

INCREASING SELF-COMPASSION AND
POSITIVE BODY ESTEEM:
AN EXPRESSIVE WRITING INTERVENTION

By

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Abstract: The purpose of the present study was twofold: The first objective of this study was to investigate the relationships between self-compassion, self-esteem, body esteem, and body comparison; the second objective was to test the effectiveness of an expressive writing intervention for fostering self-compassion and positive body esteem. Part 1 of this study included a diverse sample of 299 graduate and undergraduate students (98 Male, 201 Female) from a large southwestern university. Results indicated that higher levels of self-compassion, self-esteem, and body esteem are positively correlated, and all negatively correlated with frequency of body comparison. Additionally, results suggest that self-esteem may account for the correlations between self-compassion and body esteem, and self-compassion and body comparison, indicating body esteem and body comparison may be subsumed under the broader definition of self-esteem. This finding warrants an exploration of body attitudes that relate to self-compassion. A new concept – *body compassion* – is introduced, which would incorporate dimensions of self-compassion into one's perception of body. Women reported lower body esteem and a higher frequency of body comparison than men did. Women reported higher levels of common humanity as well. Further, age and education level differences, indicated that younger participants and those earlier in their college career experienced lower levels of self-compassion and self-esteem, and a higher frequency of body comparisons than older cohorts. Of those 299 participants, 28 completed part 2 of the study and were randomly assigned to either a Best Possible Self (BPS) writing topic condition or a control writing topic. Measures were administered after three days of writing and at 6-10 weeks later. Self-compassion, body esteem, and body comparison were not improved through this method of writing. However, self-esteem was found to have increased significantly after writing, suggesting that writing about one's Best Possible Self may be an effective means of increasing self-esteem. Limitations of the study and directions for future research are discussed.

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CHAPTER I

INTRODUCTION

Women and men appear to be overly-preoccupied with how they look in American culture (Sheldon, 2010), and this over-investment in one's appearance has led to the development of mental health problems, such as depression and anxiety, disordered eating and unhealthy exercise behaviors, a dissatisfaction with one's physical appearance, and negative body attitudes (Cahill & Massup, 2007; Dittmar, 2009; Hargreaves & Tiggemann, 2009). Therefore, negative body esteem could be considered an unhealthy and particularly dangerous self-attitude that warrants continued exploration. The purpose of the present study was twofold: to understand the psychological relationship between perceptions of the self and body, and to improve healthy attitudes in these relationships. The first objective of this study was to investigate the relationship between self-compassion and body esteem. The second objective was to test the effectiveness of an expressive writing intervention for fostering self-compassion and positive body esteem.

In recent decades, the field of psychology has shifted its focus to incorporate more positive, strengths-based theories and approaches. This movement toward positive psychology emphasizes the positive characteristics, abilities, and strengths of humans (Seligman & Csikzentmihalyi, 2000), rather than on the dysfunctions and pathologies which encumber society. Understanding these trials and tribulations that burden individuals has been a valid area of exploration, and has historically led us to significant discoveries about mental illness and

psychopathology. However, contemporary research offers promising new directions for the field, as psychologists have begun to acknowledge a more optimistic view of human nature. An emphasis on an individual's skills and talents, as well as their potential for growth and self-enhancement, has contributed to a more comprehensive look at mental health and well-being, and seem to be valuable areas of additional investigation.

Buddhist philosophy has also recently begun to make its mark in psychology, particularly within the counseling and psychotherapy fields (Daya, 2000; Wada & Park, 2009) as an avenue of exploration of healthy self-processes. With respect to psychology, Buddhism offers exposure to and exploration of human potential, which fosters focus and reflection on understanding the nature of the self in the present, as well as examination of the self in the future (Guenther & Kawamura, 1975). Kristen Neff can be considered one of the pioneers in this movement toward understanding "healthy self-attitudes" (2003b, p. 86). Drawing from the tenets of Buddhism, Neff (2003a) introduced the theoretical construct of self-compassion into mainstream Western psychological research.

Similar to the construct of compassion for others, self-compassion, as defined by Neff (2003a), involves the desire to alleviate one's sufferings as well as the sufferings of others. Someone who is self-compassionate achieves this goal by assuming a kind, non-judgmental stance toward the self – particularly in times of distress and failure. Additionally, self-compassion involves being mindfully aware of one's own flaws, faults, and shortcomings, but not harshly critical. Instead, a sense of shared experiences with others is felt when one has compassion for the self, stemming from the acknowledgment that all humans are imperfect beings and that all humans experience suffering. Through this position, a self-compassionate person attains "resilience and stability" (Neff & Vonk, 2009, p. 27) by maintaining a balanced perspective during difficult moments. In essence, self-compassion involves being kind to oneself and not overly judgmental or critical. It involves a strong sense of common humanity instead of feeling isolated and alone in one's sufferings. Finally, self-

compassion involves mindful awareness of one's imperfections that leads to positive change, instead of over-identification with and rumination on mistakes or misfortunes (Neff, 2003a).

Several studies have investigated the relationship between self-compassion and variables related to psychological well-being. In Neff's (2003a) breakthrough study, high self-compassion was found to be negatively correlated with rumination tendencies, depressive symptoms, and anxiety, indicating that those who were more compassionate toward the self were less likely to experience negative mental health symptomatology. Leary and colleagues (2007) also replicated these findings. Further research revealed that self-compassion is positively associated with feelings of social connection and overall life satisfaction (Neff, 2003a), as well as optimism, happiness, and personal initiative (Neff, Rude, & Kirkpatrick, 2007b). Moreover, self-compassion was found to be a helpful emotion-regulation approach (Neff, 2003a), wherein an individual's distressing experiences can be encountered with kindness and empathy, helping the person to transform negative feelings into a positive, proactive stance that promotes his or her well-being.

Based on the results of these studies and others (e.g., Neff, Kirkpatrick, & Rude, 2007a; Mosewich et al., 2011), it appears that self-compassion is a psychologically beneficial attitude toward the self. This claim is further evidenced by the research contrasting self-esteem and self-compassion. Self-esteem is defined as a general attitude about the self across a variety of dimensions and life domains (Rosenberg, 1965; Hobza, Walker, Yakushko, & Peugh, 2007). This construct of "global self-esteem" also involves respecting and liking oneself (Crandall, 1973), and was once viewed as the healthy self-attitude that individuals should strive to attain. "Contingent self-esteem", which relates to how one's positive image of the self is largely dependent upon the positive appraisal by others (Grossbard, Lee, Neighbors, & Larimer, 2009), is a specific type of self-esteem that is seen as unstable, as it can fluctuate based on the context (Grossbard et al., 2009).

While prior research has revealed that high self-esteem, like self-compassion, is positively correlated with happiness and life satisfaction, it is also associated with a number of personal and psychological disadvantages (Neff, 2003b; Neff 2009). Specifically, high self-esteem is related to narcissism, self-absorption, discrimination against others, and the tendency to distort one's strengths and weaknesses to boost the ego (Neff, 2003a, 2011). Self-compassion, on the other hand, is only related to healthy self-views. Neff (2003a) argues that self-compassion is differentiated from narcissism because it helps individuals admit and effectively deal with personal inadequacies. Theoretically speaking, self-esteem generally involves an evaluation of the self in comparison to others. Based on the aforementioned definition of self-compassion, it is evident that this is where self-compassion and self-esteem differ. Compassion for the self does not involve evaluating the self based on the views of others and does not aim to bolster the ego using maladaptive defense mechanisms and protective strategies (Neff, 2003a) like self-esteem does. For these reasons, psychologists have recently begun to "fall out of love with self-esteem" (Neff, 2011, p. 8) as the primary indicator of psychological well-being.

Despite the clear differences between self-esteem and self-compassion, and the negative personal consequences of self-esteem, the constructs are moderately statistically correlated (Neff, 2003a). This makes sense given that low self-esteem and low self-compassion are both related to psychological dysfunction and mental health issues, such as depression and anxiety (Leary et al., 2007; Neff, 2003a). Additionally, high self-esteem can be related to the same positive states of self-compassion, such as life satisfaction and feelings of happiness (Neff, 2009). Hence, due to the moderate correlation between these two constructs, Neff and Vonk (2009) controlled for the influence of self-esteem in relation to positive psychological variables and found that self-compassion, rather than self-esteem, could be a unique predictor of stable feelings of self-worth. Therefore, because self-compassion appears to convert negative experiences into positive self-affect, which allows acknowledgement of mistakes and promotes positive change, it might ensure the same psychological

benefits that high self-esteem does without the negative drawbacks. Through their research, Neff (2003a) and Neff and Vonk (2009) demonstrated that self-esteem and compassion for the self are statistically correlated yet theoretically separate psychological phenomena. The present study aimed to confirm prior findings that self-esteem and self-compassion are correlated constructs.

Just as researchers have focused heavily on attempting to understand individuals' self-processes and self-concepts, attitudes toward one's body is also a major area of focus within the field of psychology. Body esteem is considered to be a particular subtype of self-esteem; therefore, the association between body esteem and self-esteem will be evaluated in this study. Body esteem is defined as an overall self-appraisal of positive or negative body feelings toward various parts, functions, and areas of the body (Franzoi & Shields, 1984). Negative attitudes and feelings towards one's body is a fairly common phenomenon (Cash & Pruzinsky, 2002; Hargreaves & Tiggeman, 2009), particularly for females. However, current research has demonstrated that males are becoming increasingly dissatisfied with their bodies and physical appearance as well (Humphreys & Paxton, 2004).

Researchers had not yet explored the relationship between self-compassion and body esteem; however, given what we know about self-compassion's relationship with self-esteem, it seemed necessary to investigate this relationship in the current study. Moreover, prior researchers have suggested that body esteem or body image involves a degree of social comparison and evaluation (e.g., Brown, Cash, & Mikula, 1990; Mendelson, Mendelson, & White, 2001). Therefore, exploring how body comparison is associated with the constructs in this study aimed to clarify the connections between body esteem and self-esteem, as both are believed to theoretically encompass a social comparison component, and in addition provide some insight into the true relationships between body esteem, self-esteem, and self-compassion.

As we investigated these relationships among variables, it was also important to consider what influence one variable has on the associations among the other two. Just as self-esteem was controlled for in order to uncover self-compassion as a unique predictor of stable feelings of self-worth, self-esteem was controlled for among the relationships between self-compassion and body esteem, and among the associations between self-compassion and body comparison, in order to capture the most accurate relationship.

While early studies of self-compassion investigated the correlations among mental health variables, few studies have attempted to encourage a self-compassionate perspective through an experimental design. Given that self-compassion is a state to “strive for”, as it is related to psychological wellbeing, there is a need to develop an intervention to increase self-compassion. Due to the overwhelmingly positive results of prior studies regarding self-compassion and emotional and psychological benefits, the aims of experimental studies were to investigate if compassion for the self could be cultivated in a research sample. For instance, a study by Adams and Leary (2007) aimed to produce a self-compassionate stance for rigid dieters and individuals who experience “eating guilt” by having a researcher interrupt them while eating “forbidden foods” (p. 1124). The researcher made a statement that included all three aspects of self-compassion (self-kindness, common humanity, and mindfulness) in hopes of encouraging the participants to be more mindful and less judgmental. The results indicated that compassion for the self moderated the eating behaviors of the participants in a positive way, and helped participants to decrease their negative affect. Another study by Leary and colleagues (2007) asked participants to report on negative life events they viewed as either their “fault” or not. The results revealed that those who possessed higher levels of self-compassion were more likely to be kinder toward themselves and ascribed an appropriate amount of accountability to the events. Overall, Leary and colleagues (2007) concluded that compassion for the self was related to a holding a more realistic perspective on the situation, and associated with fewer negative emotional reactions and more positive feelings toward resolving the situation. Such experimental studies have

shown that individuals can learn to be compassionate toward themselves, which is an extremely promising outcome, particularly for the study of negative body esteem. Interventions aimed at increasing self-esteem have been largely unsuccessful (e.g., California Task Force to Promote Self-Esteem), indicating that self-esteem cannot be enhanced (Neff, 2003b); therefore, increasing self-compassion and body esteem might seem plausible.

This study postulates that encouraging a self-compassionate stance could help to alleviate the severity of the issues related to negative body esteem, and may also help cultivate psychological strengths and positive characteristics within the individual. Neff (2003a) investigated the differences between self-compassion levels in Buddhist monks and undergraduate students. Buddhist monks exposed to the ideas of self-compassion and related constructs through meditation were found to exhibit much higher levels of self-kindness, common humanity, and mindfulness, and much lower levels of self-judgment, isolation, and over-identification than did the undergraduate students. This finding could be related to mindfulness and self-compassion training and possibly age differences. Another experimental study on mindfulness-based stress reduction found significant reductions in symptom distress and mood disturbances, as well as increases in self-compassion (Birnie, Speca, & Carlson, 2010). These results support the idea that self-compassion can be fostered through specialized training and programs on mindfulness and meditation practices.

But are there others ways to cultivate self-compassion and increase positive body esteem? While a number of studies have explored the negative outcomes and consequences of preoccupation with physical appearance, few studies have attempted to prevent negative body esteem from developing or intervened in some way to increase positive body attitudes. Additionally, promising research from Adams and Leary (2007) and Neff (2003a) provides a sound rationale for continued investigation into the ways self-compassion can be enhanced. Although self-esteem, self-compassion, and body esteem have all demonstrated to be relatively stable over time based on test-retest reliabilities, research findings suggest that any of these three constructs can be increased or decreased

over time, given the appropriate psychological intervention. One intervention that may be promising for both self-compassion and body esteem is the expressive writing paradigm, introduced by James Pennebaker (Pennebaker & Beall, 1986; Pennebaker, Kiecolt-Glaser, & Glaser, 1988).

Expressive writing (also known as emotional disclosure) has resulted in significant and long-term physical and mental health benefits. A majority of expressive writing studies have investigated the effects of writing about trauma (see Smyth, 1998 and Lowe, 2006 for meta-analyses), and have consistently found that those who write about traumatic events exhibit increased immune functioning and significantly fewer visits to the health clinic, after a 6-week follow-up (Pennebaker & Beall, 1986; Pennebaker et al., 1988). More recently, researchers using the expressive writing paradigm have noticed similar psychological and physical health benefits through writing about positive life topics, which is consistent with the movement toward positive, strengths-based areas of interest, such as optimism, goals, and motivation (Meevissen, Peters, & Alberts, 2011). For example, King (2001) created a “best possible self” expressive writing condition based on the theoretical work by Markus and Nurius (1986). The “best possible self” is defined as an amalgamation of “what we would like to become, what we would become, and what we are afraid of becoming” (Meevissen et al., 2011, p. 58). It is a motivating life goal that is characterized by a future representation of the desired self. King (2001) found that participants who wrote about their best possible selves (BPS) found the task to be significantly less upsetting than those who wrote about a traumatic event. Additionally, those in the BPS condition rated their writing as equally difficult, emotional, and personal as those in the trauma condition. Overall results demonstrated that writing about achieving one’s life goals can achieve the same physical and psychological benefits that writing about trauma does, without the “emotional costs” (King, 2001, p. 804). Since then, other studies have utilized the BPS writing condition and have found similar benefits (e.g., Harrist, Carlozzi, McGovern, & Harrist, 2007).

Focusing on the self-in-future orientation may help to shift individuals out of the negative, self-absorbed, self-evaluative stance, and in turn increase constructive attitudes toward the body and

cultivate a newfound respect, kindness, and balanced awareness of the human experience. A positive-oriented expressive writing study exploring the impact on self-esteem, body comparison, or the six dimensions of self-compassion has yet to be conducted, signifying a major gap in the psychological literature. However, Neff and colleagues (2007b) used Pennebaker, Francis, and Booth's (2001) word analysis software to analyze writing samples regarding individuals' self-reported weaknesses. Findings revealed self-compassion to be related to writing about family, friends, and communication, as interpreted through first-person singular pronouns and social reference words. Additionally, self-compassion was negatively associated with first-person singular pronouns, which have previously been linked to negative outcomes like depression (Rude, Gortner, & Pennebaker, 2004). Evidenced through writing samples, these results suggest that self-compassion is related to interconnectedness with others and a less isolated view of the self.

One study has attempted to use the expressive writing paradigm as an attempt to increase body esteem. Similar to how Pennebaker and colleagues (Pennebaker & Beall, 1986; Pennebaker et al., 1988) asked participants to write about traumatic events, Earnhardt et al. (2002) asked participants to focus on their personal negative body feelings in their writing exercise; but, the study failed to find evidence of improvement in body image. The intervention in this study may have been unsuccessful because – as we know from prior research – over-identification with negative feelings and rumination, particularly on personal faults and weaknesses, can lead to lower levels of self-compassion (Neff, 2003a). Therefore, designing an expressive writing exercise that focuses on positive, self-in-future representations was a way to help individuals move away from the self-absorbed and isolative experiences brought on by negative body esteem. Additionally, the philosophy behind self-compassion seems to align with the best possible self literature, and thus was incorporated as a means for individuals to adopt a self-compassionate perspective and gain the psychological and physical health benefits that accompany the expressive writing intervention.

Examining age and gender differences was particularly germane to the purpose of this study, and was explored in relation to self-compassion, self-esteem, body esteem, and body comparison. Not only do females report lower body esteem than males, but Franzoi (1995) also discovered that males and females may feel differently about their bodies overall, as males tend to emphasize the functionality of their body, whereas females pay more attention to their physical appearance and body parts. Franzoi (1995) also found that young adults possess less positive attitudes toward their body parts. Gender differences were found in studies relating to self-compassion as well. As demonstrated in prior research (e.g., Nolen-Hoeksema, Larson, & Grayson, 1999), females were found to exhibit more self-criticism and reportedly spend more time ruminating on depressive thoughts than do their male counterparts (Neff, 2003a). Additionally, Neff (2003a) discovered that females tend to have lower self-compassion scores than males. An examination of the gender disparities, particularly among college populations, was essential in order to find ways to increase body esteem and self-compassion for both males and females. Conversely, Neff's (2003a) research with Buddhist monks did not expose any gender differences, suggesting that self-compassion training or age may be contributing factors in eliminating gender disparities in self-compassion attitudes. This was beneficial to investigate within a college population.

Research Questions

Prior research has established that self-esteem and self-compassion are moderately correlated. Self-esteem and body esteem are also moderately correlated. However, the association between self-compassion and body esteem is unknown. One purpose of the current study was to explore the associations between these self-attitudes.

Additionally, how self-esteem influences the relationships between self-compassion and body esteem, and self-compassion and body comparison, is of interest, as self-esteem, body esteem, and body comparison theoretically include a level of social comparison that self-compassion does not.

Moreover, a current debate regarding the use of self-esteem as a marker of psychological health endures; the negative effects associated with high self-esteem, such as narcissism and discrimination against others, are of concern. Self-compassion, on the other hand, was determined not to be associated with such negative drawbacks. Therefore, examining how body esteem or body comparison is related to self-compassion when controlling for the influence of self-esteem was important to investigate.

Several expressive writing studies have focused on writing about traumatic events as a means to work through the negative life experiences. More recently, positive expressive writing topics have demonstrated similar psychological and physical health benefits as the original expressive paradigm. The present study used a positive expressive writing intervention to help participants focus on the realization of their life goals and to encourage a more positive, compassionate interpretation of their self-attitude. This study specifically explored if the various components of body esteem, body comparison, self-esteem, and the six dimensions of self-compassion could be fostered through the Best Possible Self (BPS) expressive writing topic.

The present study contributes to the existing self-compassion and body esteem literature through the examination of gender and age differences, and to the expressive writing literature by testing the effectiveness of a positive writing topic. This study provides new insights into these psychological constructs through examination of the association between self-compassion and body esteem without the influence of social comparison or self-esteem, and tests an expressive writing intervention as an effective means for fostering the healthy self-attitudes of self-compassion and positive body esteem. Additionally, this study is relevant to the positive psychology movement, particularly within the field of counseling psychology. The specific research questions for this study include:

Part 1: Relationships Among Self-Process Variables

1. What are the relationships among overall self-compassion, self-esteem, body esteem, and body comparison?
2. Are these associations impacted after controlling for the influence of another variable? Specifically, will the relationship between self-compassion and body esteem, or self-compassion and body comparison change when controlling for the influence of self-esteem?
3. Will any differences across gender in relation to self-compassion, body esteem, self-esteem, and body comparison emerge, as established in prior research?
4. Will differences emerge across age ranges, as measured by age or education level, as postulated in prior research?

Part 2: Testing the Effectiveness of a Positive-Oriented Expressive Writing Intervention

5. Will differences across groups (Best Possible Self or control) emerge regarding any component of self-compassion, self-esteem, body esteem, and body comparison, at the end of a 3-day writing intervention?
6. If any differences on dependent variables are found between experimental and control groups, will this difference remain at follow-up (6-10 weeks later)?

CHAPTER II

LITERATURE REVIEW

Self-Compassion

Neff (2003b) proposed that self-compassion was a new way to expand upon the conceptualization of mental health and psychological well-being. The study of self-compassion in Western psychology began as a theoretical examination; since Neff's (2003a) introduction of this concept, a number of empirical psychological studies regarding self-compassion's role in relation to a number of mental health constructs have been conducted.

Theoretical Origins

As the primary pioneer in bringing the concept of self-compassion into the Western psychological realm, Neff (2003a, 2003b) introduced this construct due to the growing focus on "positive psychology", Buddhist philosophies, mindfulness, and strengths-based approaches, particularly within the field of counseling psychology. Seligman and Csikszentmihalyi (2000) describe positive psychology as a focus on the positive strengths and capabilities of individuals, as well as their potential for self-improvement and advancement. Positive psychology approaches, such as mindfulness-based stress reduction (MBSR), have seen significant benefits for a wide variety of clinical and non-clinical populations (Birnie, Speca, & Carlson, 2010). Buddhist philosophy has also made its mark within the realms of counseling and psychotherapy,

particularly in recent years (Wada & Park, 2009). Indeed, Daya (2000) authored an article that facilitates the application of Buddhist psychology directly into psychotherapy. In essence, Buddhist psychology, similar to positive psychology, is the study of human potentials – both how they currently exist as well as how they will exist in the future (Guenther & Kawamura, 1975, as cited in Daya, 2000).

Self-compassion is a concept with historical roots in Eastern philosophy of Buddhism, but is a relatively new concept in Western psychology (Neff, 2003a, 2003b). Western psychologists have focused more on self-esteem, self-concept, and self-attitudes in an attempt to capture the various self-processes of the human experience, but Buddhist philosophy appears to be an area of thought that focuses on analyzing and comprehending the nature of the self (Neff, 2003b). The self-compassion perspective has proved beneficial for psychologists and researchers for examining the relationships of the self in psychological health. Additionally, instead of focusing on psychological dysfunction and pathology, this strengths-based movement focuses on qualities of love, kindness, and forgiveness – and the study of self-compassion appears to fit well within this more positivist realm of psychological literature (Neff, 2003a).

Neff (2003b) introduced self-compassion as a theoretical construct that could help psychologists to expand the current knowledge base of “healthy self-attitudes” (p. 86) and perhaps better explain some of the more common self-processes. In her new book, Self-Compassion: Stop Beating Yourself Up and Leave Insecurity Behind, Neff (2011) defines self-compassion as closely related to compassion for others. Compassion for others involves being aware of and affected by the suffering of others, and exhibiting feelings of kindness toward others in an attempt to ameliorate the afflictions of others. Compassion for others also means recognition of a shared human experience – that all others are imperfect and subject to failure. Compassion for the self involves the desire to alleviate one’s own suffering as well as the suffering of others. It also involves a nonjudgmental stance toward the self and others when we

“fail or do wrong” (Neff, 2003b, p. 87), because of the shared understanding that all humans are fallible. What Neff (2011) demonstrates, however, is that most individuals can feel compassion for others, and that we sometimes afford others more sympathy and consideration than we offer ourselves in times of suffering. Instead, Neff (2011) argues that humans have a very difficult time expressing kindness toward the self when we fail at something, when we do not perform “above average”, and when we do not *exceed* our personal and societal expectations. In fact, Neff (2003b) stated that individuals may be harsher toward themselves than to their close friends, or perhaps even to strangers. In the Buddhist tradition, however, one must “care about yourself before you can really care about other people” (Neff, 2011, p. 7). Neff (2011) argues that this is the most essential lesson from the theory of self-compassion.

Neff and Vonk (2009) explain that self-compassion is predicated on the recognition of universal life experiences and similarities among each other, and “greater resilience and stability” (p. 27) through suffering. Some might argue that self-compassion leads to unconditional acceptance of faults, passivity, or laziness (Neff, 2003b). This is not the case with genuine self-compassion. In reality, Neff (2003b) suggests that a lack of self-compassion leads to inaction, apathy, and indifference. Consequently, compassion for the self allows the individual to examine weaknesses, shortcomings, and mistakes in a safe and authentic way, which leads to self-awareness and self-reflection. The mindfulness component of self-compassion encompasses a balanced state of awareness wherein the individual receives their experiences in a more supportive or empathic manner (Neff, 2003b). It is through this mindful awareness (sans self-condemnation) that the individual can “accurately perceive and rectify” any cognitions, emotions, and behaviors which are psychologically maladaptive or harmful to the self (Neff, 2003b, p. 87). Neff goes on to assert that possessing and expressing compassion for the self may involve a letting go of destructive habits and behaviors and instead “encouraging oneself to take whatever actions are needed – even if painful or difficult – in order to further one’s well-being” (p. 88).

The aforementioned description of self-compassion delineates a more general and broad sense of the concept. Neff (2003a; 2003b; 2011) has articulated the construct of self-compassion to entail three separate but corresponding components that enhance one another. Each of these three components consists of two dichotomies. The first component is self-kindness versus self-judgment. Self-kindness refers to the individual demonstrating kindness and consideration toward the self, whereas self-judgment involves harsh criticism, particularly in times of struggle. Being kind and considerate to the self is a difficult task, as many individuals are used to harsh self-appraisal, particularly of their flaws or weaknesses. The second component is common humanity versus isolation. Common humanity involves seeing one's personal experiences as part of a larger, shared experience with all other humans, and recognition that humans are all fallible. Allowing oneself to be open to and moved by the suffering of others, as well as by their own suffering, helps individuals see that all people – including oneself – are deserving of compassion (Neff, 2003b). Isolation, on the other hand, refers to viewing one's experiences as separate and detached from others, which creates more distance and disconnection. The third component, mindfulness versus over-identification, involves either contemplating one's difficult thoughts and experiences in unprejudiced awareness, or ruminating incessantly on faults and failures. Neff (2003b) describes over-identification as involving total immersion in one's emotional reactions, leading to self-pity and exaggeration of one's distress. Conversely, a mindful approach to difficult experiences and situations is one that is self-aware, nonjudgmental, and openly receptive. Developed by Neff (2003a), the Self-Compassion Scale is a reliable and valid estimate of where an individual lies on these dimensions, providing an overall self-compassion score. These individual components taken together lead to the proactive aspect of self-compassion, allowing individuals to change maladaptive behaviors and work to enhance and promote their own well-being (Neff, 2003a). Overall, self-compassion consists of honest admission of mistakes or faults, not berating oneself in times of failure, and taking the initiative to make necessary behavior modifications and other life changes (Neff, 2009).

Mental Health and Self-Compassion

Attempting a non-judgmental and empathic, as well as more realistic and balanced, perspective toward the self appears to have significant positive mental health implications. Neff (2003a) investigated the links between compassion for the self and differing emotional patterns with 232 undergraduate students. Participants completed measures that assessed self-compassion, depression, anxiety, ruminative tendencies, thought suppression, and emotional coping approaches. The overall results indicated that self-compassionate individuals were less likely to over-identify with negative emotions, as a significant negative correlation was found between self-compassion and rumination tendencies. Individuals who exhibit compassion for the self also do not tend to suppress their emotions, as the results indicated a significant negative correlation between thought suppression and self-compassion. The results revealed that self-compassionate participants strive to gain clarity about their experiences and emotions, as a significant positive correlation existed between emotional processing and self-compassion. Self-compassion can therefore be viewed as an effective emotion-regulation approach, as distressing thoughts and feelings can be met with kindness and understanding, helping the individual to take action and transform negative emotions into more positive feelings (Neff, 2003a). Perhaps the most significant findings by Neff (2003a) were related to mental health dysfunction. Overall, self-compassion was negatively correlated with anxiety and depression, indicating that those who possess compassion for the self may be less likely to experience depressive or anxious symptomology. Additionally, Neff (2003a) found that self-compassion was positively related to a sense of social connectedness and self-reports of life satisfaction. Overall, these are promising findings for the mental health field, as self-compassionate approaches in therapy may be a way for individuals who ruminate and have difficulty expressing their emotions to cope effectively with these negative thoughts. Furthermore, future studies and clinical interventions could focus

on increasing self-compassion levels in those suffering from depressive or anxious symptoms, and simultaneously help foster a sense of common humanity and satisfaction with life for clients.

Additionally, as Neff (2003a) hypothesized, females appeared to have lower levels of self-compassion than males, specifically on the dimensions of self-judgment, isolation, mindfulness, and over-identification. This was akin to prior studies on self-criticism and ruminative tendencies, where the results indicated that females are more critical of themselves and spend more time ruminating on depressive thoughts than males (e.g., Nolen-Hoeksema, Larson, & Grayson, 1999).

Neff (2003a) also explored the relationship between self-compassion levels in Buddhist monks and in an undergraduate sample. Neff (2003a) proposed that these Buddhist monks, who have been practicing a type of meditation known as *Vipissana*, have been exposed to the concept of self-compassion and related constructs (e.g., interdependence, mindfulness) through this meditation technique. It was hypothesized that the monks would exhibit higher levels of self-compassion than undergraduate participants, who perhaps have neither been exposed to nor cultivated their self-compassion. The results in this study provided three major contributions to the self-compassion literature. Overall, the findings support that self-compassion was significantly higher for Buddhist monks on the three “positive” subscales of self-kindness, common humanity, and mindfulness, as well as significantly lower on the three “negative” subscales of self-judgment, isolation, and over-identification, than the undergraduate participants. These results suggest that individuals who are educated in mindfulness practices and who have been exposed to constructs like self-compassion may have adopted and developed this perspective. Future studies could implement trainings and meditation seminars to increase compassion for the self. Another hypothesis could relate to age differences. Most research in self-compassion has centered around college students and young adults, yet Neff (2003a) compared Buddhist monks to college students on the subscales of self-compassion. It seems important to

investigate if age impacted these differences; therefore, the present study aims to uncover any differences on the scales of interest by exploring differences, as measured by age and classification, on these self-attitudes. Additionally, no significant gender differences were found between the male and female monk sample, indicating that explicit meditation and self-compassion training may be a useful tool for countering the pitfalls that a lack of self-compassion brings, particularly for females (Neff, 2003a). Gender differences were discovered between undergraduates who have not been exposed to Buddhist philosophy or the theoretical origins of self-compassion, though the monks have training in mindfulness and meditation practices; therefore, it may be possible that the meditation practices and exposure to self-compassion principles help to eliminate gender discrepancies in this area. Further research is necessary to understand the differing roles that self-compassion plays in the well-being of males and females.

Because the construct of self-compassion appears to belong within positive psychology and strengths-based literature, Neff and colleagues (2007b) aimed to investigate the association between the positive components of well-being and self-compassion. Self-compassion was speculated to benefit individuals by promoting happiness, a positive affect, and personal initiative (Neff et al., 2007b), and the results supported these hypotheses. The results from this study indicate a strong association for happiness and optimism with self-compassion. Additionally, self-compassionate individuals were found to experience generally more positive moods and less negative affect than their less compassionate counterparts. Neff and colleagues (2007b) do not understand these results to mean that self-compassion is simply a “Pollyanna” effect (p. 912). Instead, self-compassion involves the ability to hold negative emotions in balanced awareness and to reflect more honestly on them, helping the individual refrain from over-identifying and ruminating. Compassion for the self was also strongly related to personal initiative, which entails making positive changes for a more productive or satisfying life. Because self-compassionate individuals are not harshly judgmental or self-critical, Neff and colleagues (2007b) understand

these findings to mean that these individuals are more likely to “acknowledge areas of weakness”, and are able to then make the needed adjustments (p. 913). Such conclusions are important because they illustrate that self-compassion remains more than superficial happiness and unconditional acceptance of things as they are; indeed, compassion for the self is related to balanced acceptance of fallibilities and a desire to make positive changes in one’s life – a crucial element in achieving mental health and well-being.

A related study by Neff and Vonk (2009) investigated the unique effect that self-compassion alone (when controlling for self-esteem) has on positive affect states. Self-compassion and self-esteem are statistically moderately correlated as well as theoretically associated; therefore, due to the wealth of literature on the relationship between self-esteem and positive psychological outcomes, Neff and Vonk (2009) aimed to separate the roles of self-compassion and self-esteem to examine if self-esteem is really the marker of “psychological health” that researchers previously thought. Results from this study revealed that self-compassion predicted unique variance in levels of optimism, happiness, and positive mood, when accounting for self-esteem. Please refer to the section entitled *Self-Esteem* for additional information regarding the association between self-esteem and self-compassion.

Neff and colleagues (2007b) investigated self-compassion and the well-known five-factor model of personality. Not surprisingly, self-compassion has a negative correlation to neuroticism in that higher levels of compassion for the self are associated with lower levels of the characteristics of neuroticism. These results make sense given the prior findings that self-compassion is inversely related to rumination, depression, and anxiety (Neff, 2003a; Leary et al., 2007). Moreover, the personality traits of agreeableness, extraversion, and conscientiousness were all found to be positively correlated with self-compassion (Neff et al., 2007b). Perhaps the kind, “emotionally balanced” stance allows self-compassionate individuals to get along well and connect with others, and the “emotional stability” of self-compassion helps increase responsibility

and reliability (Neff et al., 2007b, p. 913). Findings from Neff and colleagues (2007b) indicate that self-compassion does not only alleviate the severity of psychopathology, but also finds psychological strengths and positive characteristics for the individual.

The elements of self-kindness and non-judgment, common humanity instead of isolative tendencies, and mindfulness rather than over-identification or rumination that comprise the construct of self-compassion appear to provide individuals with a host of productive, positive psychological strengths. Having compassion for the self appears to relate strongly to happiness and life satisfaction, social connectedness, and responsible behavior (Neff et al., 2007b), while protecting against depression and anxiety, thought suppression, and rumination (Neff, 2003a; Leary et al., 2007). Yet these are simply correlational studies with the same message: that future research needs to focus on intervention-based studies that evoke or invoke a self-compassionate mindset. New research attempts to cultivate self-compassion, mindfulness and self-awareness, and a sense of common humanity for individuals, and the general conclusions are that a compassionate stance toward the self may serve as a buffer against negative affect and destructive psychological outlooks, thereby promoting healthier, more adaptive behaviors.

Cultivating a Self-Compassionate Stance

As much of the early research relied on correlational studies between self-compassion and other self-process constructs and self-attitudes, more recent research has attempted to incorporate experimental designs to test the notion of compassion for the self as a state- or trait-like attribute. Leary and colleagues (2007) conducted a study that asked participants to report on the four worst experiences they had over a 20-day time period. Based on Neff's (2003a) conceptualization of self-compassion, Leary et al. (2007) speculated that the minor annoyances and inconveniences participants might experience within the 20-day period would hypothetically be met with the same nonjudgmental and proactive stance that a large-scale, distressing life event

would. A relatively gender-equal sample of 117 undergraduate students participated in an introductory 30-minute group session with the researcher and accessed a web-based questionnaire every five days. At this time, participants in the “fault condition” were instructed to recall the “worst thing that happened to them that was their fault” over the last four days (Leary et al., 2007, p. 888), while those in the “no fault condition” were instructed to recall the worst event that occurred that was not the individual’s fault. Participants rated the degree to which they held either themselves or others responsible for the event and how important the event was to their lives “in the big scheme of things” (Leary et al., 2007, p. 889). Participants also rated their thoughts and emotional reactions to these events. The findings from Leary and colleagues’ (2007) revealed that participants who exhibited higher levels of self-compassion in both the “fault” and “no fault” conditions indicated that they attempted to be kinder to themselves, and indicated they were less likely to be hard on themselves for the negative event they experienced. Overall, self-compassion was related to fewer negative emotions and reactions and more positive feelings toward the resolution of the situation. These results suggest that a self-compassionate stance helps the individual to balance the event in a realistic perspective, regardless of whether or not they viewed the incident as their “fault”.

In a second study by Leary and colleagues (2007), the purpose was to examine differences in reactions to ordinary situations in a sample of 123 undergraduate students. Participants read three hypothetical situations involving either receiving a low grade on an important exam, being responsible for losing an important sporting competition for their athletic team, or forgetting their lines while performing on stage in a play. Individuals were then asked to rate their emotions, cognitions, and hypothetical behavioral reactions to these three topics. The findings suggest that self-compassion uniquely predicts “less catastrophizing and less personalizing” emotional reactions and cognitions to all three situations, as well as “less extreme” behavioral responses (Leary et al., 2007, p. 892).

In conclusion, self-compassion was found to predict the reactions of individuals to both real-life (part one) and hypothetical (part two) life events (Leary et al., 2007). Leary and colleagues (2007) conducted three more studies addressing the implications of self-compassion; general conclusions about the five studies suggest that self-compassion is a crucial concept that helps individuals moderate their reactions and responses to threats, failures, loss, embarrassment, and distressing life situations. Leary and colleagues argue that their findings demonstrate that self-compassion essentially changes the individual's relationship to their self-evaluations. The results reveal that self-compassionate individuals may be more accurate in their self-assessments, tend to accept the undesired aspects of their character more readily than non-compassionate individuals, and spend less time ruminating on negative life events (Leary et al., 2007). Additionally, the findings from the fifth study regarding therapy clients who are highly self-critical indicate that fostering a more mindful and self-compassionate frame of mind could prove beneficial in psychotherapy (Leary et al., 2007). Overall, results from these studies indicate that having self-compassion may be an important protective factor, particularly for those undergoing difficult situations. It is easy to see how fostering a compassionate view of the self could be highly beneficial for therapy clients, as many individuals catastrophize and personalize the experiences they endure. These findings support the rationale for promoting and increasing self-compassion within individuals, so they can learn to accept a realistic viewpoint of the situation, take appropriate accountability for their role in the event, and make necessary adjustments for the future.

Several examples of the harshly critical and judgmental attitudes many individuals hold (rather than a more positive, self-compassionate stance) that Neff (2011) provides includes a range of negative self-talk that individuals have with themselves about their weight and body dissatisfaction. While body image and body esteem literature will be explored later (see: *Body Esteem*), an experimental study by Adams and Leary (2007) is worth discussing here, as it is a

study aimed at developing self-compassion. Adams and Leary (2007) conducted a study to investigate what role self-compassion plays when rigid dieters, those who experience guilt after eating, or others experience negative thoughts and feelings about eating a variety of unhealthy, “forbidden foods” while watching a neutral television program (unrelated to body image or dieting, and would not induce strong emotional reactions). It was hypothesized that the negative self-thought patterns that accompany disinhibited or restrictive eating patterns, as well as the feelings of guilt that stem from breaking one’s diet, could be moderated by self-compassion (Adams & Leary, 2007). Moreover, Adams and Leary (2007) aimed to induce self-compassion by having the researcher interrupt the television programming to make a statement regarding eating and food that encompassed all three aspects of self-compassion: self-kindness, common humanity, and mindfulness. The results of the study supported the hypothesis that self-compassion moderated the effects of eating behaviors during the study. Additionally, the induction of self-compassion helped participants to decrease their negative affect. Moreover, highly restrictive dieters failed to eat more after the experimental conditions. Based on the overall results, Adams and Leary (2007) propose that it may be useful to assist individuals in controlling their eating in a more self-compassionate manner. Self-compassion may also help individuals to respond in a less reactive way in times when one does not adhere to the diet. The self-compassion condition did not help participants who seemed to be high in eating guilt, however, which seems to be an area for further exploration to better understand this counterintuitive finding.

Regardless, the conclusions from Adams and Leary’s (2007) research support the rationale for training individuals to be self-compassionate, because disordered eating pathology is a highly prevalent issue that is related to depression, anxiety, and a host of other mental health concerns (e.g., O’Brien et al., 2009; Schutz, Paxton, & Wertheim, 2002). Thus, if an experimental study was able to introduce self-compassion as a healthier approach to “control” eating behaviors

and buffer the negative internal dialogue that occurs among highly restrictive dieters and individuals with severe eating pathologies, it deserves continued examination.

General Conclusions about Self-Compassion

In addition to advancing our understanding of the correlations between self-compassion and other psychological constructs, experimental studies, such as those by Leary et al. (2007) and Adams and Leary (2007), provide empirical support for the idea that psychological interventions may be useful in fostering self-compassion. In fact, Neff and colleagues (2007b) urge future researchers to implement an experimental design to obtain further support for the associations between self-compassion and psychological health. Additionally, results from these studies seem to suggest a need for deeper exploration of how individuals have some to be self-compassionate, as well as if and how a self-compassionate perspective can be nurtured.

Through a developmental lens, Neff (2009) makes the case for fostering self-compassion. Emotional maturity is said to be a nonjudgmental, forgiving, and loving position toward the self and others (Maslow, 1968, as cited in Neff, 2009); therefore, one might argue that psychologists should aim to develop and cultivate these qualities (i.e. self-compassion) throughout the lifespan. Delving into the other self-attitudes and self-concepts (i.e. self-esteem, body esteem) that become established during adolescence and young adulthood is therefore an important connection to make with the study of self-compassion. Thus, the relationship between these constructs can be examined throughout an individual's lifetime.

Self-Esteem

Perhaps one of the most closely related concepts to self-compassion is self-esteem. Neff (2003b, 2009) has based much of her initial research on comparing and contrasting these two constructs, in hopes of finding a more suitable means of evaluating and increasing psychological

health. A notable amount of psychological literature has focused on the self-processes and attitudes toward the self by using the construct of self-esteem. With the new concept of self-compassion, a closer examination of self-esteem and its known benefits and drawbacks seems warranted.

Global and Contingent Self-Esteem

Psychology has offered a plethora of definitions for self-esteem since its original introduction by William James (1890, as cited in Neff & Vonk, 2009). Recently, two major types of self-esteem have been generally explored in psychological research: global self-esteem and contingent self-esteem. Renowned psychologist Morris Rosenberg (1965) introduced the concept of a general or global image of the self. From a developmental perspective, Rosenberg explored how the individual changes physically, psychologically, and emotionally during the adolescent years, and investigated the self-processes one makes as she or he integrates into society. Rosenberg (1965) believed individuals to have attitudes (defined as facts, opinions, or orientations) toward various objects, and the self can be an object toward which the individual has a specific disposition. As Rosenberg (1965) stated, “[a]ttitudes may differ in content, in direction, in intensity, in importance, in salience, in consistency, in stability, and in clarity” (p. 6). Thus, if we are able to understand the individual’s attitude toward the self across these dimensions, then we might obtain a broad, albeit incomplete, interpretation of the “self-image” (p. 8). The individual’s interpretation of the self-image is known as “global self-esteem”. Global self-esteem, similar to the description provided by Rosenberg (1965), has since been defined as the more general assessment of the self (Hobza, Walker, Yakushko, & Peugh, 2007) across a variety of life domains. Crandall (1973) added that general self-esteem also involved liking and respecting oneself.

One of the major distinctions between self-attitudes and attitudes toward others and objects is that the individual seeks to hold only positive, favorable opinions of the self (Rosenberg, 1965), yet this is not always possible. The individual is not an objective, external observer and therefore subjectively evaluates the self, which could either be in a favorable or unfavorable manner. Therefore, it seems that the study of self-attitudes and self-image includes both accurate or distorted perceptions, as well as fluctuating emotional reactions, and also encompasses some element of evaluation by others. Rosenberg (1965) also cited Charles Horton Cooley (1912) and incorporated some of his ideas about the self-image in his construction of self-esteem. Specifically, Cooley described three processes occurring during a social interchange, which include: 1) how the individual believes s/he appears to the other person, 2) an anticipated or expected evaluation by the other person, and 3) the emotions associated with the previous two processes, and integration of these conclusions into the individual's self-concept. This aspect of self-esteem, according to Rosenberg (1965), aligns with conceptualizations of "contingent self-esteem", even though his aim was to understand self-esteem on a global level.

Contingent self-esteem can be understood as the manner in which an individual's self-worth and positive image of the self are dependent on the approval of social others or a set of social expectations (Grossbard, Lee, Neighbors, & Larimer, 2009). Contingent self-esteem is regarded as "unstable" in that it is not consistent across domains; rather, it changes based on social and external pressures, expectations, and approval/disapproval (Grossbard et al., 2009). Because of this aspect of contingent self-esteem, Grossbard and colleagues (2009) show how difficult it is to assess this construct, specifically in relation to numerous other variables, such as physical appearance or academic success.

In theory, a major component of self-esteem involves evaluation of the self in comparison to others. Leon Festinger (1954) introduced social comparison theory upon recognition that people are driven to evaluate their own abilities or performance in relation to their social peers. In

this topic, objective evaluation is not possible, and therefore the individual looks to society and their peers for comparison. The concept of social comparison has been expanded to include a number of other personal dimensions, such as a comparison of physical appearance and body parts (O'Brien et al., 2009; Schutz et al., 2002). In social comparison theory, self-esteem is related to the individual's striving for a "*better-than-average* effect" (Neff, 2009, p. 211, italics in original), wherein most individuals engage in a need to feel superior to others. The individual evaluates the self against peers and others in society and makes conclusions about the personal self-construct from these social comparisons. In some cases, the conclusions may be positive, and the individual has decided that they are "better than" their social counterpart; however, in many cases, negative conclusions about the self prevail, which can lead to destructive thoughts and behaviors, and harmful self-attitudes.

"Falling out of Love with Self-Esteem"

Originally, self-esteem was viewed as a healthy self-attitude, and researchers proposed that individuals should strive to achieve high self-esteem. Neff (2009) recognized that high self-esteem is positively related to happiness and satisfaction in life, as well as inversely related to depression and anxiety. However, a wealth of literature has demonstrated that a desire for high self-esteem is related to a number of personal drawbacks, such as the tendency to unjustifiably rate the self as more favorable in comparison to others, and leads to unrealistic views of the self (Neff, 2003b). Additionally, as Neff (2003b; 2009; 2011) summarizes, high self-esteem has been associated with narcissism, self-absorption, and even discrimination against others. Prior literature has demonstrated that self-esteem is relatively stable trait (Swann, 1996), such that even in the face of failure or disapproval from others, global self-esteem appears stable (Neff & Vonk, 2009). Moreover, recent attempts to increase self-esteem have failed (such as the California Task Force to Promote Self-Esteem), suggesting that self-esteem cannot be increased, as previously

thought (Neff, 2003b). Given the particularly negative associations that may come with high self-esteem (i.e. narcissism), it is also unclear whether or not self-esteem *should* be increased.

Neff (2009) disagrees with traditional Western thought that high self-esteem is synonymous with mental well-being and psychological health. Essentially, Neff argues that the field of psychology should “fall out of love with self-esteem” as the primary explanation for psychological well-being (Neff, 2011, p. 8). By definition, it appears that self-esteem incorporates evaluation and judgment of the self and the pursuit of approval from others. Unlike self-esteem, self-compassion is *not* predicated on these evaluative processes (Neff & Vonk, 2009). Neff (2011) recognizes that self-esteem offers some protection against self-criticism and harsh judgments, just as self-compassion does; however, self-compassion does not utilize evaluations and comparisons to others in order to feel worthy, nor does it distort self-perceptions (either positively or negatively). Neff and Vonk (2009) propose that high self-esteem and self-compassionate feelings may both be connected to positive emotional states, but for different reasons. For instance, it may be that individuals feel happy and optimistic when they positively evaluate themselves, which increases feelings of self-worth and self-esteem. Conversely, self-compassionate individuals may experience positive emotions because they are more accepting of their true selves and feel connected to others.

Neff and Vonk (2009) acknowledged that self-esteem is more likely to be felt “when things go right”, whereas self-compassion is noticed “when things go wrong” (p. 42). As mentioned previously, results from this study provide promising signs that self-compassion is also associated with positive emotional states (Neff & Vonk, 2009). Additionally, self-compassion may be a unique predictor of positive affect, unlike self-esteem, as previously thought. Neff (2003b) thus introduced self-compassion as the healthier alternative to self-esteem and proceeded to explore what psychological benefits individuals can gain from having more compassion for the self.

Neff (2003b; 2011) argues that two kinds of issues stem from dysfunctional self-esteem. On the one hand, individuals want to feel good about themselves and to feel loved or worthy. It is common to look for flaws and inadequacies in other people, because it helps us to appear better, at least for a short amount of time. Many people engage in this downward social comparison (Jones & Buckingham, 2005; O'Brien et al., 2009), and it creates a seriously negative worldview that engenders isolation and interpersonal disconnection (Neff, 2009). On the other hand, all humans have a tendency to be self-critical and “beat themselves up”, especially in comparison to others, a behavior known as upward social comparison (Jones & Buckingham, 2005; O'Brien et al., 2009). The negative internal dialogue we have with ourselves is another form of a defensive stance we take to protect our egos and maintain control of our emotions. As Neff (2011) highlights, individuals do recognize their own fallibility, so pointing out faults and weaknesses before others have a chance to helps the individual maintain some control over their self-concept.

In her initial study, Neff (2003a) argued that because self-compassion converts negative emotional experiences into positive self-affect, it might have similar benefits that self-esteem has, without the negative drawbacks. Self-compassion simply allows the individual to experience positive emotions genuinely without utilizing protective strategies to boost the ego, as self-esteem does. Given the notion that self-compassionate people should also have a higher sense of self-worth, Neff (2003a) hypothesized that self-compassion and self-esteem would be statistically correlated, but identifiably separate constructs. This hypothesis was supported in a sample of 232 undergraduate students. Though moderately correlated, the results established that self-esteem and self-compassion are two “different psychological phenomena” (p. 241). Additionally, the results suggest that self-compassion encompasses a positive self-affect, but does not relate to narcissism or the need to feel superior to others, as was the case for self-esteem.

Because self-esteem and self-compassion were found to be moderately correlated in previous research, Neff and Vonk (2009) controlled for each construct separately when analyzing

data from their 8-month study. Through investigation of long-term predictors of self-compassion and self-esteem, results indicated that self-compassion predicted greater self-worth stability than self-esteem for over 2,000 participants. Self-compassion was determined to be a negative predictor of rumination, anger toward others, and social comparisons (Neff & Vonk, 2009), signifying that individuals who are highly compassionate toward themselves compare themselves less frequently and do not ruminate as much as those with high self-esteem. Additionally, because self-compassion helps individuals admit and effectively deal with personal inadequacies, it was unrelated to narcissism. As in prior studies (e.g., Neff, 2003a), self-esteem was highly related to narcissism and the propensity to bolster one's ego and distort one's strengths and weaknesses (Neff & Vonk, 2009).

General Conclusions about Self-Esteem

Based on prior research and theoretical definitions, it is clear that low self-esteem and low self-compassion levels have similar outcomes. In general, when a person is not compassionate toward the self, they harshly judge themselves, feel isolated in their experiences, and ruminate on their faults and problems. Similarly, when someone has low self-esteem, they are self-critical (specifically in comparison to others) and may suffer from depressive symptoms and ruminative tendencies. Therefore, the evaluative and comparative aspects of low self-esteem seem to coincide with the negative dimensions of self-compassion (self-judgment, isolation, and over-identification).

Conversely, it is apparent how high self-esteem may produce similar and different effects than self-compassion. High self-esteem has been linked to positive psychological benefits, but it has also been linked to negative characteristics as well, whereas self-compassion has only been found to be associated with positive and healthy self-attitudes. And although this study aims to capture self-processes only, the positive dimensions of self-compassion incorporate humanity and

the experience of others into its perspective; however, it does so in a way that does not elicit comparisons and evaluations between the self and others, as contingent self-esteem does. Therefore, it makes sense to capture self-esteem on a global, rather than contingent, level, so as to more closely understand the “true” self-esteem and self-compassion processes that are occurring. Rosenberg (1965) attempted to create a measure of self-worth that captured how an individual regards the whole self regardless of context, yet still incorporated an evaluative component in his theoretical conceptualization. Unfortunately, this makes global self-esteem difficult to wholly distinguish from contingent self-esteem. Nevertheless, because a majority of the items on the Rosenberg Self-Esteem Scale do not involve a comparison against others, it will be utilized in this study as a global assessment of self-esteem, and will be used explored in relation to Neff’s (2003a) construct of self-compassion. The hypothesis is that global self-esteem and self-compassion will be moderately correlated, as previously established in the literature (Neff, 2003a); yet, a deeper examination of the specific relationship between these concepts will be conducted, specifically in relation to the theories of social comparison.

Overall, the results from prior research exploring the complex relationship between self-compassion and self-esteem seem to suggest that self-compassion could be a unique predictor of the positive affect, strengths, and qualities of individuals, rather than self-esteem. Additionally, a closer look at how both contingent and global self-esteem are independently related to self-compassion, as well as the construct of body esteem (explored next) is necessary. Future studies should aim to control for global or contingent self-esteem and include self-compassion measures when investigating mental health function or dysfunction, personality traits, positive affect, body satisfaction, and countless other topics within the counseling psychology literature.

Body Esteem

In line with the overall exploration on self-attitudes and self-processes, a major area of psychological research focuses on individuals' attitudes toward their body and physical appearance. In Western societies, negative feelings and overall dissatisfaction toward one's body is a common occurrence (Cash & Pruzinsky, 2002; Hargreaves & Tiggeman, 2009). A highly prevalent issue for males and females across all developmental stages, body dissatisfaction has been associated with myriad physical and mental health issues, such as depression, low self-esteem, and disordered eating and exercising pathology (Cahill & Massup, 2007; Dittmar, 2009; Hargreaves & Tiggemann, 2009). Given the particularly dangerous consequences that negative body attitudes can produce, a closer examination of "core aspect of mental and physical well-being" (Dittmar, 2009, p. 2) is in order.

Body Esteem or Body Image?

Body esteem and body image are used interchangeably in the literature, often without explicit theoretical or operational distinctions. Thoroughly explored by Cash and Pruzinsky (1990, 2002), the definition of "body image" includes subjective perceptual and attitudinal experiences about one's physical appearance. Body image is a multifaceted construct that comprises an individual's whole attitudes toward the physical self. Within this conceptualization of body image, these attitudes or dispositions include three components: 1) evaluation by the self and others, as well as how one 2) thinks about and 3) behaves in relation to the physical self. Additionally, how one views their body image also includes an assessment of the body's health and fitness. Grogan (1999) added to the definition of body image and stated that it is an overall assessment of a person's perceptions and feelings about the body, and which is "open to change through social influence" (p. 2). Moreover, Lowery and colleagues (2005) maintain that body

image is “constructed through self-observations, the reactions of others, and a complicated interaction of attitudes emotions, and experience” (p. 612).

A number of body image assessments exist in an attempt to understand this multidimensional construct. For example, Thomas Cash is one of the most distinguished experts in the area of body image etiology and evaluation. Decades of research have underlined Cash’s development of 10 different body image questionnaires, all of which assess distinct but interrelated attitudes about the physical body and appearance. Arguably the best measure for Cash and Pruzinsky’s (1990) comprehensive definition of body image, the Multidimensional Body-Self Relations Questionnaire (MBSRQ; Brown, Cash, & Mikula, 1990; Cash, 2000), encompasses evaluation and orientation of physical appearance, health, level of fitness, preoccupations with overweight, a self-classified weight section, and a satisfaction scale of various body areas. It also includes specific appearance scales that focus specifically on physical attractiveness. Notice that these definitions and assessments of body image incorporate social comparisons, which parallels the “contingent” subtype of self-esteem.

Introduced by Franzoi and Shields (1984), “body esteem” is regarded as a separate but related construct of self-esteem. In fact, Franzoi and Herzog (1986) interpreted body esteem as a particular subtype of general self-esteem. The first measurement of body esteem dates back to Secord and Jourard (1953), which was a single-score assessment called the Body-Cathexis Scale. The Body-Cathexis Scale was essentially the first method of quantifying global feelings about one’s physical appearance. Decades later, Franzoi and Shields (1984) conceptualized body esteem to encompass the wide range of positive or negative feelings that an individual has about the various parts, functions, and areas of their body. The Body Esteem Scale (BES) includes subscales specifically designed to capture the positive or negative emotions toward the body for both males and females. Body esteem can be divided into the three separate but interrelated domains for males and females, as well as two distinct object (body parts) versus process (body

functions) components, as measured by the BES. However, collectively, the researcher can obtain a global positive or negative evaluation of how the individual feels toward the areas, functions, and appearance of their body by incorporating the attitudes one has regarding their physical or sexual attractiveness, weight concern and upper body strength, and physical health. This definition of body esteem also means that there is less emphasis on how the individual is being evaluated by others, and is more of an overall self-appraisal.

Evidenced by the definition brought forth by Franzoi and Shields (1984), body esteem incorporates many of the facets that the definition of body image encompasses (Cash & Pruzinsky, 1990), with the exception of the social evaluation component. Yet, while the two concepts of *body image* and *body esteem* are used synonymously in the literature, there appears to be slight differences in how these constructs are assessed. Based on the items and how they are formulated (Franzoi & Shields, 1984), the Body Esteem Scale was not intended to capture evaluations against others or comparisons with peers. Nevertheless, Franzoi (1995) recognized that, theoretically, an individual's physical appearance and body parts are susceptible to evaluation by others – though he did not incorporate this in the measurement of body esteem. Instead, the objective is to obtain a more general self-appraisal not contingent on others. Some body image or body esteem assessments insert the social comparison and evaluative element that the BES does not. The Body-Esteem Scale for Adolescents and Adults (Mendelson, Mendelson, & White, 2001), however, attaches an “attribution” subscale, which are the perceived evaluations by others of the individual's physical appearance. Additionally, Brown and colleagues' (1990) MBSRQ incorporates the perceived appraisals by others. It is clear that these scales move away from the original body esteem assessment by Franzoi and Shields (1984), and the original definition of the subjective mental representation of the way the body appears to the individual (Lowery et al., 2005). A need for clarification is in order, so that body image or body esteem is both defined and assessed in a way that accurately reflects how people feel about their bodies.

Perhaps the direction, though, should not be to determine whether the construct of body image is the same or different from body esteem. Instead, it seems as though prior research has not clarified the different types of body attitudes into “true” or “global” body esteem (one’s attitudes toward their body without comparing the body to others) versus “contingent” body esteem (the attitudes toward the body that are conditional and based on the social approval or evaluation by others). How body esteem and body image are conceptualized within the contexts of global and contingent self-esteem may necessary to differentiate in order to understand how both constructs have been operationalized and measured within the literature thus far. In relation to contingent and global self-esteem, this author suggests that body esteem, as originally defined by Franzoi and Shields (1984), is closely related to the global assessment of the self. It could be argued that *body esteem*, as operationalized and measured by Franzoi and Shields (1984) is a measure that attempts to capture an overall sense of how the individual one feels about the body’s appearance and functionality (“global”), whereas other *body image* measures not only assess body attitudes but they also incorporate a component of social comparison (“contingent”). Additionally, body esteem attempts to measure *feelings* one has toward their body, rather than satisfaction with it. The distinction is important because someone can be “satisfied” or “dissatisfied” with their bodies, but may feel positively or negatively about the various parts (Sheldon, 2010). Because this study aims to more clearly understand true self-compassion, self-esteem, and body attitudes on an individual basis rather than on exploring the self, compassion, or one’s physical appearance *in relation to* others, the Body Esteem Scale (BES; Franzoi & Shields, 1984) seems to be the most appropriate measure for this theoretical exploration. The present study utilizes the BES to capture the overall positive and negative feelings one has about the parts or functions of the body.

The Development of Negative Body Esteem

One area that the present study does not directly investigate is how negative body esteem has developed; however, it very much deserves acknowledgement. An extensive amount of research exists that has aimed to identify which theoretical perspective, biological or environmental influence, and/or agent of socialization contributes to the development of negative body attitudes. Additionally, overwhelming support exists regarding gender differences in body esteem. Yet, the overall results are largely inconclusive. Research findings offer psychological theories and potential risk factors that may *lead to* body dissatisfaction, but an all-encompassing answer is still unknown. And, according to prior research, it appears that a single factor cannot be determined. Body esteem is a complex, multidimensional construct that may very well be under examination for decades to come. Here are a few studies highlighting this extensive research on the development of negative body esteem.

Agents of Socialization

Myriad socializing agents have been presented as potential risk factors for the development of negative body esteem. Sheldon (2010), among others, acknowledged a wealth of literature that addresses how the media, peers, and family significantly influence body dissatisfaction. A combination of unrealistic societal ideals and an increase in sources of media, in conjunction with a significant rise in body esteem disturbance has led to a surge of research studies exploring the impact of the media on body satisfaction and dissatisfaction (Dittmar, 2009). Hobza and colleagues (2007) recognize the pervasive nature of the media on Western individuals, noting that the average person is likely exposed to thousands of advertisements each day. Male and female depictions in the media are ever-present, and prior research suggests this to be a major factor in the development of body esteem. The image of females in the media has been deemed the “thin ideal”, which includes an extremely thin, flawless physical appearance

(Dittmar, 2009). McCreary and Saucier (2009) acknowledged the difference between media ideals for males and females, and identified the “muscular ideal” for males, which is an image of a physically fit, toned, and muscular man. Hargreaves and Tiggemann (2009) noted that media figures are becoming increasingly thin, and other research indicates that even brief exposure to these figures have a negative impact on mood and body satisfaction for both males and females (Cahill & Mussap, 2007). Researchers have concluded that dissatisfaction with one’s body is influenced by the inability to attain either the thin ideal or muscular ideal (Hargreaves & Tiggemann, 2009; Humphreys & Paxton, 2004); therefore, the media appears to be a notable contributor to negative body esteem.

Family and peer pressure have also been found to contribute to the development of body esteem, particularly for adolescents and young adults. Sheldon (2005) discovered that the most “salient predictor of low body esteem” (p. 292) was the influence of friends and family for both male and female college students. Between genders, the results revealed that college females are influenced more by their peers, specifically in relation to concerns with weight. College males’ body esteem, on the other hand, seems to be affected the most by family pressure (Sheldon, 2010). This new research provides more insight into the development of negative body esteem through family, peer, and media agents of socialization.

Social Comparison Theory

Mentioned previously, social comparison theory was first introduced by Festinger in 1954. This is the idea that humans are compelled to subjectively evaluate their personal possessions, abilities, and performances in comparison to their social peers. The individual looks to society, the environment, and their peer group to determine how they feel about themselves (self-esteem) and their physical appearance (body image). The aforementioned agents of socialization appear to play a role in the tendency and frequency of social comparisons.

The tendency to compare one's body against others is known as "body comparison" (Schutz et al., 2002). Prior research has indicated that those who compare their physical appearance and bodies with others are likely to engage in disordered eating behaviors (O'Brien et al., 2009). O'Brien and colleagues (2009) found that making appearance comparisons "moderates the relationship between sociocultural influences" (p. 201) like the internalization of the societal body ideal, disordered eating, and body dissatisfaction (Schutz et al., 2002). A study by Schutz and colleagues (2002) revealed that adolescent females were more likely to make body comparisons to peers and media figures. Moreover, the frequency of comparison increased as females aged, suggesting that as females move through adolescence and into young adulthood, the pressure to make comparisons against others increases. Additionally, those who make body comparisons are more likely to be dissatisfied with their bodies overall (Fisher, Dunn, & Thompson, 2002).

Because the construct of body esteem has been theorized to encompass some aspect of social comparison, it will be important to understand to what extent body comparison influences or plays a role in one's assessment of their body esteem. While the Body Esteem Scale (Franzoi & Shields, 1984) does not ask participants to rate themselves in relation to their social peers, the Body Comparison Scale (BCS, Fisher et al., 2002) measures to what extent individuals compare various parts of their body to their same-sex peers. As previously mentioned, clarification on the degree of comparison and social evaluation within the concept of body esteem is needed; therefore, it will be important to analyze how exactly these constructs are intertwined. Franzoi (1995) noted that males and females are socialized to assess their bodies differently (discussed next), but acknowledged that the body parts (versus functions) is a "more potent and salient standard of evaluation" (p. 420). Exploring body comparison will help to clarify further the associations between social comparison, self-esteem, and body esteem. Adding a body

comparison measure will also help understand any new connections between self-compassion and these body-related constructs.

Gender

While it remains unclear to what extent biology and socialization influence gender differences in body esteem, a number of studies examining body esteem have established that significant gender disparities in body esteem do exist. A host of literature suggests that females are overall more dissatisfied with their bodies than are males (Grossbard et al., 2009; Jones & Buckingham, 2005; Lowery et al., 2005), but new (and perhaps overlooked) research provides sound rationale for a more thorough investigation of gender and age differences. In a study of 120 females and 108 males, Franzoi (1995) found that young adults possess less positive attitudes toward their body parts (versus their body functions), regardless of gender. Age appears to be another demographic variable that will be important to examine with regard to body esteem feelings. Perhaps even more interesting, Franzoi (1995) found that males held more neutral attitudes toward their bodies, and did not overly identify with strongly positive or strongly negative feelings about their body parts. This is separate from other interpretations of gendered body esteem research, as other studies have claimed that males feel more “positively” about their bodies than females. In Franzoi’s (1995) sample, it appeared that females has a higher percentage of negative attitudes; however, this finding did not directly signify that males hold a higher percentage of positive feelings toward their body, as males and females each had relatively similar percentages of positive body esteem. This is an area worthy of further investigation.

As evidenced by prior research, significant gender differences in relation to body and physical appearance concerns exist (e.g., Dittmar, 2009; Franzoi, 1995; Grossbard et al., 2009), suggesting a need to measure distinct but interrelated aspects of body esteem. In line with the understanding that body esteem is a multifaceted construct, the BES asks respondents to

determine how they feel about specific bodily aspects and degree of functionality within particular areas. For example, the male subscales incorporate physical attractiveness, upper body strength and muscularity, and an overall physical health condition. Physical attractiveness relates to “handsome” or “good-looking” the individual feels (Franzoi & Herzog, 1986, p. 24). The upper body strength subscale refers to “muscular” areas of the body that can be changed through weight training and exercise (Franzoi & Shields, 1984). The physical condition subscale for males reflects upon feelings about strength and stamina. The female subscales incorporate concepts of sexual attractiveness, weight concern, and physical health. Distinct from the male category of physical attractiveness, sexual attractiveness aims to capture females’ attitudes about their sexuality and facial attractiveness. The weight concern subscale for females assesses perceptions about the female body that can be altered through gaining or losing weight (Franzoi & Herzog, 1986). Although some items overlap between the male and female physical condition subscales, this subscale aims to measure overall health and the functionality of females’ bodies.

Franzoi (1995) later separated his ideas of body esteem to assess Body-as-Object Esteem (BOE) and Body-as-Process Esteem (BPE), to gather a sense of how one feels about the appearance of their body parts (BOE) and the level of appreciation for the body’s functionality (BPE). Theoretically, Franzoi (1995) acknowledged that one’s BOE may or may not be related to social evaluations, yet does not attempt to assess the degree to which body comparison is included within one’s body esteem. This is reasonable given that the operational definition of body esteem does not attempt to incorporate the separate construct of social comparison, as perhaps body image does. For the purposes of this study, the six subscales will be explored across males and females, and BOE and BPE will be separately analyzed. Because the subscales of the original BES cannot be directly compared, but that research strongly suggests there to be differences in body esteem feelings across genders, Franzoi’s (1995) new scoring system to examine Body-as-Object and Body-as-Process helps to clarify some of the questions regarding

gender-specific body esteem issues. In general, results from Franzoi (1995) revealed that males experience their bodies on a more global level and value its functionality and process over the physical appearance. Additionally, males possess more positive body esteem for their Body-as-Process. In contrast, females seem to place more of an emphasis on their physical appearance, and scores indicate that females have more negative feelings toward their body parts than do males. Further analyses of gender differences in body esteem feelings will be conducted in the present study.

Age appears to be another worthy area of exploration. A noteworthy study by Kaminski and Hayslip (2006) investigated the gender differences in body esteem as well as the changes on the BOE or BPE for older adults. Similar to the results from Franzoi's (1995) study, the results revealed that males aged 60-91 felt more neutral (not strongly positive or negative) about their bodies than did women. Interestingly, females held more positive feelings about their bodies than their opposite-sex peers. The authors suggest this may be due to a combination of the "double standard" that older adults face in relation to physical appearance and physical health and fitness (Kaminski & Hayslip, 2006, p. 21). Males in their young adulthood feel positively about and place more of an emphasis on their health and strength (BPE), but that begins to fail as we age. Conversely, as younger females place more emphasis on their physical appearance, Kaminski and Hayslip (2006) found that older women tended to feel more positively about their body functions and processes (BPE), increasing their overall body esteem levels. These results indicate that a decline in body esteem is not inevitable as we age (Kaminski & Hayslip, 2006). These findings may be particularly relevant for studies that explore gender differences as well as for those that test effective interventions that increase body esteem over time, such as the present study.

General Conclusions about Body Esteem

It is evident that dissatisfaction with one's body is an increasing concern amongst males and females in Western society – particularly for young adults; therefore, continued focus on understanding the development of negative body esteem as well as how to intervene and perhaps prevent further psychological dysfunction should be at the forefront of new research. Several major gaps in psychological literature exists in this area, as clarification between “true”/“global” body esteem or “contingent” body esteem seems necessary to better measure how individuals appraise their own bodies. Further exploration between body comparison and body esteem could help to identify the relationship between self-appraisals and peer evaluations. In reviewing the literature, few, if any, studies made a clear distinction between a “true”, individual self-evaluation of body esteem, and a “contingent” body esteem that was conditional on social expectations and standards. Acknowledging the relationship between the concepts of body esteem and body comparison is necessary; however, teasing apart these constructs can provide a clearer representation of true body esteem.

It is also unclear how the constructs of body esteem and self-compassion are associated, as research studies have not been conducted utilizing this combination of constructs. With the relatively new introduction of the concept of self-compassion as perhaps the more preferred measure of psychological well-being, it appears that a new conceptualization of body esteem may be in order. As demonstrated through prior research, dissatisfaction with one's body and physical appearance is strongly associated with detrimental mental health and psychological outcomes (e.g. Dittmar, 2009; Hargreaves & Tiggemann, 2009). As Western psychologists are now moving toward exploring and initiating positive strengths and attributes in individuals (Neff, 2003b), perhaps a shift in how we approach and investigate negative body esteem is germane as well. In fact, operationalizing and measuring body esteem as a component of self-compassion (rather than self-esteem) may help future researchers to not only identify true appraisals of body satisfaction,

but may also help to increase an individual's positive feelings toward one's body. Compassion for the self and body may be an innovative area of exploration; but first, investigating in what ways these concepts are linked will provide future researchers with groundbreaking areas of exploration.

Expressive Writing

Over the last several decades, expressive writing (also known as emotional disclosure) studies have emerged as an effective intervention to deal effectively with trauma (Pennebaker & Beall, 1986) and to foster improved health (Pennebaker, Kiecolt-Glaser, & Glaser, 1988). Expressive writing asks participants to organize their thoughts and emotions about a personally distressing experience into word (Knowles, Wearing, & Campos, 2011). Although original studies focused on the health benefits of expressively writing about traumatic events, since then a plethora of studies have investigated how James W. Pennebaker's expressive writing paradigm can benefit individuals socially or interpersonally, psychologically, and emotionally. Additionally, many researchers have adapted Pennebaker's writing intervention to further pinpoint what aspects of writing are related to physical and mental health benefits. A thorough review of the literature exposes two areas that remain underexplored. Only one published study investigates self-compassion and expressive writing (Neff et al., 2007b), and only one known published experiment attempted to use expressive writing as an intervention for negative body attitudes (Earnhardt, Martz, Ballard, & Curtin, 2002). This study aims to add to the expressive writing literature by incorporating these two areas of exploration.

Confronting Trauma: Health and Expressive Writing

In their landmark study, Pennebaker and Beall (1986) investigated the physiological health benefits of expressively writing about past traumatic experiences. Based on prior research, Pennebaker and Beall (1986) hypothesized that disclosing traumatic experience, as well as

recognizing emotional responses to these events, would help the participants organize and make meaningful sense of the experience. Not confronting a traumatic event is stressful (Pennebaker et al., 1988), but verbally divulging information related to past traumas is difficult for many people, as these events are extremely personal and highly upsetting. Therefore, Pennebaker and Beall (1986) designed an expressive writing intervention as a means of emotional expression related to the trauma. Forty-six healthy college students participated in the study that jumpstarted the expressive writing movement. Pennebaker and Beall (1986) divided the participants into three writing conditions: control, trauma-fact, and trauma-emotion. Those in the control group were asked to write objectively about their living room or the shoes they were wearing; those in the trauma-fact group were asked to write about a traumatic event but were specifically informed not to include feelings into their writing; those in the trauma-emotion group wrote about a personally upsetting experience, with specific emphasis on revealing only their emotions about the event; and those in the trauma-combination condition were asked to report both facts and emotions related to traumatic events. It is important to note that this study relied on both self-report and objective data from the university health clinic to assess changes in health, so as to avoid influences of socially desirable responding. Although participants in the trauma writing groups reported more negative moods immediately after the 20-minute writing exercise as compared to the controls, the results revealed that those who wrote for four consecutive days on their emotions had the most pronounced physiological and health benefits over the 4-month time period (Pennebaker & Beall, 1986).

In order to connect Pennebaker and Beall's (1986) initial findings of physical health benefits to mental health benefits, a second study led by Pennebaker (et al., 1988) addressed immune functioning, distress levels, and implications for psychotherapy. One of the limitations of a self-report study is the susceptibility of demand characteristics; therefore, Pennebaker and Beall (1986) attempted to control for this possibility by assessing social desirability, and both

Pennebaker and Beall (1986) and Pennebaker and colleagues (1988) used participant data from the university health clinic. Fifty undergraduate students participated in this methodologically rigorous study and were equally divided into trauma (with an emphasis on emotional reactions) or no-trauma (control) writing conditions. Results indicated that those in the trauma writing condition believed their writing to be far more personal and emotional than those in the control condition. Additionally, the findings reveal that participants in the trauma writing condition experienced an increase in immune functioning, as measured through blood samples of T-lymphocytes. Similar to findings by Pennebaker and Beall (1986), Pennebaker and colleagues (1988) also observed that trauma condition participants experienced a significant drop in health center visits over a 6-week follow-up period. For a complete synthesis of the best research studies on the health benefits of written emotional expression (the traditional expressive writing paradigm), please see Smyth (1998). Additionally, Lowe (2006) noted that several other expressive writing studies have helped individuals with other health problems, such as asthma and arthritis. These initial studies investigating the physical health benefits of expressive writing provided a promising avenue for individuals to obtain psychological health benefits through writing as well.

Mental Health Implications of Expressive Writing

The groundbreaking studies by Pennebaker and Beall (1986) and Pennebaker et al. (1988), as well as in the meta-analysis by Smyth (1998), provided the catalyst for new topics and variables to explore with expressive writing interventions. For instance, a sample of 90 undergraduate participants who were screened for a history of depressive symptomatology but who did not currently meet criteria for depression were recruited to participate in a 3-day expressive writing exercise (Gortner, Rude, & Pennebaker, 2006). Participants were either divided into an emotionally expressive or control writing condition, wherein the experimental condition was asked to write their thoughts and feelings about prior “emotional upheavals”

(Gortner et al., 2006, p. 295). The findings strongly support that expressive writing helps lower depressive symptoms in this “depression-vulnerable” population (Gortner et al., 2006, p. 299). This study in particular provides hopeful new directions for not only lowering depressive symptomatology, but also for possibly preventing depressive and ruminative symptoms for individuals with a history of depression.

Baikie and Wilhelm (2005) summarized recent results from a variety of expressive writing studies, with a specific focus on emotional and physical health benefits. As the authors highlight, expressive writing studies tend to have negative effects immediately after the writing exercise, such as a decrease in positive mood and a slight increase in self-reported stress levels. However, over time, a number of expressive writing studies continue to demonstrate long-term objective and subjective emotional and physical health outcomes (Baikie & Wilhelm, 2005).

A review of literature on emotional disclosure of traumatic events by Hussain (2010) addresses this issue as well. As Hussain (2010) summarizes, prior research suggests that a suppression and denial of distressing events negatively impact physical and mental health. These expressive writing studies provide a significant amount of evidence that confronting a distressing experience can be psychologically and physiologically beneficial for a number of individuals. This is promising news, as humans are continually plagued by trauma and stress (Hussain, 2010). Pennebaker and colleagues (1988) offered some implications for clients involved in psychotherapy, as perhaps implementing an expressive writing exercise in conjunction with psychotherapy could have long-term mental health benefits as well. Additionally, Lowe (2006) reviewed a number of expressive and creative writing studies, and offers implications for how writing can be used as an adjunct to more evidenced-based psychotherapy approaches.

Underexplored Areas

Two areas germane to the current study that are under-examined in the current expressive writing literature are body esteem and self-compassion. Earnhardt and colleagues (2002) developed an expressive writing study in hopes of decreasing negative “body image”, as measured by Franzoi and Shields’ (1984) Body Esteem Scale. Forty-eight female students participated in this study and were recruited based on having “negative body image” (Earnhardt et al., 2002, p. 22). Similar to the traditional writing paradigm of disclosing emotions related to a traumatic event, Earnhardt and colleagues (2002) hypothesized that writing about one’s thoughts and feelings regarding negative body attitudes would help the individual to cognitively organize and restructure these feelings. Although having negative body esteem is not traumatic in and of itself, Earnhardt and colleagues (2002) believed it to be an ongoing negative experience for the individual. Contrary to the study’s hypotheses, participants in both the control and experimental groups reported improvements in dieting behavior, eating disorder symptomatology, body esteem, or mood. Additionally, the follow-up assessment at one month was briefer than the original expressive writing studies (e.g., Pennebaker & Beall, 1986). Although this study had several limitations, it was the first attempt to implement an expressive writing intervention to combat negative body esteem.

Only one known self-compassion study utilized some of the expressive writing research by James Pennebaker. Neff and colleagues (2007b) employed the Linguistic Inquiry and Word Count (LIWC; Pennebaker, Francis, & Booth, 2001) to analyze written responses regarding participants’ greatest weaknesses. LIWC is able to qualitatively analyze expressive writing samples in a number of different ways; it was utilized in Neff et al.’s (2007b) study to analyze first person pronouns, social references, and negative emotions. Consistent with the theoretical conceptualization of self-compassion, Neff and colleagues (2007b) found that compassion for the self was positively correlated with first person plural (“we”) pronouns, social references to

family, friends, and others, and to communication. Self-compassion was negatively correlated with first person singular (“I”) pronouns, which has previously been linked to negative mental health outcomes such as depression (Rude, Gortner, & Pennebaker, 2004). Although the study by Neff and colleagues (2007b) was not a traditional expressive writing paradigm exploring self-compassion and potential physical and mental health benefits, the results support prior findings that self-compassion is related to an interconnection with others and a less isolated and ruminative view of the self, specifically when considering one’s weaknesses. It makes logical sense for a future expressive writing study such as the present one to include self-compassion as a variable, in order to better understand how one might benefit from this intervention. Moreover, it will be important to explore what role self-compassion plays in an expressive writing study.

Positive Writing Topics

One of the main criticisms of the original expressive writing paradigm is the sole focus on negative life events in determining long-term health benefits of written emotional expression (King, 2001). In fact, the majority of studies have shown a bias that benefits from expressive writing *must* involve confronting the trauma (King, 2001). In a study by King and Miner (2000), participants wrote either about the positive aspects of a traumatic event or about the trauma only. Results from this study indicated that the individuals were able to gain insight and understanding into their traumatic experiences, as well as obtain the same health benefits, regardless of writing condition. In order to further explore the possible benefits of expressive writing, King (2001) investigated whether writing about life goals would produce the same health benefits that writing about trauma has generated. The writing topic of life goals was conceptualized based on ideas of the “possible self”. Briefly, possible selves have been defined as the necessary link between a person’s self-concept and their motivation to achieve (Markus & Nurius, 1986). Moreover, possible selves “encompass all of our imaginable futures for ourselves” (King, 2001, p. 800). The concept of possible self will be discussed in detail in the following section. King (2001) theorized

that writing about these life goals may be considered a therapeutic activity, as it may help the individual bring “awareness and clarity” to their life dreams (p. 800).

Eighty-one participants were divided into either a control writing condition, a trauma condition, or the “Best Possible Self” (BPS) condition, and followed the traditional paradigm by writing for 20 minutes for four consecutive days. The results indicated that writing about one’s best possible self was significantly less upsetting than the trauma writing condition, but both conditions rated the writing task as difficult, emotional, and important (King, 2001). Additionally, the BPS writing condition was related to an increase in positive affect after writing. Overall, results indicated that writing about one’s life goals can help individuals to obtain the same physical health benefits of writing about trauma, without any of the “emotional costs” (King, 2001, p. 804). Additionally, increases in subjective well-being were found for the BPS condition, as recently as the 3-week follow-up, suggesting that writing about life goals may also have psychological benefits that writing about trauma does not.

Moving completely away from writing about traumatic events, Harrist, Carlozzi, McGovern, and Harrist (2007) examined the number of illness-related visits to the university health center in a sample of 75 college students. Participants disclosed about either their best possible selves or their schedule for the day by talking or writing. Results from this study revealed that participants assigned to discuss their life goals had fewer health center visits three months after the intervention than those in the control condition. While this study investigated two modes of emotional expression (verbal or written), the overall results provide support that disclosing about positive topics like the BPS topic seem to provide long-term affective and physical health benefits (Harrist et al., 2007).

Best Possible Self

Although the best possible self writing topic was briefly noted in aforementioned expressive writing studies by King (2001) and Harrist et al. (2007), it deserves further elucidation. Consistent with the movement toward positive, strengths-based theories and approaches, research in the fields of optimism, goals, and motivation have also exploded in the last 30 years (Meevissen, Peters, & Alberts, 2011). Markus and Nurius (1986) defined the “possible self” as a combination of “what we would like to become, what we would become, and what we are afraid of becoming” (Meevissen et al., 2011, p. 58). It is an identity goal that is characterized by long-term, self-in-future representations. Markus and Nurius (1986) further defined possible selves as the “cognitive manifestations of *enduring* goals, aspirations, motives, fears, and threats” (p. 954, italics in original). Possible selves are constructed based not only on ideas about the future, but on past experiences as well, and are thought to compel humans to achieve their desired self. The construct of possible self incorporates an individual’s reflection of prior performances, comparisons to others, and experiences and expectations from a historical and cultural context (Hoyle & Sherrill, 2006). Markus and Nurius (1986) noted that possible selves are not only descriptive, they are also a motivating influence in our lives.

From a developmental perspective, Markus and Nurius (1986) believed that the construction of the possible self for adolescents and young adults was particularly important. These future-oriented selves have not yet been actualized and therefore are not “constrained” by concerns of whether or not the possible self is realistic or attainable (Hoyle & Sherrill, 2006, p. 1674). One caveat noted by Hoyle and Sherrill (2006) is that the possible self must be activated. King (2001) created the Best Possible Self (BPS) topic as a goal of activating this positive, “hoped-for” (Hoyle & Sherrill, 2006, p. 1675) self-representation, as a means to get the individual to envision the realization of their life dreams. Because the “best possible self” is both a self-representation and a self-process, it seems necessary to employ the BPS writing topic in the

present study, as it aligns perfectly with the examination of self-compassion, self-esteem, and body esteem.

General Conclusions about Expressive Writing

Pennebaker and Beall's (1986) original paradigm asked participants to write for 20 minutes for four consecutive days, and follow-up results were obtained six months later. Although several studies have closely followed the original task, recent studies have adapted the initial model to employ fewer days of writing and vary widely in the follow-up assessment timeframe. In Smyth's (1998) meta-analysis, results indicated that duration of writing was not related to specific benefits, but another meta-analysis by Frattaroli (2006) found that larger effects were found when writing sessions lasted longer than 15 minutes. In order to test the lower limits of the writing paradigm duration, a study by Burton and King (2007) asked participants to write for only two minutes for two consecutive days. The results from this study found that just two minutes of writing can offer some health benefits 4-6 weeks after the writing session. While these results are quite surprising, given the amount of support that the original writing paradigm has offered, the takeaway message may be that individuals can benefit from reflecting on significant life experiences for even just a few minutes. Furthermore, additional expressive writing studies have varied the follow-up assessment from three weeks (King, 2001) to six weeks (Pennebaker et al., 1988) to three months (Harrist et al., 2007).

In general, one can conclude that emotional disclosure about trauma has significant physical health benefits, particularly in relation to health clinic visits (Pennebaker & Beall, 1986) and immune functioning (Pennebaker et al., 1988). Prior research also provides support for long-term psychological and emotional benefits of expressive writing about traumatic events (Gortner et al., 2006; Hussain, 2010). However, a promising new area of research of expressive writing about positive topic, such as best possible selves, has emerged (Harrist et al., 2007; King, 2001)

and offers support for long-term physical and mental health benefits of writing about life goals. King (2001) makes the argument that expressive writing does not have to involve encountering a traumatic event to obtain the same advantages, and one way of achieving those benefits is to have the individual envision him or herself achieving their life goals. Perhaps one of the reasons Earnhardt and colleagues' (2002) expressive writing intervention for negative body esteem did not produce significant results was because participants were asked to focus on the negative feelings they attributed to their bodies. Instead, the present study aims to implement the positive method of writing about life goals as a means of increasing positive body esteem feelings.

Neff and colleagues (2007b) acknowledge that, from a clinical perspective, it may be important to determine populations that can be effectively targeted by intervention techniques, as studies have linked increases in self-compassion with increases in "markers of mental health" (p. 150). The physical and psychological consequences of negative body esteem are indisputable. Likewise, the benefits of increasing self-compassion and writing expressively are undeniable. Therefore, the obvious next step is to implement an expressive writing intervention that focuses on the best possible self while examining the associations and changes in self-compassion and body esteem.

CHAPTER III

METHODOLOGY

Recruitment

Study participants were recruited via multiple methods, including in-class recruitment, utilizing a subject pool, randomized sampling, and snowball. Students enrolled in the College of Education's research participant management system subject pool were allowed to participate for extra course credit; the primary investigator visited classes and posted flyers around campus; a university-approved e-mail was sent to a randomized sample of students; and the principle investigator posted on social media sites to recruit participants.

Participants accessed a website for this study via an online research participant management system, e-mail, or Facebook posting, which redirected to a secure survey website. A brief synopsis of the study appeared, along with IRB-approved informed consent information. Participants were informed that participation was voluntary and they may withdraw at any time without any penalty. Students enrolled through the research management system were awarded course credit for participation; students who did not participate were provided alternative activities for supplemental course credit, per their instructors. Upon completion of the study, all participants, regardless of recruitment modality, were invited to enter into a drawing for a chance to receive a monetary award.

Participants

This study consisted of two parts. In part 1, survey data were collected to evaluate the relationships between psychological variables of self-compassion and body esteem with self-esteem and body comparison. In part 2, an experimental design was implemented to evaluate the effectiveness of an expressive writing intervention on increasing participants' positive body esteem and self-compassion.

Part 1. Participants in part 1 (surveys only) of this study included 299 (Males = 98, Females = 201) undergraduate and graduate students at a large southwestern university. Ages of participants ranged from 18 to 57 years old ($M = 25.9$, $SD = 7.8$). All education levels were represented, with 27 Freshmen (9%), 38 Sophomores (12.7%), 47 Juniors (15.7%), 64 Seniors (21.4%), and 123 Graduate students (41.1%). Of the participants, 234 identified as White/Caucasian (78.3%), 20 identified as Black/African-American/African (6.7%), 14 identified as American Indian/Native American/Alaska Native (4.7%), 13 identified as Asian/Asian American (4.3%), 11 identified as Hispanic/Latino(a) (3.7%), and 7 identified as Multiracial (2.3%).

One hundred seventeen participants indicated they were single (39.1%). Thirty-four participants were reportedly dating (11.4%) and 75 indicated they were partnered or in a committed relationship (25.1%). Sixty-five participants identified as married (21.7%) and 8 reported to be separated, divorced, or widowed (2.7%).

Part 2. Of the 299 total participants who completed part 1, 28 participants (Males = 9, Females = 19) completed part 2 of the study, which included three days of writing for 20 minutes in one of two conditions and a follow-up survey between 6-10 weeks later.

Fourteen participants (Males = 6, Females = 8), who were randomly assigned to the experimental writing condition, completed all three days of writing and the follow-up survey. Age of participants ranged from 18-37 ($M = 25.14$, $SD = 4.49$). Of these participants, 11 identified as White/Caucasian (78.6%), two identified as Black/African-American/African (14.3%), and one identified as American Indian/Native American/Alaska Native (7.1%). Six participants reported as single (42.9%), one reported to be dating (7.1%), five identified themselves as partnered/in a committed relationship (35.7%), and two indicated they were married (12.5%). Two participants identified as sophomores (14.3%), two identified as juniors (14.3%) and three were reportedly seniors (18.8%). Seven participants were graduate students (43.8%).

Fourteen participants (Males = 3, Females = 11) were randomly assigned to the control condition and completed all three days of writing and the follow-up survey. Age of participants ranged from 19 to 40 ($M = 25.14$, $SD = 5.68$). Of these participants, 11 identified as White/Caucasian (78.6%), one identified as Black/African-American/African (7.1%), one identified as American Indian/Native American/Alaska Native (7.1%), and one identified as Hispanic/Latino (7.1%). Eight participants reported to be single (57.1%) and one indicated they were dating (7.1%). Two participants identified as partnered/in a committed relationship (14.3%), and three identified as married (21.4%). Three participants were sophomores (21.4%), one was a junior (7.1%), and 10 were graduate students (71.4%).

Measures

Demographic Items. Information related to gender orientation, age, racial/ethnic identity, marital/relationship status, and education level was collected.

Self-Compassion Scale. The Self-Compassion Scale (SCS), developed by Neff (2003a), is a 26-item measure assessing the six constructs on the three dimensions of self-compassion.

Specifically, the SCS measures responses on Self-Kindness (SK) versus Self-Judgment (SJ), Common Humanity (CH) versus Isolation (I), and Mindfulness (M) versus Over-Identification (OI). Participants were asked to read each of the 26 statements and rate their personal behavior during difficult times on a 5-point Likert scale ranging from (1) Almost Never to (5) Almost Always. For the purposes of this study, this scale was modified to a 7-point Likert scale, ranging from (1) Almost Never to (7) Almost Always. Modifying all study scales to reflect a 7-point range helps increase variance and allows for mean comparisons across the scales. Beal and Dawson (2007), in their study involving Likert-scaling for multi-level data advised to utilize “response formats with a larger number of options” (p. 669), which was consistent with a study regarding single level data (Cicchetti et al., 1985).

The SK, CH, and M subscale items are positively worded. The SK subscale is comprised of five items. An example of an SK item is “I’m kind to myself when I’m experiencing suffering.” An example of an item on the CH subscale, comprised of four items, is “When things are going badly for me, I see the difficulties as part of life that everyone goes through.” The Mindfulness scale is made up of four items. An example of an item on the M subscale is “When something upsets me I try to keep my emotions in balance.”

The SJ, I, and OI items are negatively formulated. The SJ subscale is comprised of five items. An example of an item on the SJ subscale is “When times are really difficult, I tend to be tough on myself.” An example of an item on the Isolation subscale, comprised of four items, is “When I’m really struggling, I tend to feel like other people must be having an easier time of it.” The OI subscale is made up of four items. An example of one of the OI items is “When something painful happens I tend to blow the incident out of proportion.”

To determine subscale scores, the item scores are added together and the averages calculated for each subscale. No reverse-coding is done at this point, which means that lower

subscale scores on Self-Kindness, Common Humanity, and Mindfulness subscales indicate *less* self-compassion, and higher scores indicate *more* compassion toward self; whereas higher scores on Self-Judgment, Isolation, and Over-Identification subscales indicate *less* self-compassion, while lower scores indicated *more* compassion toward oneself.

A Total Self-Compassion score is calculated by first reverse-scoring the negatively formulated subscales of SJ, I, and OI and calculating an average score. This provides a Self-Compassion grand mean to utilize as a more global assessment of self-compassion. The measure itself provides information how to interpret the SCS grand mean scores. Adjusting for the change in the Likert scale, average scores should generally fall around 4.0 on the 7-point scale (Neff, 2003a). In general, a score between 1.0 and 3.5 would indicate low self-compassion, moderate self-compassion may be between 3.5 and 5.5, and high self-compassion scores would fall between 5.5 and 7.0.

Neff (2003a) has established that the Self-Compassion Scale is a psychometrically and theoretically sound instrument. Internal consistency reliability was found to be .92 (Neff, 2003a) for the validation stage of this instrument. Additionally, the SCS grand mean score and subscale scores appear to exhibit strong test-retest reliability (Neff, 2003a), with all correlations between .80 and .93. For the grand mean, reliability correlations are .93. The Self-Kindness subscale's test-retest reliability is .88 and the Self-Judgment subscale is .88. The Common Humanity subscale obtained a correlation of .80 and its counterpart Isolation subscale obtained a reliability estimate of .85. The Mindfulness subscale's test-retest reliability is .85 and the Over-Identification subscale's reliability is .88. The Self-Compassion Scale appears to have adequate discriminant validity between other self-attitude measures as well (Neff, 2003a). Specifically, it is moderately correlated with the Rosenberg Self-Esteem Scale ($r = .59, p < .01$); however, contrasting with self-esteem and other self-attitude measures, self-compassion obtained a non-significant negative correlation with narcissism (Neff, 2003a) and has been demonstrated to have

construct validity. Future studies have continued to support that this is a reliable and valid measure of self-compassion, such as in a study by Neff et al. (2007a), where internal consistency reliability obtained was .94.

In this study, Cronbach's alpha for the Self-Kindness subscale of the SCS for the 299 total participants was .83, and the Self-Judgment subscale reliability was .82. Cronbach's alpha level for the Common Humanity subscale in this study was .79, and its counterpart Isolation subscale reached .79 reliability. The Mindfulness subscale reliability in this study was .76, and the Over-Identification subscale's Cronbach's alpha was .81. The overall reliability for all 26 items, which is used to calculate the grand mean, was .74. Generally speaking, Cronbach's alphas between .7-.8 indicated acceptable reliability (Field, 2005, p. 668) These reliability estimates in this study indicate moderate to strong overall reliability for the Self-Compassion Scale and its subscales.

Self-Esteem Scale. The Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965) is a 10-item measure capturing an individual's general feelings about the self. It is the most commonly used self-report assessment for global self-esteem (Demo, 1985; Neff, 2003a). The scale was developed and normed on a sample population of over 5,000 high school students from randomly selected school within the state of New York (Rosenberg, 1965). Participants were asked to rate their general feelings about the self on a 4-point Likert scale of (1) Strongly Agree, (2) Agree, (3) Disagree, or (4) Strongly Disagree. For the purposes of this study, this scale was modified to a 7-point Likert scale, ranging from (1) Strongly Disagree to (7) Strongly Agree. Some examples of the five positively worded items include, "On the whole, I am satisfied with myself" and "I take a positive attitude toward myself." Five of the items are negatively worded and therefore reverse-scored prior to calculating the Total Self-Esteem score. Some examples of the reverse-scored items include, "At times, I think I am no good at all" and "I wish I could have more respect for myself." Total Self-Esteem scores are calculated by simply adding the scores on each of the 10

items. Scores can range between 10 and 70, with higher scores indicating more positive self-esteem feelings. Lower scores indicate low self-esteem and generally more negative feelings toward the self. For the purposes of this study, a Self-Esteem grand mean was calculated by reverse-scoring the negatively-worded items and calculating a mean score; this allowed comparisons of grand means across all scales used in this study.

Prior studies have demonstrated adequate test-retest reliabilities, with numbers ranging between .80 and .85 (Rosenberg, 1979, as cited in Lowery et al., 2005). In Lowery and colleagues' (2005) sample, the Cronbach's alpha obtained was a respectable .79. In a study by Neff and Vonk (2009), Cronbach's alpha reached .88 for the Rosenberg Self-Esteem Scale, indicating strong reliability. Demo (1985) found support for convergent validity between the RSE and the Coopersmith Self-Esteem Inventory. Demo (1985) also found support for convergent validity with peer appraisals for reported self-esteem levels.

In this study, Cronbach's alpha for all 10 items in the RSE scale, which was used to calculate the RSE grand mean, reached .89, indicating strong reliability.

Body Esteem Scale. Franzoi and Shields (1984) developed a valid and reliable assessment of positive and negative feelings towards one's body in the young adult population (Franzoi, 1994). The Body Esteem Scale (BES) is a 35-item measure of how the respondent feels (positively or negatively) about numerous functions, parts, and sections of their body. The respondent is asked to rate how they feel about the part or function of their own body on a 5-point Likert scale, from (1) Have Strong Negative Feelings to (5) Have Strong Positive Feelings. For the purposes of this study, this scale was modified to a 7-point Likert scale, ranging from (1) Have Strong Negative Feelings to (7) Have Strong Positive Feelings.

Franzoi (1995) separated the construct of body esteem into Body-as-Object Esteem (BOE), which involves a sense of how one's likes or dislikes the appearance of their body parts,

and Body-as-Process Esteem (BPE), which is the level of appreciate for the functionality of the body (BPE). Analyses revealed 17 items comprised the Body-as-Object subscale, while 12 items constituted the Body-as-Process subscale. These subscales were created specifically to directly compare across genders (Franzoi, 1995).

For this study, Cronbach's alpha for the Body-as-Process subscale reached .89 reliability level, and the Body-as-Object subscale reliability was .91. When including all 35 items of the scale, which is used to calculate the Body Esteem grand mean, Cronbach's alpha reached .95. These results suggest strong reliability for the BES and its subscales.

Body Comparison Scale. The Body Comparison Scale (BCS; Fisher et al., 2002) is a 25-item measure assessing the frequency that individuals compare 20 different body parts to their same-sex peers on a 5-point Likert scale. Some examples of the 20 specific body part items include lips, arms, and stomach. An additional five items assess the frequency of comparisons made regarding the overall tone or shape of large body areas, such as upper body or lower body. For the purposes of this study, this scale was modified to a 7-point Likert scale, ranging from (1) Never to (7) Always. Higher scores indicate more body comparison tendencies. Three comparison subscales comprise the total body comparison score, which include General Appearance, Muscularity-Related, and Weight-Related. The General Appearance subscale includes different body parts, such as hair, nose, and teeth; these items on the General Appearance subscale are unrelated to weight or muscle tone. The Muscularity-Related subscale is comprised of body parts relating to muscle tone. Fisher and colleagues (2002) discovered that males tend to score higher on this subscale, which asks about shoulders, chest, and back – body parts that can be altered through muscle exercises and strength training. Fisher and colleagues (2002) have found that women tend to score higher on the Weight-Related subscale, which measures the frequency of comparison for body part that can be changed through weight-

changing and dieting strategies. These areas include hips, thighs, and buttocks. Again, the final five items include questions about overall shape and tone about larger sections of the body.

Prior research has demonstrated the Body Comparison Scale to have adequate reliability and validity (Cahill & Mussap, 2007; Fisher et al., 2002). In this study, the General Appearance subscale Cronbach's alpha level was .90, indicating strong reliability. The reliability estimate of the Muscularity-Related subscale was .86. Cronbach's alpha for the Weight-Related subscale reached .88. The Overall subscale, which included same-sex peer comparisons across various sections of the body, reached a Cronbach's alpha level of .92. When including all 25 items, which is used to calculate the Body Comparison Scale grand mean, the Cronbach's alpha level reached .95. These results suggest strong reliability for the BCS scale and subscales.

Manipulation Check Scale. The Manipulation Check Scale (MCS), adapted from Pennebaker and Beall (1986) as well as from the work by Earnhardt et al. (2002), was used to assess the participant's views of their expressive writing. Participants responded to five questions on a 7-point Likert scale, which ranges from (1) Not At All to (7) A Great Deal. These questions gauge various aspects of the participants' writings, which are as follows:

- (a) How personal do you feel your writing was today?
- (b) To what extent did you reveal your true feelings and emotions in your writing today?
- (c) Overall, to what extent have you told others about the topic on which you wrote today?
- (d) Do you believe that writing about this topic, either today or any previous days, has affected how you think about the topic? And
- (e) Do you believe that addressing this topic through your writing as improved the way you feel about it?

Earnhardt et al. (2002) utilized a variation of these questions to determine how effective the writing prompt “manipulations” were for the participants. In this study, these questions were used to assess differences in manipulation across writing conditions (i.e. experimental condition versus control condition) to establish to what extent the experimental condition was personal, and if there were any changes in thought processes for the participants due to writing about the topic. A one-way analysis of variance will be conducted between conditions with regard to the averages across time for each of the five questions. It was hypothesized that the writings for those in the experimental condition will be more personal and will invoke more emotions than the control condition.

Design

This experimental design is a mixed-method approach with qualitative and quantitative components. Quantitative research approaches are applied to explain current conditions, explore relationships, and attempt to study cause-and-effect phenomena (Gay, Mills, & Airasian, 2008). Experimental designs also offer generalizability, which is the application of the findings to different settings and contexts, due to the investigative rigor. Qualitative research methods seek to obtain in-depth understandings of a particular phenomenon (Gay et al., 2008). The methodological design and procedure for this study closely follows the original expressive writing paradigm by Pennebaker and Beall (1986), and used in numerous expressive writing studies since (e.g., Baikie & Wilhelm, 2005; Harrist et al., 2007; Pennebaker et al., 1988).

Procedure

Part 1: Relationships Among Self-Process Variables

The first component of this research study (part 1) includes a survey design intended to determine relationships between the constructs of interest. In order to increase the power in this study, as well as to increase the likelihood that the responses are more reflective of the true population, the goal was to obtain 200 participants. The first page of the research study website provided informed consent information, the IRB approval code, benefits and risks of participating, and the primary investigator's contact information. If they agreed to participate, all participants were first asked to provide general demographic information about themselves, then completed the Body Esteem Scale (Franzoi & Shields, 1984), the Self-Compassion Scale (Neff, 2003a), the Body Comparison Scale (Fisher et al., 2002), and the Rosenberg Self-Esteem Scale (Rosenberg, 1965). Although risks to completing this survey were minimal, a list of on-campus counseling and psychological resources were provided upon completion of the study (Pennebaker et al., 1988).

Part 2: Testing the Effectiveness of a Positive-Oriented Expressive Writing Intervention

The second part of this research study (part 2) involved an experimental design with an expressive writing intervention. Due to the more rigorous approach in an experimental design, fewer participants were needed to achieve necessary statistical power in this portion of the study. An accepted "rule-of-thumb" for sample size is around 30 participants per cell for a study measuring group differences (VanVoorhis & Morgan, 2007). I was not able to reach that number for this study, so results from analyses are discussed with extreme caution.

All participants for part 2 completed the study measures in part 1. Participants were then randomly assigned to one of two writing conditions, Best Possible Self or a Control topic.

Randomization is the process of assigning participants to either the control or experimental condition based on chance. By randomly assigning participants to conditions, this helps the researcher observe direct effects produced by the specific applied treatment (Gay et al., 2008).

Of the 299 total participants in this study, 28 completed both part 1 and part 2. On the first day of data collection, participants involved in both parts of the study entered a computer laboratory operated by the primary investigator. Participants were randomly assigned to each writing condition and were assigned a personal identification number. A copy of the informed consent was provided to all participants, which included the IRB approval code, benefits and risks of participating, and primary investigator's contact information. When the student agreed to participate, they proceeded into the research study website to begin the study.

In the first session, participants completed the aforementioned measures. Participants were then prompted for a 20-minute writing exercise based on the assigned and randomized writing condition. Participants were asked to write continuously for the entire 20 minutes, and were informed that they need not be concerned with spelling or grammatical errors. The Manipulation Check Scale assessed the participants' perceptions of their writing after each of the three writing sessions. On the second day, participants signed in using their unique identification number, and were prompted to write (type) for 20 minutes with the same writing instructions from the day prior. They then completed the Manipulation Check Scale again. On the third day of the study, participants wrote (typed) for a final session within these same conditions, and then completed all study measures (i.e., SCS, RSE, BCS, BES, and PANAS).

Six weeks after the final writing session, a confidential electronic mail message corresponding with participant number was sent to participants asking them to complete the BES, BCS, SCS, RSE, and PANAS measures for a final time at follow-up. The purpose of the follow-up survey was to assess changes in body esteem, self-compassion, body comparison, self-esteem,

and affect over time and across writing conditions. All measures were counterbalanced at each collection point to prevent carryover or order effects. The 28 participants in part 2 completed the follow-up surveys between 6-10 weeks after their third and final writing session.

Writing Conditions

Experimental Condition (Best Possible Self). Participants in the experimental writing condition were asked to write (type) for 20 minutes on the “Best Possible Self” (BPS) topic. Instructions for this condition are adapted from King (2001), Harrist et al. (2007), and Pennebaker et al. (1988), and based on prior “best possible self” literature (Markus & Nurius, 1986):

Think about your life in the future. Imagine that everything has gone as well as it possibly could. You have worked hard and succeeded at accomplishing all of your life goals. Think of this as the realization of all of your life dreams. Now, write about what you imagined. The important thing is that you write about your deepest thoughts and feelings. Do not pay attention to spelling or grammar. Please write for the full 20 minutes.

Control Condition. Those in the control writing condition were asked to write on a neutral, non-stress-inducing topic each day (Pennebaker & Beall, 1986; Romero, 2008). Participants in this study were prompted to write a detailed account of their events of the day. As with many expressive writing studies (see Baikié & Wilhelm, 2005, for a review), this control condition writing topic was chosen so as not to induce strong emotional reactions, or any extensive cognitive planning or organizing. Instructions for this condition are adapted from Romero (2008) and are as follows:

Please describe your events of the day in a factual and detail-oriented way. Your description should be informational only, and should not include comments regarding thoughts or feelings about these events. Do not pay attention to spelling or grammar. Please be as detailed as possible, and write for the full 20 minutes.

CHAPTER IV

FINDINGS

Data Analysis Strategies

Analysis strategies for part 1 include descriptive statistics, previously reported in Chapter III, multiple and univariate analyses of variance (MANOVA and ANOVA, respectively), Pearson correlational analyses, partial correlation analyses, and exploratory analyses, conducted using the *PASW® Statistics 19 Core System (SPSS 19; IBM, 2010)*, a computerized data analysis program. Strategies for part 2 include analyses of variance and exploratory analyses, conducted using *SPSS 19*, and analyses of variance between conditions on the manipulation check variables. The confidence interval of 95% ($p < .05$) was utilized to assess statistical significance.

Statistical Assumptions and Preliminary Analyses

To ensure that all scales and subscale items were internally consistent, reliabilities were calculated and a Cronbach's alpha level was determined for each measure. Results indicate that all measures had acceptable reliability for the total sample, also reported in Chapter III. All scales were adapted to a 7-point Likert rating so mean scores could be calculated and compared across measures. Subscales were computed and recoded according to instructions published by the measures' authors.

Part 1: Relationships Among Self-Process Variables

In order to answer the third research question, (3) *Will any difference across gender in relation to self-compassion, body esteem, self-esteem, and body comparison emerge?*, a multivariate analysis of variance (MANOVA) test was conducted. MANOVA analyzes differences among categorical demographic variables (independent variables) on the continuous scale variables (dependent variables). If the overall MANOVA is significant, further examination of the univariate analyses of variance (ANOVA) tests is needed in order to determine where the differences among variables were uncovered. A MANOVA takes into account the correlations among dependent variables (Field, 2005), which are present in this study. Using a MANOVA controls for Type I Error – the probability of rejecting the null hypothesis when it is actually true (Fausset, Rogers, & Fisk, 2009).

Three main assumptions are relevant to the ANOVA. The assumption of independence, which means that each score is independent of other scores; the assumption of normality, which indicates that scores are normally distributed and assumed to be randomly sampled from a representative population; and the homogeneity of variance assumption, which means that the variance in scores across the sample population are equal (Shavelson, 1996). The data meet the assumption of independence, as each group is an independent random sample from a normal population. The sample also meets the assumption of normality, as evidenced through a visual examination of the histograms displaying the distribution of data, and by comparing standardized Z-scores. Before interpreting ANOVA results, however, the assumption of homogeneity of variances (the results come from a population with equal variances) needs to be met, using a Levene's Test of Equality of Variances statistic. The Levene's statistic should not reach significance, indicating equality of variances between groups (IBM, 2010); thus, the assumption is met. In the instances of a significant Levene's Test, a Welch's F-Test is utilized to make

adjustments for unequal variances (Field, 2005), which makes corrections to the data and allows for interpretation of significant findings.

The Levene's Test for exploring differences in gender on the Body Esteem Scale subscales of Body-as-Object [$F(1, 297) = 4.49, p = .035$] and Body-as-Process [$F(1, 297) = 7.27, p = .007$] and grand mean was significant [$F(1, 297) = 9.04, p = .003$]. The Levene's Test was also significant for certain subscales and the grand mean of the Self-Compassion Scale; specifically, the Self-Kindness [$F(3, 295) = 3.07, p = .028$], the Over-Identification subscale [$F(3, 295) = 3.06, p = .029$], and the grand mean [$F(3, 295) = 2.79, p = .041$]. Additionally, the Levene's Test for the age differences on the Rosenberg Self-Esteem Scale grand mean was significant [$F(3, 295) = 2.97, p = .032$]. Therefore, Welch's adjusted F-ratios were used to correct for these unequal variances.

A multivariate analysis of variance MANOVA has an additional assumption that needs to be met in order move forward with data analysis, which is homogeneity of covariance. The assumption for the multivariate approach is that the vector of the dependent variables follows a multivariate normal distribution, and the variance-covariance matrices are equal across the cells formed by the between-subjects effects (IBM, 2010). Box's M statistic is generally used to test the assumption of homogeneity of covariance for MANOVAs; however, Box's M could not be calculated for this data set due to having "fewer than two nonsingular cell covariance matrices" (IBM, 2010), meaning that there are fewer participants per factor for one or more of the dependent variables. Therefore, examinations of the homogeneity of variances regarding the subsequent univariate ANOVAs were utilized, and Levene's Statistics and Welch's F-ratios were used to report significant findings.

Tukey's Honestly Significant Difference (Tukey's HSD) post-hoc analyses were used to further explore significant results. When significant differences are revealed, a post-hoc analysis

is used to determine where significant differences lie in the data (Shavelson, 1996). Tukey's HSD is known to be a powerful and conservative test that controls for Type I Error (Field, 2005). Post-hoc analyses were reported in the following results section.

Part 2: Testing the Effectiveness of a Positive-Oriented Expressive Writing Intervention

In order to answer questions four and five, which aim to test the effectiveness of the Best Possible Self writing intervention over a 3-day waiting period and after a 6-10 week follow-up period, pre-test MANOVAs were needed to ensure that the randomly assigned groups were relatively equal prior to the experimental writing intervention. The overall MANOVA was non-significant [*Pillai's trace* = 1.518; $p = .244$, $\eta^2 = .688$], indicating no significant differences between conditions at pre-test, ensuring that the groups were relatively equal across variables prior to exposure to the treatment or control conditions. The Pillai-Bartlett Trace (*Pillai's trace*) test is a conservative statistic that is the most powerful "when groups differ along more than one variate" (Field, 2005, p. 594). Groups were determined to be relatively equal across demographic variables of interest in this study, which included subscales and grand means of the Self-Compassion Scale and Body Esteem Scale, and grand means for the Rosenberg Self-Esteem Scale and the Body Comparison Scale. This indicates that any differences found between groups across time can be attributed to the treatment (writing interventions).

Part 1 Analyses

Research Question One: Relationships Among Self-Process Variables

In order to answer the first research question, (1) *What are the relationships among self-compassion, self-esteem, body esteem, and body comparison?*, Pearson correlation (r) analyses were conducted. Correlations were calculated for survey data collected in part 1 of the study prior to the expressive writing exercises in part 2. Based on prior research findings, it was expected that

self-esteem and self-compassion would be moderately positively correlated, and that self-esteem and body esteem would also be moderately positively correlated. Additionally, in accordance with social comparison theory, body comparison was hypothesized to be related to self-esteem and body esteem. There was no theoretical basis for hypothesizing that self-compassion and body comparison would be associated with one other, and therefore it was important to examine. Pearson correlation analyses were conducted for all scale grand means. A summary of correlation results is displayed in Table 1.

Table 1.

Pearson Correlations (r) for Grand Means of Self-Compassion, Self-Esteem, Body Esteem, and Body Comparison

	Self-Esteem	Body Esteem	Body Comparison
Self-Compassion	.659**	.375**	-.268**
Self-Esteem		.546**	-.328**
Body Esteem			-.236**

Note: ** = significant at the $p < .01$ level

In total, the Self-Compassion Scale measures one's ability to be kind to oneself during times of suffering, acknowledge their faults and weaknesses in mindful awareness, and feel a sense of common humanity with others, while the Rosenberg Self-Esteem Scale measures one's positive or negative self-attitude. Results from the correlation analyses indicated that self-compassion is significantly and positively correlated with the self-esteem ($r = .659, p = .000$), indicating that higher levels of compassion and kindness toward oneself are related to more positive attitudes toward the self in general. Results also suggest that a lack of self-compassion

correlates with low self-esteem. This finding confirms prior research that self-compassion and self-esteem are moderately correlated self-attitudes, though statistically and theoretically different constructs.

The Body Esteem Scale measures positive or negative feelings about one's body parts, and measures one's overall satisfaction or dissatisfaction with their physical appearance. Prior studies had not yet investigated the relationship between body esteem and self-compassion. As hypothesized, results from this study revealed that self-compassion is statistically positively correlated with body esteem ($r = .375, p = .000$). These results suggest that satisfaction with one's body parts and processes is related to higher levels of compassion toward the self. Conversely, low self-compassion is associated with negative body esteem feelings.

The Body Comparison Scale measures the frequency that one compares their body parts to their same-sex peers. Self-compassion was revealed to be negatively correlated with body comparison ($r = -.268, p = .000$), indicating that higher levels of compassion for oneself during times of struggle corresponded with a lower frequency of comparing one's physical appearance to others. The inverse was also true; lower levels of self-compassion correlated with more body comparison.

Previous research has indicated that self-esteem and body esteem are related constructs. Results from this study indicated that overall body esteem, as measured by the grand mean of the Body Esteem Scale, was also found to be positively correlated with the self-esteem ($r = .546, p = .000$). These findings suggest that higher levels of self-esteem are associated with positive feelings about one's physical appearance and body processes, and vice versa.

As hypothesized, a negative correlation was uncovered between body comparison and self-esteem ($r = -.328, p = .000$). This finding indicates that higher levels of self-esteem relate to a lower frequency of engaging in body comparison, suggesting that those who have more positive

attitudes toward themselves do not feel as much of a need to compare their physical appearance against their peers'. Results also suggest that those who engage in a higher frequency of comparisons against others tend to report lower levels of self-esteem.

A negative relationship was discovered between body comparison and body esteem ($r = -.236, p = .000$), suggesting that more positive feelings toward one's body parts and processes correspond to a lower frequency of body comparison to same-sex peers. This also means that those who reported negative body dissatisfaction tended to compare their physical appearance to others more frequently.

Research Question Two: Controlling for the Influence of Self-Esteem

In order to investigate the second research question, (2) *How are the relationships among self-process variables (self-compassion and body esteem, and self-compassion and body comparison) affected when controlling for the influence of self-esteem?*, partial correlation analyses were conducted. A partial correlation analysis is used to examine the relationship between two variables when holding the influence of a third variable constant in the two variables of interest (Field, 2005). Prior research by Neff and Vonk (2009) suggest that self-compassion, when controlling for self-esteem, could be a unique predictor of individuals' positive affect and strengths; therefore, partitioning out the impact of self-esteem on the newfound relationships among self-compassion and body esteem, and self-compassion and body comparison, may reveal a more accurate understanding of these relationships. Additionally, theory indicates that the construct of social comparison is a component of self-esteem (Rosenberg, 1965) and body comparison (Fisher et. al, 2002), though social comparison is not theoretically linked to self-compassion. Additionally, body esteem was determined to be a particularly subtype of self-esteem (Franzoi & Herzog, 1986). Therefore, an exploration of these correlations seems worthy.

The relationship between self-compassion and body esteem, as measured by grand means, was moderately positively correlated ($r = .375, p = .000$); however, after controlling for the influence of self-esteem within both variables using a partial correlation analysis, the relationship was no longer significant ($r = .024, p = .680$). This finding was unanticipated, and may suggest that self-esteem accounts for the relationship between self-compassion and body esteem. The association between self-compassion and body comparison, as measured by grand means, was significantly correlated ($r = -.268, p = .000$), indicating a moderate negative relationship. Once the influence of self-esteem was controlled for in both variables, the correlation coefficient was no longer significant ($r = -.072, p = .213$). This was another unanticipated finding, and may suggest that self-esteem accounts for the association between self-compassion and body comparison. Refer to Table 2 for these findings.

Table 2.

Controlling for the Influence of Self-Esteem on the Relationship Between Self-Compassion and Body Esteem, and the Relationship between Self-Compassion and Body Comparison

	Controlling for Self-Esteem	
	Body Esteem	Body Comparison
Self-Compassion	$r = .024, p = .680$	$r = -.072, p = .213$

In order to test the postulation that self-esteem accounts for the associations between self-compassion with body esteem and body comparison, additional partial correlation analyses were conducted, and interesting findings emerged. The Pearson correlation between self-esteem and body esteem was significant ($r = .546, p = .000$). When controlling for the influence of self-compassion in this relationship, the correlation coefficient decreased, though remained significant

($r = .429, p = .000$). This finding suggests that self-compassion does not seem to explain the relationship between self-esteem and body esteem. Moreover, the Pearson correlation for self-esteem and body comparison was significant ($r = -.328, p = .000$), indicating a negative relationship. Once the impact of self-compassion was controlled for in both variables, the correlation coefficient decreased but remained statistically significant ($r = -.209, p = .000$). This finding indicates that self-compassion does not account for the association between self-esteem and body comparison. See Table 3 for these results.

Table 3.

Controlling for the Influence of Self-Compassion on the Relationship Between Self-Esteem and Body Esteem, and the Relationship Between Self-Esteem and Body Comparison

	Controlling for Self-Compassion	
	Body Esteem	Body Comparison
Self-Esteem	$r = .429, p = .000$	$r = -.209, p = .000$

Overall results from the partial correlation analyses seem to indicate that self-compassion and self-esteem are separate constructs that are strongly related. Results also suggest that the construct of self-esteem plays a significant role in the association between self-compassion and body esteem, as well as in the association between self-compassion and body comparison. In both instances, the prior statistically significant relationships diminished completely once self-esteem was entered as a control variable. It may be possible that body esteem and body comparison are subsumed under the overall construct of self-esteem, and therefore not entirely separate

constructs. This could be an important area to explore in future studies that look at self-processes and body attitudes.

Research Question Three and Four: Gender and Age Differences

Multivariate analyses of variance (MANOVAs) were conducted in order to investigate the third and fourth research questions: (3) *Will any differences across gender in relation to self-compassion, body esteem, self-esteem, and body comparison emerge in this study, as established in prior research?* And (4) *Will differences emerge across age or education level, as postulated in prior research?*, multivariate analyses of variance (MANOVAs) were conducted. All statistical assumptions were met and preliminary analyses were reported previously.

Gender

Prior research has revealed significant gender differences for grand mean and six dimensions of self-compassion, the grand mean and aspects of body esteem (parts and processes), and overall frequency of body comparison. In order to test prior research findings, a MANOVA was conducted. The overall MANOVA was significant, indicating that men and women scored differently on the self-process variables of interest [*Pillai's trace* = .321; $p = .000$, $\eta^2 = .321$]. Pillai-Bartlett Trace is a conservative statistic that is the most powerful “when groups differ along more than one variate” (Field, 2005, p. 594). This significant overall MANOVA finding necessitates further analyses of the individual variables through univariate analyses of variance (ANOVA). The results for self-compassion, body esteem, and body comparison are as follows.

Based on prior research, it was anticipated that several gender differences would emerge among the dimensions of self-compassion. Neff's (2003a) findings demonstrated that men and women differ significantly on overall self-compassion, such that women tend to report lower levels of compassion for self. Additionally, women were previously found to experience higher

instances of self-judgment, feelings of isolation, and over-identification with problems (Neff, 2003a). It was hypothesized that similar results would emerge in this study. Surprisingly, the results in this study did not reveal significant gender differences on either the grand mean or five of the six dimensions of self-compassion, which was a surprising finding. The only significant gender difference that emerged was between men and women in this study for the Common Humanity subscale of the Self-Compassion Scale [$F(1, 297) = 5.36, p = .021, \eta^2 = .018$]. The mean score for women was 4.46 ($SD = 1.22$), while the mean score for men was 4.11 ($SD = 1.16$). These results suggest that women indicated higher levels of common humanity and shared experiences with others than men. Overall results for gender differences on the grand mean and dimensions of self-compassion did not confirm the hypotheses in this study.

Gender differences for body esteem have been well established in the literature (Grossbard et al., 2009; Jones & Buckingham, 2005; Lowery et al., 2005), with all reports indicating that women tend to be more dissatisfied with their bodies and physical appearance than men. Because the assumption of homogeneity of variance was not met for the Body Esteem Scale subscales and overall means, the Welch's adjusted F-ratio was utilized (Field, 2005) in order to more accurately identify estimates of differences between genders. A significant difference was revealed between men and women on the Body Esteem Scale grand mean [$F(1, 297) = 11.65, p = .001$]. Men tended to score higher overall ($M = 4.82, SD = 1.09$) than women ($M = 4.39, SD = .89$). Significant differences were also discovered on the Body-as-Object [$F(1, 297) = 9.90, p = .002$] and Body-as-Process [$F(1, 297) = 10.70, p = .001$] subscales as well. Men reported more satisfaction with their physical appearance ($M = 4.75, SD = 1.04$) than women ($M = 4.37, SD = .90$), and more positive feelings about their body processes ($M = 4.97, SD = 1.20$) than women ($M = 4.51, SD = 1.00$). In general, these results suggest that in this sample men tend to feel significantly more positively about their physical appearance and body functionality than women.

One prior research study established that females compare their body parts to their same-sex peers more frequently than their male counterparts (Schutz et. al, 2002). A univariate ANOVA revealed a significant difference among genders [$F(1,297) = 4.44, p = .036, \eta^2 = .015$] in overall body comparison. Men reportedly compare their physical appearance less frequently ($M = 3.25, SD = 1.28$) than women ($M = 3.59, SD = 1.28$). As hypothesized, these results suggest that women compare their physical appearance and body parts to their same-sex peers more frequently than men do.

No hypotheses were made regarding self-esteem, and results did not reveal any significant differences across gender. See Table 4 for a summary of gender differences.

Table 4.

Significant Differences in Self-Process Variables of Self-Compassion, Body Esteem, and Body Comparison by Gender

	Men	Women	<i>F</i>	<i>p</i>
	Mean (<i>SD</i>)	Mean (<i>SD</i>)		
SCS Common Humanity	4.11 (1.16)	4.46 (1.22)	5.36	.021
BES Grand Mean	4.82 (1.09)	4.39 (.89)	11.65	.001
BES Body-as-Object	4.75 (1.04)	4.37 (.90)	9.90	.002
BES Body-as-Process	4.97 (1.20)	4.51 (1.00)	10.70	.001
BCS Grand Mean	3.25 (1.28)	3.59 (1.28)	4.44	.036

Age and Education Level

Based on prior research findings, age range, as measured by age and college education level, is an important variable to consider in this study. Neff (2003a) discovered that gender differences in self-compassion were eliminated in a sample of Buddhist monks who had been trained in mindfulness practices. Additionally, the monks reported higher levels of overall self-compassion than did a sample of undergraduate students. This finding may be attributed to the mindfulness training; however, age could also be an influential factor. Additionally, Franzoi (1995) discovered that younger adults reported negative body esteem feelings overall. Moreover, the frequency of overall body comparison was higher for young adult females versus their adolescent counterparts (Schutz et. al, 2002). These results provide support for further exploration into age differences.

In order to more easily compare across age, participant age ranges were divided into quartiles based on the frequency distribution. Ages were distributed by 18-20 years ($n = 72$), 21-23 years ($n = 88$), 24-27 years ($n = 58$), and 28-57 years ($n = 81$). A MANOVA was computed for the independent variable age as a categorical variable across all dependent variables. The overall multivariate test for age was significant [*Pillai's trace* = .196; $p = .042$, $\eta^2 = .065$] necessitating follow-up analyses of the individual tests of between-subjects effects.

The univariate ANOVAs revealed several significant differences for age on dimensions of the Self-Compassion Scale. Results from the Welch's adjusted F-test revealed a significant difference on overall self-compassion levels [$F(3, 295) = 5.10$, $p = .002$]. A Tukey's HSD post-hoc test revealed a significant difference between the 18-20-year-old age group ($M = 3.91$, $SD = .98$) with the 28-57-year-old age group ($M = 4.52$, $SD = 1.04$), at $p = .000$. Another significant difference was found between participants aged 21-23 years ($M = 1.06$, $SD = .79$) and those aged 28-57 years ($p = .009$). These findings indicate that older individuals were more self-

compassionate than the younger participants in this study. Moreover, similar differences were found on the Self-Compassion Scale with regard to education level [$F(4, 294) = 2.60, p = .036$]. A post-hoc test revealed that Freshmen ($M = 3.76, SD = .92$) were significantly less compassionate toward themselves than Graduate students ($M = 4.33, SD = 1.03$), at $p = .037$, suggesting that self-compassion increased as an individual progressed further in their college career.

Additional analyses revealed several significant differences among age groups and education levels on the subscales of the Self-Compassion Scale. A significant difference was found on the Common Humanity subscale [$F(3, 295) = 7.72, p = .000, \eta^2 = .073$]. A Tukey's HSD post-hoc test displayed a significant difference between participants aged 18-20 years ($M = 3.87, SD = 1.14$) with participants aged 28-57 years ($M = 4.78, SD = 1.19$), at $p = .000$. Another difference was uncovered between participants aged 21-23 years ($M = 4.30, SD = 1.21$) with those aged 28-57 years ($p = .041$). These results suggest that younger participants reported feeling a lower sense of common humanity than did the older participants. Similar findings were uncovered when analyzing education level [$F(4, 294) = 4.14, p = .003, \eta^2 = .053$]. A Tukey's HSD post-hoc test indicated differences between Freshmen participants ($M = 3.61, SD = 1.06$) and Seniors ($M = 4.40, SD = 1.15$), at $p = .033$. A greater difference was found between Freshmen and Graduate students ($M = 4.56, SD = 1.20$), at $p = .002$. These results suggest that freshman participants had a lower sense of common humanity than did seniors or graduate students.

The ANOVA results indicated a significant difference among age groups on the Isolation subscale [$F(3, 295) = 5.94, p = .001, \eta^2 = .057$], and a post-hoc test revealed a difference between participants aged 18-20 years ($M = 4.15, SD = 1.45$) with those aged 28-57 years ($M = 3.44, SD = 1.48$), at $p = .009$. Findings suggest that younger participants felt more isolated in their suffering

than did older participants, and that isolation feelings tended to decline in the oldest age group. No significant differences were found between education levels on the Isolation subscale.

A significant difference across age was also discovered for the Mindfulness subscale [$F(3, 295) = 5.01, p = .002, \eta^2 = .048$]. A Tukey's HSD post-hoc analysis indicated that differences exist between participants in the 18-20 age range ($M = 4.26, SD = 1.15$) with those in the 28-57 age range ($M = 4.98, SD = 1.13$), at $p = .000$. A significant difference was also found for participants aged 21-23 years ($M = 4.45, SD = .97$) with those aged 28-57 years ($p = .011$). The findings suggest that one's ability to maintain a mindful stance toward one's shortcomings significantly increased with age. Additionally, the ANOVA for the Mindfulness subscale revealed a significant difference across education levels [$F(4, 294) = 3.43, p = .009, \eta^2 = .045$]. A post-hoc test indicated that Freshman students ($M = 3.89, SD = .99$) were less able to consider their problems in non-prejudiced awareness than Seniors ($M = 4.63, SD = 1.10$), at $p = .033$, or Graduate students ($M = 4.76, SD = 1.16$), at $p = .003$. Overall, participants who were later on their college development reported higher levels of mindfulness.

Welch's adjusted F-test revealed a difference among age groups on the Over-Identification subscale [$F(3, 295) = 2.95, p = .035$], where the post-hoc test uncovered a significant difference between the 18 to 20-year-olds ($M = 4.23, SD = 1.59$) and the 28 to 57-year-olds ($M = 3.54, SD = 1.50$), indicating higher levels of over-identifying with one's problems in the younger age group. This finding was significant at the $p = .019$ level. In summary, these overall results suggest that younger adults are less self-compassionate, over-identify with and ruminate on their problems, are less mindful, and feel isolated in their struggles than older adults. No significant differences emerged regarding education level and feelings of over-identification with life struggles.

In a large meta-analysis, Twenge and Campbell (2013) found that self-esteem, as measured by the Rosenberg Self-Esteem Scale (Rosenberg, 1965), increases steadily with age. In the current study, self-esteem was determined to be significantly different among age groups, according to the Welch F-test [$F(3, 295) = 3.01, p = .032$]. A Tukey's post-hoc test revealed a significant difference between those in the 18-20 age group ($M = 5.20, SD = 1.27$) and the 28-57 age group ($M = 5.68, SD = 1.03$), at $p = .032$. This finding indicated that participants in the older category reported more positive self-attitudes, as established in prior research. The ANOVA results for education level yielded similar findings [$F(4, 294) = 3.132, p = .015$]. A post-hoc analysis indicated Freshman ($M = 5.07, SD = 1.25$) reported slightly lower self-esteem than Graduate students ($M = 5.66, SD = .98$). These findings suggest that graduate students endorse higher levels of self-esteem and positive self-attitudes than freshmen students.

The frequency of body comparison has been shown to increase from adolescence to young adulthood (Schutz et al., 2002), and was hypothesized to decrease as one moves into older adulthood. Overall body comparison, as measured by the grand mean of the Body Comparison Scale, was determined to be significantly different across age groups in this study [$F(3, 295) = 3.40, p = .018, \eta^2 = .033$]. A post-hoc analysis revealed differences between participants aged 21-23 years ($M = 3.64, SD = 1.24$) with those aged 28-57 years ($M = 3.11, SD = 1.27$), at $p = .036$. Additionally, a significant difference was uncovered for those aged 24-27 years ($M = 3.71, SD = 1.38$) with participants aged 28-57 years ($p = .031$). These findings suggest that older participants compare their physical appearance and body parts less frequently than younger adults. No significant differences in education level emerged regarding body comparison. No significant differences were revealed for the Body Esteem Scale or subscales. Significant differences by age group are displayed in Table 5. Significant education level differences are displayed in Table 6.

Table 5.

Differences on Dimensions of Self-Compassion, Self-Esteem, and Body Comparison by Age Group

	18-20 yrs	21-23 yrs	24-27 yrs	28-57 yrs	
	Mean (<i>SD</i>)	Post-Hoc			
SCS Grand Mean	3.91 (.98)			4.52 (1.04)	$p = .000$
SCS Grand Mean		1.06 (.79)		4.52 (1.04)	$p = .009$
SCS Common Humanity	3.87 (1.14)			4.78 (1.19)	$p = .000$
SCS Common Humanity		4.30 (1.21)		4.78 (1.19)	$p = .041$
SCS Isolation	4.15 (1.45)			3.44 (1.48)	$p = .009$
SCS Mindfulness	4.26 (1.15)			4.98 (1.13)	$p = .000$
SCS Mindfulness		4.45 (.97)		4.98 (1.13)	$p = .011$
SCS Over-Identification	4.23 (1.59)			3.54 (1.50)	$p = .019$
RSE Grand Mean	5.20 (1.27)			5.68 (1.03)	$p = .032$
BCS Grand Mean		3.64 (1.24)		3.11 (1.27)	$p = .036$
BCS Grand Mean			3.71 (1.38)	3.11 (1.27)	$p = .031$

Note: Each line represents the means and standard deviations for differences across two age groups.

Table 6.

Differences on Dimensions of Self-Compassion and Self-Esteem by Education Level

	Freshman	Senior	Graduate	
	Mean (SD)	Mean (SD)	Mean (SD)	Post-Hoc
SCS Grand Mean	3.76 (.92)		4.33 (1.03)	$p = .037$
SCS Common Humanity	3.61 (1.06)	4.40 (1.15)		$p = .033$
	3.61 (1.06)		4.56 (1.20)	$p = .002$
SCS Mindfulness	3.89 (.99)	4.63 (1.10)		$p = .033$
	3.89 (.99)		4.76 (1.16)	$p = .003$
RSE Grand Mean	5.07 (1.25)		5.66 (.98)	$p = .015$

Note: Each line represents the means and standard deviations for differences across two education level groups.

Part 2 Analyses

Testing the Effectiveness of a Positive-Oriented Expressive Writing Intervention

The second part of this research study implemented a positively-oriented expressive writing intervention that aimed to increase the six dimensions of self-compassion, overall self-esteem, both facets of body esteem, and decrease overall body comparison. Based on prior research studies revealing short- and long-term psychological and physical health benefits, it was hypothesized that a positive expressive writing topic could help improve individual's self-

attitudes. Therefore, the second part of this study aimed to test the effectiveness of an expressive writing exercise after three days of writing and at follow-up (6-10 weeks later).

Manipulation Check

A manipulation check was used to detect differences between the experimental group and the control group associated with the writing intervention. For example, participants in the Best Possible Self (BPS) writing condition were prompted to write about their “deepest thoughts and feelings” while those in the Control writing condition were asked to provide “information only.” Thus, the participants in the experimental condition were expected to write in a more personal and more emotional way than those in the control condition. After each day of writing, participants rated their writing on a 7-point Likert scale (1 – Very Slightly or Not At All to 7 – Extremely) on the following questions:

1. How personal do you feel your writing was today? (Personal)
2. To what extent did you reveal your true feelings and emotions in your writing today? (Emotions)
3. Overall, to what extent have you told others about the topic on which you wrote today? (Others)
4. Do you believe that writing about this topic, either today or any previous days, has affected how you think about the topic? (Affected)
5. Do you believe that addressing this topic through your writing as improved the way you feel about it? (Improved)

Univariate ANOVAs were conducted for each question to compare differences across writing conditions. Prior researchers have combined responses to each question and averaged the findings across the writing period. A summary of results is displayed in Table 7.

Table 7.

Differences on Essay-Related Variables by Writing Condition Across 3 Days of Writing

	<i>F</i>	Best Possible Self		Control	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Personal	13.990**	6.12	1.28	3.9	1.8
Revealed True Emotions	114.552**	6.43	.57	2.45	1.26
Told Others	8.62**	4.6	1.26	2.93	1.77
Affected how you Think	5.518*	5.24	1.28	3.9	1.7
Improved how you Think	5.072*	5.31	1.3	4.02	1.7

Note: ** = significant at the $p < .01$ level, * = significant at the $p < .05$ level

For the first question, a test of between-subjects effects revealed a significant difference between writing conditions [$F(1, 26) = 13.99, p = .001$], such that, on average, those in the BPS condition felt their writing was more personal ($M = 6.12, SD = 1.28$) than those in the Control condition ($M = 3.9, SD = 1.8$). The same trend was found for the second question [$F(1, 26) = 114.55, p = .000$], where those in the BPS condition reportedly revealed their true feelings and emotions more ($M = 6.43, SD = .57$) than those in the Control condition ($M = 2.45, SD = 1.26$). For the third question, ANOVA results revealed a significant difference between conditions [$F(1, 26) = 8.26, p = .008$], such that those in the BPS condition told others about the topic more frequently ($M = 4.6, SD = 1.26$) than those in the Control condition ($M = 2.93, SD = 1.77$). A similar trend was discovered for the fourth question as well [$F(1, 26) = 5.52, p = .027$], wherein

participants in the BPS condition felt that writing about the topic influenced how they thought about it ($M = 5.24, SD = 1.28$) more than those in the Control condition ($M = 3.9, SD = 1.7$). Lastly, a significant difference was revealed between conditions on the fifth question [$F(1, 26) = 5.07, p = .033$], such that those in the BPS condition felt that writing about this topic had improved the way they felt about it ($M = 5.31, SD = 1.3$) more than the participants in the Control condition ($M = 4.02, SD = 1.7$). Overall, these results confirm the hypothesis that those in the BPS writing condition would rate their writing as more personal and believe writing about their best possible self improved their way of thinking, in contrast to the Control condition topic. These results indicate that the intervention or “manipulation” condition was successfully differentiated from the control condition in this study.

Research Questions Five and Six: Effectiveness of an Expressive Writing Intervention after Three Days of Writing and at Follow-Up

The second part of this study tested the effectiveness of a positive, future-oriented expressive writing topic across three days of writing and after a 6-10 week follow-up. The fifth research question to be answered was, (5) *Will differences between writing conditions (Best Possible Self or Control) emerge regarding the six dimension of self-compassion, both aspects of body esteem, and overall self-esteem and body comparison at the end of a 3-day writing exercise?* The sixth research question was, (6) *If any differences do emerge between groups on these self-process variables, will this difference remain at follow-up?* Repeated measures analyses of variance were utilized to determine changes across each time a measure was administered; in this study, the Self-Compassion Scale, Body Esteem Scale, Body Comparison Scale, and Rosenberg Self-Esteem Scale were all administered three times: at pre-test, immediately following the 3-day writing interventions (post-test), and between 6-10 weeks later (follow-up).

As explained in the preliminary analyses section, a MANOVA was conducted to ensure that the groups were equal at pre-test, prior to participating in the writing intervention. The overall MANOVA was non-significant, indicating no significant differences between conditions at pre-test. This means that the Best Possible Self (BPS) and Control groups were relatively equal across the grand means and six dimensions of self-compassion, both aspects of body esteem, overall self-esteem, and overall body comparison prior to exposure to the writing topic.

Expressive writing was expected to be an effective means of fostering positive self-attitudes and body attitudes. Prior research had not yet implemented a writing intervention to increase levels of self-compassion, body esteem, or self-esteem, nor had it been utilized to decrease frequency of body comparison. The sample size for part 2 present study was small (Total $n = 28$), with 14 participants in each writing condition. Results were interpreted with this in mind.

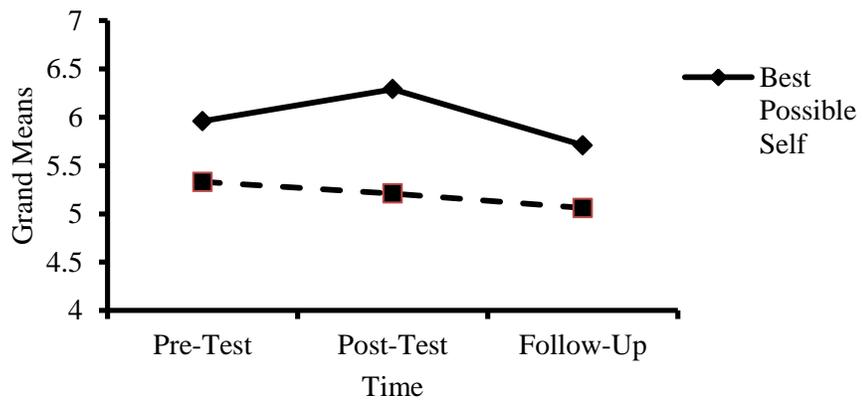
Due to high success in prior research expressive writing studies which resulted in psychological and health benefits, the present study aimed to foster self-compassion through a positive writing exercise. It was hypothesized that any of the six dimensions of self-compassion, as measured by the Self-Kindness, Self-Judgment, Common Humanity, Isolation, Mindfulness, and Over-Identification subscales, or overall self-compassion level, could be cultivated by writing about achieving future life goals. However, MANOVA results from the total sample did not reveal any significant differences between BPS or Control conditions across time. This indicates that overall self-compassion – nor aspects of it – were not improved through this method of writing.

It was also anticipated that an expressive writing intervention could help foster positive feelings toward one's body parts and processes, as measured by the Body-as-Object and Body-as-Process subscales of the Body Esteem Scale, and the grand means. The repeated measures

ANOVA did not confirm this hypothesis, which indicates that positive body esteem did not increase through this writing method for the total sample. Additionally, no significant changes were recorded between conditions for the Body Comparison Scale across time. This indicates that expressive writing about one's best possible self was not effective at decreasing the frequency of body comparison in the total sample.

Prior studies had not utilized expressive writing as a means to increase one's self-esteem. A repeated measures ANOVA revealed a significant interaction effect between writing conditions on the Rosenberg Self-Esteem Scale across all three times administered [$F(1, 24) = 5.51, p = .027, \eta^2 = .187$]. Follow-up analyses revealed a significant change between BPS and Control conditions between pre-test and post-test (after three days of writing) [$F(1, 24) = 7.12, p = .013, \eta^2 = .229$]. A significant difference between groups from post-test to follow-up (6-10 weeks after the intervention) [$F(1, 24) = 5.67, p = .026, \eta^2 = .191$] was found. In general, these results suggest that positive attitudes toward the self tended to increase for participants in the Best Possible Self writing condition across time, whereas participants' scores in the Control condition remained statistically the same. This was a particularly intriguing discovery, given that prior attempts to bolster self-esteem had been largely unsuccessful (e.g., California Task Force to Promote Self-Esteem, reported in Neff, 2003a). See Figure 1 for a graphical depiction of these changes in self-esteem between writing conditions across time.

Figure 1. Rosenberg Self-Esteem Scale responses over time.



CHAPTER V

CONCLUSION

Purpose

The purpose of the present study was twofold: to explore the relationships among self-compassion and body esteem constructs, and to test the effectiveness of an expressive writing intervention as a means of fostering positive self-attitudes. More specifically, this study aimed to explore the associations between self-compassion, self-esteem, body esteem, and body comparison, and then to understand more fully those relationships when controlling for the influence of self-esteem on the relationships between self-compassion and the measures of body attitudes. Prior research has not focused on investigating the relationships among these constructs, specifically with regard to the way self-compassion relates to body esteem and body comparison. Additionally, the known association between self-compassion and self-esteem (Neff, 2003a) was more closely examined.

Another goal of this study was explore gender differences in the dimensions of self-compassion, body esteem, and overall body comparison. In addition, this study aimed to identify other similarities and differences with regard to age and education level, as postulated in prior research findings in this area. Few studies have paid much attention to age differences with regard to these self-processes; therefore, the present study intended to investigate a gap in the

psychological literature.

Prior studies have concluded that writing about positive topics can be a successful intervention for producing psychological and physical health benefits (e.g., King, 2001). Therefore, by implementing a positive, self-in-future oriented experimental writing paradigm, this study tested the potentially positive impact that writing about the self could have on college students' self-processes in comparison to a control writing topic.

Relationships Among Self-Attitudes

It was hypothesized that self-compassion and self-esteem would be positively correlated, based on prior research findings (Neff, 2003a). Results in the present study were consistent with previous findings, and indicate that self-compassion and self-esteem are moderately correlated self-attitudes, but distinct constructs. Average scores on self-compassion and self-esteem scales indicated moderate positive correlations, such that those who were high in self-compassion were also high in self-esteem; the opposite was also true, such that those who reported lower levels of self-compassion also scored lower on a measure of self-esteem.

The association between self-esteem and body esteem was also explored. Developers of the construct of body esteem interpreted it as a potential subtype of general self-esteem (Franzoi & Herzog, 1986). Results from the correlation analyses confirm a positive relationship between overall body esteem and the self-esteem. A strong association was also found between the Body-as-Process and Body-as-Object subscales with general self-esteem, indicating that those who have positive feelings regarding their physical appearance, body parts, and body processes also report strong self-esteem. The results of the present study indicate that body esteem and self-esteem are positively correlated constructs.

A thorough examination of the literature revealed that the relationship between self-compassion and body esteem had not yet been investigated; neither had the association between self-compassion and body comparison. Because self-esteem is positively associated with self-compassion, and self-esteem is also positively associated with body esteem, it was hypothesized that self-compassion and body esteem would also be positively associated with one other. This hypothesis was confirmed by findings in the present study. Participants who reported higher levels of self-kindness and compassion also reported stronger positive feelings toward their own body parts and physical appearance. These results also indicate that those who have positive attitudes toward their body parts and functions practice more self-kindness, have a mindful approach to their suffering, and feel they can identify with others who also have flaws and shortcomings. Body dissatisfaction is correlated with depression, anxiety, and disordered eating (Cahill & Massup, 2007; Dittmar, 2009; Hargreaves & Tiggemann, 2009); therefore, exploring ways to increase self-compassion could be a means of avoiding these mental health problems. Additionally, the present study's findings that men and women experience body dissatisfaction and struggle with self-compassion provides evidence that an intervention that fosters healthy self-attitudes is much needed, particularly for college students.

Self-esteem and body comparison were hypothesized to be significantly (negatively) correlated, as both constructs theoretically involve an element of social comparison. Results from this study confirm this hypothesis. Those who reported higher frequencies of comparing their body and physical appearance to same sex peers also tended to have lower self-esteem, while those with higher levels of positive self-attitudes compared their bodies less often to others. As high levels of body comparison has been found to be related to body dissatisfaction and disordered eating, among other problems (Schutz et al., 2002), this may mean that positive self-esteem could be a protective factor against body comparison and the negative consequences that often result.

Self-compassion and body comparison were not hypothesized to be strongly correlated, because body comparison involves social comparison, but the construct of self-compassion does not involve comparison against others. However, a significant and negative relationship between self-compassion and body comparison was revealed. These results suggest that those who frequently compare their physical appearance and various parts of their bodies to same-sex others also tend to be more critical of themselves, feel alone in their suffering, and ruminate on their stressful experiences. Conversely, it appears that participants who have a more compassionate, nonjudgmental attitude, and reported a more balanced and mindful approach to their flaws and weaknesses compared their overall body areas less often. These findings may be an indication that higher levels of self-compassion correspond with a decrease in body comparison, and that those who are able to maintain a mindful and kind stance toward themselves feel less of a need to compare their bodies to others. Conversely, those feel isolated in their struggles and tend to ruminate on their flaws and weaknesses (e.g., dissatisfaction with body) may feel pulled to compare their physical appearance against others, which further contributes to their feelings of isolation and disconnection. These results also support the relationships that were found between self-compassion with self-esteem and body esteem – both of which are negatively correlated with frequency of body comparison. Partial correlations, discussed next, were conducted as an attempt to uncover more accurate relationships amongst all study variables by controlling for the extraneous influence of the related constructs.

Overall, the results from the correlation analyses suggest that the more positively one feels about oneself in general and specifically about one's physical appearance and body functions, the need to compare with others is reduced. Additionally, the better able an individual is to be kind and compassionate to oneself, mindfully aware of their struggles, and remember that everyone else has flaws and weaknesses, the less likely they will be to compare their physical appearance and specific body parts to their same-sex peers. Correlations also revealed that harsh

self-criticism, isolation, and rumination are all linked to low self-esteem, negative body esteem, and higher frequency of body comparisons. This is a particularly important finding, given that body dissatisfaction and frequent body comparison has been found in prior research to be correlated with depression, anxiety, eating disorders, and other detrimental psychological problems (Cahill & Massup, 2007; Dittmar, 2009; Hargreaves & Tiggemann, 2009). This supports prior findings by Neff (2003a) that lower levels of self-compassion are associated with depressive and anxious symptomology. Future research studies should specifically explore the relationship between high or low levels of self-compassion with eating disorders and other mental health problems to gain a deeper understanding of the direct associations. However, the results from this study in general provide new and important information regarding the relationships among positive and negative self-processes, thereby further substantiating the need to find ways of fostering positive self-attitudes.

Controlling for Self-Esteem

The partial correlations in this study were utilized as a way to better understand complex relationships among self-compassion, self-esteem, body esteem, and body comparison. Prior studies have provided evidence that self-esteem and self-compassion are separate but related constructs, as are self-esteem and body esteem. Additionally, prior research has established that self-compassion is a unique predictor of positive affect, happiness, and other qualities (Neff, 2003a), when the influence of self-esteem has been controlled. Therefore, controlling for the influence of self-esteem on the relationship between self-compassion and body esteem, and in the relationship between self-compassion and body comparison was important for clarifying the unique aspects of each construct.

Interestingly, the moderate, positive relationship that was found between self-compassion and body esteem completely diminished when controlling for the influence of self-esteem. These

results suggest that the construct of self-esteem may account for the relationship between self-compassion and body esteem. This finding may also confirm the idea that body esteem is a particular subtype of self-esteem, as Franzoi and Herzog (1986) suggested. Future research studies could explore this association more thoroughly. It was also surprising to find that controlling for self-esteem reduced the negative association between self-compassion and body comparison to a statistically insignificant level. These results may mean that self-esteem completely accounts for the relationship between self-compassion and body comparison, and perhaps that body comparison is a construct subsumed under the broader definition of self-esteem. This could be an area of future research.

In order to more closely examine these findings, partial correlations were computed to test if the associations between self-esteem and body esteem, or between self-esteem and body comparison were also impacted when controlling for the influence of self-compassion in both variables. Self-compassion was controlled for in the relationship between self-esteem and body esteem, and the correlation maintained statistical significance. Self-compassion was also controlled for in the association between self-esteem and body comparison, and again the relationship remained statistically significant. Therefore, these findings revealed that self-compassion does not wholly account for the relationships between self-esteem, body esteem, and body comparison.

These findings may help support the hypothesis that body esteem and body comparison are body-related aspects of self-esteem, and should be examined in future research studies. Moreover, it would also be important to explore if there are any body-related subtypes under the construct of self-compassion. Determining a subtype of self-compassion that delineates body attitudes could be a useful way to better understand positive and negative feelings regarding physical appearance. Moreover, exploring body comparison and body esteem as subcomponents to self-esteem could also be a new to integrate more positive-oriented and strengths-based

preventative measures and interventions as a means of increasing self-compassion and body compassion, and of decreasing mental health problems.

Gender and Age Differences

Several research studies have revealed significant gender differences related to self-compassion, particularly in the areas of self-judgment, isolation, mindfulness, and over-identification. For example, previous findings revealed that women reported lower levels of overall compassion for the self and mindfulness, yet higher instances of self-criticism, feelings of isolation, and ruminating on negative experiences (e.g., Neff, 2003a). This provided support for prior research (e.g., Nolen-Hoeksema, Larson, & Grayson, 1999) that women are more critical of themselves and over-identify more with depressive symptoms than males. The present study did not reveal these same gender differences on all six dimensions of self-compassion or the grand mean. Instead, the findings in the current study indicated that women felt higher levels of common humanity than men do, suggesting that women are more able to recognize that all humans are fallible, and relate to others as part of a larger, shared experience. Limitations, discussed at the end of the article, may help explain why some hypothesized gender differences for self-compassion did not emerge in this study.

It is well-established in the literature that women tend to be more dissatisfied with their bodies and physical appearance than men (Grossbard et al., 2009; Jones & Buckingham, 2005; Lowery et al., 2005). As hypothesized women in the present study reported lower levels overall of positive feelings toward their bodies compared to men. Male participants, on the other hand, reported more satisfaction with their physical appearance and body parts, and felt more positively about their body processes and functionality than women did. However, a closer examination of scores seemed to confirm Franzoi's (1995) research; he found that while women report lower levels of body satisfaction, men's body attitudes are not "positive", they are in fact more

“neutral”. These may be important distinctions to consider when making gender determinations about negative or positive body esteem feelings. Women in this study reported negative body attitudes and significant dissatisfaction with one’s appearance. As previously stated, prior research has found that body dissatisfaction is linked with serious mental health consequences; therefore, it seems necessary to continue to look for effective prevention and intervention strategies. Additionally, because men are reporting more neutral feelings toward their physical appearance, rather than positive feelings, prevention efforts targeting male body esteem could be fruitful. Future research might also look more closely at specific variables that contribute to either positive or negative body esteem.

According to results in this study, women reported comparing specific body parts to their same-sex peers’ body parts more frequently than men did. These findings confirm prior research conducted by Fisher and colleagues (2002) with the same results – that women tend to compare their physical appearance to same-sex peers more frequently than men do.

Prior research suggests that age or education level could be important factors to consider when examining differences in on self-compassion, body esteem, and body comparison. Neff’s (2003a) comparison of Buddhist monks to undergraduate students revealed that previously established gender differences in self-compassion were completely eliminated in the sample of monks who were trained in mindfulness and meditation. The monks also reported higher levels of self-compassion than the undergraduate students. It was hypothesized (Neff, 2003a) that the differences could have related mostly to the mindfulness training; however, age could have been a contributing factor that the present study explored. Based on the present study’s findings, that younger participants were overall less compassionate with the self than the older participants, it appears worthy to consider. In the research on body esteem, Franzoi (1995) discovered that young adult participants reported more negative body esteem feelings overall in an age-diverse sample. Additionally, the rate of body comparison was higher for young adult females versus their

adolescent counterparts (Schutz et. al, 2002). Therefore, these prior findings provide support for further examination of age differences with regard to self-compassion, body esteem, and body comparison.

Several significant differences emerged between age groups in this study. Overall, younger participants and those who were early in their college career (i.e. Freshmen) reported lower levels of compassion for the self compared to those further along in college. Specifically, younger participants indicated lower levels of common humanity, feeling isolated in their struggles, and a tendency to over-identify with their problems, in comparison to older participants. Additionally, older participants and those who were more advanced in their college career (i.e. seniors and graduate students) reported higher levels of self-compassion, mindful awareness of one's shortcomings, and a shared sense of common humanity with others in comparison to younger participants.

The age differences across nearly all dimensions of self-compassion may be helpful in better understanding the lack of gender differences in the present study. Most of the self-compassion research conducted thus far has been with undergraduate students, a relatively restricted age sample. Neff's (2003s) study comparing Buddhist monks and undergraduate students may be one of the only studies thus far looking at different age groups, though higher compassion for self and relatively equal levels of self-compassion across genders were attributed to mindfulness training of the monks; however, age could have also been an influential factor. The age range in this study was large, and nearly half of the participants identified as graduate students. Though causation cannot be inferred, age could be influencing participants' self-compassion levels in this study. This could be an important area of future exploration, and would significantly contribute to the self-compassion literature.

Similar to self-compassion, positive feelings of self-esteem also seemed to increase with age and education level. Moreover, positive attitudes toward one's body parts and processes also increased with age, while the tendency to engage in body comparison was much lower for the older adults in this study. In general these results suggest that age could be a protective factor against low self-compassion, negative body esteem or self-esteem, and frequent body comparison. It would be interesting to explore in a future study what processes are operating within older adults that lead to healthier self-attitudes.

Effectiveness of Expressive Writing

Though expressive writing has been well-established in the literature as effective means of increasing physical and psychological health benefits, only one published research study implemented a writing intervention to increase body image feelings (Earnhardt et al., 2002). One possible reason Earnhardt et al.'s (2002) study was ineffective could have been due to asking participants to write about their negative body attitudes; therefore, having participants write about their own negative body attitudes was not included in this study. Additionally, no prior research studies have attempted to implement an expressive writing intervention to increase self-compassion. Therefore, based on prior research regarding positive writing topics (Harrist et al., 2007; King, 2001), the main hypothesis in this study was that psychological benefits in the form of increased self-compassion and body esteem could be fostered through a writing topic about one's best possible self.

Overall, results from the manipulation check questions indicate that the experimental design worked; those in the Best Possible Self condition wrote about personal experiences and revealed their emotions more than those in the Control condition. This would suggest that any differences in outcome variables would be due to a treatment effect, indicating the intervention was successfully implemented.

No significant changes occurred across time for participants in the Best Possible Self condition on the measures of self-compassion or body esteem, and the frequency of body comparison did not change. According to results from this study, self-compassion, body esteem, and body comparison were not improved through this method of writing.

Though not an expected effect, self-esteem increased from pre-test (prior to writing) to post-test (after the three-day writing exercise), and again from post-test to follow-up (6-10 weeks later). These results suggest that writing about one's best possible self helped participants to cultivate positive attitudes toward themselves across time, while self-esteem levels for those in the control condition remained relatively stable. Though unanticipated, this is a promising finding, and may necessitate a closer examination between global (stable) or contingent (changeable) self-esteem levels. Given that prior attempts to increase self-esteem have been reportedly unsuccessful (e.g. California Task Force to Promote Self-Esteem, reported in Neff, 2003a), this was an interesting discovery that could be explored further in future research. Additionally, further exploration of which components of self-esteem – including some aspects of body esteem or even body comparison – are improving could be a worthy area of research.

Limitations for the study overall, and possible reasons as to why the expressive writing intervention was largely ineffective at fostering healthy self-attitudes will be discussed in the following section.

Limitations and Directions for Future Research

Several limitations are apparent in this study. First, the range of ages in this study differed significantly from prior studies of self-compassion focusing mainly on young adults and undergraduate college students, which may be one reason why the hypothesized gender differences in self-compassion did not emerge. Prior research has looked mainly at young adults and college students, and has found that women tend to be less compassionate toward themselves

than men. However, nearly 40% of the total sample in this study identified as graduate students, and the ages ranged widely from 18-57. Based on the present study's results that younger participants tended to score lower on self-compassion than the older participants, it appears worthy to consider age as a contributing factor to an individual's self-attitude. It may be beneficial to be more intentional when targeting specific age brackets to look more closely at the age differences found for self-compassion and body esteem, specifically.

Another limitation of the study for the experimental design portion (part 2) was the low number of participants. Although there were a few significant findings, the main hypotheses regarding increasing body esteem and self-compassion were not substantiated. Duplicating the same experimental design with more participants to gain statistical power may reveal additional significant results. Another limitation in part 2 was that no exclusion criteria were implemented. The purpose was to obtain a diverse and representative sample of the university population, which was accomplished; however, participants were not selected based on their self-compassion or body esteem scores. Considering that self-compassion is evident "when things go wrong" (Neff & Vonk, 2009, p. 42), future researchers may want to target those with low body esteem feelings and low self-compassion in order to test the effectiveness of this positive writing paradigm.

Because men and women seem to be impacted differently by these body-related negative self-processes, and because scores generally did not improve for either men or women after the writing intervention, perhaps adapting the writing topic to specifically target women's issues and men's issues separately could help in the development of an effective intervention. Additionally, because writing about one's negative body image was unsuccessful in prior research (Earnhardt et al., 2002), perhaps creating a body-oriented writing condition that targets the "best possible physical self", for example, may be a useful way to increase ratings on the body attitude measures.

Further, a writing intervention that incorporates the elements of self-compassion could be a more explicit way of targeting low self-compassion. The present study was the first one to incorporate an established Best Possible Self writing task with body esteem and self-compassion outcomes. The next logical step would be to adapt the established writing paradigm to be a more suitable fit for the outcome measures. Self-compassion is considered an effective emotion regulation approach, as it can help the individual to transform negative emotions into more positive feelings by being kind and understanding of oneself (Neff, 2003a). Future studies should focus on the elements of self-compassion in the writing task to increase positive self-attitudes. Developing a writing topic that incorporates the three positive-oriented aspects of self-compassion (self-kindness, mindfulness, and common humanity) could be a way to combine strengths-based approaches with self-compassion.

Finally, future studies should more closely examine the ways that body comparison and body esteem are related to global self-esteem. Results from the present study indicate that body comparison and body esteem are subtypes of global self-esteem, as their relationship with self-compassion is completely accounted for by the self-esteem ratings. Pearson correlation results indicate that body esteem and body comparison are still associated with self-compassion, though theoretically and statistically different constructs. In fact, the correlation among these variables could be largely due to the idea that body comparison and body esteem are components of self-esteem. The relationships among these variables need to be explored further to identify subtypes of self-compassion that may be related body attitudes. Self-compassion arguably offers a preferred reconceptualization and measure of psychological well-being and healthy self-attitudes compared to self-esteem. It follows that a reconceptualization of healthy attitudes toward the body – what may be coined “body compassion” – to replace older constructs of body image and body esteem is also needed. *Body compassion*, in this reconceptualization, reflects self-oriented

attitudes of kindness, common humanity, and a mindful approach to one's body as compared to attitudes of self-criticism, isolative feelings, and over-identification with negative body emotions.

Negative body esteem, low self-esteem, and low levels of self-compassion continue to plague individuals in Western society. Prior research has established that these negative self-attitudes are highly correlated with psychological and physical health problems, such as depression and the development of eating disorders. Increased efforts to develop effective interventions, such as through expressive writing about positive topics, will be helpful to individuals seeking relief from these negative outlooks. The present study contributes to the existing self-compassion and body esteem literature through the examination of gender and age differences. Additionally, and perhaps more importantly, the present study also contributes to a theoretical reconceptualization of body attitudes by proposing a new construct of *body compassion*. Future research should focus on the body attitudes that comprise self-compassion. The present study also contributes to the expressive writing literature by testing effectiveness of a positive writing topic, specifically that writing about one's best possible self-in-future representation fosters positive self-esteem feelings. The present study provides new insights into these psychological constructs through examination of the association between self-compassion and body esteem, and between self-compassion and body comparison, without the influence of self-esteem. Moreover, this study aimed to test an expressive writing intervention as an effective means for fostering the healthy self-attitudes of self-compassion and positive body esteem.

REFERENCES

- Adams, C. E. & Leary, M. R. (2007). Promoting self-compassionate attitudes toward eating among restrictive and guilty eaters. *Journal of Social and Clinical Psychology, 26* (10), 1120-1144.
- Baikie, K. A. (2005). Emotional and physical health benefits of expressive writing. *Advances in Psychiatric Treatment, 11* (5), 338-346.
- Beal, D. J. & Dawson, J. F. (2007). On the Use of Likert-Type Scales in Multilevel Data: Influence on Aggregate Variables. *Organizational Research Methods, 10* (4), 657-672.
- Birnie, K., Speca, M., & Carlson, L. E. (2010). Exploring self-compassion and empathy in the context of mindfulness-based stress reduction (MBSR). *Stress and Health, 26* (5), 359-371.
- Brown, T. A., Cash, T. F., & Mikula, P. J. (1990). Attitudinal body image assessment: Factor analysis of the Body-Self Relationships Questionnaire. *Journal of Personality Assessment, 55*, 135-144.
- Burton, C. M., & King, L. A. (2008). Effects of (very) brief writing on health: The two-minute miracle. *British Journal of Health Psychology, 13* (1), 9-14.
- Cahill, S. & Mussap, A. J. (2007). Emotional reactions following exposure to idealized bodies predict unhealthy body change attitudes and behaviors in women and men. *Journal of Psychosomatic Research, 62*, 631-639.

- Cash, T. F. (2000). Manual for the Multidimensional Body-Self Relations Questionnaire (3rd Rev.). Available from the author at www.body-images.com.
- Cash, T.F. & Pruzinsky, T. (1990). *Body Images: Development, Deviance, and Change*. New York: Guilford Press.
- Cash, T.F. & Pruzinsky, T. (2002). *Body Image: A Handbook of Theory, Research, and Clinical Practice*. New York: Guilford Press.
- Cicchetti, D. V., Showalter, D., & Tyrer, P. J. (1985). The effect of number of rating scale categories on levels of inter-rater reliability: A Monte Carlo investigation. *Journal of Applied Psychology, 9*, 31-36.
- Cooley, C. H. (1912). Valuation as a social process. *Psychological Bulletin, 9*.
- Crandall, R. (1973). The measurement of self-esteem and related constructs, pp. 80-82 in J. P. Robinson & P. R. Shaver (Eds). *Measures of social psychological attitudes*. Revised edition. Ann Arbor: ISR.
- Crawford, J. R., and Henry, J. D. (2004). The Positive and Negative Affect Schedule (PANAS): Construct validity, measurement properties and normative data in a large non-clinical sample. *British Journal of Clinical Psychology, 43*, 245-265.
- Crowne, D. P. & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology, 24* (4), 349-354.
- Daya, R. (2000). Buddhist psychology, a theory of change processes: Implications for counsellors. *International Journal for the Advancement of Counselling, 22* (4), 257-271.
- Demo, D. H. (1985). The measurement of self-esteem: Refining our methods. *Journal of Personality and Social Psychology, 48*, 1490-1502.
- Dittmar, H. (2009). How do “body perfect” ideals in the media have a negative impact on body image and behaviors? Factors and processes related to self and identity. *Journal of Social and Clinical Psychology, 28* (1), 1-8.
- Earnhardt, J., Martz, D., Ballard, M., & Curtin, L. (2002). A writing intervention for negative

- body image: Pennebaker fails to surpass the placebo. *Journal of College Student Psychotherapy*, 17 (1), 19-35.
- Fausset, C. B., Rogers, W. A., & Fisk, A. D. (2009). Univariate and Multivariate Analysis of Variance: A Primer. Technical Report presented at the Georgia Institute of Technology: Atlanta, GA. Retrieved from:
<https://smartech.gatech.edu/bitstream/handle/1853/40570/HFA-TR-0904-ANOVA%20MANOVA%20Primer.pdf>
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7, 117-140.
- Field, A. (2005). *Discovering Statistics Using SPSS* (2nd Eds.). London, England: Sage Publications, Ltd.
- Fisher, E., Dunn, M., & Thompson, J. K. (2002). Social comparison and body image: Body comparison processes using multidimensional scaling. *Journal of Clinical and Social Psychology*, 21, (5), 566-579.
- Franzoi, S. L. (1994). Further evidence of the reliability and validity of the Body Esteem Scale. *Journal of Clinical Psychology*, 50, 237-239.
- Franzoi, S. L. (1995). The body-as-object versus the body-as-process: Gender differences and gender considerations. *Sex Roles*, 33, 417-437.
- Franzoi, S. L., & Herzog, M. E. (1986). The Body Esteem Scale: A convergent and discriminant validity study. *Journal of Personality Assessment*, 50, 24-31.
- Franzoi, S. L. & Shields, S. A. (1984). The Body-Esteem Scale: Multidimensional structure and sex differences in a college population. *Journal of Personality Assessment*, 48, 173-178.
- Frattaroli, J. (2006). Experimental disclosure and its moderators: A meta-analysis. *Psychological Bulletin*, 132 (6), 823-865.
- Gay, L. R., Mills, G. E. & Airasian, P. (2009). *Educational research: Competencies for analysis and application* (9th ed.). Upper Saddle River, New Jersey: Prentice-Hall.
- Gortner, E. -M., Rude, S. S., & Pennebaker, J. W. (2006). Benefits of expressive writing in

- lowering rumination and depressive symptoms. *Behavior Therapy*, 37 (3), 292-303.
- Grogan, S. (1999). *Body image: Understanding body dissatisfaction in men, women, and children*. London; New York: Routledge.
- Grossbard, J. R., Lee, C. M., Neighbors, C., & Larimer, M. E. (2009). Body image concerns and contingent self-esteem in male and female college students. *Sex Roles*, 60 (3), 198-207.
- Guenther, H. V. & Kawamura, L. S. (1975). *Mind in Buddhist Psychology*. Emeryville, CA: Dharma Publishing.
- Hargreaves, D. A. & Tiggemann, M. (2009). Muscular ideal media images and men's body image: social comparison processing and individual vulnerability. *Psychology of Men & Masculinity*, 10 (2), 109-119.
- Harrist, R. S., Carlozzi, B. L., McGovern, A. R., & Harrist, A. W. (2006). Benefits of expressive writing and expressive talking about life goals. *Journal of Research in Personality*, 41 (4), 923-930.
- Hobza, C. L., Walker, K. E., Yakushko, O., & Peugh, J. L. (2007). What about men? Social comparison and the effects of media Images on body and self-esteem. *Psychology of Men & Masculinity*, 8 (3), 161-172.
- Hoyle, R. H., & Sherrill, M. R. (2006). Future orientation in the self-system: possible selves, self-regulation, and behavior. *Journal of Personality*, 74 (6), 1673-1696.
- Humphreys, P. & Paxton, S. J. (2004). The impact of exposure to idealized male images on adolescent boys' body image. *Body Image*, 1, 253-266.
- Hussain, D. (2010). Healing through writing: Insights from research. *International Journal of Mental Health Promotion*, 12 (2), 19-23.
- IBM Corporation (2010). *IBM SPSS Statistics for Windows* (19.0). Armonk, NY: IBM Corp.
- Kaminski, P. L., & Hayslip, J. B. (2006). Gender differences in body esteem among older adults. *Journal of Women & Aging*, 18 (3), 19-35.
- King, L. A. (2001). The health benefits of writing about life goals. *Personality and Social*

Psychology Bulletin, 27 (7), 798-807.

- King, L.A. & Miner, K.N. (2000). Writing about the perceived benefits of traumatic events: Implications for physical health. *Personality and Social Psychology Bulletin*, 26, 220-230.
- Knowles, E. D., Wearing, J. R., & Campos, B. (2011). Culture and the health benefits of expressive writing. *Social Psychological and Personality Science*, 2 (4), 408-415.
- James, W. (1983). *The principles of psychology*. Cambridge, MA: Harvard University Press. (Original work published 1890).
- Jones, A. M. & Buckingham, J. T. (2005). Self-esteem as a moderator of the effect of social comparisons on women's body image. *Journal of Social and Clinical Psychology*, 24 (8), 1164-1187.
- Leary, M. R., Tate, E. B., Adams, C. E., Allen, A. B., & Hancock, J. (2007). Self-compassion and reactions to unpleasant self-relevant events: the implications of treating oneself kindly: The implications of treating oneself kindly. *Journal of Personality and Social Psychology*, 92 (5), 887-904.
- Lowe, G. (2006). Health-related effects of creative and expressive writing. *Health Education*, 106 (1), 60-70.
- Lowery, S. E., Kurpius, S. E. R., Befort, C., Blanks, E. H., Sollenberger, S., Nicpon, M. F., & Huser, L. (2005). Body image, self-esteem, and health-related behaviors among male and female first year college students. *Journal of College Student Development*, 46 (6), 612-623.
- Markus, H. & Nurius, P. (1986). Possible selves. *American Psychologist*, 41, 954-969.
- Maslow, A. H. (1968). *Toward a psychology of being (2nd Edition)*. New York: Van Nostrand Reinhold.
- McCrae, R. & Costa, P. (1997). Personality trait structures as a human universal. *American Psychologist*, 52, 509-516

- McCreary, D. R. & Saucier, D. M. (2009). Drive for muscularity, body comparison, and social physique anxiety in men and women. *Body Image, 6*, 24-30.
- Meevissen, Y. M. C., Peters, M. L., & Alberts, H. J. E. M. (2011). Become more optimistic by imagining a best possible self: Effects of a two week intervention. *Journal of Behavior Therapy and Experimental Psychiatry, 42* (3), 371-378.
- Mendelson B.K., Mendelson, M.J. & White, D.R. (2001). Body-Esteem scale for adolescents and adults. *Journal of Personality Assessment, 76* (1), 90-106.
- Mosewich, A.D., Kowalski, K.C., Sabiston, C.M., Sedgwick, W.A., & Tracy, J.L. (2011). Self-compassion: A potential resource for young women athletes. *Journal of Sport & Exercise Psychology, 33* (1), 103-123.
- Neff, K. D. (2003a). The development and validation of a scale to measure self-compassion. *Self and Identity, 2* (3), 223-250.
- Neff, K. D. (2003b). Self-Compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity, 2* (2), 85-101.
- Neff, K. D. (2009). The Role of self-compassion in development: A healthier way to relate to oneself. *Human Development, 52* (4), 211-214.
- Neff, K. D. (2011). *Self-Compassion: Stop beating yourself up and leave insecurity behind*. New York: William Morrow.
- Neff, K. D., Kirkpatrick, K. L., & Rude, S. S. (2007a). Self-compassion and adaptive psychological functioning. *Journal of Research in Personality, 41* (1), 139-154.
- Neff, K. D., Rude, S. S., & Kirkpatrick, K. L. (2007b). An examination of self-compassion in relation to positive psychological functioning and personality traits. *Journal of Research in Personality, 41* (4), 908-916.
- Neff, K. D. & Vonk, R. (2009). Self-compassion versus global self-esteem: Two different ways of relating to oneself. *Journal of Personality, 77* (1), 23-50.
- Nolen-Hoeksema, S., Larson, J., & Grayson, C. (1999). Explaining the gender difference in

- depressive symptoms. *Journal of Personality and Social Psychology*, 77, 1061 -1072.
- O'Brien, K. S., Caputi, P., Minto, R., Peoples, G., Hooper, C., Kell, S., & Sawley, E. (2009). Upward and downward physical appearance comparisons: Development of scales and examination of predictive qualities. *Body Image*, 6, 201-206.
- Pennebaker, J. W. & Beall, S. K. (1986). Confronting a traumatic event: Toward an understanding of inhibition and disease. *Journal of Abnormal Psychology*, 95, 274–281.
- Pennebaker, J.W., Booth, R.E., & Francis, M.E. (2007). Linguistic Inquiry and Word Count (Version 2007) [Computer software]. Austin, TX: LIWC.net.
- Pennebaker, J. W., Kiecolt-Glaser, J. K., & Glaser, R. (1988). Disclosure of traumas and immune function: Health implications for psychotherapy. *Journal of Consulting and Clinical Psychology*, 56 (2), 239-245.
- Romero, C. (2008). Writing wrongs: Promoting forgiveness through expressive writing. *Journal of Social and Personal Relationships*, 25 (4), 625-642.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Rosenberg, M. (1979). *Conceiving the self*. New York: Basic Books.
- Rude, S. S., Gortner, E.-M., & Pennebaker, J. W. (2004). Language use of depressed and depression-vulnerable college students. *Cognition & Emotion*, 18, 1121–1133.
- Schutz, H. K. Paxton, S. J. & Wertheim, E. H. (2002). Investigation of body comparison among adolescent girls. *Journal of Applied Social Psychology*, 32 (9), 1906-1937.
- Secord, P.F., & Jourard, S.M. (1953). The appraisal of body cathexis: Body cathexis and the self. *Journal of Consulting Psychology*, 17 (5), 343-347.
- Seligman, M. E. & Csikszentmihalyi, M. (2000). Positive Psychology: An introduction. *American Psychologist*, 55, 5-14.
- Shavelson, R.J. (1996). *Statistical reasoning for the behavioral sciences (3rd Edition)*. Boston, MA: Allyn and Bacon.

- Sheldon, P. (2010). Pressure to be perfect: influences on college students' body esteem. *The Southern Communication Journal*, 75 (3), 277.
- Smyth, J. (1998). Written emotional expression: Effect sizes, outcome types, and moderating variables. *Journal of Consulting and Clinical Psychology*, 66 (1), 174-184.
- Swann, W. B. (1996). *Self-traps: The elusive quest for higher self-esteem*. New York: Freeman
- Thomas, C. D. & Freeman, R. J. (1990). The Body Esteem Scale: Construct validity of the female subscales. *Journal of Personality Assessment*, 54 (1-2), 204-212.
- VanVoorhis, C. R. & Morgan, B. L. (2007). Understanding Power and Rules of Thumb for Determining Sample Sizes. *Tutorials in Quantitative Methods for Psychology*, 3 (2), 43-50.
- Wada, K. & Park, J. (2009). Integrating Buddhist psychology into grief counseling. *Death Studies*, 33 (7), 657-683.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of Positive and Negative Affect: The PANAS Scales. *Journal of Personality and Social Psychology*, 54, 1063-1070.
- Zevon, M. A., & Tellegen, A. (1982). The structure of mood change: An idiographic/nomothetic analysis. *Journal of Personality and Social Psychology*, 43, 111-122.

APPENDICES

APPENDIX A. Tables

Table 1.

Pearson Correlations (r) for Grand Means of Self-Compassion, Self-Esteem, Body Esteem, and Body Comparison

	Self-Esteem	Body Esteem	Body Comparison
Self-Compassion	.659**	.375**	-.268**
Self-Esteem		.546**	-.328**
Body Esteem			-.236**

Note: ** = significant at the $p < .01$ level

Table 2.

Controlling for the Influence of Self-Esteem on the Relationship Between Self-Compassion and Body Esteem, and the Relationship between Self-Compassion and Body Comparison

	Controlling for Self-Esteem	
	Body Esteem	Body Comparison
Self-Compassion	$r = .024, p = .680$	$r = -.072, p = .213$

Table 3.

Controlling for the Influence of Self-Compassion on the Relationship Between Self-Esteem and Body Esteem, and the Relationship Between Self-Esteem and Body Comparison

	Controlling for Self-Compassion	
	Body Esteem	Body Comparison
Self-Esteem	$r = .429, p = .000$	$r = -.209, p = .000$

Table 4.

Significant Differences in Self-Process Variables of Self-Compassion, Body Esteem, and Body Comparison by Gender

	Men	Women	<i>F</i>	<i>p</i>
	Mean (<i>SD</i>)	Mean (<i>SD</i>)		
SCS Common Humanity	4.11 (1.16)	4.46 (1.22)	5.36	.021
BES Grand Mean	4.82 (1.09)	4.39 (.89)	11.65	.001
BES Body-as-Object	4.75 (1.04)	4.37 (.90)	9.90	.002
BES Body-as-Process	4.97 (1.20)	4.51 (1.00)	10.70	.001
BCS Grand Mean	3.25 (1.28)	3.59 (1.28)	4.44	.036

Table 5.

Differences on Dimensions of Self-Compassion, Self-Esteem, and Body Comparison by Age

	18-20 yrs	21-23 yrs	24-27 yrs	28-57 yrs	
	Mean (<i>SD</i>)	Post-Hoc			
SCS Grand Mean	3.91 (.98)			4.52 (1.04)	$p = .000$
SCS Grand Mean		1.06 (.79)		4.52 (1.04)	$p = .009$
SCS Common Humanity	3.87 (1.14)			4.78 (1.19)	$p = .000$
SCS Common Humanity		4.30 (1.21)		4.78 (1.19)	$p = .041$
SCS Isolation	4.15 (1.45)			3.44 (1.48)	$p = .009$
SCS Mindfulness	4.26 (1.15)			4.98 (1.13)	$p = .000$
SCS Mindfulness		4.45 (.97)		4.98 (1.13)	$p = .011$
SCS Over-Identification	4.23 (1.59)			3.54 (1.50)	$p = .019$
RSE Grand Mean	5.20 (1.27)			5.68 (1.03)	$p = .032$
BCS Grand Mean		3.64 (1.24)		3.11 (1.27)	$p = .036$
BCS Grand Mean			3.71 (1.38)	3.11 (1.27)	$p = .031$

Note: Each line represents the means and standard deviations for differences across two age groups.

Table 6.

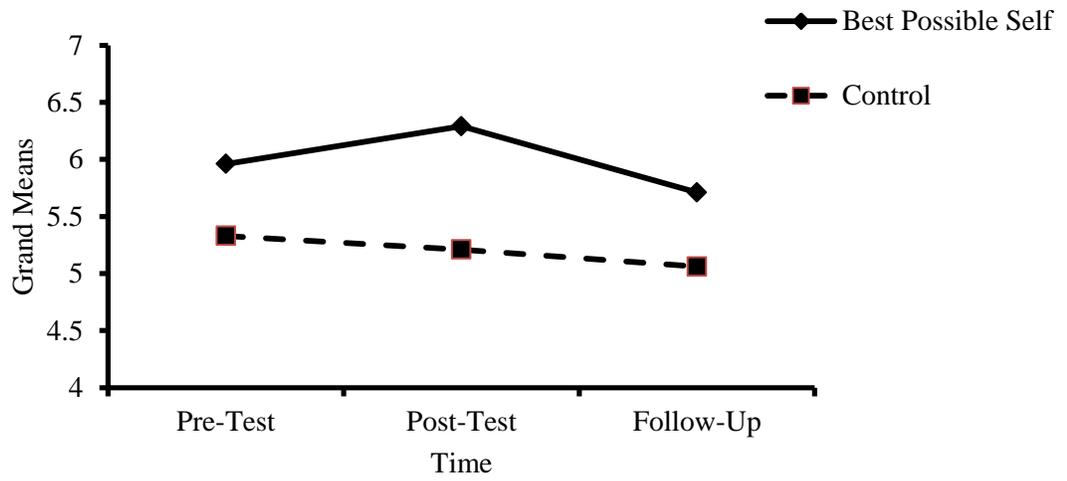
Differences on Dimensions of Self-Compassion and Self-Esteem by Education Level

	Freshman	Senior	Graduate	
	Mean (<i>SD</i>)	Mean (<i>SD</i>)	Mean (<i>SD</i>)	Post-Hoc
SCS Grand Mean	3.76 (.92)		4.33 (1.03)	$p = .037$
SCS Common Humanity	3.61 (1.06)	4.40 (1.15)		$p = .033$
	3.61 (1.06)		4.56 (1.20)	$p = .002$
SCS Mindfulness	3.89 (.99)	4.63 (1.10)		$p = .033$
	3.89 (.99)		4.76 (1.16)	$p = .003$
RSE Grand Mean	5.07 (1.25)		5.66 (.98)	$p = .015$

Note: Each line represents the means and standard deviations for differences across two education level groups.

APPENDIX B: Figures

Figure 1. Rosenberg Self-Esteem Scale Responses Over Time



Oklahoma State University Institutional Review Board

Date: Monday, January 30, 2012
IRB Application No ED128
Proposal Title: Expressive Writing for Self-Compassion and Body Esteem

Reviewed and Processed as: Expedited

Status Recommended by Reviewer(s): Approved Protocol Expires: 1/29/2013

Principal Investigator(s):

Lindsay Murn 408 Willard Stillwater, OK 74078	Steven Harrist 419 Willard Stillwater, OK 74078
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The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

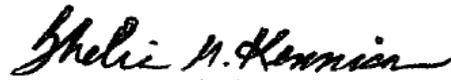
The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 219 Cordell North (phone: 405-744-5700, beth.mcternan@okstate.edu).

Sincerely,


Shelia Kennison, Chair
Institutional Review Board

CONSENT FORM

OKLAHOMA STATE UNIVERSITY

PROJECT TITLE: Writing and the Self

INVESTIGATOR: Lindsay Murn, M.S.

INSTITUTION: Oklahoma State University, College of Education, School of Applied Health and Educational Psychology

PURPOSE:

The purpose is to explore psychological processes in college students through an online writing study.

PROCEDURES:

Participating in the study will include a total of 2 hours of your time. Participation will consist of signing up for 3 consecutive days of participation in a computer lab and a follow-up day. On the first day, you will fill out some questionnaires (10-20 minutes) and write (type) on a specific topic for 20 minutes. You will be asked to provide some basic demographic information, and to fill out some measures about yourself and your feelings. On the second day, you will answer a few questions and write for 20 minutes. On the third day, you will write for 20 minutes and fill out some questionnaires (10-20 minutes). Six weeks later, you will be sent via email an online questionnaire to complete.

RISKS OF PARTICIPATION:

There are no foreseeable risks associated with this study, including stress, psychological, social, physical, or legal risks which are greater than those ordinarily encountered in daily life. You will be provided with a list of on-campus counseling resources upon completion of this study. If, however, you begin to experience discomfort or stress at any time during this project, you may end your participation. You will be provided with a list of on-campus counseling resources upon completion of this study.

BENEFITS OF PARTICIPATION:

Potential benefits of participating in this study may include a sense of contribution to the public by advancing the understanding of psychological processes involved in expressive writing. New themes may emerge that contribute to new assessments, interventions, or other preventive and awareness-raising efforts. Additional benefits may include improved emotional or psychological functioning.

CONFIDENTIALITY:

Participants have been given a study ID to log in to the study website. Any participant names will be removed from the records once 100 participants have completed the study to protect participant privacy. Any potentially personal information will be changed and modified thoroughly to protect identities if quotes or qualitative themes are reported in research. Group data will be the primary method for reporting study results. Participants can assist in protecting their privacy by not including identifying information in written essays (e.g. "I am the daughter of Senator Smith"). All data, once removed from the website, will be stored in a locked file cabinet within the office of the principal investigator. Research records will be stored securely

Okla. State Univ. IRB
Approved <u>1/30/12</u>
Expires <u>1/29/13</u>
IRB # <u>EO-12-8</u>

for 5 years, and only researchers and individuals responsible for research oversight will have access to the records.

COMPENSATION:

Once 100 participants have completed the study, they will be entered into a drawing for a chance to win one of five \$50.00 cash prizes.

CONTACTS:

This study is part of a requirement for the primary investigator's completion of the Doctor of Philosophy degree in Counseling Psychology at Oklahoma State University. Your participation in this study is greatly appreciated. If you have any questions concerning this study, please feel free to contact the primary investigator, Lindsay Murn, M.S. at murn@okstate.edu, or her advisor, Steve Harrist, Ph.D. at steve.harrist@okstate.edu.

If you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-3377 or irb@okstate.edu.

PARTICIPANT RIGHTS:

Your participation in this research is voluntary. There is no penalty for refusal to participate, and you are free to withdraw your consent and participation in this project at any time.

CONSENT DOCUMENTATION:

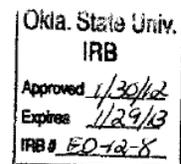
I have been fully informed about the procedures listed here. I am aware of what I will be asked to do and of the benefits of my participation. I also understand the following statements:

I affirm that I am 18 years of age or older.

I have read and fully understand this consent form. I sign it freely and voluntarily. A copy of this form will be given to me. I hereby give permission for my participation in this study.

Participant Signature Date

Researcher Signature Date



Oklahoma State University Institutional Review Board

Date: Friday, April 06, 2012
IRB Application No ED1273
Proposal Title: Understanding Self-Processes in College Students

Reviewed and Exempt
Processed as:

Status Recommended by Reviewer(s): Approved Protocol Expires: 4/5/2013

Principal
Investigator(s):

Lindsay Murn	Steven Harrist
408 Willard	419 Willard
Stillwater, OK 74078	Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

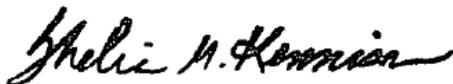
The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 219 Cordell North (phone: 405-744-5700, beth.mcternan@okstate.edu).

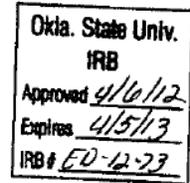
Sincerely,



Shelia Kennison, Chair
Institutional Review Board

Consent

INFORMED CONSENT
OKLAHOMA STATE UNIVERSITY



PROJECT TITLE: Understanding Self-Processes in College Students

INVESTIGATOR: Lindsay Murn, M.S., Lindsay.Murn@okstate.edu

INSTITUTION: Oklahoma State University, College of Education, School of Applied Health and Educational Psychology

PURPOSE:

The purpose of this research study is to explore self and psychological processes of undergraduate and graduate college students (over the age of 18).

PROCEDURES:

Students interested in participating will read and agree to the terms of this consent form and continue into the survey website. Following the instructions on the SurveyMonkey website, you will first be asked to fill out basic demographic information. Then you will be asked to respond to several questions exploring individual self-processes. The survey will take approximately 20 minutes to complete.

RISKS OF PARTICIPATION:

There are no foreseeable risks associated with this research study; however, if you begin to experience discomfort or stress at any time during this project, you may end your participation. You will be provided with a list of on-campus counseling resources upon completion of this study.

BENEFITS OF PARTICIPATION:

Potential benefits of participating in this research study may include a sense of contribution to the public and to the field of psychology by advancing the understanding of psychological processes and self-processes in college students. New themes may emerge that contribute to new assessments, interventions, or other preventive and awareness-raising efforts.

CONFIDENTIALITY:

Your participation is completely voluntary. Names, emails, or IP addresses will not be connected to your survey responses in any way, and no personally identifying information will be documented. The records of this research study will be stored securely on a password-protected USB drive within the sole possession of the primary investigator in a locked filing cabinet for no more than 5 years. Records will be kept private. Any results obtained will be reported as group data; no individual responses will be reported.

COMPENSATION:

Once 200 participants have been reached, all participants will be entered into a drawing for a chance to win one of five \$25.00 cash prizes offered by the primary investigator. Five names will be randomly selected for the monetary awards.

Students participating via the COE Sona System may ~~also~~ earn course credit for their participation. Participation in this project is regarded as satisfying 0.5 “units” of credit, which are then afforded a certain percentage of the course grade by each instructor.

PARTICIPANT RIGHTS:

Your participation in this research is voluntary. There is no penalty for refusal to participate, and you are free to withdraw your consent and participation in this project at any time.

CONTACTS:

This ~~research~~ study is part of a requirement for the primary investigator’s completion of the Doctor of Philosophy degree in Counseling Psychology at Oklahoma State University. If you have any questions concerning this ~~research~~ study, please feel free to contact the primary investigator, Lindsay Murn, M.S. at murn@okstate.edu, or her adviser, Steve Harrist, Ph.D. at steve.harrist@okstate.edu.

If you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-3377 or irb@okstate.edu.

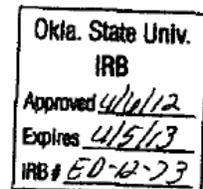
CONSENT:

By clicking “Next”, I agree that:

- I have been fully informed about the procedures listed here.
- I am aware of what I will be asked to do and of the benefits of my participation.
- I affirm that I am 18 years of age or older.
- I have read and fully understand this consent form.

My participation in this survey indicates my willingness to participate in this research study. I hereby give permission for my participation in this study.

*Click Next/I Agree



APPENDIX D: Measures

Self-Compassion Scale (Neff, 2003a)

“How I Typically Act Toward Myself in Difficult Times”

Instructions: Please read each statement carefully before answering. Indicate how often you behave in the stated manner.

1	2	3	4	5	6	7
Almost Never						Almost Always

1. I'm disapproving and judgmental about my own flaws and inadequacies.
2. When I'm feeling down I tend to obsess and fixate on everything that's wrong.
3. When things are going badly for me, I see the difficulties as part of life that everyone goes through.
4. When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world.
5. I try to be loving towards myself when I'm feeling emotional pain.
6. When I fail at something important to me I become consumed by feelings of inadequacy.
7. When I'm down and out, I remind myself that there are lots of other people in the world feeling like I am.
8. When times are really difficult, I tend to be tough on myself.
9. When something upsets me I try to keep my emotions in balance.
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 intolerant and impatient towards those aspects of my personality I don't like.
12. When I'm going through a very hard time, I give myself the caring and tenderness I need.

13. When I'm feeling down, I tend to feel like most other people are probably happier than I am.
14. When something painful happens I try to take a balanced view of the situation.
15. I try to see my failings as part of the human condition.
16. When I see aspects of myself that I don't like, I get down on myself.
17. When I fail at something important to me I try to keep things in perspective.
18. When I'm really struggling, I tend to feel like other people must be having an easier time of it.
19. I'm kind to myself when I'm experiencing suffering.
20. When something upsets me I get carried away with my feelings.
21. I can be a bit cold-hearted towards myself when I'm experiencing suffering.
22. When I'm feeling down I try to approach my feelings with curiosity and openness.
23. I'm tolerant of my own flaws and inadequacies.
24. When something painful happens I tend to blow the incident out of proportion.
25. When I fail at something that's important to me, I tend to feel alone in my failure.
26. I try to be understanding and patient towards those aspects of my personality I don't like.

Self-Esteem Scale (Rosenberg, 1965)

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you *strongly agree*, circle 7. If you *strongly disagree*, circle 1.

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

1. On the whole, I am satisfied with myself.
2. At times, I think I am no good at all.
3. I feel that I have a number of good qualities.
4. I am able to do things as well as most other people.
5. I feel I do not have much to be proud of.
6. I certainly feel useless at times.
7. I feel that I'm a person of worth, at least on an equal plane with others.
8. I wish I could have more respect for myself.
9. All in all, I am inclined to feel that I am a failure.
10. I take a positive attitude toward myself.

Body Esteem Scale (Franzoi & Shields, 1984)

Instructions: On this page are listed a number of body parts and functions. Please read each item and indicate how you feel about this part or function of your own body using the following scale:

	1	2	3	4	5	6	7		
	Strong Negative Feelings			No Feeling One Way or the Other		Strong Positive Feelings			
1. Body scent			1	2	3	4	5	6	7
2. Appetite			1	2	3	4	5	6	7
3. Nose			1	2	3	4	5	6	7
4. Physical stamina			1	2	3	4	5	6	7
5. Reflexes			1	2	3	4	5	6	7
6. Lips			1	2	3	4	5	6	7
7. Muscular strength			1	2	3	4	5	6	7
8. Waist			1	2	3	4	5	6	7
9. energy level			1	2	3	4	5	6	7
10. Thighs			1	2	3	4	5	6	7
11. Ears			1	2	3	4	5	6	7
12. Biceps			1	2	3	4	5	6	7
13. Chin			1	2	3	4	5	6	7
14. Body build			1	2	3	4	5	6	7
15. Physical coordination			1	2	3	4	5	6	7
16. Buttocks			1	2	3	4	5	6	7
17. Agility			1	2	3	4	5	6	7
18. Width of shoulders			1	2	3	4	5	6	7

19. Arms	1	2	3	4	5	6	7
20. Chest or breasts	1	2	3	4	5	6	7
21. Appearance of eyes	1	2	3	4	5	6	7
22. cheeks/cheekbones	1	2	3	4	5	6	7
23. Hips	1	2	3	4	5	6	7
24. Legs	1	2	3	4	5	6	7
25. Figure or physique	1	2	3	4	5	6	7
26. Sex drive	1	2	3	4	5	6	7
27. Feet	1	2	3	4	5	6	7
28. Sex organs	1	2	3	4	5	6	7
29. Appearance of stomach	1	2	3	4	5	6	7
30. Health	1	2	3	4	5	6	7
31. Sex activities	1	2	3	4	5	6	7
32. Body hair	1	2	3	4	5	6	7
33. Physical condition	1	2	3	4	5	6	7
34. Face	1	2	3	4	5	6	7
35. Weight	1	2	3	4	5	6	7

Body Comparison Scale (Fisher et al., 2002)

Instructions: For the items below, use the following scale to rate how often you compare these aspects of your body to those of other individuals of the same sex. NOTE: Please be sure that you read and respond to all of the questions according to how you would compare yourself to your *same-sex peers*.

	1	2	3	4	5	6	7
	Never						Always
1. Ears	1	2	3	4	5	6	7
2. Nose	1	2	3	4	5	6	7
3. Lips	1	2	3	4	5	6	7
4. Hair	1	2	3	4	5	6	7
5. Teeth	1	2	3	4	5	6	7
6. Chin	1	2	3	4	5	6	7
7. Shape of face	1	2	3	4	5	6	7
8. Cheeks	1	2	3	4	5	6	7
9. Forehead	1	2	3	4	5	6	7
10. Upper arm	1	2	3	4	5	6	7
11. Forearm	1	2	3	4	5	6	7
12. Shoulders	1	2	3	4	5	6	7
13. Chest	1	2	3	4	5	6	7
14. Back	1	2	3	4	5	6	7
15. Waist	1	2	3	4	5	6	7
15. Stomach	1	2	3	4	5	6	7

17. Buttocks	1	2	3	4	5	6	7
18. Thighs	1	2	3	4	5	6	7
19. Hips	1	2	3	4	5	6	7
20. Calves	1	2	3	4	5	6	7
21. Muscle tone of upper body	1	2	3	4	5	6	7
22. Overall shape of upper body	1	2	3	4	5	6	7
23. Muscle tone of lower body	1	2	3	4	5	6	7
24. Overall shape of lower body	1	2	3	4	5	6	7
25. Overall body	1	2	3	4	5	6	7

Manipulation Check Scale (Pennebaker & Beall, 1986)

Instructions: Please respond to the questions based on the following scale.

1	2	3	4	5	6	7
Very Slightly or Not at All						Extremely

- (a) How personal do you feel your writing was today?
- (b) To what extent did you reveal your true feelings and emotions in your writing today?
- (c) Overall, to what extent have you told others about the topic on which you wrote today?
- (d) Do you believe that writing about this topic, either today or any previous days, has affected how you think about the topic?
- (e) Do you believe that addressing this topic through your writing as improved the way you feel about it?

Demographic Items

Instructions: Please complete the following items.

1. What is your age? __

2. How do you identify?

Male

Female

Transgender

Other

3. What is your education level?

Freshman

Sophomore

Junior

Senior

Graduate Student

4. How do you identify?

White/Caucasian

Black/African-American/African

Native American/American Indian/Alaska Native

Asian/Asian-American

Middle Eastern

Hispanic/Latino(a)

Multiracial

Other (please specify): _____

5. What is your marital status?

Single

Dating

Partnered/In a committed relationship

Married

Separated

Divorced

Widowed

6. What is your cumulative GPA? __

VITA

Lindsay T. Murn

Candidate for the Degree of

Doctor of Philosophy

Dissertation: INCREASING SELF-COMPASSION AND POSITIVE BODY
ESTEEM: AN EXPRESSIVE WRITING INTERVENTION

Major Field: Counseling Psychology

Biographical:

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- Completed the requirements for the Master of Science in Educational Psychology at Oklahoma State University, Stillwater, Oklahoma in July, 2009.
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Experience:

- Doctoral Psychology Intern, University of Florida Counseling and Wellness Center (APA-Accredited Psychology Internship Program), Gainesville, Florida, 2012-2013.
- Intake Counselor, Oklahoma State University Student Counseling Center, Stillwater, Oklahoma, 2011-2012.
- Psychological Clinician Intern, L.E. Rader Juvenile Facility, Oklahoma Office of Juvenile Affairs, Sand Springs, Oklahoma, 2010-2011.
- Practicum Counselor, University of Central Oklahoma Student Counseling Center, Edmond, Oklahoma, 2009-2010.
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