PARASOCIAL COMPARISON:
THE ANALYSIS OF A NEW SOCIAL COMPARISON TARGET WHEN LOOKING AT BODY SATISFACTION

by

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ABSTRACT

The purpose of this study is to expand upon prior research that explores how media images contribute to body dissatisfaction. This study was grounded in the theory of social comparison which purports that individuals have an innate drive to compare themselves with others. This study focuses specifically on social comparison in relation to body image and body satisfaction. Previous research in this area holds that engaging in social comparison with either friends or media images helps to perpetuate body dissatisfaction. Until now, research explored social comparison only when it occurs between friends or between an individual and a celebrity. This study proposes to expand the domain of this research and test if a parasocial relationship with a thin model/celebrity affects social comparison and resulting body image effects.

The hypotheses within this study proposed that engaging in social comparison with a celebrity with whom there existed a parasocial relationship would result in lower levels of body satisfaction. In all, 300 undergraduate female Caucasian students participated in this study during which they were asked questions that pertained to demographics, self-esteem, body satisfaction, and television use. The 205 participants within the experimental group were asked additional questions in regard to parasocial interactions and social comparison. Results from this study showed that individuals experienced lower levels of body satisfaction following social comparison with a thin celebrity. The findings also indicated that engaging in a parasocial relationship increases one’s likelihood to socially compare. Finally, this study suggested that women who engage in parasocial relationships experienced lower levels
of body satisfaction than their counterparts who did not engage in parasocial relationships. However, this study did not find that women who viewed photos of a thin celebrity experienced lower levels of body satisfaction than the women who only viewed a landscape photo. The results of this study support previous social comparison research that people who engage in upward image/body-centric social comparison will experience feelings of inferiority or body dissatisfaction. These findings suggest that much more research should be conducted to better understand the effects of parasocial relationships specifically within the area of body satisfaction. Future research should look at parasocial relationships from a perspective similar to approaches used in the study of interpersonal relationships.
Chapter 1

INTRODUCTION

As many as one in four college women suffer from an eating disorder such as bulimia nervosa and anorexia nervosa, and the number increases for women on the whole (American Psychiatric Association, 2000). Researchers have found that the main cause of such high numbers of eating pathology is body image disturbance also known as body dissatisfaction (Gentles & Harrison, 2006). Apart from eating disorders, body dissatisfaction, or the experience of negative thoughts and feelings toward one’s body, has also been linked to depression and low self-esteem in teen and late-teen females (Jones, 2004).

There exists a substantial amount of research that indicates that over the past 50 years there has been a societal shift in which the preferred or ideal figure for women has become increasingly thin (Davis & Oswalt, 1992; Garner, Garfinkle, Schwartz, & Thompson, 1980; Silverstein, Peterson, & Perdue, 1986). For example, Lin and Kulik (2002) note that the predominant body shape for female models over the past half-century has changed from a full hourglass shape to a long, thin, shape, that for most is almost impossible to achieve. Richins (1991) reported that models in advertisements are often unrealistically attractive and female models are often unrealistically thin. This supports the claim made by media critics that advertisements put forth unrealizable beauty that
cannot be met by consumers (Richins, 1991). Because images portrayed in media content are often unattainable, females who view such content are hypothesized to feel inferior.

Much of the research concerning body dissatisfaction implies that media exposure contributes to the average female’s concerns about body shape, weight, and fat (Thomsen, 2002). Rodin, Silberstein, and Striegel-Moore (1984) termed the phrase “normative discontent” in reference to the prevalence of body dissatisfaction among females in Western cultures. Researchers believe that the media possess the ability to enter one’s cognitions and provide a heightened awareness and internalization of the extremely thin body ideals that then leads to altered thinking and, in the case of eating disorders, altered behavior (Thomsen, 2002). A great deal of research indicates that media exposure is significantly correlated with disordered eating among adults and young adults (Holmstrom, 2004).

The dominant theory that explains the internalization of thin images is social comparison. Social comparison theory (Festinger, 1954) postulates that individuals possess an innate drive to compare their opinions and abilities to others in order to engage in self-evaluation and self-assessment. Initially, social comparison research only analyzed comparisons made concerning an individual’s abilities and opinions. However, in more recent years, this assessment has expanded to include physical traits such as body shape and size. Festinger’s (1954) primary focus of the theory dealt with comparisons made with intimate or particularistic targets such as friends and family members. As research in the area progressed, the theory expanded to include universalistic targets, or distant sources of influence, such as figures in the media and celebrities.
Currently, research that considers social comparison in conjunction with body dissatisfaction separates comparison targets into two dichotomous categories: the intimate targets, usually representative of friends and family, and universalistic targets, celebrities or media figures. However, little-to-no research has been conducted to analyze a third category that melds the two former categories: the parasocial relationship. Derrick, Gabriel, and Tippin (2008) define parasocial relationships as “one-sided relationships that people establish with media personae, such as show characters, news anchors, talk show hosts, and celebrities” (p. 261). Because Perse and Rubin (1989) found that these relationships often develop like and share attributes of interpersonal relationships, this study considers if parasocial relationships affect social comparison with celebrities and subsequent body satisfaction. This study will focus on body satisfaction, media images, and parasocial relationships in order to explore the ways in which this third target classification plays a role in the female’s perception of herself and her body.

For the purpose of this study, I looked specifically at Caucasian, college-age females. There are three reasons for this focus on females rather than males. First, females, more often than males, face socio-cultural pressures that call for pronounced physical attractiveness and an increased drive for thinness (Smolak, Levine, & Thompson, 2001; Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). Second, disordered eating and body dissatisfaction are also disproportionately higher for females than males, which indicates a greater need to study social comparison and body satisfaction for females. Third, researchers found that appearance is essential to a female’s self-concept and evaluations made by her peers (Frederickson & Roberts, 1997) and that the images of females portrayed in the media are so thin that the average woman lacks the ability to
attain this unhealthy appearance, even though, she might still attempt to model the woman’s figure (Groesz, Levine, & Murnen, 2002).

Age is also an important variable when studying how social comparison is linked to body satisfaction. Most studies find significant effects with adult and young adult groups. Irving (1990) stated that undergraduate-age women expressed greater negative evaluations of their own bodies following exposure to images of thin models, than women of the same age group who viewed images of average or plus-size models. Peer groups, specifically for young adults, play a significant role in the creation and regulation of body image related behaviors and attitudes (Paxton, Schultz, Wertheim, & Muir, 1999). Richins (1991) also notes that models in advertisements that specifically target late adolescent or college-age females are often “uncommonly attractive” (p. 72).

There are also cultural differences that exist among females of differing ethnicities and race. As Moriarty and Harrison (2008) explain, “ethnic and racial minorities tend to idealize a larger body size than whites” (p. 366). These groups are believed to be influenced more by their racial or ethnic social norms and less by media content (Parnell, Sargent, Thompson, Duhe, Valois, & Kemper, 1996; Ruiz, Pepper, & Wilfley, 2004). Roberts, Cash, Feingold, and Johnson (2006) conducted a body satisfaction meta-analysis in which they found that overall, Black women had higher levels of body satisfaction than their White counterparts. More specifically, the results of this meta-analysis revealed a quadratic curve that indicated the greatest differences between the two races occurred for women in their 20’s, with Caucasian females most negatively affected by media exposure to thin models.
The primary purpose of this study was to explore how social comparison within a parasocial relationship influences feelings of body satisfaction among college-age Caucasian women.

**Social Comparison**

The theory of social comparison deals primarily with the issue of self-evaluation and the thought processes involved with such evaluations (Goethals, 1986). According to Festinger (1954) individuals have the need to evaluate their opinions and abilities. However, if objective, nonsocial measures are unavailable for comparison, this need is met by comparing opinions and abilities to those of others with whom the individual identifies as being similar (Festinger, 1954). While Festinger’s (1954) original theory was somewhat narrow in its focus on opinions and abilities, over the last 50 years the theory has grown to include a number of varied approaches and applications that range from social comparison in the areas such as athletics, academics, and appearance.

Festinger’s (1954) initial research as well as later research indicates that individuals are most likely to compare themselves with others they perceive to be similar in a certain dimension. This similarity allows for individuals to take information gathered through the comparison and better understand themselves and quite possibly direct the actions they should take in the future to fulfill specific aspirations.

Social comparison, according to Gilbert, Price, and Allan (1995), is a central feature of human life. The comparison process for humans has become a mechanism for adaption that allows for the assessment of the abilities of one’s competitor. If individuals see that their competitor or peer is superior, they may make the necessary adaptations in
order to obtain superiority like that of the competitor. So, social comparison plays an integral role in individuals’ quests to know themselves and construct and evaluate their social reality (Goodman, 2007; Mettee & Smith, 1977).

Within social comparison there exist two forms of comparison that receive a great deal of attention and correlate with the way an individual feels following a comparison – upward and downward comparison. Festinger’s (1954) early work on social comparison revealed that individuals preferred to compare themselves with others who were slightly superior – Festinger termed this as the “upward drive.” Further research indicated that individuals are more likely to engage in upward comparisons when the comparison is made in private and when little to no contact will be made with the compared individual (Ybema & Buunk, 1993). Buunk (1995) and Buunk, Schaufeli, and Ybema (1994) found that when social comparison does not publicly indicate inferiority on the individual’s behalf and does not include the superior individual looking down on the other, upward comparison will be utilized. Fundamentally, an upward comparison will be made only if the individual engaging in the comparison does not appear to be inferior in the eyes of others.

Researchers found that engaging in upward comparisons may have significant effects on one’s performance in the real world. Blanton, Buunk, Gibbons, and Kuyper (1999) found that students who compared themselves with fellow students who performed well in school received some of the highest GPAs in their class. Individuals who are looking to either self-improve or self-enhance most often utilize upward comparisons.

Despite being recognized almost 12 years after the original theory, downward comparisons also play a large role in social comparison theory. This nature of comparison
indicates that if individuals feel threatened in a certain domain such as academics or physical strength that they will most likely engage in downward comparison in which they compare themselves with someone they believe to be worse off in the specific domain (Buunk & Gibbons, 2007). For instance, if students feel as though they performed poorly on an exam, they will be less likely to compare themselves with a student they believe to have performed well and will instead compare with an individual they feel received a lower grade. Wills (1981) expanded on downward comparison and noted that individuals who experience a decline in well-being will often compare themselves to others they perceive as worse off in an effort to improve their well-being.

**Media Effects**

Social comparison has evolved to include comparisons to others who are disparate from the individual. Universalistic targets, or distant sources of influence, such as media, and intimate targets, such as friends and family, are used as reference points in the social comparison process. Stice (1994, 1998) and Stice, Nemeroff, and Shaw (1996) proposed that the three major sources of socio-cultural pressures that enforce the importance of thinness and beauty in women are family, peers, and the media. Irving (1990) concluded that mass media images induce greater pressure to conform to the thin ideal and standards of attractiveness than more intimate sources, such as friends and family.

Young women who internalize thin ideals were more likely to engage in social comparison resulting in body dissatisfaction (Groesz, Levine, & Murnen, 2002; Stice, 1994; Stice, Nemeroff, & Shaw, 1996). This may be due to the fact that family
members, such as parents or grandparents, have a more relaxed standard of beauty as they have most likely experienced their own personal fluctuations in body shape and size. Conversely, the same standard of beauty presented via the media has most likely influenced peers, who are generationally equivalent to the participant. Thus, it is only logical that family members exert the least amount of pressure to be thin, followed by peers, with the greatest amount of pressure coming from the media (Irving, 1990).

The role of the parent also plays a significant part in the way adolescents and college age children view their bodies. The comments that parents make in reference to weight, shape, and eating habits have been shown to aid in the development of body dissatisfaction and eating disorders (Ata, Ludden, & Lally, 2007; Benedikt, Wertheim, & Love, 1998). Negative comments made by parents about weight and constant encouragement to diet heavily influence body dissatisfaction as well as eating disorders. Keery, Eisenberg, Boutelle, Neumark-Sztainer, and Story (2006) found that despite the great impact these parental influences have, parental pressures in regard to body shape and size are shown to be mediated by one’s level of media internalization. Parental influences are also mediated by one’s tendency to engage in social comparison as well as his or her level of media internalization (Keery, et al, 2006). Although parental influences play a large role in the development of body dissatisfaction and oftentimes eating disorders, these pressures act as catalysts through which young adults engage in social comparison and focus a great deal on media content.

According to Evans (2003), it is quite possible that women associate “positive life success” with those who are thin and/or attractive. Advertisements and commercials often depict the business-savvy female or the successful girlfriend/wife/mother as thin,
happy, and attractive (Evans, 2003). It may be because of this that women strive for the thin-ideal body in hopes that it will also result in success. Evans notes that thin figures in the media cause women to believe that should she change her figure she might also be capable of altering her lifestyle and subsequently achieve success.

In terms of attractiveness, women are likely to be influenced by the extreme thinness, or ideal body image, posed by Western society. According to Monteath and McCabe (1997), women believe Western society would negatively rate their bodies more so than they would themselves. Richins (1991) revealed that male viewers rated female subjects as less attractive after viewing beautiful models. Thus, these men rated average looking females lower than they would normally because the contrast involved idealized images of highly attractive models. Based on the results in these studies, it is justifiable that women’s views of their own bodies are affected by the way in which they believe others view them.

**Social Comparison and Body Satisfaction**

While the original premise of the theory of social comparison deals with attitudes and beliefs, it has also been utilized in the evaluation of one’s physical appearance, in essence how one feels toward his or her body also known as body satisfaction.

Various studies have concluded that a perceptual contrast effect in regard to physical attractiveness affects recorded body satisfaction (Brown, Novick, Lord, & Richards, 1992; Cash, Cash, & Butters, 1983; Kenrick & Gutierres, 1980; Thornton & Maurice, 1997; Thornton & Moore, 1993). Thornton and Moore (1993) explain that a
perceived contrast effect occurs when ratings of a moderate stimulus become more extreme when exposed to a more polarized stimulus. They found that both men and women perceive themselves as less physically attractive after viewing photographs of highly attractive people. Women’s overall ratings of their body satisfaction, however, were somewhat less than men’s. It is believed that this is because women, in general, express more dissatisfaction with their bodies and society places greater emphasis on looks in regard to women (Thornton & Moore, 1993). On the other hand, when exposed to unattractive stimuli, self-ratings were higher than those in a control group. Women perceived themselves as more attractive in the positive contrast condition (viewing of unattractive images) than men. Men perceived themselves as more attractive in the negative contrast condition (viewing of attractive images) than women. Thus, it was found that both men and women’s perceptions of their own attractiveness were affected by both upward comparison (negative contrast effect) and downward comparison (positive contrast effect) (Thornton & Moore, 1993).

In their analysis of the portrayal of body image in the media, Fouts and Burggraf (2000) looked at 18 primetime sitcoms and found that the females portrayed in these shows were very likely to be perceived as “below average” in weight rather than “average” or “above average.” This result coincides with the findings of Malkin, Wornian, and Chrisler (1999) that female portrayals in the media place a great deal of emphasis on overly or idealized thin women. The study also found that the character’s weight positively correlated with the number of negative comments made about her by her fellow characters. Even more alarming was the use of the laugh track following the comments, suggesting to the audience that the comments should be perceived as funny
rather than hurtful or malicious. Young female viewers who are naturally inclined to socially compare begin to compare their bodies to those depicted in the media – bodies that are often unrealistically thin. As a result of the desire to obtain an unrealistically thin figure, girls may begin to engage in unhealthy behaviors such as bulimia or anorexia nervosa (Botta, 1999; Harrison & Cantor, 1997).

Body satisfaction decreases specifically when the target becomes polarized or further away from the individual. Ratings of the stimulus become more extreme in the context of the polarized stimulus. When subjects view attractive individuals, they might perceive average looking women as less physically attractive than a control group who did not view the polarized stimulus, or images of attractive women (Brown et al., 1992; Cash et al., 1983; Kenrick & Gutierres, 1980; Thornton & Maurice, 1997; Thornton & Moore, 1993). Brown et al. (1992) concluded that females’ self-evaluations are subject to a contrast effect when they use society’s attractiveness criteria as a comparison measurement. To replicate previous research, the first hypotheses of this study are:

\[ H1: \text{Women’s body satisfaction will be lower after viewing photos of thin models.} \]

\[ H2: \text{Social comparison after exposure to thin models will lead to lower body satisfaction.} \]

**Parasocial Relationships and Body Satisfaction**

Most research that concerns social comparison in relation to body dissatisfaction or body disturbance analyzes the intimate comparison that occurs between
either two friends or two family members or the universal comparison in which an individual engages in comparison with a celebrity. However, as research has suggested (Basil, 1996; Brown, Basil, Bocarnea, 2003; Cohen, 2001; Eyal & Cohen, 2006), individuals combine their intimate and universal relationships into what is referred to as the parasocial relationship – a one-sided relationship that the individual forms with a celebrity.

This type of relationship has yet to be analyzed in the realm of social comparison and body satisfaction and warrants the attention of the field as scholars realize that more people engage in this pseudo-relationship. The potential implications of engaging in social comparison with a celebrity who is perceived as a friend may lead to greater body dissatisfaction among women as the unattainable thin ideal is brought closer to home. Should women begin to compare their appearance with media figures in the same way they compare with intimate friends, the pressure to look like celebrities might ultimately result in increased body dissatisfaction or potentially eating disorders.

Greenwood (2008) defines parasocial interaction (PSI) as the “development of an imagined friendship with a media persona such that the viewer comes to feel that they “know” a media character or personality and forms an interpersonal attachment that is somewhat analogous to one they would form with an actual friend” (p. 415). Once this imagined friendship has come to fruition, the parasocial interaction becomes a parasocial relationship (PSR). While it was once believed that only individuals who had difficulties forming interpersonal relationships with their peers would engage in PSI or PSRs, researchers have found that relationships with characters on television do not act as substitutes for actual friendships, instead they help to complement
interpersonal relationships (Perse & Rubin, 1989; Tsao, 1996). Parasocial relationships do not stem from a single television viewing; rather they grow overtime with repeated viewership and continue even when the individual is not watching television.

Cohen (2004) writes that media figures attempt to establish a friendship with their viewers that extends beyond the character they portray in order to garner a larger and more stable following. Researchers have found that award ceremonies, charity events, and interviews with the media figures gives fans the feeling that they “know” celebrities because they know even more about them than what is provided in a single television series or movie (Cohen, 2004). In this way, fans believe they know celebrities’ personal preferences, opinions and beliefs – similar to what they would learn from an intimate friendship.

While the parasocial relationship is a one-sided relationship for the media viewer, researchers have found that the media personalities with whom individuals form these relationships often provide a sense of intimacy to the viewer. Koenig and Lessan (1985) found that television viewers rated their favorite media personalities as more distant from themselves than their friends but closer than their acquaintances. These findings were also supported by Newton and Buck (1985) who found that media personalities can be perceived as a significant other. This suggests that media personalities are an important and sometimes influential part of an individual’s social network.

Derrick, Gabriel, and Tippin (2008) indicate that research concerning parasocial relationships has primarily analyzed the creation and maintenance of the relationship and has rarely explored the consequences of participating in such a
relationship. There are three aspects of the parasocial relationship that suggest that a relationship of this nature might increase the likelihood of social comparison and lead to decreased body satisfaction.

First, friendships enhance social comparison effects. Kenrick and Gutierres (1980) and Melamed and Moss (1975) examined how the relationship between the targets and the context affects the perceiver’s ratings of their physical attractiveness. If the targets and the context do not have a friendship, then a contrast effect occurs. If the opposite is true and they have a friendship or a romantic relationship, then attractiveness is incorporated, or might produce an assimilation effect. As a “pseudo friendship,” parasocial relationships should lead to assimilation during social comparison that would in turn, lead to effects on body satisfaction.

The use of the Internet and social networking channels allows for the viewer of a television show to engage in activities that involve the parasocial target beyond the confines of the show. For example, characters from the television program *The Office*, blog on a weekly basis about what they (as the character) are going through throughout the week. The actors remain in character to give their viewers additional insight into the lives of the show’s characters. Similar to interviews in magazines or on television, these online blogs or twitter posts are an extension of the show and provide viewers with information they would not otherwise receive. This additional information about the characters is similar to the information individuals would receive while developing intimate friendships. Thus, the use of these newer technologies greatly enhances the viewer’s access to the media persona, which may help to cultivate parasocial relationships.
Second, both the traditional intimate relationships involved in the social comparison process and parasocial relationships are based upon the notion of homophily or similarity. Rogers and Bhowmik (1970) describe homophily as “the degree to which pairs of individuals who interact are similar with respect to certain attributes, such as beliefs, values, education, social status, and the like” (p. 23). Derrick, Gabriel, and Tippin (2008) suggest that “people seek out, are attracted to, and get along with people who are similar to their ideal selves” (p. 263). It is this homophily between two individuals that increases intimate attraction and effective communication (Turner, 1993). Homophily can be categorized into four different domains – attitude, background, value, and appearance (McCroskey, Daly, Richmond, & Cox, 1975). Parasocial homophily can be broken down into these four domains as well. Cortez (1992) found that like interpersonal relationships, the choice of media personality with whom a viewer forms a parasocial relationship is predicted by similar values, attitudes, backgrounds, and communication styles – indicating that parasocial relationships adhere to the same patterns identified in interpersonal relationships.

Just as individuals seek out friends who possess similar qualities and beliefs (LaPrelle, Hoyle, Insko, & Bernthal, 1990; LaPrelle, Insko, Cooksey, & Graetz, 1991; Herbst, Gaertner, & Insko, 2003; Wetzel, Schwartz, & Vasu, 1979), they tend to form parasocial relationships with celebrities they see as similar to themselves (Cohen, 2004; Cortez, 1992; Turner, 1993). Because people are more likely to socially compare themselves to those who are similar (Goethals, 1986), the parasocial relationship should also facilitate social comparison. Often studied as a precursor of attraction, similarity for many is rewarding and often results in attraction (Berscheid & Walster, 1978; Byrne,
1992; Duck, 1998). It is clear that similarity to self and ideal self plays a significant part within intimate relationships as well as parasocial relationships.

Third, attraction plays a large role in both parasocial and personal relationships. Rubin and McHugh (1987) make the claim that uncertainty reduction occurs with parasocial relationships in the same ways that it occurs in personal relationships. According to uncertainty reduction theory, increased communication in an intimate relationship leads to increased liking or attraction. In a parasocial relationship, attraction is facilitated through increased exposure rather than increased communication as this type of relationship is one-sided. Defined by Berscheid and Walster (1978), intimate attraction is “an individual’s tendency or predisposition to evaluate another person or the symbol of the person in a positive way” (pp. 3-4). Akin to the notion of similarity, attraction is derived from a rewarding interaction or reciprocated attraction (Newcomb, 1956). If television characters can provide their viewers with a rewarding experience or a sense of mutual attraction, the viewers begin to feel a greater attraction to the characters and may potentially engage in parasocial relationships. Berger and Chaffee (1975) identify an association between liking (attraction) and intimacy (represented by a parasocial relationship). Rubin and McHugh (1987) make the claim that this connection supports the idea that perceiving media figures as attractive will positively correlate with communication intimacy (i.e., a parasocial relationship). Media personalities are often physically attractive (Richins, 1991) and receive a heightened amount of exposure. As a result, there exists an increased opportunity for viewers to develop a parasocial relationship with personalities they see as attractive.
One social comparison study demonstrates how the level of attraction influences one’s opinion. The more attractive a group, the more important it becomes as a comparison group (Festinger, 1954). Back (1951) conducted an experiment which demonstrated that members of groups who were highly attracted to each other attempted to influence and change opinions, compared to groups whose members were less attracted to each other.

These common connections between parasocial relationships and social relationships lead me to believe that there is significant theoretical grounding that would support the idea that parasocial social comparisons have similar effects as social comparison with a friend. The next set of hypotheses predicts that a parasocial relationship will enhance social comparison and lead to stronger effects on body satisfaction.

**H3:** Women will be more likely to socially compare themselves to thin media personalities with whom they have a parasocial relationship than women who do not.

**H4:** Women will experience lower levels of body satisfaction after viewing the target of parasocial relationship than television content that portrays a model or actor with whom there exists no parasocial relationship.
CHAPTER 2

METHOD

This study was designed to investigate the relationship between celebrity social comparison and body satisfaction among white college-age females. In essence, the objective of this study was to assess the theoretical underpinnings between social comparison processes and parasocial relationships. The study measured the following concepts: (a) parasocial relationships (b) social comparison and (c) body satisfaction in response to viewing thin media images. The study controlled for self-esteem and BMI in regard to social comparison and body satisfaction. I assessed the research hypotheses by conducting an online experiment that measured a female’s body satisfaction after viewing photos of thin celebrities. This was a Web-based experiment using Qualtrics in which the participants had the ability to complete the study from his or her personal computer. This online experiment took participants no longer than 15 minutes to complete and involved answering close-ended questions and viewing photos of thin celebrities.

The Nature of the Sample

Online questionnaires were completed by 576 undergraduates enrolled in introductory communication courses (Comm200, Comm212, and Comm370) at the University of Delaware in Fall 2009. Participants were recruited with the offer of extra credit in their respective course in exchange for participation. This overall group was 39.7% (n = 229) male and 60.1% (n = 347) female. The original sample consisted of White/Caucasian (86.5%), African American (4.3%), Asian (3.7%), Hispanic/Latino
(2.9%), Native American (0.9%), and “Other” (1.7%) ethnicities. Because the study’s hypotheses focused only on Caucasian females, only data from these respondents were included in further analysis (52.1% of the sample, $n = 300$).

Aside from the parameters of gender and racial ethnicity, the questionnaire (Appendix A) was designed to measure the following additional descriptive information: age, year in college, daily television viewing, and major.

**Age**

The Caucasian female participants were asked to provide their age by the question “What is your age in years?” The participants ranged in age from 18 to 23 years, with the mean age being 19.93 years ($SD = 0.92$).

**Year in College**

Participants were asked to indicate their year in school by the question “What year are you in college?” The responses ranged from Freshman (3.0 %), Sophomore (31.3%), Junior (47.0 %), Senior (17.7%), and 5+ (1.0 %).

**Television Viewing**

Respondents were asked to provide the amount of time they spent watching television. They were prompted with the question “How much television do you watch per day?” Responses were converted to minutes. Participants’ viewing times ranged from no television viewing to watching television 10 hours per day, with a mean viewing time of 122.2 minutes daily ($SD = 86.14$).
Class and Major

The respondents were also instructed to indicate their major by writing it into the space provided. The overall sample represented 51 majors at the University of Delaware. The largest group was Communication majors, which accounted for 27.0% of the sample \((n = 81)\). The second largest group was Fashion Merchandising majors, which accounted for 8.6% \((n = 26)\). The third largest group was Accounting and Finance majors, which accounted for 8.0% \((n = 24)\). The fourth largest group was Exercise Science majors, which accounted for 5.0% \((n = 15)\).

Control Variables

BMI. Participants were asked two questions that were used to compute Body Mass Index (BMI). First, respondents were asked to indicate their height in feet and in inches. These measurements were then calculated to represent each participant’s height solely in inches. Participants ranged in height from 59 inches (4’11”) to 79 inches (6’7”): \(M = 64.73\) inches (~ 5’5”), \(SD = 2.56\).

Then, participants were asked to indicate their weight in pounds. The weight of the female respondents ranged from 95 pounds to 245 pounds: \(M = 132.62\), \(SD = 20.93\).

BMI was calculated using the formula of \((\text{weight in pounds} \times 703) / (\text{height in inches})^2\) (How to Calculate BMI, 2009) and ranged from a BMI of 13.96 to a BMI of 44.81\((M = 22.27, SD = 3.38)\).

In addition to asking respondents their height and weight, the Body Mass Index Silhouette Matching Test (BMI-SMT) was utilized to gauge the individual’s
21 perception of his or her own body (Peterson, Ellenberg, & Crossman, 2003). This scale uses silhouettes rather than numbers to illustrate an individual’s body mass index. The participants were instructed to place an “X” in the box under the continuum of BMI ranges that they feel best reflects their current appearance (See Appendix A, page 79). Participants’ responses ranged from 0 to 25 ($M = 11.18$, $SD = 4.48$). The mean for this scale represents a BMI of approximately 24. Because BMI and BMI-SAT were significantly related, only BMI was used as a control variable.

Self-Esteem. Because prior research shows that self-esteem is also related to body image, self-esteem was measured using Rosenberg’s (1989) self-esteem scale. According to Rosenberg, self-esteem is a favorable or unfavorable attitude toward oneself. The Self-Esteem Scale consists of 10 items that ask participants to respond to statements about themselves on a 4-point scale (1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree). This scale has been widely used as a valid and reliable measure of self-esteem in the social sciences. The scale’s internal reliability has remained consistent with a reported coefficient $\alpha$ ranging from .79 to .85 (Daly et al., 1994; Kalbfleisch & Davies, 1993; Knobloch-Westerwick et al., 2004; Knobloch-Westerwick & Keplinger, 2006; Rangarajan & Kelly, 2006; Schrodt, 2003; Schrodt, Ledbetter, & Ohrt, 2007; Teboul, 1995). See Appendix A, pages 68-69, Questions 9, 10, 11, 13, 14, 16, 18, 19, 21 & 22. In data collection, Rosenberg’s self-esteem scale was interspersed with 5 filler questions in order to diminish any response effects (See Appendix A, pages 68-69, Questions 12, 15, 17, 20, & 23).
Responses to the 10 items were averaged to create a Self-Esteem score so that the higher scores indicate higher self-esteem. Scores from this study ranged from 1 to 4 (N= 300, M = 3.39, SD = .37, α = .77). Table 1 summarizes the Self-Esteem Scale.

<table>
<thead>
<tr>
<th>Self-Esteem Statements</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel that I am a person of worth, at least on an equal basis with others.</td>
<td>3.53</td>
<td>0.60</td>
</tr>
<tr>
<td>I feel that I have a number of good qualities.</td>
<td>3.50</td>
<td>0.61</td>
</tr>
<tr>
<td>All in all, I am inclined to feel that I am a failure. *</td>
<td>3.52</td>
<td>0.56</td>
</tr>
<tr>
<td>I am able to do things as well as most other people.</td>
<td>3.17</td>
<td>0.58</td>
</tr>
<tr>
<td>I feel I do not have much to be proud of. *</td>
<td>3.50</td>
<td>0.64</td>
</tr>
<tr>
<td>I take a positive attitude toward myself.</td>
<td>3.13</td>
<td>0.62</td>
</tr>
<tr>
<td>On the whole, I am satisfied with myself.</td>
<td>3.18</td>
<td>0.62</td>
</tr>
<tr>
<td>I wish I could have more respect for myself. *</td>
<td>3.41</td>
<td>0.78</td>
</tr>
<tr>
<td>I certainly feel useless at times. *</td>
<td>3.50</td>
<td>0.64</td>
</tr>
<tr>
<td>At times I think I am no good at all.*</td>
<td>3.49</td>
<td>0.59</td>
</tr>
<tr>
<td>Scale Overall</td>
<td>3.39</td>
<td>0.35</td>
</tr>
</tbody>
</table>

*Items reverse-coded for analysis

Note: 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree

**Experimental Variables**

*Parasocial interaction.* Parasocial interaction with the celebrity in the target photo was measured. Participants were asked to complete the 10-item version of the Parasocial Interaction Scale (Rubin et al., 1985) about the celebrity whose photo they viewed. The ten-item version of the scale has been used reliably in prior research with a Chronbach Alpha of about .88 (Perse, 1994). The scale contains items that assess
empathy, attraction, and homophily. The responses given by the participants ranged from strongly disagree (1) to strongly agree (5) for each statement so that higher scores indicate higher levels of a parasocial relationship. See Appendix A, page 73, Questions 27-36. Responses to the 10 items were averaged to create a PSI score. The Parasocial Interaction scale ranged from 1 to 4.8 ($N = 205, M = 2.81, SD = .77, \alpha = .91$) The PSI scale is represented by Table 2. The means and standard deviations for each item are present in this table.

<table>
<thead>
<tr>
<th>Table 2: Parasocial Interaction Scale</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel sorry for celebrity* she makes a mistake.</td>
<td>2.60</td>
<td>0.99</td>
</tr>
<tr>
<td>Celebrity * makes me feel comfortable, as if I am with friends.</td>
<td>2.40</td>
<td>0.98</td>
</tr>
<tr>
<td>I see celebrity* as a natural, down-to-earth person.</td>
<td>3.01*</td>
<td>1.10</td>
</tr>
<tr>
<td>I look forward to watching celebrity* when she’s on television.</td>
<td>2.93*</td>
<td>1.14</td>
</tr>
<tr>
<td>If celebrity* appeared on another TV program, I would watch that program.</td>
<td>2.91*</td>
<td>1.06</td>
</tr>
<tr>
<td>When celebrity* shows me how she feels about a situation, it helps me make up my own mind about the situation.</td>
<td>1.98</td>
<td>0.93</td>
</tr>
<tr>
<td>If there were a story about celebrity* in a newspaper or magazine I would read it.</td>
<td>3.10</td>
<td>1.07</td>
</tr>
<tr>
<td>I miss seeing celebrity* when she is not on program*.</td>
<td>2.03</td>
<td>1.06</td>
</tr>
<tr>
<td>I would like to meet celebrity* in person.</td>
<td>3.10</td>
<td>1.17</td>
</tr>
<tr>
<td>I think celebrity * is attractive.</td>
<td>3.96*</td>
<td>0.81</td>
</tr>
<tr>
<td>Scale Overall</td>
<td>2.81</td>
<td>0.77</td>
</tr>
</tbody>
</table>

*Note: *All underlined celebrity and programs refer to the photograph the participant viewed.
Because the fourth hypothesis predicted that level of parasocial interaction would be linked to Body Satisfaction, Parasocial interaction scores were categorized as either high or low. Of the respondents, 102 scored between 1 and 2.8 and were categorized as low PSI. The other 198 participants’ scores ranged between 2.9 and 4.8 and were categorized high PSI.

Social comparison. Because this study focuses on the effects of social comparison on body satisfaction, amount of social comparison was measured by using the Comparison to Models Survey (Strowman, 1996). This scale measures one’s social comparison with the celebrities presented in the photos based on 9 traits. The scale was coded from 1 (Not at all) to 4 (A lot) in order to assess social comparison with the celebrity in the experimental photo. See Appendix A, pages 74-75, Questions 37-45. Item scores were averaged to create a social comparison scale so that higher scores indicate more social comparison. The scale ranged from 1 to 4 (N = 205, M = 2.06, SD = 0.71, α = .92) Table 3 presents the means and standard deviations for each item of the Social Comparison Scale.
Table 3: Social Comparison Scale

<table>
<thead>
<tr>
<th>When you looked at the photo of celebrity*, how much did you compare yourself to her…</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>…in general?</td>
<td>2.14</td>
<td>0.86</td>
</tr>
<tr>
<td>... in terms of her eating habits?</td>
<td>1.90</td>
<td>0.95</td>
</tr>
<tr>
<td>… in terms of her exercise habits?</td>
<td>1.94</td>
<td>0.96</td>
</tr>
<tr>
<td>…in terms of her happiness?</td>
<td>1.82</td>
<td>0.87</td>
</tr>
<tr>
<td>…in terms of her physical appearance?</td>
<td>2.60</td>
<td>0.94</td>
</tr>
<tr>
<td>…in terms of her intelligence?</td>
<td>1.53</td>
<td>0.73</td>
</tr>
<tr>
<td>…in terms of her body weight?</td>
<td>2.42</td>
<td>1.02</td>
</tr>
<tr>
<td>…in terms of her muscularity?</td>
<td>1.91</td>
<td>0.91</td>
</tr>
<tr>
<td>How much did you compare your overall body to Blake’s?</td>
<td>2.34</td>
<td>0.90</td>
</tr>
<tr>
<td><strong>Scale Overall</strong></td>
<td>2.06</td>
<td>0.71</td>
</tr>
</tbody>
</table>

*Note: 1 = Not at all, 2 = Not Very Much, 3 = Some, 4 = A lot
*All underlined celebrity and programs refer to the photograph the participant viewed.

Dependent Variables

*Body satisfaction.* The study used two measurements to represent Body Satisfaction. First, global body satisfaction was measured through the use of Huddy’s body dissatisfaction scale (Huddy, Neiman, & Johnson, 1993). This scale was chosen because meta-analyses have shown that effect sizes for global body satisfaction measures are greater than the effect sizes for individual body part measures (Holmstrom, 2004). The original scale included 20 items that relate to body image and weight (See Appendix A, page 76, Questions 46-49). In order to create a leaner version of the scale, a smaller scale
for measuring body dissatisfaction was created. I identified 4 items that specifically related to feelings of body satisfaction. Respondents indicated their agreement with these four items (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree). The scores were averaged to create a body dissatisfaction score so that higher scores indicate higher body dissatisfaction. The shortened scale was a reliable measure of body dissatisfaction and ranged from 1 to 5 ($N = 300, M = 2.87, SD = .90, \alpha = .89$) Table 4 presents the means and standard deviations for each item of the shortened Body Dissatisfaction Scale.

Table 4: Body Satisfaction Scale

<table>
<thead>
<tr>
<th>Item</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel good about my body</td>
<td>3.23</td>
<td>1.04</td>
</tr>
<tr>
<td>I’m satisfied with my present weight*</td>
<td>3.09</td>
<td>1.07</td>
</tr>
<tr>
<td>When I look into a full-length mirror, I’m satisfied with what I see</td>
<td>3.13</td>
<td>1.02</td>
</tr>
<tr>
<td>I wish I could lose some weight</td>
<td>3.79</td>
<td>0.99</td>
</tr>
<tr>
<td><strong>Scale Overall</strong></td>
<td>2.87</td>
<td>0.90</td>
</tr>
</tbody>
</table>

*Recoded item.*

The Body Attitudes Questionnaire (Ben-Tovim & Walker, 1991) is comprised of 10 items that assess the individual’s feelings concerning feeling fat and salience of weight with possible answers ranging from strongly disagree (1) to strongly agree (5) (See Appendix A, page 77, Questions 50-59). The original Body Attitudes Questionnaire consisted of six subscales and 44 items. In order to develop a more economical scale for
measuring body attitudes, only two of the subscales (Feeling Fat and Salience), which were relevant to this study’s focus, were utilized. Once again, these two subscales were examined and I selected only items that seemed central to the constructs. The 6-item Feeling Fat scale was reliable \((N = 300, M = 3.45, SD = 0.82, \alpha = .87)\). The 4-item Salience subscale however, was not reliable \((N = 300, \alpha = .41)\) so only the Feeling Fat subscale was used in subsequent analysis. For further analysis, scores were averaged to create a Feeling Fat measure. Table 5 presents the means and standard deviations for each item of the revised Body Attitude Questionnaire.

**Table 5: Body Attitude Questionnaire Scale: Feeling Fat Subscale**

<table>
<thead>
<tr>
<th>Item</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I get so worried about my shape that I feel I ought to diet.</td>
<td>3.19</td>
<td>1.17</td>
</tr>
<tr>
<td>I feel fat when I can’t get clothes over my hips.</td>
<td>3.70</td>
<td>1.10</td>
</tr>
<tr>
<td>I hardly ever feel fat.*</td>
<td>3.52</td>
<td>1.07</td>
</tr>
<tr>
<td>I feel fat when I wear clothes that are tight.</td>
<td>3.31</td>
<td>1.05</td>
</tr>
<tr>
<td>I feel fat when I can no longer get into clothes that used to fit me.</td>
<td>3.89</td>
<td>0.95</td>
</tr>
<tr>
<td>I try to avoid clothes which make me feel especially aware of my shape.</td>
<td>3.08</td>
<td>1.11</td>
</tr>
<tr>
<td>Scale Overall</td>
<td>3.45</td>
<td>0.82</td>
</tr>
</tbody>
</table>

*Note: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree
*Items were recoded for analysis.
Table 6: Body Attitude Questionnaire Scale: Saliency Subscale

<table>
<thead>
<tr>
<th>Item</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are more important things in life than the shape of my body.*</td>
<td>2.19</td>
<td>0.90</td>
</tr>
<tr>
<td>I hardly ever think of the shape of my body.*</td>
<td>4.08</td>
<td>0.74</td>
</tr>
<tr>
<td>I spend a lot of time thinking about my weight.</td>
<td>3.27</td>
<td>1.07</td>
</tr>
<tr>
<td>Losing 5 pounds in weight would not really affect my feelings about myself.*</td>
<td>3.38</td>
<td>1.02</td>
</tr>
</tbody>
</table>

Note: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree
*Items were recoded. Because of low reliability, these items were not used in further analysis.

Procedure

Following the demographic and control variable portion of the questionnaire, the participants viewed a photograph as stimulus. Participants were not timed while viewing the photos due to lack of technological capabilities. Instead, participants were instructed to view the photo carefully for a minimum of 6 seconds in order to ensure that they have cognitively processed the images (personal communication, James Angelini, November, 2009). The photographs required the participant to click through them in order to progress to the next portion of the questionnaire.

After viewing the photograph, the participants were asked to fill out the remainder of the questionnaire. This last portion evaluated the participant’s parasocial relationship with the celebrity in the photograph, amount of social comparison with the celebrity, and body satisfaction.

Following the completion of the study, participants were directed to a final page that provided my e-mail address so that they could ask any questions about the study.
I also provided links to organizations that might help with eating disorders and media literacy for any participants who would like additional information.

**Experimental Stimuli**

Photos of four thin female celebrities who appeal to college-age females were used as the stimulus for this study: Lauren Conrad (*The Hills*), Blake Lively (*Gossip Girl*), Leighton Meester (*Gossip Girl*), and Spencer Grammar (*Greek*). The different photos were randomly selected for participants in order to diminish any effects due to a single celebrity. The photos of the celebrities were image neutral and contained no other humans in the photograph other than the celebrity (Hobza, Walker, Yakushko, & Peugh, 2007).

A pretest was administered to two communication courses (COMM 350) in order to determine the celebrities whose photos would be used for this study. For this pretest, 48 undergraduate students were asked to identify 4 male and 4 female celebrities to whom they believed their peers could relate. Once identified, the students were then asked to indicate whether or not someone their age would consider each of the celebrities they identified as a friend, ranging from 1 (strongly disagree) to 5 (strongly agree). The celebrities selected for this study were those who were mentioned most often and received the highest ratings. A similar earlier pretest was administered asking students to indicate the celebrities with whom they believed they themselves could relate. This pretest yielded few indications of parasocial relationships with celebrities. So, I utilized ideas drawn from third person effect to overcome this “social desirability effect” for this pretest. Third-person effects theory posits that the “individuals exposed to mass media messages
will expect the communication to have a greater effect on others than on themselves” (Rojas, Shah, & Faber, 1996, p. 163). This notion becomes especially true when the content of that communication is perceived as negative or taboo. Parasocial interactions are often perceived to occur when individuals lack the social skills to begin and foster friendships with other every-day people (Perse & Rubin, 1989; Tsao, 1996). Although this perception is rather untrue, many might still tend to believe that this is the case. By changing the wording in the pretest questions from “indicate four celebrities with whom you believe you could relate” to “indicate four celebrities with whom you believe your peers could relate” the responses were vastly different in that they indicated stronger parasocial bonds with the reported celebrities and provided a wider range of celebrities.

Four of the top rated and most often reported celebrities from the pretest were selected as celebrity targets for this study. The four female celebrities who emerged as potential targets of parasocial relationships for college-aged females: Lauren Conrad (The Hills), Blake Liveley (Gossip Girl), Leighton Meester (Gossip Girl), and Spencer Grammar (Greek). In order to get the photos for the experimental stimuli, I conducted a Google search using the celebrities’ names plus words like “thin” and “anorexic” (i.e., “Lauren Conrad Thin”) as search terms. This search yielded a number of various photos. From this group, I asked the same respondents from the pretest to indicate in which photo each celebrity looked thinnest. This resulted in the selection of the four final photos for the study.

Because the assumption underlying hypotheses three and four of the study is that parasocial interaction with a celebrity will affect body satisfaction after exposure to the photo of the celebrity, several procedures were taken to ensure some familiarity with
these celebrities. First, study participants were asked if they were familiar with one of the four celebrities. The survey software randomly selected the celebrity that was the target of this question. If they were familiar with the celebrity, they were then asked how often they watched her show. If they were not familiar, a second celebrity/program was randomly presented. This procedure continued until each respondent was paired with a familiar celebrity. If respondents were not familiar with any celebrity, they saw the photo of a randomly selected celebrity.

In all, participants in the study were familiar with three of the four celebrities. Respondents were asked if they were familiar with the randomly selected celebrity and could respond with either “yes” or “no” (See Appendix A, page 72, Question 25). They were most familiar with Leighton Meester of *Gossip Girl* (*n* = 74, *M* = 1.02, *SD* = 0.14), then Blake Lively of *Gossip Girl* (*n* = 57, *M* = 1.05, *SD* = 0.22), then Lauren Conrad of *The Hills* (*n* = 78, *M* = 1.06, *SD* = 0.24) and very few participants were familiar with Spencer Grammar of *Greek* (*n* = 5, *M* = 1.29, *SD* = 0.49).

Including study participants who were randomly assigned a celebrity with whom they were not familiar, 83 respondents answered questions pertaining to Lauren Conrad, 60 answered questions about Blake Lively, 53 answered questions about Leighton Meester, and seven participants responded to questions about Spencer Grammar.

The control group answered the self-esteem questionnaire and viewed a landscape photo. The 95 respondents in the control group were then asked to complete the body satisfaction portion of the survey.
**Statistical Analysis**

This study analyzed only the data collected from Caucasian females. I utilized an independent $t$-test to test hypothesis one, which predicted that women’s body satisfaction would be lower after viewing photos of thin models. Pearson’s correlation was used to test hypothesis two, which predicted a negative correlation between social comparison and body satisfaction. Pearson’s correlation was also used to test hypothesis three, which predicted a positive relationship between the likelihood of engaging in social comparison and an individual’s parasocial relationship with a celebrity. Hypothesis four utilized analysis of variance in order to measure the difference in body satisfaction between those who engage in a parasocial relationship and those who do not in regard to the celebrity shown in the photographs. Because prior research has found a relationship between self-esteem, BMI and Body Satisfaction, self-esteem and BMI were used as covariates in all analyses. Finally, hierarchical multiple regression was used to assess the multivariate contribution of social comparison and parasocial interaction to body satisfaction.
CHAPTER 3

RESULTS

This chapter provides the findings of this study through the presentation of the statistical tests of the study’s hypotheses. Additional related analyses are also provided.

Body Satisfaction

Hypothesis 1 predicted that women who viewed the photo of the celebrity would experience lower body satisfaction than participants in the control group who viewed a landscape photo. This hypothesis was not supported. Body Satisfaction scores of females who viewed the photos of thin models \((M = 2.92)\) were not significantly different from that of the control group: \(t(298) = 1.46, p = .16\). Feeling Fat scores of females who viewed the photos of thin models \((M = 3.40)\) were not significantly different from that of the control group: \(t(298) = -1.56, p = .10\).

In order to see if exposure to a particular celebrity had any stronger effects, I compared exposure to each of the four celebrities to the control group individually. There were no significant effects for individual celebrity photo exposure. To control for Type 1 error, I used Bonferroni’s correction and set alpha = .01. There were no significant effects for individual celebrities. The means are summarized in Tables 7 and 8.
Table 7: Celebrities and Feeling Fat

<table>
<thead>
<tr>
<th></th>
<th>Control M</th>
<th>Experimental M</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>3.56</td>
<td>3.40</td>
<td>-1.56</td>
<td>.10</td>
</tr>
<tr>
<td>Lauren Conrad</td>
<td>3.56</td>
<td>3.40</td>
<td>1.35</td>
<td>.18</td>
</tr>
<tr>
<td>Blake Lively</td>
<td>3.56</td>
<td>3.30</td>
<td>0.70</td>
<td>.053</td>
</tr>
<tr>
<td>Leighton Meester</td>
<td>3.56</td>
<td>3.51</td>
<td>0.38</td>
<td>.70</td>
</tr>
<tr>
<td>Spencer Grammar</td>
<td>3.56</td>
<td>3.37</td>
<td>0.60</td>
<td>.55</td>
</tr>
</tbody>
</table>

Table 8: Celebrities and Body Satisfaction

<table>
<thead>
<tr>
<th></th>
<th>Control M</th>
<th>Experimental M</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>2.76</td>
<td>2.92</td>
<td>1.46</td>
<td>.15</td>
</tr>
<tr>
<td>Lauren Conrad</td>
<td>2.76</td>
<td>2.91</td>
<td>1.10</td>
<td>.28</td>
</tr>
<tr>
<td>Blake Lively</td>
<td>2.76</td>
<td>3.02</td>
<td>1.77</td>
<td>.08</td>
</tr>
<tr>
<td>Leighton Meester</td>
<td>2.76</td>
<td>2.82</td>
<td>0.38</td>
<td>.70</td>
</tr>
<tr>
<td>Spencer Grammar</td>
<td>2.76</td>
<td>3.11</td>
<td>0.91</td>
<td>.36</td>
</tr>
</tbody>
</table>

Social Comparison

The second hypothesis predicted that social comparison after exposure to thin models would be related to lower body satisfaction. This hypothesis was supported. Social comparison was negatively related to body satisfaction ($r = -.37, p < .001$) and positively related to feeling fat ($r = .41, p < .001$). This relationship was maintained when controlling for BMI and self-esteem for Feeling Fat ($r = .37, p < .001$) and Body
Satisfaction \((r = -0.31, p < .001)\). The correlations among the variables of the study are presented in Table 9.

**Table 9: Social Comparison and Body Satisfaction**

<table>
<thead>
<tr>
<th></th>
<th>Feeling Fat</th>
<th>Body Satisfaction</th>
<th>Social Comparison</th>
<th>PSI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeling Fat</td>
<td>1.0</td>
<td>-0.70***</td>
<td>0.37***</td>
<td>0.23***</td>
</tr>
<tr>
<td>Body Satisfaction</td>
<td>-0.80***</td>
<td>1.0</td>
<td>-0.37***</td>
<td>-0.11</td>
</tr>
<tr>
<td>Social Comparison</td>
<td>0.37***</td>
<td>-0.31***</td>
<td>1.0</td>
<td>0.23***</td>
</tr>
</tbody>
</table>

*Note: * \(p < .05\), ** \(p < .01\), *** \(p < .001\). First row entries in table are zero order correlation. Second row entries are partial correlation controlling for BMI and Self-Esteem.*

**Parasocial Relationships and Social Comparison**

Hypothesis 3 postulated that women would be more likely to socially compare themselves to thin media personalities with whom they have a parasocial relationship. This hypothesis proposed a positive correlation between a parasocial relationship and the tendency to engage in social comparison. This hypothesis was supported. There was a significant positive correlation between social comparison and parasocial interaction: \(r = 0.23, p < .001\). This relationship was maintained when controlling for BMI and self-esteem: \(r = 0.23, p < .001\).
Parasocial Relationships and Body Dissatisfaction

The fourth hypothesis predicted that women will experience lower levels of body satisfaction after viewing the target of parasocial relationship than television content that portrays a model or actor with whom there exists little parasocial relationship. This hypothesis purports a negative relationship between a parasocial relationship and an individual’s body satisfaction. This hypothesis was partially supported. Those who had a high PSI with the celebrity photo they viewed (M = 2.85) reported body satisfaction that did not significantly differ from those with low PSI (M = 2.91): F(1, 298) = 0.26, p = .61. The effect of the parasocial relationship, however, was limited to the Feeling Fat Scale. Those who reported a high PSI with the celebrity they viewed reported higher Feeling Fat scores (M = 3.53) than those who had low PSI (M = 3.28): F(1, 298) = 6.47, p < .05.

Results from hypothesis four are provided in Table 10.

Table 10: Parasocial Interaction and Body Dissatisfaction

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeling Fat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Parasocial Interaction</td>
<td>3.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Parasocial Interaction</td>
<td>3.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body Satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Parasocial Interaction</td>
<td>2.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Parasocial Interaction</td>
<td>2.91</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Multivariate Influences on Body Dissatisfaction.

Because the general goal of this study is to explore the relationship of social comparison and parasocial interaction on Caucasian female's body satisfaction, I used hierarchical multiple regression to assess those multivariate relationships. Once again, because prior research holds that self-esteem and BMI have independent effects on body satisfaction, they were entered on the first step of the equation to control for any variance they would contribute. Social comparison and parasocial interaction were entered on the second step, as the test of their ability to predict body dissatisfaction. Table 11 summarizes the regression.

In all, 39.2% of variance in Feeling Fat was predicted by the variables of the study: \( R = .63, F(2, 198) = 20.6, p < .001 \). The control variables, entered on the first step, accounted for 26.6% \( (p < .001) \). On the second step PSI and Social Comparison added significantly to the model, another 12.6%. Feeling Fat was significantly predicted by BMI \( (\beta = .44, p < .001) \), Social Comparison \( (\beta = .30, p < .001) \), PSI \( (\beta = .16, p < .01) \), and Self-Esteem \( (\beta = -.12, p < .05) \).

Overall, 50.6% of variance in Body Satisfaction was predicted by the variables of the study: \( R = .71, F(2, 198) = 11.4, p < .001 \). The control variables, entered on the first step accounted for 45.0% of the variance \( (p < .001) \). On the second step, PSI and Social Comparison added significantly to the model, another 5.7%. In the final analysis, Body Satisfaction was significantly predicted by BMI \( (\beta = -.55, p < .001) \), Self-
Esteem ($\beta = .25, p < .001$), Social Comparison ($\beta = - .23, p < .001$). PSI was not a significant contributor to the equation ($\beta = -.06, p = .27$).

### Table 11: Multivariate Influences of Parasocial Interaction

<table>
<thead>
<tr>
<th></th>
<th>Feeling Fat</th>
<th>Body Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$R^2$ Change</td>
<td>$\beta$</td>
</tr>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>26.6%***</td>
<td>-.12*</td>
</tr>
<tr>
<td>BMI</td>
<td>.44***</td>
<td></td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td>12.6%***</td>
<td>.16**</td>
</tr>
<tr>
<td>PSI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Comparison</td>
<td>.30***</td>
<td></td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td>39.2%***</td>
<td></td>
</tr>
</tbody>
</table>

*Note: *$p < .05$. **$p < .01$. ***$p < .001$*
CHAPTER 4

DISCUSSION

This goal of this study was to explore how media images contribute to body dissatisfaction. Previous research indicates that engaging in social comparison with media images of thin celebrities increases body dissatisfaction. This study expanded the domain of this research to test if a parasocial relationship with a thin model/celebrity affects social comparison and resulting body image effects. This chapter discusses the study’s findings. Each hypothesis is discussed in terms of strengths, limitations, and future research.

Summary of Results

First Hypothesis: Exposure to Thin Celebrities and Body Satisfaction

The first hypothesis was based on previous social comparison research that proposed that individuals have an innate need to evaluate their abilities and appearance through comparison of the attributes of their peers or individuals in the media (Brown et al., 1992; Richins, 1991; Stice, 1994, 1998; Thornton & Moore, 1993). This study focused specifically on the area of social comparison that deals with body dissatisfaction and body image because prior research indicates that body dissatisfaction is often a result of appearance-based social comparison – especially when the target is a celebrity or model (Cash et al., 1983, Kenrick & Gutierres, 1980). The decrease in body satisfaction after viewing a thin model or celebrity can best be explained by the concept of upward comparison. Festinger’s early work indicated that individuals choose to engage in
comparison with others who are slightly superior. This form of comparison that Festinger identified as “upward drive” was later supported by other researchers (Blanton, Buunk, Gibbons, & Kuyper, 1999; Ybema & Buunk, 1993).

A large portion of the theory indicates that the type of target (the person with whom an individual makes a comparison) influences the form of comparison. For instance, comparison with a celebrity, model, or person in the media will almost always result in an upward comparison because these types of individuals are often perceived to be superior to the average person. This study places specific emphasis on comparison with individuals in the media.

The first hypothesis was an attempt to replicate previous research. It proposed that women’s body satisfaction will be lower after viewing the photos of thin models. This hypothesis, however, was not supported. There was no significant difference between the experimental and control groups on body satisfaction. The methods of study might explain this lack of support.

The amount of time that participants were asked to view the photo might not have been sufficient for the facilitation of social comparison. Respondents were instructed to view the photo of the celebrity for “approximately six seconds.” This is a rather short amount of time for an individual to view a photo, engage in social comparison, and experience lowered body satisfaction. In her meta-analysis, Holmstrom (2004) indicates that exposure length is a noted methodological issue in many experimental studies concerning media consumption and body image. Viewing times in previous research ranged from 45 seconds (Crouch & Degelman, 1998) to 26 minutes
(Myers & Biocca, 1992). Clearly, the amount of time this study’s respondents were asked to spend with the photo was shorter than other studies.

Other social comparison studies aid the social comparison process by prompting respondents with discussion topics or directions to analyze a photo of the target. Evans (2003) weighed and measured her participants in front of a mirror in order to activate thoughts about their weight and appearance in hopes to increase the likelihood that the participants would engage in social comparison. Other studies explicitly directed their participants to engage in social comparison with the stimuli (Corning, Krumm, & Smitham, 2006).

Holmstrom (2004) also notes that study designs in this area of research are inconsistent. The majority of the research usually falls into one of two categories: survey or experiment. Survey designs in this area of research usually include a greater number of participants, measure more variables and analyze more general trends than experimental studies. The experimental design provides the researcher with greater control over the variables and allows for the researcher to make more authoritative inferences about causality. The differences in the two design types speak to a potential weakness in this study in that surveys do not require the participant to view the stimuli. Instead, participants are often asked about their media consumption and then asked to complete a body dissatisfaction questionnaire (van den Berg, Paxton, Keery, Wall, Guo, Neumark-Sztainer, 2007). I conducted this study as an experiment to test for causality and could not do so had I utilized a survey. Perhaps if this study were conducted as a survey rather than an experiment, it would have yielded different results concerning body satisfaction.
In the future, this study should direct the participant’s focus to the stimuli and provide either a prompt or directions that instruct the respondent to pay closer attention to the photographs. This might lead to an increase in social comparison by the experimental group and a statistically significant difference between the control and experimental group.

Despite collecting data from 300 female participants, the power of this study was simply not large: power = .26. As Holmstrom (2004) notes that effect sizes for body dissatisfaction are often quite small, a much larger sample would be needed to have sufficient power, perhaps as many as 1200 additional females. Pallant (2007) also indicates that in experimental studies it is best to keep the number of participants in each group equal as it may become difficult to detect statistically significant differences between the two groups. Because of the need to have enough participants to test hypotheses 2, 3, and 4, this study had a control group/experimental group ratio of 1:3, which might have contributed to a loss of power and contributed to the lack of statistical significance with this hypothesis.

The lack of significant findings for the first hypothesis might indicate that the celebrities depicted represented a more realistic female figure. Future research should conduct content analysis of popular female performers to see if they continue to be thin (Davis & Oswalt, 1992; Garner, Garfinkle, Schwartz, & Thompson, 1980; Silverstein, Peterson, & Perdue, 1986).

One future avenue for this study is to look at the effects of downward comparison in terms of the celebrity parasocial relationship. Rather than use thin and extremely good-looking celebrities, future research could examine how exposure to
celebrities like Niki Blonsky and Kirsti Alley affects body satisfaction (Myers & Biocca, 1992). Previous research indicates that those who engage in downward comparison often do so to feel better about themselves. Would downward comparison with heavier celebrities have the same effect or would the fact that they are celebrities still make the respondents feel inferior?

**Second Hypothesis: Social Comparison and Body Satisfaction**

The second hypothesis proposed that social comparison after exposure to thin models would lead to lower body satisfaction. The expectation was that participants in the experimental group would engage in upward comparison with the celebrity they viewed. This upward comparison would result in the feeling of inferiority and possibly decreased body satisfaction. In other words, because the individual did not compare well to the celebrity in the photograph, body satisfaction would most likely diminish. This hypothesis was supported and found that social comparison was negatively related to Body Satisfaction and positively related to Feeling Fat. This relationship was maintained when controlling for BMI and self-esteem for each scale. This finding supports prior research (Brown et al., 1992; Cash et al., 1983; Irving, 1990; Kenrick & Gutieres, 1980; Thornton & Maurice, 1997) and demonstrates explicitly the role of social comparison in body satisfaction.

This finding not only supports previous research that shows that social comparison results in lowered body satisfaction, but it measures and accounts for social comparison. Social comparison is not always measured and is often just assumed to
occur. This hypothesis in particular indicated that social comparison did occur and did produce lower body satisfaction.

I revised the Body Attitudes Questionnaire (BAQ), (Ben-Tovim & Walker, 1991) and Huddy’s body dissatisfaction scale (Huddy, Neiman, & Johnson, 1993) to create a more efficient and streamlined instrument. The original scales consisted of 62 items, which were too long to use in my study. Based on the examination of questions, I selected those that dealt more with body shape, size, and weight on the whole. My updated scales consisted of only 14 questions. This reduction of the scales shortened the length of the study and allowed participants to move quickly from one section to the next.

However, herein lies a limitation. The 10 questions from the BAQ were items taken from two subscales of the original scale: Feeling Fat and Saliency. The shortened 6-item Feeling Fat subscale was reliable ($\alpha = .89$) but the 4-items comprising the Saliency subscale were not ($\alpha = .41$). It would be of great interest to determine if the selection of different questions from the Saliency subscale or the inclusion of additional scale items would result in the reliability of the shortened version. Future research should continue to create shorter instruments to measure these concepts.

**Third Hypothesis: Parasocial Interaction and Social Comparison**

Hypothesis 3 predicted that women who engage in a parasocial relationship with a celebrity are likely to also engage in social comparison. The support of this hypothesis validates earlier arguments that the very nature of making a celebrity a pseudo-friend brings that celebrity closer to the individual. Festinger (1954) originally believed that we compare ourselves to friends and family. Only after the establishment of this
theory did others add the extension of comparison with celebrities and media personalities. Essentially, the women who make celebrities their friends engage in social comparison as originally defined by Festinger.

Because this hypothesis was supported, we now know that friendship plays a large role in parasocial relationships and social comparison. The results of this study support the assertion that parasocial relationships do mirror real life friendships (Basil, 1996; Brown, Basil, & Bocarnea, 2003; Cohen, 2001; Eyal & Cohen, 2006; Perse & Rubin, 1989). Individuals who engage in parasocial relationships appear to see the celebrity as a target for social comparison. Future research should explore if other interpersonal processes such as self-disclosure transfer to the parasocial relationship.

Despite the support for this hypothesis, there still exist some limitations that need to be addressed. Women in the experimental group only saw a selection of four celebrities about whom they would answer questions. This limited number of celebrities limited the strength of a parasocial relationship because there is the likelihood that the participants engage in parasocial relationships with celebrities other than the ones shown in this study. Because they were presented with photos of only four preselected celebrities, participants categorized as having low PSI might actually have high PSI with a celebrity not shown. Future research should consider methods that allow participants to select “favorite” celebrities.

There might also still be some “taboo” surrounding the idea of parasocial relationships/interactions. Although previous research has discounted the view of deficient audience members seeking relationships through the media (Perse & Rubin, 1989), many people still might perceive PSI as something in which only individuals who
lack social skills engage. Because of this perception, the measurement of PSI might be affected by social desirability. Methods to counteract this would be advantageous.

**Fourth Hypothesis: Parasocial Interaction and Body Satisfaction**

Hypothesis four proposed that women would experience decreased body satisfaction after viewing a celebrity with whom they had a parasocial relationship. Because celebrities are often more attractive than the average person, the comparison that would most likely take place is an upward comparison. This form of comparison usually results in feeling inferior than the target and in this case would most likely contribute to diminished body satisfaction. Hypothesis 4 was partially supported. Parasocial interaction was significantly related to Feeling Fat. Parasocial interaction was not significantly linked to Body Satisfaction.

This partial support might indicate that parasocial relationships only affect temporary feelings of body dissatisfaction. After looking at the scales’ items, they seem to differentiate between state and enduring concepts. For example, questions on the Feeling Fat scale indicate dissatisfaction with one’s body for an instance or single situation: “I feel fat when I can't get clothes over my hips.” However, the Body Satisfaction Scale seems to assess body dissatisfaction in an overarching and continual way: “I feel good about body image.” Perhaps parasocial relationships only lead to a temporary feeling of dissatisfaction whereas other factors contribute to a continual state of body dissatisfaction. Future research should explore the endurance of thin celebrity effects.
This study did not utilize multiple pictures of the targets and did not continually show respondents pictures of the celebrity. It would be interesting to see if continued viewing, as experienced with PSI, will lead to lowered Body Satisfaction and Feeling Fat? Should the study align better with the ways in which individuals engage in parasocial relationships, the results might better mirror those found in real-life relationships.

This experiment might yield stronger results if it were conducted as a longitudinal study. Cohen (2002) notes that parasocial relationships develop over time, similar to regular relationships. An individual develops a greater bond with a media figure or celebrity with continued and regular viewing of that celebrity’s television show. Increased access to the celebrity through blogs, twitter, interviews, and endorsements allow for people to extend their time with the celebrity outside of the parameters of a show or movie. If this study were conducted longitudinally, the respondents would have continued exposure to this celebrity in the same way they would if they read a blog posting or watched an interview.

**Hierarchical Multiple Regression**

A hierarchical multiple regression was used to test the ability of two control measures (parasocial interaction and social comparison) to predict body satisfaction (Feeling Fat subscale and Body Satisfaction scale) after controlling for the influence of BMI and self-esteem. This multiple regression analysis indicated that parasocial interaction and social comparison were both significant predictors of overall body dissatisfaction when controlling for BMI and self-esteem. It is important to note that
parasocial interaction alone was not a significant predictor of lower scores on the Body Satisfaction scale. However, when combined with social comparison in Step 2 of the regression, the two control variables significantly predicted levels of body satisfaction and accounted for an additional 12.6% of the variance for Feeling Fat and an additional 5.7% of the variance for Body Satisfaction. These findings are particularly noteworthy because parasocial interaction has not yet been tested as an area of influence in body image and body satisfaction.

In the future, it would be useful to determine why parasocial interaction was not a significant predictor of levels of Body Satisfaction. Again, the difference in scales might relate more to the ways in which the questions were worded in each of the scales. Perhaps the temporary language used in the Feeling Fat subscale once again accounted for differences between the two scales.

**Overall Implications**

One of the main strengths of this study was the inclusion of a measurement of social comparison. Much of the previous social comparison research assumed that social comparison took place but did not measure if it occurs. Some researchers use prompts or explicit directions to encourage the participants to engage in social comparison (Corning, Krumm, & Smitham, 2006; Evans, 2003). However, my study used little prompting, but measured the participant’s engagement in social comparison. This validated that most participants in the experimental group engaged in a moderate level of social comparison after viewing the celebrity.
In addition to measuring social comparison, this research added a new dimension to the study of social comparison. Previous research only looked at the ways in which social comparison with a universalistic and intimate target affected body image. My research combined the two previous targets into the parasocial target. This study indicates that PSI is an important mediating variable in understanding the effects of media exposure on body satisfaction and should be studied in greater detail, in other areas of body image research as well. The findings in this study specify that PSI could have a much larger impact on the way individuals utilize and internalize what they view in the media. Effects of PSI will only grow as a result of the implementation of celebrity blogging and tweeting.

It would be interesting to see what impact parasocial interactions or relationships might have on other media effects. For example, does greater accessibility to political figures lead to parasocial relationships with candidates? In turn, would a parasocial relationship with a candidate affect votes? The examination of PSI in political research might give some additional insight into the relationship between candidates and their constituents.

It would also be interesting to see how individuals react to the negative actions of a celebrity with whom they have a parasocial relationship. Is cognitive dissonance created if Anna is a devout animal lover and vegetarian and her pseudo friend Blake Lively decides to begin a strictly leather fashion line? If so, how is the parasocial relationship affected? How are Anna’s behaviors affected? This would tie in closely with cognitive dissonance, another of Festinger’s theories (a theoretical product of social comparison).
A few changes would have improved this experiment’s method. Increasing the number of celebrities in the study would most likely prove beneficial. This study used four celebrities to ensure that effects were not due to a single celebrity. But, allowing for participants to view more celebrities would hopefully allow for greater generalizability. If participants had the ability to view the photo of the celebrity for an extended period of time might also help to increase the amount of social comparison, perhaps leading to stronger exposure effects.

The study would be user-friendlier if it achieved a certain level of user interaction. Future research might find a way to allow the participants to type in the name of the celebrity with whom they currently engage in PSI and then present a photo of that celebrity rather than giving respondents only four celebrities from whom they can choose. This interactive component would not limit the participant’s response and will allow for future research to determine if any celebrity trends exist in regard to PSI.

Another area in which this current study could be improved is the number of photos the respondent views of each celebrity. If the participant were to see five photos of Blake Lively rather than just one, would this have a greater impact on parasocial interaction, social comparison, or both? Parasocial relationships usually develop over time with sustained and frequent viewing (Cohen, 2002). If this same concept was applied to his experiment, what kinds of results would it yield? To enhance this effect even more, future researchers should consider showing a photo or photos of the celebrity throughout the questionnaire so participants could view the photos while they answer each question. This continual viewing might also help to increase the amount of observed social comparison.
To lessen or even eliminate the taboo of PSI in this study, future researchers could re-work the parasocial interaction scale to include third-person phraseology. For instance, rather than ask the participant “When Blake Lively shows me how she feels about a situation, it helps me make up my own mind about the situation” the question could be posed to ask “When Blake Lively shows how she feels about a situation, I believe it helps my peers make up their minds about the situation.” Wording the questions from a third person perspective will help take away the participants’ motivation to respond in a socially acceptable manner. Instead, they will feel as though they’ve answered on behalf of their peers. When I utilized this method of rewording questions in my pretest, I found a drastic difference in responses. It is probable that the same will result if the wording is changed for these questions as well.

If possible, it might be advantageous to use one overarching scale to measure body satisfaction. Although the two scales that I used streamlined the study, it might be of interest to look into alternate measurement instruments. One scale that measures body satisfaction through the use of a minimal number of questions would be optimal. However, there is the possibility that a longer pre-existing scale would work just as well if it were shortened (Ben-Tovim & Walker, 1991).

This study would benefit from the use of celebrity video footage as opposed to still photos. The use of video rather than photos mimics the ways in which individuals currently engage in parasocial relationships. If this study were to act as a continuation of PSI, the respondents might be more inclined to answer the questions without thinking much about social acceptability.
To further enhance this study, it would be useful to see what type of effect parental and peer influence has on the parasocial relationship. As Stice (1994, 1998) proposed, the three major sources of socio-cultural pressures that enforce the importance of thinness in females are family, peers and the media. In the case of the parasocial relationship, figures in the media, in essence, become part of the peer category. By controlling or accounting for parental or peer influence, the depth of the parasocial relationship can be examined further. This could help to determine how much of the parasocial relationship is facilitated by the individual or by outside sources. Controlling for parental and peer influences would also indicate how much of the individual’s body satisfaction is caused by a parasocial relationship versus parental and peer input.

In the future it would be interesting to see if there is any difference in parasocial relationships between celebrities who engage in activities such as blogging or tweeting and those who do not. The wave of social media provides a level of accessibility to the celebrities who once seemed distant. Because of these new technologies, individuals have the opportunities to not only watch the celebrity’s show but to follow what they are doing on twitter, know how they are feeling from their blog posts, and see additional photos of them as everyday people. Do celebrities who allow for this enhanced accessibility facilitate a greater parasocial relationship with their viewers? If so, how does this play into body satisfaction and body image and other media effects?

There are entire media sources that profit off of the public’s consumption of parasocial-enhancing materials. Magazines like *US Weekly* and *OK* capitalize on the public’s need for greater celebrity accessibility. Clearly, this area of research has just scratched the surface of how deeply parasocial relationships penetrate the public. What
other effects does this relationship have? Can these types of relationships be positive, negative, or both? What greater purpose do these relationships serve? Do celebrities who actively allow for greater accessibility get a return, either monetarily or within their fan-base, for their efforts to promote parasocial relationships? Do celebrities even know that they are influencing these relationships?

This study contributes to previous research in a number of ways. The examination of parasocial relationships in this experiment indicated that people actively engage in parasocial relationships. This supports the findings of prior research that parasocial relationships might complement rather than supplement interpersonal relationships. In fact, parasocial relationships often closely mirror interpersonal relationships. These findings alone suggest that parasocial relationships should no longer be viewed as “taboo” or socially unacceptable and that they may function in the same ways as interpersonal relationships with close friends and family members.

This research calls for closer examination of the parasocial relationship, specifically within the area of body satisfaction and eating disorders. Previous social comparison research found that women experience lowered body satisfaction after viewing photographs of highly attractive people, like celebrities (Thornton & Moore, 1993). However, these celebrities were often viewed as distant from the individual who engaged in social comparison. By viewing celebrities as a friend, this once distant target becomes much closer to the individual. This closeness may pose a problem because celebrities are often unrealistically attractive or unrealistically thin (Richins, 1991). According to Thomsen (2002), the media allows for consumers to internalize the extremely thin body ideals portrayed in various contexts and may lead to altered thoughts
or behaviors about one’s weight. If viewers already internalize these thin ideals while they simultaneously engage in parasocial relationships with thin celebrities, the likelihood for greater body dissatisfaction or the potential for eating disorders increases.

Engaging in social comparison with a parasocial friend may have greater repercussions than engaging in social comparison with an intimate friend or family member. Social comparison with intimate targets may affect one’s body satisfaction, but intimate targets are more likely to be closer to the average weight and appearance than their parasocial counterparts. By engaging in body and weight comparison with a parasocial friend, the individual might be more likely to internalize extreme thinness as being normal for the average person because the distance that once existed between the celebrity and the viewer is no longer in place. Instead, rather than viewing social comparison with a celebrity as something to promote self-improvement or self-enhancement, it may be viewed as a mechanism to self-evaluate. Utilizing social comparison in this way will result in feeling inferior and potentially lead to body dissatisfaction or eating disorders.

**Conclusion**

Prior body image research found that female body dissatisfaction was a result, in part, of media exposure. Because of what the female viewed, whether on television, in magazines, or in the movies, she was likely to develop concerns about her weight and body shape. Thomsen (2002) found that the media act as a contributing factor to body dissatisfaction because they provide their viewers with heightened awareness about body
image. This heightened awareness allows for viewers to internalize the thin ideals established by the media and may lead to changes in thoughts or behaviors like eating disorders. Ultimately, in the case of adults and young adults, media exposure also correlates significantly with disordered eating (Holmstrom, 2004). The very nature of parasocial interaction involves media exposure because the individual who engages in parasocial relationships does so only after continued viewing of the character or content.

Previously, research only looked at media exposure and body dissatisfaction but failed to fully explore the relationships between the individual and the content they viewed. This study examined this relationship and found that those who engage in parasocial relationships with celebrities have an increased level of body dissatisfaction. Perhaps media perpetuated body dissatisfaction includes more than just viewing the content. In fact, this study looks at how the individual internalizes the thin ideal and doesn’t just validate that it occurs. Future body image research should test or account for the parasocial relationship. It is possible that parasocial interactions contributed to findings of body dissatisfaction in previous research.

Previous research also noted a shift in the figure of the female celebrity/media personality. Over the course of 50 years, the female shape presented in the media transitioned from a curvy, hourglass silhouette to a very thin shape that is almost completely devoid of curves. This new female shape does not accurately represent the average female form and is quite unattainable for the everyday woman. In media effects research, the viewing of a thin celebrity was shown to prompt body dissatisfaction among women. However, these findings were presented when the viewer perceived the celebrity as a distant media personality. The introduction of the parasocial relationship transforms
celebrities into friends. In essence, should individuals engage in parasocial interactions with female celebrities, they witness both the extreme thinness of other celebrities on the whole as well as the extreme thinness of the celebrity with whom they have this pseudo relationship. Parasocial relationships in the area of body satisfaction may lead the individual to perceive the women around her as thin when in reality only the celebrities are unrealistically thin. This type of perception is not healthy and may lead women feel pressure to obtain that same level of extreme thinness. To expand this field, researchers should test the perception of thinness between groups of women who engage in parasocial relationships and those who do not. This would help to determine how women who participate in parasocial relationships perceive the body types of women overall as opposed to their non-parasocial counterparts.

Because one of the main contributors to eating disorders is body dissatisfaction, one might predict that the impact of the parasocial relationship will cause an increase the numbers of eating disorders. Females who engage in parasocial relationships experience greater media exposure and greater internalization of those they view. The parasocial relationship also brings about the perception of a larger group of women as being unrealistically thin. Media exposure, coupled with this enhanced perception of thinness may lead to increased pressure to become thin. Some women may resort to extreme measures to obtain the extreme thinness they view in the media.

The findings of this study imply that parasocial relationships may have detrimental effects on women who engage in these relationships. One suggestion for the prevention of body dissatisfaction and eating disorders includes enhanced media literacy. If women realize that what they view on television or in magazines does not accurately
represent the average woman, they might be able to avoid feelings of body inadequacy. However, parasocial relationships might make media literacy a bit difficult to understand because women who take part in these pseudo relationships often perceive the relationship as being real. The parasocial relationship blurs the line of reality and as a result, might make understanding the difference between reality and what’s shown in the media more difficult to comprehend.

This study helped to expand upon prior research that analyzes how media images contribute to body dissatisfaction. This study found that engaging in social comparison with a parasocial “friend” contributed to the perpetuation of body dissatisfaction. Previous researchers only looked at social comparison between friends or a celebrity. This study expanded the domain of this research and examined parasocial relationship in the context of social comparison and resulting body image effects. This study adds on to previous research that indicated that exposure to thin media images affects female body image. As a result, parasocial relationships that females have with celebrities and media personalities affect both social comparison and body image.
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APPENDIX A

First, let’s begin with some information about you.

1. Are you: ______________(M/F)

2. How old are you (in years)? ______________________

3. Are you?
   a. White/Caucasian
   b. African American
   c. Hispanic
   d. Asian
   e. Native American
   f. Pacific Islander
   g. Other________________

4. What is your current height? _______ feet _____ inches

5. What is your current weight? ______________________ pounds

6. Please slide the scale under the area that best reflects your current appearance.

7. What year are you in college?
   a. 1st (Freshman)
   b. 2nd (Sophomore)
   c. 3rd (Junior)
   d. 4th (Senior)
   e. 5th +
   f. Graduate Student
   g. Other________________
8. What is your major? _____________________
Now, here are some statements that people might say about themselves. Please click to indicate how much you agree with each statement.

9. I feel that I am a person of worth, at least on an equal basis with others.
   Strongly Disagree  Disagree  Agree  Strongly Agree

10. I feel that I have a number of good qualities.
    Strongly Disagree  Disagree  Agree  Strongly Agree

11. All in all, I am inclined to feel that I am a failure.
    Strongly Disagree  Disagree  Agree  Strongly Agree

12. Thinking is not my idea of fun.*
    Strongly Disagree  Disagree  Agree  Strongly Agree

13. I am able to do things as well as most other people.
    Strongly Disagree  Disagree  Agree  Strongly Agree

14. I feel I do not have much to be proud of.
    Strongly Disagree  Disagree  Agree  Strongly Agree

15. I enjoy solving puzzles.*
    Strongly Disagree  Disagree  Agree  Strongly Agree

16. I take a positive attitude toward myself.
    Strongly Disagree  Disagree  Agree  Strongly Agree

17. I enjoy thinking abstractly.*
    Strongly Disagree  Disagree  Agree  Strongly Agree

18. On the whole, I am satisfied with myself.
    Strongly Disagree  Disagree  Agree  Strongly Agree

19. I wish I could have more respect for myself.
<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.</td>
<td>I prefer a task that is intellectual and difficult to one that does not require much thought.*</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Agree</td>
</tr>
<tr>
<td>21.</td>
<td>I certainly feel useless at times.</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Agree</td>
</tr>
<tr>
<td>22.</td>
<td>At times I think I am no good at all.</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Agree</td>
</tr>
<tr>
<td>23.</td>
<td>I prefer complex to simple problems.*</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Agree</td>
</tr>
</tbody>
</table>
Now, here are a few questions that deal with television viewing.

24. How much television do you watch per day? __________ hours________ minutes

25. Are you familiar with Blake Lively?
   a. Yes
   b. No
26. How often do you watch Gossip Girl?
   a. All the time it’s on
   b. Most of the time it’s on
   c. Sometimes
   d. Not very often
   e. Never
Now, here is a photograph of Blake Lively. Please look at this picture carefully as you will be asked questions about it later.

PHOTOS SHOWN HERE
Now, here are some statements that people say about celebrities. Please indicate how much you agree with each statement about _______ (celebrity name).

27. I feel sorry for Blake Lively she makes a mistake.
   Strongly Disagree  Disagree  Disagree Some/Agree Some Agree  Strongly Agree

28. Blake Lively makes me feel comfortable, as if I am with friends.
   Strongly Disagree  Disagree  Disagree Some/Agree Some Agree  Strongly Agree

29. I see Blake Lively as a natural, down-to-earth person.
   Strongly Disagree  Disagree  Disagree Some/Agree Some Agree  Strongly Agree

30. I look forward to watching Blake Lively when she’s on television.
   Strongly Disagree  Disagree  Disagree Some/Agree Some Agree  Strongly Agree

31. If Blake Lively appeared on another TV program, I would watch that program.
   Strongly Disagree  Disagree  Disagree Some/Agree Some Agree  Strongly Agree

32. When Blake Lively shows me how she feels about a situation, it helps me make up my own mind about the situation.
   Strongly Disagree  Disagree  Disagree Some/Agree Some Agree  Strongly Agree

33. If there were a story about Blake Lively in a newspaper or magazine, I would read it.
   Strongly Disagree  Disagree  Disagree Some/Agree Some Agree  Strongly Agree

34. I miss seeing Blake Lively when she is not on Gossip Girl.
   Strongly Disagree  Disagree  Disagree Some/Agree Some Agree  Strongly Agree

35. I would like to meet Blake Lively in person.
   Strongly Disagree  Disagree  Disagree Some/Agree Some Agree  Strongly Agree

36. I think Blake Lively is attractive.
   Strongly Disagree  Disagree  Disagree Some/Agree Some Agree  Strongly Agree
Now, here are some questions about the photograph you viewed. Please answer each question accordingly.

37. When you looked at the photo of Blake Lively, how much did you compare yourself to her in general?
   Not at all  Not very much  Some  A lot

38. When you looked at the photo of Blake Lively, how much did you compare yourself to her in terms of her eating habits?
   Not at all  Not very much  Some  A lot

39. When you looked at the photo of Blake Lively, how much did you compare yourself to her in terms of her exercise habits?
   Not at all  Not very much  Some  A lot

40. When you looked at the photo of Blake Lively, how much did you compare yourself to her in terms of her happiness?
   Not at all  Not very much  Some  A lot

41. When you looked at the photo of Blake Lively, how much did you compare yourself to her in terms of her physical appearance?
   Not at all  Not very much  Some  A lot

42. When you looked at the photo of Blake Lively, how much did you compare yourself to her in terms of her intelligence?
   Not at all  Not very much  Some  A lot

43. When you looked at the photo of Blake Lively, how much did you compare yourself to her in terms of her body weight?
44. How much did you compare yourself to her in terms of her muscularity?

Not at all  Not very much  Some  A lot

45. How much did you compare your overall body to Blake’s?

Not at all  Not very much  Some  A lot
Now, here are some statements that people might say about themselves. Please indicate how much you agree with each statement.

46. I feel good about my body.
   Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

47. I'm satisfied with my present weight.
   Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

48. When I look into a full-length mirror, I'm satisfied with what I see.
   Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

49. I wish I could lose some weight.
   Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

50. I get so worried about my shape that I feel I ought to diet.
   Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

51. I feel fat when I can't get clothes over my hips.
   Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

52. I hardly ever feel fat.
   Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

53. I feel fat when I wear clothes that are tight.
   Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

54. I feel fat when I can no longer get into clothes that used to fit me.
   Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

55. I try to avoid clothes which make me feel especially aware of my shape.
   Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree
56. There are more important things in life than the shape of my body.
   Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree

57. I hardly ever think of the shape of my body.
   Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree

58. I spend a lot of time thinking about my weight.
   Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree

59. Losing 5 pounds in weight would not really affect my feelings about myself.
   Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree
60. One final question, please click on the button that best reflects your current appearance.