

A Dissertation

by

NEETA A. RAMKUMAR

Submitted to the Office of Graduate Studies of Texas A&M University in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

August 2012

Major Subject: Counseling Psychology

Self-compassion in Overcontrolled, Undercontrolled, and Resilient Personality Types

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SELF-COMPASSION IN OVERCONTROLLED, UNDERCONTROLLED, AND RESILIENT PERSONALITY TYPES

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ABSTRACT

Self-compassion in Overcontrolled, Undercontrolled, and Resilient Personality Types. (August 2012)

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The psychological benefits of self-compassion, a construct associated with adaptively dealing with emotional suffering from life's problems appear to overlap with those of trait resiliency in terms of theoretical underpinnings and outcome research. This study investigated the relationship between self-compassion, personality, and gender in order to shed light on the construct's relevance to an existing framework of resiliency personality research. One hundred and twenty-three college students completed the Big Five Inventory (BFI) and Self-compassion Scale (SCS). A cluster-analysis of the BFI scores yielded three cluster prototypes consistent with overcontrolled, undercontrolled, and resilient personality prototypes identified in previous studies of children and adult community samples.

Analyses revealed resilient individuals reported significantly higher overall Self-compassion (M = 3.08, SD = .25) compared to both overcontrolled (M = 2.85, SD = .20, t = -4.32, $p \le .00$) and undercontrolled types (M = 2.90, SD = .25, t = 3.53, $p \le .00$).

Interestingly, there were no significant differences between overcontrolled and undercontrolled types or between men and women, on overall Self-compassion. A two by three MANOVA of gender and personality prototype on the SCS revealed a significant interaction on overall Self-compassion score ($F = 3.92, p \le .02$) and the Common Humanity subscale ($F = 3.81, p \le .03$). Post hoc analyses were conducted to examine the nature of the gender and personality interactions. The theoretical issues raised by these results are discussed and recommendations are made for utilizing self-compassion in treatment and future research.

To Mom and Dad, the source of my every success

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Through this journey, I have emerged a counseling psychologist fulfilling a personal and professional dream. This achievement is undoubtedly due to the people who have contributed to my learning, supported my aspirations, and enlivened my spirit along the way.

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1. INTRODUCTION

Psychologists have been intrigued by qualities in a person that seem to promote adaptive coping and resilience in the face of life's challenges. Whereas some people are able to "roll with the punches," others seem to be crushed by their emotional pain. They may ruminate, catastrophize, and lose hope instead of persevering and moving on from loss. There has been increasing dialogue in the past decade between Buddhism and psychology to explore new areas of research and ways of treating mental illness. This movement has included the emergence of Acceptance and Commitment Therapy (e.g., Hayes, 2002) and Kabat-Zinn's mindfulness-based stress-reduction programs (e.g., Kabat-Zinn, 2003). Self-compassion, a construct originating from ancient Buddhist philosophies, has received increasing attention in recent years within psychological circles as a self-attitude associated with adaptively dealing with emotional suffering from life's problems (Neff, 2003a, 2009a, 2009b).

Self-compassion can be thought of as a healthy form of self-acceptance, yet it is distinct from other positive psychology constructs such as self-esteem (Neff, 2003a; 2003b). Self-compassion involves being open and connected to one's painful experiences in a non-critical way such that one can learn and grow. Research indicates self-compassion is a strong predictor of mental health. Individuals high in self-compassion have been associated with lower levels of depression, anxiety, and self-

This dissertation follows the style of *Personality and Individual Differences*.

criticism as well as higher levels of life satisfaction and social connectedness compared to those low self-compassion (Neff, 2003a).

Although research on self-compassion in psychology has a relatively limited history, it is rapidly expanding and has been studied in a variety of populations and settings. Self-compassion has been examined with adolescents (Mosewich, Kowalski, Sabiston, Sedgwick, & Tracy, 2011; Lo, 2007; Neff & McGehee, 2010; Tanaka, Wekerle, Schmuck, & Pagalia-Boak, 2011), college students (e.g., Leary, Tate, Adams, Allen, & Hancock, 2007; Mills, Gilbert, Bellow, McEwan, & Gale, 2007; Neff, 2003b), psychologists (Moore, 2008), counselors (Patsiopoulos & Buchanan, 2011), caregivers (Shapiro, Brown, & Biegel, 2007), and health care professionals (Shapiro, Astin, Bishop, & Cordova, 2005). Self-compassion has also been studied in relation to a variety of mental health issues including eating disorders (Adams & Leary, 2007), sexual offenders (Lo, 2007), childhood abuse (Tanaka et al., 2011), depression (Mills et al., 2007), posttraumatic stress disorder or PTSD (Thompson & Waltz, 2008), smoking cessation (Kelly, Zuroff, & Shapira, 2009), chronic pain/disability (Costa & Pinto-Gouveia, 2011; Wren et al., 2012), and Cluster C personality disorders (Schanche, Stiles, McCullough, Svartberg, & Nielsen, 2011). Moreover, literature on the cross-cultural relevance of self-compassion has studied self-compassion in individuals from the United States, Thailand, Taiwan, Turkey, Denmark, and Canada (Deniz, Kesici, & Sümer, 2008; Neff, Pisitsungkagarn, & Hsieh, 2008; Neff & Vonk, 2009; Patsiopoulos & Buchanan, 2011).

The developing body of research indicates encouraging findings for the success of interventions focused on improving one's self-compassion (for reviews see Baer,

2010). Gilbert and Irons (2004) developed "compassionate mind training" for self-critical people and others have incorporated self-compassion into mindfulness training (e.g., Shapiro et al., 2005). McKay and Fanning (2000) developed a cognitive behavioral approach to improve self-esteem designed to increase self-compassion. They also discuss a form of compassion meditation in which individuals can direct compassionate messages towards themselves. Lee (2005) urges a model of using cognitive therapy to develop self-compassion, especially in cases healing from chronic posttraumatic stress disorder. Germer (2009) recently published a book accessible to the general public that serves as a thorough step-by-step guide to developing a practice of self-compassion. Psychologists have also become interested in how other treatments such as emotion-focused therapy and dialectical behavior therapy may increase self-compassion, although not originally intended to affect self-compassion.

In order for self-compassion to be considered a meaningful indicator of psychological functioning and a potential focus for interventions, it needs to be linked to an existing framework of personality research already tied to physical and mental health outcomes. There appears to be significant overlap regarding the psychological benefits of trait resiliency and self-compassion in terms of theoretical underpinnings and outcome research. Both are negatively associated with psychopathology and health coping. Only two studies, however, have attempted to link self-compassion to personality traits.

Baker and McNulty (2011) studied gender and Big Five personality differences in self-compassion. Neff, Rude, and Kirkpatrick (2007) also assessed the Big Five in participants and results indicated that individuals high in self-compassion tend to score

significantly lower on neuroticism than individuals low in self-compassion. This was expected because neuroticism has been linked to self-criticism, isolation, and rumination, which suggested a lack of self-compassion. The study found self-compassion accounted for a significant amount of variance in psychological health beyond what was attributable to personality factors.

Person-centered approaches to personality research have identified three reliable personality prototypes based in the Big Five model: overcontrolled, undercontrolled, and resilient. Approaching personality from these distinct types as opposed to individual factors is advantageous in several ways. Most important, the types take into account personality variations across multiple dimensions, thus offering a more complete profile of one's personality. Overcontrolled, undercontrolled, and resilient types have been associated to unique behavioral health outcomes including injury risk (Berry & Schwebel, 2009) and driving accidents (Herzberg, 2009). Resilient types, in particular, appear to have much in common to those who tend to be high self-compassion. They have been found to cope more adaptively with life stress and report higher wellbeing and life satisfaction (Berry, Elliott, & Rivera, 2007). To date, no studies have investigated self-compassion from a person-centered approach, let alone in the context of the resilient, overcontrolled, and undercontrolled personality types.

The purpose of this study is to investigate the relationship between self-compassion and the overcontrolled, undercontrolled, and resilient personality prototypes in order to shed light on the construct's relevance to existing personality research.

Linking self-compassion to the Big Five personality framework is an essential step to

understanding self-compassion as a psychologically adaptive mindset that should inform client assessment and treatment planning.

2. LITERATURE REVIEW

In this section self-compassion and its components are defined and distinguished from related constructs. The evidence of self-compassion as a psychologically adaptive mindset in the literature is reviewed and the implications of these findings are considered. Person-centered and variable-centered research in personality psychology is discussed and the case is made for utilizing a person-centered approach to understand self-compassion in a personality framework. Overcontrolled, undercontrolled, and resilient personality types are explained within their theoretical and empirical contexts. Finally, the rationale for this study and research hypotheses are presented.

2.1 Defining Self-compassion

Western thought has typically conceptualized compassion as it relates to feeling for others during hardships and desiring to ease suffering. Buddhist philosophy, on the other hand, has emphasized having compassion for oneself as well as others for centuries. In fact, Buddhism does not distinguish between compassion for self and others at all (Barnard & Curry, 2011). Showing warmth, kindness, and acceptance to oneself is seen as fundamental to overcoming the suffering inherent in the course of a lifetime whether it is due to external circumstance or one's own foolish action. Until Neff operationalized self-compassion with the development of the Self-compassion Scale (SCS) (Neff, 2003a; 2003b), quantitative psychological research on the construct was limited. High scores on the SCS have been negatively associated with self-criticism, depression, anxiety, rumination, thought suppression, and neurotic

perfectionism and positively associated with life-satisfaction, social connectedness, and emotional intelligences (Neff, 2003a).

Neff wrote that self-compassion "involves being touched by and open to one's own suffering, not avoiding or disconnecting from it, generating the desire to alleviate one's suffering and to heal oneself with kindness. Self-compassion also involves offering nonjudgmental understanding to one's pain, inadequacies and failures, so that one's experience is seen as part of the larger human experience" (p. 224, Neff, 2003a). Neff points out that self-pity, self-centeredness, and laziness, should not be confused with self-compassion. From this perspective, self-compassionate individuals are expected to approach their weakness and shortcomings authentically without harsh criticism. Through feelings of inter-connectedness, they can find hope and meaning in suffering which enables them to utilize adaptive coping skills.

Neff identified three distinct components of self-compassion: self-kindness, common humanity, and mindfulness that mutually enhance one another (2003a; 2008). Self-kindness relates to treating oneself with warmth and understanding rather than harsh criticism. Self-compassionate people recognize that imperfections and failures are an inevitable aspect of life. Common humanity refers to being able to see one's experiences as part of the larger, shared human experience rather than isolating ones experience and disconnecting from that of others. Mindfulness involves having awareness and acceptances of the experience without judging. Rather than disconnecting or overidentifying with painful feelings, mindfulness enables one to experience the present as it is without getting caught up with what "should have been" or "could have been."

These processes work together to keep one from "over-identifying" with emotions. Mindfulness is thought to play the biggest role in that a nonjudgmental attitude lessens self-criticism, which makes self-understanding easier, and therefore enhances self-kindness. Also, because mindfulness involves taking a balanced perspective, it counteracts egocentric states of mind that isolate one from feelings of interconnectedness. Self-kindness and common humanity do, however, make achieving a mindful state easier. If one can be kind rather than critical of oneself to experience some level of self-acceptance, one could lessen the emotional impact of negative events and have more awareness of one's thoughts to maintain a balanced point of view. Likewise, reminding oneself that suffering and failure happen to all people helps keeps one from over-identifying with one's own struggles and losing a balanced perspective. Finally, self-kindness and common humanity influence each other. Self-critical attitudes heighten the sense of self and make connecting with the experience of others difficult. By softening the way one treats oneself, it is possible to see beyond one's personal experience and engage with others. By the same token, interconnectedness with others lessens the burden of shame, guilt, and blame that one deals with on one's own and makes self-kindness easier.

2.2 Differences between Self-compassion and Related Constructs

Self-esteem. Self-compassion is related to self-esteem, but they are conceptually and *statistically* distinct (Neff, 2003b). Correlations between self-compassion and global self-esteem are moderate and range from .56 (Leary et al., 2007) to .68 (Neff & Vonk, 2009). The constructs are similar in that they are related to self-acceptance,

positive appraisals about oneself, and have both been linked to positive psychological outcomes such as life satisfaction, elements of a meaningful life, happiness, optimism, personal initiative, and positive affect (Neff, 2003a, 2009; Neff, Kirkpatrick, & Rude, 2007; Neff et al., 2007b). Several studies, however, have demonstrated that self-compassion is unique from self-esteem and often predicts variance beyond what can be explained by self-esteem alone, which indicates that they are best viewed as complementary constructs (e.g., Neff, 2003b; for reviews see Barnard & Curry, 2011).

Unlike self-esteem, self-compassion encompasses connecting with others opposed to standing out and potentially putting others down. Self-compassion does not involve being selfish or self-centered like self-esteem can be because it entails acknowledging that all people, including oneself, are worthy of compassion. In fact, Roy Baumeister and his colleagues (Baumeister, Heatherton, & Tice, 1993; Baumeister, Smart, & Boden 1996) argue that a subset of individuals with high self-esteem feel superior to others; most self-esteem measures make no distinction between these individuals. Self-esteem has been positively correlated with narcissism whereas selfcompassion is not (Leary et al., 2007; for reviews see Neff, 2009a; 2009b). It is important to note that unrealistic praise is not desirable for psychological growth as it may perpetuate inaccurate beliefs about one's self and discourage acknowledgement of unhealthy patterns of behavior (Neff, 2003a). The self-focus of self-esteem not only becomes a barrier to the common humanity aspect of self-compassion, but is also responsive to isolating negative self-evaluative processes such as guilt and shame (Mosewich et al., 2011).

Conversely, one's level of self-compassion is unrelated to one's ability, performance, successes/failures, or self-evaluation, which are implicit in self-esteem. Self-compassion stems from a recognition and acceptance of flaws as part of the human condition, but self-esteem does not appear to provide such a buffer against performance-based evaluations (Neff, 2003b). In one study (Neff et al., 2007a) where participants considered their greatest weakness in a laboratory setting, self-compassion was associated with reduced self-evaluative anxiety as compared to self-esteem. Indeed, Neff and Vonk (2009) found that contingent self-esteem, which is based on evaluation of the self, was inversely related to self-compassion (r = -.47). Self-compassion has been linked to more emotional balance than self-esteem in embarrassing situations, when receiving negative interpersonal feedback, or remembering unpleasant past events (Leary et al., 2007). High self-esteem, by contrast, was associated with defensive coping strategies.

In young women athletes, self-compassion has been found to be inversely related to fear of failure, fear of negative evaluation, shame proneness, and body consciousness; self-compassion also predicted variance beyond self-esteem on these variables relevant to positive sport experiences (Mosewich et al., 2011). Self-compassion also predicated variance beyond self-esteem in regards to women's body image and intrinsic motivations to exercise (Magnus, Kowalski, & McHugh, 2010); the authors partly attributed these results to the emphasis of outward comparisons to others implicit in self-esteem and not self-compassion. Lo (2007) discovered that in adolescent sexual offenders, self-compassion fully mediated the relationship between empathy and shame to social

functioning while self-esteem did not. Additional results suggested that a self-compassionate stance might be a better means than self-esteem for encouraging interpersonal growth, addressing cognitive distortions, and increasing moral engagement in adolescent sexual offenders.

Finally, differences between self-compassion and self-esteem are also apparent across cultures. Neff, Pisitsungkagarn, and Hsieh (2008) sampled undergraduates in the United States, Thailand, and Taiwan and ANOVAs revealed main effects of culture on both variables (Self-compassion: F(2, 562) = 31.87, p < .001; Self-esteem: F(2, 562) = 41.96, p < .001). Self-compassion averages were highest for Thai, then American, then Taiwanese students. In contrast, self-esteem averages were significantly higher for American students than both Thai and Taiwanese students (who were not significantly different from each other). While this is the only study to date comparing the constructs cross-culturally, it offers initial evidence that self-compassion and self-esteem correlates may be differentially impacted by culture.

Ultimately self-compassion offers an alternative to egocentric notions of self-related processes that self-esteem cannot. The complementary constructs are expected to correlate with one another as self-compassionate individuals should have high self-esteem (and vice versa), but a moderate correlation is not enough to be considered the same construct (Neff, 2003b). If their contribution in the literature were redundant, self-compassion would not predict additional variance after controlling for self-esteem on so many variables (Barnard & Curry, 2011). Future research will continue to expand our

understanding of the underlying mechanisms that create overlap and differences between self-compassion and self-esteem.

Self-forgiveness. A concept that is strongly related to self-compassion is selfforgiveness, although self-compassion is distinct from it in a variety of ways. While research on both constructs continues to be in the early stages, the small body of selfforgiveness literature is more theoretical than empirical, and developed as a subset of interpersonal forgiveness research (Hall & Fincham, 2005; 2008). As such, selfforgiveness research is currently narrower in scope compared to self-compassion. There is some consensus (although not conclusive) that self-forgiveness may be thought of as an experience that includes a release of resentment and revenge motivations towards ones self, either when one has wronged another or failed to live up to ones own standards (Hall & Fincham, 2005; Watson et al., 2012). Self-forgiveness concerns a "transgression" or "offense," unlike self-compassion, which is also relevant when one is experiencing suffering at no fault of his or her own. Essentially, "blame" is implied in self-forgiveness and unnecessary in self-compassion. Fisher and Exline (2006) further found that prosocial aspects of self-forgiveness are only evident when remorse cooccurs. The absence of self-condemning attitudes alone does not delineate between positive adjustment and narcissism.

Elements of self-acceptance and self-kindness that are negatively associated with feelings of guilt or shame overlap with self-compassion, but the common humanity and mindfulness components to self-compassion are not implicit in self-forgiveness.

Rangganadhan and Todorov (2010) found that people who were "prone" to experiencing

shame were more likely to have high levels of discomfort when faced with another's distress and be low on self-forgiveness. Guilt-proneness and the ability to have empathy for others, however, did not emerge as key personality traits that inhibit self-forgiveness. Although it has not been studied, it is possible that self-compassion could mediate the relationship between shame and self-forgiveness. The common humanity and mindfulness components of self-compassion uniquely include recognition that others struggle as oneself is struggling and mindful acceptance of negative emotions (Baker & McNulty, 2011); these facets of self-compassion may serve to enhance one's ability to self-forgive.

While related, self-compassion encompasses a broader range of experiences than self-forgiveness by definition. This theoretical distinction is apparent in clinical interventions, in which self-forgiveness oriented exercises tend to target feelings of guilt and shame (Scherer, Worthington, Hook, & Campana, 2011) and do not necessarily include the mindfulness components of self-compassion exercises. Additionally, self-forgiveness continues to be researched to determine whether it is better conceptualized as a "state" response to specific wrongdoings or a "trait" (Watson et al., 2012). Hall and Fincham (2008) found that the self-forgiveness process could be described by a linear pattern in which forgiveness increased over seven weeks following an offense. Self-compassion as a construct, however, refers to a consistent "way of being" that may be learned (Neff, 2003b).

Beyond the similarities in their definitions, the overlap between self-compassion and self-forgiveness is evident in their relationships to other constructs. Like low self-

compassion, low self-forgiveness may be related to emotional instability, negative self-evaluation, and internalized blame (Fisher & Exline, 2006). Self-forgiveness has also been inversely related to neuroticism (Ross, Kendall, Matters, Wrobel, and Rye, 2004), anxiety, and depression (Maltby, Macaskill, & Day, 2001). As more research is conducted with both of these variables, it is expected that their similarities and differences will become more apparent.

2.3 Self-compassion as a Psychologically Adaptive Mindset

A developing body of research has found that self-compassion has been associated with healthy ways of overcoming adversity and seems to buffer individuals against negative feelings related to unpleasant events (Leary et al., 2007). Selfcompassion research has demonstrated that self-compassion has been associated with a variety of positive outcomes including greater life-satisfaction, social connectedness, autonomy, resilient coping, intrinsic motivation for learning, personal growth goals, curiosity and exploration, happiness, optimism, positive affect, wisdom, personal initiative, emotional resilience (Neff et al., 2007b; for reviews see Neff, 2009b; Barnard & Curry; 2011). Self-compassion has also been linked to less anxiety, depression, selfcriticism, rumination, thought suppression, perfectionism, fear of failure, burnout, and, of particular interest to this study, neuroticism (Gilbert, Baldwin, Irons, Bacchus, & Palmer, 2006; Kelly et al., 2009; Neff, 2009b). A narrative study conducted amongst counselors indicated the practice of self-compassion contributed to improved wellbeing and self-care, enhanced therapeutic relationships, a "culture of caring" in the workplace, job satisfaction and burnout prevention (Patsiopoulos & Buchanan, 2011).

Viewing self-compassion from evolutionary biology, neurobiology and attachment theory, Gilbert (2005) suggested that self-compassion deactivates the threat system and therefore the need to be defensive. Instead, the self-soothing system is activated, which is associated with security, safety, and warmth. As such, self-compassion has been theorized to function as an emotion regulation strategy in which highly self-compassionate individuals adaptively manage their emotions (Neff, 2003b).

Self-compassion emphasizes a nonjudgmental, non-avoidant awareness of feelings by neither running from or to emotional arousal. Thompson and Waltz (2008) found higher self-compassion was associated with less avoidant behavior in individuals with PTSD. In another study (Raque-Bogdan, Ericson, Jackson, Martin, & Bryan, 2011), the relationship between attachment orientation (avoidance levels and anxiety) and mental health was partially mediated by self-compassion, which suggests that self-compassion is a pathway of adult attachment styles to psychological wellbeing. In young adults, secure attachment style predicted higher self-compassion; preoccupied and fearful attachment styles were negatively associated with self-compassion (dismissive attachment was not significantly linked to self-compassion).

In addition, self-compassion was found to partially mediate the relationship between family factors (such as maternal support and family functioning) and wellbeing (Neff & McGehee, 2010). Consistent with these findings, lower levels of self-compassion have been associated with higher childhood emotional abuse, emotional neglect, and physical abuse; adolescents low in self-compassion were more likely to report psychological distress, problem alcohol use, and a serious suicide attempt than

youths high in self-compassion (Tanaka et al., 2011). In this sense, self-compassion can be seen as an "emotional approach" coping strategy to regulate negative affect (Stanton, Danoff-Burg, Cameron, & Ellis, 1994; Stanton et al., 2000) that is influenced by family dynamics (Neff & McGehee, 2010). Self-compassion, therefore, appears to facilitate adaptive, resilient responses to personal adversity that may be useful in overcoming vulnerabilities of a dysfunctional environment (Tanaka et al., 2011).

Terry and Leary (2011) postulated that the enhanced self-regulation associated with self-compassion plays a key role in health-promoting behaviors such as adhering to medical recommendations and working towards health goals. Magnus and collegues (2010) found that self-compassion was positively related to beneficial exercise outcomes in women. The authors noted that self-compassion is rooted in enhancing wellbeing and personal growth rather than making changes to increase self-worth or make better impressions. Similarly, a study by Kelly and collegues (2010) indicated that a self-compassion intervention in a smoking reduction treatment was more effective than the baseline condition; the intervention reduced smoking more rapidly for participants who were low in their readiness to change and who were highly self-critical. They propose that self-regulating from a self-compassionate stance is particularly helpful for individuals whose personalities and motivation level tend to undermine traditional treatment.

Previous research on chronic illness such as cancer and arthritis has demonstrated that constructs such as self-efficacy, acceptance, and optimism are related to pain, psychological distress, and disability. Self-compassion is beginning to gain recognition

within health psychology as new research has shown self-compassion to be relevant for individuals with disabilities. A recent study examining the impact of self-compassion in a chronic pain population found that self-compassion was shown to be associated with less psychopathology and more acceptance of pain—in terms of willingness to experience pain and engagement in activities (Costa & Pinto-Gouveia, 2011). Another study on adjustment to persistent pain in patients with musculoskeletal pain and obesity, found that self-compassion was a significant predictor of both negative and positive affect, and negatively associated with pain catastrophizing and pain disability (Wren et al., 2012).

Higher self-compassion has also been linked to academic benefits such as healthier coping after a failed exam (Neff, Hsieh, & Dejitthirat, 2005) and less motivation anxiety and procrastination tendency (Williams, Stark, & Foster, 2008).

Neff, Hsieh, and Dejitterat (2005) found self-compassion was positively associated with mastery goals, which involve learning because of an intrinsic joy. Performance goals, which involve one's self-worth, however, were negatively associated with self-compassion. This relationship was medicated by lesser fear of failure and greater perceived competence among self-compassionate individuals. Relatedly, results from Magnus and colleagues (2010) demonstrated self-compassion was positively associated with intrinsic motivation to exercise and negatively associated with external motivation, introjected morivation, and obligatory exercise behavior. In their theoretical model of psychological wellbeing after project failure in the workplace, Shepherd and Cardon (2009) postulated that self-compassion facilitates healthy emotional processing in which

employees learn from the failure experience. Consist with these findings, a study on the impact of learning an emotionally focused couples therapy for clinicians found that self-compassion increased as emotional processing was improved but was not associated with the participant's knowledge of or competence in, the therapy itself (Montagno, Svatovic, & Levenson, 2011).

It is unclear whether there are gender differences in self-compassion levels. Neff (2003a) speculated that women are less self-compassionate than men because women are socialized to be more self-critical and develop compassion for others rather than themselves. Moreover, women tend to be more negative, prone to depression and more likely to have a ruminative coping style, which are negatively associated with self-compassion. Neff (2003b) found women's overall self-compassion scores were significantly lower than men's scores, but significant differences in samples between men and women are not always present (Neff et al., 2007b).

There are also conceptual reasons to believe that women may be more self-compassionate then men. Compassion for others is positively associated with self-compassion and mindfulness includes being open to experiencing negative emotions.

Moreover, self-compassion has been shown to be positively associated with willingness to apologize (Howell, Dopko, Turowski, & Buro, 2011) and women tend to apologize more than men because they have a lower threshold for behavior considered offensive and therefore deserving of an apology (Schumann & Ross, 2010). The authors postulated that a variety of gender differences may contribute to this phenomenon including that women, compared to men, have a lower threshold for pain, more empathy for the

experiences of others, focus on maintaining harmony in relationships, and experience more guilt.

Baker and McNulty (2011) examined the effect of gender and personality differences on self-compassion within the context of relationships. Three studies and a meta-analysis were conducted. While there were not significant differences between men and women reported, results revealed that women's level of self-compassion was related to motivation to "correct interpersonal mistakes" in relationships regardless of whether they were high or low on conscientiousness. On the other hand, selfcompassion was associated with greater commitment to "correct interpersonal mistakes" in men high in conscientiousness, while it was not in men low in conscientiousness. This research is notable in regards to the present study for two reasons. First, it suggests that gender differences in self-compassion exist, but are complex. Second, it demonstrates the utility of researching self-compassion in relation to personality traits. Thus far, self-compassion has been studied as an individual difference by comparing its relationship to variables, but little is known about the underlying causes of variation of self-compassion in individuals. Baker and McNulty (2011) and Neff, Rude, and Kirkpatrick (2007) are the only published studies to date that attempt to explore how personality relates to self-compassion.

Neff, Rude, and Kirkpatrick (2007) found self-compassion had the strongest association with neuroticism of the Big Five factors; higher self-compassion predicted lower levels of neuroticism. Self-compassion related positively to agreeableness and extraversion, which is theoretically consistent with the notion that self-compassionate

individuals are more socially interconnected and able to get along with others. There was also a significant positive relationship with conscientiousness, which may suggest that the emotional stability provided by a self-compassionate attitude encourages responsible behavior and resistance to self-indulgent behavior. The only Big Five factor that did not have a significant relationship to self-compassion was openness to experience. The authors speculated that measures of openness include additional characteristics such as creativity, which may be unrelated to self-compassion.

Although this study sheds light on how each personality traits may or may not relate to self-compassion, it did not examine how an individual's overall personality might relate to their level of self-compassion. Moreover, it is limited to correlational analyses of each variable and cannot determine whether self-compassion *causes* or *is caused by* one's personality. Personality research from a "person-centered" approach could provide a theoretical foundation for examining causality by accounting for one's childhood temperament.

2.4 Person-centered Approaches to Personality Research

The majority of personality research to date has focused on assessing personality traits in relation to one another from a "variable-centered" or "dimensional" approach. In variable-centered approaches the correlational structure of personality traits are analyzed as variables, not as individuals of a particular population (Mervielde & Asendorpf, 2000). For instance, a variable-centered approach might link high levels of neuroticism to greater risk of depression, but not account for other personality traits possessed by the individual that might mediate this relationship. Ultimately, it misses an

important aspect of one's personality: the organization of personality dimensions within different types of people (Magnusson, 1988).

In "person-centered" approaches, on the other hand, the "configuration" of multiple personality traits within an individual is analyzed. This enables a person's unique personality profile on several traits to be considered opposed to grouping individuals based on one aspect of their personality. Thus, the person becomes the unit of analysis rather than the variable (Steca, Alessandri, & Caprara, 2010). Utilizing personality configurations offers the opportunity to understand how individual differences could influence outcomes beyond what is possible from studying variables independent from one another. For example, Berry and Schwebel (2009) did not find that neuroticism predicted risk for injury in children, but it did moderate the effects of extraversion in determining injury risk. This was only revealed by a "configural" assessment strategy.

Mervielde and Asendorpf (2000) described the historical development of the person-centered approach, which can be traced back to the personalistic psychology of William Stern, a German differential psychologist. Gordon Allport (1937) later became a proponent of Stern's system of thought in American personality psychology. He wrote that he found the most remarkable aspect of Stern's doctrine, "the immensely broadened range of categories that it is able to offer to the psychological investigator, otherwise crippled by monisms and dualisms that place restrictions on the scope of problems admitted to good standing in psychology" (p. 235). Jack and Jeanne Block (Block &

Block, 1980) were the first to formally distinguish person-centered from variable-centered research strategies.

Emerging research indicates that there are advantages to approaching personality research from this person-centered perspective. In addition to making it possible to analyze the configuration of personality traits, the person-centered approach facilitates the grouping of individuals into personality "types" on several dimensions of personality. The most well known classification of personality types is likely the Myer-Briggs Type Indicator (MBTI; Myers, McCaulley, Quenk, & Hammer, 1998; as cited in Tieger & Barron-Tieger, 1992) which has been widely used in non-clinical samples. The scientific validity of the MBTI typologies, however, has been criticized for multiple shortcomings (Hunsley, Lee, & Wood, 2003). In clinical personality assessment, Welsh code types of the Minnesota Multiphasic Personality Inventory-2 (MMPI-2; Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 2001) and code types of the Personality Assessment Inventory (PAI; Morey, 1991) complement interpretations of individual scales by providing interpretations from the person-centered approach. Other familiar personality types include the Strong Interest Inventory (SII; Harmon, Hansen, Borgen, & Hammer, 1994) based on the Holland typology, the California Personality Inventory-Revised (CPI-R; as cited in Craig, 1999), and Eysenck's types (as cited in Saya & Popa, 2011) based on ancient temperament typology.

The development of personality types simplifies personality description and prediction for research and application. It also holds significant promises for clinical utility including improving communication with providers and the general public about

the implications of personality differences (Robins & Tracy, 2003). Types derived from person-centered approaches are descriptively clear and intuitively appealing. Although scientific accuracy should not be sacrificed for the sake of our intuitions, it is critical for findings to be easy to explain to clinicians, counselors, educators, parents, health care professionals, and policymakers in order for beneficial research to be applied. Clear communication enables clinicians to better tailor interventions to client needs by accounting for their personality. Developing interventions based on how individuals score on a singular variable such as "locus of control" neglects to identify possible strengths that may mediate the variable's impact on overall psychological functioning. Ideally, person-centered approaches avoid this pitfall by considering multiple aspects of one's personality that may be relevant to a particular intervention. In this regard, person-centered approaches are in line with positive psychology initiatives of considering someone's adaptive strengths in addition to their weaknesses (Seligman & Csikzentmihalyi, 2000).

Previous studies have had mixed results when attempting to compare the predictive power of trait versus type approaches (Huey & Weisz, 1997), yet most personality research continues to be variable-centered. The theoretical and clinical advantages of the person-centered approach cannot be overlooked. Given the value of person-centered approaches in understanding the complexity of individual differences, it is critical for future research to incorporate person-centered models in order to address this imbalance in the literature in personality psychology. At the same time, it is essential to keep in mind that both approaches are valuable.

Although the person-centered approach developed in opposition to the tradition of the variable-centered approach, Mervielde and Asendorpf (2000) argue the importance of conceptualizing the two approaches as complements. There was no "failure of the variable-centered approach" (p. 38) that gave rise to the person-centered approach. Rather, the two approaches complement our understanding of the individual components as well as their configuration to gain a comprehensive picture of personality.

It is necessary to look at individual differences piece by piece in order to understand their relevance/role in one's profile. Variable-centered research provides the building blocks for interpreting multiple dimensions of personality. In fact, variable-centered approaches can inform person-centered models to ensure that the development of "personality types" do not "pigeon-hole" a person into an oversimplified category. Although types indeed aim to simplify, variation should be expected within groups (Asendorpf, Borkenau, Ostendorf, & van Aken, 2001; Hart, Atkins, & Fegley, 2003). The degree to which an individual differs from the prototype can be measured quantitatively. Thus labeling a person as belonging to the undercontrolled type means that they resemble this type more than the other two. Identification of a prototypical configuration amongst the variation provides a mechanism to organize and interpret the complexity of personality. Finally, it is important to keep in mind that with future research, it should be possible to identify subtypes within the broad typologies that may deal more specifically with the nature of variation (e.g., Pulkkinen, 1996).

2.5 Overcontrolled, Undercontrolled, and Resilient Types

Block and Block (1980) pioneered the person-centered approach in modern personality psychology research based on theory they developed over several decades on individual differences in ego-control and ego-resiliency. The constructs are rooted in the psychodynamic tradition of conceptualizing the ego in terms of regulating individual desires under externally imposed constraints (Huey & Weisz, 1997). Ego-control refers to an individual's tendencies in responding to internal impulses and expression. Undercontrolled individuals are characterized by having difficulty controlling impulses and expressiveness, while overcontrolled individuals unnecessarily inhibit action and expression. Undercontrollers tend to be more spontaneous, immediate, unconventional, unpredictable, self-dramatizing, rebellious, moody, and unconcerned with ambiguities. In contrast, overcontrollers tend to be constricted, narrow in interests, dependable, delay gratification for too long, and distressed by ambiguities. Ego-resiliency involves an individual's ability to negotiate the expression of internal impulses with the demands of external circumstances. Resilient individuals demonstrate an adaptive response to changing situations and appropriate control of behavioral impulses. They are able to plan ahead and work towards goals in addition to relax and enjoy life. Resilients tend to handle new situations with flexibility and "bounce back" from traumatic experiences more easily than unresilient (or "brittle") types (Block & Block, 1951, 2006a; Huey & Weisz, 1997; Letzring, Block, & Funder, 2005).

Although similar notions of ego-control and ego-resiliency are evident in the literature (self-regulation, effortful control, etc.), few constructs account for behavioral

control on a continuum. Most conceptualize a direct relationship between self-control and adaptive functioning, while Block and Block suggested that both extremes (overcontrolled and undercontrolled) were maladaptive. Ego-control and ego-resiliency theory implies a U-shaped quadratic relationship of behavioral control with the most adaptive type (resilient) falling in the middle. Block and Block (2006a) noted activities such as vacation, art, brainstorming, and sexual situations in which too much behavioral control is maladaptive. Conceptualizing self-control on this continuum enables us to account for overcontrolled in addition to undercontrolled tendencies.

In a longitudinal study that has followed pre-school children through their thirties, Block and Block (1980) demonstrated replicable clusters of overcontrolled, undercontrolled and resilient personality profiles in children. There is strong evidence that ego-control is stable across a lifetime for both sexes despite the life circumstances that might instigate changes in personality. Asendorf and van Aken (1999) found that childhood personality types predict later development better than the variables of ego-control and ego-resiliency and current person-centered research has focused on the three types. Overcontrolled, undercontrolled, and resilient types have since been replicated in various populations including other children, adolescents, adults, and older adults (e.g., Caspi & Silva, 1995; Mervielde & Asendorpf, 2000; Robins, John, Caspi, Moffitt, & Stouthamer-Loeber, 1996; van Aken & Dubas, 2004). They also have been studied cross-culturally (Sava & Popa, 2011) and replicated in clinical populations such as spinal cord injury patients (Berry et al., 2007) and females with eating disorders (Claes et al., 2006).

Caspi and Silva (1995) studied the three typologies as temperamental qualities in young children and were able to predict personality traits into adulthood. Asendorpf and colleagues (2001) demonstrated strong evidence for the three-prototype model as valid personality descriptors at the highest level of analysis for both childhood and adulthood. Participants were grouped into types using statistical clustering techniques like Q-factor and cluster analyses, assessment methods from self and proxy reports, and personality instruments such as Q-sorts and versions of the NEO (Berry & Schwebel, 2009). Caspi (1998) concluded that the high similarity across studies suggests that the overcontrolled, undercontrolled, and resilient types constitute a core set of types for any generalizable personality typology. All three prototypes have been found to be replicable, reliable, and theoretically interpretable in these studies.

The overcontrolled, undercontrolled, and resilient types were derived from the Big Five personality factors: neuroticism (often referred to as trait negative affectivity, Watson & Pennebaker, 1989), extraversion, openness, agreeableness, and conscientiousness. The Big Five model is one of the most widely researched personality frameworks across psychological disciplines. Developmentally these personality factors have been found to be reliable and stable from childhood and predictive of adjustment and functioning later in life (for reviews see Goldberg, 1990; John, Naumann, & Soto, 2008).

Resilient types are characterized by low neuroticism, high extraversion, and usually high in the other factors. They are considered well adjusted, freer of psychopathology, and higher in wellbeing and life satisfaction. It is estimated that the

majority of people (about 50%) are resilient types (Asendorpf et al., 2001).

Overcontrolled and undercontrolled types, on the other hand, have problems with adjustment. Undercontrolled types tend to be low in conscientiousness and sometimes agreeableness. They often score high in extraversion. Low impulse control, aggression, danger-seeking behavior, and interpersonal problems are associated with undercontrolled types. Overcontrolled types are defined by their high neuroticism and low extraversion although they are similar to resilient types in that they tend to score high on the other factors as well. They differ from undercontrolled types in that they demonstrate high impulse control, low aggression, and tend to be shy and less sociable. Overcontrolled

Multiple studies indicate that these three types reliably predict a variety of behaviors and health outcomes. Personality type assessed by behavior in preschool has been shown to predict adult orientation (Block & Block, 2006b). Undercontrolled and resilient children were more likely to be politically liberal at age 23 and overcontrolled types were more likely to be conservative. Further, overcontrolled types have been shown to have the greatest amount of prejudice and undercontrolled types the least (Ekehammar & Akrami, 2003).

individuals tend to internalize problems and have a negativistic disposition.

Undercontrolled individuals appear to be more likely to engage in risky behaviors than their counterparts. Atkins and Hart (2008) found that undercontrolled types identified at age five or six were more likely to experience their first sexual intercourse prior to age 16 than resilient or overcontrolled types. These undercontrolled adolescents were also more likely to report they had experienced peer pressure to engage

in misconduct and delinquency. Berry and Schwebel (2009) found that undercontrolled personality type in children predicted greater risk of unintentional injury. Similarly, Herzberg (2009) demonstrated that the three prototypes predicted accident involvement and driving behavior. Undercontrollers as a group were the most problematic drivers—likely due to their problems with impulse control and aggressiveness. Overcontrollers were the least likely group to have problems on the road—thought to be due to their precautious tendencies and anticipations of problems. Interestingly, resilient types were not the most adaptive in terms of road safety and fell between these groups—possibly due to an "optimistic bias" that they are less likely to experience negative events like traffic accidents. Consistent with theory and other evidence, undercontrollers seem to be the modal prototype in spinal cord injury populations. Berry and colleagues (2007) found that resilient types were underrepresented in a sample of persons with spinal cord injury compared to normative populations. Overcontrollers had more difficulty adjusting to and being accepting of disability than resilient and undercontrolled types.

Recently, Chapman and Goldberg (2011) conducted a study the predictive power of these types for midlife health using longitudinal data. Personality classifications made in childhood remarkably predicted incidents of heart disease 40 years later with 67% accuracy and incidents of stroke with over 70% accuracy. Resilient children were found to have enjoyed better health overall and lower risk of outcomes than their counterparts. Overcontrolled children became more susceptible to hypertension while undercontrolled children were more likely to experience stroke.

2.6 Rationale for the Study

Although the similarities between self-compassionate individuals and resilient types are evident, there is no research addressing this overlap. Utilizing a variable-centered approach, Neff and colleagues (2007b) found self-compassion accounts for a unique amount of variance in psychological wellbeing that personality does not explain. This suggests self-compassion serves as an additional layer of adaptive or maladaptive protections, distinct from the identified Big Five factors. As noted earlier, no studies have been conducted examining self-compassion from a person-centered centered model to date.

Both self-compassion and trait resilience appear to buffer individuals from the negative effects of unpleasant events. The difference is that the adaptive psychological response of resilient types is thought of as an innate characteristic, detectable in childhood and stable through adulthood. Self-compassion on the other hand, can be understood in a social cognitive model. Although it may come more naturally to some than others, self-compassion is a learned skill that can be formally taught. For example, evidence indicates that practicing Buddhists have more self-compassion than the general population (Neff, 2003b). Indeed, Buddhists who have been practicing longer tend to be more self-compassionate than newer practitioners, which indicates that self-compassion is a quality that can be cultivated with time.

Several studies to date have examined efficacy of interventions aimed at increasing self-compassion to improve wellbeing. For instance, a Mindfulness-Based Stress Reduction (MBSR) program with healthcare professionals, which incorporated

self-kindness exercises into mindfulness and meditation practices found significant increases in participant reports of self-compassion (Shapiro et al., 2005). The benefits of resilience associated with self-compassion could be achieved for overcontrolled and undercontrolled through these interventions much like problem-solving training. This becomes even more promising as initial results reported by Neff and colleagues (2007a) found that therapist ratings of self-compassion over a one-month period are strongly correlated with self-reports. The validity of clinician evaluations of self-compassion in others broadens the potential applications of self-compassion to practice.

This study intends to tease apart the relationship between self-compassion and personality. It explores whether resilient, undercontrolled, and overcontrolled typologies differ on levels of self-compassion. It also examines the potential for gender differences in self-compassion. The study utilizes a college student sample for this investigation for several reasons. Self-compassion and the Big Five personality typologies have been well studied in college student populations and have often been used in preliminary research on these constructs. In addition, college student proved an accessible population to gain the 120 participants needed for optimal data analysis (this will be explained in more detail in the following statistical analysis section). The results inform the implications for future interventions incorporating self-compassion training. Specifically, the following hypotheses are tested in this project:

 Resilient individuals will report higher self-compassion than undercontrolled and overcontrolled individuals.

- 2) Overcontrolled individuals will report less self-compassion than undercontrolled individuals.
- 3) Women will report less self-compassion than men.
- 4) Gender will not moderate the relationship of personality type to self-compassion.

3. METHODS

This section presents the methodology of the study including the procedure, selection and demographics of participants, and measures used. The data analysis plan as well as hypotheses of the study are reviewed.

3.1 Procedure

Participants were compensated with two dollars for volunteering to complete the survey, which usually took 15 to 30 minutes to complete. They answered basic demographic questions (i.e., age, race, gender, college year, major), the Self-compassion Scale (SCS) (Neff, 2003b), and the Big Five Inventory (BFI) (John, Donahue, & Kentle, 1991; John & Srivastava, 1999). The demographic questions were included to help explain any results due to variance in the sample.

3.2 Participants

Participants were 123 Texas A&M University students recruited to be in the study from undergraduate classes and common areas around campus (e.g., library, outdoor plaza, and study lounges). Women constituted 52% of participants and 48% were men. The mean age of participants was 19.94 years (SD = 1.58) and number of years in college was 2.25 (SD = 0.98). Table 1 provides further information about the self-reported race of participants.

Table 1Participant Self-Reported Race

| Self-Reported Race | Percent |
|--|---------|
| White or Caucasian | 68.3 |
| Hispanic, Latino, or Dominican | 15.4 |
| Black or African-American | 8.1 |
| Asian, Indian, Chinese, Korean, or Arab/Egyptian | 5.7 |
| Other than listed above | 2.4 |

3.3 Measures

Self-compassion Scale. Developed by Neff (2003b) the SCS has been used in most psychological research on self-compassion because it is the only published validated measure of self-compassion. The SCS consists of 26 self-report items on a 5-point Likert scale ranging from 1 (almost never) to 5 (almost always). There are six subscales, which consist of the self-compassion components and their negative counterparts: Self-Kindness versus Self-Judgment, Common Humanity versus Isolation, and Mindfulness versus Over-Identification.

Each scale consists of four or five items that were selected through exploratory factory analyses; items with loadings onto subscales under .40 were eliminated from the final version (Neff, 2003b). Confirmatory factor analyses were then conducted to test goodness of fit. The items in subscales of the negative components are reverse-scored and the means of the six subscales are averaged to derive the overall Self-compassion score. The SCS was originally normed on a college student population. Neff (2003b)

noted that average scores tend to be around 3.0, low scores from 1.0 to 2.5, moderate scores 2.5 to 3.5, and high scores from 3.5 to 5.

The SCS has proven to have appropriate factor structure in line with theory, good test-retest reliability (α = .93; Neff, 2003b, 2005), convergent and divergent validity, and no significant social desirability bias. The subscales demonstrate strong internal consistency reliabilities (ranging from .75 to .81) between self-compassion components and their negative counterparts. The overall internal consistency between subscales for the SCS is .92.

Big Five Inventory. The BFI (John et al., 1991; John & Srivastava, 1999) consists of 44 self-report items on a 5-point Likert scale ranging from 1 (disagree strongly) to 5 (agree strongly). The BFI was developed because of the need for a short instrument to measure the Big Five personality domains: Neuroticism (N), Extraversion (E), Agreeableness (A), Conscientious (C), and Openness to Experience (O). All items consist of short phrases (for brevity and simplicity) based on the trait adjectives (e.g., is talkative, is depressed, tends to be lazy) and some items have additional clarification to avoid ambiguity (e.g., Is original, comes up with new ideas). Items were selected based on factor analyses on a large sample of junior college and public university students. There are eight to 10 items per subscale and specified items are reverse scored before the items of each subscale are averaged to obtain the subscale score.

Although the scales include less items than the best-validated Big Five measure, the NEO-FFI (Costa & McCrae, 1992), content converge and psychometric properties are not sacrificed. The BFI is highly correlated with the NEO-FFI; the mean of

corrected convergent validity correlations across the five domains is .95. Alpha reliabilities of the BFI scales in North American samples range from .75 to .90 (and average above .80). Test-retest reliabilities are also strong (mean of .85 after three months). The BFI is considered reliable, valid, and is widely used to measure the Big Five personality domains (for reviews see John et al., 2008) and has amassed substantial data from use with college students. Srivastava, John, Gosling, and Potter (2003) provided descriptive statistics of the BFI in a large sample (N = 132, 515) aged 21 to 60 year olds. For 21 years old participants (N = 6076): Neuroticism (M = 3.32, SD = .82), Extraversion (M = 3.25, SD = .90), Agreeableness (M = 3.64, SD = .72), Conscientious (M = 3.45, SD = .73), and Openness to Experience (M = 3.92, SD = .66).

3.4 Hypotheses

The hypotheses for this study as well as their rationale were presented in the previous chapter and are reviewed in this section. The following hypotheses will be addressed by the study and following data analysis plan:

- Resilient individuals will report higher self-compassion than undercontrolled and overcontrolled individuals.
- Overcontrolled individuals will report less self-compassion than undercontrolled individuals.
- 3) Women will report less self-compassion than men.
- 4) Gender will not moderate the relationship of personality type to self-compassion.

3.5 Data Analysis Plan

SPSS software was used to complete the data analysis required by this study. The data analysis plan consisted of analyzing initial data by gathering descriptive statistics and further data to examine means, standard deviations, distribution normality, and to identify outliers. Next, the data from the BFI was to be used to replicate the personality typologies using cluster analysis procedures. Assuming that three personality typologies emerge as predicted, tests for significant differences in self-compassion by personality and gender types would proceed. A chi-square test would be conducted to look at the distribution of personality by gender type. An ANOVA would be conducted to determine whether differences exist between types and/or genders.

Finally, a two by three Multivariate Analyses of Variance (MANOVA) would be used conducted to test for significant differences in self-compassion across overcontrolled, undercontrolled, and resilient groups by gender. Dependent variables would include self-compassion as well as the subscales. Any significant interactions between gender and personality prototype would be followed up by additional analyses that may assist in the interpretation of the interaction.

4. RESULTS

In this section the following results of the data analysis are reported: initial analyses (which include gathering descriptive statistics and identifying the personality prototypes), hypothesis testing, personality prototype and gender interaction analyses and follow-up interaction analyses.

4.1 Initial Analyses

Initial analyses included running descriptive statistics in SPSS software to examine means, standard deviations, normalcy of the distribution, and possible outliers. Table 2 provides descriptive statistics for the SCS and the BFI as well as the intercorrelations between all scales. The data were then analyzed to replicate the personality typologies. Following this, comparative analyses were conducted to test for differences in self-compassion by personality and gender types. A chi-square test was also conducted to look at the distribution of personality by gender type. For all analyses in this study, a significance level of .05 was used.

Table 2Descriptive Statistics and Correlations for Self-compassion and Personality Variables

| Variabl | SC | SK | СН | MF | SJ | IS | OI | N | Е | A | С | О |
|---------|------|-------|-------|------|-------|-------|-------|-------|------|-------|-------|------|
| e | | | | | | | | | | | | |
| SCS | | | | | | | | | | | | |
| 1. SC | _ | .64** | .63** | 52** | .38** | 68** | 58** | 50** | .07 | .20* | .09 | 05 |
| 2. SK | | _ | .33** | 67** | .54** | 43** | 40** | 44** | .14 | .31** | .13 | .02 |
| 4. CH | | | _ | 42** | .14 | 23* | 10 | 10 | 09 | .26** | 04 | .01 |
| 6. MF | | | | _ | 48** | .55** | .55** | .46** | 02 | 42** | 18* | 15 |
| 3. SJ | | | | | | .66** | .69** | .55** | 17 | 27** | 16 | .09 |
| 5. IS | | | | | | _ | 58** | 52** | .14 | .19* | .16 | 06 |
| 7. OI | | | | | | | | 69** | .09 | .20* | .19* | 03 |
| BFI | | | | | | | | | | | | |
| 8. N | | | | | | | | _ | 10 | 34** | 15 | .10 |
| 9. E | | | | | | | | | | 03 | 02 | .15 |
| 10. A | | | | | | | | | | | .30** | 02 |
| 11. C | | | | | | | | | | | | 02 |
| 12. O | | | | | | | | | | | | _ |
| M | 3.00 | 2.80 | 2.90 | 2.80 | 2.80 | 2.90 | 3.10 | 2.70 | 3.40 | 4.00 | 3.60 | 3.60 |
| SD | .25 | .81 | .84 | .77 | .82 | 1.01 | 1.01 | .76 | .81 | .52 | .61 | .58 |

Note. SCS = Self-compassion Scale; SC = Total Self-compassion; SK = Self-Kindness; CH = Common Humanity; MF = Mindfulness; SJ = Self-Judgment; IS = Isolation; OI = Over-Identification. Means listed for SJ, IS, and OI are not reverse-coded (i.e., high SJ score indicates high self-judgment). BFI = Big Five Inventory; N = Neuroticism; E = Extraversion; A = Agreeableness; C = Conscientious; O = Openness to Experience.

^{*} p < .05. ** p < .01

4.2 Personality Clusters

The participants were first classified as overcontrolled, undercontrolled, and resilient types through clustering techniques. The most widely used method for previous cluster analyses of the Big Five traits described by Berry and colleagues (2007) was replicated in this study. Because clustering is sensitive to outliers, especially if the sample sizes are not large enough to counter balance them, box-plots were constructed. Three outliers were identified and removed before the analysis was run. Hierarchical clustering was first conducted using Ward's method in SPSS with the data from the BFI to obtain support for three clusters as the best initial solution.

A nonhierarchical *k*-means clustering procedure was performed using the cluster centers from results of the three cluster solution from Ward's method as starting points. This was intended to optimize the final cluster classification. Each case was assigned to a cluster based on Euclidean distances from cluster means. Asendorf and colleagues (2001) recommended using the Cohen's kappa coefficient to compare profiles across studies. They suggested a typical cut off for group membership at .60 to ensure adequate profile agreement with other classifications. Cohen's kappa coefficient in this study was .74 and compared group membership between the results from Ward's method and the final typology from the *k*-means solution.

Overcontrolled, undercontrolled, and resilient types were identifiable based on the Big Five scores of the each cluster's personality prototype. Figure 1 shows the three prototypes (with Big Five traits in "z" scores) obtained from the cluster analysis. As expected, one group was consistent with the resilient profile from other studies and

characterized by a low Neuroticism and high on Extraversion, Agreeableness, and Conscientiousness. Another group fit the profile for the undercontrolled type and was low in Conscientiousness and Agreeableness while average or above average on other factors. The final group was consistent to the overcontrolled type and characterized by high Neuroticism and low on Extraversion as anticipated (it was also low on all other factors).

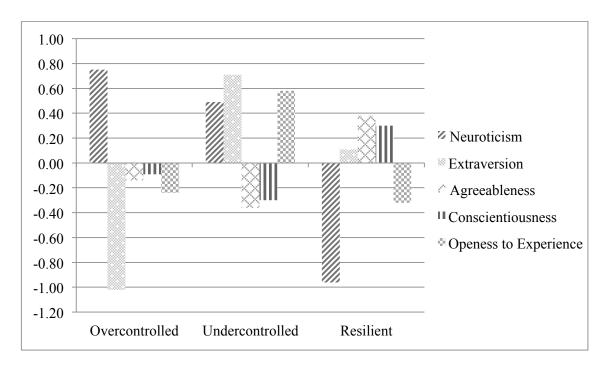


Figure 1. Three Personality Prototypes Derived from the Big Five Inventory (BFI). A sample of 120 participants was used. Big Five personality traits are shown in "z" scores.

It is worth noting that the resilient group in previous studies typically scores high or at least average on Openness, which was not the case in this sample. This difference in the Openness trait may reflect an unusual aspect of the study body at this university. In this sample participants were classified as 40.8% resilient, 33.3% undercontrolled, and 25.8% overcontrolled. These proportions can be compared to the Asendorf et al. (2001) sample in which the average proportions of each personality profile were 49% resilient, 28% undercontrolled, and 23% overcontrolled.

4.3 Hypothesis Testing

Self-compassion Differences. Descriptive statistics were run to calculate the means and standard deviations of total self-compassion scores across types. An ANOVA revealed a statistically significant difference between the three groups on their total Self-compassion scores ($F = 11.17, p \le .00$). Three independent sample t-tests were conducted to determine which self-compassion scores differed across groups. Consistent with the first hypothesis, analyses revealed the resilient group had significantly higher total Self-compassion scores (M = 3.08, SD = .25) compared to both overcontrolled ($M = 2.85, SD = .20, t = -4.32, p \le .00$) and undercontrolled groups ($M = 2.90, SD = .25, t = 3.53, p \le .00$). The overcontrolled and undercontrolled groups, however, were not statistically different in total Self-compassion scores ($t = .76, p \le .45$), inconsistent with the second hypothesis. Table 3 displays analyses of the self-compassion variables across personality prototypes and Figure 2 depicts the self-compassion subscale means plotted for overcontrolled, undercontrolled, and resilient types.

| Table 3 |
|---|
| Comparison of Personality Prototypes on Self-compassion Variables |

| | Ove | rcontro | olled | Undercontrolled | | Resilient | | | | | |
|----------|------|---------|----------|-----------------|-----|-----------|----------------|-----|----------|-------|---------|
| Variable | M | SD | d_{12} | \overline{M} | SD | d_{32} | \overline{M} | SD | d_{31} | n^2 | F |
| SC | 2.85 | .19 | 26 | 2.90 | .25 | .72 | 3.08 | .25 | .92 | .16 | 11.71** |
| SK | 2.53 | .71 | 20 | 2.67 | .86 | .72 | 3.19 | .72 | .92 | .13 | 8.68** |
| CH | 2.92 | .70 | .01 | 2.91 | .96 | .22 | 3.08 | .78 | .21 | .01 | .58 |
| MF | 3.01 | .74 | .07 | 2.96 | .88 | 90 | 2.43 | .59 | 98 | .12 | 8.09** |
| SJ | 2.41 | .59 | 25 | 2.59 | .69 | .90 | 3.32 | .81 | 1.12 | .25 | 19.13** |
| IS | 3.36 | .93 | .20 | 3.17 | .97 | 82 | 2.43 | .90 | -1.03 | .17 | 11.70** |
| OI | 3.71 | .87 | .28 | 3.47 | .79 | -1.19 | 2.42 | .88 | -1.47 | .32 | 27.68** |

Note. Degrees of freedom for all variables are (2, 117); d_{12} = Cohen's d between overcontrolled and undercontrolled groups; d_{23} = Cohen's d between resilient and undercontrolled groups; d_{13} = Cohen's d between resilient and overcontrolled groups; SC = Total Self-compassion; SK = Self-Kindness; CH = Common Humanity; MF = Mindfulness; SJ = Self-Judgment; IS = Isolation; OI = Over-Identification. Means listed for SJ, IS, and OI are not reverse-coded (i.e., high SJ score indicates high self-judgment).

* *p* < .05. ** *p* < .01.

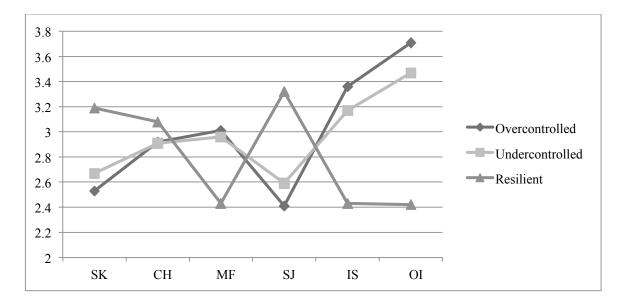


Figure 2. Means of Self-compassion Subscales Across Prototypes. SK = Self-Kindness; CH = Common Humanity; MF = Mindfulness; SJ = Self-Judgment; IS = Isolation; OI = Over-Identification. Means listed for SJ, IS, and OI are not reverse-coded (i.e., high SJ score indicates high self-judgment).

Contrary to the third hypothesis which predicted that women would have less self-compassion than men, another independent samples t-test revealed that there were no significant differences across gender in total Self-compassion scores (Women M = 2.96, SD = .29; Men M = 2.95, SD = .22, F = .04, $P \le .90$). Women did, however, differ significantly from men on their scores of the subscales, Self-Judgment (Women M = 2.64, SD = .72; Men M = 3.05, SD = .87, F = 7.72, $P \le .01$) and Over-Identification (Women M = 3.37, SD = .92; Men M = 2.83, SD = 1.04, F = 8.48, $P \le .00$) which suggests there may be differences between men and women at the component level of self-compassion. Table 4 displays analyses of the self-compassion variables in men and women.

Table 4Comparison of Gender on Self-compassion Variables

| | Women | | Men | | _ | | |
|----------|-------|-----|------|------|----------|-------|--------|
| Variable | M | SD | M | SD | d_{12} | n^2 | F |
| SC | 2.96 | .29 | 2.95 | .22 | 0.03 | .00 | .04 |
| SK | 2.78 | .81 | 2.91 | .82 | -0.16 | .01 | .74 |
| CH | 3.07 | .88 | 2.88 | .75 | 0.22 | .01 | 1.65 |
| MF | 2.81 | .81 | 2.70 | .74 | 0.14 | .01 | .63 |
| SJ | 2.64 | .72 | 3.05 | .87 | -0.57 | .06 | 7.72** |
| IS | 2.96 | .96 | 2.89 | 1.07 | 0.07 | .00 | .11 |
| OI | 3.37 | .94 | 2.83 | 1.04 | 0.57 | .07 | 8.48** |

Note. Degrees of freedom for all variables are (2, 117); d_{12} = Cohen's d between women and men; SC = Total Self-compassion; SK = Self-Kindness; CH = Common Humanity; MF = Mindfulness; SJ = Self-Judgment; IS = Isolation; OI = Over-Identification. Means listed for SJ, IS, and OI are not reverse-coded (i.e., high SJ score indicates high self-judgment). * p < .05. ** p < .01.

Personality by Gender Interactions. A two by three Multivariate Analyses of Variance (MANOVA) was conducted to test for significant differences in self-compassion across overcontrolled, undercontrolled, and resilient groups by gender. Self-compassion was measured by seven dependent variables: the total Self-compassion score and the six subscales from the SCS (Self-Kindness, Common Humanity, Mindfulness, Self-Judgment, Isolation, and Over-Identification). This study aimed to have at least 15 participants in each of the six cells (by group and gender) by having 120 participants. Only two cells fell slightly short of this goal: undercontrolled and overcontrolled men at 13 and 14 participants, respectively. Table 5 displays the number of participants by personality prototype and gender. A chi-square test examining gender distribution revealed there was a statistically significant difference between men and women across personality types ($p \le .01$).

Table 5Cross-tabulation of Participants by Personality Prototype and Gender

| Personality | Gen | _ | |
|-----------------|-------|-----|-------|
| Prototype | Women | Men | Total |
| Overcontrolled | 17 | 14 | 31 |
| Undercontrolled | 27 | 13 | 40 |
| Resilient | 17 | 32 | 49 |
| Total | 61 | 59 | 120 |

The results of the MANOVA indicated that the overall model was statistically significant (F = 8.41, $p \le .00$). Table 6 displays the results of the MANOVA.

Personality prototype had a significant main effect on all of the self-compassion variables except Common Humanity. Interestingly, gender did not have a significant main effect on any of the self-compassion variables.

The interaction between gender and personality prototype was significant only on the total Self-compassion score ($F = 3.92, p \le .02$) and the Common Humanity subscale ($F = 3.81, p \le .03$). This would suggest that differences in overall self-compassion and the common humanity component among types depend on gender. Specifically, resilient women are significantly higher in Self-compassion and Common Humanity than other groups. Table 7 and 8 display the means (and standard deviations) for the Self-compassion and Common Humanity scores, respectively, by personality prototype and gender. Figures 3 and 4 display the corresponding data in a graph.

A simple effects analysis for gender revealed that the means of all self-compassion variables were significantly different between types for women. A post hoc analysis using Tukey's procedure (α = .05) indicated that resilient women were significantly different from overcontrolled women on all variables and significantly different from undercontrolled women on all variables except Self-Kindness and Common Humanity. Overcontrolled and undercontrolled women did not differ from each other on any of the self-compassion variables.

On the other hand, among men the means of the total Self-compassion score,

Common Humanity, and Mindfulness were not significantly different between types.

Tukey's procedure revealed that resilient men were significantly different from

uncontrolled and overcontrolled men on all three of the negative subscales of self-

compassion: Self-Judgment, Isolation, and Over-Identification. On Self-Kindness, resilient men differed from undercontrolled men, but not overcontrolled men. As found in women, overcontrolled and undercontrolled men did not differ from each other on any of the self-compassion variables.

These results confirm the fourth hypothesis that gender moderates the relationship between personality type and self-compassion. They suggest that self-compassion may be relevant for women across personality prototypes and more nuanced in men. Specifically, that for men, the negative counterparts of the components of self-compassion may vary across personality types more so than the positive components.

To further investigate this gender difference, a one-way ANOVA was then conducted between men and women on the individual Big Five personality traits. Interestingly, Neuroticism was the only trait that was significantly different between genders (F = 9.93, $p \le .00$); the mean for Neuroticism in women was significantly higher (Women M = 2.92, SD = .74, Men M = 2.50, SD = .70). The implications of these results are addressed in the discussion.

Table 6Effect of Personality Prototype and Gender on Self-compassion Variables

| Effect | Variable | df | n^2 | F |
|-------------|----------|----|-------|---------|
| | SC | 2 | .20 | 14.40** |
| | SK | 2 | .13 | 8.39** |
| Dangamality | SJ | 2 | .21 | 14.99** |
| Personality | СН | 2 | .03 | 1.73 |
| Prototype | IS | 2 | .17 | 12.05** |
| | MF | 2 | .13 | 8.38** |
| | OI | 2 | .30 | 23.93** |
| | SC | 1 | .01 | 1.12 |
| | SK | 1 | .00 | .00 |
| | SJ | 1 | .02 | 2.15 |
| Gender | СН | 1 | .01 | 1.58 |
| | IS | 1 | .01 | .59 |
| | MF | 1 | .00 | .00 |
| | OI | 1 | .03 | 3.10 |
| | SC | 2 | .06 | 3.92* |
| | SK | 2 | .01 | .80 |
| Personality | SJ | 2 | .01 | .49 |
| Prototype X | CH | 2 | .06 | 3.81* |
| Gender | IS | 2 | .00 | .32 |
| | MF | 2 | .02 | 1.37 |
| | OI | 2 | .01 | .66 |

Note. Analysis used is multivariate analysis of variance (MANOVA). SC = Total Self-compassion; SK = Self-Kindness; SJ = Self-Judgment; CH = Common Humanity; IS = Isolation; MF = Mindfulness; OI = Over-Identification.

^{*} *p* < .05. ** *p* < .01.

Table 7Self-compassion Total Means by Participant Personality Prototype and Gender

| Personality | Gei | | |
|-----------------|------------|------------|------------|
| Prototype | Women | Men | Total |
| Overcontrolled | 2.80 (.15) | 2.91 (.22) | 2.85 (.19) |
| Undercontrolled | 2.91 (.30) | 2.86 (.10) | 2.90 (.25) |
| Resilient | 3.20 (.21) | 3.01 (.24) | 3.08 (.25) |
| Total | 2.96 (.29) | 2.95 (.22) | |

Note. Standard deviations are listed in parentheses.

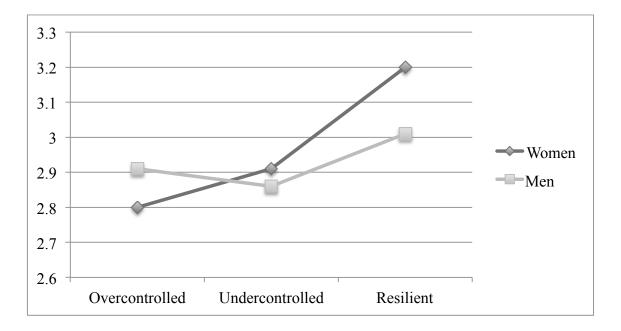


Figure 3. Self-compassion Total Score by Personality Prototype and Gender.

Table 8Common Humanity Subscale Means by Participant Personality Prototype and Gender

| Personality | Ger | | |
|-----------------|-------------|------------|------------|
| Prototype | Women | Men | Total |
| Overcontrolled | 2.76 (.74) | 3.11 (.62) | 2.76 (.74) |
| Undercontrolled | 2.98 (1.00) | 2.75 (.90) | 2.91 (.96) |
| Resilient | 3.53 (.65) | 2.84 (.74) | 3.08 (.78) |
| Total | 3.07 (.88) | 2.88 (.75) | |

Note. Standard deviations are listed in parentheses.

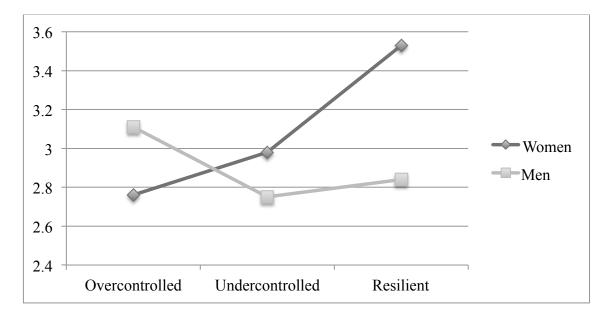


Figure 4. Common Humanity Score by Personality Prototype and Gender.

5. DISCUSSION AND CONCLUSIONS

In this study, the relationship between self-compassion, gender, and personality prototypes based on the Big Five model were examined. This chapter will address the possible interpretations of the results, insights affecting treatment, and limitations of the study, recommendations for future research.

5.1 Self-compassion and Personality Prototype

As predicted, overall Self-compassion was found to be significantly higher in resilient personality types compared to overcontrolled and undercontrolled types. The results confirm the hypothesis that the self-compassion and resilient personality are related. Not only do resilient types and those high in self-compassion enjoy similar psychological benefits at the previous literature indicates, but this study confirms that resilient types are indeed more likely to be higher in self-compassion compared to other personality types. It further suggests that self-compassion is a component of resilient psychological functioning beyond resiliency as a trait. The person-centered approach used in this study supports the notion that a particular constellation of personality traits generates a self-compassionate way of being.

Contrary to what was expected overcontrolled and undercontrolled types were not significantly different from each other in overall Self-compassion. Every subscale followed this pattern across all groups except Common Humanity, which was not significantly different across personality type. While overcontrolled and undercontrolled types have dramatically different ways of operating, statistically they were remarkably similar in their levels of self-compassion across subscales. Thus, self-compassion

appears to successfully distinguish adaptive from maladaptive personality functioning in the world, but does not appear to be affected by the variations of maladaptive thoughts or behaviors. This is somewhat consistent with the theoretical foundation of Block and Block's (1951) theory of ego-control and ego-resiliency in which a U-shaped quadratic relationship depicts overcontrolled and undercontrolled behavioral control at the extremes and resilient control in the middle as the most adaptive type. Self-compassion's association with the resilient prototype is indicative of its adaptive contribution to behavioral control. Supporting this idea is a growing body of research on self-compassion oriented interventions to assist with self-regulatory behaviors such as smoking and eating disorders (e.g., Kelly et al., 2010).

While personality is likely to remain stable over the lifetime, self-compassion can be taught (Neff, 2003b) and has the potential to offer some of the psychological benefits experienced by resilient persons to overcontrolled and undercontrolled persons who experience ego-regulation problems. More research is needed to replicate these findings and ensure validity of these results in a broader demographic sample, but they are encouraging for the development of interventions with overcontrolled and undercontrolled populations to enhance self-regulation abilities.

5.2 Gender Differences in Self-compassion

The genders did not differ significantly from each other in terms of overall Self-compassion. This was contrary to the predication that women would have less self-compassion than men. The results provide further evidence that self-compassion is not a construct unique to or favored by one gender. It notably adds to the existing literature in

which no clear gender difference in self-compassion has been found consistently. The only significant differences in subscales revealed that women experience significantly less Self-Judgment and more Over-Identification than men. Only the interaction effect (discussed below) indicates the more complex pattern of gender differences in self-compassion—consistent with other findings in the literature (Baker & McNulty, 2011).

While gender differences amongst personality prototypes was beyond the scope of the inquiry in this study, a significant difference in the distribution of gender across types was found which indicates that gender may contribute to the likelihood that one is either overcontrolled, undercontrolled, or resilient. Surprisingly, the many of studies on these personality prototypes do not address the issue of gender difference across types. Results from studies that do examine differences are mixed. Several studies indicate that in childhood and adolescence, boys are more likely to be undercontrolled than girls (Asendorf et al., 2001; Asendorf & van Aken, 1999; Berry & Schwebel, 2009; Klimstra, Hale, Raaijmakers, Branje, & Meeus, 2010; Meeus, Van de Schoot, Klimstra, & Branje, 2011). There is evidence that girls are overrepresented in overcontrolled types (Berry & Schwebel, 2009; Klimstra et al., 2010; Meeus et al., 2011; van Aken & Dubas, 2004), although significant differences are not always present (Asendorf & van Aken, 1999). Girls may also be more likely to be classified as resilient (Asendorf et al., 2001; Asendorf & van Aken, 1999; Klimstra et al., 2010), yet several studies did not find significant differences (Berry & Schwebel, 2009; Meeus et al., 2011; van Aken & Dubas, 2004). Significant differences in gender distribution across personality type appear to be less common in adult samples (Asendorf et al., 2001; Berry et al., 2007;

Herzberg; 2009; Steca et al., 2010) although in a second sample, Herzberg (2009) found that men were more likely to be overcontrolled and women were more likely to be resilient.

All of the findings from these previous studies were contrary to the data from the current study, which found men to be overrepresented in resilient types. There are some previous studies, however, consistent with the finding that men were also more likely to be undercontrolled while women were more likely to be overcontrolled types. More research is needed to determine the effect of gender on personality prototype. A dimensional look at the data from this study revealed that the only personality factor that was significantly different between men and women was Neuroticism. This finding suggests that gender differences may appear more complex in the person-centered approach as applied in this study, when compared to variable-centered approaches.

5.3 Personality and Gender Interpretations

A significant interaction between personality prototype type and gender was found for overall Self-compassion and the Common Humanity subscale. The results indicate that gender moderates self-compassion differences across types on these two variables. Possible interpretations of these results and analysis of gender differences across personality type are discussed below.

Self-compassion Subscales. It is possible that Common Humanity may have created the gender difference in the overall Self-compassion given that it was the only significant subscale. The subscales have not been validated to use independently or previously used independently in the literature, as such any interpretations made from

these results must be made with caution. Interpretation of the subscales is useful insofar as expanding understanding on the components of self-compassion, but cannot be used to draw final conclusions.

Gender Differences. While there were no gender differences across selfcompassion variables, when personality was accounted for, the relevance of selfcompassion appeared more nuanced for men. Resilient, overcontrolled, and undercontrolled men were not significantly different from one another on total Selfcompassion scores or the positive components of self-compassion (with the exception of a significant difference on Self-Kindness between resilient and undercontrolled men). Resilient men, however, were significantly different from overcontrolled and undercontrolled men on all three of the negative counterparts of the components of selfcompassion: Self-judgment, Isolation, and Over-Identification. This may suggest that overcontrolled and undercontrolled men are more inclined to negative way of being compared to resilient men. Conversely, it may suggest that positive aspects of being self-compassionate are not significantly different in personality prototypes amongst men. By comparison, resilient women appear to be more self-compassionate in both positive and negative aspects of self-compassion when compared to overcontrolled and undercontrolled women. In other words, resilient women are simultaneously more selfcompassionate in greater positive aspects and lesser negative aspects whereas resilient men are only more self-compassionate in lesser negative aspects when compared to the other personality types.

There is no research or theoretical explanation of self-compassion or the resilient prototype that explains why this difference between personality types exists for women but not men. It is plausible that men differ from one another in terms of negative aspects of relating to oneself that may interfere with self-compassion, but that they are more similar in their proactive engagement in self-compassion (self-kindness, common humanity, and mindfulness). As Neff (2003a) pointed out, a person may tend to be selfcritical/judgmental, but that may or may not mean that the person actively takes steps to practice self-kindness. This interpretation would suggest that the negative and positive aspects of self-compassion could generally be expected to be more consistent in women. In other words, if women are low in over-identification, it may be more likely that they are also consistent in actively engaging in mindfulness. An exception to this generalization, however, was the finding that undercontrolled women were not significantly different from resilient women on Self-Kindness or Common Humanity while overcontrolled women were significantly different. Thus, more research is needed to test this interpretation of gender differences in self-compassion.

Neuroticism and Plasticity. Another potential explanation for the gender differences found in this study concerns the influence of neuroticism. While this study examined personality from a person-centered approach through overcontrolled, undercontrolled, and resilient personality prototypes, it is interesting to note that the only personality variable that was significantly different between men and women in this study was Neuroticism. Of the Big Five factors, neuroticism has been found be the most linked, theoretically and statistically, to overall self-compassion in that the neuroticism

construct encompasses the self-judgment, isolation, and rumination expected in the lack of self-compassion (Neff et al., 2007b). Neuroticism was also shown to have a moderate inverse relationship to the Self-compassion total score (-.50) in this study.

In a study conducted by Srivastava, and collegues (2003), the plasticity of the Big Five personality dimensions across the lifetime in men and women were examined. Although the Big Five are assumed to be stable across the life span, Neuroticism was found to be significantly higher in women than men in college age samples with differences between the genders narrowing over the life span. Men, by comparison remained relatively stable in their levels of neuroticism while women's levels decreased over time. This sheds light on the possibility that women could vary more than men in neuroticism across overcontrolled, undercontrolled, and resilient types. If this is the case, differences in neuroticism across women may explain why women are also more variable in their levels of self-compassion across groups compared to men. While outside the scope of this study, examining the influence of neuroticism on self-compassion from a variable-centered approach in addition to the person-centered approach may be useful in gaining more understanding of the influence of neuroticism.

5.4 Limitations

Assessing the utility of person-centered versus variable-centered approaches was beyond the scope of this study, but the lack of a complementary dimensional approach limited the ability to interpret results. In retrospect, this may be relevant given that overcontrolled and undercontrolled personality types are both characterized by high neuroticism and were generally not found to be significantly different from each other in

self-compassion. Neuroticism has already been found to be inversely associated with both self-compassion and resilient personality (e.g., Berry et al., 2007; Neff et al., 2007b), and the extent to which a factor such as neuroticism could account for differences in self-compassion in this study is unknown.

A related limitation concerns the generalizability of interpretations from the results because this study was conducted in a college student population and is not representative of the community at large. The sample demographic affects interpretation of the results broadly as well as specifically limiting the ability to interpret the effect of neuroticism as discussed. Since neuroticism has been shown to be developmental influenced as it appears higher in young women compared to young men, and follows a trajectory that narrows the gender gap over time (Srivastava et al., 2003) the college student sample is less than ideal for untangling the utility of person-centered and variable-centered approaches in this case. Thus, future studies are critical to investigating whether the findings of gender and personality differences in self-compassion are replicated in community-based samples. Such studies will provide a more informed and balanced foundation for interpreting the phenomenon revealed in this inquiry.

Finally, the data from this study is limited by self-report. Both the SCS and BFI, which were completed by participants, are self-report measures. Social desirability as well as variation in ability to have insight into internal psychological processes may have affected the results given that differences in personality type are likely to include the importance of social desirability and insight. Moreover, self-compassion and the Big

Five personality dimensions have been assessed by others (i.e., parents, teachers, or clinicians) in previous research, but collateral data was not used to verify scores in this study.

5.5 Recommendations for Future Research

Self-compassion is bound to receive increasing attention on the Western psychology scene as we gain more understanding of how the construct sheds light on mental health, but we should remember that the construct is also a central tenant of the Buddhist tradition that has endured. As the construct is further developed for research and clinical use in the field of psychology, it is important to remember to context of self-compassion. Historically, self-compassion developed as way of being conducive to sound mental and emotional health, beneficial to all persons. Self-compassion psychological theory is consistent with this perspective in that it does not anticipate that developing self-compassion is only beneficial for some. While there may be differences in baseline levels of self-compassion across gender, culture, personality, or other variables, research on self-compassion interventions will be helpful in determining whether some people respond to self-compassion interventions more than others.

The results of this study are limited in their generalizability to the community as discussed previously, but there is some indication that utilizing self-compassion would be a beneficial intervention for overcontrolled and undercontrolled women. Self-compassion may help mitigate the influence of higher levels of neuroticism present in younger women in particular, compared to their male peers. In overcontrolled and undercontrolled men, self-compassion interventions that target self-judgment, isolation,

and over-identification opposed to the positive components of self-compassion may be more helpful since this is how they differ from their resilient counterparts. Longitudinal data regarding the stability/plasticity of self-compassion across the lifetime would be an important addition to the body of literature in order to track the effect of aging on one's self-compassion.

While it is essential for future research to expand from a college student population base, there is evidence that studying self-compassion and personality types in students especially relevant from a developmental perspective (Neff, 2009a). A recent study examined whether overcontrolled, undercontrolled, and resilient personality type changes during adolescence (Meeus et al., 2011). The investigators found evidence for the stability of types for over 70% of the sample and observed personality "transitions" in the rest. Most of the transitions were shifts to resilient types thereby resulting in fewer overcontrolled and undercontrolled types as the cohorts moved into adulthood. Further, no differences were found between genders on personality type transitions. In the developmental trajectory of personality development, adolescence may be an optimal stage to foster self-compassion in order to facilitate/encourage more transitions to resilient personality. Several researchers, including Neff, have argued the value of self-compassion principles during the unique challenges of adolescent years (e.g., Lo, 2007; Mosewich et al., 2011; Neff & McGehee, 2010; Tanaka et al., 2011).

Future research should also continue to examine self-compassion interventions and the impact of resilient personality in clinical and non-clinical community. Self-compassion research in other populations is increasingly evident as recent work has been

conducted with medical (chronic pain) populations (Costa & Pinto-Gouveia, 2011; Wren et. al, 2012). The results of this study, which provide evidence of the relationship between self-compassion and resilient personality, suggest that self-compassionate individuals may enjoy similar health benefits found to be present in resilient types. A logical next step of self-compassion intervention research would be to evaluate whether improving self-compassion may impact health outcomes such as stroke and hypertension which are more likely in overcontrolled and undercontrolled types (Chapman & Goldberg, 2011).

It is also encouraging that a short form of the Self-compassion Scale (SCS) has recently been validated (Raes, Pommier, Neff, & Van Gucht, 2011) and that clinician rated self-compassion has been found to correlate well to self-reported self-compassion. This should facilitate measuring self-compassion in a broader range of studies to come.

Furthering our understanding of self-compassion as a psychologically adaptive mindset and its applications is a key aspect of growth in our field. Academia, clinicians, and the public alike are showing increasing interest in positive psychology and resilience variables. Research on self-compassion has already expanded notably since Neff developed the first validated the Self-compassion Scale in 2003 and it continues to prove relevant across settings in both clinical and non-clinical populations. Studies addressing self-compassion's nuances across populations and in clinical interventions are expected to continue to emerge as findings urge us to ask more questions about self-compassion's potential to enhance wellbeing and to understand self-compassion and it's relationship to personality.

The person-centered approach to personality as demonstrated in this study was key to bridging pre-existing literature to the construct of self-compassion and revealed encouraging support for the development of self-compassion interventions in overcontrolled and undercontrolled populations. In this way, self-compassion may be a mechanism to acquire some of the adaptive psychological functioning evident in resilient personality types. The ultimate hope is that the results from this study will inspire more research on self-compassion and resiliency from a person-centered approach.

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APPENDIX A: SELF-COMPASSION SCALE

HOW I TYPICALLY ACT TOWARDS MYSELF IN DIFFICULT TIMES

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

| Aimost never 1 | 2 | 3 | 4 | Almost always 5 |
|----------------------|--------------------|------------------------|------------------|--------------------------|
| 1 | <u>2</u> | 3 | 4 | 3 |
| 1. I'm o | disapproving and | judgmental about | my own flaws | and inadequacies. |
| 2. Whe | n I'm feeling dov | wn I tend to obsess | and fixate on | everything that's wrong. |
| 3. Whe | n things are goin | g badly for me, I s | ee the difficult | ies as part of life that |
| ever | yone goes throug | gh. | | |
| 4. Whe | n I think about m | ny inadequacies, it | tends to make | me feel more separate |
| and o | cut off from the r | rest of the world. | | |
| 5. I try | to be loving towa | ards myself when | I'm feeling em | otional pain. |
| 6. Whe | n I fail at someth | ing important to m | ne I become co | nsumed by feelings of |
| inad | equacy. | | | |
| 7. When | I'm down and o | out, I remind mysel | f that there are | lots of other people in |
| the v | vorld feeling like | e I am. | | |
| 8. Whe | n times are really | y difficult, I tend to | be tough on n | nyself. |
| 9. Whe | n something upse | ets me I try to keep | my emotions | in balance. |
| 10. Whe | en I feel inadequa | ate in some way, I | try to remind n | nyself that feelings of |
| inad | equacy are share | d by most people. | | |
| 11. I'm | intolerant and im | npatient towards th | ose aspects of | my personality I don't |
| like. | | | | |
| 12. Whe | en I'm going thro | ough a very hard tin | me, I give mys | elf the caring and |
| tende | erness I need. | | | |
| 13. Whe | en I'm feeling do | wn, I tend to feel l | ike most other | people are probably |
| happ | oier than I am. | | | |

| 14. When something painful happens I try to ta | ke a balanced view of the |
|---|--------------------------------------|
| situation. | |
| 15. I try to see my failings as part of the humar | condition. |
| 16. When I see aspects of myself that I don't li | ke, 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 li | ke 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 av | vay 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 m | y feelings with curiosity and |
| openness. | |
| 23. I'm tolerant of my own flaws and inadequa | cies. |
| 24. When something painful happens I tend to | blow the incident out of |
| proportion. | |
| 25. When I fail at something that's important to | o me, I tend to feel alone in my |
| failure. | |
| 26. I try to be understanding and patient toward | ds those aspects of my personality I |
| don't like. | |

APPENDIX B: BIG FIVE INVENTORY

How I am in general

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who *likes to spend time with others*? Please write a number next to each statement to indicate the extent to which **you agree or disagree with that statement.**

| 1 | 2 | 3 | 4 | 5 |
|----------|----------|---------------|----------|----------|
| Disagree | Disagree | Neither agree | Agree | Agree |
| Strongly | a little | nor disagree | a little | strongly |

I am someone who...

| 1 | Is talkative | 16 Generates a lot of enthusiasm |
|-----|--|--|
| 2 | Tends to find fault with others | 17 Has a forgiving nature |
| 3 | Does a thorough job | 18 Tends to be disorganized |
| 4 | Is depressed, blue | 19. Worries a lot |
| 5 | Is original, comes up with new | 20 Has an active imagination |
| | ideas | 21 Tends to be quiet |
| 6 | Is reserved | 22 Is generally trusting |
| 7 | Is helpful and unselfish with others | 23. Tends to be lazy |
| 8 | Can be somewhat careless | 24 Is an ationally stable not easily |
| 9 | Is relaxed, handles stress well. | 24 Is emotionally stable, not easily upset |
| 10 | Is curious about many different things | 25 Is inventive |
| | - | 26 Has an assertive personality |
| 11 | Is full of energy | 27. Can be cold and aloof |
| 12 | Starts quarrels with others | 20 Demonstrate and the death is Emished |
| 13. | Is a reliable worker | 28. Perseveres until the task is finished |
| | | 29. Can be moody |
| 14 | Can be tense | 20 Walnes artistic confliction |
| 15 | Is ingenious, a deep thinker | 30 Values artistic, aesthetic experiences |

| 31. | Is sometimes shy, inhibited |
|-----|---|
| 32. | Is considerate and kind to almost everyone |
| 33. | Does things efficiently |
| 34. | Remains calm in tense situations |
| 35. | Prefers work that is routine |
| 36. | Is outgoing, sociable |
| 37. | Is sometimes rude to others |
| 38. | Makes plans and follows through with them |
| 39. | Gets nervous easily |
| 40. | Likes to reflect, play with ideas |
| 41. | Has few artistic interests |
| 42. | Likes to cooperate with others |
| 43. | Is easily distracted |
| 44. | Is sophisticated in art, music, or literature |

VITA

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