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Investigating the Role of Self-Compassion in Protecting Body Image Against Self-Objectification and Social Comparison

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Investigating the Role of Self-Compassion in Protecting Body Image Against Self-Objectification and Social Comparison

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Abstract

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Body image is a multifaceted construct comprised of evaluative self-perceptions about one's physique. Western societies' portrayals of women as objects of perfection provoke feelings of inadequacy and trigger social comparison, which can contribute to body dissatisfaction and body shame. Self-compassion involves relating to oneself with mindfulness and kindness while honoring one's common humanity. Being self-compassionate is connected to enhanced well-being and improved body image. The proposed experiment asks participants to make appearance comparisons to an idealized body and subsequently complete a writing task and body image surveys. This study will explore whether a self-compassionate writing task mitigates the negative body image outcomes associated with social comparison and self-objectification. Statistical analyses will be performed using multiple regression. Proposed results suggest the need for evaluation of a self-compassion based body image program.

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INTRODUCTION

Extensive research on body image has illuminated its central role in girls' and women's psychological and physical well-being. As females are faced with objectified images and ample opportunities for social comparison, the risk of detrimental cognitive, emotional, and physical outcomes increases. In Western societies graphics representing women as objects of desire pervade the media and aggrandize the importance of physical appearance (Fredrickson & Roberts, 1997). Females are viewed and valued as bodies (or body parts) rather than whole beings, which imposes a need to embody idealized beauty in order to be valued. Girls and women often internalize these unrealistic physical standards and learn to measure their bodies against others' to verify their worth. When females pursue physical beauty for the sake of gaining approval, they participate in self-objectification and apply social comparison to gauge their relative success. This self-critical focus on physical appearance can be instrumental in shaping female body image concerns and subsequent unhealthy behaviors.

For this reason, it is necessary to identify protective factors that help girls and women develop resilience against the provocative visuals that saturate Western societies. Self-compassion may be a source of protection against body image disturbance. Self-compassion is a healthy way of relating to oneself that can be practiced when confronted with instances that may elicit self-objectification, social comparison, body dissatisfaction, and body shame. The proposed study will examine whether a self-compassionate writing activity performed after a physical appearance comparison task lessens the negative body image effects associated with social comparison and self-objectification.

LITERATURE REVIEW

Body Image, Body Dissatisfaction, and Body Shame

The human body is an intricate vessel through which we experience the world. For humans to have healthy cognitive, emotional, social, and physical development, individuals must take care of their bodies. Abundance of nutritious food, social support, safety, and calm environmental conditions allow human bodies to thrive (Maslow, 1943). However, self-perceptions and attitudes about one's body, which refer to a multifaceted construct known as body image, are the source of deleterious outcomes for many girls and women (Cash & Pruzinsky 2002).

As a construct, body image is composed of two main dimensions: evaluation and investment. Evaluation signifies the level of satisfaction an individual has with her body and investment indicates the psychological value an individual attaches to physical appearance (Cash, 2002). A well-established and growing volume of literature on the topic reveals that body image issues are incredibly common; thus, researchers refer to female concerns with physical appearance as "normative discontent" (Rodin, Silberstein, & Striegel-Moore, 1984), which suggests that most women can be afflicted by body dissatisfaction to some degree (Striegel-Moore & Franko, 2002; Tiggemann & Slater, 2004). In fact, Runfola and colleagues (2013) looked at 5,868 females residing in the United States, ranging in age from 25 – 89 years old and found that 91% of women conveyed body dissatisfaction by indicating a disparity between their current and preferred silhouette. This study bolsters previous research findings that demonstrate a remarkably high prevalence of negative body image in North American women (Fallon & Rozin, 1985; Pruis & Janowsky, 2010). Negative body image, body image disturbance and issues, and body dissatisfaction are all terms that will be used interchangeably to refer to this phenomenon.

Expanding literature on body image issues has shed light on notable trends throughout the female life span. For example, researchers have found that girls as young as 4 – 5 years old experience body dissatisfaction (Davison, Markey, & Birch, 2000) and girls ages 6 – 7 express a desire to have a thinner body (Dohnt & Tiggeman, 2004; 2005; 2006). Phares, Steinberg, and Thompson (2004) even included young girls in the normative discontent that has been established for women. Longitudinal studies demonstrate that body dissatisfaction increases throughout adolescence and young adulthood with sustained body dissatisfaction into late adulthood (Bucchianeri, Arikian, Hannan, Eisenberg, & Neumark-Sztainer, 2013; Runfola et al., 2013).

Moreover, college-aged women have been identified as especially prone to body dissatisfaction and disordered eating due to the added demands of balancing the pressure of higher education with the responsibilities of living away from home and managing one's physical and emotional health (Levine & Smolak, 2006; Neighbors & Sobal, 2007). Studies of college women have found that over 80% report body dissatisfaction (Heatherton, Nichols, Mahamedi, & Keel, 1995; Vohs, Heatherton, & Herrin, 2001). Furthermore, research has indicated college women to be markedly influenced by the psychological processes of social comparison theory and objectification theory, which are the leading theoretical frameworks of this proposal (Fitzsimmons-Craft, 2011; Tylka & Sabik, 2010). For these reasons, college is a prime developmental period for research to explore ways to protect physical and psychological well-being in terms of reducing negative body image.

In recent years, awareness about men's body image concerns has grown, with studies looking at the effects of media images on body satisfaction (Blond, 2008; Galioto & Crowther, 2013) and investigating how men internalize body ideals and engage in social comparison (Hargreaves & Tiggeman, 2009; Hobza, Walker, Yakushko, & Peugh, 2007). Interestingly, in research comparing male and female body image, it appears that the mechanisms by which men and women experience body dissatisfaction may operate differently (Franzoi et al., 2011; Van den Berg et al., 2007). As a result, the resiliency strategies needed to counteract body

dissatisfaction will likely differ according to sex. Therefore, this proposal will focus only on college females with hopes that the findings of this study will inform future body image research on both sexes.

BODY DISSATISFACTION AND BODY SHAME: OUTCOMES AND COMORBIDITY

Negative body image is related to a range of injurious thought patterns and behaviors that contribute to adverse psychosocial and physical consequences (Stice, 2002; Stice & Shaw, 2002). For example, body dissatisfaction is considered a steady and enduring risk and maintenance factor for eating pathology (Stice, 2002; Stice, Ng, & Shaw, 2010). Eating pathology refers to eating disorder symptoms, which include a range of irregular eating habits such as self-induced vomiting, restrained eating, or eating until the point of discomfort (Gilbert, 1983). The whole body suffers from these actions with acutely damaging impacts on the condition of internal organs and regulation of bodily functions, and if these behaviors persist, women are likely to fully develop an eating disorder—anorexia nervosa, bulimia nervosa, or binge eating disorder (Vandereycken & Van Deth, 1994). Women with negative perceptions of their bodies are more likely to obsessively diet, deprive themselves of food, overeat, or gain excessive weight (Neumark-Sztainer, Paxton, Hannan, Haines, & Story, 2006; Stice, 2002). Indeed, some researchers have referred to body dissatisfaction as an "essential precursor" to eating disorders (Polivy & Herman, 2002) due to its crucial and consistent role in eating disturbance (Stice, 2002; Stice, Ng, & Shaw, 2010; Thompson et al., 1999). This is of great concern in recognition of the severe consequences of eating disorders and bearing in mind that anorexia nervosa is the most fatal psychological disorder (Striegel-Moore & Bulik, 2007).

Body shame, although a similar construct to body dissatisfaction, has been viewed as a conceptually distinct attitude about one's body (Miner-Rubino, Twenge, & Fredrickson, 2002). Fredrickson and Roberts (1997) describe body shame as a feeling of unworthiness triggered by a woman's perceived failure to measure up to cultural expectations of beauty. Body dissatisfaction refers to a woman's opinion about her body, while body shame refers to a woman's opinion

about her morality and self-worth because of her body. It is possible that a woman may be dissatisfied with her body without feeling ashamed of herself because of her body's discrepancies from cultural appearance standards. Yet, some argue that there should be a single measure to evaluate body dissatisfaction and body shame as one construct granted that it is unlikely for someone to experience one without the other (Lindner, Tantleff-Dunn, & Jentsch, 2012). In the body image literature the differentiation between these concepts is inconclusive (Lindner, Tantleff-Dunn, & Jentsch, 2012; Miner-Rubino, Twenge, & Fredrickson, 2002). For the purpose of this study, body dissatisfaction and body shame will be treated as discrete but related concepts in light of the important implications both attitudes have on women's psychological and physical well-being.

In Western societies where there is an inordinate emphasis on physical perfection and a high value placed on attractiveness and thinness for women (Hesse-Biber, Leavy, Quinn, & Zoino, 2006), there is an elevated risk to experience body shame (Cafri, Yamamiya, Brannick, & Thompson, 2005; Sheldon, 2010; Striegel-Moore, 1997). The body ideal of slimness has become an indicator of a woman's health, success, social attractiveness, ability to have self-control, and youthfulness (Bordo, 2003; Brownell, 1991). Women learn to internalize the expectations of beauty and believe their worth is rooted in their physical attributes rather than their whole being. Yet, the cultural standard women strive to meet is considered unattainable (Kilbourne, 1994). Women experience body shame as a result of their perceived failure to be good enough, and harmful physical and psychological health outcomes ensue (Miner-Rubino, Twenge, & Fredrickson, 2002).

According to the literature, body shame is another key contributor to disordered eating habits (McKinley & Hyde, 1996; Noll & Fredrickson, 1998; Tiggemann, 2013). Body shame sparked by striving for Western society's version of a flawless body is related to severe weight control behaviors such as restricting calorie intake or purging meals (e.g., Thompson & Stice, 2001) and measures as drastic as starvation and cosmetic surgery (Calogero, Pina, Park, & Rahemtulla, 2010; Kilbourne, 1994). Even more, feelings of shame initiate self-destructive

reactions to diet transgressions such as binge eating, excessive exercise, or the use of laxatives or diet pills (Markham, Thompson, & Bowling, 2005; Myers & Crowther, 2007; Noll & Fredrickson, 1998; Tiggemann, 2013; Tylka & Sabik, 2010).

Extensive research reveals that women with body image concerns are disposed to experience a host of other psychological difficulties including anxiety, depression, stress, and diminished quality of life (Cash & Fleming, 2002a; Cash & Fleming, 2002b). Moreover, women are also at a greater risk of low self-esteem, negative affect, and social withdrawal when plagued with negative perceptions about their bodies (Grossbard, Lee, Neighbors, & Larimer, 2009; Mintz & Betz, 1988; Stice, 2002). Unfortunately, these outcomes are not rare for women given the high predominance of body dissatisfaction.

Media Influence and Ideal Internalization

One of the reasons body image concerns are so widespread in Western societies is due to the prominence of idealized images displayed in the media. Through television, movies, magazines, smart phone applications, the ever-growing Internet, and ubiquitous advertisements embedded in all of the above, Western society puts women's physical appearance under extreme scrutiny, including their accessories and articles of clothing, hairstyles and skin texture, and body shape and facial features. Through the media women are coerced into believing that if they conform to cultural ideas of beauty, they can achieve perfection, social approval, and physical appeal.

The power of media on body dissatisfaction and disordered eating was poignantly depicted in a naturalistic experiment conducted in Fiji (Becker, Burwell, Herzog, Hamburg, & Gilman, 2002). Prior to this study, Fiji had little access to Western media and only one reported case of an eating disorder in the 1990s. As a matter of fact, the Fijian cultural preference is for women to be full-bodied with robust appetites. Therefore, the Western fixation on being slender is nonexistent and actually discouraged in Fijian tradition. During the experiment, eating attitudes and behaviors of adolescent Fijian girls were assessed preceding exposure to Western

regional television. After three years from the initial introduction to Western television, researchers reexamined the Fijian girls' beliefs about their bodies and thoughts towards eating with the same scales and with open-ended interviews. Some Fijian girls had been exposed for only a month, while others had had more prolonged exposure just over three years. Together quantitative and qualitative data revealed a significant increase in disordered eating attitudes and behaviors, such as dieting and self-induced vomiting for weight control for Fijian girls with both shorter and longer media exposure (Becker, Burwell, Herzog, Hamburg, & Gilman, 2002). The broader silhouette that was once regarded as attractive came to be interpreted as undesirable for these young Fijian girls. In essence, the cultural norm for women to have fuller figures was overturned by their mere exposure to Western media. The insights garnered from this study call attention to the overwhelming impact of media on body image and the subsequent actions women take in response to how they feel about their bodies.

Ample research demonstrates how girls and women who are exposed to the beauty ideals perpetuated through media and socially reinforced by parents and peers are more vulnerable to developing problems with disordered eating and related physical and psychological health risks (Grabe, Ward, & Hyde, 2008; Spettigue & Henderson, 2004; Thompson & Stice, 2001). In a study examining 49 experiments and 28 correlational studies, researchers found that women's negative body image is connected to exposure to idealized media, with effect sizes of $d = -.28$ for body dissatisfaction and $d = -.30$ for eating habits and beliefs (Grabe, Ward, & Hyde, 2008). This signifies that media exposure plays an evident role in increasing body dissatisfaction and unhealthy eating behaviors. In particular, the causal impact of media is demonstrated with experiments exposing women to idealized media and resulting in a consistent increase in body dissatisfaction after viewing the images (Groesz, Levine, & Murnen, 2002; Want, 2009). Women's body dissatisfaction has been similarly affected by a range of media formats such as music videos (Bell, Lawton, & Dittmar, 2007; Tiggemann & Slater, 2003), fashion magazines (Posavac, Posavac, & Posavac, 1998), and television (Heinberg & Thompson, 1995). Given the omnipresence of visual media through smartphone and mobile web technology, it is virtually

impossible for a woman to avoid images depicting these unrealistic criteria for beauty. Thus, women are at tremendous risk to develop distorted perceptions of their bodies and disordered eating patterns by way of media influence.

Importantly, a woman's feelings about her body in response to these messages depend on the degree to which she internalizes cultural norms of physical appearance, which is commonly referred to as the "thin ideal" in the West. Women who internalize the thin ideal subscribe to the notion that being thin is desirable and adopt thinness as a personal ideal (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). More generally, women who internalize Western ideals of beauty revere the looks of the epitomized perfect woman, who is typically depicted as thin, tall, and blonde, with a toned physique (Polivy & Herman, 2004; Schooler, Ward, Merriwether, & Caruthers, 2004). In the past couple of decades, there has been a heightened emphasis on muscle tone so women appear firm, yet still slender and feminine (Bordo, 2003). In current trends, idealized bodies are not only unusually slim, but often exceptionally fit (Grogan, 2008; Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004). Physical ideals evolve throughout cultures and women's internalized ideals change according to what is socially relevant. Therefore, the thin ideal is becoming confounded with a "fit ideal," meaning that women with defined muscles, rather than soft curves, are gaining more desirability in recent years (Homan, McHugh, Wells, Watson, & King, 2011). In any case, internalization of idealized bodies directly impacts women's body image, with mounting evidence from longitudinal and experimental studies that illustrate the causal role internalization plays in body image concerns (Cafri, Yamamiya, Brannick, & Thompson, 2005; Thompson & Stice, 2001). Furthermore, women who possess greater internalization of physical ideals are more inclined to make appearance-based social comparisons (Stormer & Thompson, 1996), which is another potent correlate of body dissatisfaction (Myers & Crowther, 2009).

The dominance of perfected bodies in the media and the persuasive sway of Western society's beauty ideals provide a breeding ground for women's insecurities about their bodies to

intensify. Researchers have attempted to capture the complex mechanisms by which women come to resent their bodies through the following theories.

Theoretical Frameworks

Several theoretical frameworks have emerged throughout the past six decades illustrating the presence of various influences on female body image. The dual pathway model (Stice, 1994), objectification theory (Fredrickson & Roberts, 1997), social comparison theory (Festinger, 1954), and tripartite influence model (Thompson et al., 1999) offer different perspectives on how women develop body image concerns. There is sufficient empirical support for all four models, with some shared ideas about how social and cultural factors influence body perceptions.

Stice's dual pathway model proposes that sociocultural pressures incite girls and women to internalize notions of prototypical beauty (1994). Moreover, internalization of these ideals is hypothesized to lead to body dissatisfaction due to the standards of unattainable perfection and impractical thinness. The first proposed link of the model illustrates the connection between body dissatisfaction and dietary restraint, which then connects to the second proposed link, which is a heightened risk for eating disorders (See Figure 1 for an illustration of the model). Negative affect is thought to be the channel through which dietary restraint evolves into an eating disorder due to a misguided belief that starving oneself and binging and/or purging allows one to manage their emotions (Stice, 1994). This sociocultural model has been supported by years of research in both cross-sectional (Stice, Nemeroff, & Shaw, 1996; Stice, Ziemba, Margolis, & Flick, 1996) and longitudinal studies (Stice, 2001; Stice & Agras, 1998).

Along similar lines, the tripartite influence model suggests three major sources of influence for a woman's later development of body image concern and eating disturbance: media, parents, and peers. According to this model, the extent to which women internalize cultural standards of appearance and the increased propensity to make appearance-based comparisons are two mediating factors that function as connections between body image and dysfunctional eating habits. Previous research has confirmed the role of these mediating

variables as leading to body image and eating outcomes (van den Berg, Thompson, Obremski-Brandon, & Coovert, 2002).

Although these approaches to conceptualizing how women develop their body image are well supported by the literature, recent studies have begun to integrate objectification theory and social comparison theory to explain the complexities of female body image (Fitzsimmons-Craft et al., 2012; Lindner, Tantleff-Dunn, & Jentsch, 2012; Tylka & Sabik, 2010). Therefore, the tenets of objectification theory and social comparison theory will form the foundation for this proposal.

OBJECTIFICATION THEORY

Human behavior is the outcome of a breadth and depth of ideas, emotions, thoughts, and desires. Yet, Western media often values people as depersonalized objects rather than individuals with thoughts and opinions of their own (Loughnan et al., 2010). Objectification theory posits that a prevailing source of negative body image for women is the way they are represented in society (Fredrickson & Roberts, 1997). Advertisements, television, film, and Internet platforms divest women of human qualities by way of objectification. Objectification theory asserts that in society women are predominantly reduced to their bodies (or a collection of body parts) and are regarded as objects to be used and evaluated by others (Fredrickson & Roberts, 1997).

Women in visual media are frequently dismembered, showing only sections of the body instead of the complete figure. Often images of women are beheaded and the focus is solely on a single appendage or overemphasized segment of the body, commonly the torso or buttocks (Vaes, Paladino, & Puvia, 2011). Many advertisements use women's bodies in place of objects (e.g. tables, beer bottles, food, and decoration), or as a canvas for selling products such as shoes, cars, and cigarettes (Fredrickson & Roberts, 1997; Goffman, 1979; Lindner, 2004; Stankiewicz & Rosselli, 2008). By perpetually dehumanizing women in pervasive imagery, consumers of media become familiar with the utility of women's bodies to sell products, entertain the masses,

embody perfection, and visually satisfy sexual desires (Miner-Rubino, Twenge, & Fredrickson, 2002).

With the compelling pressure to measure up to beauty ideals upheld by society, women learn to internalize their role as an object and engage in self-objectification (Fredrickson & Roberts, 1997). When women begin to self-objectify, they become preoccupied with their bodies and habitually monitor the position of their clothing and posture to manufacture an ideal appearance. A heightened body surveillance, or view of oneself from the perspective of others, co-occurs with relentless comparisons to unreachable physical standards, which leaves women feeling disillusioned, useless, and simply not good enough (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996). Lately research on body image has been increasingly turning to objectification theory as a framework to further understand how women develop negative views of their body (for a review, see Calogero, Tantleff-Dunn, & Thompson, 2011). Studies indicate that those with higher levels of self-objectification also experience higher levels of body shame, neuroticism, anxiety, depression, and disordered eating (Lindner, Tantleff-Dunn, & Jentsch, 2012; Noll & Fredrickson, 1998).

Interestingly, a study by Gervais, Vescio, Forster, Maass, and Suitner (2012) looked at how men and women cognitively process male and female bodies. This study introduced and tested the sexual body parts recognition bias hypothesis that asserts how women (in comparison to men) are minimized to sexual body parts. That is, specific female body parts (e.g., breasts, abdominal muscles, and buttocks) are regularly referenced and made salient in media, which reduces the value of women to the desirability of their body parts rather than their intellect and capabilities. The authors investigated their hypothesis using the lens of the parts versus whole body recognition paradigm from cognitive psychology (Tanaka & Farah, 1993). This paradigm addresses that perception influences recognition and some body parts are easier to identify in a global (whole body) versus local (isolated body part) context (Tanaka & Farah, 1993). Gervais and colleagues (2012) had participants initially view images of entire bodies of both men and women and then view a second set of images and identify those that they had seen in the original

set. In viewing the second set, however, half of the trials displayed modified body parts in the context of an entire body and the other half of trials displayed modified body parts in isolation. Results indicated that female body part recognition was better than female whole body recognition, while results for males were the inverse.

This article provides the first empirical evidence of how women are reduced to their body parts in the perceiver's minds (Gervais, Vescio, Forster, Maass, & Suitner, 2012), which is likely facilitated by the frequency of fragmented female bodies in the media. Both men and women demonstrated the same trend for local processing women's bodies. These findings illustrate a principal tenet of objectification theory; women learn to internalize the inescapable experience of objectification and perceive themselves and other women as objects (Fredrickson & Roberts, 1997).

SOCIAL COMPARISON THEORY

Humans are naturally driven to gauge how their personal qualities measure up to a given set of norms according to Festinger's social comparison theory (1954). In particular, Festinger posits that individuals assess their opinions and abilities to determine their self-worth and subjective status. Without the presence of objective standards, Festinger suggests that humans will choose to appraise themselves in relation to corresponding others (1954).

According to social comparison theory, there are two directions of social comparison—upward and downward—that influence the affective consequences of engaging in comparison (Suls & Wills, 1991). Upward comparisons are made against individuals who are thought to be superior to oneself in a given domain and downward comparisons are made against individuals who are thought to be inferior to oneself in a given domain. Upward comparisons typically elicit feelings of inadequacy whereas downward comparisons boost well-being and self-regard (Wheeler & Miyake, 1992). Yet, this is not always the case and largely depends on the realm of comparison and the comparison target (Wheeler & Miyake, 1992). In the context of body image, social comparison theory operates distinctively and discreetly.

Although people customarily prefer to maintain a positive view of themselves when engaging in comparisons with others (Bosveld, Koomen, & Pligt, 1994), body image research points to a propensity for women to compare themselves to superior others even if this results in negative feelings about themselves (Fitzsimmons-Craft, 2011; Lev-Ari, Baumgarten-Katz, & Zohar, 2014; Major, Testa, & Bylsma, 1991; Wheeler & Miyake, 1992). Moreover, Festinger (1954) proposed that individuals tend to compare themselves to relevant others such as friends and family rather than people removed from their immediate social interactions; however, much of women's comparisons occur toward socially distant women pictured in magazine advertisements and movie screens (Fitzsimmons-Craft, 2011; Lev-Ari, Baumgarten-Katz, & Zohar, 2014). Substantial research has found that the choice to make upward comparisons about physical appearance is significantly related to increased body dissatisfaction and disordered eating (Bailey & Ricciardelli, 2010; Fitzsimmons-Craft, 2011; Fitzsimmons-Craft, Harney, Brownstone, Higgins, & Bardone-Cone, 2012; Lev-Ari, Baumgarten-Katz, & Zohar, 2014).

In addition to the direct comparisons women make about their bodies (e.g., a woman thinking that another woman is thinner/prettier/stronger than her), women also make indirect comparisons that are subconscious judgments of their own or others' bodies (e.g., a woman looking at an outfit on a model and feeling like she wouldn't look good in the same outfit). Both direct and indirect comparisons are strongly correlated to body dissatisfaction (Lev-Ari, Baumgarten-Katz, & Zohar, 2014).

As previously mentioned, these effects vary depending on the value a woman places on her physical appearance and her internalization of the ideals to which she is comparing herself. If a woman compares her body to thin models, but does not believe thinness is pertinent to her well-being, she will likely not exhibit significant increases in body dissatisfaction or unhealthy eating patterns (Dittmar & Howard, 2004; Halliwell & Dittmar, 2005; Heinberg & Thompson, 1995). In contrast, women who are already dissatisfied with their bodies are apt to engage in more appearance comparisons, especially upward comparisons (Schaefer & Thompson, 2014). The act of comparing one's body with an idealized target has the most detrimental ramifications

for women who are highly dissatisfied with their physical appearance (Leahey, Crowther, & Mickelson, 2007). For these women, upward comparisons exacerbate negative affect, guilt, body dissatisfaction, and thoughts of dieting and exercising (Leahey, Crowther, & Mickelson, 2007; Schaefer & Thompson, 2014).

In regards to body image, social comparison is the mechanism by which individuals determine the relative standing of their physical appearance by measuring their body parts against standards of perfection established by society and propagated by media, peers, and family (Strahan, Wilson, Cressman, & Buote, 2006). A meta-analysis of 189 effect sizes from correlational and experimental studies presented a significant effect of appearance comparisons on body dissatisfaction ($d = 0.77$) (Myers & Crowther, 2009). This is startling evidence of how social comparison contributes to body dissatisfaction, which underlines the necessity to address this pressing issue.

CIRCLE OF OBJECTIFICATION AND SOCIAL COMPARISON

Researchers have proposed that the relationship between self-objectification, objectification of others, and social comparison forms a "circle of objectification" (Lindner, Tantleff-Dunn, & Jentsch, 2012; Strelan and Hargreaves, 2005). As women engage in self-objectification, they take the perceiver's perspective of their own body or body parts. In other words, women see their bodies as objects to be scrutinized and appraised, and consequently partake in evaluation of their appearance from an onlooker's viewpoint. From this place of critical body awareness, women also perceive other women's bodies or body parts as objects. When women objectify their own or others' bodies, they are likely making a comparison without consciously deciding to do so (Lindner, Tantleff-Dunn, & Jentsch, 2012).

The act of evaluating one's own or another's body in this way typically contributes to feelings of body dissatisfaction or body shame. This is because evaluations of one's body are often made against the unrealistic portrayals of feminine beauty, which reinforce the strong sociocultural pressures to establish a sense of worthiness through one's physical appearance. The

inability to achieve physical similarity to the beauty ideal induces feelings of shame and insufficiency, which heighten the need to seek improvement and social approval, resulting in further comparisons that continue this vicious cycle (Lindner, Tantleff-Dunn, & Jentsch, 2012). The proposed study uses this integration of objectification theory and social comparison theory to illustrate how the combination of self-objectification and social comparison threatens body image and well-being and thereby necessitates the presence of a strong protective factor to ensure women's psychological and physical health.

Body Image Interventions and Protective Factors

A growing field of research in the past three decades is focused on body image interventions; in fact, protecting body image is considered a vitally important public health goal in light of the high prevalence of body dissatisfaction and its adverse outcomes (Paxton, 2000). Body image interventions seek to prevent the detrimental thoughts and behaviors associated with body dissatisfaction and disordered eating that threaten physical and psychological wellness. Such prevention and intervention programs have become a growing research focus in the past three decades. Yager and O'Dea (2008) delineate the array of intervention types into five approaches; didactic knowledge-based, psycho-educational, cognitive-behavioral therapy, media literacy, and dissonance-based approaches, and reviewed their efficacy.

Their findings indicate that some intervention styles are more effective than others. Studies with didactic, psycho-educational, or cognitive behavioral therapy interventions had minimal impact on body dissatisfaction and eating behaviors and often did not generate any significant effects (Mutterperl & Sanderson, 2002; Nicolino, Martz, & Curtin, 2001). In contrast, media literacy tactics have shown notable results in improving body dissatisfaction (Posavac, Posavac, & Weigel, 2001; Yamamiya, Cash, Melnyk, Posavac, & Posavac, 2005). Media literacy interventions strive to increase individuals' critique of the media they consume to decrease internalization of unrealistic standards of beauty. Media images propagate ideas about the perfect

female body and media literacy aims to reduce the credibility and persuasive influence of these ideals (Irving & Berel, 2001; Shaw & Waller, 1995).

Media literacy interventions strive to increase individuals' critique of the media they consume to decrease internalization of unrealistic standards of beauty. Media images propagate ideas about the perfect female body and media literacy aims to reduce the credibility and persuasive influence of these ideals (Irving & Berel, 2001; Shaw & Waller, 1995). Body image interventions underlining media literacy tactics have also shown notable results in improving body dissatisfaction (Posavac, Posavac, & Weigel, 2001; Yamamiya, Cash, Melnyk, Posavac, & Posavac, 2005). Although media literacy and dissonance-based body image interventions are found to be promising strategies to help women with body dissatisfaction and disordered eating, the interventions implemented up until 2008 were missing key components that encourage self-acceptance, body appreciation, and healthy body image.

Similarly dissonance-based interventions have been successful in diminishing women's internalization of the thin ideal and drive for thinness, (Stice, Mazotti, Weibel, & Agras, 2000; Stice, Trost, & Chase, 2003; Roehrig, Thompson, Brannick, & Van den Berg, 2006). The method behind dissonance-based interventions is grounded in cognitive dissonance theory, which proposes that an inconsistency between beliefs and behavior provokes psychological discomfort that becomes an impetus for change to reduce the internal conflict (Festinger, 1957). In dissonance-based body image interventions, participants are asked to endorse an idea that is counter to their current beliefs about physical appearance; for instance, one study asked female university students to design an educational program to help reduce thin ideal internalization in high school girls (Stice, Mazotti, Weibel, & Agras, 2000). By taking a stance against mainstream media images, which promote thin ideal internalization, the university students experienced dissonance and thereby changed their beliefs.

In the nine years since Yager & O'Dea's (2008) review was published, researchers have made great strides in developing body image interventions. There has been continued exploration on refining media literacy (e.g., Halliwell, Easun, & Harcourt, 2011) and dissonance-based

interventions (e.g., Halliwell & Diedrichs, 2014; Stice, Butryn, Rohde, Shaw, & Marti, 2013). More recently, interventions have also been focused on identifying protective factors and fostering positive body image (e.g., Albertson, Neff, & Dill-Shackleford, 2014; Halliwell, 2013; Homan, Sedlak, & Boyd, 2014; Snapp, Hensley-Choate, & Ryu, 2012; Swami, Hadji-Michael, & Furnham, 2008; Wood-Barcalow, Tylka, & Augustus-Horvath, 2010). In view of the painful outcomes associated with body dissatisfaction, it is crucial to address how to help women develop positive feelings toward their bodies and resilience. In the past decade, an array of protective factors have emerged in the literature as ways to improve and protect women's body image including gratitude (Homan, Sedlak, & Boyd, 2014), body image flexibility (Sandoz, Wilson, Merwin, & Kellum, 2013), and body appreciation (Halliwell 2013; 2015). One additional possible protective factor that might offer women an opportunity to cope with negative body image is self-compassion (Braun, Park, & Gorin, 2016).

Self-compassion

Self-compassion, a way of relating to oneself with kind attention, is believed to be a source of resilience to help women cope with the emotional pain caused by body dissatisfaction and body shame (Albertson, Neff, & Dill-Shackleford, 2014; Breines, Toole, Tu, & Chen, 2014; Homan & Tylka, 2015; Tylka, Russell, & Neal, 2015). Self-compassion is a construct derived from Buddhist teachings (Brach, 2003; Kornfield, 1993; Salzberg 1997) and was established as a psychological construct by Neff (2003). Self-compassion is an attitude toward oneself defined by three core positive qualities and reduced levels of their negative counterparts: self-kindness vs. self-judgment, mindfulness vs. overidentification, and common humanity vs. isolation (Neff, 2003). These interconnected elements function together to create a self-compassionate way of being.

Self-kindness is the practice of extending comforting support and understanding to oneself in response to difficulties and distress. Rather than meeting personal failings with a barrage of self-judgment, self-kindness allows challenging experiences to be met with warmth

and gentleness. Mindfulness refers to witnessing emotional pain with openness, acceptance, and clarity. This entails attending to the present moment directly as it is instead of magnifying what is wrong and overidentifying with and worsening negative emotions (Neff, 2003). Common humanity involves recognizing that pain is part of the collective human experience and that all humans suffer from loss, failure, and sorrow. By acknowledging how others share similar hardships, common humanity relieves the agony of feeling isolated and creates a sense of belonging to a greater whole. With these interacting components, an individual has access to a coping strategy of self-compassion that offers self-soothing and affect regulation (Sirois, 2015; Terry & Leary, 2011).

Over the past decade an expanding body of research indicates that self-compassion provides a reliable and abiding source of physical and psychological well-being (for a review see, Zessin, Dickhäuser, & Garbade, 2015). Research demonstrates that greater self-compassion is related to lower levels of stress, anxiety, and depression (Neff, 2003; Neff, Kirkpatrick, & Rude, 2007). For this reason, self-compassion is being used frequently in clinical practice (Baer, 2010). Macbeth and Gumley (2012) performed a meta-analysis of 20 studies and found a large effect size when examining the negative link between self-compassion and psychopathology. Individuals higher in self-compassion are also less likely than those with low self-compassion to ruminate on or suppress negative thoughts and emotions (Neff, 2003). Not only does self-compassion reduce experience of negative mindsets, but it is also a healthy coping strategy when confronting despair and distressing life situations including chronic pain, divorce, and homesickness (Sbarra, Smith, & Mehl, 2012; Terry, Leary, & Mehta, 2012; Costa & Pinto-Gouveia, 2011).

It appears that self-compassion cultivates a joyful and inspired perspective on life. Greater levels of self-compassion are connected to heightened feelings of happiness, wisdom, optimism, gratitude, curiosity, life satisfaction, and positive affect (see Neff, 2012 for a review). Self-compassionate individuals are equipped with emotional stability when disappointment and discomfort arises because self-compassion is grounded in acceptance and appreciation for

oneself as is. Those with higher self-compassion exhibit less narcissism, anger, and public self-consciousness (Neff & Vonk, 2009). Rather than being reliant on one's achievements or opinions of others to feel valuable, self-compassionate individuals are less likely to seek approval from external sources and therefore possess more stable and less contingent feelings of self-worth (Neff & Vonk, 2009). Those with high contingent self-worth depend on reaching milestones and being successful to feel good about oneself and are prone to experience intensified reactions to events that are pertinent to one's contingencies (Crocker & Wolfe, 2001). Self-compassion allows individuals to respond to both accomplishments and setbacks with receptivity and calm presence.

Furthermore, researchers have examined self-compassion's role in clinical practice (e.g., Gilbert, 2010). Self-compassion allows individuals to gain understanding of themselves, embrace their wholeness, and forgive their perceived limitations, and these qualities of self-compassion appear to offer a therapeutic mechanism for individuals to cope with life's difficulties (Baer, 2010). Neff and Germer (2013) developed a method of teaching self-compassion in a nonclinical setting - an eight-week program called Mindful Self-Compassion (MSC). Participants of MSC are given tools to help incorporate self-compassion into everyday life including meditation, writing, and other informal exercises. A randomized control-trial of MSC illuminated significant increases in self-compassion, mindfulness, compassion for others, and life satisfaction as well as decreases in depression, anxiety, stress, and emotional avoidance. The program sustained these impressive outcomes at six months and one-year follow-ups. Interestingly, life satisfaction significantly increased at the one-year follow-up, which illustrates the power of self-compassion to enrich quality of life over time (Neff & Germer, 2013).

Considering that self-compassion can be taught and yield improvements in well-being (Neff & Germer, 2013), it is important to offer self-compassion in accessible formats. For instance, the resiliency skills offered by self-compassion have been examined in writing interventions, which is a fairly direct method to help individuals embody self-compassion. Leary and colleagues (2007) paved the way for researchers to induce self-compassion through writing.

In Leary's (2007) study participants were asked to think about unfavorable experiences of failure, rejection, humiliation, and loss and reflect on them in response to three prompts that were designed to awaken a mindset encompassing the three components of self-compassion—common humanity, self-kindness, and mindfulness (Neff, 2003). Results indicated that individuals in the self-compassionate writing condition reported less negative affect and greater equanimity in response to discussing upsetting life events (Leary, Tate, Adams, Allen, & Hancock, 2007).

This approach to self-compassionate writing has been the model for several other studies that have also found emotionally beneficial results with a range of populations including university students (Breines & Chen, 2013; Johnson & O'Brien, 2013; Odou & Brinker, 2014; Zabelina & Robinson, 2010), breast cancer survivors (Przezdziecki, Alcorso & Sherman, 2016; Przezdziecki & Sherman 2016), hospice workers (Imrie & Troop, 2011), and Chinese university students (Wong & Mak, 2016).

For example, Odou and Brinker (2014) found that having participants complete 8 – 10 minutes of self-compassionate writing after thinking about and describing an unpleasant event led to greater mood improvements compared to an expressive writing comparison group. In another study conducted by Johnson and O'Brien (2013), shame-prone individuals were asked to recount an experience of shame and respond to self-compassionate writing prompts about this event. Participants in the self-compassionate writing condition exhibited significantly less shame and less negative affect compared to participants in an expressive writing condition (Johnson & O'Brien, 2013).

Self-compassion involves looking at one's weaknesses, mistakes, and failures with openness, forgiveness, and an understanding of one's humanity. Instead of narrowing in on mistakes and feeling like a complete failure, Breines & Chen's (2013) study demonstrated how a self-compassionate task allowed participants to feel potential for growth and change in regards to their perceived flaws and be more motivated for self-improvement. These findings exemplify

just how self-compassion helps individuals interpret their shortcomings with a more expansive outlook (Breines & Chen, 2013).

Two studies have examined the impact of a self-compassion writing intervention on post-treatment body image difficulties for breast cancer survivors (Przezdziecki. Alcorso, & Sherman, 2016; Przezdziecki & Sherman, 2016). One study compared self-compassionate writing to an expressive writing control using writing prompts analogous to those designed by Leary and colleagues (2007). Przezdziecki and Sherman (2016) found that individuals who completed self-compassion writing prompts reported less negative affect and greater self-compassion compared to individuals in the expressive writing condition.

Przezdziecki, Alcorso, and Sherman's (2016) study investigated My Changed Body, which is a website researchers created to provide self-paced writing activities for breast cancer survivors. Participants were asked to complete six writing prompts including; 1) writing freely about a negative body image experience, 2) treating one's body with kindness, 3) kind advice to oneself, 4) connection with others who share difficulties with body image, 5) awareness of circumstances in a broader context, and 6) a self-compassionate letter to summarize the situation. After completing the self-compassion writing exercises, individuals reported lower negative affect and greater self-compassion. It is important to note, however, this study was not a controlled experiment and was predominantly intended to garner feedback on the usability of the website. Nevertheless, Przezdziecki and colleagues' research in addition to the collection of studies with other populations, suggests that self-compassionate writing is a beneficial activity after thinking about or undergoing an unfavorable experience. Despite the increasing number of studies looking at the impact of self-compassionate writing on mental health, however, no studies to our knowledge have looked at the impact of self-compassionate writing on individuals who struggle with body image.

SELF-COMPASSION AND BODY IMAGE

In the past ten years interest in the relationship between self-compassion and body image has been increasing steadily. More recently there is a growing understanding of how self-compassion functions as a protective factor particularly for individuals with body image concerns and eating disorders. In a review of the literature by Braun, Park, and Gorin (2016), self-compassion is deemed a consistent source of protection against eating pathology in both clinical and non-clinical populations. Furthermore, across multiple studies, self-compassion appears to counteract the roots of eating pathology, such as negative body image and sociocultural factors. For instance, self-compassion is inversely related to the tendency to engage in physical appearance comparisons (Duarte, Ferreira, Trindade, & Pinto-Gouveia, 2015; Homan & Tylka, 2015) and to monitor one's appearance with body surveillance (Daye, Webb, & Jafari, 2014). Self-compassion is also a significant predictor of reduced thin-ideal internalization (Tylka, Russell, & Neal, 2015), decreased body shame (Liss & Erchull, 2015), lower levels of appearance-contingent self-worth (Neff & Vonk, 2009), and lower levels of body preoccupation (Wasylkiw, MacKinnon, & MacLellan, 2013). These ways of thinking about and acting toward one's body are risk factors for eating pathology (Polivy & Herman, 2002; Striegel-Moore & Bulik, 2007); yet, self-compassion acts as a buffer against these self-destructive behaviors.

In addition to reducing maladaptive patterns, self-compassion enriches healthy attitudes and treatment of one's body. Self-compassion is related to greater body image flexibility (Ferreira, Pinto-Gouveia, & Duarte, 2011; Daye, Webb, & Jafari, 2014), body appreciation (Homan & Tylka, 2015; Wasylkiw, MacKinnon, & MacLellan, 2013), and intuitive and mindful eating (Schoenefeld & Webb, 2013).

Daily diary studies offer insight into how self-compassion influences attitudes and behaviors on a day-to-day basis. Kelly and Stephen (2016) conducted a daily diary study with college women over seven days, and found that on days when participants reported higher levels of self-compassion, they also reported increases in intuitive eating, body appreciation, and body satisfaction. Moreover, average levels of self-compassion throughout the week predicted average levels of body image and eating behavior. These findings illustrate that self-compassion can

change from one day to the next, and that when women treat themselves with more self-compassion than is standard for them, they tend to enjoy improved body image and adaptive eating habits (Kelly & Stephen, 2016). This study reinforces findings from similar research conducted by Breines, Toole, Tu and Chen (2014).

Breines and colleagues (2014) conducted a daily diary study and laboratory evaluation on how self-compassion relates to disordered eating habits and body shame. From the diary data, researchers found that on days when participants indicated higher appearance-related self-compassion, they engaged in less disordered eating behaviors. In the lab participants wrote about a perceived body flaw and completed a series of surveys on body shame, self-esteem, appearance-related self-compassion, and anticipated disordered eating. Afterward, they performed a neutral task during which chocolate was made available to eat. The laboratory assessment revealed that self-compassion predicted lower body shame and lower anticipated disordered eating. This study's findings highlight self-compassion as an effective approach to soothe women's feelings of shame about one's body and establish healthier attitudes and eating behaviors (Breines, Toole, Tu, & Chen, 2014).

Given that self-compassion is a practice that can be learned, it makes sense to teach this skill to help girls and women cultivate positive body image. Albertson, Neff, and Dill-Shackleford (2014) found evidence that three weeks of self-compassion training could manifest changes in body image (2014). In this study, women first took baseline measures of body dissatisfaction, body shame, body appreciation, contingent self-worth, and self-compassion. The experimental group was instructed to simply listen to guided self-compassion meditations for three weeks, while the control group was waitlisted. After three weeks passed, participants completed the same surveys from baseline. Results showed decreases in body dissatisfaction and body shame and increases in self-compassion and body appreciation in the experimental group compared to the waitlist control. Moreover, the experimental group had reduced contingent self-worth based on appearance after the three-week intervention.

Toole and Craighead (2016) conducted a very similar, but shorter study on self-compassion meditation training for women with body image distress. Their research design included the same self-report measures from the study by Albertson, Neff, and Dill-Shackleford (2014), but only spanned 6 days. College-aged women with appearance concerns came into the lab to complete the questionnaires and then listen to a 20-minute compassionate body scan meditation. For the next 6 days, participants were sent emails every morning inviting them to listen to the self-compassion meditation included in the email. A week from the initial lab visit, participants came back into the lab to complete the same surveys. Results on body appreciation and appearance-contingent self-worth were consistent with the prior study in that participants reported greater body appreciation and lower appearance-contingent self-worth after listening to the self-compassion meditations compared to the control group (Toole & Craighead, 2016). However, participants did not exhibit decreases in body shame or body dissatisfaction, which may be due to having less contact with self-compassion relative to the three-week meditation training (Toole & Craighead, 2016).

In sum, it appears that even relatively short encounters with self-compassion, beginning with as little as one week up to three weeks, can enrich body appreciation and shift the amount of worthiness participants attach to their bodies, which is pivotal considering that appearance tends to be the category to which women attribute most of their self-worth (Albertson, Neff, & Dill-Shackleford, 2014; Harter, 1999; Toole & Craighead, 2016). By alleviating the merciless self-judgment that is often evoked by failing to meet elusive physical appearance expectations, self-compassion has the capacity to inspire a healthy self-concept and enhance psychological well-being.

As individuals practice self-compassion, they learn to transform difficulties into opportunities for growth. When women inflict emotional pain through ruthless self-criticism of their bodies or engage in unhealthy eating behaviors, self-compassion offers a refuge. Self-compassionate individuals are, by definition, less judgmental of themselves and recognize other people as a source of connection rather than a cause for feeling separate and alone. When women

compare their bodies and evaluate their attractiveness relative to others, they are forgetting a core component of self-compassion—common humanity. All humans have bodily imperfections, and being mindful of this shared experience can help women cope with their anticipated inability to meet socially prescribed standards of beauty. The healing nature of self-compassion, particularly when expressed in writing, allows women to develop the skill of caring for themselves.

Integrative Analysis

In the context of body image research, there is a need to focus more on the cultivation of protective factors that can prevent body dissatisfaction, the onset of eating pathology, and associated psychological distress (Grogan, 2010). To change the normative discontent of women in Western societies to a norm of self-acceptance, researchers need to focus on intervention programs designed to increase positive body image. Further understanding of the mechanisms that encourage girls and women to have healthier attitudes about their bodies has great implications for decreasing the prevalence of eating disorders, depression, and anxiety associated with body image concern (Avalos, Tylka, & Wood-Barcalow, 2005; Wood-Barcalow, Tylka, & Augustus-Horvath, 2010).

Self-compassion addresses fundamental issues in women's body image concerns as framed by social comparison theory and objectification theory. Mindfulness of societal pressures, internalized ideals, and media consumption can enlighten women about the many forces that influence body image. Self-compassion entails paying attention to the present moment, which enables women to be more observant of their tendency to make appearance comparisons or to view objectifying media. Likewise, being mindful about food choices can motivate women to appreciate their bodies and nourish themselves with wholesome meals. With this awareness, women can also make healthful lifestyle choices about the media they choose to consume, and they can learn to question their interpretations of their appearance-based comparisons. Moreover, self-compassion allows women to recognize how body image concerns are a collective experience. Instead of feeling ashamed and less worthy than other women, self-

compassion can help women feel connected to others by recognizing their intrinsic worthiness regardless of body shape or size. The self-kindness embedded in self-compassionate action cannot be underestimated as a radical way to bolster positive body image and counteract the damaging impacts of self-objectification and social comparison. With body dissatisfaction considered normative, it is easy to scrutinize one's body and feel justified in doing so. Yet, choosing to appreciate one's body and treat it with respect is a profound act of self-kindness that supports health and well-being. Overall, self-compassion can serve as a healthy response to self-objectification and social comparison and minimize the deleterious consequences of body shame and body dissatisfaction on physical and psychological well-being.

Proposed Study

Body dissatisfaction and body shame are all too common experiences for women in Western societies. In light of the harmful consequences associated with these negative attitudes, it is important to find ways to help women protect themselves from these outcomes. It is not possible for women to entirely avoid exposure to media, ignore other female bodies in their environment, disregard opinions of friends and family, or prevent unconscious comparisons made with others; therefore, women must learn how to cope with these thoughts in order to maintain a positive body image and healthy attitude toward themselves.

The primary intention of the proposed study is to examine self-compassion as a protective factor for body image against the adverse impacts of self-objectification and social comparison. The proposed study involves an experiment and writing task to explore this issue. Subjects will be exposed to photographs of idealized bodies and be prompted to compare their own bodies to a series of images. Rather than implicit comparison, participants will be explicitly instructed to compare their bodies to the pictures, which should promote effectiveness of the comparison activity and elicit negative body image outcomes according to previous studies (Cattarin, Thompson, Thomas, & Williams, 2000; Halliwell & Dittmar, 2005).

Next, participants will be randomized to one of three writing conditions – self-compassionate writing, expressive writing, and neutral writing. Expressive writing is characteristically focused on writing about traumatic, stressful, or emotional events (Pennebaker & Beall, 1986), and it is included as a comparison condition in view of previous research that indicates merely writing about difficult situations can relieve psychological distress and physical health symptoms (Frattaroli, 2006; Pennebaker & Chung, 2011). Though previous findings on expressive writing's connection to improved body image in particular have been mixed (Arigo & Smyth, 2012; Earnhardt, Martz, Ballard, & Curtin, 2002; Frayne & Wade, 2006; Lafont & Oberle, 2014), it will provide a strong contrast to the self-compassionate writing group because of its ability to help individuals process stressful experiences (Pennebaker, 1993). The neutral writing condition will serve as an active control. The measures completed after the writing task will assess state body dissatisfaction and body shame because both concepts are risk factors for disordered eating and psychological affliction (Stice, 2002; Stice, Ng, & Shaw, 2010; Noll & Fredrickson, 1998).

Research Questions and Hypotheses

RESEARCH QUESTION 1.

Does self-compassionate writing lead to reductions in state body dissatisfaction compared to expressive or neutral writing, while controlling for trait body dissatisfaction?

Hypothesis 1.

It is hypothesized that the self-compassionate writing task will have a positive influence on body image; therefore, individuals randomly assigned to the self-compassionate writing condition will report significantly less state body dissatisfaction compared to individuals randomly assigned to the expressive writing and neutral writing tasks. Differences between the expressive writing and neutral writing conditions are not hypothesized because it is not the focus of the proposed study and there are not clear expectations.

Rationale for Hypothesis 1.

Social comparison is a strong predictor of negative body image (Myers & Crowther, 2009), and research demonstrates that viewing pictures of idealized bodies is strongly connected to body dissatisfaction (Grabe, Ward, & Hyde, 2008; Groesz, Levine, & Murnen, 2002; Want, 2009). Furthermore, the isolated body parts are intended to provoke self-objectification, which is also associated with body image disturbance (Fredrickson & Roberts, 1997; Noll & Fredrickson, 1998; Tiggemann & Lynch, 2001). Self-compassion has been linked with lower levels of body dissatisfaction (Albertson, Neff, & Dill-Shackleford, 2013), and self-compassionate writing has been shown to alleviate the impact of recounting or experiencing distressing situations (Johnson & O'Brien, 2013; Leary, Tate, Adams, Allen, & Hancock, 2007; Odou & Brinker, 2014). Therefore, it is hypothesized that completing a self-compassionate writing activity after a physical appearance comparison task that will likely evoke unpleasant feelings will provide individuals the opportunity to cope with their emotions and feel more at ease, which in turn will protect their state body dissatisfaction after the physical appearance comparison task. Trait levels of body dissatisfaction will be controlled for to assure that any group differences in state body dissatisfaction can be attributed to the experimental procedure and not to pre-existing levels of this trait.

RESEARCH QUESTION 2.

Does self-compassionate writing lead to reductions in state body shame compared to expressive or neutral writing, while controlling for trait body shame?

Hypothesis 2.

It is hypothesized that the self-compassionate writing task will have a positive influence on body image; therefore, individuals randomly assigned to the self-compassionate writing task will report significantly less state body shame compared to individuals randomly assigned to the expressive writing and neutral writing tasks. Differences between the expressive writing and

neutral writing conditions are not hypothesized because it is not the focus of the proposed study and there are not clear expectations.

Rationale for Hypothesis 2.

In alignment with the rationale for Hypothesis 1, it is hypothesized that it will benefit individuals to complete a self-compassionate writing activity after the distressing task of having to make physical appearance comparisons to an idealized body and body parts. Social comparison, exposure to idealized bodies, and self-objectification are all elements of the physical appearance comparison task that research has established are strongly connected to body shame (Markham, Thompson, & Bowling, 2005; Monro & Huon, 2005). Self-compassion has been connected to lower levels of body shame (Breines, Toole, Tu, & Chen, 2013), which supports the hypothesis that the self-compassionate writing task will protect state body shame from the impact of social comparison and self-objectification. Trait levels of body shame will be controlled for to assure that any group differences in state body shame can be attributed to the experimental procedure and not to pre-existing levels of this trait.

METHODS

Participants

For this study, participants will be recruited from the Educational Psychology Department subject pool. The subject pool consists of undergraduate students currently enrolled in classes with a central focus on educational theory and psychological content within the Educational Psychology Department. For participating in this study, students will receive credit toward their course requirements. Students have the opportunity to choose the research studies in which they would like to participate in order to receive an equivalent of five hours of research credit. Female undergraduates of at least 18 years of age will be allowed to participate in this study regardless of other demographic characteristics.

An a priori power analysis was computed with G*Power 3.1.9.2. to estimate the appropriate sample size needed for suitable statistical power. At least 48 participants will be required to detect a medium effect size (Cohen's f = .25) with an alpha level of .05 and an estimated power of .80. This effect size falls within the range of the average effect sizes for social comparison and exposure to ideal bodies on body dissatisfaction (Want, 2009). This sample size is recommended for a linear multiple regression analysis. In consideration of possible attrition, a sample size of 90 participants will be sought from the subject pool to ascertain a sufficient sample. Analyses will be conducted using SPSS 21.0.0.

Measures (pre-experiment)

Demographics. These questions will ask for some personal information about the participants including their current year in school, age, sex, race/ethnicity, height, and weight.

Eating Disorder Inventory-3 – Body Dissatisfaction Subscale (EDI-3-BDS). The Body Dissatisfaction subscale of the Eating Disorders Inventory will be used to measure trait body dissatisfaction (Garner, 2004). The EDI-BDS comprises ten items and captures negative attitudes about the overall shape and size of the body (e.g., "I think my hips are too big"). A continuous

six-point scale is used with 1 (never) and 6 (always) as the anchors. This subscale has been commonly used in samples of clinical, college, and community individuals and displays sound psychometric properties with a reliability estimate of .91 (Garner, 2004).

Objectified Body Consciousness Scale (OBCS). Trait body shame will be evaluated with the Body Shame subscale from the OBCS. The eight items from the subscale are measured with a seven-point Likert scale of 1 (strongly disagree) to 7 (strongly agree) (McKinley & Hyde, 1996). The Body Shame subscale includes items such as "When I'm not the size I think I should be, I feel ashamed," and has a reported Cronbach's alpha of .75 and a test-retest reliability of .79. (McKinley & Hyde, 1996).

Measures (post-experiment)

Modified Eating Disorder Inventory-3–Body Dissatisfaction Subscale (modified EDI-3-BDS). State body dissatisfaction will be evaluated using modified versions of the ten items from the Eating Disorder Inventory-3 Body Dissatisfaction Subscale. For this measure, each item from the EDI-3-BDS will be prefaced by "Right now…" Only one item was altered further to convey state dissatisfaction, changing from "I feel bloated after eating a normal meal," to, "I feel bloated." (Garner, 2004).

Modified Objectified Body Consciousness Scale – Body Shame Subscale (modified OBCS-BSS). State body shame will be measured using four modified items from the Body Shame subscale of McKinley and Hyde's Objectified Body Consciousness scale (1996). For example, in place of "I feel like I must be a bad person when I don't look as good as I could," the item reads, "[Right now…] I feel bad about myself because of my body." This modified scale was used in the aforementioned diary study by Breines, Toole, Tu, & Chen (2014) and had good internal consistency ($\alpha = .83$).

Procedures

Prior to conducting the study, the researcher will submit a proposal of the research design, procedures, and materials to the Institutional Review Board for the Protection of Human Subjects (IRB) at the University of Texas at Austin. The IRB will verify that all guidelines of ethical research are met for this study prior to administration. The study will follow all ethical principles established by the American Psychological Association and the University's Department of Educational Psychology.

The online survey tool Qualtrics will be used for this research. Once participants select this study from the subject pool database, they will be sent a URL for the survey with one initial measure and a brief description. Completion of the Eating Disorder Inventory – Body Dissatisfaction Subscale (EDI-3-BDS; Garner, 2004) and the Objectified Body Consciousness Scale - Body Shame Subscale (OBCS-BSS; McKinley & Hyde 1996) will be required by a certain date. Please see Appendix B for the items on these measures. After this measure, participants will be asked to fill out their demographic information (age, sex, ethnicity, height, and weight). Please see Appendix C for demographic questions.

Once all participants have completed the pre-experiment measures, the researcher will then randomly assign the subjects to one of three possible writing conditions: self-compassionate writing, expressive writing, and neutral writing. After the researcher has randomly assigned participants to a writing condition, participants will be sent an email prompting them to sign up for a time slot to come to the University's campus and complete the experiment and second survey of post-experiment measures in a laboratory setting approximately one month later.

The experiment will begin with the physical appearance comparison task. First, the researcher will provide participants with images of five different women, with each woman exemplifying one of the five most common body shapes derived from the clothing industry, which are frequently referred to as the "apple," pear," "ruler," "cone," and "hourglass" shapes (Istook, Simmons, Devarajan, 2004). Participants will be asked to choose the body that they

consider to be their personal ideal body type, that is, the body they would most like their body to resemble. Women with apple body shapes are described as having narrow shoulders and hips with a larger chest and wide waistline. Pear-shaped women have wider hips, thicker thighs, and larger bottoms with small to medium chests. Women with ruler-shaped bodies typically have narrow shoulders and hips that are about equal in width. Cone-shaped women tend to have larger chests, wider shoulders, and narrow hips. Women with hourglass shapes are equally broad in shoulders and hips with a defined and narrow waistline. See Appendix D for examples of images and Appendix E for complete experiment instructions. Regardless of the ideal body shape chosen by the participants, the images shown will be flattering pictures that depict characteristics of idealized bodies. In other words, muscle definition and relative thinness will be represented in the images of all the body shapes. In the media, these physical standards are imposed upon women of all shapes despite the varying hip, chest, waist, and shoulder widths that these body shapes refer to (Istook, Simmons, Devarajan, 2004).

Depending on which body type the participants choose, a sequence of isolated body part images that correspond to the chosen ideal body type will appear one at a time. For instance, an image of a torso/stomach will be presented on the screen. Below the image the participant will be prompted to rate the attractiveness of this body part on a scale of 1 – 7, and to rate the attractiveness of her own torso/stomach in comparison to this image on a scale of 1 – 7, with 1 (not at all attractive) and 7 (extremely attractive) as anchors. The participant will be asked to complete this same task for other body parts including chest, arms, legs, back, buttocks, and hips. Each body part will be selected from a woman with a body that represents the ideal body type initially selected by the participant (i.e., if a participant chose "ruler" as her ideal, all images would be from women with a "ruler" body type).

Once the physical appearance comparison task is finished, participants will complete a writing activity depending on their randomly assigned condition. One group of participants will be given a self-compassionate writing assignment, a second group will be given an expressive

writing assignment, and a third group will be given a neutral writing assignment. For complete writing instructions for each condition please see Appendix F.

Participants in the self-compassionate writing condition will follow instructions modeled after those used in Leary, Tate, Adams, Allen, and Hancock's (2007) study. To induce feelings of self-compassion, participants will respond to three prompts. The first prompt is intended to evoke a sense of common humanity: "Please reflect on how you feel about your body in comparison to your ideal body shape. Write about ways in which others may share similar feelings." The second prompt aims to elicit feelings of self-kindness: "Write a paragraph about your perceptions of your body. Be kind and understanding of any flaws and imperfections the way you would be toward a close friend who expressed the same feelings about her body." The third prompt stimulates a mindful way of thinking: "Describe any thoughts and feelings that are coming up for you right now about your body. Try your best to be nonjudgmental and accepting of yourself."

Participants in the expressive writing condition will follow instructions adapted from Pennebaker, Colder, and Sharp's (1990) procedure. The expressive writing instructions will include three prompts to parallel the expected writing time of the self-compassionate condition. The three prompts will ask participants to focus on three body parts they do not like about themselves in comparison to the ideal body they chose. Each question will ask participants to: "Please write a paragraph on how you feel about this particular body part of yours in comparison to your ideal body. As you write, express your emotions freely and allow yourself to explore whatever thoughts and feelings arise."

Participants in the neutral writing condition will be also be given three prompts to approximate the same writing time as the other two groups. The first prompt will be: "From memory only, please list and describe the size, shape, and color of five items that you keep in your school bag (e.g., a backpack or purse.) Second: "Please list the classes you are currently enrolled in. Give a neutral and thorough description of the class material." Third: "Please write in detail about this week's weather patterns so far – make sure to mention the wind, temperature,

and approximate humidity." These prompts are designed not to elicit emotional responses and are estimated to take similar time and effort in comparison to the other writing conditions.

All writing conditions will be shown the following sentence to encourage openness and authenticity in the writing: "Remember your responses are completely anonymous and your writing is confidential." When participants complete their writing activity, they will be directed to another page of short questionnaires to complete the post-experiment measures.

State body dissatisfaction and state body shame will be assessed with the following scales, respectively: Modified Eating Disorder Inventory-3–Body Dissatisfaction Subscale (EDI-3-BDS; Garner, 2004) and Modified Objectified Body Consciousness Scale – Body Shame Subscale (OBCS-BSS; McKinley & Hyde, 1996). Please see Appendix G for the items on each outcome measure.

Regardless of writing condition, at the end of the study, all participants will be given a handout with resources to cope with body image concerns including references to the University's Counseling and Mental Health Center. See Figure 2 for the study procedure flow, indicating the order of measures/scales and activities.

DATA ANALYSIS AND EXPECTED RESULTS

To investigate the research questions statistical analyses will be performed using multiple regressions to look for the impact of writing condition on body dissatisfaction and body shame, while holding other variables constant. In order to disentangle the effect of writing on body dissatisfaction and body shame perceptions, two separate multiple regression analyses will be conducted. In each case, state body dissatisfaction or state body shame will be regressed on one control variable (trait body dissatisfaction or trait body shame, respectively) and the target variable—writing condition. Regression analysis allows the unique effect of a variable to be observed by statistically controlling for other variables included in the model. Analyses are hypothesized to show that above and beyond the variance accounted for by trait body dissatisfaction and body shame, writing condition will explain a significant increase in variance. This will clearly demonstrate the unique variance provided by the writing condition, which is expected to illuminate self-compassionate writing as a powerful tool to protect state body dissatisfaction and state body shame on the spot. These analyses are used by recommendation of the meta-analyses completed by Groesz, Levine, & Murnen (2002) and Want (2009) suggesting that trait levels are necessary to control for because the negative effect of exposure to ideal images is heightened when women have prior body image concerns.

Preliminary Analyses

After data collection and data cleaning, a series of preliminary analyses will be conducted to confirm the data fulfill the statistical assumptions for regression analyses. Descriptive statistics will be computed using SPSS to determine if the mean, standard, deviation, maximum, minimum, and frequencies of each variable are plausible and reasonable. This will also highlight any problematic values that may indicate errors or misentered data. Scatterplots of each variable and graphs of standardized residuals will provide visuals of whether or not the distribution is normal. In the case of normal distribution, outliers will be detected with a two-sided Grubb's test that will test for outliers one at a time.

Assumptions of regressions to be tested in the preliminary analysis are the normality of the residuals, homoscedasticity (i.e., homogeneity of variance), linearity, and independence of errors. First, the researcher will inspect residual plots to conclude a normal distribution of the dependent variables. Second, homoscedasticity will be confirmed with Levene's test to look for equality of residual variances. An alpha level greater than .05 will enable the researcher to fail to reject the null hypothesis that there is no difference among population variances, and this will indicate the assumption has been met. Third, linearity will be assessed through scatterplot analyses of the covariates and dependent variables. Fourth, the independence of errors assumption will be considered met since the pre-experiment measures are a linear prediction of the post-experiment measures and were assessed prior to the experiment.

TEST OF RESEARCH QUESTION 1.

To discover whether there is a main effect for writing condition on state body dissatisfaction while controlling for the effects of trait body dissatisfaction, a sequential regression analysis will be conducted on SPSS. To compare the effectiveness of the three different writing conditions, two dummy variables will be created. In the first dummy variable self-compassionate and expressive writing will be coded as zero and neutral writing will be coded as 1. In the second dummy variable self-compassionate and neutral writing will be coded as zero and expressive writing will be coded as 1. The self-compassionate writing condition will be the reference group, coded as zero for both dummy variables. This will allow the researcher to look for hypothesized differences between the self-compassionate writing and expressive writing conditions (dummy variable 1) as well as the self-compassionate writing and neutral writing conditions (dummy variable 2).

First the control variable (trait body dissatisfaction) will be entered into the model followed by the two dummy variables with state body dissatisfaction as the dependent variable. To determine the significance of the overall model, the researcher will evaluate the F statistic at an alpha level of .05. If the p-value is less than or equal to .05, the null hypothesis that writing

condition does not affect state body dissatisfaction will be rejected. This indicates there is a significant amount of variance explained by the model.

Next the betas will be evaluated to determine significance of group differences. If dummy variable 1 (EXPRESSIVE) has a p-value less than or equal to .05, then there are significant differences between the group means of the expressive writing condition and self-compassionate writing condition, while controlling for trait body dissatisfaction. If dummy variable 2 (NEUTRAL) has a p-value less than or equal to .05, then there are significant differences between the group means of the neutral writing condition and self-compassionate writing condition, while controlling for trait body dissatisfaction. According to the hypothesis, it is anticipated that both dummy variable 1 (EXPRESSIVE) and 2 (NEUTRAL) will have positive and significant betas, indicating increased reports of state body dissatisfaction in the expressive and neutral writing groups compared to self-compassionate writing.

TEST OF RESEARCH QUESTION 2.

The same analysis will be performed with state body shame as the outcome variable. A sequential regression analysis will be conducted to determine whether there is a main effect for writing condition on state body shame while controlling for the effects of trait body shame. Two dummy variables will be created to compare the effectiveness of the three different writing conditions. In the first dummy variable self-compassionate and expressive writing will be coded as zero and neutral writing will be coded as 1. In the second dummy variable self-compassionate and neutral writing will be coded as zero and expressive writing will be coded as 1. The self-compassionate writing condition will be the reference group, coded as zero for both dummy variables. This will allow the researcher to look for hypothesized differences between the self-compassionate writing and expressive writing conditions (dummy variable 1) as well as the self-compassionate writing and neutral writing conditions (dummy variable 2).

In the sequential regression, the control variable (trait body shame) will be entered into the model first, followed by the two dummy variables, and state body shame as the dependent

variable. The significance of the overall model will be found by evaluating the F statistic at an alpha level of .05. If the p-value is less than or equal to .05, the null hypothesis that writing condition does not affect state body shame will be rejected. This indicates there is a significant amount of variance explained by the model.

Similar to research question 1, the betas will be evaluated next to determine significance of group differences. If dummy variable 1 (EXPRESSIVE) has a p-value less than or equal to .05, then there are significant differences between the group means of the expressive writing condition and self-compassionate writing condition, while controlling for trait body shame. If dummy variable 2 (NEUTRAL) has a p-value less than or equal to .05, then there are significant differences between the group means of the neutral writing condition and self-compassionate writing condition, while controlling for trait body shame. According to the hypothesis, it is anticipated that both dummy variable 1 (EXPRESSIVE) and 2 (NEUTRAL) will have positive and significant betas, indicating increased reports of state body shame in the expressive and neutral writing groups compared to self-compassionate writing.

LIMITATIONS

Due to the novelty of this study's methodology, it is vital to mention its possible limitations. First, and perhaps most importantly, the writing manipulation may not reliably induce feelings of self-compassion. Although the self-compassionate writing prompt is modeled after other successful experiments (Johnson & O'Brien, 2013; Leary, Tate, Adams, Allen, & Hancock, 2007; Odou & Brinker, 2014), participants may not be familiar with how to be gentle toward themselves or they may not be comfortable accessing tender emotions in an experimental setting.

Similarly, it is possible that the physical appearance comparison task may not produce feelings of state body dissatisfaction or state body shame. If the participants do not feel any distress after comparing their body to a supposedly more desirable body, results will not likely show an effect from any of the writing prompts. Participants who appear unaffected by the physical appearance comparison task may possess more durable positive body image, but this may also restrict significant findings between conditions if participants are not impacted by the physical appearance comparison task. Unfazed participants may also signify weak external validity; and, if the experiment does not sufficiently resemble real-world situations, participants' responses may not be accurate representations of their feelings. Therefore, the experiment may lack effectiveness and generalizability. However, given the profusion of electronic images in Western societies, it is probable that the women in this study will have encountered similar visuals in their everyday lives, which would improve external validity and generalizability.

Third, there are some variables that are not accounted for in this study that may influence the findings of the experiment. For instance, women with heightened anxiety may be more vulnerable to experiencing distress from the physical appearance comparison task (Owen & Spencer, 2013), and women with depression may be more receptive to the benefits of the writing assignments (Baikie, Geerligs, & Wilhelm, 2011; Pauley & MacPherson, 2010). Additionally, depression and body dissatisfaction are frequently concomitant (e.g., Quick, Eisenberg,

Bucchianeri, & Neumark-Sztainer, 2013). Thus, including these variables would likely contribute to explaining variance. Fourth, there is little ethnic and racial diversity in the subject pool, which hinders the ability to examine differences in diverse populations despite substantial evidence of variability in body image depending on race and ethnicity (Grabe & Hyde, 2006; Wildes, Emery, & Simons, 2001).

SUMMARY AND IMPLICATIONS

This proposal uses an integrated model of social comparison and objectification theory to illustrate the development of women's body image disturbance. Western media influence is recognized as a leading contributor of body dissatisfaction and body shame by objectifying women and perpetuating comparison to physical ideals. Self-compassion is presented as a valuable source of resilience for women's body image. The proposed study's objective is to illustrate the protective nature of self-compassion in the form of self-compassionate writing performed after an activity that requires participants to engage in social comparison and self-objectification. The self-compassionate writing condition is hypothesized to protect state body dissatisfaction and body shame by awakening the nurturing qualities of self-kindness, mindfulness, and shared humanity. In comparison to expressive writing and neutral writing, the self-compassionate writing condition is anticipated to have significantly lower reports of body dissatisfaction and body shame given that it fosters comforting awareness and emotional warmth that the other writing conditions do not offer.

Since there is a budding interest in the qualities that generate positive body image, the proposed study will contribute to the literature by exploring the prospective role of self-compassion as a protective factor. The distinctive methodology will also provide researchers with an innovative approach to examine possible buffers or resilience strategies in the face of self-objectification and social comparison. If self-compassion, a teachable skill with notable impacts on well-being, can make a difference in this short-term and relatively implicit context, then self-compassion training has potential to help individuals protect themselves against the physical and psychological risks of social comparison and self-objectification. There is a critical need to help women cultivate healthy and proactive responses to the sociocultural influences that are often toxic to body image, and self-compassionate writing is an easily learned tool to do just that. Results from the proposed study are expected to provide evidence for self-compassionate writing as an untapped resource of coping and resilience. By relating to discomfort about

physical appearance with a sense of calm awareness and benevolence, self-compassionate writing can be a practice that women implement to help alleviate their suffering caused by body shame and body dissatisfaction. If women were taught to relate to themselves self-compassionately, there may very well be a striking decrease in the prevalence of eating disorders, depression, and anxiety associated with negative body image. This proposed study has far-reaching implications to deem self-compassion an essential and enriching skill for women to develop, which may help to eventually change the normative discontent to normative self-acceptance.

ADDENDUM

An Evaluation of a Self-Compassion

Body Image Intervention

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PART 1: PROGRAM DESCRIPTION

Given the public health risk that negative body image presents, it is necessary to evaluate the effectiveness of a potential intervention designed to help women develop healthy attitudes toward themselves and cultivate psychological and physical well-being. The proposed study investigates self-compassion as a protective factor against self-objectification and social comparison through a writing assignment. The expected results from this study may suggest the need for a more thorough and practical evaluation of a comprehensive body image intervention.

The Self-Compassion Body Image Program (SCBIP) is an interactive, self-reflective program composed of eight sessions over the course of eight weeks that discuss body image concerns and self-compassion to help women cultivate body appreciation and healthy attitudes towards themselves. SCBIP is modeled after the Mindful Self-Compassion (MSC) program developed by Kristin Neff and Chris Germer (2012). A randomized control-trial of MSC found significant increases in self-compassion, mindfulness, compassion for others, and life satisfaction as well as decreases in depression, anxiety, stress, and emotional avoidance (Neff & Germer, 2012). Therefore, SCBIP has the potential to address both the foundation and indications of negative body image.

Program Goals

The three essential elements of self-compassion – mindfulness, common humanity, self-kindness – will be at the root of SCBIP (Neff, 2003). Each session will fundamentally integrate the practice of self-compassion through the formatting of the program, which includes group discussions (common humanity), increased awareness of thoughts and feelings about the body through experiential exercises (mindfulness), and encouragement of kind speech toward themselves and others through journaling and in-class activities (self-kindness). This program design will help instill self-compassion by providing the opportunity for the facilitators and participants to embody the qualities of self-compassion in each session. Self-compassion has the potential to enrich life satisfaction and gratitude, as well as decrease feelings of stress, anxiety,

and depression by helping participants learn how to respond to life with openness, connection, and patience.

General Organization of Program

SCBIP is organized by eight topics that will be covered during each 2.5 hour session: 1) media literacy; 2) body dissatisfaction and body shame experiences; 3) self-compassion overview; 4) mindfulness; 5) common humanity; 6) self-kindness; 7) self-compassionate practices; 8) body appreciation and gratitude. The transactions and their levels of inference for each session are explained in more detail in the following paragraphs.

The first session of the self-compassion intervention for body image would start with the topic of media literacy to begin raising the participants' awareness about the myriad influences they are exposed on a daily basis. Media literacy is a way of increasing cognizance about the cultural messages being sent by the media. Discussions on media literacy in previous interventions encourage participants to question the validity of media messages and to challenge the physical appearance ideals put forth by television, film, and advertising. Media literacy has been included in several successful body image interventions and has been shown to decrease body dissatisfaction and disordered eating habits (Yamamiya, Cash, Melnyk, Posavac, & Posavac, 2005). Therefore, media literacy is an essential part of a body image intervention because media has such a potent impact on women's perceptions about their bodies.

Furthermore, since mindfulness is a core component of self-compassion, it is essential to foster mindfulness about media consumption to help the participants become more attentive to how their media choices influence their attitudes toward their bodies. The media literacy session transactions are group discussions about the media and how the participants interpret what they see, how it makes them feel, and what they can do about it.

The second session covers body dissatisfaction and body shame. This session will help the participants be conscious of how the perceptions of their bodies make them feel. Since body dissatisfaction and body shame have been associated with depression, negative affect, and eating

disorders (Stice, 2002), it is important for the participants to recognize the detrimental outcomes of judging and resenting one's body. To decrease negative thoughts about one's body, the participants must be aware of their negative thoughts and how these thoughts arise from patterns of behavior such as social comparison and self-objectification. The transactions of the second session involve group discussions and self-reflection activities through journaling and mindfulness practices. Since this particular session may bring up sensitive and tender feelings, participants will be assigned to do a self-compassionate writing activity for homework. It will provide a useful transition to talk about self-compassion in more detail the following week.

The third session introduces and defines self-compassion. All three components will be talked about briefly (because the next three weeks will talk about each component separately and in-depth). The third session transactions include an introduction to the definition of self-compassion and group discussions about the self-compassionate writing homework assignment.

The fourth session talks in detail about mindfulness. As mentioned, mindfulness is a necessary element to self-compassion because it involves being open and accepting of the present moment and aware of one's thoughts and feelings without judgment. Severe emotional distress can come from overidentifying with negative thoughts and feelings or from resisting the present moment. Mindfulness is an excellent tool to help individuals get perspective on whatever is happening and to allow thoughts and feelings to arise, stay for awhile, and eventually go away. The more individuals resist the emotional pain, the more it persists and creates suffering. The more women wish their bodies looked differently and feel they should be more beautiful in order to be worthy, the worse women will feel about their current situation. Instead, if women become aware of feelings of inadequacy, they can notice their discomfort with calm presence and then have a clear mind to know how to respond to their suffering—that is, with kindness and understanding. In the fourth session, the transactions are a series of mindfulness exercises, such as mindful breathing, walking meditation, visualization, progressive muscle relaxation, and body scan. These activities will give participants opportunities to become familiar with being open and accepting to their thoughts, feelings and sensations in their bodies.

The fifth session discusses common humanity. A lot of group discussion occurs on this day to illustrate the shared experience of body dissatisfaction and body shame. By this time the participants will have established a trusting and safe connection with one another, which creates space for them to be open about their personal experiences. This connection and trust allows the participants to be vulnerable and share about their own body image issues. Being authentic about body image issues gives permission for others to be honest about their struggles and allows women to understand they are not alone in their feelings, which is fundamental to the understanding of common humanity. The transactions of the fifth session will be small group discussions with periods of self-reflective journaling and mindfulness practices.

The sixth session will be focused on self-kindness. Self-kindness is a way to change the self-critical and self-judgmental views of one's body to one of loving kindness and appreciation. The transactions of this session include practices of reframing negative self-talk with self-kindness in small groups and journaling exercises. Participants will brainstorm ways to be kind to themselves and make commitments to say kind things to themselves whenever they catch themselves in a negative thought pattern about their bodies. The mindfulness that they have been practicing will enhance their ability to remember to be kind and caring to themselves.

The seventh session will integrate all three components of self-compassion into a focused self-compassionate writing and self-compassionate meditation workshop. Every week participants will have been given homework assignments of self-compassionate writing prompts and guided meditations related to the topic of that week's session. This session in particular has transactions completely devoted to practicing self-compassion through writing, meditation, and self-talk. Participants will be given time during the session to share the self-compassion practices that have helped them feel better throughout the program so far. This session's focus on cultivating self-compassion skills will enrich the participants' confidence about how to be self-compassionate in difficult moments on the spot and how to spread self-compassion into other areas of life. The more holistically self-compassionate practices are applied, the more opportunities participants will have to enhance their body image and psychological well-being.

The eighth session will be focused on body appreciation and gratitude. Previous studies have found that gratitude and body appreciation are also protective factors against negative body image (Halliwell, 2013). Therefore, the session will integrate self-compassionate thoughts with grateful and appreciative thoughts about one's body. The transactions for the last session are group discussions, self-compassion practices, and reflection on what the participants have learned and how they will implement their newfound knowledge and skills acquired from their SCBIP experience.

First Order Outcomes

SCBIP is designed to enhance female college students' body image through self-compassion practices and thereby yield first order outcomes such as increased body appreciation, decreased body dissatisfaction and body shame, and increased self-compassion. Other psychological well-being outcomes that the program is expected to produce are improved life satisfaction and gratitude and lower levels of depression, anxiety, and stress given the established relationships between self-compassion and these variables.

Second Order Outcomes

Anticipated second order outcomes include decreases in disordered eating and weight control behaviors such as restricted intake of calories, binging, over-exercise, purging meals, or use of laxatives or dietary pills.

Evaluation Approach

A combination of Applied Research and Value-Oriented approaches will be used for the implementation of the Self-Compassion Body Image Program. In light of the demand to reduce the prevalence of women's body dissatisfaction and disordered eating (Paxton, 2000), which frequently contribute to the development of eating disorders and mental illness (Stice, Ng, & Shaw, 2010), this program is driven by a great need to improve women's psychological and

physical wellness. Furthermore, several body image interventions have been facilitated with a broad range of results (Yager & O'Dea, 2008). The effectiveness of this program as a viable alternative to pre-existing interventions is another motivating force for its evaluation. Therefore, this program is subject to all the advantages and disadvantages of these research perspectives. Applied Research allows for more experimental control over variables that increases statistical power. Values Oriented approach encourages the program to be tailored to the needs of the people afflicted by the problem, which enriches the quality of the program curriculum. However, because it is Applied Research, the program cannot be continuously adjusted because that would violate the controlled experimental environment. Additionally, interpretation of which needs are most important to be addressed may lead to disagreement among evaluators. Overall, this mixed method approach allows researchers to design the most inclusive and relevant program to alleviate body image concerns and promote resiliency and coping skills.

The transactions of each session are relatively low inference, which means they reflect real-life conditions. For example, in session 1, the program will make use of real media that the participants are regularly exposed to and ask the participants to connect the group discussion and activities directly to the relevant media. Participants can bring this skill directly to their daily lives. Additionally, mindfulness, common humanity, and self-kindness are all elements that participants can become more aware of in daily life by becoming more present with their thoughts and feelings (mindfulness), more connected to others (common humanity), and more kind to themselves in their thoughts, speech, and actions (self-kindness). The self-compassionate writing practice and guided meditations may be slightly higher inference because the outcomes of these exercises are to elicit feelings of openness, acceptance, and understanding of one's experience and greater appreciation and gratitude for one's body. In other words, although the exercises may be used outside of the program context, the skills taught in the SCBIP are not necessarily explicitly or naturally occurring activities to be found in real-world conditions.

Evaluation Analysis

To evaluate the transactions a combination of quantitative and qualitative measurements will be administered. To look at pre- and post-program levels of body image, psychological well-being, and coping skills eleven quantitative measures will be given at the first SCBIP session and the last SCBIP session. Participants will also be invited to complete follow-up measures at 1 month, 3 months, and 6 months after program completion to evaluate sustainability and strength of the effects.

To gather comprehensive data participants will be asked to complete open-ended written questions at the first and last SCBIP session that ask them to discuss what they appreciate, like, dislike, want to change, and are ashamed of about their bodies. See stakeholder question #1 for more detail.

After program completion participants will be invited to participate in one of two sets of interviews about their experience with SCBIP. The first round of interview questions will delve into how participants experienced the practices that were taught in the program; in particular, the interview will seek to understand which activities were most beneficial to the participants, and why. This will inform whether or not the program design needs to be adjusted to better meet the needs of the target population. Participants will also be asked to define and express what self-compassion and mindfulness mean to them personally. This will provide a greater understanding of how participants are interpreting and integrating the knowledge into their personal lives. Perhaps the vocabulary participants use to describe these constructs will indicate how facilitators can communicate and teach the curriculum with an authentic and relatable voice. In sum, these interview questions are written to determine the coping skills that participants developed over the eight weeks. See stakeholder question #5 for more detail.

In the second round of interviews, the central questions ask about the overall program and what influence it has had on the participants' thoughts about media, attitude toward their bodies, eating behaviors, daily habits, and quality of life. These questions draw from what the

participants appeared to learn from the program. With a greater understanding of which transactions were successfully received by the participants amidst the various constraints, program facilitators will know what concepts and activities need more emphasis and clarity, and which ones are resonating most with the participants. See stakeholder question #6 for more detail.

Lastly, it is important to assess the impact this program has on social climate since support and acceptance from peers in regard to physical appearance is crucial in developing healthier attitudes toward body image. Small groups of participants around four to five individuals will be recruited for focus groups a couple of weeks after program completion. These will be informal discussions about how physical appearance plays a role in their friendships and social dynamics at school or in their community. Although a facilitator will be there to moderate and guide discussion, the idea of the focus groups is to stimulate authentic conversation that girls and women would have about their bodies, food, beliefs, and behaviors on a typical day.

As discussion unfolds, facilitators will take notes on the frequency and intensity of dialogue involving body insecurities, such as body shaming and co-rumination, which can be defined as engaging in extensive mutual sharing of problems and shared focus on worries and fears with peers or close others (Rose, 2002). Given that this focus group will take place after eight weeks of transformative self-reflection, the facilitators will also prompt the participants to discuss how they appreciate and value their bodies. This may prove to be even more vulnerable than discussing body dissatisfaction, but will be a necessary gauge of how deeply participants embody the changed mindsets toward themselves.

Since nonverbal communication is an essential feature of expression, facilitators will also consider how the participants' body language supports or negates what is verbalized. This will allow facilitators to better understand the group dynamics and determine the quality of the social climate. If there had been pre-existing issues of bullying based on physical appearance before the program, then the facilitators would ask participants to address how things have changed or not. Participants will also be given to the chance to provide written responses to the focus group

questions in case they have anything to add to what was said and unsaid. See stakeholder question #7 for more details.

The written and interview questions and focus groups will complement the quantitative data and provide deeper insight into the participants' experience. Additionally, this will enhance the evaluation of the program by learning what aspects of the program were most effective and beneficial according to the participants. Qualitative data collection illuminates the subtleties, richness, and depth of experience that quantitative data cannot portray in numbers.

For the quantitative outcomes, analysis will entail investigating correlations and differences in pre- and post-program mean scores. Once the interview and focus groups are transcribed, the qualitative analysis of the written and interview questions and focus group discussions will begin with open coding to look for distinct themes or categories in the data. Open coding involves classifying interview responses and organizing the qualitative data by various themes, concepts, and categories. Once responses are collated by shared ideas, we can propose definitions about the developing themes. Then axial coding will be the method used to look for the emergence of connections among concepts. This integrates the data and provides a cohesive understanding of the most prominent concepts. With both open and axial coding, researchers can better understand the nuanced interrelationships of the variables and see clearly how the program is affecting the participants on deeper levels than what only quantitative data can capture. Overall, this thorough analysis will determine if this program is a ready to be implemented in schools, organizations, and communities.

PART 2: PROGRAM DECOMPOSITION

Diagram 1: High Level Explanation of Complete Self-Compassion Body Image Program

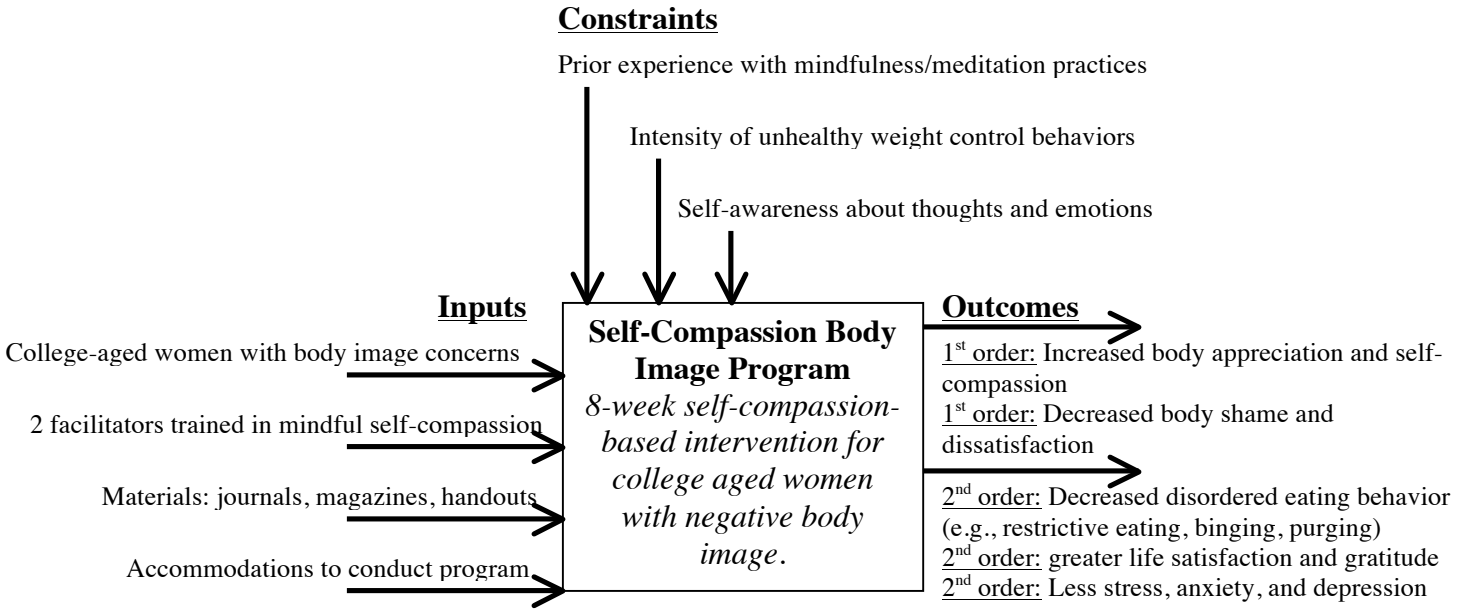


Diagram 1 Description: The Self-compassion Body Image Program (SCBIP) is an interactive, self-reflective program to help women cultivate emotional resilience and coping skills in regards to body image. College-aged women with self-reported body image concerns will participate in this program led by two facilitators trained in mindful self-compassion skills. Materials for the interactive exercises and accommodations for the program are necessary for a successful program. Participants' prior knowledge of mindfulness and meditation practices constrains the outcomes. Additionally a participant's willingness and capacity to be self-aware of thoughts and emotions presents a constraint on their potential to develop self-compassion. Second order outcomes including changes in healthy attitudes and behaviors are constrained by the participants' level of body image concerns and tendency to control their weight through extreme diets or exercise.

Diagram 2: Breakdown of Program Transactions (a select few, not all)

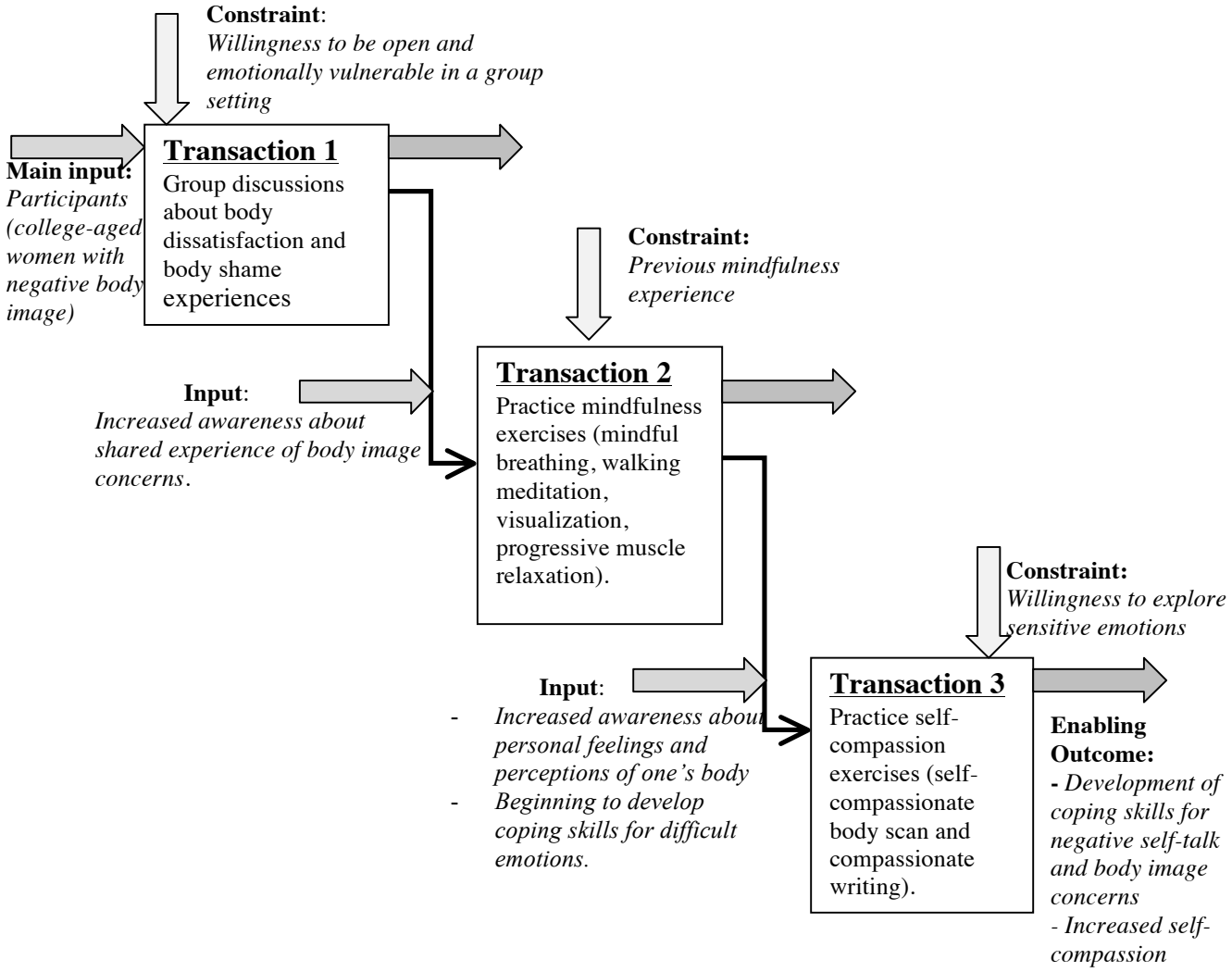


Diagram 2 Description: The Self-compassion Body Image Program (SCBIP) provides a variety of activities for the participants to learn about themselves and develop new skills and ways of thinking about their body and who they are. The activities in SCBIP build upon one another. As participants progressively gain greater awareness and understanding about their thoughts, beliefs, and actions, they learn exercises and practices to use to help them cope with their personal challenges. By doing this in a group setting, the participants connect with others and learn from their experiences. As the program evolves the exercises go deeper, and participants will refine their knowledge about which tools work for them and why. Prior experiences and willingness to be open and vulnerable are the primary constraints for the activities. However, as the participants become more familiar with their group and feel safe to be open in this setting, this allows them to get more out of the practices. The enabling outcomes referred to here are the mechanism by which participants will reach the first order outcomes.

Diagram 3: Breakdown of Self-compassion Exercises (Transaction 3)

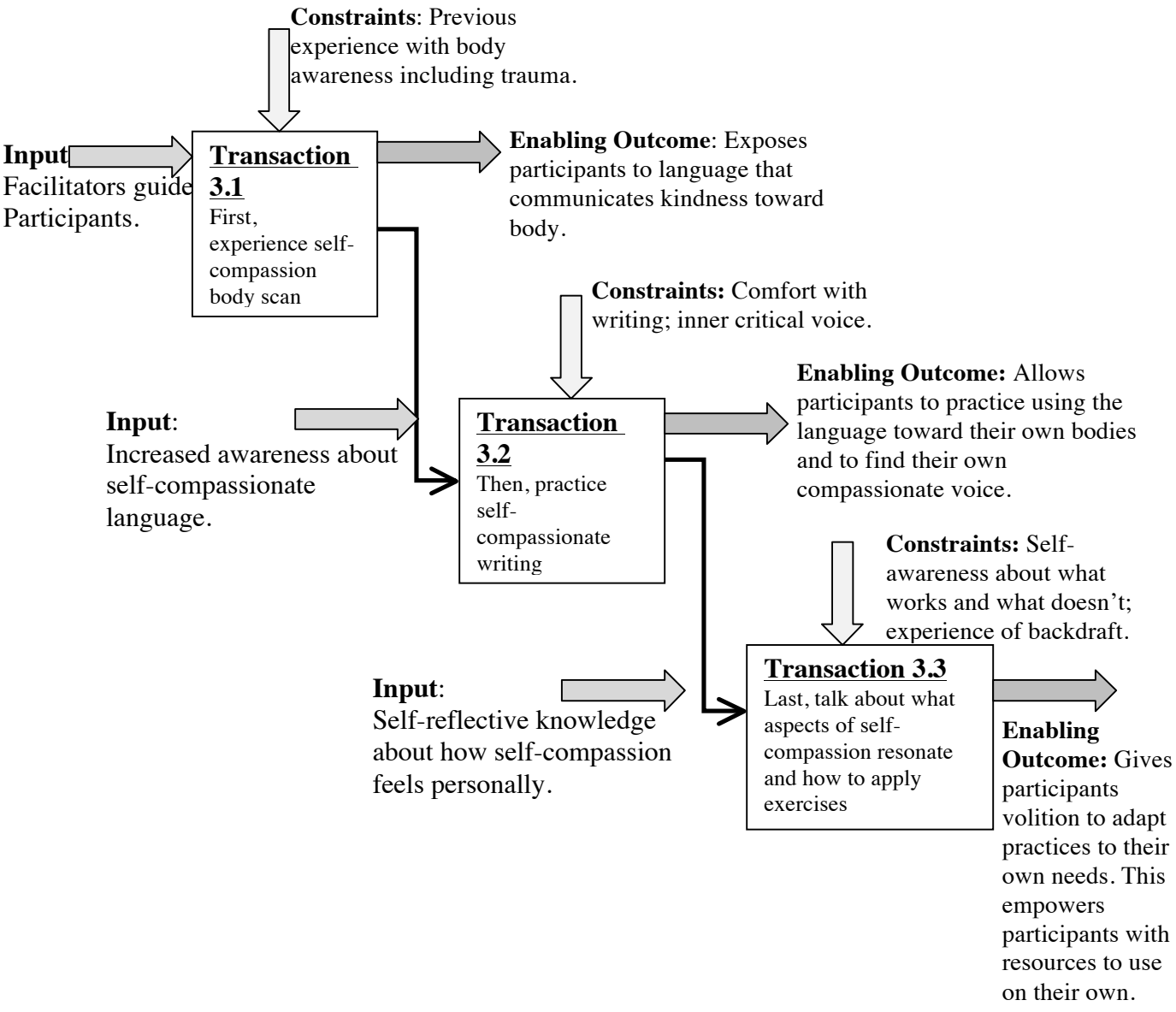


Diagram 3 Description: The input for each component of this transaction is the knowledge from the facilitators and presence of the participants. The constraint for each component of the transaction is the participants' openness and willingness to try the self-compassion exercises without judgment or criticism. If the participants do not buy into it as something useful, it will not lead to the outcome, which is increased self-compassion. Increased self-compassion is the goal of this transaction. These units of activity are present as part of homework assignments as well as appear in several of the eight sessions since self-compassion is an integral part of this intervention and is a primary goal of the program.

PART 3: STAKEHOLDER QUESTIONS

1. *Will my daughter feel better about her body after the SCBIP?*
   - **a. Variables** are to be measured pre- and post-program. Participants will complete the measurements at the first SCBIP session and the last SCBIP session. (Participants will also be invited to complete follow-up questions (see #8) at 4 weeks (1 month), 12 weeks (3 months), and 24 weeks (6 months) after the program is finished to determine sustainability and strength of the effects).
     - a. Body image (definitions)
       - i. Body appreciation: refers to a woman's acceptance, respect, and gratitude for her body, with recognition of the inaccuracy of media's skewed and narrow depiction of beauty
       - ii. Body shame: refers to a woman's opinion about her morality and self-worth because of her body
       - iii. Body dissatisfaction: refers to a woman's opinion about her body and whether she believes her body (or body parts) is acceptable or in need of change.
   - **b. Instrumentation**
     - a. Self-report scales
       - i. Body Appreciation Scale-2 (BAS-2; Tylka & Wood-Barcalow, 2015)
       - ii. Body Shame Subscale of Objectified Body Consciousness Scale (OBCS-BSS; McKinley & Hyde, 1996)
       - iii. Body Dissatisfaction Subscale of Eating Disorder Inventory-3 (EDI-3-BDS; Garner, 2004)
     - b. Open-ended written questions
       - i. What do you appreciate about your body? What do you like about your body and why?
       - ii. What are you ashamed of about your body?
       - iii. What would you change about your body? What do you dislike about your body and why?
   - **c. Data analysis**
     - a. For the scales I will look at descriptive statistics and differences in pre- and post-program mean scores.
     - b. For the written responses I will begin with open coding to look for distinct themes or categories in the data. I will continue with axial coding to find connections among concepts and to see how they relate to the interview and focus group data in #5, 6, 7, and 8 (see below).

2. *Will my daughter have healthier eating habits after the Self-Compassion Body Image Program (SCBIP)?*
   - **a. Variable** is to be measured pre- and post-program. Participants will complete the measurements at the first SCBIP session and the last SCBIP session.

a. Eating Pathology (eating behaviors and eating attitudes): refers to eating disorder symptoms, which include a range of irregular eating habits such as self-induced vomiting, restrained eating, or eating until the point of discomfort

b. Instrumentation

a. Eating Attitudes Test-26 (Garner et al., 1982)

c. Data analysis:

a. I will look at descriptive statistics and differences in pre- and post-program mean scores.

3. *Will the SCBIP help my daughter feel good about herself?*

a. Variable is to be measured pre- and post-program. Participants will complete the measurements at the first SCBIP session and the last SCBIP session.

a. Self-acceptance: refers to an individual's ability to embrace all of who they are, including perceived flaws and shortcomings.

b. Instrumentation

a. Self-report scale

i. Unconditional Self-Acceptance Questionnaire (Chamberlain & Haaga, 2001) (Example items: "I believe that I am worthwhile simply because I am a human being" and "I feel I am a valuable person even when other people disapprove of me.")

c. Data analysis

a. I will look at descriptive statistics and differences in pre- and post mean scores.

4. *Will the SCBIP help my daughter be happier?*

d. Variables are to be measured pre- and post-program. Participants will complete the measurements at the first SCBIP session and the last SCBIP session.

a. Psychological well-being (definitions)

i. Depression, anxiety, stress: refers to experience of negative emotional states: depression (hopelessness, pessimistic, despair); anxiety (panicky, worried, fearful); stress (tense, irritable, jumpy).

ii. Life satisfaction: refers to psychological well-being in terms of how content an individual is with his/her life situation.

iii. Gratitude: refers to psychological well-being in terms of how prone an individual is to feel a general sense of gratitude in daily life.

iv. Happiness: refers to experience of positive emotion of joy

b. Instrumentation

a. Self-report scales

i. Depression Anxiety Stress Scale-21 (DASS; Lovibond & Lovibond, 1995)

ii. Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985)

iii. Gratitude Questionnaire (GQ-6; McCullough, Emmons, & Tsang 2002)

iv. Subjective Happiness Scale (SHS; Lyubomirsky & Lepper, 1999)

c. Data analysis

a. I will look at descriptive statistics and differences in pre- and post mean scores.

5. *Will the SCBIP teach my daughter any coping skills?*

a. Variables are to be measured pre- and post-program. Participants will complete the measurements at the first SCBIP session and the last SCBIP session.
    a. Self-compassion: refers to the emotional awareness and attentive care given to oneself in times of difficulty. This concept encompasses three key components: self-kindness, mindfulness, and common humanity.
    b. Mindfulness: refers to an open, nonjudgmental awareness of whatever is arising in the present moment. Mindfulness allows individuals to feel, think, speak, and act with clarity and intention.

b. Instrumentation
    a. Self-report scales
        i. Self-Compassion Scale-Short Form (SCS-SF; Raes, Pommier, Neff, & Van Gucht, 2003)
        ii. Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003)
    b. Interview questions
        i. What were your favorite activities from the program, and why?
        ii. Which activities help you feel better about your body, and why?
        iii. Which activities help you feel better in general, and why?
        iv. What activities did you do at home?
        v. Define what self-compassion means to you. What does it look like when you practice self-compassion?
        vi. Define what mindfulness means to you. What does it look like when you practice mindfulness?

c. Data analysis
    a. I will look at descriptive statistics and differences in pre- and post mean scores.
    b. For the interview questions, I will begin with open coding to look for distinct themes or categories in the data. I will continue with axial coding to find connections among concepts.

6. *How will I know that my daughter learned anything from this program?*

a. Variable to be measured post program only.
    a. Change and growth: refers to participants' perception of the program's impact.

b. Instrumentation
    a. Interview questions
        i. What did you learn from this program?
        ii. What was your favorite topic to discuss, and why?
        iii. How has this program influenced your thoughts about media? Do you interpret the media differently after this program? If so, how and why?
        iv. How has this program influenced the way you feel about your body? Do you see your body differently after this program? If so, how and why?
        v. Has this program influenced you thoughts and behaviors around eating? If so, how?
        vi. Has this program influenced your daily habits in a noticeable way? If so, how?
        vii. Has this program changed your life in any significant ways? If so, how?

c. Data analysis

a. For the interview questions, I will begin with open coding to look for distinct themes or categories in the data. I will continue with axial coding to find connections among concepts.

7. *Will this program improve the social climate among girls in schools?*
   - **a. Variable** to be measured post program only, and only if the program is conducted with middle or high school students that know one another (acquaintances or friends). Additionally, these focus groups will only be conducted if school climate regarding body image and bullying is a relevant concern.
     a. Social climate: refers to how much girls are feeling supported and accepted by their peers in regards to their physical appearance.
   - **b. Instrumentation**
     a. Focus groups: small groups of participants (4 – 5 individuals) will be recruited for focus groups a couple weeks after completion of the program. The focus groups will be informal discussions about how physical appearance plays a role in their friendships and social dynamics at school. If there had been issues of bullying based on physical appearance before the program, then the facilitators would encourage the groups to discuss their experiences. Conversations about body insecurities (e.g., body shaming talk) will also be discussed.
   - **c. Data analysis**
     a. I will begin with open coding to look for distinct themes or categories in the data. I will continue with axial coding to find connections among concepts.

8. *How do we know this program is worthwhile?*
   - **a. Variables** to be measured: Follow-up questions at 4 weeks (1 month), 12 weeks (3 months), and 24 weeks (6 months) after the completion of SCBIP. Select items from self-report scales will be chosen for the following variables:
     a. Body image
        i. Body appreciation
        ii. Body dissatisfaction
        iii. Body shame
     b. Psychological well-being
        i. Happiness
        ii. Gratitude
        iii. Life satisfaction
        iv. Depression/anxiety/stress
     c. Coping skills
        i. Self-compassion
        ii. Mindfulness
     d. Self-acceptance
   - **b. Instrumentation**
     a. For reliability, all eleven scales will be included in the pre-intervention and post-intervention follow up questionnaires. This amounts to 140 total items, which is estimated to take about an hour to complete.
   - **c. Data analysis**
     a. I will look at descriptive statistics and matrices of correlations.

APPENDICES

Appendix A

FIGURES

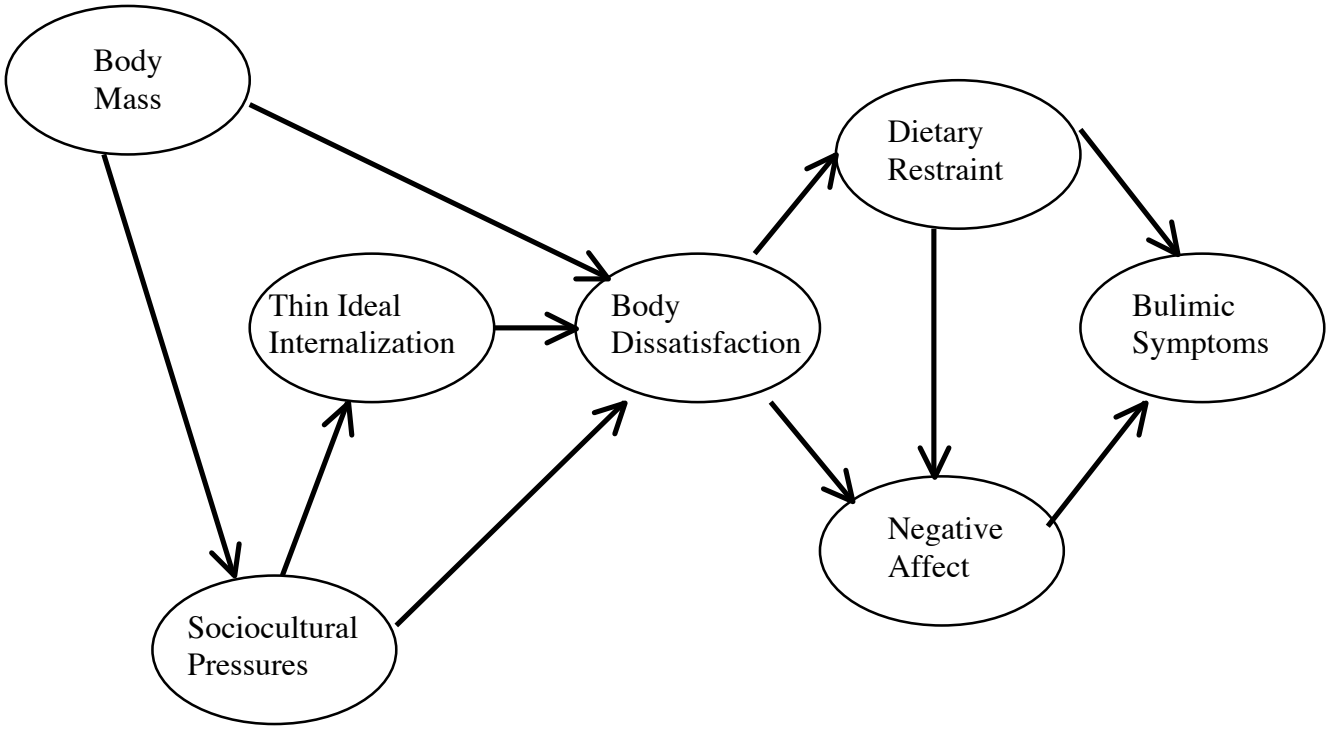


Figure 1: Stice's Dual Pathway Model (1994)

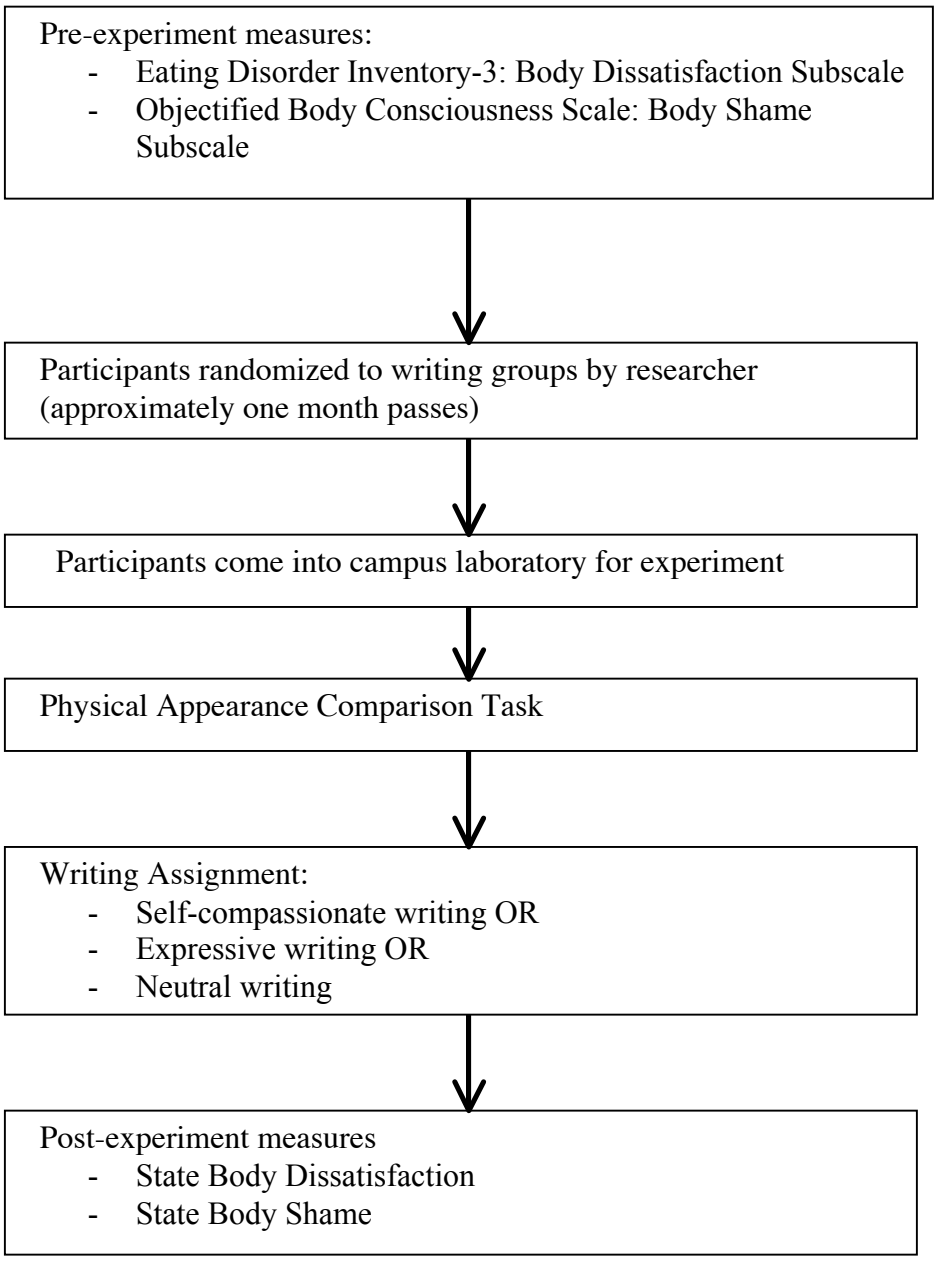


Figure 2: Flow of Experimental Procedures

Appendix B

PRE-EXPERIMENT MEASURES

Eating Disorder Inventory-3 (Garner, 2004)

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

Never					Always
1	2	3	4	5	6

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

Objectified Body Consciousness Scale (McKinley & Hyde, 1996)

Read each item and decide whether you agree or disagree and to what extent.

Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7

1. When I can't control my weight, I feel like something must be wrong with me.
2. I feel ashamed of myself when I haven't made the effort to look my best.
3. I feel like I must be a bad person when I don't look as good as I could.
4. I would be ashamed for people to know what I really weigh.
5. I never worry that something is wrong with me when I am not exercising as much as I should.
6. When I'm not exercising enough, I question whether I am a good enough person.
7. Even when I can't control my weight, I think I'm an okay person.
8. When I'm not the size I think I should be, I feel ashamed.

Appendix C

DEMOGRAPHIC QUESTIONS

1.) What year are you in school?
- (1) Freshman
- (2) Sophomore
- (3) Junior
- (4) Senior
- (5) Fifth year senior
- (6) Other:_____

2.) What is your race/ethnicity? (please mark all that apply)
- (1) African American or Black
- (2) Asian, Pacific Islander, or Asian American
- (3) European American or White
- (4) Hispanic or Latino/a
- (5) Native American
- (6) Middle Eastern/North African

3.) How old are you? _____ years

4.) Height: _____ft. _____in.

5.) Weight: _____ lb.

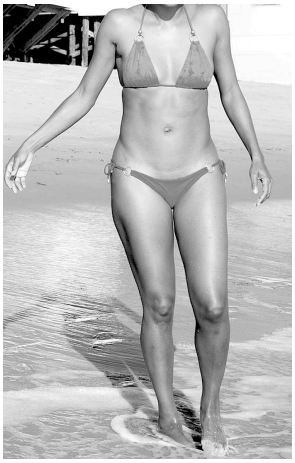
Appendix D

EXAMPLE IMAGES

Apple

Cone

Pear



Ruler

Hourglass

Appendix E

EXPERIMENT INSTRUCTIONS

Among the following five images, which do you consider to be the ideal body type? That is, which body would you most like your body to resemble?

(Images displayed here)

For the following images, please rate how attractive you think this body part is on the scale below.

(Image displayed here)

Not at all attractive						Extremely attractive
1	2	3	4	5	6	7

Now, compare your same body part to this image. Please rate how attractive you think your body part is in comparison.

Not at all attractive						Extremely attractive
1	2	3	4	5	6	7

Appendix F

WRITING PROMPTS

The individual prompts (1, 2, 3) for each condition will appear on separate pages with the general instructions included at the top of each page.

Self-compassionate writing condition:

General instructions:
"**IMPORTANT INSTRUCTIONS—PLEASE READ!**
For the following questions, please provide a written response while keeping in mind any thoughts and feelings you had while comparing your body to your ideal body shape. It is important for you to try your best to be thorough in your response and write down anything that is relevant. Remember your responses are completely anonymous and your writing is confidential."

Individual prompts:

1. "Please reflect on how you feel about your body in comparison to your ideal body shape. Write about ways in which others may share similar feelings."
2. "Write a paragraph about your perceptions of your body. Be kind and understanding of any flaws and imperfections the way you would be toward a close friend who expressed the same feelings about her body."
3. "Describe any thoughts and feelings that are coming up for you right now about your body. Try your best to be nonjudgmental and accepting of yourself."

Expressive writing condition:

General instructions:
"**IMPORTANT INSTRUCTIONS—PLEASE READ!**
For the following questions, please provide a written response while keeping in mind any thoughts and feelings you had while comparing your body to your ideal body shape. It is important for you to try your best to be thorough in your response and write down anything that is relevant. Remember your responses are completely anonymous and your writing is confidential."

Individual prompt for 1, 2, & 3:
"Think of three parts of your body that you do not like in comparison to the ideal body you chose. For each body part, answer the following question: Please write a paragraph

on how you feel about this particular body part of yours in comparison to your ideal body. As you write, express your emotions freely and allow yourself to explore whatever thoughts and feelings arise."

1. Body part: _____
2. Body part: _____
3. Body part: _____

Neutral writing condition:

General instructions:
"**IMPORTANT INSTRUCTIONS—PLEASE READ!**
Please do your best to answer the following questions. Remember your responses are completely anonymous and your writing is confidential."

Individual prompts:

1. "From memory only, please list and describe the size, shape, and color of five items that you keep in your school bag (e.g., a backpack or purse)."
2. "Please list the classes you are currently enrolled in. Give a neutral and thorough description of the class material."
3. "Please write in detail about this week's weather patterns – make sure to mention the wind, temperature, and approximate humidity."

Appendix G

POST-EXPERIMENT MEASURES

State Body Shame

Please answer how much you agree with the following statements.

Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7

1. Right now I feel ashamed of my body.
2. Right now I would be ashamed for people to know what I weigh.
3. Right now I feel bad about myself because of my body.
4. Right now I feel self-conscious about my body.

State Body Dissatisfaction

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

Never					Always
1	2	3	4	5	6

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

Appendix H

SCBIP MEASURES

Body Appreciation Scale-2 (Tylka & Wood-Barcalow, 2015)

For each item, the following response scale should be used: 1 = Never, 2 = Seldom, 3 = Sometimes, 4 = Often, 5 = Always.

Please indicate whether the question is true about you never, seldom, sometimes, often, or always.

1. I respect my body.
2. I feel good about my body.
3. I feel that my body has at least some good qualities.
4. I take a positive attitude towards my body.
5. I am attentive to my body's needs.
6. I feel love for my body.
7. I appreciate the different and unique characteristics of my body.
8. My behavior reveals my positive attitude toward my body; for example, I hold my head high and smile.
9. I am comfortable in my body.
10. I feel like I am beautiful even if I am different from media images of attractive people (e.g., models, actresses/actors).

Scoring Procedure: Average participants' responses to Items 1–10.

Depression, Anxiety, and Stress Scale (DASS-21-Lovibond & Lovibond, 1995)

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:
0 Did not apply to me at all - NEVER
1 Applied to me to some degree, or some of the time - SOMETIMES
2 Applied to me to a considerable degree, or a good part of time - OFTEN
3 Applied to me very much, or most of the time - ALMOST ALWAYS

1. I found it hard to wind down.
2. I was aware of dryness of my mouth.
3. I couldn't seem to experience any positive feeling at all.
4. I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion).
5. I found it difficult to work up the initiative to do things.
6. I tended to over-react to situations.
7. I experienced trembling (eg, in the hands).
8. I felt that I was using a lot of nervous energy.
9. I was worried about situations in which I might panic and make a fool of myself.
10. I felt that I had nothing to look forward to.
11. I found myself getting agitated.
12. I found it difficult to relax.
13. I felt down-hearted and blue.
14. I was intolerant of anything that kept me from getting on with what I was doing.
15. I felt I was close to panic.
16. I was unable to become enthusiastic about anything.
17. I felt I wasn't worth much as a person.
18. I felt that I was rather touchy.
19. I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat).
20. I felt scared without any good reason.
21. I felt that life was meaningless.

Eating Attitudes Test-26 (Garner et al., 1982)

Part A: Complete the following questions

1) Birth Date Month:____ Day: ____ Year:_____
2) Gender Male:_____ Female_____
3) Height Feet:____ Inches:____
4) Current weight (lbs.):_____
5) Highest weight (excluding pregnancy):_____
6) Lowest adult weight:_____
7) Ideal weight:_____

Part B: Check a response for each of the following statements

1. Am terrified about being overweight. Always – Usually – Often – Sometimes – Rarely – Never
2. Avoid eating when I am hungry. Always – Usually – Often – Sometimes – Rarely – Never
3. Find myself preoccupied with food. Always – Usually – Often – Sometimes – Rarely – Never
4. Have gone on eating binges where I feel that I may not be able to stop. Always – Usually – Often – Sometimes – Rarely – Never
5. Cut my food into small pieces. Always – Usually – Often – Sometimes – Rarely – Never
6. Aware of the calorie content of food that I eat. Always – Usually – Often – Sometimes – Rarely – Never
7. Particularly avoid food with a high carbohydrate content (i.e., bread, rice, potatoes, etc.) Always – Usually – Often – Sometimes – Rarely – Never
8. Feel that other would prefer if I ate more. Always – Usually – Often – Sometimes – Rarely – Never
9. Vomit after I have eaten. Always – Usually – Often – Sometimes – Rarely – Never
10. Feel extremely guilty after eating. Always – Usually – Often – Sometimes – Rarely – Never
11. Am preoccupied with a desire to be thinner. Always – Usually – Often – Sometimes – Rarely – Never
12. Think about burning up calories when I exercise. Always – Usually – Often – Sometimes – Rarely – Never
13. Other people think that I am too thin. Always – Usually – Often – Sometimes – Rarely – Never
14. Am preoccupied with the thought of having fat on my body. Always – Usually – Often – Sometimes – Rarely – Never

15. Take longer than others to eat my meals. Always – Usually – Often – Sometimes – Rarely – Never
16. Avoid foods with sugar in them. Always – Usually – Often – Sometimes – Rarely – Never
17. Eat diet foods. Always – Usually – Often – Sometimes – Rarely – Never
18. Feel that food controls my life. Always – Usually – Often – Sometimes – Rarely – Never
19. Display self-control around food. Always – Usually – Often – Sometimes – Rarely – Never
20. Feel that others pressure me to eat. Always – Usually – Often – Sometimes – Rarely – Never
21. Give too much time and thought to food. Always – Usually – Often – Sometimes – Rarely – Never
22. Feel uncomfortable after eating sweets. Always – Usually – Often – Sometimes – Rarely – Never
23. Engage in dieting behavior. Always – Usually – Often – Sometimes – Rarely – Never
24. Like my stomach to be empty. Always – Usually – Often – Sometimes – Rarely – Never
25. Have the impulse to vomit after meals. Always – Usually – Often – Sometimes – Rarely – Never
26. Enjoy trying new rich foods. Always – Usually – Often – Sometimes – Rarely – Never

Part C: Behavioral Questions: In the past 6 months have you:

A. Gone on eating binges where you feel that you may not be able to stop?*
B. Ever made yourself sick (vomited) to control your weight or shape?
C. Ever used laxatives, diet pills, or diuretics (water pills) to control your weight or shape?
D. Exercises more than 60 minutes a day to lose or to control your weight?
E. Lost 20 pounds or more in the past 6 months?

*defined as eating much more than most people would under the same circumstances and feeling that eating is out of control.

The Gratitude Questionnaire-Six Item Form (GQ-6) (McCullough, Emmons, & Tsang, 2002)

Using the scale below as a guide, write a number beside each statement to indicate how much you agree with it.

1 = strongly disagree
2 = disagree
3 = slightly disagree
4 = neutral
5 = slightly agree
6 = agree
7 = strongly agree

____1. I have so much in life to be thankful for.
____2. If I had to list everything that I felt grateful for, it would be a very long list.
____3. When I look at the world, I don't see much to be grateful for.*
____4. I am grateful to a wide variety of people.
____5. As I get older I find myself more able to appreciate the people, events, and situations
that have been part of my life history.
____6. Long amounts of time can go by before I feel grateful to something or someone.*

* Items 3 and 6 are reverse-scored.

Mindful Attention and Awareness Scale (Brown & Ryan, 2003)

Instructions: Below is a collection of statements about your everyday experience. Using the 1-6 scale below, please indicate how frequently or infrequently you currently have each experience. Please answer according to what really reflects your experience rather than what you think your experience should be. Please treat each item separately from every other item.

1	2	3	4	5	6
Almost Always	Very frequently	Somewhat Frequently	Somewhat Infrequently	Very Infrequently	Almost Never

I could be experiencing some emotion and not be conscious of it until some time later.	1 2 3 4 5 6
I break or spill things because of carelessness, not paying attention, or thinking of something else.	1 2 3 4 5 6
I find it difficult to stay focused on what's happening in the present.	1 2 3 4 5 6
I tend to walk quickly to get where I'm going without paying attention to what I experience along the way.	1 2 3 4 5 6
I tend not to notice feelings of physical tension or discomfort until they really grab my attention.	1 2 3 4 5 6
I forget a person's name almost as soon as I've been told it for the first time.	1 2 3 4 5 6
It seems I am "running on automatic," without much awareness of what I'm doing.	1 2 3 4 5 6
I rush through activities without being really attentive to them	1 2 3 4 5 6
I get so focused on the goal I want to achieve that I lose touch with what I'm doing right now to get there	1 2 3 4 5 6
I do jobs or tasks automatically, without being aware of what I'm doing.	1 2 3 4 5 6
I find myself listening to someone with one ear, doing something else at the same time	1 2 3 4 5 6
I drive places on 'automatic pilot' and then wonder why I went there.	1 2 3 4 5 6
I find myself preoccupied with the future or the past.	1 2 3 4 5 6
I find myself doing things without paying attention.	1 2 3 4 5 6
I snack without being aware that I'm eating.	1 2 3 4 5 6

Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985)

The following items describe attitudes and feelings you have towards your life in general. To the left of each item, write in the number that indicates the degree of your agreement or disagreement with each of the statements below. **Please use the following scale:**

Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

_____ 1. In most ways my life is close to ideal.

_____ 2. The conditions of my life are excellent.

_____ 3. I am satisfied with my life.

_____ 4. So far I have gotten the important things I want in life.

_____ 5. If I could live my life over, I would change almost nothing.

Self-Compassion Scale-Short Form (Raes, Pommier, Neff, & Van Gucht, 2011)

Please read each statement carefully before answering. To the left of each item, indicate how often you behave in the stated manner, using the following scale:

Almost never				**Almost always**
1	**2**	**3**	**4**	**5**

_____1. When I fail at something important to me I become consumed by feelings of inadequacy.
_____2. I try to be understanding and patient towards those aspects of my personality I don't like.
_____3. When something painful happens I try to take a balanced view of the situation.
_____4. When I'm feeling down, I tend to feel like most other people are probably happier than I am.
_____5. I try to see my failings as part of the human condition.
_____6. When I'm going through a very hard time, I give myself the caring and tenderness I need.
_____7. When something upsets me I try to keep my emotions in balance.
_____8. When I fail at something that's important to me, I tend to feel alone in my failure
_____9. When I'm feeling down I tend to obsess and fixate on everything that's wrong.
_____10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.
_____11. I'm disapproving and judgmental about my own flaws and inadequacies.
_____12. I'm intolerant and impatient towards those aspects of my personality I don't like.

Subjective Happiness Scale (Lyubomirksy & Lepper, 1999)

For each of the following statements and/or questions, please circle the point on the scale that you feel is most appropriate in describing you.

1. In general, I consider myself:
   1 not a very happy person to 7 a very happy person

2. Compared to most of my peers, I consider myself:
   1 less happy to 7 more happy

3. Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you?
   1 not at all to 7 a great deal

4. Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To what extent does this characterization describe you?
   1 not at all to 7 a great deal

Note: Item #4 is reverse coded.

Unconditional Self-Acceptance Questionnaire (Chamberlain & Haaga, 2001)

INSTRUCTIONS: Please indicate how often you feel each statement below is true or untrue of you. For each item, indicate the appropriate number (1 to 7) using the following key:

		More Often Untrue Than True	Equally Often True And Untrue	More Often True Than Untrue		
Almost Always Untrue	Usually Untrue				Usually True	Almost Always True
1	2	3	4	5	6	7

1. Being praised makes me feel more valuable as a person.
2. I feel worthwhile even if I am not successful in meeting certain goals that are important to me.
3. When I receive negative feedback, I take it as an opportunity to improve my behavior or performance.
4. I feel that some people have more value than others.
5. Making a big mistake may be disappointing, but it doesn't change how I feel about myself overall.
6. Sometimes I find myself thinking about whether I am a good or bad person.
7. To feel like a worthwhile person, I must be loved by the people who are important to me.
8. I set goals for myself with the hope that they will make me happy (or happier).
9. I think that being good at many things makes someone a good person overall.
10. My sense of self-worth depends a lot on how I compare with other people.
11. I believe that I am worthwhile simply because I am a human being.
12. When I receive negative feedback, I often find it hard to be open to what the person is saying about me.
13. I set goals for myself that I hope will prove my worth.
14. Being bad at certain things makes me value myself less.
15. I think that people who are successful in what they do are especially worthwhile people.
16. I feel that the best part about being praised is that it helps me to know what my strengths are.
17. I feel I am a valuable person even when other people disapprove of me.
18. I avoid comparing myself to others to decide if I am a worthwhile person.
19. When I am criticized or when I fail at something, I feel worse about myself as a person.
20. I don't think it's a good idea to judge my worth as a person.

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