieting (and potentially on eating disorders) can account for a portion of the increasing prevalence of bulimia in young women. However, all women are exposed to these same sociocultural pressures and, yet, not all women develop eating disorders. It has been suggested that, although all women are exposed to the cultural ideal of thinness, women who are more inclined to accept and internalize cultural mores about slimness and beauty are at greatest risk for dieting and subsequent eating disorders (Bruch, 1978; Heinberg, et al., 1995; Rodin et al., 1985; Striegel-Moore et al., 1986). According to Striegel-Moore et al. (1986), "the more a woman believes that what is fat is bad, what is thin is beautiful and what is beautiful is good, the more she will work toward thinness and be distressed about fatness" (p. 247). Bruch (1978) similarly proposed that the sociocultural epidemic of eating disorders may be a result of women equating weight control with beauty and success through subscribing to fashion's ideal of thinness.

Consistent with the hypothesis that internalization of sociocultural attitudes toward thinness is associated with bulimia, Mintz and Betz (1988) and Striegel-Moore et al. (1986) found that bulimic women expressed a substantially greater acceptance of sociocultural values concerning appearance and weight than women without disturbed eating behaviors. Other research has also indicated that endorsement of the thin ideal is

positively correlated with eating disorder symptomatology (Kendler et al., 1991; Stice et al., 1994; Timko, Striegel-Moore, Silberstein, & Rodin, 1987). Further, Heinberg et al. (1995) found that internalization of sociocultural attitudes of appearance accounted for a significant proportion of the variance in eating disordered behavior beyond the influence of self-esteem, body mass, and simple awareness of thinness and appearance standards.

If internalization of the sociocultural standard of thinness is associated with bulimia, it follows that individuals in subcultures which exaggerate the thinness value and exert heightened pressure on women to conform to the thin ideal should evidence higher rates of disordered eating. Indeed, research indicates that groups (e.g., models, gymnasts, cheerleaders, and ballet students) that magnify the sociocultural standard of thinness have a greater incidence of eating disorders and disturbed eating behaviors than the general population (Garner & Garfinkel, 1980; Lundhom & Littrell, 1986; Meerman, 1983). Further, groups in which the pressures of thinness are minimal or absent demonstrate a lower prevalence of eating disorders. Research indicates that ethnic minorities and citizens of non-Western countries demonstrate lower rates of eating disorder pathology (Gray, Ford, & Kelly, 1987; Prince, 1985). However, as the sociocultural thinness standard has been propagated throughout society, individuals from diverse races have begun to develop eating disorders. For instance, minority women who demonstrate greater acceptance of American ideals of attractiveness tend to exhibit a significantly greater incidence of disturbed eating patterns than minority women who do not adhere to American values and attitudes (Pumariaga, 1986; Pate, Pumariaga, Hester, & Garner, 1992). Further, research has indicated that women from non-Western countries who

relocate to Western continents demonstrate greater eating pathology than women who remain in their home countries (Nasser, 1986; Fichter et al., 1988). As the thin ideal has spread through society there has also been a shift in prevalence of the disorder among economic backgrounds. Whereas in the past, bulimia was primarily seen as the exclusive domain of upper socioeconomic classes, the relationship between socioeconomic status and disordered eating has weakened in recent years (Striegel-Moore, Schreiber, Pike, Wilfley, & Rodin, 1995). The results of these studies demonstrate the pervasiveness of the thin ideal and the relationship between internalization of this thinness value and disordered eating habits.

Social Conformity

Although speculation has been offered as to the risk factors for internalization of the thinness ideal (Stice, 1994; Mason & Chaney, 1996), the specific process of accepting the sociocultural standard of thinness has not been determined. A potential factor influential in the process of internalization of the thinness ideal is social conformity. Mason and Chaney (1996) suggest that women who learn that consensus and unity are important may be more likely to conform to social pressures. The tendency to conform to social influence may predispose these women to accept the thinness ideal and subsequently develop disordered eating habits.

Social conformity is defined as the extent to which an individual, who is under group pressures toward uniformity, complies with a group consensus (Allen, 1965). Social influence is defined as group pressure to conform (Allen, 1965). Asch (1956) was one of the first researchers to demonstrate the profound effects of social influence on

conformity behavior. Asch found that when participants were presented with the choice between reporting an autonomous response to a perceptual stimulus or conforming to majority influence by reporting an obviously erroneous response, a significant minority (37%) of the respondents conformed to a clearly incorrect group judgment. Since Asch's initial investigation the phenomenon of social conformity has been researched extensively. Experimenters have investigated conformity to consensus using manipulations with perceptual stimuli (Asch, 1956, Froming & Carver, 1981; Moscovici, 1980), opinion tasks (Bray, Johnson, & Chilstrom, 1982; Maas, Clark, & Haberkorn, 1982; Johnson, 1989), and decision tasks (Doms, Van Avermaet, & Sas, 1980; Maslach, Santee, & Wade, 1987). The results of these studies supported Asch's initial findings that a minority of individuals will conform to a group's consensus when the group's response is clearly erroneous, and even if the response is disparate from the individual's personal opinion.

Based on the consistency of findings in social conformity research, investigators have further defined specific components of conformity behavior. It appears that two primary types of social influence exist, informational and normative influence. Informational social influence is defined as "influence to accept information obtained by another as evidence about reality" (Deutsch & Gerard, 1955, p. 629). This type of conformity is in operation when an individual conforms to a group based on the belief that the group's response must be correct. Normative social influence is defined as "an influence to conform with the positive expectations of another" (Deutsch & Gerard, 1955, p. 629). This type of conformity is in operation when an individual conforms to a group

based on an awareness of social expectations and a desire to meet those expectations. Most often informational and normative influence operate in conjunction. However, it is possible for informational and normative social influence to operate independently in conformity behavior. That is, an individual may conform based solely on the perceived veracity of the group's response or an individual may conform behaviorally to another's view without privately accepting the belief. Thus, it appears that individuals conform to a group's consensus based on a belief that the group is correct *and/or* an awareness of the expectations of others and a desire to meet those expectations.

It has been suggested that conformity based on normative social influence consists of two separate personality tendencies (Froming & Carver, 1981). The first factor is social desirability, which is defined as the need for social approval (Strickland & Crowne, 1962). Normative influence conformity based on the need for social approval concerns conformity to the group in order to attain group acceptance or prevent group rejection. Conformity based on normative influence also consists of public self-consciousness. Public self-consciousness is defined as an awareness of the expectations of others and a focus on the self as a social object (Scheier, 1980). Normative influence conformity based on public self-consciousness concerns conformity to the group in order to prevent conflict among group members. The goal of publicly self-conscious individuals is to "get along by going along" (Schlenker & Weigold, 1990, p. 820).

Although the constructs of social desirability and public self-consciousness appear similar, they involve separate processes (Turner, Scheier, Carver, & Ikes, 1978). Both social desirability and public self-consciousness encompass a concern with self-

presentation. However, social desirability is self-presentation based on a need for approval, whereas public self-consciousness is self-presentation based on a desire of group cohesion and the facilitation of social exchange (Froming & Carver, 1981).

Research has demonstrated that social desirability and public self-consciousness are related to conformity behavior. Strickland and Crowne (1962) identified a relationship between social desirability and conformity, finding that individuals with a high need for approval were more likely to conform to the responses of confederates in an auditory stimuli conformity manipulation. More recent research has supported Strickland and Crowne's initial findings, indicating that individuals who demonstrate high social desirability are more likely than others to comply with a group's response (Froming & Carver, 1981). Research has also demonstrated a relationship between public self-consciousness and social conformity. Froming and Carver (1981) found that individuals high in public-self-consciousness were more likely to conform to a consensus in an auditory perception task. Further, Scheier (1980) found that individuals who scored high on a measure of public self-consciousness were more likely than others to conform to another individual's attitudes toward certain values.

In sum, research has demonstrated that certain individuals tend to conform to majority opinion. Two factors are involved in conformity behavior, informational and normative influence. By definition, normative influence involves public-self consciousness and social desirability. Thus, individuals who are aware of social expectations and desire to meet these expectations are more likely than others to conform to majority opinion.

Social Conformity and Internalization of the Sociocultural Standard of Thinness.

No research to date has directly investigated the relationship between the tendency toward social conformity and internalization of the sociocultural standard of thinness. However, it has been suggested that women who are more vulnerable to social pressures are at higher risk for internalizing the thinness standard and, in turn, for developing bulimia (Striegel-Moore et al., 1986; Hsu, 1990).

Kelman (1961) identified three stages of opinion change involved in social conformity: compliance, identification, and internalization. Compliance occurs when an individual adopts a belief of another based on approval or disapproval from group members. In this stage, an individual may act in accordance with the beliefs and attitudes of another, yet privately disagree. Identification occurs when an individual adopts the group attitude based on a satisfaction of a self-defining relationship between the person and the group. In this stage the individual adopts another's belief in attempt to be like that person or group. As long as group pressures are present or as long as the individual wishes to attain group status, he or she will both publicly and privately adopt the group's attitude. Whereas in compliance the individual is concerned with pleasing others, in identification the individual is concerned with meeting the other's expectations for his or her own role performance. Internalization occurs when another's belief is integrated into a person's own value system and the individual acts in accordance with the attitude both publicly and privately. Research has suggested that initial public compliance often leads to internalization or private acceptance (Gerard, 1954; Hardy, 1957).

Various explanations of the progression from public compliance to internalization have been offered. It has been suggested that individuals may feel committed to their group responses and that a disparate private response results in cognitive dissonance (Festinger, 1954; Brehm & Cohen, 1962). It has also been suggested that the desire to attain group status facilitates the progression from public compliance to internalization (Kelley & Shapiro, 1954). Research has demonstrated that individuals are more likely to both publicly and privately accept the beliefs of attractive, credible, and/or cohesive groups (Allen, 1965; Festinger, Gerard, Hymovitch, Kelley, & Raven, 1952;Gerard, 1954).

Based on the characteristics of the thinness ideal and of the groups that prescribe to this norm, it appears that the factors that facilitate progression from public compliance to internalization are operative in the process of internalization of the thinness standard. Based on the severity and pervasiveness of the thinness ideal and because the thinness standard is propagated by well-respected, attractive individuals, young women are likely to at least publicly acknowledge a desire for thinness. Based on certain individual tendencies (i.e., need for approval, public self-consciousness), some individuals may feel the need to publicly comply with the thinness standard, both verbally and behaviorally.. Specifically, public compliance to the thinness ideal may consist of engaging in a group critique of the figures of other women, dressing a certain way to enhance thinness to impress others, or restricting food intake in front of others for whom thinness is important. Public compliance in this manner may promote internalization similar to the manner described in the social influence. Specifically, because of pressure from the

media and from groups that magnify the thinness standard, certain individuals who publicly comply with the thinness standard are likely to identify with this belief. In turn, based on individual difference factors and personal belief systems, some individuals internalize the thinness standard. Based on this hypothesized progression of internalization of the thinness standard, it is apparent that individuals who are more likely to publicly comply with the beliefs of others are at higher risk for public compliance with the thinness ideal and ultimately for internalization of this ideal.

Social Conformity and Bulimia. Although no experimental research has directly investigated the relationship between social conformity and bulimia, research has indicated that social influences are instrumental in the development of bulimia. Crandall (1988) investigated the role of social influence in binge eating, a symptom of bulimia, suggesting that the perpetuation of bingeing may be the result of social forces. He found that binge eating became "the norm" (p. 593) in two sororities over a year's period and that the development of this norm was based on popularity and group pressures toward uniformity. Although Crandall alluded to the magnified presence of the thinness ideal in sororities, he failed to control for the perpetuation of the thinness standard and group pressure toward acceptance of the thinness standard as determinants of the increase in binge eating. Further, although Crandall found that women who were in "psychological distress" (p. 596), as measured by Roseberg's Self-Esteem Scale, were more likely than others to comply with the binge-eating norm, he did not specifically investigate individual difference factors (e.g., tendencies toward social conformity) that predisposed a woman to conform to the binge-eating norm.

Other research has suggested that women with bulimia demonstrate tendencies toward social conformity. Anecdotally, bulimic women have been described as dependent (Striegel-Moore et al., 1986), suggestible (Boskind-White & White, 1987) and compliant (Hsu, 1990). Striegel-Moore et al. (1993) suggest that women with bulimia portray a "false self" (p. 297), in which they create a facade which meets the expectations of others and the demands of the social situation. Boskind-White and White (1987) describe women with bulimia as "eager to appease others and to avoid conflict at any cost" (p. 192). Additionally, a significant portion of women with bulimia also meet criteria for depression (Blouin, Zuro, & Blouin, 1990), which has been associated with social conformity tendencies (Maslach, Santee, & Wade, 1987). Further, links between other socially influenced behaviors and bulimia suggest that women with bulimia may be more vulnerable to social pressures than others. Research has indicated that women with bulimia are at greater risk for substance abuse than the general population (Mitchell, Hatsukami, Eckert, & Pyle, 1985). Further, there is evidence that women with bulimia may be more sexually active than women without disordered eating habits (Calam & Slade, 1987). Although it has been suggested that the tendencies toward substance abuse and sexual activity may be related to impulsivity (Garfinkel & Garner, 1982), it is equally likely that these tendencies represent a heightened vulnerability to social pressures.

In addition to the anecdotal evidence of social conformity tendencies in women with bulimia, research has supported a relationship between the factors involved in conformity based on normative influence (i.e., social desirability, public self-consciousness) and bulimia. Studies have indicated that, compared to women without

eating disorders, women with bulimic symptomatology have higher needs for approval. Dunn and Ondercin (1981) found that women with bulimic symptomatology scored higher than controls on a measure of social desirability. Katzman and Wolchik (1984) found that women who met DSM-III criteria for bulimia were more likely to demonstrate extreme demands for approval than women without disturbed eating habits.

Researchers have also identified a relationship between public self-consciousness and bulimia symptomatology. Theron, Nel, and Lubbe (1991) identified a relationship between disturbed body image (a symptom of bulimia) and public self-consciousness in a sample of undergraduate men and women. Blanchard and Frost (1983) found that public self-consciousness was significantly related to restrained eating, a hypothesized precursor to bulimia. Research has also demonstrated a relationship between the clinical syndrome of bulimia nervosa and public self-consciousness. Mason (1995) found that undergraduate women who met criteria for bulimia, based on a self-report measure, were more likely to demonstrate a concern with self-presentation and an increased awareness of social expectations. Striegel-Moore et al. (1993) found that women with DSM-III-R diagnoses of bulimia nervosa demonstrated higher levels of public self-consciousness than women without disordered eating.

Although the aforementioned studies suggest that social influences are instrumental in acceptance of the thinness ideal and in the development of bulimia, these relationships have not been investigated directly. Future research is required to determine the role of social conformity in the development of bulimia.

Summary

Research has been presented which evidences a relationship between internalization of the sociocultural standard of thinness and bulimia nervosa in undergraduate women. However, the factors that place a woman at risk for internalizing the thinness ideal have not been determined. A potential factor that may predispose a woman to accept the thinness standard is social conformity. Research has indicated that individuals who initially conform (i.e., publicly comply) with the attitudes of others are more likely to internalize group attitudes (Allen, 1965). However, this tendency has not been directly researched in relation to the thinness ideal. Research also was presented which suggests a relationship between social conformity and bulimia. Although it has been shown that social forces are instrumental in the perpetuation of bulimic behaviors (Crandall, 1988), the direct relationship between individual social conformity tendencies and bulimia has not been investigated.

CHAPTER III

THE PRESENT STUDY

Various models of the sociocultural influences of bulimia have been presented in the literature. Stice (1994) suggests that multiple sociocultural pressures are involved in the development of bulimia, including the thinness ideal for women, the importance of appearance in the female gender role, and the importance of appearance for women's societal success. Although the combination of these social factors is important in the etiology of bulimia, the factors must be thoroughly investigated to better understand their specific roles in bulimia development. Mason and Chaney (1996) identified specific factors that place a young woman at risk for internalizing the sociocultural standard of thinness and called for a thorough investigation of acceptance of the thinness ideal as a risk factor for bulimia in undergraduate women. It is their position that women who are raised in family environments that encourage conformity are more likely than others to conform to social pressures, including the thinness ideal. In turn, these women are more likely to develop bulimia. Research has extensively investigated the relationship between family environment characteristics and bulimia (Blouin et al., 1990; Humphrey, 1989; Johnson & Flach,1985; Ordman & Kirschenbaum, 1986; Shisslak McKeon, & Crago, 1990; Stern et al., 1989). However, no published research has investigated the direct relationship between social conformity and bulimia.

The primary goal of the present study was to experimentally investigate the extent to which social conformity is related to internalization of the sociocultural standard of thinness and bulimia nervosa. The relationship among these variables was determined by

comparing participants' responses on a self-report measure of acceptance of the thinness ideal and on a self-report measure of bulimia to an experimental paradigm measure of social conformity. For the purpose of this study social conformity was defined as public compliance with a deviant group consensus. Social conformity was measured by the amount of attitude change after exposure to the group consensus that deviated from the individual's true response.

Demographic information, as well as symptoms of depression, were assessed as potential covariates. Research has demonstrated a relationship between some demographic data and bulimia and a relationship between depressive symptomatology and bulimia (Blouin et al., 1990), as well as between depression and social conformity tendencies (Maslach et al., 1987). Thus, these variables were assessed as potential covariates so that the direct, independent relationship between bulimia and social conformity could be measured.

The present study utilized an opinion task in the measurement of social conformity in bulimia nervosa. This type of task was chosen for this study because it closely approximates the process of conformity to the thinness ideal. First, the thinness ideal is basically an opinion or attitude. Second, opinion tasks are considered the most ambiguous tasks faced by individuals in the social conformity process (Tanford & Penrod, 1984). Research has indicated that individuals are more likely to internalize group responses in ambiguous opinion tasks; whereas in unambiguous perceptual tasks (e.g., determination of line length) the participant is more likely to publicly comply with the group's deviate response, yet a private change in perception is quite rare (Asch,

1956). Thus, by utilizing an opinion task, rather than a perceptual task, the progression from public compliance to private acceptance was more accurately depicted.

Based on a review of opinion task paradigms utilized in the study of social influence (e.g., Allen & Levine, 1969; Hardy, 1957; Helson, Blake, & Mouton, 1958; Johnson, 1989; Rugs & Kaplan, 1993), an apparatus was employed in the present study that incorporated the strengths of these various studies. Specifically, the format of the present study most closely approximated that of Johnson (1989). Johnson utilized an opinion task in his investigation of the relationship between social influence and concern for appropriateness (i.e., concern with social demands). Johnson's study is similar to Allen and Levine's (1969) research in which social conformity to various topics was assessed. In Phase I of Johnson's (1989) study participants completed the Concern For Appropriateness Scale (CFA) and responded to a list of 18 value situations on a 5-point Likert scale. In Phase II participants with high and low scores on the CFA met with two confederates. Participants were asked to rate their opinions on a series of values. Response position was counterbalanced across the participant and confederates. The confederates agreed with the participant's prior responses on all of the trials except for the four in which the participant was last to respond. On these trials the participant was pressured to conform to an opinion that differed from his/her prior viewpoint. Results indicated that individuals with a high concern for appropriateness were more vulnerable to social influence.

Johnson's study (1989) demonstrated several improvements over other opinion task conformity paradigms. First, there was an interval between Phase I and Phase II of

the study and separate experimenters were utilized in each phase. Thus, participants may have been likely to feel less committed to their original responses. Second, the experiment included control trials in which group pressures were absent (i.e., when the participant responded first or when confederates agreed with the participant's initial opinion). Thus, opinion change under social influence could be compared to opinion change without group pressures. Third, the conformity trials included both opinions that were rated as important and opinions that were rated as unimportant by the participant. Research has shown that participants are more likely to comply to opinions that they view as unimportant (Kaplowitz, Fink, D'Alessio, & Armstrong, 1983). Thus, by including self-rated important and unimportant opinions in the conformity trials, the subjective valence of the opinions was controlled. Fourth, various topics were utilized so that opinion change could be measured more comprehensively. Finally, participants were in a face-to-face format in which conformity pressures are greatest and that more accurately mimics real-life social pressures.

Although the Johnson (1989) study demonstrates several improvements over past research, it is not without limitations. First, only two confederates were utilized. Research indicates that conformity effects are greatest at a majority of three and then level off (Asch, 1951). Second, the genders of the confederates were not reported. Research has suggested that gender of confederates affects social conformity (Tuddenham, 1958). In the present study four confederates (two male and two female) were utilized in order to maximize conformity effects and to balance the effects of gender.

Based on a review of the literature on bulimia and social conformity, three related outcomes to this study were anticipated. First, it was hypothesized that women who scored highly on a measure of bulimia would demonstrate higher scores on a measure reflecting internalization of the thinness standard. Research has indicated that women who internalize the thinness standard are at higher risk for the development of eating disorders (Mintz & Betz, 1988). Further, this relationship appears to supercede mere awareness of the thinness ideal for women (Heinberg et al., 1995).

Second, it was hypothesized that women scoring highly on a measure of bulimia would be more likely to conform to social pressure in an experimental setting. Research has suggested that women with bulimia demonstrate tendencies toward social conformity (i.e., public self-consciousness, need for approval) (Katzman & Wolchick, 1984) (Striegel-Moore et al., 1993) and that social pressures are involved in the perpetuation of bulimic symptomatology (Crandall, 1988). Thus, it was expected that women who endorsed greater bulimic symptomatology would be more likely to conform to social pressure in an experimental setting.

Third, it was hypothesized that women who scored highly on a measure of internalization of the sociocultural standard of thinness would be more likely to conform to social pressure in an experimental setting. Research has suggested that public compliance to attitudes of others is associated with internalization of others' attitudes (Hardy, 1957; Gerard, 1954). Thus, it follows that women who publicly conform to the attitudes and beliefs of others are at greater risk for internalizing the sociocultural standard of thinness.

CHAPTER IV

METHOD

The present study was separated into two phases. PHASE I was a group survey in which participants completed self-report measures of bulimia, internalization of the sociocultural standard of thinness, depression, and opinions and values. Participants from PHASE I who scored high on a measure of bulimia were chosen for PHASE II of the study along with 20 matched controls who scored low on the bulimia measure. PHASE II was the experimental component of the study and consisted of an oral completion of the opinions and values measure from PHASE I. PHASE II participants met individually with 4 trained confederates who gave pre-selected disparate answers from the true participant's PHASE I responses on the opinions and values measure. Conformity was measured as the difference between the participant's PHASE I and PHASE II responses.

PHASE I

Participants and Procedure

The participants in PHASE I were 131 female volunteers from introductory psychology classes. Prior to participation, informed consent was obtained and participants were informed that confidentiality would be maintained and that withdrawal from the study would not be penalized. Participants were given the questionnaires in a group format in a large classroom. The questionnaires were administered to participants in an invariant order and the instructions for each measure were read aloud. Participants earned one extra credit point for their participation in Phase I.

Materials

A Background Information Sheet assesses demographic information, including age, race, location of residence, year in school, parental marital status, and parental education and occupation (See Appendix A).

The Bulimia Test - Revised (BULIT-R) (Thelen, Farmer, Wonderlich & Smith, 1991) is a 36-item multiple-choice questionnaire that diagnoses bulimia based on DSM-III-R criteria. The BULIT-R categorizes individuals into 3 groups: bulimics (>104), subclinical bulimics (90-103), and non-bulimics (<90). Although these scores designate groupings for bulimia severity, it has been suggested that a lower limit of 85 be used for research purposes (Thelen et al., 1991). Although the BULIT-R is based on DSM-III-R criteria, the measure encompasses the primary criteria of the DSM-IV bulimia diagnosis. Specifically, the BULIT-R assesses the frequency of bingeing behavior, the use of a compensatory behavior, whether it be purging (e.g., vomiting or laxative use) or nonpurging (e.g., fasting), feelings of loss of control, feelings of self-deprecation, and overconcern with body shape and weight. Past research with the BULIT-R has indicated a 3% prevalence rate of bulimia and a 9% prevalence rate of subclinical bulimia in college samples (Thelen, Mann, Pruitt, & Smith, 1987). The BULIT-R is reported to be highly reliable [$r(159) = .95$], with good predictive and discriminant validities (Thelen et al., 1991). Studies comparing the BULIT to the Eating Disorder Inventory (EDI) and the Eating Attitudes Test (EAT) have shown the BULIT to be the most valid indicator of bulimia (Welch & Hall, 1989) (See Appendix B).

The Sociocultural Attitudes Toward Appearance Questionnaire (SATAQ) (Heinberg, et al., 1995) is a 14-item, 5-point Likert-format questionnaire that assesses

internalization of the sociocultural standard of thinness. Items are totaled with higher scores indicating greater recognition and internalization of the sociocultural standard of thinness. Items can be specifically examined to determine internalization as compared to mere awareness of the thinness ideal. The Internalization Scale is comprised of 8 items reflecting an individual's degree of acceptance of society's value of thinness for women and the Awareness Scale is comprised of 6 items, indicating an individual's degree of recognition of these values. Research indicates good convergent validity between the SATAQ and multiple indices of body image and eating disturbance (Heinberg et al., 1995). (See Appendix C)

The Opinions and Values Questionnaire is a list of value situations (e.g., "To have sex while unmarried"). Respondents rate the personal acceptability of each of the 20 value items on a 7-point scale ranging from *very acceptable* (1) to *very unacceptable* (7); they also rate the personal importance of the items on a 7-point scale ranging from *very important* (1) to *very unimportant* (7). (See Appendix D)

The Inventory to Diagnose Depression (IDD) (Zimmerman & Coryell, 1987) is a 22-item instrument used to assess the presence of DSM-IV (APA, 1994) depressive symptomatology. Items are grouped into five statements regarding various depressive symptoms, arranged in order of increasing severity. A severity index of depressive symptomatology is obtained by summing the items. A scoring algorithm also provides for making binary decisions regarding the presence of symptoms necessary for a diagnosis of major depressive disorder. The IDD has been shown to be a reliable and valid measure of depression (Zimmerman & Coryell, 1987, 1988; Zimmerman, Coryell,

Wilson, & Corenthal, 1986). The IDD has also demonstrated good diagnostic concordance with both semi-structured interviews for depression and clinician ratings of major depression symptomatology (Zimmerman & Coryell, 1994; Zimmerman et al., 1986). Because depression has been linked to bulimia (Blouin et al., 1990) and to conformity tendencies (Maslach et al., 1987), depression diagnosis from the IDD was assessed to determine its relationship to the variables under investigation.

PHASE II Pilot Study

Prior to execution of PHASE II of the study, a pilot study was conducted to ensure proper training of confederates and proper execution of the experimental paradigm. Prior to the pilot, confederates met for three 1-hour practice sessions in which they were trained for their roles in the experimental paradigm and in which they practiced utilizing lab members as the true participants. After completion of confederate training, five participants (who had not been selected for PHASE II) were selected for participation in the pilot study. These participants were interviewed following their participation to determine the areas of needed alteration. None of the participants was aware of the true purpose of the study. PHASE II was conducted based on the pilot study.

PHASE II

Individuals from PHASE I who scored above 85 on the BULIT-R were selected for PHASE II of the study. A comparable number of randomly chosen age and race-matched participants who scored between 20-60 on the BULIT-R were chosen as a control group. Demographic information of PHASE II participants is presented in Table

1. BULIT-R scores for PHASE II participants are presented in Table 2. The Phase II script is presented in Appendix F. Participants in Phase II of the study received an additional extra credit point for their participation. The experimenter in PHASE II was separate from the experimenter in PHASE I.

Each participant met in a room with the experimenter and four other participants who were actually trained confederates. The confederates were actors from the Speech and Drama department who were financially compensated for their participation. Two confederates were male and two were female in order to balance the effects of gender. The experimenter and the confederates remained uninformed as to whether the participant was in the high or low BULIT-R group.

The experimenter informed participants that PHASE II of the study was an extension of PHASE I and that in PHASE II opinions and values would be assessed via an oral format as opposed to the survey format in PHASE I. In order to communicate a sense of uniformity and cohesion, the experimenter explained to the participants that the groups were formed based on similar responses in PHASE I of the study and based on the similarity of their responses to those of society in general. Also, confederates communicated a sense of cohesion by periodically pointing out the agreement among participants (e.g., "Isn't it amazing how much we agree on all of these values"; "I'm glad we all agree on these issues, I think it is important for students to get along").

The experimenter distributed an information sheet that listed 30 value situations selected from the Opinions and Values Questionnaire. Participants were instructed to give their opinions with one of the following responses: *very acceptable* (1), *acceptable*

(2), *fairly acceptable* (3) *undecided* (4), *fairly unacceptable* (5), *unacceptable* (6), and *very unacceptable* (7). Unknown to the participant, the sheets given to the confederates contained the participants' PHASE I attitude responses that the confederates were to give during the subsequent conformity manipulation. Twenty-four of the value issues were the same for all participants and were used to communicate group solidarity and agreement with the participants. The other six issues were two that were identified earlier by the participant as *important,* two identified as *unimportant*, and two items that reflected beliefs about attractiveness and thinness. Item order was counterbalanced across participants so that one third of the participants received an unimportant issue first, one third received an important issue first, and one third received an attractiveness item first. The issues were presented by the experimenter and were answered orally in a round robin manner.

On the six trials in which the participant responded first, the confederates gave responses identical to that of the participant. When the confederates responded first, they gave the same answer as the participant's pretest response, except on the six trials in which the participant was last to respond. On these trials, the confederates gave a unanimous response that was four scale points away from the answer given by the participant in PHASE I (e.g., if the participant answered *acceptable*, the confederates answered *unacceptable*). (If the participant answered *undecided* to the item in PHASE I, then the confederates gave a response that was three scale points away). The disparate responses provided by the confederates on the six conformity trials were designed to

influence the participant to conform to group-held values and represents the experimental manipulation component of the study.

The order of responding was as follows (the conformity trials are in bold):

Issue	Confederate 1	Confederate 2	Confederate 3	Participant	Confederate 4
#1	1	2	3	4	5
#2	5	1	2	3	4
#3	4	5	1	2	3
#4	3	4	5	1	2
#5	**2**	**3**	**4**	**5**	**1**
#6	1	2	3	4	5
#7	5	1	2	3	4
#8	4	5	1	2	3
#9	3	4	5	1	2
#10	**2**	**3**	**4**	**5**	**1**
#11	1	2	3	4	5
#12	5	1	2	3	4
#13	4	5	1	2	3
#14	3	4	5	1	2
#15	**2**	**3**	**4**	**5**	**1**
#16	1	2	3	4	5
#17	5	1	2	3	4
#18	4	5	1	2	3

#19	3	4	5	1	2
#20	**2**	**3**	**4**	**5**	**1**
#21	1	2	3	4	5
#22	5	1	2	3	4
#23	4	5	1	2	3
#24	3	4	5	1	2
#25	**2**	**3**	**4**	**5**	**1**
#26	1	2	3	4	5
#27	5	1	2	3	4
#28	4	5	1	2	3
#29	3	4	5	1	2
#30	**2**	**3**	**4**	**5**	**1**

A participant's conformity score was determined by giving 1 point for each scale point deviation (in the direction of the confederates' response) from her response during PHASE I. A Total Conformity score was calculated; the higher the score, the greater the difference in values expressed in the experimental setting as compared to the survey setting. The Total Conformity scores ranged from *no conformity* (0) to *complete conformity* (24).

Upon completion of the conformity manipulation, participants were debriefed and their awareness of the true purpose of the study was assessed. Two participants in the non-bulimia group were aware of the conformity manipulation and were not included in the analyses.

CHAPTER V

RESULTS

In order to determine covariates to be utilized in the analyses, zero-order correlations were performed for Phase II participants on the variables under investigation. As previously discussed, a variable would be utilized as a covariate if it was correlated with two or more of the study variables or if the bulimia and non-bulimia group differed significantly on any variable. Results revealed a significant relationship between bulimia scores on the BULIT-R and depression scores on the IDD ($r=.56$, $p<.0001$). However, depression scores on the IDD were not related to conformity scores ($r=.089$, $p= .31$). Thus, depression was not utilized as a covariate in the additional analyses. No demographic variables were significantly related to two or more of the study variables, nor were there significant differences between groups on any demographic variables. Thus, no demographic variables were utilized as covariates in the current study.

A one-way Multivariate Analysis of Variance (MANOVA) was conducted to examine the first two hypotheses of group (bulimia diagnosis versus no bulimia diagnosis) differences in internalization scores on the SATAQ and in social conformity scores. MANOVA results were significant, Pillai's trace $F= 8.16$, $p=.001$. Individual ANOVA results revealed a significant difference between the bulimia group and the non-bulimia group on internalization scores on the SATAQ, $F (1, 38) = 16.7$, $p<.0001$, suggesting that women with bulimia are more likely to internalize sociocultural standards of thinness than are women without bulimia symptomatology. A second individual ANOVA revealed no significant difference between the bulimia and non-bulimia groups

on conformity scores, $F(1, 38) = .55$, $p=.46$, failing to support a relationship between bulimia diagnosis and conformity to group pressure. Total Conformity scores for each group are presented in Table 3. Similar to past research, results revealed a significantly higher rate of conformity for both groups on unimportant items as compared to important items, lending validation to our experimental paradigm and suggesting that women are more likely to conform to social influence for opinions that are not as personally relevant. Commonly rated important items included "Having an abortion for not medical reasons", whereas commonly rated unimportant items included "Misrepresenting a child's age to receive reduced travel fare." Conformity rates for each group based on item content (i.e., beliefs about thinness, items ranked as important, items ranked as unimportant) are presented in Table 4.

A zero-order correlation was performed to examine the third hypothesis of a relationship between internalization scores on the SATAQ and Total conformity scores in the conformity paradigm. Results were nonsignificant ($r=.17$, $p=.150$) and failed to support a relationship between internalization of the thinness ideal and conformity to simulated group pressure, suggesting that women who conform to the thinness standard are not necessarily at higher risk for conforming to group pressure in general.

Based on the heterogeneity of BULIT-R scores for the Bulimia group (BULIT-R score range between 85-157), women with only subclinical (90-103) or clinical ($\geq$104) levels of bulimia were compared to non-bulimic individuals on internalization scores on the SATAQ and on conformity scores. MANOVA results were significant, Pillai's trace $F=6.43$, $p=.004$. Individual ANOVA's revealed a significant difference between bulimia

and non-bulimia groups on the SATAQ, $F(1,34)= 11.89$, $p=.001$, suggesting that severely bulimic individuals are more likely to internalize sociocultural standards of thinness than are individuals without bulimia symptomatology. A second individual ANOVA failed to reveal significant differences between groups on conformity scores, $F(1,34)=1.9$, $p=.17$, suggesting that women with subclinical and clinical levels of bulimia were no more likely to conform to group pressure than women without bulimic symptomatology.

CHAPTER VI

DISCUSSION

The present study was an experimental investigation of the relationships among social conformity, the sociocultural standard of thinness, and bulimia nervosa. The relationship among these variables was examined by comparing responses on a self-report measure of acceptance of the thinness ideal and responses on a self-report measure of bulimia to an experimental paradigm measure of social conformity. Consistent with the bulimia literature (e.g., Mason, 1995; Striegel-Moore et al., 1987; Heinberg et al., 1995), results revealed a significant relationship between internalization of the thinness standard and bulimia, suggesting that individuals who accept societal standards of thinness and beauty for women are more likely to develop bulimia symptomatology. Although a relationship between internalization of the thinness standard and bulimia was identified in the current study, the relationship between bulimia and conformity and the relationship between internalization of the thinness standard and conformity were not supported. These results suggest that conformity may not be involved in the process of internalization of the thinness standard for bulimic women.

Although the results from the present study may be an accurate representation of a lack of conformity tendencies for bulimic women, alternative explanations for the findings are possible. First, in the present study the sample size may have been too small to represent the actual effects of conformity pressure for bulimic individuals as compared to non-bulimic individuals. It may be that conformity trends for bulimic individuals are revealed in larger samples. Studies with larger samples utilizing self-report measures of

social conformity (Mason, 1995) and self-report measures of variables related to social conformity (Blanchard & Frost, 1983; Striegel-Moore et al., 1993, Theron et al., 1991) have identified significant a relationship between bulimia and social conformity processes. It must be considered, however, that factors other than large sample size may have accounted for the increased conformity effects in past studies of conformity and bulimia. For instance, past studies utilized self-report measures of conformity rather than an experimental manipulation. It may be that factors related to self-report increase bulimic individuals' conformity tendencies as compared to non-bulimic individuals. Specifically, individuals without bulimia may be less likely to conform to group pressure in an anonymous situation, whereas bulimic individuals may conform regardless of the situation. Research has suggested that many individuals conform in group conditions, but are less likely to conform in anonymous conditions (Kelman, 1961). Kelman has identified this phenomenon as a distinction between identification with group opinion and internalization of group opinions. It may be that many individuals conform to group consensus in the presence of group members, but that only bulimic women internalize group opinions. It may be that only women who internalize group opinions are at risk for developing bulimia. In future research this possibility might be measured by re-assessing opinions and values after the experimental manipulation. Additional research is required to determine factors related to conformity variables for bulimic individuals and non-bulimic individuals in self-report conditions as compared to simulated group pressure conditions.

Another explanation for the lack of significant findings in the current study is related to ceiling effects of the experimental paradigm. In the current study conformity effects were extreme. All women conformed regardless of bulimia diagnosis with most women changing at least a portion of their answers from Phase I to Phase II. It may be that extreme ceiling effects of the study masked the relationship between bulimia and social conformity. Asch (1951) and other researchers have identified the extreme effects of group pressure on various individuals regardless of psychological symptomatology. It may be that when effects are extreme, most individuals conform. However, in less extreme situations individuals with bulimia may continue to conform, whereas individuals without eating disorder pathology may fail to conform when group pressure is weaker. Additional research is required to determine the effects of subtle versus extreme group pressure on bulimic individuals as compared to non-bulimic individuals.

A final explanation of the lack of significant findings in the present study is that the cut-off scores utilized to separate the bulimia and non-bulimia group may have been too broad. The current study employed a cut-off score of 85 on the BULIT-R to define bulimia symptomatology. As previously mentioned, 85 has been recommended as a bulimia cut-off for research purposes by Thelen and colleagues (1991). However, this score is below the subclinical level of bulimia. This lower score may not accurately capture bulimia symptomatology and may fail to represent the true bulimia syndrome. In the present study four participants in the bulimia group fell below subclinical levels of bulimia, eleven participants were in the subclinical range, and five participants were in the bulimia range. Although the BULIT-R scores of the non-bulimia group were

significantly lower than the bulimia group, it may be that the large range of BULIT-R scores for the bulimia group represented a heterogeneous group of women with regard to bulimia symptomatology. Although additional analyses failed to identify significantly greater conformity tendencies for clinical and subclinical bulimics, a larger sample size may have revealed significant differences. Raising cut-off scores or utilizing a diagnostic interview in a larger group may offer a more stringent and potentially more representative measure of bulimia.

Although the present study had several methodological weaknesses that may account for the nonsignificant findings, this study also demonstrated several strengths as compared past research. Many studies have examined variables related to social conformity in bulimia nervosa (e.g., Mason, 1995; Striegel-Moore et al., 1993). However, no research has utilized an experimental manipulation of conformity as related to bulimia. The experimental manipulation utilized in this study was an improvement over past bulimia research utilizing self-report measures of conformity by offering more control and better isolation of the variables under study.

The present study also demonstrated improvement over past conformity research utilizing an experimental measure of social conformity. First, similar to Johnson's study (1987) the current study utilized an interval between Phase I and Phase II of the study and separate experimenters in each phase. Thus, participants may have been likely to feel less committed to their original responses. Second, the experiment included control trials in which group pressures were absent. Thus, opinion change under social influence was compared to opinion change without group pressures. Third, the conformity trials

included both opinions that were rated as important and opinions that were rated as unimportant by the participant, so that the subjective valence of the opinions was controlled. Consistent with past research (Kaplowitz et al., 1983), the present study demonstrated that participants were more likely to comply with opinions that they view as unimportant. Fourth, by utilizing various topics as stimuli in the conformity paradigm, opinion change could be measured more comprehensively. Fifth, participants were in a face-to-face format in which conformity pressures are greatest and that more accurately mimics real-life social pressures. Finally, both male and female confederates were utilized to control for gender effects and four confederates were used to achieve maximum conformity effects (Asch, 1951).

Based on the strengths of the present study, it is possible that the nonsignificant findings is an accurate reflection of a lack of relationship between social conformity and bulimia. It may be that a process other than conformity (e.g., family variables, achievement orientation, need for approval, media access) accounts for internalization of the thinness ideal and bulimia development. Some researchers (e.g., Stice, 1994) have suggested that the process of acceptance of the thinness standard is very intricate, and that a combination of factors sets the stage for internalization. Specifically, social conformity may interact with other risk factors to predispose a woman to internalize the thinness standard and to develop bulimia. For instance, it may be that the interaction of conformity tendencies with a specific family background places a woman at risk for internalization and bulimia. Alternatively, it may be that conformity tendencies and other personality characteristics (e.g., need for approval, public self-consciousness) interact to

place a woman at risk for bulimia. These factors, as well as their interactions, must be examined thoroughly to determine their role in internalization of the thinness standard and development of bulimia nervosa.

Summary and Recommendations

In summary, the present study failed to demonstrate a relationship among social conformity, internalization of beliefs about thinness and attractiveness, and bulimia symptomatology in a group of mild, moderate, and severe bulimic women. An analysis of only moderate and severe bulimic individuals demonstrated similar findings. In light of the weaknesses of the current study, these findings offer many avenues for future research. First, future studies that replicate the present study may benefit from utilizing a larger sample with higher bulimia cut-off scores on the BULIT-R. An even greater improvement would be to utilize a clinical interview to diagnose bulimia in participants. These modifications may more accurately represent the true bulimia syndrome and may offer a more representative group of bulimic individuals.

Secondly, in the experimental paradigm, it may be helpful to include moderate or mild group pressure in addition to no group pressure and extreme group pressure. This modification will help determine if bulimic individuals are more likely to conform to mild and extreme group pressure as compared to non-bulimics, who may only conform to extreme group. Additionally, inclusion of a post-assessment of opinions and values may uncover differences for bulimics and non-bulimics in terms of follow-up internalization of group opinions. Specifically, it may be that both bulimics and non-bulimics conform

in group situations, but only bulimics go on to internalize the group's opinion, whereas non-bulimics retain their original opinions when group pressure is absent.

Finally, researchers may wish to investigate other variables related to social conformity (e.g., public self-consciousness, need for approval, family variables) and their roles in the etiology of bulimia. Currently, the etiology of bulimia is most often conceptualized from a biopsychosocial perspective in which biological, familial, sociological, and individual difference factors converge to place a woman at risk for developing bulimic symptomatology (Vitousek & Orimoto, 1993). Current researchers emphasize the importance of considering intraindividual characteristics in the etiology of eating disorders (Leung, Geller, & Katzman, 1996). However, the precise individual difference variables involved in bulimia development, as well as their position in the etiological pathway and their interactive effects, is unclear. Research utilizing path analysis models of bulimia development or preferably utilizing longitudinal measures of bulimia development in high-risk individuals is required to determine the route of acceptance of the thinness ideal in development of bulimia nervosa.

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Table 1.

Demographic Information for Phase II Participants

Bulimia Group (n=20)	Non-Bulimia Group (n=20)
Age	Age
Mean= 21.1 SD=3.46	Mean= 20.6 SD=2.91
Race	Race
Caucasian= 17 (85%)	Caucasian= 17 (85%)
African American= 1 (5%)	African American= 1 (5%)
Native American= 2 (10%)	Native American= 2 (10%)
Year in School	Year in School
Freshman= 10 (50%)	Freshman= 9 (45%)
Sophomore= 2 (10%)	Sophomore= 4 (20%)
Junior= 4 (20%)	Junior= 4 (20%)
Senior= 4 (20%)	Senior= 3 (15%)

Table 2.

BULIT-R Scores by Group.

Bulimia Group		Non-Bulimia Group	
BULIT-R Range (Level)	# Participants	BULIT-R Range	# Participants
105-157 (Clinical)	5	37-67	20
90-104 (Subclinical)	11		
85-89 (Mild)	4		

Table 3. Conformity Means by Group

Bulimia Group		Non-bulimia Group	
Conformity Mean = 13.8	SD=3.8	Conformity Mean = 12.5	SD=4.2

Table 4.

Conformity Means by Group and by Item Content

Item Content	Group	Mean	SD
Beliefs about Thinness			
	Bulimia	4.85	1.98
	Non-Bulimia	4.30	2.34
Important	Bulimia	3.35	2.25
	Non-Bulimia	3.20	2.48
Unimportant	Bulimia	5.60	2.33
	Non-Bulimia	5.00	2.36

Appendix A

BACKGROUND INFORMATION SHEET

Please fill in the blanks or circle the appropriate response for the following questions.

1. Age: ____

2. Race:
   (1) Caucasian
   (2) African American
   (3) Hispanic
   (4) Native American
   (5) Asian
   (6) Other (please describe) ___

3. Year in school:
   (1) Freshman
   (2) Sophomore
   (3) Junior
   (4) Senior

4. How would you describe the marital status of your parents while you were growing up?

   (1) Married
   (2) Separated
   (3) Divorced
   (4) Divorced/Remarried

**Please answer the following 4 questions as they pertain to the family in which you primarily grew up:

5. Father/Stepfather's highest level of education:
   (1) Less than 12th grade
   (2) High school degree
   (3) College degree
   (4) Graduate degree

6. Mother/Stepmother's highest level of education:
   (1) Less than 12th grade
   (2) High School degree
   (3) College degree
   (4) Graduate degree

7. Father/Stepfather's occupation: _____

8. Mother/Stepmother's occupation: _____

Appendix B

BULIT-R

Answer each question by filling circling the appropriate answer. Please respond to each item as honestly as possible; remember all information you provide will be kept strictly confidential.

1. I am satisfied with my eating patterns.

a. agree
b. neutral
c. disagree a little
d. disagree
e. disagree strongly

2. Would you presently call yourself a "binge eater"?

a. yes, absolutely
b. yes
c. yes, probably
d. yes, possibly
e. no, probably not

3. Do you feel you have control over the amount of food you consume?

a. most or all of the time
b. a lot of the time
c. occasionally
d. rarely
e. never

4. I am satisfied with the shape and size of my body.

a. frequently or always
b. sometimes
c. occasionally
d. rarely
e. seldom or never

5. When I feel that my eating behavior is out of control, I try to take rather extreme measures to get back on course (strict dieting, fasting, laxatives, diuretics, self- induced vomiting, or vigorous exercise).

a. always
b. almost always
c. frequently
d. sometimes
e. never or my eating behavior is never out of control

6. I use laxatives or suppositories to help control my weight.

a. once a day or more
b. 3-6 times a week
c. once or twice a week
d. 2-3 times a month
e. once a month or less (or never)

7. I am obsessed about the size and shape of my body.

a. always
b. almost always
c. frequently
d. sometimes
e. seldom or never

8. There are times when I rapidly eat a very large amount of food.

a. more than twice a week
b. twice a week
c. once a week
d. 2-3 times a month
e. once a month or less

9. How long have you been binge eating (eating uncontrollably to the point of stuffing yourself)?

a. not applicable; I don't binge eat
b. less than 3 months
c. 3 months - 1 year
d. 1 - 3 years
e. 3 or more years

10. Most people I know would be amazed if they knew how much food I can consume at one sitting.

a. without a doubt
b. very probably
c. probably
d. possibly
e. no

11. I exercise in order to burn calories.

a. more than 2 hours per day
b. about 2 hours per day
c. more than 1 but less than 2 hours per day
d. one hour or less per day
e. I exercise but not burn calories or I don't exercise

12. Compared with women your age, how preoccupied are you about your weight and body shape?

a. a great deal more than average
b. much more than average
c. more than average
d. a little more than average
e. average or less than average

13. I am afraid to eat anything for fear that I won't be able to stop.

a. always
b. almost always
c. frequently
d. sometimes
e. seldom or never

14. I feel tormented by the idea that I am fat or might gain weight.

a. always
b. almost always
c. frequently
d. sometimes
e. seldom or never

15. How often do you intentionally vomit after eating?

a. 2 or more times a week
b. once a week
c. 2-3 times a month
d. once a month
e. less than once a month or never

16. I eat a lot of food even when I'm not hungry.

a. very frequently
b. frequently
c. occasionally
d. sometimes
e. seldom or never

17. My eating patterns are different from the eating patterns of most people.

a. always
b. almost always
c. frequently
d. sometimes
e. seldom or never

18. After I binge eat I turn to one of several strict methods to try to keep from gaining weight (vigorous exercise, strict dieting, fasting, self-induced vomiting, laxatives, or diuretics).

a. never or I don't binge eat
b. rarely
c. occasionally
d. a lot of the time
e. most or all of the time

19. I have tried to lose weight by fasting or going on strict diets.

a. not in the past year
b. once in the past year
c. 2-3 times in the past year
d. 4-5 times in the past year
e. more than 5 times in the past year

20. I exercise vigorously and for long periods of time in order to burn calories.

a. average or less than average
b. a little more than average
c. more than average
d. much more than average
e. a great deal more than average

21. When engaged in an eating binge, I tend to eat foods that are high in carbohydrates (sweets and starches).

a. always
b. almost always
c. frequently
d. sometimes
e. seldom, or I don't binge

22. Compared to most people, my ability to control my eating behavior seems to be:

a. greater than others' ability
b. about the same
c. less
d. much less
e. I have absolutely no control

23. I would presently label myself a "compulsive eater", (one who engages in episodes of uncontrolled eating).

a. absolutely
b. yes
c. yes, probably
d. yes, possibly
e. no, probably not

24. I hate the way my body looks after I eat too much.

a. seldom or never
b. sometimes
c. frequently
d. almost always
e. always

25. When I am trying to keep from gaining weight, I feel that I have to resort to vigorous exercise, strict dieting, fasting, self-induced vomiting, laxatives, or diuretics.

a. never
b. rarely
c. occasionally
d. a lot of the time
e. most or all of the time

26. Do you believe that it is easier for you to vomit than it is for most people?

a. yes, it's no problem at all for me
b. yes, it's easier
c. yes, it's a little easier
d. about the same
e. no, it's less easy

27. I use diuretics (water pills) to help control my weight.

a. never
b. seldom
c. sometimes
d. frequently
e. very frequently

28. I feel that food controls my life.

a. always
b. almost always
c. frequently
d. sometimes
e. seldom or never

29. I try to control my weight by eating little or no food for a day or longer.

a. never
b. seldom
c. sometimes
d. frequently
e. very frequently

30. When consuming a large quantity of food, at what rate of speed do you usually eat?

a. more rapidly than most people have ever eaten in their lives
b. a lot more rapidly than most people
c. a little more rapidly than most people
d. about the same as most people
e. more slowly than most people (or not applicable)

31. I use laxatives or suppositories to help control my weight.

a. never
b. seldom
c. sometimes
d. frequently
e. very frequently

32. Right after I binge eat I feel:

a. so fat and bloated I can't stand it
b. extremely fat
c. fat
d. a little fat
e. O.K. about how my body looks or I never binge eat

33. Compared to other people of my sex, my ability to always feel in control of how much I eat is:

a. about the same or greater
b. a little less
c. less
d. much less
e. a great deal less

34. In the last 3 months, on the average how often did you binge eat (eat uncontrollably to the point of stuffing yourself)?

a. once a month or less (or never)
b. 2-3 times a month
c. once a week
d. twice a week
e. more than twice a week

35. Most people I know would be surprised at how fat I look after I eat a lot of food.

a. yes, definitely
b. yes
c. yes, probably
d. yes, possibly
e. no, probably not or I never eat a lot of food

36. I use diuretics (water pills) to help control my weight.

a. 3 times a week or more
b. once or twice a week
c. 2-3 times a month
d. once a month
e. never

Appendix C

SATAQ

Please read each of the following items and circle the number that best reflects your agreement with the statement.

1. Women who appear in TV shows and movies project the type of appearance that I see as my goal.

1	2	3	4	5
completely disagree		neither agree nor disagree		completely agree

2. I believe that clothes look better on thin models.

1	2	3	4	5
completely disagree		neither agree nor disagree		completely agree

3. Music videos that show thin women make me wish that I were thin.

1	2	3	4	5
completely disagree		neither agree nor disagree		completely agree

4. I do not wish to look like the models in the magazines.

1	2	3	4	5
completely disagree		neither agree nor disagree		completely agree

5. I tend to compare my body to people in magazines and on TV.

1	2	3	4	5
completely disagree		neither agree nor disagree		completely agree

6. In our society, fat people are not regarded as attractive.

1	2	3	4	5
completely disagree		neither agree nor disagree		completely agree

7. Photographs of thin women make me wish that I were thin.

1	2	3	4	5
completely disagree		neither agree nor disagree		completely agree

8. Attractiveness is very important if you want to get ahead in our culture.

1	2	3	4	5
completely disagree		neither agree nor disagree		completely agree

9. It's important for people to work hard on their figures/physiques if they want to succeed in today's culture.

1	2	3	4	5
completely disagree		neither agree nor disagree		completely agree

10. Most people do not believe that the thinner you are, the better you look.

1	2	3	4	5
completely disagree		neither agree nor disagree		completely agree

11. People think that the thinner you are, the better you look in clothes.

1	2	3	4	5
completely disagree		neither agree nor disagree		completely agree

12. In today's society, it's not important to always look attractive.

1	2	3	4	5
completely disagree		neither agree nor disagree		completely agree

13. I wish I looked more like a swimsuit model.

1	2	3	4	5
completely disagree		neither agree nor disagree		completely agree

14. I often read magazines like Cosmopolitan, Vogue, and Glamour and compare my appearance to the models.

1	2	3	4	5
completely disagree		neither agree nor disagree		completely agree

Appendix D

Opinions and Values Questionnaire

Please read each of the following items and circle the number that best reflects the personal acceptability and personal importance of each statement.

1. Having sexual relations with someone you intend to marry, but have not yet married.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

2. Taking your own life.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

3. Normal weight individuals taking diet pills to lose weight.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

4. Having sexual relations while unmarried.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

5. Betting on horse races.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

6. Entering a beauty contest.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

7. Having an abortion for non-medical reasons.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

8. Employing large-size models.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

9. Using alcohol.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

10. Seeking a divorce because of incompatability.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

11. Marrying someone who is not a member of your religious tradition.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

12. Getting plastic surgery to look more attractive.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

13. Using profane or blasphemous speech.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

14. Having homosexual relationships.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

15. A mother working outside the home when there are preschool children in the family.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

16. Wearing make-up to look more attractive.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

17. Misrepresenting a child's age to secure a reduced travel fare.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

18. Married persons using birth control devices.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

19. Plagiarizing someone else's work and passing it off as your own.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

20. Littering.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

21. Exercising to achieve a better body.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

22. Taking a sick day from work in order to attend a sporting event.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

23. Smoking marijuana.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

24. Buying something you cannot afford.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

25. Hiring one person over another based on attractiveness.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

26. Not voting in primaries and elections.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

27. Getting liposuction.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

28. Keeping the money when someone mistakenly gives you too much change.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

29. Driving under the influence of drugs or alcohol.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

30. Seeking professional assistance for psychological or emotional difficulties.

1	2	3	4	5	6	7
very acceptable	acceptable	fairly acceptable	undecided	fairly unacceptable	unacceptable	very unacceptable

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1	2	3	4	5	6	7
very important	important	fairly important	undecided	fairly unimportant	unimportant	very unimportant

Appendix E

IDD

1. On this questionnaire are groups of 5 statements.
2. Read each group of statements carefully.
3. Then pick out the one statement in each group that best describes the way you have been feeling the past two weeks.
4. Circle the number next to the statement you picked.

1.	0	I do not feel sad or depressed.
	1	I occasionally feel sad or down.
	2	I feel sad most of the time.
	3	I feel sad most of the time and cannot snap out of it.
	4	I am so sad or unhappy that I can't stand it.
2.	0	My energy level is normal.
	1	My energy level is occasionally a little lower than normal.
	2	I get tired easily or have less energy than usual.
	3	I get tired from doing almost anything.
	4	I feel tired or exhausted almost all of the time.
3.	0	I have not been feeling more restless and fidgety than usual.
	1	I feel a little more restless or fidgety than usual.
	2	I have been very fidgety, and I have some difficulty sitting still in a chair.
	3	I have been extremely fidgety, and I have been pacing a little bit almost every day.
	4	I have been pacing more than an hour per day, and I can't sit still.
4.	0	I have not been talking or moving more slowly than usual.
	1	I am talking a little slower than usual.
	2	I am speaking slower than usual, and it takes me longer to respond to questions, but I can still carry on a normal conversation.
	3	Normal conversations are difficult because it is hard to start talking.
	4	I feel extremely slowed down physically, like I am stuck in mud.
5.	0	I have not lost interest in my usual activities.
	1	I am a little less interested in 1 or 2 of my usual activities.
	2	I am less interested in several of my usual activities.
	3	I have lost most of my interest in almost all of my activities.
	4	I have no interest at all in my usual activities.

6.	0	I get as much pleasure out of my usual activities as usual.
	1	I get a little less pleasure from 1 or 2 of my usual activities.
	2	I get less pleasure from several of my usual activities.
	3	I get almost no pleasure from most of the activities that I usually enjoy.
	4	I get no pleasure from any of the activities that I usually enjoy.
7.	0	I have not been feeling guilty
	1	I occasionally feel a little guilty.
	2	I often feel guilty.
	3	I feel quite guilty most of the time.
	4	I feel extremely guilty most of the time.
8.	0	I do not feel like a failure.
	1	My opinion of myself is occasionally a little low.
	2	I feel I am inferior to most people.
	3	I feel like a failure.
	4	I feel I am a totally worthless person.
9.	0	I haven't had any thoughts of death or suicide
	1	I occasionally think life is not worth living.
	2	I frequently think of dying in passive ways (such as going to sleep and not waking up), or that I'd be better off dead.
	3	I have frequent thoughts of killing myself, but I would not carry them out.
	4	I would kill myself if I had the chance.
10.	0	I can concentrate as well as usual.
	1	My ability to concentrate is slightly worse than usual.
	2	My attention span is not as good as usual and I am having difficulty collecting my thoughts, but this hasn't caused any problems.
	3	My ability to read or hold a conversation is not as good as it usually is.
	4	I cannot ready, watch TV, or have a conversation without great difficulty.
11.	0	I make decisions as well as I usually do.
	1	Decision making is slightly more difficult than usual.
	2	It is harder and takes longer to make decisions, but I do make them.
	3	I am unable to make some decisions.
	4	I can't make any decisions at all.
12.	0	My appetite is not less than normal.
	1	My appetite is slightly worse than usual.
	2	My appetite is clearly not as good as usual, but I still eat.
	3	My appetite is much worse now.
	4	I have no appetite at all, and I have to force myself to eat even a little.

13.	0	I haven't lost any weight.
	1	I've lost less than 5 pounds.
	2	I've lost between 5-10 pounds.
	3	I've lost between 11-25 pounds.
	4	I've lost more than 25 pounds.
14.	0	My appetite is not greater than normal.
	1	My appetite is slightly greater than normal.
	2	My appetite is clearly greater than usual.
	3	My appetite is much greater than usual.
	4	I feel hungry all of the time.
15.	0	I haven't gained any weight.
	1	I've gained less than 5 pounds.
	2	I've gained between 5-10 pounds.
	3	I've gained between 11-25 pounds.
	4	I've gained more than 25 pounds.
16.	0	I am not sleeping less than normal.
	1	I occasionally have slight difficulty sleeping.
	2	I clearly don't sleep as well as usual.
	3	I sleep about half my normal time.
	4	I sleep less than 2 hours per night.
17.	0	I am not sleeping more than normal.
	1	I occasionally sleep more than normal.
	2	I frequently sleep at least 1 hour more than usual.
	3	I frequently sleep at least 2 hours more than usual.
	4	I frequently sleep at least 3 hours more than usual.
18.	0	I do not feel discouraged about the future.
	1	I occasionally feel a little discouraged about the future.
	2	I often feel discouraged about the future.
	3	I feel very discouraged about the future most of the time.
	4	I feel that the future is hopeless and that things will never improve.

Appendix F

Phase II Script

The participant will come into the room in which 3 confederates are already seated, and will be ***instructed to sit by Confederate #3. The 4th confederate will then arrive and be seated by the participant.***

The experimenter will welcome the participants and say:

"Phase II is an extension of Phase I of this study. In this phase, opinions an values will be assessed in an oral format. All of you signed a consent during Phase I agreeing to participate. This phase of the study is worth 1 extra credit point in addition to the one that you have already received for phase I. Again, let me remind you that you are fee to with draw from the study at any time without penalty.

The five of you were selected as a group based on the similarity of your Phase I responses and the similarity of these responses to those of society. Today, we are going to answer a 30-item questionnaire that should take approximately 10 minutes. First, why don't we get to know each other a little better. Why don't we introduce ourselves? Look at confederate 1 expectantly.

CONFEDERATE 1: My name is _____
CONFEDERATE 2: My name is _____
CONFEDERATE 3: My name is _____

PARTICIPANT: My name is _____

CONFEDERATE 4: My name is _____

Do any of you know each other?

Confederates shake heads

Pass out questionnaires. For each confederate who goes first, the response is in a square.

On the following items, you will be asked to state how acceptable each statement is to you. I will read each question and then each of you will answer the question out loud. We will begin with (Name) and we will alternate who goes first. Just give me time to record your answers. Any questions?

Appendix G

IRB Approval

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD
HUMAN SUBJECTS REVIEW

Date: 11-09-96 **IRB#: AS-97-028**

Proposal Title: AN EXPERIMENTAL INVESTIGATION OF SOCIAL CONFORMITY AND BULIMIA NERVOSA IN UNDERGRADUATE WOMEN.

Principal Investigator(s): John M. Chaney, Nicole S. Mason

Reviewed and Processed as: Expedited

Approval Status Recommended by Reviewer(s): Approved

ALL APPROVALS MAY BE SUBJECT TO REVIEW BY FULL INSTITUTIONAL REVIEW BOARD AT NEXT MEETING, AS WELL AS ARE SUBJECT TO MONITORING AT ANY TIME DURING THE APPROVAL PERIOD.
APPROVAL STATUS PERIOD VALID FOR ONE CALENDAR YEAR AFTER WHICH A CONTINUATION OR RENEWAL REQUEST IS REQUIRED TO BE SUBMITTED FOR BOARD APPROVAL.
ANY MODIFICATIONS TO APPROVED PROJECT MUST ALSO BE SUBMITTED FOR APPROVAL.

Comments, Modifications/Conditions for Approval or Reasons for Deferral or Disapproval are as follows:

Signature: _____ Date: November 20, 1996

Chair of Institutional Review Board

VITA

Nicole J. Siegfried

Candidate for the Degree of

Doctorate of Philosophy

Dissertation: AN EXPERIMENTAL INVESTIGATION OF SOCIAL CONFORMITY AND INTERNALIZATION OF THE SOCIOCULTURAL STANDARD OF THINNESS IN BULIMIA NERVOSA

Major Field: Psychology

Biographical:

Personal Data: Born in Peoria, Illinois, On September 3, 1969, the daughter of James and Cynthia Siegfried.

Education: Graduated from Germantown High School, Germantown, Tennessee in May 1987; received Bachelor of Arts degree in Psychology from University of Alabama, Tuscaloosa, Alabama. Received Masters of Science in Psychology from Oklahoma State University, Stillwater, Oklahoma. Completed the requirements for Doctorate of Philosophy degree in Psychology at Oklahoma State University in May 1999.

Experience: Employed as a Psychology Intern at University of Alabama at Birmingham 1997-1998. Employed as a Research Fellow at the University of Alabama at Birmingham in Preventive Medicine 1998-Present.

Professional Memberships: Association for the Advancement of Behavioral Therapy, Society of Behavioral Medicine.