

THE EFFECTS OF MEDIA EXPOSURE ON BODY SATISFACTION,
BELIEFS ABOUT ATTRACTIVENESS, MOOD AND BULIMIC
SYMPTOMATOLOGY AMONG COLLEGE WOMEN

Jessica Lea Varnado, B. A., M. A.

Dissertation Prepared for the Degree of
DOCTOR OF PHILOSOPHY

UNIVERSITY OF NORTH TEXAS

December 2000

APPROVED:

Trent A. Petrie, Major Professor
Karen Cogan, Committee Member
Bert Hayslip Jr., Committee Member
Carolyn Kern, Committee Member
Earnest H. Harrell, Chair of the Department of
Psychology
C. Neal Tate, Dean of the Robert B. Toulouse
School of Graduate Studies

Varnado, Jessica Lea, The effects of media exposure on body satisfaction, beliefs about attractiveness, mood and bulimic symptomatology among college women. Doctor of Philosophy (Counseling Psychology), December, 2000, 130 pp., 6 tables, references, 118 titles.

The research of Stice et al. (1994) and Stice and Shaw (1994) proposed several mechanisms that may mediate the adverse effects of media exposure to the thin ideal including internalization of the thin-ideal, negative affect, and body dissatisfaction. The purpose of this study was to extend initial research of Stice and Shaw (1994) by incorporating two forms of media (e.g., TV and Magazines) to assess the effects of exposure to the media portrayal of ideal body shape on women's mood, body satisfaction, and internalization of societal values concerning attractiveness. The relation of these variables to bulimic symptomatology was examined. The current study improved upon Stice and Shaw's study (1994) by matching participants' scores on BMI, level of negative affect, and level of body satisfaction before random assignment to the experimental conditions. Female undergraduates aged 18 to 25 years participated in premeasure ($N = 198$) and post measure ($N = 164$) conditions. Results from repeated multivariate analysis indicated media exposure to ideal-body images demonstrated no significant changes in women's affect, body satisfaction or endorsement of the thin ideal. Indirect support for the sociocultural theory of eating disorders was provided by multiple regression analyses that demonstrated lower levels of satisfaction with size and shape of body and higher levels of negative affect predicted bulimic symptomatology in women. Future research should determine which females are at greater risk than others for the development of body dissatisfaction, negative mood, and internalization of U.S. values of attractiveness in response to media related messages communicating a thin ideal.

ACKNOWLEDGMENTS

I would like to acknowledge the following people who provided immeasurable assistance, support and inspiration throughout the process of completing my dissertation. First, I would like to thank the chair of my committee, Trent A. Petrie, Ph.D., for the countless time, weekend supervision and 5-minute phone calls (that turned into 30 minutes) he devoted to overseeing my research. With his patience and guidance he facilitated the development of critical thinking skills that will serve me well as I continue my overall professional development and identity as a psychologist. Nicole Van Nood's dedication and effort spent collecting and scoring the data were unparalleled. Her tireless commitment in data collection and scoring contributed to the integrity and professionalism of the study. To my husband, Nathan Dunk, and my entire extended family, especially my parents, Jerry Lynn and David Varnado, D.D.S., and my sister, Jennifer Placke, I would never have been able to finish. Their belief in my potential and constant prayers and encouragement enabled me to reach for the stars. Thank you for believing in me. I thank my closest friends Jonnalee Barta, Ph.D., Laura Austin, Jodi Gonzalez, Ph.D., and David Falkstein, Ph.D., who always supported my efforts. Their emotional support and friendship across the miles helped normalize this sometimes seemingly insurmountable endeavor. Finally, I would like to acknowledge the contributions of all the participants in this study who provided further information and understanding of individuals who struggle with eating disorders.

TABLE OF CONTENTS

	Page
ABSTRACT	
TITLE PAGE	i
ACKNOWLEDGMENTS	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	iv
Chapter	
1. INTRODUCTION.....	1
Introduction to the Study	
Sociocultural Influences	
Proposed Mechanisms of Action of Media Exposure on Eating Pathology	
2. METHOD	18
Participants	
Instruments	
Procedure	
Data Analysis	
3. RESULTS.....	35
Descriptive and Demographic Data	
Prevalence of Bulimic Symptomatology	
Repeated Measures Analyses	
Hierarchical Regression Analyses	
Exploratory Analyses	

4. DISCUSSION	52
Prevalence of Bulimic Symptomatology	
Investigation Hypotheses	
Limitations in the Research	
Implications for Prevention	
Directions for Future Research	
Conclusions	
APPENDICES.....	65
Appendix A: Beliefs About Attractiveness – Revised (BAA-R)	
Appendix B: Positive and Negative Affect Scale (PANAS)	
Appendix C: Body Parts Satisfaction Scale – Revised (BPSS)	
Appendix D: Bulimia Test – Revised (BULIT-R)	
Appendix E: Media Consumption Scale (MCS)	
Appendix F: Psychology of Fashion and Advertising Questionnaire	
Appendix G: Demographic Questionnaire	
Appendix H: Social Desirability Scale (SDS)	
Appendix I: Tables Including Descriptive Data and all Statistical Analyses	
REFERENCES.....	118

LIST OF TABLES

Table		Page
1	Means and Standard Deviations of Predictor and Criterion Variables	98
2	Pearson Product-Moment Correlations Among the Predictor and Criterion Variables	101
3	Means and Standard Deviations and F Values for Univariate ANOVAs for Dependent Variables Across Time Including Specific Mood Indicators	108
4	Means and Standard Deviations and F Values for Univariate ANOVAs for Dependent Variables Across Time Including Positive and Negative Affect	110
5	Post Measure Hierarchical Regression Analyses for Variables Predicting Bulimic Symptoms Including the Specific Mood Indicators	112
6	Post Measure Hierarchical Regression Analyses for Variables Predicting Bulimic Symptoms Including Positive and Negative Affect	115

CHAPTER 1

INTRODUCTION TO THE STUDY

Bulimia nervosa (BN) and anorexia nervosa (AN) are psychophysiological disorders whose onset occurs primarily in adolescence and young adulthood. BN is characterized by the repeated sequence of bingeing (consuming large quantities of food within a short period of time) and purging (voiding the body of food and its calories through vomiting, laxative use, diuretic use, or excessive exercising), whereas AN is characterized by extreme restriction of food resulting in a type of self-starvation. Prevalence studies suggest that eating disorders affect between 0.5% and 3% of the population with 90% of such disorders occurring in women (American Psychiatric Association [APA], 1994).

Attempts at understanding this gender difference in prevalence rates have been largely linked to sociocultural influences that exert unrealistic social pressures on women to diet and lose weight (Stein, 1991; Striegel-Moore, Silberstein & Rodin, 1986). The sociocultural influences suggested as contributing to eating disorders include the thin body-image ideal espoused for women, the centrality of appearance in the female gender role, and the importance of appearance in women's success in society (Striegel-Moore et al., 1986). More particularly, media messages that communicate the importance of women's appearance and its function in determining societal success are suggested as key contributors to the adverse effects (e.g., eating disorders) of unrealistic efforts to achieve a thin ideal (Stice, Schupak-Neuberg, Shaw & Stein, 1994; Stice & Shaw, 1994). For example, research has demonstrated that women exposed to the media's portrayal of the

thin ideal experience increased negative feelings, body dissatisfaction, and eating disorder symptoms (Stice et al., 1994, Stice & Shaw, 1994). Additional evidence suggests that the extent to which women internalize these sociocultural pressures (e.g., media messages) is related to eating disordered symptomatology (Stice & Shaw, 1994). Thus, women whose efforts to achieve society's thin ideal are met with failure, and most are, may be vulnerable to the development of disordered eating patterns. Moreover, standards of female beauty have become increasingly slimmer since the 1960's which has paralleled an increase in disordered eating attitudes and behaviors (Garner, Garfinkle, Schwartz, & Thompson, 1980; Wiseman, Gray, Mosimann, & Ahrens, 1992).

Taken together, the research mentioned above supports both a sociocultural model and the mass media's influence in understanding the prevalence of eating disorders in women. More particularly, media messages communicating the importance of women's appearance and its function in determining societal success have been shown to produce feelings of negative affect and body dissatisfaction, both of which are suggested to be precursors to disordered eating. Additionally, women who have internalized these media messages are thought to be more susceptible to the development of eating disorders. Thus, the purpose of this study will be to investigate the connections between the media's portrayal of the thin ideal and the development of negative affective states and body dissatisfaction.

The following introduction will broadly review the literature with respect to the sociocultural model of eating disorders. The influence of a current sociocultural environment emphasizing an unrealistic standard of beauty and the means used to communicate this unrealistic standard will be reviewed, specifically addressing the mass media's influence in women's adaptation of this standard. In addition, the proposed mechanisms of action of media exposure on eating pathology will be addressed.

Sociocultural Influences

Studies of prevalence rates have provided well-documented evidence that most eating disorders occur in women. Although multiple determinates for eating disorders are recognized (e.g., psychological, biological, familial), this gender difference has primarily been linked to sociocultural influences that exert unrealistic social pressures on women to diet and lose weight (Stein, 1991; Striegel-Moore et al., 1986). That the majority of women affected by this disorder reside in more urban or westernized cultures provides additional support for the notion that sociocultural environments play a considerable role in the development of eating disorders. The premise of the sociocultural model to eating disorders is that cultural events or cultural environments increase sociocultural pressures (e.g., pressure to be thin) in certain individuals already susceptible to pathology (Johnson & Connors, 1987). Much research has focused on how these sociocultural pressures are transmitted and their influence in promoting the thin body-ideal to women. For example, families, peers, and the mass media all play a pivotal part in transmitting sociocultural pressures.

In the early stages of socialization, the family serves as the primary social agent and thus serves as the initial means by which sociocultural pressures can be communicated. For example, families of eating disordered youth are thought to be overly conscious of weight and appearance and communicate these concerns in the family environment (Pike & Rodin, 1991). Similarly, restrained eaters recalled their parents as more focused on dieting and physical attractiveness than controls did (Costanzo & Woody, 1985).

As the individual grows older, peers also play an important role in promoting a thin ideal (Crandall, 1988; Gordon, 1988). For example, within the college environment, Kashubeck, Marchand-Martella, Neal, and Larsen (1997) found that experiencing

pressures to be thin and to lose weight and knowing more women who binged and purged predicted higher levels of bulimic symptoms in women. Sororities have been identified as a specific peer influence where sociocultural pressures attached to physical appearance, weight, and body shape predominate (Crandall, 1988). Crandall (1988) found that members of a sorority accommodated the frequency of their binge eating to match the social norms of their sorority. In other words, members' binge eating could be predicted from the binge eating patterns of their sorority sisters.

Another means of communicating the importance of being attractive and thin is the mass media (Garner & Garfinkle, 1980; Gordon, 1988). Its impact in promoting eating disorders has been implicated for a number of reasons. First, the increase in eating pathology over the last several decades parallels a change in the body size of female models emphasizing a thinner standard and an increase in the number of articles on diet, weight-loss, and exercise appearing in major women's magazines. Secondly, evidence exists that eating disorders are more prevalent in Westernized cultures where society's standards of beauty as promoted by the media emphasize a slender feminine physique. Finally, bulimics evidence greater internalization of the thin feminine ideal and anorexics demonstrate a greater drive for thinness than non-eating disordered controls.

Research has documented an increase in disordered eating attitudes and behaviors over the last several decades (Pyle, Halvorson, Neuman, & Mitchell, 1986; Szmukler, McCance, McCrone, & Hunter, 1986). This increase coincides with the increase in the number of articles in major women's magazines that emphasize weight-loss, dieting, and exercise and the decrease in body size of female models emphasizing a thinner, more tubular appearance (Garner et al., 1980; Wiseman et al., 1992). For example, Garner et al. (1980) studied the weight and height measurements of Miss America contestants and Playboy centerfolds spanning a 20-year period. Over that time period, both groups

showed body changes that emphasized a thinner standard. In particular, Playboy centerfolds' bust and hip measurements decreased while waists became larger. Although absolute weight remained the same, heights of centerfolds increased leading to a more tubular appearance. Miss America contestants' weight declined an average of .28 lb. per year and winners weighed significantly less than nonwinners. Wiseman et al. (1992) studied these same groups of women between 1979 and 1988. They discovered that 69% of the Playboy centerfolds and 60% of Miss America contestants met DSM-III-R criteria for AN given that their weights were 15% or more below their expected weight for their age and height. Morris, Cooper and Cooper (1988) also documented this shifting feminine ideal to a more tubular, slender appearance. Specifically, the heights and weights of fashion models between 1967 and 1987 increased in relation to a decrease in bust and hip measurements.

Snow and Harris (1986) reviewed women's magazines and documented an increase in the number of advertisements for diet products since 1950. Anderson and DiDomenico (1992) noted that women's magazines contained 10.5 times more advertisements and articles emphasizing weight loss and shape than men's magazines. Similarly, Wiseman et al. (1992) also examined the number of diet and exercise articles spanning the years of 1959-1988 in two popular women's magazines. They reported an overall increase in emphasis on weight reduction evidenced by the increasing proportion of diet articles, exercise articles, and diet/exercise articles. They also noted that a disproportionate number of articles placed greater significance on exercising than dieting as a means to controlling weight. Specifically, the number of diet articles steadily decreased from 1981 to 1988 while the number of exercise articles surpassed the number of diet articles for these same years. The authors suggested that an overemphasis on

exercise might be providing a less noticeable method of purging that allowed some individuals to suffer from BN, but not be easily diagnosed.

Paralleling the increase in eating disorders, the above studies indicate that women's ideal body shape promoted in the media has become increasingly thinner in the past 20 years. The media's emphasis on dieting, weight-loss, and exercise to promote this thin ideal has increased, which some theorists contend actively promotes disordered eating (Rodin, Silberstein, & Striegel-Moore, 1985). Given that current weight statistics from the Metropolitan Life Insurance Company (cited in Johnson & Connors, 1987) indicate women under 30 years have actually increased in body weight over this same time period, cultural standards of a thin ideal are diametrically opposed to the reality of today's women.

The second piece of evidence implicating the media comes from research that has focused on Western culture's preoccupation with thinness (Garner et al., 1980; Morris et al., 1988; Silverstein, Perdue, Peterson & Kelly, 1986; Silverstein, Perdue, Peterson, Vogel & Fantini, 1986; Silverstein, Peterson & Perdue, 1986; Wiseman et al., 1992). Some theorists' contend that Western culture's preoccupation with thinness contributes to eating disordered attitudes and behaviors in women (Boskind-Lodahl, 1976; Garner & Garfinkel, 1980; Schwartz, Thompson & Johnson, 1982; Thompson & Schwartz, 1982). For example, Pyle, Mitchell, Eckert, Halvorson, Neuman and Goff (1983) studied 1,300 college students for weight related concerns. Fear of becoming fat prevailed as a significant concern in both bulimic and non-bulimic women. However, other non-Western cultures and ethnic minorities evidence less eating pathology (Anderson & Hay, 1985; Fichter, Elton, Sourdi, Weyer & Koptagel-Ilial, 1988; Gray, Ford, & Kelly, 1987; Jones, Fox, Babigan, & Hutton, 1980; Kendell, Hall, Hailey, & Babigian, 1973; Silber, 1986).

The lower incidence of eating disorders in non-Western cultures and among ethnic minority cultures in Western society suggests that Western majority culture's preoccupation with thinness and its positive relationship with eating pathology may be a culturally-bound syndrome (Fichter et al., 1988; Nasser, 1986). Nasser (1988) and Swartz (1985) defined a culture-bound syndrome as a combination of symptoms that is not found to be universal to all populations, but is restricted to a particular culture. Overall, research would seem to suggest that eating disorders appear to be a syndrome bound to Western culture, especially for those women in Western culture who have internalized these media messages promoting a thin ideal.

The last piece of evidence implicating the media in promoting eating disorders comes from research that indicates bulimics evidence a greater internalization of the thin ideal than non-eating disordered controls. For example, studies have reported that an individual's endorsement of the thin ideal could predict the subsequent diagnosis of bulimia (Kendler, MacLean, Neale, Kessler, Heath, & Eaves, 1991) and general eating disorder symptomatology (Stice et. al, 1994; Timko, Striegel-Moore, Silberstein, & Rodin, 1987). Mintz and Betz (1988) found that a greater endorsement of sociocultural mores regarding the desirability to be thin distinguished bulimics from chronic dieters and controls. Research has also demonstrated that female bulimics desire to be significantly thinner in body size than weight-matched controls (Williamson, Kelley, Davis, Ruggiero, & Blouin, 1985). Additionally, individuals with bulimia frequently endorse distorted images of body shape evidencing an internalization of the thin ideal (Garner, Olmstead, & Polivy, 1983; Johnson, Lewis, Love, Lewis, & Stuckey, 1984; Stice & Shaw, 1994). Like bulimics, anorexics also tend to exaggerate the size of their bodies (Crisp, 1980; Garfinkel & Garner, 1982).

Research supports the premise that sociocultural influences impact eating disordered individuals through society's use of the media, Western culture's preoccupation with thinness and dieting, and eating-disordered individual's belief in society's standard of beauty as defined by the thin ideal. Most of the research to date has been correlational in nature and prevents firm conclusions from being drawn about the direction of these effects. For example, does an individual's belief in society's standard of beauty as defined by the thin ideal lead to eating disorders or is it the other way around?

Two studies have attempted to ascertain the directional nature of these effects. The first study used a series of experimental manipulations to investigate the mass media's impact on disordered eating. The second study used structural equation modeling to investigate the direct and indirect effects of media consumption on eating pathology. Results supported not only the media's impact on disordered eating, but also the sociocultural model's tenets for understanding eating pathology.

In the first study, participants were 157 undergraduate women randomly assigned to one of three groups: those exposed to pictures of ultra-thin female models ($n = 50$), those exposed to pictures of average-weight female models ($n = 55$), and those exposed to pictures containing no people ($n = 52$) (Stice & Shaw, 1994). Results indicated that individuals exposed to pictures of ultra-thin models, compared to those exposed to pictures of average-weight models or pictures without models, experienced higher levels of depression, stress, guilt, shame, insecurity, and body dissatisfaction. In addition, negative affect, body dissatisfaction and internalization of the thin ideal were significant predictors for bulimic symptomatology.

Stice, Schupak-Neuberg, Shaw and Stein (1994) investigated how exposure to the thin ideal might lead to eating disordered behavior. Previous studies had demonstrated that women exposed to slides of thin models (versus average or over-sized models)

demonstrated lower self-esteem and body satisfaction (Irving, 1990) and that women exposed to attractive models (versus unattractive) resulted in lower self-ratings of attractiveness (Cash, Cash, & Butters, 1983). Neither study investigated how exposure to the thin ideal might lead to disordered eating behavior.

Stice et al. (1994) investigated the impact of exposure to magazines containing images of ultra-thin models for its effect on gender-role endorsement, body dissatisfaction, ideal-body stereotype internalization and degree to which these variables were related to bulimic symptomatology. Results demonstrated significant direct effects of media exposure on eating disorder symptomatology. Media consumption was related to increased gender-role endorsement and a greater internalization of the thin-ideal stereotype that was associated with body dissatisfaction and eating pathology. Structural equation modeling indicated that the adverse effects of exposure to the thin ideal were partially mediated by internalization of this sociocultural ideal. Results supported previous research that bulimics endorse a thin ideal and also demonstrated that media exposure to the thin ideal predicted greater internalization of distorted body images.

Taken together, these two studies indicate that the increasing prevalence of eating disorders seems to be related to society's emphasis as promoted by the media on a thinner, more tubular appearance and women's subsequent internalization of this feminine ideal. These two studies also confirm sociocultural influences of the thin ideal in promoting eating disorders. Although multiple determinants to eating disorders have been substantiated, the sociocultural model provides the most comprehensive explanation for the extreme gender differences in the prevalence of eating pathology and increasing relationships between eating disorder and internalization of thin ideal in Westernized cultures.

Proposed Mechanisms of Action of
Media Exposure on Eating Pathology

The research of Stice et al. (1994) and Stice and Shaw (1994) suggested several variables that may mediate the adverse effects of media exposure to the thin ideal: 1) internalization of the thin-ideal stereotype, 2) negative affect, and 3) body dissatisfaction. Although many correlational studies have demonstrated this relationship of disordered eating to internalization of the thin-ideal stereotype, negative feelings, and body dissatisfaction, little experimental research has investigated eating pathology and its relationship to exposure of thin-ideal body images promoted by the media. Only one study has directly linked a woman being exposed to the societal ideal of thinness and then her experiencing things such as body dissatisfaction and negative affect (Stice & Shaw, 1994). The following will review studies of a correlational or experimental nature that directly or indirectly support the proposal by Stice et al. (1994) and Stice and Shaw (1994). The adverse effects of media exposure to society's beauty ideal are mediated by an individual's level of internalization of the thin-ideal stereotype, her experience of negative affect, and her degree of body dissatisfaction.

Internalization

In theory, exposure to the thin-ideal images promoted in the media will lead to greater internalization of this ideal, thus increasing the risk of eating disordered behaviors. Those individuals who do not internalize sociocultural pressures should be less likely to engage in eating disordered behavior (Striegel-Moore et al., 1986). This association is supported by studies indicating that bulimics demonstrate higher levels of endorsement of societal messages regarding thinness and attractiveness than controls (Garner et al., 1983; Mintz & Betz, 1988; Williamson et al., 1985). Other studies report that individuals with AN tend to possess strong drives for thinness (Crisp, 1980;

Garfinkel & Garner, 1982). Mintz and Betz (1988) found a high incidence of eating disordered behaviors in normal-weight college women whose degree of severity (although not meeting criteria of an eating disorder) was strongly associated with, among other factors, a greater endorsement of sociocultural beliefs espousing a thin feminine ideal. It appears that endorsing a thin ideal is associated with disordered eating patterns even in nondiagnosable eating pathology. As the Mintz and Betz study (1988) was not longitudinal, little is known if these women later went on to develop an eating disorder. Although correlational studies cited above support the association of internalization of sociocultural standards of thinness and disordered eating, few studies have used experimental designs to demonstrate how internalization of the thin ideal leads to eating pathology.

Stice and Shaw (1994) attempted to do so using an experimental design to demonstrate how exposure to ideal body-type images affected women's endorsement of the thin-ideal stereotype. No direct effect was found between media exposure and internalization of the thin ideal. Given individuals' vast amount of media exposure during the course of socialization, the authors noted a single experimental manipulation might not cause marked change in levels of internalization. They suggested that correlational studies may have to be relied upon to demonstrate the relation between media use and internalization of society's thin ideal stereotype. Both the research of Stice et al. (1994) and Stice and Shaw (1994) suggest that eating pathology is positively associated with endorsement of the thin ideal and that the internalization of sociocultural pressures mediates the relation between media exposure and disordered eating.

Negative Affect

Other studies have noted a relationship between negative affect and eating disorders that may also mediate the relationship between internalization of societal

stereotypes and disordered eating. Some theorists suggest that negative affect often precedes binge/purge episodes in some women (Stice & Shaw, 1994). Williamson et al. (1985) found that bulimics were more depressed, anxious, neurotic, and impulsive than their non-bulimic and obese counterparts. Depression has consistently been reported in bulimics (e.g., Ulster, 1989). Sykes, Leuser, Melia & Gross (1988) found the co-occurrence of depression as high as 50% in patients with diagnosable eating disorders, which is disproportionately higher than the rate of depression found in the general population. Greenberg (1986) reported that bulimics obtained higher scores on the Beck Depression Inventory than controls. Other studies noted bulimics evidence greater anxiety than non-bulimics (e.g., Bulik, Beidel, Duchmann, Weltzin, & Kaye, 1992; Parmer, 1991) and lower self-esteem than controls (e.g., Katzman & Wolchik, 1984; Mintz & Betz, 1988; Shisslak, Prazda, & Crago, 1990). Additional research studied psychological and behavioral correlates in individuals with nondiagnosable presentations of disordered eating. Among other factors, they found that "symptomatic eaters" reported more mood disturbances than their asymptomatic cohorts (Steiger, Puentes-Neuman & Leung, 1991).

Although little is known of the specific relationship between mood disturbances and the development of eating pathology, research indicates that bulimics engage in binge eating episodes to ameliorate negative mood states. For example, prior to binge eating, bulimics evidence greater levels of depression, anxiety, and feelings of inadequacy (Davis, Freeman, & Garner, 1988; Schotte, Cools, & McNally, 1990; Steinberg, Tobin, & Johnson, 1990). Research by Schupak-Neuberg & Nemeroff (1993) found that bulimics reported bingeing as a means to manage negative mood states suggesting that women who experience negative feelings about themselves and their bodies engage in binge eating as a means of coping. Others have suggested bingeing reduces feelings of depression because it serves as a distraction (Hawkins & Clement, 1984; Heatherton &

Baumeister, 1992). Binge eating is significant because it is thought to initiate the binge/purge cycle of bulimia in at-risk individuals (Hawkins & Clement, 1984). As the binge provides only temporary relief, the women soon experience increased feelings of guilt, depression, shame, and fear due to their binge eating that, in turn, may lead to purging and more binge eating episodes in an effort to manage their negative mood states. The cycle of bingeing and purging characteristic of bulimics begins and can become deeply ingrained (Hawkins & Clement, 1984). The research cited above (i.e., Hawkins & Clement, 1984; Heatherton & Baumeister, 1992; Schupak-Neuberg & Nemeroff, 1993) supports the hypothesis that bulimic symptoms function to regulate negative affect, a hypothesis that has received additional support by Stice and Shaw (1994).

Stice and Shaw (1994), using a series of experimental manipulations, found exposure to magazine images of thin-models resulted in negative affect, specifically, increased feelings of depression, unhappiness, shame, guilt, stress and decreased confidence. Hierarchical regression analyses indicated that depression, shame, stress, and guilt were predictive of bulimic symptoms while confidence and happiness showed an inverse relationship to this criterion. Negative affect functions to mediate putative effects of the media's promotion of the thin ideal. Media exposure to ideal body images may lead to negative affect that may trigger binge eating in some women (Stice & Shaw, 1994).

Body Dissatisfaction

Body dissatisfaction may also mediate the relationship of media exposure to thin-ideal body images and disordered eating. Internalization of societal standards of beauty (e.g., thin ideal) is believed to heighten feelings of body dissatisfaction that partially mediates the putative effects of exposure to ideal body images embodied in the media (Stice et al., 1994). Festinger's (1954) social comparison theory suggests that individuals engage in social comparisons of societal standards in efforts to satisfy a need for self-

evaluation. For women who have internalized the ideal-body images portrayed in the media, social comparisons of physical attractiveness to women portrayed in television shows, movies, and magazines may serve to increase feelings of body dissatisfaction. Through such comparisons women may view their bodies as inadequate and may feel dissatisfied with their size and shape.

Research suggests that body dissatisfaction may increase in women who internalize the thin-ideal stereotype (Irving, 1990). Irving (1990), using a series of experimental manipulations, found that women exposed to slides of thin models reported less body satisfaction than those women exposed to slides of average or oversized models. Stice and Shaw (1994) demonstrated that media exposure resulted in heightened body dissatisfaction and suggested that exposure to the thin ideal produces body dissatisfaction that promotes eating disordered behavior. In an attempt to alleviate their body dissatisfaction, women may engage in restrained eating in order to lose weight. However, dietary restraint appears to increase the risk for binge eating (Polivy & Herman, 1985).

Restrained eating has been associated with both disregulated or binge eating and bulimia (Dykens & Gerrard, 1986; Greenberg, 1986; Katzman & Wolchik, 1984; Polivy & Herman, 1985; Williamson et al., 1985). Greenberg (1986) studied bulimic and non-bulimic undergraduates and found bulimic subjects to report greater dietary restraint, binge eating, and levels of life stress than their non-bulimic counterparts. Katzman and Wolchik (1984) compared bulimics to non-eating disordered individuals and found that bulimics exhibited greater levels of dietary restraint and greater body dissatisfaction than non-eating disordered individuals. Polivy and Herman (1985) have suggested that the focus on dieting in the media may promote dietary restraint and thus increase the risk for disordered eating behaviors.

Additional studies have demonstrated a definite relationship between body dissatisfaction and eating pathology (Mintz & Betz, 1988; Striegel-Moore, Silberstein, Frensch, & Rodin, 1989; Stice & Shaw, 1994; Stice et al., 1994). Stice and Shaw (1994) found that body dissatisfaction following exposure to thin-ideal body images predicted bulimic symptomatology. Longitudinal research has also demonstrated that body dissatisfaction predicts disordered eating (Attie & Brooks-Gunn, 1989; Striegel-Moore et al., 1989).

Striegel-Moore et al. (1989) assessed the prevalence of negative eating patterns among college students at the beginning and end of their freshman year. They found that negative eating patterns and worsening of disordered eating symptoms were associated with increasing body dissatisfaction manifested as dysphoric feelings about their weight, decreased ratings of attractiveness, and increased dissatisfaction with their weight. Research cited suggests that body dissatisfaction, like negative affect and internalization of the thin ideal, appears to be a precursor to disordered eating.

Previously cited studies support the hypothesis that media communicates an unrealistic standard of attractiveness and acceptance through the message that in order to be successful, liked, valued, competent, and even beautiful, you must be thin and physically fit. The research of Stice et al. (1994) and Stice and Shaw (1994) have proposed several mechanisms that may mediate the adverse effects of media exposure to the thin ideal, including internalization of the thin-ideal stereotype, negative affect, and body dissatisfaction. They have demonstrated that exposure to the media's portrayal of the thin ideal produces increased negative feelings and body dissatisfaction, that in turn, serve as important mediators of the adverse effects of societal pressures to be thin (i.e., eating pathology) (Stice et al., 1994, Stice & Shaw, 1994).

The purpose of this study is to extend the initial research of Stice and Shaw (1994) that demonstrated exposure to ideal body images contained in the media adversely affects women's affective state and body satisfaction. Because the Stice and Shaw study (1994) was first to experimentally manipulate exposure to the thin ideal to demonstrate the relationships between it and negative affect and body dissatisfaction, additional research using an experimental design is warranted. This research will be important to guide the development of programs designed to prevent the development of eating disorders. For example, school-based prevention efforts could be implemented that teach individuals about the deleterious effects of ideal body-images (thus decreasing internalization of thin-ideal stereotype) and about incongruence between the biology of the female body and society's thin ideal (thus promoting greater body satisfaction). Specifically, this study will: 1) examine the effects of exposure to the body-shape ideal on women's affect, body satisfaction, and internalization of societal values concerning attractiveness, and 2) link such mediators to bulimic symptomatology. Unlike the Stice and Shaw (1994) study that used only one form of media (photographs), this study will use both still and video images in order to incorporate a broader sampling of media influence (e.g., movies/TV and magazines) and its relative affects. Do video images more strongly communicate the thin ideal message than still photos or is it vice versa? Do stronger media messages cause greater changes? Female subjects will be randomly assigned to one of four "fashion" conditions (i.e., Control, No Model, Still Model, and Video Model; for specific details, see Method section). It is expected that the women assigned to the Video Model and Still Model conditions will evidence greater negative affect, greater endorsement of societal beliefs about attractiveness, and higher levels of body dissatisfaction than those in the Control and No Model conditions. Because this study is the first to incorporate two forms of media (video and still photographs), no

hypothesis was made with respect to the relationship between the Still Model and Video Model Conditions. As in the Stice and Shaw study (1994), it is expected that body dissatisfaction and negative affect will be predictive of bulimic symptoms. Furthermore, a strong positive relationship will be demonstrated between internalization of the thin ideal and eating pathology.

CHAPTER 2

METHOD

Participants

One-hundred ninety-eight female college students between the ages of 18 and 25 who attended a large southwestern, public university completed premeasure questionnaires on a voluntary basis. Of these 198 participants, 164 returned for the post measure and completed the full study. Participants completing the study received extra credit for their participation and were entered in a \$100 drawing. Due to a problem on the PANAS portion of the questionnaires, 36 participants had to be dropped from the study although still receiving extra-credit for their participation and a chance in the \$100 drawing. Analyses were conducted with the 128 remaining participants.

On average, women had a body mass index of 22.48 kg/m² and were 20.03 (SD = 1.82) years old. Ninety-four (73.4%) participants were Caucasian, non-Hispanic; 13 (10.2%) were Black, non-Hispanic; 9 (7.0%) were Hispanic; 5 (3.9%) were Asian-American; and 7 (5.5%) were other groups (e.g., biracial, international students). No participant identified her race/ethnicity as Native American.

Regarding rank in college, 44 (34.4%) of participants were freshman, 31 (24.2%) were sophomores, 29 (22.7%) were juniors, 22 (17.2%) were seniors, 1 (0.8%) was a graduate student and 1 (0.8%) indicated she was a non-degree seeking student. For self-reported grade point average participants fell in the following categories: 43 (33.6%) reported 3.5 - 4.0, 41 (32%) reported 3.0 - 3.49, 32 (25%) reported 2.5 - 2.99, 8 (6.3%) reported 2.4 - 2.49, and 3 (2.3%) reported less than 2.5. With respect to media

consumption, participants averaged 17.28 (SD = 12.62) hours a week watching television and reading magazines combined, 14.54 (SD = 10.99) hours per week for media consumption of television alone, and 2.74 (SD = 3.06) hours per week for media consumption of magazines alone.

Instruments

Sociocultural beliefs about attractiveness. The 19-item Beliefs About Attractiveness Scale-Revised (BAA-R; Petrie, Rogers, Johnson, & Diehl, 1996) measures the degree to which women endorse U.S. values concerning attractiveness and thinness, with the expectation that greater endorsement of such values would be related to more disordered eating attitudes and behaviors. For items such as, "The heavier a woman is the less attractive she is," individuals indicate their level of agreement on a 7-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). Exploratory and confirmatory factor analyses demonstrated the presence of two stable factors: Importance of Physical Fitness (BAAR1, consisting of 9 items) and Importance of Being Attractive and Thin (BAAR2, consisting of 10 items). Total scores for each factor are obtained by summing individual items for the factor and dividing by 9 for Factor 1 (Importance of Physical Fitness) and by 10 for Factor 2 (Importance of Being Attractive and Thin) yielding an overall score ranging from 1 (low endorsement of U.S. societal values of attractiveness) to 7 (high endorsement of U.S. societal values of attractiveness).

Cronbach's alpha for the two scales was .88 and .89, respectively (Petrie et al., 1996) and in the current study .82 (premeasure) and .87 (postmeasure) for Importance of Physical Fitness, and .87 (premeasure) and .91 (postmeasure) for Importance of Being Attractive and Thin. Concerning the scales' validity, the two factors were unrelated to a measure of social desirability, negatively related to self-esteem (Rosenberg Self-Esteem Scale; $r = -.29$ to $-.32$), and positively related to measures of depression (Center for

Epidemiological Studies - Depression; $r = .16$ to $.28$), concern with body shape (Body Shape Questionnaire; $r = .42$ to $.44$), and bulimic symptoms (Bulimia Test-Revised; $r = .40$ to $.46$) (Petrie et al., 1996). See Appendix A.

Mood scale. The Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988) measures individuals' mood states. The PANAS consists of 10 positive and 10 negative mood descriptors. Participants are asked to rate, on a 5-point scale from 1 (very slightly or not at all) to 5 (extremely), the extent to which they have experienced each mood state during a specific time frame (moment, today, past few days, week, past few weeks, year, general). The specified time frame used to obtain a baseline measure of mood state was "within the last month." The specified time frame to obtain immediate changes in affect following stimulus exposure was "at this moment." The following 5 items (guilty, ashamed, anxious, stressed, depressed) were included in the PANAS questionnaire. These items were added to parallel the affective states measured by Stice and Shaw (1994).

For the 20 item PANAS, separate negative and positive scores can be obtained by summing across each of the respective items. A total score for either factor ranges from 10 (slightly or not at all experiencing a positive or negative mood state) to 50 (extremely experiencing a positive or negative mood state) during the specified time frame for premeasure and postmeasure. Watson et al. (1988) reported internal consistency reliabilities (coefficient alphas) of $.87$ to $.90$ for the positive items (PANAS PA scale) and $.84$ to $.87$ for the negative items (PANAS NA scale). One-week test-retest reliabilities of $.81$ for the PANAS NA scale and $.79$ for the PANAS PA scale were also reported, as well as support for the stability of the PANAS after two months. Cronbach's Alpha for the current study ranged from $.85$ to $.91$ between pre and postmeasure PANAS PA scores and from $.87$ to $.90$ between pre and postmeasure PANAS NA scores. There is adequate

empirical evidence for the factorial, convergent, and discriminate validity of the PANAS (see Watson et al., 1988); both college student and psychiatric norms are available. For this study, overall positive and negative mood scores, as well as the individual negative mood items from the Stice and Shaw (1994) study (anxious, stressed, depressed, shameful, guilty) were used. See Appendix B.

Body Satisfaction. The Body Parts Satisfaction Scale-Revised (BPSS-R; Petrie & Austin, 1997) is a modification of the original BPSS developed by Berscheid, Walster, & Bohrnstedt (1973) and measures degree of concern about body shape. The original BPSS consisted of 24 body parts. Petrie and Austin (1997) decreased the number of items to 14 by maintaining only those body parts believed to be most closely related with dissatisfaction (e.g., hips, stomach, upper thighs). Exploratory factor analyses with promax rotation revealed that a two-factor solution best fit the data: Satisfaction With Body (Factor 1; 7 items) and Satisfaction With Face (Factor 2; 3 items) and confirmatory factor analysis supported the two-factor solution (Petrie & Tripp, 1999). Based on recommendations by Tabachnik and Fidell (1996), only items with factor loadings greater than .50 were retained. Four items were dropped (i.e., height, shoulders, breasts, lower legs) as they did not load significantly on either factor.

The BPSS-R is comprised of a list of ten body parts to which subjects rate their level of satisfaction. Using a Likert format subjects rate body parts such as shoulders, hips, upper thighs, legs, and abdomen from 1 (extremely dissatisfied) to 6 (extremely satisfied). Summing the individual item ratings for each factor and dividing by 7 for Factor 1 (Satisfaction With Body) and 3 for Factor 2 (Satisfaction With Face) yielding an overall score ranging from 1 (extremely dissatisfied) to 6 (extremely satisfied) derives an overall body satisfaction score. One additional item "Overall satisfaction with size and

shape of body" was added based on prior research demonstrating convergent validity ($r = .70$) with the overall body satisfaction score (Berscheid, 1973).

Internal consistency for the BPSS-R is more than adequate with a Cronbach's alpha of .90 for Satisfaction With Body and .72 for Satisfaction With Face. In the current study, Cronbach's alpha for Satisfaction With Body equaled .87 (premeasure) and .91 (postmeasure), and for Satisfaction With Face, .68 (premeasure) and .75 (postmeasure). Construct validity was demonstrated by significant correlations between mean body satisfaction scores for Satisfaction With Body and for Satisfaction With Face with the (a) Multidimensional Body-Self Relations Questionnaire Appearance Orientation Factor ($r = .75$ and $.43$, respectively; Brown, Cash, & Mikulka, 1990) (b) Body Shape Questionnaire ($r = -.75$ and $-.34$, respectively; Cooper, Taylor, Cooper, & Fairburn, 1987; Evans & Dolan, 1993) (c) Situational Inventory of Body Image Dysphoria ($r = -.75$ and $-.34$, respectively; Cash, 1994) (d) Revised Restraint Scale Concern for Dieting Factor ($r = -.60$ and $-.27$, respectively; Herman & Polivy, 1980) and (e) Binge Scale Questionnaire ($r = -.37$ and $-.26$, respectively; Hawkins & Clement, 1980). Lower scores on Satisfaction With Body were also significantly related to body mass index in kg/m^2 ($r = -.32$) and Revised Restraint Scale Weight Fluctuation Factor ($r = -.48$; Herman & Polivy, 1980) (Petrie & Tripp, 1999). See Appendix C.

Bulimic Symptomatology. The 36-item Bulimia Test - Revised (BULIT-R; Thelen, Farmer, Wonderlich & Smith, 1991) is a 36-item, objective self-report measure that assesses the symptoms of bulimia. Although this instrument was originally based on criteria of the Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised (DSM III-R; APA, 1987) a recent study by Thelen, Mintz and Vander Wal (1996) determined the test continues to be a valid measure of bulimia nervosa according to DSM-IV criteria (APA, 1994). It also provides information about bulimic

symptomatology and weight-loss behaviors. Individuals respond to all items; only 28 contribute to the total score. All items are presented in a 5-point, forced choice Likert type format with 5 points representing the extreme bulimic response and 1 point representing responses in the normal direction. Total scores are obtained by summing across the 28 items and can range from 28 to 140.

Thelen et al. (1996), in validating the BULIT-R using DSM-IV criteria for BN, found high internal consistency (Cronbach's Alpha = .98). The correlation of BULIT-R scores with group classification (i.e., bulimic, eating disordered not otherwise specified, or control group) demonstrated a high overall validity coefficient of .73. Predictive validity of each of the test items was shown through point-biserial correlations ranging from .44 to .74. The positive predictive value was .81 (i.e., correctly classifying an eating disordered individual) and the negative predictive value was .98 (i.e., correctly classifying a non-eating disordered individual). For the current study, Cronbach's alpha was .95. In terms of construct validity, the BULIT-R correlated .85 and .99 with the Binge Scale (Hawkins & Clement, 1980) and the BULIT (Smith & Thelen, 1984), respectively. Using therapist diagnosis as the criterion measure, Thelen et al. (1991) reported the sensitivity, specificity, positive, and negative predictive values as .83, .96, .73, .97, respectively, for female undergraduates when a cutoff score of 104 was employed. See Appendix D.

Media Exposure. The Media Consumption Scale (MCS; Stice et al., 1994) is a self-report measure that assesses individual's exposure to media-related outlets, specifically television and magazines. The measure consists of seven items related to television exposure (e.g., "How many hours of Drama shows, such as X-Files, Jag, Family Law, and Chicago Hope do you watch in an average week?") and four items related to magazine exposure (e.g., "How many hours do you spend reading Fashion or Beauty magazines such as Glamour, Cosmopolitan, Elle or Vogue, in an average

week?”). Participants report the number of hours they watch television programs or read magazines in an average week. The scale for each category ranges from 0 hours to 20 hours. Scores for the scale are obtained by summing the total hours of reported media exposure. For purposes of this study total score of media consumption was broken down into two subscores: media consumption of television and media consumption of magazines. This scale has been modified from its original form used by Stice et al. (1994) to include current television programming (i.e., TV news magazines) and current popular magazines (i.e., women's domestic magazines). For the current study, Cronbach's Alpha was .73 for total media consumption; .69 for television alone, and .67 for magazines alone. The original version used in the Stice et al. (1994) study demonstrated sound reliability (test-retest over a three week period, $r = .76$). See appendix E.

Fashion and advertising questionnaire. The Fashion and Advertising Questionnaire (administered in two parts) was developed to support the stated premise of the study (an investigation of fashion). On this 16-item questionnaire (8 items in Part 1 and 8 items in Part 2) participants give information related to their perceptions of fashion and advertising (e.g., “Your favorite clothing store is _____”). Items were not scored or used in analyses for this study. See appendix F.

Demographic data. A questionnaire was developed specifically for this study to obtain age, weight, height, ideal weight, academic rank in school, cumulative grade point average and race/ethnicity. Self-reported weight and height were used to determine a Body Mass Index (BMI) for each subject by dividing weight (in kilograms) by height (in meters) squared. The BMI has been demonstrated as an accepted measure of physical size (Keys, Fidanza, Karvonen, Kimura, & Taylor, 1972). The relative accuracy of self-reports of height and weight has been previously established (Attie & Brooks-Gunn, 1989; Cash, Grant, Shovlin, & Lewis, 1992). See Appendix G.

Social desirability scale. The 13-item short, homogenous version of the original Marlowe-Crowne scale measures individuals' tendencies to respond in a socially desirable manner (SDS; Reynolds, 1982). Items are presented in a true-false format, and total scores range from 0 (low) to 13 (high). In the current study, scoring was modified; total scores ranged from 13 (low) to 26 (high). Internal consistencies have ranged from .61 to .70. In the current sample, CA was .66. Correlations between the short form and the original Marlow-Crowne measure were in the .80s and .90s (Strahan & Gerbasi, 1972). See appendix H.

Procedure

Pilot Study. In an effort to provide optimal external validity, still photos of 25 models and video clips of 10 female models wearing one or two-piece swimsuits in a major U.S. magazine and video (Sports Illustrated swimsuit edition) for the years 1997, 1998, and 1999 were selected as communicating the media's representation of the ideal female body image. The still photos were photographed by a professional photographer for duplication into slides and grouped by model ($n = 25$), each model wearing one to four contemporary women's swimsuits (i.e., 1 - 4 slides for each model). Video clips were also grouped by model ($n = 10$) and showed the models wearing two to three contemporary swimsuits each.

Female participants aged 18 to 25 years were eligible for the pilot study. Recruiting occurred during the third and fourth week of both summer sessions in two ways: (a) a poster announcing an extra credit opportunity posted on the second floor of Terrill Hall in the area for recruitment purposes and (b) announcements for extra credit made by instructors in summer session undergraduate psychology classes. Participants were instructed to appear on a voluntary basis one time during specified dates and times and were informed participation from beginning to end (i.e., waiting for scheduled

session, receiving instructions, and participating in the experiment) would take approximately thirty minutes. Participants were randomly assigned to the video condition or the still photo condition and tested in groups of 3-4 people. They were introduced to the general purpose of the study (i.e., students' attitudes concerning fashion and advertising) and informed both verbally and in writing all answers would be kept confidential and be reported in a group fashion only. Following written consent, participants filled out a demographic questionnaire for age, year in school, race, height, weight, and ideal weight, in addition to 6 questions regarding fashion and advertising to support the premise of the study. Participants were given a questionnaire specific to the experimental condition (i.e., video or slides) and each given a still photo of a model (i.e., the cover photo of the 1999 Sports Illustrated swimsuit issue) to use as an example of someone who represented the ideal female body image.

The study began with the viewing of the slides or video clips, depending on the participants' assigned group. The video clips of each model were separated from the other models in the pilot study by a 10-second interval, as were the slides of each model separated from slides containing the other models. During each 10-second interval, participants answered three questions relating to the model's body weight, body shape, and overall appearance they had just been shown. Participants used a 7-point Likert type scale where a 1 indicated the model was Not representative of the ideal female body image and a 7 indicated the model was Extremely representative of the ideal female body image. Following completion of questionnaires, participants received extra-credit. Participants completing the pilot study were ineligible to participate in the experimental study.

Pilot test means for the slides were calculated for each model on the three dimensions and then collapsed together to provide one overall measure of attractiveness

for that model. Any models receiving a rating of 5.5 or lower were eliminated from the group of slides; 4 models were eliminated ($M = 5.0, 5.5, 4.5, \text{ and } 5.2$). Pilot test means for the video clips were also calculated for each model on the three dimensions and then collapsed together to provide one overall measure of attractiveness for that model. Any models receiving a rating of 5.5 or lower were eliminated from the group of video clips; one model was eliminated ($M = 5.4$).

Experimental Study. As with the pilot tests, female students between the ages of 18 and 25 were eligible for participation, and were drawn from undergraduate psychology classes. Specific instructions were read to the participants before they completed the questionnaires:

This is a research project investigating the psychology of fashion and advertising. In order to receive your 4 points extra credit and be entered in the \$100 drawing, you will be required to give your full participation on two separate dates (Part 1 and Part 2) which will be scheduled approximately two to three weeks apart.

For today (Part 1), you will be asked to complete a short questionnaire which will take approximately 20 - 25 minutes to complete. For our second meeting, about two to three weeks later, you will be introduced to additional materials relating to fashion and advertising. Following this, you will be asked to fill out a short questionnaire. The total time for Part 2 will take approximately 30 - 35 minutes.

So that you feel comfortable filling out the questionnaires, it is important that you know that any information you give is confidential. Your name will not be on the

questionnaires. If you have any questions or concerns, please feel free to ask me at any time.

Please read over the consent form and sign it before you answer any further questions in the packet. After signing the consent form, begin answering the questions in the packet. Once you have completed the questionnaire, check over in case there are any questions you forgot to answer. When completed, turn it in along with the consent form.

Before you leave, please write on the space provided below any information we will need to contact you for part two of the study. This will include your name, address, phone number, and/or e-mail address and what psychology class or classes you are taking. We ask for all this information so that we can contact you for the second part of the study. Remember, upon completion of Part 2 you will be given your 4 extra credit points and be entered in the \$100 drawing.

Participation for this study began with women reading and signing a consent form providing general information regarding the aim of the experiment. The study was presented as a project concerning "students attitudes toward fashion and advertising." Following the informed consent, the participants were administered the Premeasure Questionnaire Packet requiring the individual to provide general information (e. g., demographics, amount of exposure to media related messages, response bias) about herself, as well as assess her baseline mood, body satisfaction, and level of internalization of the thin ideal. Specifically, the Premeasure Questionnaire Packet included: (a)

demographic questionnaire, (b) MCS, (c) Fashion and Advertising Questionnaire-Part 1, (d) SDS, (e) PANAS, (f) BAA-R, and (g) BPSS-R.

Participants were matched on BMI, body satisfaction and negative mood and then randomly assigned to one of the four experimental conditions: (a) Written Descriptions ($n = 33$), (b) No Model ($n = 30$), (c) Still Photo ($n = 31$), and (d) Video Model ($n = 34$). As discussed earlier, due to error on how the Likert scale on the PANAS was labeled, 36 participants were dropped.

Participants were individually contacted by phone call or e-mail to notify them of their assigned time, date, and location of the second part of the study. Throughout this process, several follow up calls were made to participants reminding them of their appointment date and time to ensure positive turnout. Approximately two to three weeks later participants returned for the second part of the study. Participants read instructions describing the rationale for the study and the process for the second half of the study. The instructions were:

This is the second part of the study investigating the psychology of fashion and advertising. After you complete this part of the study you will receive the full extra credit points (4) and be entered in the \$100 drawing. Once again, any information you give will be kept strictly confidential. If you have any questions or concerns, please feel free to ask me at any time.

Once you have completed the questions, you will need to leave me your name, mailing address, phone number and/or e-mail address so that I may contact you in the event you are the winner in the \$100 drawing. The drawing will take place upon the completion of the study, most likely next February of 2000. Also, please indicate if

you are interested in knowing the results of this study. I will be happy to provide you with a summary of the results.

For this part of the study, you will be asked to view additional materials relating to fashion and advertising. You will have exactly six minutes to do so. At the end of six minutes, you will fill out a questionnaire packet. Please do not refer back to any of the materials once you begin the questionnaire. Like the first part of the study, this will only take a short time, approximately 20 to 25 minutes to complete.

When you are finished, please look over your responses one more time to make sure everything is filled out. Then bring your completed questionnaire to me and I will give your full extra credit points (4). Additionally, I will need you to fill out the information below so that I can enter you in the \$100 drawing.

Remember to take your time viewing the materials and answering the questions.

In the control condition, participants were brought into a room in groups of three or four (as were the other groups) and given a binder containing short written summaries that described the 19 women's swimsuits in the still photo condition (some were one-piece and others were two-piece). In the first experimental condition (No Model), participants were shown 19 slides of the swimsuits described in the control condition. In the second experimental condition (Still Model), participants were shown 35 slides of women modeling various contemporary swimsuits. In the final experimental condition (Video Model), participants were shown the videotape of 9 women modeling the swimsuits.

Immediately after exposure to one of the four stimuli conditions, participants were administered the Stimulus Questionnaire Packet. The questionnaire required approximately 20-25 minutes to complete, and required the participant to provide information regarding her present mood state, level of body satisfaction, impression of the fashion conditions, bulimic symptomatology, and beliefs about attractiveness. As such, the instructions for the mood scales required participants to report their mood "at this moment." The order of the scales in the Stimulus Packet was presented as follows: (a) PANAS, (b) BPSS-R, (c) Fashion and Advertising Questionnaire-Part 2, (d) BAA-R, and (e) BULIT-R. The scales were presented in particular order with measures of mood and body satisfaction placed, counterbalanced, at the beginning of the packet to assess immediate changes in affect. So that content of particular scales did not reveal the hypothesis of the study, reactive measures such as the BULIT-R were placed toward the end of the Stimulus Packet. All questionnaires in the Premeasure Questionnaire Packet and in the Stimulus Questionnaire Packet were completed anonymously (no identifying information was requested). Following completion of the Stimulus Packet, participants were debriefed in writing, received their four extra credit points and were entered in the \$100 drawing. The Debriefing Statement was:

Thank you for your participation in this study investigating the effects of the media (e.g., TV, magazines, and movies) on certain variables known to be related to individuals with eating disorders. Your participation will help to further our understanding of bulimia by enabling us to better understand the relationship between individuals at risk for developing an eating disorder and societal messages of beauty promoted by the media. Additionally, your participation will help to promote knowledge about bulimia that enables professionals to better design prevention

programs educating individuals about eating disorders and possibly preventing them from developing bulimia. If you believe you may be bulimic, please contact the UNT Counseling and Testing Center at (94) 565-2741 and/or the UNT Health Center at (940) 565-2790. They have trained professionals who can answer questions and address any concerns related to eating disorders that may arise in connection with your participation in this study.

Data Analysis

Initially, univariate descriptive statistics were obtained noting ranges, means and standard deviations. Data was screened for normality and outliers and fit between distribution and assumptions of multivariate statistics.

Comparison of Participants Who Dropped with Those Who Continued. To assure that the remaining 128 participants who completed both the premeasure and postmeasure questionnaires did not significantly differ from the 34 participants who dropped out after the premeasure (which is a different group than those who were dropped due to error on the PANAS), separate MANOVAs were conducted on the premeasure variables. Premeasure variables were: age, BMI, BPSS-R Factors 1 and 2, BAA-R Factors 1 and 2, SDS, MTV, MMG, and positive and negative affect scales of the PANAS or PANAS individual item numbers 6, 13, 21, 23, and 25. Results of the MANOVA including positive and negative affect indicated the groups did not differ, Wilks' Lambda = 0.90 $F(11,150) = 1.56, p > .05$. Results of the MANOVA including the five individual mood items indicated the groups did not differ, Wilks' Lambda = 0.83 $F(14,147) = 2.09, p > .01$.

Repeated Measures of Analyses.

Initially, two separate one-way analysis of variance (ANOVAs) were conducted with BMI as the dependent variable to determine the degree of variability between each.

The different experimental conditions served as independent variables for each of the ANOVAs. In the past, BMI has demonstrated a relationship to predictors (e.g., depression and body satisfaction) of bulimic symptoms (Davis & Cowles, 1989). Research has indicated that lower indices of body mass are inversely related to depression, body dissatisfaction, and anxiety (Pine, Cohen, Brook, & Coplan, 1997; Joiner, Schmidt, & Singh, 1994; Raeikkoenen, Hautanen, & Keltikangas, 1994; Steen, Wadden, Foster, & Andersen, 1996). Since participants were matched on BMI, negative affect, and body satisfaction, it was not expected that the groups would differ; results of ANOVAs confirmed this expectation. Thus, BMI was not used as a covariate. The data analysis proceeded by conducting 2 (Time) X 4 (Experimental Condition) Multivariate Analyses of Variance. The MANOVAs were used to determine effects of exposure to the different beauty ideal conditions on levels of specific mood states (anxious, stressed, depressed, shameful, guilty), overall positive and negative affect, level of body satisfaction, and internalization of values concerning attractiveness. Follow-up analyses were conducted for significant MANOVAs using a univariate ANOVA with a Bonferonni correction that held the groupwise error rate at .005. For significant ANOVAs, post hoc Scheffé tests were run to determine which group means differed significantly from each other.

Hierarchical Regression Analyses. Pearson product moment correlation coefficients were calculated among predictor and criterion variables. To avoid multicollinearity, if any correlation among predictor variables was higher than .7, a decision was made as to whether or not to retain those variables. As in the Stice and Shaw study (1994), hierarchical regression analyses were performed to determine the variance expected in bulimia symptoms (BULIT-R) which could be accounted for by negative affect (PANAS), positive affect (PANAS), individual level of negative mood (anxious, stressed, depressed, shameful, guilty) (PANAS), internalization of the body-shape ideal

(BAA-R), body satisfaction (BPSS-R), media consumption (MCS), and BMI. The inclusion of BMI in the regression was based on previous research that indicated BMI has been shown to be a predictor of bulimic symptoms (Petrie & Lester, 1995). Because most of these scales were developed with a general population, Cronbach's alpha was determined for each measure.

CHAPTER 3

RESULTS

In order to present the results in an organized fashion, this chapter has been divided into five broad categories: (a) descriptive and demographic data, (b) prevalence of bulimic symptomatology, (c) repeated measure analyses, (d) hierarchical regression analyses and (e) exploratory analyses. Of the 198 participants that were included in the premeasure study, 164 returned for the post measure and completed the full study. For all statistical analyses alpha was set at .01, except for Pearson-product moment correlations that were set at .001 to control family-wise error rate. Pearson product-moment correlations determined a high correlation between independent mood variables (i.e., anxious, stressed, depressed, ashamed, and guilty) and measures of positive and negative affect (PANAS positive and negative affect scales). For this reason, separate Repeated Measures and hierarchical regression analyses were conducted to determine independent contributions of each.

Descriptive and Demographic Data

Table 1 presents the means and standard deviations for predictor and criterion variables at pre and post test. Table 2 presents the Pearson product-moment correlations among the predictor and criterion variables at pre and post test. Examination of significant ($p < .001$) correlations suggested that reporting of bulimic symptoms was positively related to negative mood (NA; premeasure $r = .41$, postmeasure $r = .43$), guilt (P6; postmeasure only $r = .39$), shame (P13; premeasure $r = .36$, postmeasure $r = .38$), anxiety (P21; premeasure $r = .35$, postmeasure $r = .30$), stress (P23; premeasure $r = .32$,

postmeasure $r = .38$), depression (P25; premeasure $r = .39$, postmeasure $r = .43$) and beliefs in the importance of being physically fit and in shape (BA; postmeasure only $r = .32$). Reporting of bulimic symptoms was negatively related to satisfaction with size and shape of body (BPS1; premeasure $r = -.46$, postmeasure $r = -.53$) and satisfaction with facial features (BPS2; premeasure $r = -.36$, postmeasure $r = -.30$).

Examination of correlations between social desirability and all predictor and criterion variables (see Table 2) ranged from $-.33$ to $.29$ and indicated other variables in the study were not tapping into a social desirability response set. For this reason, SDS scores were not included in regression equations.

Prevalence of Bulimic Symptomatology

The participants' BULIT-R scores were used to assess prevalence of bulimic symptomatology behaviors as well as bulimia nervosa. Based on Thelen et al.'s (1996) diagnostic criterion (i.e., BULIT-R > 104), 4 participants (3.13 %) could be considered at-risk for the development of bulimia; 3 were Caucasian, non-Hispanic and 1 identified herself as Asian-American. Prevalence of bulimic symptomatology when minority status was taken into account was 2.34% for Caucasian, non-Hispanic participants and 0.78% for minority participants. When participants who were dropped from the study due to the PANAS problem ($n = 36$) were included; one additional Caucasian, non-Hispanic participant could be considered at risk for the development of bulimia. Total sample of individuals completing the study ($N=164$) indicated a prevalence of 3.05%, a prevalence of 2.44% for Caucasian, non-Hispanic participants; and a prevalence of 0.61% for minority status participants.

Repeated Measures Analyses

To test Hypothesis 1 that women assigned to the Video Model and Still Model conditions would evidence greater negative affect, greater endorsement of societal beliefs

about attractiveness, and higher levels of body dissatisfaction than those in the Control and No Model conditions; repeated measures analyses were employed with the within participants factors of time (pre and postmeasure) and the experimental conditions acting as the independent variables. The between participants factor was exposure to one of the four different experimental conditions: (a) written descriptions of swimsuits (Written Descriptions), (b) slides of swimsuits and no models (No Model), (c) slides of swimsuits with models (Still Photo), and a (d) video of models wearing swimsuits (Video Model). Dependent measures were body satisfaction, satisfaction with facial features, beliefs concerning the importance of being attractive and thin, belief in the importance of being physically fit and in shape, and individual variables of mood (i.e., anxious, stressed, depressed, ashamed, and guilty) or positive affect and negative affect. As with previous MANOVAs, the repeated measure analyses were conducted separately for the five individual mood indicators and for the measures of positive and negative affect.

The repeated measures analysis that employed the five individual mood variables, satisfaction with size and shape of body, satisfaction with facial features, and values concerning attractiveness (i.e., thinness and physical fitness) indicated no significant interaction effects, Wilks' Lambda = .75, $F(27, 339) = 1.30$, $p > .05$. Regarding main effects, time was significant, Wilks' Lambda = .74, $F(9, 116) = 4.57$, $p < .001$, but not experimental condition, Wilks' Lambda = .78, $F(27, 339) = 1.12$, $p > .05$. Follow-up univariate ANOVAs revealed time effects for anxiety, $F(1, 124) = 24.83$, $p < .001$; stress, $F(1, 127) = 23.37$, $p < .001$; and depression, $F(1, 124) = 11.27$, $p < .001$. No differences across time were found for body satisfaction, $F(1, 124) = 0.10$, $p > .05$; satisfaction with face, $F(1, 124) = 0.23$, $p > .05$; belief in importance of being physically fit and in shape, $F(1, 124) = 0.96$, $p > .05$; belief in importance of being attractive and thin, $F(1, 124) = 1.59$, $p > .05$; feeling guilty, $F(1, 124) = 1.79$, $p > .05$; and feeling ashamed, $F(1, 124) =$

0.12, $p > .05$. Women's ratings of guilt, anxiety, stress and depression all decreased from premeasure (baseline) to post measure. Table 3 presents the means and standard deviations for univariate ANOVAs for variables across time.

The repeated measures analysis employing the factors of positive and negative affect, satisfaction with size and shape of body, satisfaction with facial features, and adoptions of U.S. values concerning female thinness and physical fitness as dependent variables demonstrated no significant interaction effects, Wilks' Lambda = .82, $F(18, 337) = 1.97$, $p > .05$, and no main effects for experimental condition, Wilks' Lambda = .85, $F(18, 337) = 1.08$, $p > .05$. However, significant main effects were found for time, Wilks' Lambda = .48, $F(6, 119) = 21.43$, $p < .001$. Follow-up univariate ANOVAs revealed time effects for positive affect, $F(1, 124) = 63.11$, $p < .001$ and negative affect, $F(1, 124) = 66.53$, $p < .001$. No significant differences were demonstrated across time for body satisfaction, $F(1, 124) = 0.10$, $p > .05$; satisfaction with face, $F(1, 124) = 0.23$, $p > .05$; belief in importance of being physically fit and in shape, $F(1, 124) = 0.96$, $p > .05$; and belief in importance of being attractive and thin, $F(1, 124) = 1.59$, $p > .05$. Decreases in positive and negative affect were found from premeasure to post measure. Table 4 gives the means and standard deviations of the univariate ANOVAs for variables across time.

Hierarchical Regression Analyses

To test Hypothesis 2 that body dissatisfaction and negative affect would predict bulimic symptomatology, the relationship of predictor variables to bulimic symptomatology was investigated using hierarchical regression analyses. As with previous analyses, the regression analyses were conducted separately for the five mood variables and for measures of positive and negative affect. The eating disorder literature indicates that women with higher body mass report higher levels of bulimic

symptomatology than women with lower body mass (Davis & Cowles, 1989). Given this reported positive relationship between BMI to bulimic symptomatology, it was decided to enter BMI first into the model to control for the effects of physical size.

Predictor variables in the regression analyses were BMI, satisfaction with size and shape of body and face, positive and negative affect or the individual mood items of the PANAS, beliefs concerning attractiveness and physical fitness, and media consumption of magazines and television. The model employing the individual PANAS items did not achieve significance when BMI was entered in the first step, $F(1, 126) = 6.20, p > .01$, accounting for 5% of the variance. At step 2, Factors 1 and 2 of the BPSS-R were entered into the model and achieved significance accounting for 24% of total variance, $F(2, 124) = 20.35, p < .001$. As expected, satisfaction with size and shape of body was associated with less bulimic symptomatology. At step 3, individual mood indicators were entered and accounted for an additional 9% of the variance, $F(5, 119) = 3.50, p = .005$. Beta values indicated no relationship between the individual mood indicators and bulimic symptoms. At step four, values concerning thinness and importance of physical fitness were entered into the model, but did not contribute significantly, $F(2, 117) = 2.33, p > .05$. In the last step, media consumption of magazines and of television were entered into the model, but did not contribute significantly, $F(2, 115) = 2.40, p > .05$. The overall regression model employing all independent variables was significant, $F(12, 115) = 7.01, p < .001$, accounting for 42% of the variance ($\text{Adj. } R^2 = 36\%$). Even so, results suggest that the best model for predicting BULIT-R scores be defined by the first 3 steps of the model (i.e., BMI, Factors 1 and 2 of the BPSS-R, and individual mood items of the PANAS). Evaluation of beta values and squared semi-partial correlation coefficients (sr^2), however, when considered in conjunction with the other predictor variables, indicate that only lower levels of satisfaction with size and shape of body ($\beta = -0.35; sr^2 = 0.16$) was

related to higher levels of bulimic symptomatology. Table 5 contains B, standard error, beta weights, t values and p values for the hierarchical regression analyses employing the individual mood items.

A second post measure regression analysis employing the measures of positive and negative affect was conducted and did not achieve significance when BMI was entered in the first step, $F(1, 126) = 6.20, p > .01$, accounting for 5% of the variance. At step 2, Factors 1 and 2 of the BPSS-R were entered into the model and was significant accounting for 24% of the total variance, $F(2, 124) = 20.35, p < .001$. As expected, satisfaction with size and shape of body and satisfaction with facial features demonstrated a negative relationship with bulimic symptomatology. At step 3, positive and negative affect were entered into the model adding another 11% of the total variance, $F(2, 122) = 10.46, p < .001$. Higher levels of positive and negative affect were associated with higher levels of bulimic symptomatology. At step 4, beliefs regarding importance of being attractive and thin and physically fit were entered into the model, but did not contribute significantly, $F(2, 120) = 2.58, p > .05$. Media consumption of magazines and of television was entered in the last step, but did not contribute significantly, $F(2, 118) = 1.06, p > .05$. The overall regression model employing all independent variables was significant, $F(9, 118) = 9.61, p < .001$, accounting for 42% of the variance ($\text{Adj. } R^2 = 38\%$). As in the prior regression analysis, results suggest the best model for predicting BULIT-R scores be defined by the first 3 steps of the model (i.e., BMI, Factors 1 and 2 of the BPSS-R, and positive and negative affect scales of the PANAS). Evaluation of beta values and squared semi-partial correlation coefficients (sr^2), however, when considered in conjunction with the other predictor variables, indicate that only lower levels of satisfaction with size and shape of body ($\beta = -0.46; sr^2 = 0.16$) and higher levels of negative affect ($\beta = 0.24; sr^2 = 0.05$) were related to higher levels of bulimic

symptomatology. Table 6 contains B, standard error, beta weights, t values and p values for the post measure regression analyses including positive and negative affect.

Exploratory Analyses

Because the initial hypotheses were not supported, exploratory analyses were conducted to examine factors that may have influenced the original analyses. As with analyses in the original study, all repeated measure analyses conducted in the exploratory phase were conducted separately for the five individual mood indicators and for the measures of positive and negative affect.

Minority Status. Prior studies have reported differences in prevalence and levels of mediators of bulimic symptomatology in minority populations as compared to the Western majority population (Gray, Ford, & Kelly, 1987; Hamilton, Brooks-Gunn, & Warren, 1985; Harris & Koehler, 1992; Hsu, 1987; Lester & Petrie, 1998). To determine if minority status participants responded differently than Caucasian students, the sample was split (minority vs. nonminority) and analyses run again separately by minority group status.

The repeated measures including positive and negative affect for the minority group indicated no significant interaction effects, Wilks' Lambda = 0.42 $F(18,71) = 1.42$, $p > .01$, as did the repeated measures including positive and negative affect for the Caucasian, non-Hispanic group, Wilks' Lambda = 0.80 $F(18,289) = 1.33$, $p > .01$. Regarding main effects, there were effects for time for the minority group, Wilks' Lambda = 0.50, $F(6,25) = 4.16$, $p < .01$, and for the Caucasian, non-Hispanic group, Wilks' Lambda = 0.45 $F(6,102) = 20.85$, $p = .000$, but no effects for experimental group for the minority group, Wilks' Lambda = 0.54 $F(18,71) = 0.97$, $p > .01$, or for the Caucasian non-Hispanic group, Wilks' Lambda = 0.82 $F(18,289) = 1.18$, $p > .01$.

Follow-up univariate ANOVAs for the Caucasian, non-Hispanic group revealed time effects for positive affect, $F(1, 107) = 63.03, p = .000$ and negative affect, $F(1, 107) = 53.34, p = .000$. As in original analyses, decreases in positive and negative affect were found from premeasure to postmeasure. No significant differences were demonstrated across time for body satisfaction, $F(1, 107) = 0.12, p > .01$; satisfaction with face, $F(1, 107) = 0.90, p > .01$; belief in importance of being attractive and thin, $F(1, 107) = 0.38, p > .01$; and belief in importance of being physically fit and in shape, $F(1, 107) = 0.85, p > .01$.

Follow-up univariate ANOVAs for the minority group revealed time effects for positive affect, $F(1, 30) = 16.58, p = .000$, but not for negative affect (unlike the Caucasian, non-Hispanic group), $F(1, 30) = 6.20, p = .019$. As in original analyses, decreases in positive and negative affect were found from premeasure to postmeasure despite that level of negative affect was not statistically significant using criteria at $p < .01$. Additionally, no significant differences were demonstrated across time for body satisfaction, $F(1, 30) = 0.51, p > .01$; satisfaction with face, $F(1, 30) = 0.02, p > .01$; belief in importance of being attractive and thin, $F(1, 30) = 0.87, p > .01$; and belief in importance of being physically fit and in shape, $F(1, 30) = 4.06, p > .01$.

The repeated measures including the five individual mood indicators for the minority group indicated no significant interaction effects, Wilks' Lambda = 0.28 $F(27,65) = 1.33, p > .01$, as did the repeated measures including the five individual mood indicators for the Caucasian, non-Hispanic group, Wilks' Lambda = 0.75 $F(27,290) = 1.14, p > .01$. Regarding main effects there were effects for time for the Caucasian non-Hispanic group, Wilks' Lambda = 0.75 $F(9,99) = 3.69, p = .001$, but not for the minority group, Wilks' Lambda = 0.61, $F(9,22) = 1.60, p > .01$. There were no effects for experimental condition for the minority group, Wilks' Lambda = 0.36 $F(27,65) = 1.01, p$

> .01, or for the Caucasian non-Hispanic group, Wilks' Lambda = 0.74 $F(27,290) = 1.18$, $p > .01$.

Follow-up univariate ANOVAs for the Caucasian, non-Hispanic group revealed time effects for feeling anxious, $F(1, 107) = 12.70$, $p = .000$, and stressed, $F(1, 107) = 19.76$, $p = .000$. As in the original analysis, anxiety and stress decreased from premeasure to postmeasure. No significant differences were demonstrated across time for feeling guilty, $F(1, 107) = 0.95$, $p > .01$; feeling ashamed, $F(1, 107) = 0.21$, $p > .01$; feeling depressed, $F(1, 107) = 6.64$, $p > .01$; body satisfaction, $F(1, 107) = 0.12$, $p > .01$; satisfaction with face, $F(1, 107) = 0.90$, $p > .01$; belief in importance of being attractive and thin, $F(1, 107) = 0.38$, $p > .01$; and belief in importance of being physically fit and in shape, $F(1, 107) = 0.85$, $p > .01$.

Results of repeated measures for the minority group and the Caucasian, non-Hispanic group paralleled results in the original analyses that found no interaction or no main effects for experimental condition, but found time effects for positive affect which decreased from premeasure to postmeasure. Repeated measures for the Caucasian, non-Hispanic group also showed results similar to the original study that found time effects for negative affect and the individual negative feeling states of anxiety and stress, but not depression, although all three decreased from premeasure to postmeasure. The minority group did not show time effects for negative affect, or for feeling anxious, stressed, or depressed. Although slight differences existed in the time effects across minority status, this variable did not influence participants' responses to the experimental condition.

Level of Media Consumption. Exposure to magazines and/or television was another variable that might influence participants responses to the experimental condition. Those consuming more media might respond differently to questionnaires when compared to participants reporting spending less time reading magazines or less

time watching television. Thus, level of media consumption was introduced as an independent variable. Pearson product-moment correlations indicated consumption of magazines and television could be analyzed separately as they were related, but not highly correlated ($r = .43, p < .001$). Media consumption of television and media consumption of magazines served as independent variables, each with two levels (High and Low). The obtained median for television (median = 750 minutes per week) and for magazine consumption (median = 120 minutes per week) served to separate participants into high and low media consumption groups for both groups (i.e., High TV, Low TV and High Magazine, Low Magazine). Participants whose media consumption equaled the median were randomly assigned to the high and low groups. For example, 26 participants' media consumption for magazines equaled the median of 120; each was randomly assigned to the low magazine consumption group or high magazine consumption group. MANOVAs and Repeated Measures were conducted separately for the following four groups: 1) participants who reported spending more time reading magazines, 2) participants who reported spending less time reading magazines, 3) participants who reported watching more television, and 4) participants who reported watching less television.

As in original analyses, results of repeated measures considering level of media consumption and including positive and negative affect demonstrated no interaction effects for the high television consumption group, Wilks' Lambda = 0.69 $F(18,153) = 1.19, p > .01$, the low television consumption group, Wilks' Lambda = 0.68 $F(18,156) = 1.28, p > .01$, the high magazine consumption group, Wilks' Lambda = 0.69 $F(18,131) = 1.00, p > .01$, and the low magazine consumption group, Wilks' Lambda = 0.67 $F(18,167) = 1.43, p > .01$. Regarding main effects, no differences were found for experimental condition in the high television consumption group, Wilks' Lambda = 0.86 $F(18,153) = 0.47, p > .01$; the low television consumption group, Wilks' Lambda = 0.58 $F(18,156) =$

1.83, $p > .01$; the high magazine consumption group, Wilks' Lambda = 0.77 $F(18,131) = 0.70$, $p > .01$; and the low magazine consumption group, Wilks' Lambda = 0.63 $F(18,167) = 1.64$, $p > .01$, thus paralleling original analyses. However, there were effects for time (that paralleled original study results) for the high television consumption group, Wilks' Lambda = 0.51 $F(6,54) = 8.71$, $p = .000$; the low television consumption group, Wilks' Lambda = 0.41 $F(6,55) = 12.98$, $p = .000$; the high magazine consumption group, Wilks' Lambda = 0.63 $F(6,46) = 4.47$, $p = .001$; and the low magazine consumption group, Wilks' Lambda = 0.35 $F(6,59) = 18.55$, $p = .000$.

Follow-up univariate ANOVAs for the high television consumption group including positive and negative affect revealed time effects for level of negative affect, $F(1,59) = 30.06$, $p = .000$; and level of positive affect, $F(1,59) = 23.11$, $p = .000$. As in original analyses, level of positive and negative affect decreased from premeasure to postmeasure. Groups did not differ on level of satisfaction with body shape, $F(1,59) = 1.74$, $p > .01$; level of satisfaction with facial features, $F(1,59) = 0.56$, $p > .01$; belief in importance of being physically fit and in shape, $F(1,59) = 0.34$, $p > .01$; and belief in importance of being attractive and thin, $F(1,59) = 0.01$, $p > .01$.

Follow-up univariate ANOVAs for the low television consumption group including positive and negative affect revealed time effects for level of negative affect, $F(1,60) = 35.35$, $p = .000$; and level of positive affect, $F(1,60) = 36.81$, $p = .000$. As in original analyses, level of positive and negative affect decreased from premeasure to postmeasure. No differences were found for level of satisfaction with body shape, $F(1,60) = 0.25$, $p > .01$; level of satisfaction with facial features, $F(1,60) = 0.62$, $p > .01$; belief in importance of being physically fit and in shape, $F(1,60) = 0.65$, $p > .01$; and belief in importance of being attractive and thin, $F(1,60) = 1.76$, $p > .01$.

Follow-up univariate ANOVAs for the high magazine consumption group including positive and negative affect showed time effects for level of positive affect, $F(1,51) = 15.08, p > .01$; and level of negative affect, $F(1, 51) = 11.70, p = .000$. Results paralleled findings in original analyses in that level of positive and negative affect decreased from premeasure to postmeasure. Groups did not differ on level of satisfaction with body shape, $F(1, 51) = 0.34, p > .01$; level of satisfaction with facial features, $F(1, 51) = 0.02, p > .01$; belief in importance of being physically fit and in shape, $F(1, 51) = 1.73, p > .01$; and belief in importance of being attractive and thin, $F(1, 51) = 0.13, p > .01$.

Follow-up univariate ANOVAs for the low magazine consumption group including positive and negative affect revealed time effects for level of positive affect, $F(1,64) = 50.84, p > .01$; and level of negative affect, $F(1, 64) = 54.42, p = .000$. Results paralleled findings in original analyses in that level of positive and negative affect decreased from premeasure to postmeasure. Groups did not differ on level of satisfaction with body shape, $F(1, 64) = 0.02, p > .01$; level of satisfaction with facial features, $F(1, 64) = 1.66, p > .01$; belief in importance of being physically fit and in shape, $F(1, 64) = 0.29, p > .01$; and belief in importance of being attractive and thin, , $F(1, 64) = 3.90, p > .01$.

Results of repeated measures considering level of media consumption and including the five individual mood indicators demonstrated no interaction effects for the high television consumption group, Wilks' Lambda = 0.61 $F(27,150) = 1.03, p > .01$, the low television consumption group, Wilks' Lambda = 0.56 $F(27,153) = 1.26, p > .01$, the high magazine consumption group, Wilks' Lambda = 0.43 $F(27,126) = 1.58, p > .01$, and the low magazine consumption group, Wilks' Lambda = 0.62 $F(27,164) = 1.07, p > .01$. Regarding main effects, no differences were found for experimental condition in the high

television consumption group, Wilks' Lambda = 0.66 $F(18,150) = 0.86$, $p > .01$; the low television consumption group, Wilks' Lambda = 0.53 $F(27,153) = 1.39$, $p > .01$; the high magazine consumption group, Wilks' Lambda = 0.61 $F(27,126) = 0.88$, $p > .01$; and the low magazine consumption group, Wilks' Lambda = 0.61 $F(27,164) = 1.14$, $p > .01$, thus paralleling original analyses. However, there were effects for time that paralleled original study results in the high television consumption group, Wilks' Lambda = 0.67 $F(9,51) = 2.80$, $p < .01$; and the low magazine consumption group, Wilks' Lambda = 0.63 $F(9,56) = 3.66$, $p = .001$. No time effects were found for the low television consumption group, Wilks' Lambda = 0.68 $F(9,52) = 2.74$, $p = .011$; and the high magazine consumption group, Wilks' Lambda = 0.78 $F(9,43) = 1.32$, $p > .01$.

Follow-up univariate ANOVAs for the high television consumption group including the five individual mood indicators revealed time effects for feeling anxious, $F(1,59) = 10.56$, $p < .01$; and stressed, $F(1,59) = 16.62$, $p = .000$. As in original analyses, levels of anxiety and stress decreased from premeasure to postmeasure. Groups did not differ on level of feeling guilty, $F(1,59) = 0.23$, $p > .01$; ashamed, $F(1,59) = 0.12$, $p > .01$; and depressed, $F(1,59) = 5.78$, $p = .019$; and in level of satisfaction with body shape, $F(1,59) = 1.74$, $p > .01$; satisfaction with facial features, $F(1,59) = 0.06$, $p > .01$; belief in importance of being physically fit and in shape, $F(1,59) = 0.34$, $p > .01$; belief in importance of being attractive and thin, and $F(1,59) = 0.01$, $p > .01$.

Follow-up univariate ANOVAs for the low magazine consumption group including the five individual mood indicators revealed time effects for feeling anxious, $F(1,64) = 20.85$, $p = .000$; and stressed, $F(1,64) = 16.29$, $p = .000$. As in original analyses, levels of anxiety and stress decreased from premeasure to postmeasure. Groups did not differ on level of feeling guilty, $F(1, 64) = 1.92$, $p > .01$; feeling ashamed, $F(1, 64) = 1.22$, $p > .01$; and feeling depressed, $F(1, 64) = 4.96$, $p > .01$; level of satisfaction with body

shape, $F(1, 64) = 0.02, p > .01$; level of satisfaction with facial features, $F(1, 64) = 1.66, p > .01$; belief in importance of being physically fit and in shape, $F(1, 64) = 0.29, p > .01$; and belief in importance of being attractive and thin, $F(1, 64) = 3.90, p > .01$.

Results of repeated measures considering level of media consumption paralleled the original analyses that found no interaction effects and no main effects for experimental condition. As in the original study, significant time effects were found for positive and negative affect in all four media consumption groups (i.e., high television consumption group, low television consumption group, high television consumption group, and low magazine consumption group). Significant time effects were found on levels of anxiety and stress for the high television consumption group and the low magazine consumption group, but not for the low television consumption group and the high magazine consumption group.

Despite noted differences, the overall results for repeated measures paralleled results found in original analyses. Like the analyses exploring minority status, differences in level of media consumption of magazines and of television did not adequately explain non-significant findings in original analyses.

Time of Data Collection. As minority status and level of media consumption did not provide useful information in understanding results from original analyses, time of data collection was considered to see if participants who volunteered for the study during the Fall semester differed in their responses to the experimental conditions from participants who volunteered for the study during the Spring semester. Time of data collection served as two independent variables (Fall and Spring).

As in original analyses, results of repeated measures considering time of data collection and including positive and negative affect demonstrated no interaction effects for the Fall group, Wilks' Lambda = 0.62 $F(18,165) = 1.70, p > .01$; and for the Spring

group, Wilks' Lambda = 0.66 $F(18,148) = 1.30$, $p > .01$. Regarding main effects, no differences were found for experimental condition in the Fall group, Wilks' Lambda = 0.70 $F(18,165) = 1.21$, $p > .01$; and the Spring group, Wilks' Lambda = 0.64 $F(18,148) = 1.39$, $p > .01$, thus paralleling original analyses. However, there were effects for time that paralleled original study results for the Fall group, Wilks' Lambda = 0.54 $F(6,58) = 8.12$, $p = .000$; and the Spring group, Wilks' Lambda = 0.44 $F(6,52) = 11.05$, $p = .000$.

Follow-up univariate ANOVAs for the Fall group including positive and negative affect revealed time effects for level of negative affect, $F(1,63) = 36.31$, $p = .000$; and level of positive affect, $F(1,63) = 16.27$, $p = .000$. As in original analyses, level of positive and negative affect decreased from premeasure to postmeasure for the Fall group. Groups did not differ on level of satisfaction with body shape, $F(1, 63) = 0.37$, $p > .01$; level of satisfaction with facial features, $F(1, 63) = 0.28$, $p > .01$; belief in importance of being physically fit and in shape, $F(1,63) = 0.28$, $p > .01$; and belief in importance of being attractive and thin, $F(1,63) = 0.06$, $p > .01$.

Follow-up univariate ANOVAs for the Spring group including positive and negative affect revealed time effects for level of negative affect, $F(1,57) = 24.59$, $p = .000$; and level of positive affect, $F(1,57) = 46.08$, $p = .000$. As in original analyses, level of positive and negative affect decreased from premeasure to postmeasure for the Spring group. No differences were found for level of satisfaction with body shape, $F(1,57) = 0.01$, $p > .01$; level of satisfaction with facial features, $F(1,57) = 0.14$, $p > .01$; belief in importance of being physically fit and in shape, $F(1,57) = 0.67$, $p > .01$; and belief in importance of being attractive and thin, $F(1,57) = 0.26$, $p > .01$.

Results of repeated measures considering time of data collection and including the five individual mood indicators demonstrated, similar to original analyses, no interaction effects for the Fall group, Wilks' Lambda = 0.53 $F(27,161) = 1.45$, $p > .01$; and the Spring

group, Wilks' Lambda = 0.54 $F(27,144) = 1.26$, $p > .01$. Regarding main effects, no differences were found for experimental condition in the Fall group, Wilks' Lambda = 0.60 $F(27,161) = 1.16$, $p > .01$; and in the Spring group, Wilks' Lambda = 0.63 $F(27,144) = 0.90$, $p > .01$, thus paralleling original analyses. However, there were effects for time in the Fall group that paralleled original study results, Wilks' Lambda = 0.66 $F(9,55) = 3.15$, $p < .01$; but not for the Spring group, Wilks' Lambda = 0.78 $F(9,49) = 1.56$, $p > .01$.

Follow-up univariate ANOVAs for the Fall group including the five individual mood indicators revealed time effects for level of anxiety, $F(1,63) = 11.17$, $p = .001$; stress, $F(1,63) = 20.93$, $p = .000$; and depression, $F(1,63) = 10.35$, $p < .01$. As in original analyses, levels of anxiety, stress, and depression decreased from premeasure to postmeasure for the Fall group. Groups did not differ on level of feeling guilty, $F(1, 63) = 1.71$, $p > .01$; feeling ashamed, $F(1, 63) = 0.16$, $p > .01$; satisfaction with body shape, $F(1, 63) = 0.37$, $p > .01$; level of satisfaction with facial features, $F(1, 63) = 0.28$, $p > .01$; belief in importance of being physically fit and in shape, $F(1,63) = 0.28$, $p > .01$; and belief in importance of being attractive and thin, $F(1,63) = 0.06$, $p > .01$.

Results of repeated measures for the Fall and Spring Groups indicated, as shown in original analyses, time of data collection showed no interaction effects and no main effects for experimental condition. Effects for time were demonstrated in the Fall and Spring groups for level of positive and negative affect with level of positive and negative affect decreasing across time for participants in the Fall group and for participants in the Spring group, respectively. Significant time effects were shown for the Fall group on levels of anxiety, stress, and depression, which decreased across time, as in original analyses.

Results of repeated measures paralleled the original results overall and indicated time of data collection did not account for lack of findings in the original analyses. As

when considering minority status and level of media consumption, time of data collection failed to explain non-significant findings in the original study.

CHAPTER 4

DISCUSSION

The sociocultural approach to eating disorders has emphasized media related messages promoting the importance of women's appearance and their function in determining societal success as key contributors to bulimic symptomatology and attitudes in females (Stice et al., 1994; Stice & Shaw, 1994). The research of Stice et al. (1994) and Stice and Shaw (1994) proposed several mechanisms that may mediate the adverse effects of media exposure to the thin ideal, including internalization of the thin-ideal stereotype, negative affect, and body dissatisfaction. The purpose of this study was to extend the initial research of Stice and Shaw (1994) by incorporating two forms of media (e.g., TV/Video and Magazines/Still Photos) to assess the effects of exposure to the media portrayal of ideal body shape on women's mood, body satisfaction, and internalization of societal values concerning attractiveness. In addition, the relation of these variables to bulimic symptomatology was examined.

Prevalence of Bulimic Symptomatology

Based on Thelen et al.'s, (1996) diagnostic criteria (i.e., BULIT-R > 104), four of the women (3.13%) in the current sample could be considered at-risk for the development of bulimia; three identified their race/ethnicity as Caucasian, non-Hispanic and one identified herself as Asian-American. Prevalence of bulimic symptomatology when minority status was taken into account was 2.34% for Caucasian, non-Hispanic participants and 0.78% for minority participants. When participants who were dropped from the study due to the PANAS problem ($n = 36$) were included, one additional Caucasian, non-Hispanic participant could be considered at risk for the development of

bulimia. Total sample of individuals completing the study including the participants dropped from the study due to error on the PANAS (N = 164) indicated a prevalence of bulimic symptomatology of 3.05%, a prevalence of 2.44% for Caucasian, non-Hispanic participants; and a prevalence of 0.61% for minority status participants. Prevalence for all participants (N = 164) regardless of race is at the high end of prevalence studies that suggest eating disorders affect between 0.5% and 3% of the population with 90% of such disorders occurring in women (DSM-IV; Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, American Psychiatric Association, 1994).

Prevalence rates of bulimia nervosa in college samples (primarily Caucasian) are somewhat higher, 3.8% to 5.1%, (Heatherton, Nichols, Mahamedi, & Keel, 1995; Striegel-Moore et al., 1989) than what was found in this study. As stated earlier, prevalence rate of bulimia nervosa for all Caucasian, non-Hispanic participants was 2.44%. Although this sample was primarily Caucasian, non-Hispanic (73.4%), the prevalence rate for all minority participants combined (prevalence rate = 0.61%) appeared to be lower than reported prevalence rates of bulimia for any single minority group. For example, the African-American, non-Hispanic prevalence rate equaled 1.5% in a college population (Gray, Ford, & Kelly, 1987); in an Asian-American female college population the prevalence rate equaled 0.78% (Tsai & Gray, 2000); and in a Mexican-American undergraduate population the prevalence rate equaled 1.4% (Lester & Petrie, 1998). Given the prevalence of eating disorders in this sample was not clarified by diagnostic interviewing, it was impossible to determine exactly how many of the participants actually met the DSM-IV criteria.

Investigation Hypotheses

Hypothesis 1. The first hypothesis that women assigned to the Video Model and Still Model conditions would evidence greater negative affect, greater endorsement of

societal beliefs about attractiveness, and higher levels of body dissatisfaction than those in the Control and No Model conditions was not supported. No interaction effects or main effects for different media presentations of the thin ideal were found. Significant time effects, however, were found from premeasure to postmeasure on measures of positive affect, negative affect, and specific mood states of anxiety, stress, and depression. Scores on all these measures decreased from premeasure to postmeasure.

Stice and Shaw (1994) demonstrated that women exposed to magazine images of thin-models (versus women exposed to average-weight models or no models) resulted in negative affect, specifically, increased feelings of depression, unhappiness, shame, guilt, stress and decreased confidence. Women exposed to these magazine images evidenced heightened body dissatisfaction, but did not demonstrate any direct effect on level of internalization of the thin-ideal stereotype (Stice and Shaw, 1994). Irving (1990) reported decreases in body satisfaction following media exposure in women exposed to slides of thin models versus women exposed to slides of average and oversized models. On the other hand, Cash, Cash, & Butters (1993) found exposure to attractive versus unattractive models resulted in lower self-ratings of attractiveness for women in the attractive model condition, but did not effect level of body satisfaction. They (Cash, Cash, & Butters, 1993) did not examine individual mood states, but demonstrated a personality variable (social anxiety) was negatively related to self-rated attractiveness. The findings of the current study corroborated non-significant findings in the Stice and Shaw study (1994) regarding level of internalization following media exposure, but did not confirm Stice and Shaw's (1994) change in affective states or body dissatisfaction. The findings of effects for the individual affective states following media exposure were a unique finding in the Stice and Shaw study (1994).

Perhaps examining similarities and differences between the current study and Stice and Shaw's study (1994) can elucidate reasons for these different results. In the ultra-thin model condition, Stice and Shaw (1994) used still photos from one issue of *Cosmopolitan*, a popular women's magazine. The current study used magazine pictures from several years (1997, 1998, 1999) of *Sports Illustrated's* (SI) Swimsuit Edition, a popular men's magazine. The models in the SI swimsuit issue are elite super-models often seen in *Cosmopolitan* magazine thus the pictures of these models in both studies were similar. This similarity suggests that the differences in results between the studies do not appear to be caused by differences in content (i.e., type of models) of media exposure. Stice and Shaw (1994), like previous studies (Cash, Cash, & Butters, 1993; Irving, 1990) included an experimental condition exposing women to average-weight (i.e., normal) or unattractive models; the current study did not. However, the current study, like these studies (Cash, Cash, & Butters, 1993; Irving, 1990; Stice & Shaw, 1994), included a control condition containing no models.

The current study improved upon Stice and Shaw's study (1994) by matching participants' scores on BMI, level of negative affect, and level of body satisfaction before random assignment to the experimental conditions. By doing so, effects could be more confidently attributed to the experimental condition unlike these other studies (Cash, Cash, & Butters, 1993; Irving, 1990; Stice & Shaw, 1994) whose results may not be attributed to media exposure, but to some unknown artifact. Unlike the Stice and Shaw (1994) study that used only one type of media, this study expanded their study (Stice & Shaw, 1994) to include two types of media (i.e., magazines and TV/video). Even so, results of original analyses indicated no interaction of main effects for experimental condition.

If improvements in the Stice and Shaw study (1994) were truly improvements, what could possibly explain the current study's results when compared to the Stice and Shaw (1994) study? Could it be that the stimulus exposure or design of the study provided reasonable explanations for these results? Pilot test data indicated that participants found the stimulus material (video and photos) to be highly attractive. As a result, the strength of the stimulus was not thought to be an issue. The design of the study did not seem to be an issue because collection of data occurred at points in the semester when participants had no mid-term or final exams, situations that might influence their mood states. Because the hypothesis was not supported and stimulus exposure and study design did not offer adequate reasons for the lack of findings, exploratory analyses were conducted to examine if other factors such as minority status, level of media consumption and time of data collection might have influenced the findings. In general, the results of exploratory analyses paralleled those of the full sample. No interaction and main effects for experimental condition were found and time effects were only present for certain mood states. Having ruled out possible factors (i.e., stimulus exposure, study design, minority status, level of media consumption, & time of data collection) for lack of findings, alternative explanations are offered.

Five to ten years ago a six-minute exposure to media images (as used in this study) influenced mood states and body satisfaction, individuals today may be so desensitized by the pervasiveness of media bombardment that these messages do not register. For example, Rosenthal and Schreiner (2000) found that individuals' are reporting less clinically significant symptoms of anxiety, anger, and depression today than even eight years ago (Bertocci, Hirsch, Sommer, & Williams, 1992). The sample of participants in this study was fairly psychologically healthy. Participants were functioning in a college setting and reported low mean scores for individual mood states. Level of

guilt (\underline{M} = pre 1.88, post 1.73), shame (\underline{M} = pre 1.58, post 1.62), anxiety (\underline{M} = pre 2.87, post 2.37), stress (\underline{M} = pre 3.60, post 2.99), and depression (\underline{M} = pre 2.13, post 1.78) indicated that participants were reporting very little negative affect (i.e., mean scores ranged from slightly to moderately experiencing each individual mood state at both pre and post stimulus conditions). It seems likely that stimulus exposure did not register because it was not that different from the media images participants see on a daily basis. This study's current findings (i.e., no changes in body satisfaction and affect) may be more representative of how women respond to today's media messages; they are desensitized.

An additional possibility may be that family factors influenced participants' response to media images. Prior research has shown family body dissatisfaction, family social appearance orientation, and family achievement emphasis (hypothesized as a family climate for eating disorders) distinguished an eating disordered group from a control group and a group with clinical depression suggesting that family climate may play an important role in the development of eating disorders (Laliberte, Boland, & Leichner, 1999). Distinguishing between individuals in a family climate that did not emphasize achievement, social appearance, and body dissatisfaction (i.e., the control condition of Laliberte et al., 1999) and those individuals in a family climate that did (i.e., the hypothesized family climate for eating disorders) might show differential effects following media exposure on level of body dissatisfaction and negative affect. Perhaps participants whose family emphasized achievement, social appearance and concern with their bodies would demonstrate greater changes in affect and body satisfaction following media exposure than those families who did not emphasize these things.

Another factor that may have influenced participants' response to media images is level of acculturation and its effects on disordered eating attitudes and behavior. This

study did not include a measure of acculturation which has been shown to be related to disordered eating attitudes and behaviors in Mexican-American populations (Chamorro, 1997) and African-American populations (Turnbull, 1999). Although minority status was ruled out in this study as affecting current study findings, no measure of acculturation was included and may be important in distinguishing media influences for cultural minorities. For example, minority women who report adoption of the dominant culture's standard of beauty may have evidenced greater body dissatisfaction and negative affect following media exposure than minority women who did not report adoption of the dominant culture's standard of beauty.

Hypothesis 2. The second hypothesis of the study that body dissatisfaction and negative affect would predict bulimic symptomatology was supported. Hierarchical regression analyses revealed that lower levels of satisfaction with size and shape of body and higher levels of negative affect were predictive of bulimic symptomatology. This is somewhat consistent with the research of Stice et al. (1994) who found negative affect, body dissatisfaction, and internalization of the thin ideal were significant predictors of bulimic symptomatology. Significant relationships were demonstrated between bulimic symptoms and (1) internalization of the thin ideal, (2) body dissatisfaction, (3) stress, (4) guilt, and (5) depression, which is consistent with past research (Stice and Shaw, 1994). Although many of the predictor variables were related, when they were considered simultaneously, only body satisfaction and negative mood predicted bulimic symptomatology.

Lester and Petrie (1998) found beliefs about attractiveness and body satisfaction to be unrelated to bulimic symptomatology when considered simultaneously with measures of depression, acculturation, body mass, and self-esteem in an African-American college female population. Findings in their study (Lester & Petrie, 1998)

paralleled findings in the current study in that internalization of values of attractiveness were not predictive of bulimic symptoms. Perhaps there are mediating relationships between internalization of the thin ideal and bulimic symptomatology. Internalization of the thin ideal may be a distal factor that influences negative mood which in turn predicts symptoms of disordered eating.

Varnado (1998) in a study replication (Johnson, 1998) looked at perceived discrepancies between a woman's actual self and ideal self (labeled as their gender discrepancy) on disordered eating attitudes and behaviors in a sample of primarily Caucasian, non-Hispanic undergraduate women (72.2%). Results indicated women who desired to be more masculine and women who desired to more masculine and more feminine evidenced less psychologically healthy profiles, but only as it related to gender discrepant characteristics and behaviors, not gender discrepant attitudes. Specifically, women who desired to be more masculine and women who desired to be more masculine and more feminine in their gender characteristics and behaviors evidenced lower self-esteem (as measured on the Rosenberg Self-Esteem Scale), greater body dissatisfaction (as measured on the BPSS), less physical self-worth (as measured on the Physical-Self Perception Profile), and greater beliefs in the importance of being thin and attractive and being strong and muscular (as measured on the BAA-R) than women who were satisfied with their masculinity and femininity. Gender discrepant women did not report higher levels of bulimic symptomatology and drive for thinness than nondiscrepant women did. The findings in the Varnado (1998) study support the idea that internalization of the thin ideal (as measured on the BAA-R in the current study) may be a distal factor influencing body satisfaction or negative affect that in turn predicts eating disorder symptomatology.

Limitations in the Research

Several limitations are worthy of mention. First, although no significant differences were found between individuals who completed the study from those that dropped out after the premeasure, some participant differences may contribute to the results of this investigation. It is possible that participants who completed both parts of the study possessed characteristics that were different from participants who voluntarily dropped out and that were not measured directly. For example, this study did not look at the role family influences played in the development of disordered eating attitudes and behaviors (Haudek, Rorty & Henker, 1999; Laliberte, Boland, & Leichner, 1999; Webster, 2000). Distinguishing between individuals in a family climate that did not emphasize achievement, social appearance, and body dissatisfaction (i.e., the control condition of Laliberte et al., 1999) from those individuals that did (i.e., the hypothesized family climate for eating disorders) might show differential effects following media exposure on level of body dissatisfaction and negative affect. Perhaps participants whose families emphasized social appearance and concern with their bodies were the participants who voluntarily dropped out of the study. These same participants might show adverse effects (i.e., greater body dissatisfaction and negative mood) following media exposure in the Still Model and Video Model conditions. Second, given that extra credit and a monetary drawing were offered for the students' participation, some individuals may have chosen to participate in the study merely for the extra credit or chance at winning money and thus not responded thoughtfully to each question. Third, although the social desirability factors were not a significant issue in this study, the participants may have been less inclined to answer honestly due to the manner in which the experimental conditions were presented. Specifically, several participants were tested together at one time. Efforts were made to reduce this problem by spacing the participants

far from each other and by only testing 3 to 4 participants at a time. Regardless, testing the participants individually may have elicited different responses to the questionnaires than if participants were tested in a group. Fourth, this investigation relied exclusively on self-report data. Greater confidence could be placed in the results if additional data, such as behavioral observations or multiple reporter data, had been collected. For example, to determine if participants engaged in pathological eating behaviors following stimulus exposure, an experimental manipulation could be included in the study (e.g., offering M&M pieces at baseline and following stimulus exposure to examine differences in food intake across the groups).

Implications for Prevention

Despite these limitations, the findings of this study have several implications for counselors and clinicians working with college females. Risk factors for bulimic symptomatology and attitudes include lower levels of satisfaction with size and shape of body and facial features, and higher levels of positive and negative affect especially higher levels of depression. Clients who present with these issues should alert the counselor to explore eating attitudes and the presence of behavioral eating disturbances.

Counselors might choose to focus on bodily concerns and educate the client about realistic versus unrealistic body ideals. Individuals with elevated body-image concerns might participate in a dissonance-based targeted preventive intervention like the one studied by Stice and Weibel (2000). Female undergraduates with elevated body-image concerns were assigned to a three-session intervention, wherein they argued against the thin ideal, or a delayed-intervention control condition. The intervention resulted in decreased internalization of the thin ideal, less body dissatisfaction and negative affect and less dieting and bulimic symptomatology. Most changes were maintained at a 1-month follow-up. Individuals evidencing disordered eating behaviors might participate in

Appetite Awareness Training (AAT), an 8-week cognitive-behavioral group intervention, like the one proposed by Allen (1997) where individuals completing the program showed improvements in binge eating and associated symptomatology, depression, social anxiety and urges to eat. Counselors can encourage clients with eating issues to participate in these type groups.

Viewing one's body in a positive manner and advocating healthy eating and exercising behaviors may help decrease negative affect by promoting a greater sense of psychological well-being despite the demands of school. Additionally, media literacy programs that encourage critical viewing skills, especially in the area of food advertising, could be implemented on school campuses (Morant, 2000) as part of eating disorders awareness week.

Directions for Future Research

Several directions for future research are suggested by the current findings. Although the research of Stice and Shaw (1994) suggests that the media's portrayal of the thin ideal results in heightened body dissatisfaction and increased negative affect, the lack of findings in the current study highlight the need for further studies using experimental design methods and incorporating multiple types of media (e.g., TV/film and magazines) to confirm or disconfirm findings in the Stice and Shaw (1994) study. Additionally, we do not know how differences in personality might influence a woman's receptivity to media messages and place her at greater risk than others for the development of bulimic symptomatology. For example, Davis (2000) confirmed that the relationship between general perfectionism and disordered eating only occurs when combined with a tendency to be anxious and hypercritical. Research could explore if women who are perfectionistic respond differently to media messages than women who are not. Research that addresses

personality differences and its effects on women's affective states will guide the design of intervention and prevention efforts.

Future research should also be directed toward investigating additional mediums of sociocultural influence on women. The influences of peers, family and community on females should be investigated to determine the contributions of each in bulimic symptomatology. As discussed earlier, body dissatisfaction, social appearance orientation, and achievement emphasis in the family may play an important role in the development of eating disorders (Laliberte, Boland, & Leichner, 1999), as may adversity in childhood (Webster & Palmer, 2000), paternal overprotection (Murray, Waller & Legg, 2000), and quality of parent-child relations, particularly the mother-daughter relationship (Haudek, Rorty & Henker, (1999). Regarding community influences, future research should explore identification with and participation in cultural activities (i.e., eating traditional foods and speaking a traditional language other than English) that may serve to mediate levels of disordered eating attitudes and behaviors in some populations (Jane, Hunter & Lozzi, 1999).

As discussed earlier, previous studies have demonstrated acculturation level and its influences on disordered eating attitudes and behaviors in minority populations (Chamorro, 1997, Turnbull, 1999). Although minority status was ruled out in this study as affecting current study findings, no measure of acculturation was included and may be important in distinguishing media influences for cultural minorities in future studies. Longitudinal studies will provide further understanding of the development of bulimic symptomatology and more compelling evidence on the predictors of eating disorders.

Conclusions

Contrary to hypotheses that exposure to different media presentations of the thin ideal body image results in disturbances in affect, decreased body satisfaction and

internalization of such images, results from this study provided only indirect support for the sociocultural explanation for eating disorders in women. This study found that lower levels of satisfaction with size and shape of body and higher levels of negative affect were predictive of bulimic symptomatology in females. Future research will need to determine which females are at greater risk than others for the development of body dissatisfaction, negative mood, and internalization of media's ideal female body images, known to adversely impact bulimic symptomatology in women. Identification of women who are at greater risk for the development of disordered eating attitudes and behaviors will guide the design of intervention and prevention efforts.

APPENDIX A
BELIEFS ABOUT ATTRACTIVENESS
SCALE - REVISED (BAA-R)

Beliefs About Attractiveness Scale-Revised (BAA-R)

DIRECTIONS: Listed below are statements about women’s attractiveness in our society. For each item, please circle the response that best describes what you believe to be true using the following scale:

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree Nor Disagree			Strongly Agree

It is very important that you respond to all the items and that you answer them honestly.

1. People would prefer to date thin rather than overweight women..... 1 2 3 4 5 6 7
2. It is not that important for overweight women to spend money on clothes since they will look unattractive no matter what they wear..... 1 2 3 4 5 6 7
3. A woman with an attractive face will not get very far in life without a thin body..... 1 2 3 4 5 6 7
4. Overweight women lack self-control and discipline..... 1 2 3 4 5 6 7
5. The heavier a woman is, the less attractive she is..... 1 2 3 4 5 6 7
6. Being physically fit and in-shape is directly related to attractiveness..... 1 2 3 4 5 6 7
7. Physically fit and in-shape women have a greater sense of well-being..... 1 2 3 4 5 6 7
8. Thinness represents the current beauty ideal for women..... 1 2 3 4 5 6 7

(Continues)

Beliefs About Attractiveness Scale-Revised (continued)

9. Attractive women are smarter than unattractive women.....	1	2	3	4	5	6	7
10. The more physically fit and in-shape a woman is, the more likely it is she will have a romantic partner.....	1	2	3	4	5	6	7
11. Attractive women are more interesting and outgoing than unattractive women.....	1	2	3	4	5	6	7
12. It is important for women to be physically fit and in-shape.....	1	2	3	4	5	6	7
13. Overweight women should be embarrassed by how they look.....	1	2	3	4	5	6	7
14. Attractive women lead more fulfilling lives than unattractive women.....	1	2	3	4	5	6	7
15. The thinner a woman is, the more attractive she is.....	1	2	3	4	5	6	7
16. Attractiveness increases the likelihood of professional success.....	1	2	3	4	5	6	7
17. A physically fit and in-shape body reflects the beauty ideal for women.....	1	2	3	4	5	6	7
18. Physically fit and in-shape women have more self-confidence.....	1	2	3	4	5	6	7
19. Women who are physically fit and in-shape have more fun than those who are not.....	1	2	3	4	5	6	7

APPENDIX B

POSITIVE AND NEGATIVE AFFECT SCALE (PANAS)

Positive and Negative Affect Scale (PANAS)

DIRECTIONS: This scale consists of a number of words that describe different feelings and emotions. Read each item and then circle the choices that best describe how you are feeling right now. That is, indicate to what extent you currently feel this way. Use the following scale for your answers. Remember, there are no right or wrong answers so please give us your honest opinion.

	1	2	3	4	5
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely
1. Interested.....	1	2	3	4	5
2. Distressed.....	1	2	3	4	5
3. Excited	1	2	3	4	5
4. Upset	1	2	3	4	5
5. Strong.....	1	2	3	4	5
6. Guilty	1	2	3	4	5
7. Scared.....	1	2	3	4	5
8. Hostile.....	1	2	3	4	5
9. Enthusiastic.....	1	2	3	4	5
10. Proud.....	1	2	3	4	5
11. Irritable.....	1	2	3	4	5
12. Alert	1	2	3	4	5
13. Ashamed	1	2	3	4	5
14. Inspired.....	1	2	3	4	5
15. Nervous.....	1	2	3	4	5

(Continues)

Positive and Negative Affect Scale (continued)

	1 Very slightly or not at all	2 A little	3 Moderately	4 Quite a bit	5 Extremely
16. Determined.....	1	2	3	4	5
17. Attentive.....	1	2	3	4	5
18. Jittery.....	1	2	3	4	5
19. Active.....	1	2	3	4	5
20. Afraid.....	1	2	3	4	5
21. Anxious.....	1	2	3	4	5
22. Happy.....	1	2	3	4	5
23. Stressed.....	1	2	3	4	5
24. Confident.....	1	2	3	4	5
25. Depressed.....	1	2	3	4	5

APPENDIX C

BODY PARTS SATISFACTION SCALE - REVISED (BPSS-R)

Body Parts Satisfaction Scale - Revised (BPSS-R)

DIRECTIONS: Below is a list of body parts. Please rate how satisfied you are, at this moment, with each body part according to the following scale. Remember, it is very important that you respond to all the items and that you answer them honestly as they apply to you. All of the information you provide will be kept strictly confidential.

	Extremely Dissatisfied	1	2	3	4	5	6	Extremely Satisfied	
<hr/>									
1.	Height			1	2	3	4	5	6
2.	Weight			1	2	3	4	5	6
3.	Hair			1	2	3	4	5	6
4.	Complexion			1	2	3	4	5	6
5.	Overall face.....			1	2	3	4	5	6
6.	Shoulders			1	2	3	4	5	6
7.	Arms			1	2	3	4	5	6
8.	Stomach			1	2	3	4	5	6
9.	Chest			1	2	3	4	5	6
10.	Back.....			1	2	3	4	5	6
11.	Buttocks.....			1	2	3	4	5	6
12.	Legs.....			1	2	3	4	5	6
13.	Lower legs (calves).....			1	2	3	4	5	6
14.	General muscle tone			1	2	3	4	5	6
15.	Overall satisfaction with size and shape of your body .			1	2	3	4	5	6

APPENDIX D
BULIMIA TEST – REVISED (BULIT-R)

Bulimia Test-Revised (BULIT-R)

DIRECTIONS: Answer each question by circling the response which best describes what you believe to be true about yourself. Please respond to all the items and answer them as honestly as possible. Remember, all of the information you provide will be kept strictly confidential.

1. I am satisfied with my eating patterns.

- 1 agree
- 2 neutral
- 3 disagree a little
- 4 disagree
- 5 disagree strongly

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

- 1 yes, absolutely
- 2 yes
- 3 yes, probably
- 4 yes, possibly
- 5 no, probably not

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

- 1 most or all of the time
- 2 a lot of the time
- 3 occasionally
- 4 rarely
- 5 never

(Continues)

Bulimia Test - Revised (continued)

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

- 1 frequently or always
- 2 sometimes
- 3 occasionally
- 4 rarely
- 5 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).

- 1 always
- 2 almost always
- 3 frequently
- 4 sometimes
- 5 never or my eating behavior is never out of control

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

- 1 once a day or more
- 2 3-6 times a week
- 3 once or twice a week
- 4 2-3 times a month
- 5 once a month or less (or never)

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

- 1 always
- 2 almost always
- 3 frequently
- 4 sometimes
- 5 seldom or never

(Continues)

Bulimia Test - Revised (continued)

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

- 1 more than twice a week
- 2 twice a week
- 3 once a week
- 4 2-3 times a month
- 5 once a month or less (or never)

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

- 1 not applicable; I don't binge eat
- 2 less than 3 months
- 3 3 months - 1 year
- 4 1 - 3 years
- 5 3 or more years

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

- 1 without a doubt
- 2 very probably
- 3 probably
- 4 possibly
- 5 no

11. I exercise in order to burn calories.

- 1 more than 2 hours per day
- 2 about 2 hours per day
- 3 more than 1 but less than 2 hours per day
- 4 one hour or less per day
- 5 I exercise but not to burn calories or I don't exercise

(Continues)

Bulimia Test - Revised (continued)

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

- 1 a great deal more than average
- 2 much more than average
- 3 more than average
- 4 a little more than average
- 5 average or less than average

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

- 1 always
- 2 almost always
- 3 frequently
- 4 sometimes
- 5 seldom or never

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

- 1 always
- 2 almost always
- 3 frequently
- 4 sometimes
- 5 seldom or never

15. How often do you intentionally vomit after eating?

- 1 2 or more times a week
- 2 once a week
- 3 2-3 times a month
- 4 once a month
- 5 less than once a month or never

(Continues)

Bulimia Test - Revised (continued)

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

- 1 very frequently
- 2 frequently
- 3 occasionally
- 4 sometimes
- 5 seldom or never

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

- 1 always
- 2 almost always
- 3 frequently
- 4 sometimes
- 5 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).

- 1 never or I don't binge eat
- 2 rarely
- 3 occasionally
- 4 a lot of the time
- 5 most or all of the time

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

- 1 not in the past year
- 2 once in the past year
- 3 2-3 times in the past year
- 4 4-5 times in the past year
- 5 more than 5 times in the past year

(Continues)

Bulimia Test - Revised (continued)

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

- 1 average or less than average
- 2 a little more than average
- 3 more than average
- 4 much more than average
- 5 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).

- 1 always
- 2 almost always
- 3 frequently
- 4 sometimes
- 5 seldom or I don't binge

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

- 1 greater than others' ability
- 2 about the same
- 3 less
- 4 much less
- 5 I have absolutely no control

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

- 1 absolutely
- 2 yes
- 3 yes, probably
- 4 yes, possibly
- 5 no, probably not

(Continues)

Bulimia Test - Revised (continued)

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

- 1 seldom or never
- 2 sometimes
- 3 occasionally
- 4 a lot of the time
- 5 most or all of the time

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.

- 1 never
- 2 rarely
- 3 occasionally
- 4 a lot of the time
- 5 most or all of the time

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

- 1 yes, it's no problem at all for me
- 2 yes, it's easier
- 3 yes, it's a little easier
- 4 about the same
- 5 no, it's less easy

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

- 1 never
- 2 seldom
- 3 sometimes
- 4 frequently
- 5 very frequently

(Continues)

Bulimia Test - Revised (continued)

28. I feel that food controls my life.

- 1 always
- 2 almost always
- 3 frequently
- 4 sometimes
- 5 seldom or never

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

- 1 never
- 2 seldom
- 3 sometimes
- 4 frequently
- 5 very frequently

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

- 1 more rapidly than most people have ever eaten in their lives
- 2 a lot more rapidly than most people
- 3 a little more rapidly than most people
- 4 about the same rate as most people
- 5 more slowly than most people (or not applicable)

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

- 1 never
- 2 seldom
- 3 sometimes
- 4 frequently
- 5 very frequently

(Continues)

Bulimia Test - Revised (continued)

32. Right after I binge eat I feel:

- 1 so fat and bloated I can't stand it
- 2 extremely fat
- 3 fat
- 4 a little fat
- 5 OK 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:

- 1 about the same or greater
- 2 a little less
- 3 less
- 4 much less
- 5 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)?

- 1 once a month or less (or never)
- 2 2-3 times a month
- 3 once a week
- 4 twice a week
- 5 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.

- 1 yes, definitely
- 2 yes
- 3 yes, probably
- 4 yes, possibly
- 5 no, probably not or I never eat a lot of food

(Continues)

Bulimia Test - Revised (continued)

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

- 1 3 times a week or more
- 2 once or twice a week
- 3 2-3 times a month
- 4 once a month
- 5 never

For the following questions, please circle yes or no. Remember, all answers will be kept strictly confidential:

- | | | |
|---|-----|----|
| 37. I have been diagnosed with an eating disorder by a mental health professional. | YES | NO |
| 38. I have received treatment for an eating disorder from a mental health professional. | YES | NO |

APPENDIX E

MEDIA CONSUMPTION SCALE (MCS)

MEDIA CONSUMPTION SCALE

Directions: Below are several questions about your daily activities. For all of the questions below think about them as they apply to your behavior over the past month. Please answer them as honestly as possible. Circle the number of hours on the scale on average that best reflects your behavior with respect to each category of TV show or magazine.

TELEVISION

1. How many hours of Comedy shows, such as Friends, Dharma & Greg, and Frasier do you watch in an average week?

0 ½ 1 ½ 2 ½ 3 ½ 4 ½ 5 ½ 6 ½ 7 ½ 8 ½ 9 ½ 10 ½ 11 ½ 12 ½ 13 ½ 14 ½ 15 ½ 16 ½ 17 ½ 18 ½ 19 ½ 20
hours hours hours hours hours

2. How many hours of Game shows, such as Jeopardy and Wheel of Fortune, do you watch in an average week?

0 ½ 1 ½ 2 ½ 3 ½ 4 ½ 5 ½ 6 ½ 7 ½ 8 ½ 9 ½ 10 ½ 11 ½ 12 ½ 13 ½ 14 ½ 15 ½ 16 ½ 17 ½ 18 ½ 19 ½ 20
hours hours hours hours hours

3. How many hours of Drama shows, such as X-Files, Jag, Family Law, and Chicago Hope do you watch in an average week?

0 ½ 1 ½ 2 ½ 3 ½ 4 ½ 5 ½ 6 ½ 7 ½ 8 ½ 9 ½ 10 ½ 11 ½ 12 ½ 13 ½ 14 ½ 15 ½ 16 ½ 17 ½ 18 ½ 19 ½ 20
hours hours hours hours hours

(Continues)

Media Consumption Scale (Continued)

4. How many hours of Daytime Soap Opera shows, such as *The Young and the Restless* or *Days of our Lives*, do you watch in an average week?

0 ½ 1½ 2½ 3½ 4½ 5 ½ 6½ 7½ 8½ 9½ 10 ½ 11½ 12½ 13½ 14½ 15 ½ 16½ 17½ 18½ 19½ 20
hours hours hours hours hours

5. How many hours of Evening Soap Opera shows, such as *Beverly Hills 90210*, do you watch in an average week?

0 ½ 1½ 2½ 3½ 4½ 5 ½ 6½ 7½ 8½ 9½ 10 ½ 11½ 12½ 13½ 14½ 15 ½ 16½ 17½ 18½ 19½ 20
hours hours hours hours hours

6. How many hours of Talk shows, such as *Jerry Springer*, *Montel Williams*, or *Oprah Winfrey* do you watch in an average week?

0 ½ 1½ 2½ 3½ 4½ 5 ½ 6½ 7½ 8½ 9½ 10 ½ 11½ 12½ 13½ 14½ 15 ½ 16½ 17½ 18½ 19½ 20
hours hours hours hours hours

7. How many hours of Music Videos, such as *MTV*, *CMT*, *BET*, and *VH-1*, do you watch in an average week?

0 ½ 1½ 2½ 3½ 4½ 5 ½ 6½ 7½ 8½ 9½ 10 ½ 11½ 12½ 13½ 14½ 15 ½ 16½ 17½ 18½ 19½ 20
hours hours hours hours hours

(Continues)

Media Consumption Scale (continued)

8. How many hours of TV News Magazines, such as 20-20, Dateline, or 48 Hours, do you watch in an average week?

0 ½ 1½ 2½ 3½ 4½ 5 ½ 6½ 7½ 8½ 9½ 10 ½ 11½ 12½ 13½ 14½ 15 ½ 16½ 17½ 18½ 19½ 20
hours hours hours hours hours

MAGAZINES

9. How many hours do you spend reading Entertainment or Arts magazines, such as Rolling Stone or Entertainment Weekly or People, in an average week?

0 ½ 1½ 2½ 3½ 4½ 5 ½ 6½ 7½ 8½ 9½ 10 ½ 11½ 12½ 13½ 14½ 15 ½ 16½ 17½ 18½ 19½ 20
hours hours hours hours hours

10. How many hours do you spend reading News magazines, such as Time, Newsweek, or U.S. News and World Report, in an average week?

0 ½ 1½ 2½ 3½ 4½ 5 ½ 6½ 7½ 8½ 9½ 10 ½ 11½ 12½ 13½ 14½ 15 ½ 16½ 17½ 18½ 19½ 20
hours hours hours hours hours

11. How many hours do you spend reading Health or Fitness magazines, such as Shape or Fitness, in an average week?

0 ½ 1½ 2½ 3½ 4½ 5 ½ 6½ 7½ 8½ 9½ 10 ½ 11½ 12½ 13½ 14½ 15 ½ 16½ 17½ 18½ 19½ 20
hours hours hours hours hours

(Continues)

Media Consumption Scale (continued)

12. How many hours do you spend reading Women's Fashion magazines, such as Vogue, Glamour, Cosmopolitan or In Style in an average week?

0 ½ 1½ 2½ 3½ 4½ 5 ½ 6½ 7½ 8½ 9½ 10 ½ 11½ 12½ 13½ 14½ 15 ½ 16½ 17½ 18½ 19½ 20
hours hours hours hours hours

13. How many hours do you spend reading Women's Domestic magazines, such as Southern Living, Good Housekeeping, or Martha Stewart's Living in an average week?

0 ½ 1½ 2½ 3½ 4½ 5 ½ 6½ 7½ 8½ 9½ 10 ½ 11½ 12½ 13½ 14½ 15 ½ 16½ 17½ 18½ 19½ 20
hours hours hours hours hours

APPENDIX F
PSYCHOLOGY OF FASHION
AND ADVERTISING QUESTIONNAIRE

Psychology of Fashion and Advertising Questionnaire (Part 1)

1. Favorite type of magazine (please circle your answer.)
 - 1) Fashion (e.g., Vogue, Glamour, Cosmo)
 - 2) Health and Fitness (e.g., Shape)
 - 3) Entertainment (e.g., Entertainment, People)
 - 4) Music (e.g., Rolling Stone Magazine)
 - 5) Music (e.g., Rolling Stone Magazine)
 - 6) Domestic (e.g., Southern Living, Good Housekeeping)
 - 7) News (e.g., Time, Newsweek)
 - 8) Other _____

2. Average number of magazines you read per month . (please circle your answer.)
 - 1) Less than one
 - 2) One to three
 - 3) More than three

2. Favorite clothing store _____

3. Amount of money spent on clothing per month (please circle your answer.)
 - 1) Less than \$50
 - 2) \$50 - \$100
 - 3) more than \$100

2. I generally pay attention to advertisements of new products in my favorite magazines. (please circle)
 - 1) True
 - 2) False

2. Generally, I pay more attention to advertisements when they are.... (circle any which apply to you.)
 - 1) Funny
 - 2) Sad
 - 3) Thought provoking
 - 4) Emotionally touching

(Continues)

Psychology of Fashion and Advertising Questionnaire (Part 1) (continued)

2. Generally, I notice advertisements if young, attractive men and/or women endorse the products. (circle one)

1) True

2) False

2. In general, I notice what my friends are wearing and what type of fashionable clothing they have on.

1) True

2) False

Psychology of Fashion and Advertising (Part 2)

Please circle the number under the column that best applies to each of the numbered statements. Circle 1 for 'true' or circle 2 for 'false'.

	TRUE	FALSE
1. In general, I prefer to wear a one-piece swimsuit rather than a two-piece swimsuit.	1	2
2. If I look good in it, I'll buy it no matter the cost.	1	2
3. In general, I prefer to wear bright rather than dark colors.	1	2
4. I don't follow the latest fashion trends; I have my own style.	1	2
5. More times than not, I'd choose to go shopping over other activities.	1	2
6. I notice what the movie stars or TV celebrities are wearing.	1	2
7. The swimsuits these days are too revealing.	1	2
8. I really don't care about fashion.	1	2

APPENDIX G
DEMOGRAPHIC QUESTIONNAIRE

Demographic Questionnaire

1. What is your age? _____ (years)
2. What is your current weight? _____ pounds
3. What is your current height? _____ feet and _____ inches
4. What is your ideal weight? _____ pounds
5. What is your academic rank in school?
 - 1 ___ freshman
 - 2 ___ sophomore
 - 3 ___ junior
 - 4 ___ senior
 - 5 ___ graduate student
 - 6 ___ other (please specify) _____
6. What is your cumulative grade point average?
 - 1 ___ 3.5 – 4.0
 - 2 ___ 3.0 – 3.49
 - 3 ___ 2.5 – 2.99
 - 4 ___ 2.4 – 2.49
 - 5 ___ less than 1.99
7. What is your race/ethnic group?
 - 1 ___ Asian-American
 - 2 ___ Black, non-Hispanic
 - 3 ___ Caucasian
 - 4 ___ Hispanic
 - 5 ___ Native American
 - 6 ___ Biracial (please specify) _____
 - 6 ___ Other (please specify) _____

APPENDIX H
SOCIAL DESIRABILITY SCALE (SDS)

Social Desirability Scale (SDS)

Please circle the number under the column which best applies to each of the numbered statements. Circle 1 for 'true' or circle 2 for 'false'.

	True	False
1. It is sometimes hard for me to go on with my work if I am not encouraged.	1	2
2. I sometimes feel resentful when I don't get my own way.	1	2
3. On a few occasions, I have given up doing something because I thought too little of my ability.	1	2
4. There have been times when I felt like rebelling against people in authority even though I knew they were right.	1	2
5. No matter who I'm talking to, I'm always a good listener.	1	2
6. There have been occasions when I took advantage of somebody.	1	2
7. I'm always willing to admit it when I make a mistake.	1	2
8. I sometimes try to get even rather than forgive and forget.	1	2
9. I am always courteous, even to people who are disagreeable.	1	2
10. I have never been irked when people expressed ideas very different from my own.	1	2
11. There have been times when I was quite jealous of the good fortune of others.	1	2
12. I am sometimes irritated by people who ask favors of me.	1	2
13. I have never deliberately said something that hurt someone's feelings.	1	2

APPENDIX I
TABLES: INCLUDES DESCRIPTIVE DATA
AND ALL STATISTICAL ANALYSES

Table 1

Means and Standard Deviations of Predictor and Criterion Variables (N = 128)

Variable	Pre measure		Post measure	
	Mean	Standard Deviation	Mean	Standard Deviation
age	20.03	1.82	--	--
BMI	22.48	3.57	--	--
sds	18.76	2.78	--	--
guilt	1.88	1.06	1.73	1.13
shame	1.58	0.96	1.62	1.03
anxiety	2.87	1.08	2.37	1.29
stress	3.60	1.15	2.99	1.31
depression	2.13	1.12	1.78	1.10
PA	33.85	6.11	28.18	8.16
NA	23.05	7.42	18.00	7.49
BPS1	3.14	1.10	3.16	1.07
BPS2	4.04	0.94	4.07	0.93
BA1	4.56	1.10	4.62	1.08
BA2	2.30	1.03	2.39	1.09

(Table Continues)

Table 1 (continued)

Variable	Pre measure		Post measure	
	Mean	Standard Deviation	Mean	Standard Deviation
magazines	2.74	3.06	--	--
television	14.54	10.99	--	--
BULIT-R	--	--	51.67	19.99

Note. Age = 18 - 25 years; BMI = body mass index (kg/m^2); sds = Social Desirability Scale; guilt = Positive and Negative Affect Scale - Guilty (level of guilt: 1 [*slightly or not at all*] to 5 [*extremely*]); shame = Positive and Negative Affect Scale - Ashamed (level of shame: 1 [*slightly or not at all*] to 5 [*extremely*]); anxiety = Positive and Negative Affect Scale - Anxiety (level of anxiety: 1 [*slightly or not at all*] to 5 [*extremely*]); stress = Positive and Negative Affect Scale - Stressed (level of stress: 1 [*slightly or not at all*] to 5 [*extremely*]); depression = Positive and Negative Affect Scale - Depressed (level of depression): 1 [*slightly or not at all*] to 5 [*extremely*]); PA = Positive and Negative Affect Scale – Positive Affect (level of positive affect: 10 [*slightly or not at all*] to 50 [*extremely*]); NA = Positive and Negative Affect Scale – Negative Affect (level of negative affect: 10 [*slightly or not at all*] to 50 [*extremely*]); BPS1 = Body Parts Satisfaction Scale, Factor 1 (level of satisfaction with size and shape of body: 1 [*extremely dissatisfied*] to 6 [*extremely satisfied*]); BPS2 = Body Parts Satisfaction Scale, Factor 2 (level of satisfaction with facial features: 1 [*extremely dissatisfied*] to 6 [*extremely satisfied*]);

(Table Continues)

Table 1 (continued)

BA1 = Beliefs About Attractiveness Scale - Revised, Factor 1 (adoption of U.S. values of physical fitness: 1 [low endorsement of importance of being physically fit and in shape] to 7 [high endorsement of importance of being physically fit and in shape]); BA2 = Beliefs About Attractiveness Scale - Revised, Factor 2 (adoption of U.S. values of attractiveness: 1 [low endorsement of importance of being attractive and thin] to 7 [high endorsement of importance of being attractive and thin]); television = Media Consumption Scale (television: 0 to 20 hours/week); magazines = Media Consumption Scale (magazines: 0 to 20 hours/week); BULIT-R = Bulimia Test - Revised (level of bulimic symptomatology: 28 [few symptoms] to 140 [many symptoms]).

Table 2

Pearson Product-Moment Correlations Among the Predictor and Criterion Variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	AGE	BMI	SDS	MTV	MMG	MTOT	PAa	NAa	P6a	P13a	P21a	P23a	P25a	PAb	NAb
1. AGE	--														
2. BMI	.01	--													
3. SDS	.06	.06	--												
4. MTV	-.03	.05	.06	--											
5. MMG	.06	-.05	-.03	.43*	--										
6. MTOT	-.01	.03	.05	.98*	.62*	--									
7. PAa	-.14	-.11	.27	.15	.09	.15	--								
8. NAa	-.02	.09	-.33*	-.11	.11	-.07	-.13	--							
9. P6a	.002	.08	-.20	-.01	.04	.00	.05	.52*	--						
10. P13a	.02	.03	-.07	.02	.28*	.08	-.04	.61*	.26	--					
11. P21a	.03	-.06	-.18	-.04	.18	.01	.001	.64*	.32*	.39*	--				
12. P23a	-.08	.03	-.21	-.14	.03	-.11	-.17	.63*	.25	.23	.41*	--			

(Table Continues)

Table 2 (continued)

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	AGE	BMI	SDS	MTV	MMG	MTOT	PAa	NAa	P6a	P13a	P21a	P23a	P25a	PAb	NAb
13. P25a	-.08	.18	-.33*	-.08	.004	-.07	-.24*	.66*	.22	.34*	.44*	.54*	--		
14. PAb	-.12	-.07	.16	.06	.17	.10	.38*	.02	.11	.06	.04	-.04	-.06	--	
15. NAb	.11	.13	-.13	.01	.28*	.07	.03	.55*	.35*	.52*	.46*	.34*	.41*	.11	--
16. P6b	.05	.08	-.15	.05	.22	.10	-.08	.47*	.32*	.44*	.41*	.20	.39*	.10	.75*
17. P13b	.02	.11	-.17	-.02	.23	.04	.01	.45*	.30*	.39*	.37*	.25	.38*	.05	.81*
18. P21b	.07	.05	.02	-.03	.23*	.03	-.09	.38*	.18	.35*	.56*	.29*	.20	.28*	.60*
19. P23b	.07	.09	-.13	-.10	.12	-.06	-.05	.47*	.31*	.38*	.32*	.45*	.34*	.08	.59*
20. P25b	.13	.20	-.23	-.11	.09	-.08	-.19	.43*	.15	.46*	.24	.24	.47*	-.14	.71*
21. BPS1a	-.05	-.35*	.29*	-.04	-.09	-.06	.26	-.37*	-.18	-.25	-.15	-.44*	-.43*	.23	-.29*
22. BPS2a	-.05	-.12	.23	.08	-.06	.05	.28*	-.20	-.15	-.24	-.16	-.21	-.19	.15	-.24
23. BPS1b	.03	-.29*	.22	-.02	-.14	-.05	.23	-.42*	-.19	-.24	-.25	-.47*	-.42*	.27	-.33*
24. BPS2b	.01	-.14	.16	-.02	-.19	-.07	.25	-.28*	-.16	-.27	-.25	-.18	-.22	.19	-.22
25. BA1a	.25	-.09	-.07	-.07	-.01	-.07	-.13	.02	.01	-.06	.12	.05	.08	.05	.10
26. BA2a	.22	.02	-.20	.01	.11	.03	-.13	.12	.11	-.001	.19	.08	.09	.13	.16

(Table Continues)

Table 2 (continued)

Variables	16	17	18	19	20	21	22	23	24	25	26	27	28	29
	P6b	P13b	P21b	P23b	P25b	BPS1a	BPS2a	BPS1b	BPS2b	BA1a	BA2a	BA1b	BA2b	BULT
13. P25a														
14. PAb														
15. NAb														
16. P6b	--													
17. P13b	.67*	--												
18. P21b	.42*	.35*	--											
19. P23b	.36*	.35*	.48*	--										
20. P25b	.56*	.59*	.30*	.44*	--									
21. BPS1a	-.27	-.29*	-.07	-.31*	-.41*	--								
22. BPS2a	-.12	-.18	-.14	-.22	-.33*	.29*	--							
23. BPS1b	.35*	-.35*	-.19	-.35*	-.38*	.77*	.29*	--						
24. BPS2b	-.13	-.19	-.24	-.21	-.24	.31*	.67*	.51*	--					
25. BA1a	.03	.09	.19	.14	.12	-.07	-.03	-.07	-.05	--				
26. BA2a	.13	.10	.26	.11	.15	-.19	-.05	-.17	-.09	.70*	--			

(Table Continues)

Table 2 (continued)

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	AGE	BMI	SDS	MTV	MMG	MTOT	PAa	NAa	P6a	P13a	P21a	P23a	P25a	PAb	NAb
27. BA1b	.15	-.06	-.09	-.08	.05	-.06	-.09	.04	-.02	-.09	.14	.08	.12	-.002	.10
28. BA2b	.14	.13	-.10	.04	.17	.08	-.12	.14	.22	.07	.17	.11	.14	.04	.21
29. BULT	.12	.22	-.23	.10	.27	.15	-.06	.41*	.27	.36*	.35*	.32*	.39*	.09	.43*

(Table Continues)

Table 2 (continued)

Variables	16	17	18	19	20	21	22	23	24	25	26	27	28	29
P6b	P13b	P21b	P23b	P25b	BPS1a	BPS2a	BPS1b	BPS2b	BA1a	BA2a	BA1b	BA2b	BULT	
27. BA1b	.03	.16	.13	.02	.12	-.02	-.01	.07	.01	.75*	.53*	--		
28. BA2b	.20	.17	.21	.12	.20	-.22	-.04	-.22	-.14	.54*	.74*	.58*	--	
29. BULT	.39*	.38*	.30*	.38*	.43*	-.46*	-.36*	-.53*	-.30*	.13	.27	.13	.32*	--

Note. AGE = age (18 - 25 years); BMI = body mass index (kg/m^2); SDS = social desirability scale: (level of social desirability

responses: 13 [low social desirability bias] to 26 [high social desirability bias]), MTV = Media Consumption Scale (television: 0 to 20 hrs/ week); MMG = Media Consumption Scale (magazines: 0 to 20 hrs/week); MTOT = Media Consumption Scale (total television and magazines: 0 to 20 hrs/week); PAa = Positive and Negative Affect Scale - Positive Affect (level of pre measure positive affect: 10 [low or not at all] to 50 [extremely]); NAA = Positive and Negative Affect Scale - Negative Affect (level of pre measure negative affect: 10 [low or not at all] to 50 [extremely]); P6a = Positive and Negative Affect Scale - Guilty (level of pre measure guilt: 1 [slightly or not at all] to 5 [extremely]); P13a = Positive and Negative Affect Scale - Ashamed (level of pre measure shame: 1 [slightly or not at all] to 5 [extremely]); P21a = Positive and Negative Affect Scale - Anxiety (level of pre measure anxiety: 1 [slightly or not at all] to 5 [extremely]); P23a = Positive and Negative Affect Scale - Stressed (level of pre measure stress: 1 [slightly or not at all] to 5 [extremely]); P25a = Positive and Negative Affect Scale - Depressed (level of pre measure depression: 1 [slightly or not at all] to 5 [extremely]); PAb = Positive and Negative Affect Scale - Positive Affect (level of post measure positive affect: 10 [low or not at all] to 50 [extremely]);

(Table Continues)

Table 2 (continued)

NAb = Positive and Negative Affect Scale - Negative Affect (level of post measure negative affect: 10 [low or not at all] to 50 [extremely]); P6b = Positive and Negative Affect Scale - Guilty (level of post measure guilt: 1 [slightly or not at all] to 5 [extremely]); P13b = Positive and Negative Affect Scale - Ashamed (level of post measure shame: 1 [slightly or not at all] to 5 [extremely]); P21b = Positive and Negative Affect Scale - Anxiety (level of post measure anxiety: 1 [slightly or not at all] to 5 [extremely]); P23b = Positive and Negative Affect Scale - Stressed (level of post measure stress: 1 [slightly or not at all] to 5 [extremely]); P25b = Positive and Negative Affect Scale - Depressed (level of post measure depression: 1 [slightly or not at all] to 5 [extremely]); BPS1a = Body Parts Satisfaction Scale (Factor 1) (level of pre measure satisfaction with size and shape of body: 1 [extremely dissatisfied] to 6 [extremely satisfied]); BPS2a = Body Parts Satisfaction Scale (Factor 2)(level of pre measure satisfaction with facial features: 1 [extremely dissatisfied] to 6 [extremely satisfied]); BPS1b = Body Parts Satisfaction Scale (Factor 1) (level of post measure satisfaction with size and shape of body: 1 [extremely dissatisfied] to 6 [extremely satisfied]); BPS2b = Body Parts Satisfaction Scale (Factor 2) (level of post measure satisfaction with facial features: 1 [extremely dissatisfied] to 6 [extremely satisfied]); BAla = Beliefs About Attractiveness Scale - Revised (pre measure Factor 1) (adoption of U. S. values of physical fitness: 1 [low endorsement of importance of being physically fit and in shape] to 7 [high endorsement of importance of being physically fit and in shape]); BA2a = Beliefs About Attractiveness Scale - Revised (pre measure Factor 2) (adoption of U.S. values of attractiveness: 1 [low endorsement of importance of being attractive and thin] to 7 [high endorsement of importance of being attractive and thin]); BA1b = Beliefs About Attractiveness Scale - Revised (post measure Factor 1) (adoption of U. S. values of physical fitness: 1 [low endorsement of importance of being physically fit and in shape] to 7 [high endorsement of importance of being physically fit and in shape]);

(Table Continues)

Table 2 (continued)

BA2b = Beliefs About Attractiveness Scale - Revised (post measure Factor 2) (adoption of U. S. values of attractiveness: 1 [low endorsement of importance of being attractive and thin] to 7 [high endorsement of importance of being attractive and thin]);

BULT = Bulimia Test-Revised (level of bulimic symptomatology: 28 [few symptoms] to 140 [many symptoms]).

* $p \leq .001$.

Table 3

Means and Standard Deviations and F Values for Univariate ANOVAs for Dependent Variables Across Time Including the Specific Mood Indicators (N = 128)

Univariate Variable	Time 1 (pre measure)	Time 2 (post measure)	F value
BPS1	3.14 (1.03)	3.16 (1.07)	0.10
BPS2	4.04 (0.94)	4.07 (0.93)	0.23
BA1	4.56 (1.10)	4.62 (1.08)	0.96
BA2	2.30 (1.03)	2.39 (1.09)	1.59
guilt	1.88 (1.06)	1.73 (1.13)	1.79
shame	1.58 (0.96)	1.62 (1.03)	0.12
anxiety	2.87 (1.08)	2.37 (1.29)	24.83**
stress	3.60 (1.15)	2.99 (1.31)	28.37**
depression	2.13 (1.12)	1.78 (1.10)	11.27*

Note. Values in parenthesis represent standard deviations. BPS1 = Body Parts Satisfaction Scale (Factor 1, level of body satisfaction: 1 [*extremely dissatisfied*] to 6 [*extremely satisfied*]); BPS2 = Body Parts Satisfaction Scale (Factor 2, level of satisfaction with face: 1 [*extremely dissatisfied*] to 6 [*extremely satisfied*]);

(Table Continues)

Table 3 (continued)

BA1 = Beliefs About Attractiveness Scale - Revised (Factor 1, adoption of U.S. values of physical fitness: 1 [low endorsement of importance of being physically fit and in shape] to 7 [high endorsement of importance of being physically fit and in shape]);

BA2 = Beliefs About Attractiveness Scale - Revised (Factor 2, adoption of U. S. values of attractiveness: 1 [low endorsement of importance of being attractive and thin] to 7 [high endorsement of importance of being attractive and thin]); guilt = Positive and Negative Affect Scale - Guilty (level of guilt): 1 [*slightly or not at all*] to 5 [*extremely*]); shame = Positive and Negative Affect Scale - Ashamed (level of shame: 1 [*slightly or not at all*] to 5 [*extremely*]); anxiety = Positive and Negative Affect Scale - Anxiety (level of anxiety: 1 [*slightly or not at all*] to 5 [*extremely*]); stress = Positive and Negative Affect Scale - Stressed (level of stress: 1 [*slightly or not at all*] to 5 [*extremely*]); P25b = Positive and Negative Affect Scale - Depressed (level of depression: 1 [*slightly or not at all*] to 5 [*extremely*]).

* $p = .001$. ** $p < .001$.

Table 4

Means and Standard Deviations and F Values for Univariate ANOVAs for Dependent Variables Across Time Including Positive and Negative Affect (N = 128)

Univariate Variable	Time 1 (pre measure)	Time 2 (post measure)	F value
BPS1	3.14 (1.03)	3.16 (1.07)	0.10
BPS2	4.04 (0.94)	4.07 (0.93)	0.23
BA1	4.56 (1.10)	4.62 (1.08)	0.96
BA2	2.30 (1.03)	2.39 (1.09)	1.59
PA	33.85 (6.11)	28.18 (8.16)	63.11*
NA	23.05 (7.42)	18.00 (7.49)	66.53*

Note. Values in parentheses represent standard deviations. BPS1 = Body Parts Satisfaction Scale (Factor 1, level of body satisfaction: 1 [*extremely dissatisfied*] to 6 [*extremely satisfied*]); BPS2 = Body Parts Satisfaction Scale (Factor 2, level of satisfaction with face: 1 [*extremely dissatisfied*] to 6 [*extremely satisfied*]); BA1 = Beliefs About Attractiveness Scale - Revised (Factor 1, adoption of U. S. values of physical fitness: 1 [low endorsement of importance of being physically fit and in shape] to 7 [high endorsement of importance of being physically fit and in shape]); BA2 = Beliefs About Attractiveness Scale - Revised (Factor 2, adoption of U.S. values of attractiveness: 1 [low endorsement of importance of being attractive and thin] to 7 [high endorsement of importance of being attractive and thin]);

(Table Continues)

Table 4 (continued)

PA = Positive and Negative Affect Scale - Positive Affect: 10 [*slightly or not at all*] to 50 [*extremely*]); NA = Positive and Negative Affect Scale - Negative Affect: 10 [*slightly or not at all*] to 50 [*extremely*]. * $p < .001$.

Table 5
Post Measure Hierarchical Regression Analyses for Variables Predicting Bulimic
Symptoms Including the Specific Mood Indicators (N= 128)

Variable	<u>B</u>	<u>SE B</u>	b	t
Step 1				
BMI	1.21	0.49	0.22	2.49
Step 2				
BMI	0.39	0.45	0.07	0.87
BPS1	-9.03	1.72	-0.48	-5.24**
BPS2	-1.00	1.91	-0.05	-0.53
Step 3				
BMI	0.33	0.43	0.06	0.76
BPS1	-6.57	1.80	-0.35	-3.64**
BPS2	-0.48	1.87	-0.02	-0.26
guilt	1.35	1.90	0.08	0.71
shame	0.74	2.05	0.04	0.36
anxiety	1.34	1.39	0.09	0.96
stress	1.49	1.38	0.10	1.08
depression	2.71	1.80	0.15	1.51
Step 4				
BMI	0.30	0.43	0.05	0.69
BPS1	-6.27	1.83	-0.33	-3.43*

(Table Continues)

Table 5 (continued)

	<u>B</u>	<u>SE B</u>	<u>b</u>	<u>T</u>
Step 4 (contd.)				
BPS2	-0.48	1.85	-0.02	-0.26
guilt	1.34	1.92	0.08	0.70
shame	0.60	2.07	0.03	0.29
anxiety	0.89	1.39	0.06	0.64
stress	1.68	1.37	0.11	1.23
depression	2.42	1.79	0.13	1.36
BA1	0.75	1.75	0.04	0.43
BA2	2.48	1.75	0.14	1.41
Step 5				
BMI	0.34	0.43	0.06	0.80
BPS1	-6.30	1.81	-0.34	-3.48**
BPS2	-4.37E-02	1.84	-0.00	-0.02
guilt	0.98	1.91	0.06	0.51
shame	0.16	2.07	0.01	0.08
anxiety	0.66	1.39	0.04	0.08
stress	1.80	1.36	0.12	1.33
depression	2.91	1.79	0.16	1.63
BA1	1.08	1.74	0.06	0.62

(Table Continues)

Table 5 (continued)

	<u>B</u>	<u>SE B</u>	b	T
Step 5 (contd.)				
BA2	1.97	1.75	0.11	1.12
MTV	1.88E-03	0.00	0.06	0.76
MMG	1.38E-02	0.01	0.13	1.50

Note. $\underline{R}^2 = 0.05$ for Step 1, $p < .05$; $6\underline{R}^2 = 0.24$ for Step 2, $p < .001$; $6\underline{R}^2 = 0.09$ for Step 3, $p = .005$; $6\underline{R}^2 = .02$ for Step 4, $p > .05$; $6\underline{R}^2 = .02$ for Step 5, $p > .05$. BMI = body mass index (kg/m²); BPS1 = Body Parts Satisfaction Scale - Factor 1, level of satisfaction with size and shape of body (post measure); BPS2 = Body Parts Satisfaction Scale - Factor 2, level of satisfaction with facial features (post measure); guilt = Positive and Negative Affect Scale - Guilty (post measure); shame = Positive and Negative Affect Scale - Ashamed (post measure); anxiety = Positive and Negative Affect Scale - Anxious (post measure); stress = Positive and Negative Affect Scale - Stressed (post measure); depressed = Positive and Negative Affect Scale - Depression (post measure); BA1 = Beliefs About Attractiveness - Revised, Factor 1, belief in importance of being physically fit and in shape (post measure); BA2 = Beliefs About Attractiveness-Revised, Factor 2, belief in importance of being attractive and thin (post measure); MTV = Media Consumption Scale - television; MMG = Media Consumption Scale - magazines.

* $p = .001$. * $p < .001$.

Table 6

Post Measure Hierarchical Regression Analyses for Variables Predicting Bulimic
Symptoms Including Positive and Negative Affect (N= 128)

Variable	<u>B</u>	<u>SE B</u>	b	t
Step 1				
BMI	1.21	0.49	0.22	2.49
Step 2				
BMI	0.39	0.45	0.07	0.87
BPS1	-9.03	1.72	-0.48	-5.24***
BPS2	-1.00	1.91	-0.05	-0.53
Step 3				
BMI	0.33	0.42	0.06	0.78
BPS1	-8.65	1.71	-0.46	-5.05***
BPS2	-0.93	1.78	-0.04	-0.52
PA	0.48	0.19	0.20	2.59
NA	0.64	0.21	0.24	3.08**
Step 4				
BMI	0.31	0.41	0.06	0.75
BPS1	-8.49	1.75	-0.45	-4.86***
BPS2	-0.83	1.76	-0.04	-0.47
PA	0.47	0.19	0.19	2.53
NA	0.57	0.21	0.21	2.77*

(Table Continues)

Table 6 (continued)

	<u>B</u>	<u>SE B</u>	<u>b</u>	<u>t</u>
Step 4 (contd.)				
BA1	1.44	1.66	0.08	0.87
BA2	1.92	1.70	0.10	1.13
Step 5				
BMI	0.35	0.42	0.06	0.85
BPS1	-8.44	1.75	-0.45	-4.82***
BPS2	-0.55	1.78	-0.03	-0.31
PA	0.43	0.19	0.18	2.27
NA	0.53	0.21	0.20	2.49
BA1	1.63	1.68	0.09	0.97
BA2	1.63	1.71	0.09	0.96
MTV	1.31E-03	0.00	0.04	0.54
MMG	8.86E-03	0.01	0.08	0.96

Note. $\underline{R}^2 = 0.05$ for Step 1, $p < .05$; $6\underline{R}^2 = 0.24$ for Step 1, $p < .001$; $6\underline{R}^2 = 0.11$ for Step 3, $p < .001$; $6\underline{R}^2 = .03$ for Step 4, $p > .05$; $6\underline{R}^2 = .01$ for Step 5, $p > .05$.

BMI = body mass index (kg/m^2); BPS1 = Body Parts Satisfaction Scale - Factor 1, level of satisfaction with size and shape of body (post measure); BPS2 = Body Parts Satisfaction Scale - Factor 2, level of satisfaction with facial features (post measure); PA = Positive and Negative Affect Scale - Positive Affect (post measure); NA = Positive and Negative Affect Scale - Negative Affect (post measure);

(Table Continues)

Table 6 (continued)

BA1 = Beliefs About Attractiveness - Revised, Factor 1, belief in importance of being physically fit and in shape (post measure); BA2 = Beliefs About Attractiveness - Revised, Factor 2, belief in importance of being attractive and thin (post measure); MTV = Media Consumption Scale - television; MMG = Media Consumption Scale - magazines.

* $p < .01$. ** $p < .005$. *** $p < .001$.

REFERENCES

Allen, H. N. (1997). Appetite awareness training: A cognitive-behavioral intervention for binge eating disorder. Dissertation Abstracts International, 57, (10-B), 6554.

American Psychiatric Association. (1987). Diagnostic and statistical manual of mental disorders (3rd ed., rev.). Washington, DC: Author.

American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders (4th ed., rev.). Washington, DC: Author.

Anderson, A. E., & DiDomenico, L. (1992). Diet vs. shape content of popular male and female magazines: A dose-response relationship to the incidence of eating disorders? International Journal of Eating Disorders, 11, 283-287.

Anderson, A. E., & Hay, A. (1985). Racial and socioeconomic influences in anorexia nervosa and bulimia. International Journal of Eating Disorders, 4, 479-487.

Attie, E., & Brooks-Gunn, J. (1989). Development of eating problems in adolescent girls: A longitudinal study. Developmental Psychology, 25, 70-79.

Berscheid, E., Walster, E., & Bohrnstedt, G. (1973, November). The happy American body: A survey report. Psychology Today, 119-131.

Bertocci, D., Hirsch, E., Sommer, W., & Williams, A. (1992). Student mental health needs: Survey results and implications for service. Journal of American College Health, 42, 3-10.

Boskind-Lodahl, M. (1976). Cinderella's stepsisters: A feminist perspective on anorexia nervosa and bulimia. Signs: Journal of Women in Culture and Society, 2, 342-356.

Brown, T. A., Cash, T. F., & Mikulka, P. J. (1990). Attitudinal body image assessment: Factor analysis of the Body-Self Relations Questionnaire. Journal of Personality Assessment, *55*, 135-144.

Bulik, C. M., Beidel, D. C., Duchmann, E., Weltzin, T. E., & Kaye, W. H. (1992). Comparative psychopathology of women with bulimia nervosa and obsessive-compulsive disorder. Comprehensive Psychiatry, *33*, 262-268.

Cash, T. F. (1994). The Situational Inventory of Body-Image Dysphoria: Contextual assessment of a negative body image. The Behavior Therapist, *June*, 133-134.

Cash, T. F., Cash, D. W., & Butters, J. W. (1983). "Mirror, mirror, on the wall....?": Contrast effects and self-evaluations of physical attractiveness. Personality and Social Psychology Bulletin, *9*, 351-358.

Cash, T. F., Grant, J. R., Shovlin, J. M., & Lewis, R. J. (1992). Are inaccuracies in self-reported weight motivated distortions? Perceptual and Motor Skills, *72*, 209-210.

Chamorro, R. (1997). Acculturation and disordered eating patterns among Mexican-American women. Dissertation Abstracts International, *58*, (5 - B), 2666).

Cooper, P. J., Taylor, M. J., Cooper, Z., & Fairburn, C. G. (1987). The development and validation of the Body Shape Questionnaire. International Journal of Eating Disorders, *6*(4), 485-494.

Costanzo, P. R., & Woody, E. A. (1985). Domain-specific parenting styles and their impact proneness. Journal of Social and Clinical Psychology, *3*, 425-445.

Crandall, C. S. (1988). Social contagion of binge eating. Journal of Personality and Social Psychology, *55*, 588-598.

Crisp, A. H. (1980). Anorexia nervosa: Let me be. London Academic Press.

Crowne, D. P., & Marlowe, D. (1960). A scale of social desirability independent of psychopathology. Journal of Consulting Psychology, *24*, 349-354.

Davis, C. (2000). Not just a pretty face: physical attractiveness and perfectionism in the risk for eating disorders. International Journal of Eating Disorders, *27*, 67-73.

Davis, C., & Cowles, M. (1989). A comparison of weight and diet concerns and personality factors among female athletes and non-athletes. Journal of Psychosomatic Research, *33*, 527-536.

Davis, R., Freeman, R. J., & Garner, D. M. (1988). A naturalistic investigation of eating behavior in bulimia nervosa. Journal of Consulting and Clinical Psychology, *56*, 273-279.

Dykens, E. M., & Gerrard, M. (1986). Psychology profiles of purging bulimics, repeat dieters, and controls. Journal of Consulting and Clinical Psychology, *54*, 283-288.

Evans, C., & Dolan, B. (1993). Body shape questionnaire: Derivation of shortened "alternate forms." International Journal of Eating Disorders, *13*(3), 315-321.

Festinger, L. (1954). A theory of social comparison processes. Human Relations, *7*, 117-140.

Fichter, M. M., Elton, M., Sourdi, L., Weyerer, S., & Kiptagel-Ilial., G. (1988). Anorexia nervosa in Greek and Turkish adolescents. European Archives of Psychiatric and Neurological Science, *237*, 200-208.

Garfinkel, P. W., & Garner, D. M. (1982). Anorexia nervosa: A multidimensional perspective. NY: Brunner/Mazel.

Garner, D. M. & Garfinkel, P. E. (1980). Socio-cultural factors in the development of anorexia nervosa. Psychological Medicine, *10*, 647-656.

Garner, D. M., Garfinkel, P. E., Schwartz, D., & Thompson, M. (1980). Cultural expectations of thinness in women. Psychological Reports, *47*, 483-491.

Garner, D. M., Olmstead, M. P., & Polivy, J. (1983). Developmental and validation of a multidimensional eating disorder inventory for anorexia nervosa and bulimia. International Journal of Eating Disorders, *2*, 15-34.

Gordon, R. A. (1988). A sociocultural interpretation of the current epidemic of eating disorders. In B. J. Blinder, B. F. Chaiting, & R. Goldstein (Eds.), The eating disorders (pp. 151-163). Great Neck, NY: PMA.

Gray, J. J., Ford, K., & Kelly, L. M. (1987). The prevalence of bulimia in a Black college population. International Journal of Eating Disorders, *6*, 733-740.

Greenberg, B. R. (1986). Predictors of binge eating in bulimic and nonbulimic women. International Journal of Eating Disorders, *5*, 269-284.

Hamilton, L. H., Brooks-Gunn, J., & Warren, M. P. (1995). Sociocultural influences on eating disorders in professional female ballet dancers. International Journal of Eating Disorders, *4*, 565-477.

Harris, M. B., & Koehler, K. M. (1992). Eating and exercise behaviors and attitudes of Southwestern Anglos and Hispanics. Psychology and Health, *7*, 165-174.

Haudek, C., Rorty, M., & Henker, B. (1999). The role of ethnicity and parental bonding in the eating and weight concerns of Asian-American and Caucasian college women. International Journal of Eating Disorders, *25*, 425-433.

Hawkins, II, R. C., & Clement, P. F. (1980). Development and construct validation of a self-report measure of binge eating tendencies. Addictive Behaviors, *5*, 219-226.

Hawkins, R. C., II, & Clement, P. F. (1984). Binge eating: Measurement problems and a conceptual model. In R. C. Hawkins, W. J. Fremouw, & P. F. Clements (Eds.), The binge purge syndrome: Diagnosis, treatment, and research (pp.229-251). New York: Springer.

Heatherton, T. F., & Baumeister, R. F. (1991). Binge eating as escape from self-awareness. Psychological Bulletin, 110, 86-108.

Heatherton, T. F., Nichols, P., Mahamedi, F., & Keel, P. (1995). Body weight, dieting, and eating disorder symptoms among college students. American Journal of Psychiatry, 152, 1623-1629.

Hsu, L. K. G. (1987). Are the eating disorders becoming more common in Blacks? International Journal of Eating Disorders, 6(1), 113-124.

Irving, L. M. (1990). Mirror Images: Effects of the standard of beauty on the self- and body-esteem of women exhibiting varying levels of bulimic symptoms. Journal of Social and Clinical Psychology, 9, 230-242.

Jane, D. M., & Hunter, G. C., & Lozzi, B. M. (1999). Do Cuban American women suffer from eating disorders? Effects of media exposure and acculturation. Hispanic Journal of Behavioral Sciences, 21 (2), 212-218.

Johnson, C. E. (1998). The relationship of gender-discrepant attitudes, behaviors and characteristics to disordered eating. Dissertation Abstracts International, 58, (7-B), 3926.

Johnson, C., & Connors, M. E. (1987). The Etiology and Treatment of Bulimia Nervosa: A Biopsychosocial Perspective. Basic Books: NY.

Johnson, C. L., Lewis, C., Love, S., Lewis, L., & Stuckey, M. (1984). Incidents and correlates of bulimic behavior in a female high school population. Journal of Youth and Adolescence, 13, 15-26.

Joiner, T. E., Schmidt, N. B., & Singh, D. (1994). Waist-to-hip ratio and body dissatisfaction among college women and men: Moderating role of depressed symptoms and gender. International Journal of Eating Disorders, 16, 199-203.

Jones, D. J., Fox, M. M., Babigian, H. M., & Hutton, H. E. (1980). The epidemiology of anorexia nervosa in Monroe County, New York 1960-1976. Psychosomatic Medicine, *42*, 551-558.

Kashubeck, S., Marchand-Martella, N., Neal, C., & Larsen, C. (1997). Sorority membership, campus pressures, and bulimic symptomatology in college women: A preliminary investigation. Journal of College Student Development, *38*, 40-48.

Katzman, M. A., & Wolchik, S. A. (1984). Bulimia and binge eating in college women: A comparison of personality and behavioral characteristics. Journal of Consulting and Clinical Psychology, *52*, 423-428.

Kendell, R. E., Hall, D. J., Hailey, A., & Babigian, H. M. (1973). The epidemiology of anorexia nervosa. Psychosomatic Medicine, *3*, 200-203.

Kendler, K. A., MacLean, C., Neale, M., Kessler, R., Heath, A., & Eaves, L. (1991). The genetic epidemiology of bulimia nervosa. American Journal of Psychiatry, *148*, 1627-1637.

Keys, A., Fidanza, F., Karvonen, M. J., Kimura, N., Taylor, H. L. (1972). Indices of relative weight and obesity. Journal of Chronic Diseases, *25*, 329-343.

Laliberte, M., Boland, F. J., & Leichner, P. (1999). Family climates: Family factors specific to disturbed eating and bulimia nervosa. Journal of Clinical Psychology, *55*, 1021-1040.

Lester, R., & Petrie, T. A. (1995). Physical, psychological, and societal correlates of bulimic symptomatology among African-American college women. Journal of Counseling Psychology, *42*, 315-321.

Lester, R., & Petrie, T. A. (1995). Personality and physical correlates of bulimic symptomatology among Mexican American female college students. Journal of Counseling Psychology, *42*, 199-203.

Mintz, L. B., & Betz, N. E. (1988). Prevalence and correlates of eating disordered behaviors among undergraduate women. Journal of Counseling Psychology, 35, 463-471.

Morant, H. (2000). BMA demands more responsible media attitude on body image. British Medical Journal, 7248, 1495-1496.

Morris, A., Cooper, T., & Cooper, P. J. (1988). The changing shape of female fashion models. International Journal of Eating Disorders, 8, 593-596.

Murray, C., Waller, G., & Legg, C. (2000). Family dysfunction and bulimic psychopathology: The mediating role of shame. International Journal of Eating Disorders, 28, 84-89.

Nasser, M. (1986). Comparative studies of the prevalence of eating attitudes among Arab female students of both London and Cairo universities. Psychological Medicine, 16, 621-625.

Nasser, M. (1988). Culture and weight consciousness. Journal of Psychosomatic Research, 32, 573-577.

Noles, S., Cash, T. F., & Winstead, B. A. (1985). Body image, physical attractiveness, and depression. Journal of Consulting and Clinical Psychology, 53, 88-94.

Parmer, J. C. (1991). Bulimia and object relations: MMPI and Rorschach variables. Journal of Personality Research, 56, 266-276.

Petrie, T., & Austin, L. J. (1997). Reference currently unavailable.

Petrie, T., Rogers, R., Johnson, C., & Diehl, N. (1996). Development and validation of the revised Beliefs About Attractiveness Scale. Paper presented at the 104th Annual Convention of the American Psychological Association. Toronto, Ontario, Canada.

Petrie, T. A., & Lester, R. (1995). Personality and physical correlates of bulimic symptomatology among Mexican American female college students. Journal of Counseling Psychology, *42*, 199-203.

Petrie, T., & Tripp, M. (2000). Factorial and construct validity of Body Parts Satisfaction Scale - Revised. Poster presented at the 108th Annual Convention of the American Psychological Association. Washington, D.C.

Pike, K. M., & Rodin, J. (1991). Mothers, daughters, and disordered eating. Journal of Abnormal Psychology, *100*, 198-204.

Pine, D. S., Cohen, P., Brook, J., & Coplan, J. D. (1997). Psychiatric symptoms in adolescence as predictors of obesity in early adulthood: A longitudinal study. American Journal of Public Health, *87*, 1303-1310.

Polivy, J., & Herman, C. P. (1985). Dieting and bingeing: A causal analysis. American Psychologist, *40*, 193-204.

Pyle, R. L., Halvorson, P. A., Neuman, P. A., & Mitchell, J. E. (1986). The increasing prevalence of bulimia in freshman college students. International Journal of Eating Disorders, *5*, 631-647.

Pyle, R. L., Mitchell, J. E., Eckert, E. D., Halvorson, P. A., Neuman, P. A., & Goff, G. M. (1983). The incidence of bulimia in freshman college students. International Journal of Eating Disorders, *2*, 75-85.

Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. Applied Psychological Measurement, *1*, 385-401.

Raeikoen, K., Hautanen, A., Keltikangas, J. L. (1994). Association of stress and depression with regional fat distribution in healthy middle-aged men. Journal of Behavioral Medicine, *17*, 605-616.

Reynolds, W. M., (1982). Development of reliable and valid short forms of the Marlowe-Crowne social desirability scale. Journal of Clinical Psychology, 38, 119-125.

Robinson, J. M., & Shaver, P. (1973). Measures of Sociopsychological Attitudes (rev. ed.). Ann Arbor, MI: Institute for Sociological Research.

Rodin, J., Silberstein, L.R., & Striegel-Moore, R. H. (1985). Women and weight: A normative discontent. In T. B. Sonderegger (Ed.), Nebraska symposium on motivation: Vol. 32. Psychology and gender (pp.267-307). Lincoln: University of Nebraska.

Rosenthal, B. S., & Schreiner, A. C. (2000). Prevalence of psychological symptoms among undergraduate students in an ethnically diverse urban public college. Journal of American College Health, 49, (1), 12-18.

Schotte, D. E., Cools, J., & McNally, R. J. (1990). Film-induced negative affect triggers overeating in restrained eaters. Journal of Abnormal Psychology, 99, 317-320.

Schupak-Neuberg, E., & Nemeroff, C. (1993). Disturbances in identity and self-regulation in bulimia nervosa: Implications for a metaphorical perspective of "body as self." International Journal of Eating Disorders, 13, 335-347.

Schwartz, D. M., Thompson, M. G., & Johnson, C. L. (1982). Anorexia nervosa and bulimia: The socio-cultural context. International Journal of Eating Disorders, 1, 20-36.

Shisslak, C. M., Prazda, S. L., & Crago, M. (1990). Body weight and bulimia as descriptors of psychological characteristics among anorexic, bulimic, and obese women. Journal of Abnormal Psychology, 99, 380-384.

Schotte, D. E., Cools, J., & McNally, R. J. (1990). Film-induced negative affect triggers overeating in restrained eaters. Journal of Abnormal Psychology, 99, 317-320.

Silber, T. (1986). Anorexia nervosa in Blacks and Hispanics. International Journal of Eating Disorders, 5, 121-128.

Silverstein, B., Perdue, L., Peterson, B., & Kelly, E. (1986). The role of the mass media in promoting a thin standard of bodily attractiveness for women. Sex Roles, 14, 519-532.

Silverstein, B., Perdue, L., Peterson, B., Vogel, L., Fantini, D. A. (1986). Possible causes of the thin standard of bodily attractiveness for women. International Journal of Eating Disorders, 5, 907-916.

Silverstein, B., Peterson, B., & Perdue, L. (1986). Some correlates of the thin standard of bodily attractiveness for women. International Journal of Eating Disorders, 5, 895-905.

Smart, R. S. (1999). Role of ethnicity, body dissatisfaction, and stressful life events in disordered eating among Asian-American, Chicana/Latina, and European American college females. Dissertation Abstracts International, 60, (6 - B), 2962.

Smith, M. C., & Thelen, M. H. (1984). Development and validation of a test for bulimia. Journal of Consulting and Clinical Psychology, 5, 863-872.

Snow, J. T., & Harris, M. B. (1986). An analysis of weight and diet content in five women's interest magazines. The Journal of Obesity and Weight Regulation, 5, 194-214.

Steen, S. N., Wadden, T. A., Foster, G. D., & Andersen, R. E. (1996). Are obese adolescent boys ignoring an important health risk? International Journal of Eating Disorders, 20, 281-286.

Steiger, H., Puentes-Neuman, G., & Leung, F. (1991). Personality and family features of adolescent girls with eating symptoms: Evidence for restrictor/binger differences in a nonclinical population. Addictive Behaviors, 16, 303-314.

Stein, D. M. (1991). The prevalence of bulimia: A review of the empirical research. Journal of Nutrition Education, 23, 205-213.

Steinberg, S., Tobin, D., & Johnson, C. (1990). The role of bulimic behaviors in affect regulation: Different functions for different patient subgroups? International Journal of Eating Disorders, *9*, 51-55.

Stice, E., Mazotti, L., Weibel, D., & Agras, W. S. (2000). Dissonance prevention program decreases thin-ideal internalization, body dissatisfaction, dieting, negative affect, and bulimic symptoms: A preliminary experiment. International Journal of Eating Disorders, *27*, (2), 206-217.

Stice, E., Schupak-Neuberg, E., Shaw, H. E., & Stein, R. L. (1994). Relation of media exposure to eating disorder symptomatology: An examination of mediating mechanisms. Journal of Abnormal Psychology, *103*, 836-840.

Stice, E., & Shaw, H. E. (1994). Adverse effects of the media portrayed thin-ideal on women and linkages to bulimic symptomatology, Journal of Social and Clinical Psychology, *13*, 288-308.

Stice, E., Weibel, D., & Agras, W. S. (2000). Dissonance prevention program decreases thin-ideal internalization, body dissatisfaction, dieting, negative affect, and bulimic symptoms: A preliminary experiment. International Journal of Eating Disorders, *27*, 206-217.

Strahan, R., & Gerbasi, K. C. (1972). Short, homogenous versions of the Marlow-Crowne Social Desirability Scale. Journal of Clinical Psychology, *28*, 191-193.

Striegel-Moore, R. H., Silberstein, L. R., Frensch, P., & Rodin, J. (1989). A prospective study of disordered eating among college students. International Journal of Eating Disorders, *8*, 499-509.

Striegel-Moore, R. H., Silberstein, L. R., & Rodin, J. (1986). Toward an understanding of risk factors for bulimia. American Psychologist, *41*, 246-263.

Swartz, L. (1985). Anorexia nervosa as a culture-bound syndrome. Social Science Medicine, 20, 725-730.

Sykes, D. K., Leuser, B., Melia, M., & Gross, M. (1988). A demographic analysis of 252 patients with anorexia nervosa and bulimia. International Journal of Psychosomatics, 35, 5-9.

Szmukler, G., McCance, C., McCrone, L., & Hunter, D. (1986). Anorexia nervosa: A psychiatric case register study from Aberdeen. Psychological Medicine, 16, 49-58.

Tabachnick, B. G., & Fidell, L. S. (1989). Using Multivariate Statistics. New York: Harper Collins.

Thelen, M. H., Farmer, J., Wonderlich, S., & Smith, M. (1991). A revision of the Bulimia Test: The BULIT-R. Psychological Assessment: A Journal of Consulting and Clinical Psychology, 3, 119-124.

Thelen, M. H., Mintz, L. B., Vander Wal, J. S. (1996). The Bulimia Test – Revised: Validation with DSM-IV criteria for bulimia nervosa. Psychological Assessment, 8, 219-221.

Thompson, M. G., & Schwartz, M. (1982). Life adjustment of women with anorexia and anorectic-like behavior. International Journal of Eating Disorders, 1, 47-60.

Timko, C., Striegel-Moore, R. H., Silberstein, L. R., & Rodin, J. (1987). Femininity/masculinity and disordered eating in women: How are they related? International Journal of Eating Disorders, 6, 701-712.

Tsai, G., & Gray, J. (2000). The Eating Disorders Inventory among Asian-American college women. The Journal of Social Psychology, 140, (4), 527-529.

Turnbull, D. B. (1999). Weight control strategies and eating disorder tendencies among college women in four ethnic groups. Dissertation Abstracts International, *59*, (10-B), 5588.

Ulster, C. (1989). Bulimia: A literature review. British Journal of Occupational Therapy, *52*, 138-142.

Varnado, J. L. (1998). The relationship of gender discrepant attitudes, behaviors, and characteristics to disordered eating in a female college population. Unpublished master's thesis, University of North Texas, Denton.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. Journal of Personality and Social Psychology, *54*, 1063-1070.

Webster, J. J., & Palmer, R. L. (2000). The childhood and family background of women with clinical eating disorders: A comparison with women with major depression and women without psychiatric disorder. Psychological Medicine, *30*, 53-60.

Williamson, D. A., Kelley, M. L., Davis, C. J., Ruggeriero, L., & Blouin, D. C. (1985). Psychopathology of eating disorders: A controlled comparison of bulimic, obesity and normal subjects. Journal of Consulting and Clinical Psychology, *53*, 161-166.

Wiseman, M. A., Gray, J. J., Mosimann, J. E., & Ahrens, A. H. (1992). Cultural expectations of thinness in women: An update. International Journal of Eating Disorders, *11*, 85-89.