A TRANSLATION AND VALIDATION STUDY OF THE KOREAN SELF-COMPASSION SCALE

A THESIS SUBMITTED TO THE GRADUATE DIVISION OF THE UNIVERSITY OF HAWAIʻI AT MĀNOA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

IN

PSYCHOLOGY

OCTOBER 2022

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Acknowledgments

The completion of this thesis would not have been possible without the continuous support from the UH faculty. Foremost, I would like to express my sincere gratitude to my advisor, Dr. Kelly Vitousek, for the continuous support, guidance, patience, and encouragement throughout the process. I would also like to thank my committee members, Dr. Min Liu for providing consultation on statistical analyses, and Dr. Janet Latner for providing insightful feedback.

My sincere gratitude also goes to Dr. Young Hoon Kim and research staff at the Sociocultural Laboratory at Yonsei University, and to the translators who volunteered to participate in the translation process. I also appreciate Dr. Tony Papa for providing guidance on decision-making of my statistical analyses.

I thank my friends and colleagues for the thought-provoking discussions and encouraging words that kept me motivated throughout the whole process. Last but not the least, I would like to give special thanks to my family for their unconditional trust, support, and love. Words cannot fully describe how grateful I am to have the opportunities that I have today, which would not have been possible without my family's trust in my capabilities and passion.

Abstract

Self-compassion, derived from Buddhist principles, refers to a positive self-attitude focused on recognizing and accepting one's failures with a balanced awareness and kindness. In recent years, there has been growing interest in the putative benefits of self-compassion for enhancing psychological well-being in many countries. A Korean version of the widely used Self-Compassion Scale (SCS; Neff, 2003b) was published by Kim and colleagues in 2008 (Korean Self-Compassion Scale; K-SCS); however, it may not accurately capture the constructs assessed by the initial SCS. The proposed study was designed to address conceptual and methodological concerns by retranslating the K-SCS using approved translation procedures and to examine its properties in a South Korean sample. The goal of the current study was to provide a reliable version of the K-SCS that can be used in further research on self-compassion in South Koreans, providing an accurate and reliable means of assessing the nature and correlates of self-compassion in this population. This initial exploration of the newly translated K-SCS examined its associations with psychological well-being (including life satisfaction and happiness) and mental health (including symptoms of depression, anxiety, and eating disorders), and compared patterns of relationships in Korean and American samples. Comparative analyses between these populations were conducted to identify similar and/or different patterns of relationships between self-compassion, psychological well-being, and mental health indices. However, findings from these comparative analyses should be taken with caution due to the US sample's unusually high mean scores and atypical patterns of gender differences noted on some measures when compared to the standardized sample from previous studies.

Keywords: Self-compassion, Self-compassion scale, South Korea, Culture

Introduction

Background and Purpose of the Current Study

Self-compassion has received increasing attention from Western researchers because of its positive association with indices of psychological well-being and mental health (Booker & Dunsmore, 2019; Neff, 2004; Neff *et al.*, 2007). The most widely used self-report measure of the construct is Kristen Neff's Self-Compassion Scale (SCS; Neff, 2003b). With the increasing importance placed on studying individuals from different cultural backgrounds, several researchers have translated the measure and examined its psychometric properties (e.g., Aritmitsu *et al.*, 2018; Birkett, 2013; Neff *et al.*, 2008). Despite the increased attention on cross-national research on self-compassion, only a few studies have incorporated cultural considerations into the translation process or revisited the psychometric properties of translated versions of the SCS. A Korean version of the SCS was developed 14 years ago (K-SCS; Kim *et al.*, 2008); subsequently, scant research has been undertaken to further investigate its reliability, validity, cultural appropriateness, and measurement invariance in relation to the original SCS. The current study was designed to re-translate the measure while considering translational equivalence and cultural appropriateness and to examine its psychometric properties, with the goal of providing a more accurate self-report measure of self-compassion for Koreans. Finally, the current study also conducted a cross-cultural comparison between South Korean and American participants to identify similar or different patterns of associations between self-compassion and other constructs such as satisfaction with life, body image disturbances, and mental health indices including depression, stress, anxiety, and eating disorders.

Self-Compassion

Self-compassion, an Eastern philosophical concept derived from Buddhist philosophy, is a self-attitude focused on showing compassion towards the self (Neff, 2003a, b). According to Neff (2003a, b), self-compassion has three components: (a) self-kindness, (b) mindfulness, and (c) common humanity, with each component described by positive and negative poles. Self-kindness refers to providing understanding, support, and warmth to the self in the midst of failures and difficult times (Neff, 2003 a, b). The opposite of self-kindness is self-judgment, which involves harsh self-criticism when faced with difficulties and perceived inadequacies. Mindfulness is understood as recognizing one's current feelings, thoughts, and situations without avoiding or overidentifying with those painful experiences; over-identification is an opposite construct that describes an unbalanced state of awareness when exposed to painful experiences (Neff, 2003 a, b). Common humanity is defined as seeing life experiences (including failures, flaws, and painful situations) as shared with all human beings. In contrast to common humanity, isolation is defined as feeling different and disconnected from others in the midst of difficulties (Neff, 2003 a, b). According to Neff (2003 a, b), the three components interact to generate an overall healthy attitude toward the self, which is collectively called self-compassion. Currently, the Self-Compassion Scale (SCS), a self-report measure that assesses one's general tendency to show compassion towards the self, is almost exclusively used for self-compassion research.

Self-Compassion Scale and Its Psychometric Properties

The SCS (Neff, 2003b) was developed to measure thoughts, emotions, and behaviors related to showing compassion towards the self. Theoretically, compassion toward the self is not different from compassion toward others. Both compassion toward the self and toward others involve being open and aware of suffering, showing patience, kindness, and non-judgmental

understanding, and recognizing the imperfection of human nature (Neff, 2003a, b). The theory underlying self-compassion indicates that the three main components (i.e., self-kindness, mindfulness, and common humanity) are conceptually distinct, but mutually impact one another, creating an overarching compassionate frame of mind toward the self (Neff, 2016).

In the original study of the development of the SCS, it was initially hypothesized that the measure would indicate a three factor-structure (i.e., self-kindness, mindfulness, and common humanity). However, the confirmatory factor analysis and exploratory factor analysis of each component of self-compassion resulted in two factors, representing a six-factor structure (Neff, 2003b). Neff (2003b) theorized that this may be due to the presence of positive and negative aspects of each facet (e.g., self-kindness vs. self-judgment). Neff (2003b) noted that it is not uncommon for positive and negative items to load on separate factors (Enos, 2001; Finney, 2001). Therefore, Neff concluded that it is theoretically coherent that these three components form six factors that are correlated with one another. Neff (2003b) further maintained that the six-factor structure is more sensible because having a low level of one behavior does not necessarily mean having a low level of the opposite behavior. For example, it is possible for individuals to show no tendency to judge themselves (i.e., self-judgment) yet fail to provide kindness and understanding toward themselves (i.e., self-kindness). In addition to the six-factor structure, Neff (2003b) reported that the intercorrelations between the factors can be explained by a single higher-order factor of self-compassion. Accordingly, SCS subscale scores were obtained by calculating the mean of the items that belong to a respective subscale, and the total score by adding the sum of all the subscales after reverse scoring the negatively phrased items (Neff, 2003b). Thus, the SCS has six subscales that can be summed to create a total score that represents the overarching construct of self-compassion.

After the introduction of the SCS, numerous studies were conducted to replicate its factor structure across different populations, with inconsistent findings. For example, Chinese (Chen *et al*., 2011) and Spanish (Garcia-Campayo *et al.*, 2014) versions of the SCS suggested the single higher-order factor model. On the other hand, results from Italian (Petrocchi *et al.*, 2014), German (Hupfeld & Ruffieux, 2011), Portuguese (Costa *et al.*, 2015), and Dutch (López *et al.*, 2015) versions of the SCS suggested that a single higher-order factor may not be the optimal method of examining the overarching construct of self-compassion. Although translation issues could be one possible explanation for these different factor structures, a study by Williams and colleagues (2014) using the original SCS failed to replicate the factor structure found in the initial validation study by Neff (2003b). In this study, poor goodness of fit index was observed in the hierarchical six-factor structure and an acceptable goodness of fit index for the six-factor model, suggesting that the SCS may be used to assess six facets of self-compassion independently rather than the overall level of self-compassion.

To address these inconsistent findings, several studies have explored alternative psychometric models to assess model fit. A few studies have suggested the use of a two-factor model in which the SCS is conceptualized to have two dimensions: (1) self-compassion, which is comprised of self-kindness, mindfulness, and common humanity, and (2) self-coldness, which entails self-judgment, over-identification, and isolation (e.g., Costa *et al.*, 2015; López *et al.*, 2015). In this context, positively phrased items are summed to reflect the overall level of self-compassion, and negatively phrased items are summed to indicate the overall level of self-coldness. This aligns with Gilbert's (2005) theory of social mentalities, which states that there are two distinct processing systems involved in how people interact with the world: the *threat-defense* and *safeness* systems. According to Gilbert (2005), the internal processes involved in

how individuals treat themselves vary depending on which system is being activated. Further research by P. Gilbert and H. Gilbert (2011) indicated that the *safeness* system is associated with self-compassion while the *threat-defense* system is related to self-coldness. A few studies suggest that the six components of the SCS may not be summed to indicate an overarching construct of self-compassion. Rather, the SCS may represent two dimensions that represent self-compassion (i.e., self-kindness, mindfulness, and common humanity) and self-coldness (self-judgment, over-identification, and isolation).

Interestingly, this two-factor structure may not be discrepant from the pattern observed when Neff (2003b) initially examined the dimensions of the SCS. When Neff (2003b) conducted a CFA for each of the three components of the SCS, each component resulted in two-factor models instead of one-factor models. Although Neff (2003b) conceptualized this six-factor structure as intercorrelated items for which each component subsumes positive (compassionate) and negative (uncompassionate) poles, the two-factor structure of components may represent the two-factor models that other studies have found. To address the growing number of inconsistent findings about the dimensions of the SCS, Neff (2016) applied another statistical approach, the bifactor model, to investigate the factor structure and examine the validity of using the overall self-compassion score.

According to Neff (2016), in a single higher-order model, the target factor explains the correlations of the subscale factors, with an underlying assumption that the target factor has no direct effect on the individual item responses. This statistical approach indicates that self-compassion explains the intercorrelations of the six subscales, with an assumption that self-compassion is not directly associated with each item in the SCS (Reise *et al.*, 2010). On the other hand, in the bifactor model, self-compassion is assumed to directly impact individual items in the

SCS and how these individual items form the subscales. According to Neff (2016), the bifactor model is a more theoretically coherent conceptualization of the construct because self-compassion directly impacts the ways individuals respond to their suffering, difficult situations, or perceived flaws, which are represented by each item in the SCS.

Neff and colleagues (2017) further examined the factor structure of the SCS using various statistical models. Based on their findings, they suggested that future attempts to translate and validate the SCS should use a single-factor bifactor model (also known as single-bifactor model) and a six-factor correlated model when evaluating model fit. Neff and colleagues (2019) recently explored the factor structure of the SCS in 20 different populations across 16 countries and reported that the findings further supported the use of the single-bifactor model and six-factor structure model using an exploratory structural equation modeling (ESEM) framework. The authors concluded that the single-bifactor model indicates that the overall score of SCS can be used to measure the general construct of self-compassion while a six-factor correlated model suggests that the SCS can be used to examine the six subscales of constituent components of self-compassion.

Considerations When Using the Self-Compassion Scale

It is important to note that individuals who lack self-insight may have a limited capacity to characterize their own level of self-compassion accurately on a self-report measure (Neff, 2003b). Furthermore, although Neff (2003a) conceptualizes self-compassion as a general trait that is relatively stable over time, insufficient research has been conducted to conclude that individuals with high SCS scores maintain and utilize compassionate mindset when feeling vulnerable or faced with challenging situations. A few studies have attempted to use the SCS to capture the “in-the-moment response” that might indicate context-dependence or temporal

variability of the scale, rather than construing self-compassion as a general trait that is assumed to be stable across various situations and throughout time.

Leary and colleagues (2007) conducted a series of studies investigating the relationship between the level of self-compassion and responses to negative life events. The findings indicate that self-compassion is associated with lower negative emotional reactions and more balanced perspective of perceiving the unpleasant situations and negative feedback from others. When self-compassion was experimentally induced by asking participants to reflect on negative events with a compassionate attitude towards the self, participants responded less negatively to unpleasant events despite attributing the events to their personality and actions. These findings suggest that individual responses to unpleasant life events may be explained in part by differing levels of self-compassion and can be modified, at least in the short-term in an experimental context, by inducing a compassionate mindset towards the self.

Another study by Allen and Leary (2014) examined the relationship between self-compassionate thoughts and responses to aging with older adults. In this study, participants were randomly assigned to think about positive, negative, or any age-related events. Results indicated that a high level of self-compassion was associated with greater overall positive thoughts (including age-related events, idea of getting older, and change in thoughts of aging after turning 40). Furthermore, participants who were assigned to think positively about age-related events endorsed more self-compassionate cognitions, suggesting that showing compassion towards the self is context-dependent to a certain extent. Consistently, a study by Homan (2016) with multigenerational sample indicated that level of self-compassion is positively correlated with age as well as psychological well-being (i.e., self-acceptance, positive relationship with others,

personal growth, purpose in life, environmental mastery, and autonomy), suggesting that self-compassion may vary as individuals grow older.

In sum, findings from studies (i.e., Allen & Leary, 2012; Leary *et al.*, 2007) indicate that levels of self-compassion may impact the way individuals process negative life events, with a higher level of self-compassion associated with balanced perspective, acceptance, and kindness. These studies also suggest that induction of self-compassionate practices may result in increased levels of self-compassion, at least in the short-term, which in part indicates a context-dependent characteristic of self-compassion.

In addition to variability of self-compassion based on contexts and age, the variability of one's overall SCS remains unclear, especially when only the level of one or two components of self-compassion change. Although Neff (2003a) maintained that the three conceptually distinct components mutually enhance and engender one another, questions remain as to whether an increase in one or two components result in an increase across others. For example, Moore's (2008) study of a brief mindfulness training with clinical psychology students found that the intervention resulted in increased mindfulness but not a higher overall SCS score. This preliminary observation suggests that the components of self-compassion may not influence one another and that an increase in one component may not lead to an increase in the overall SCS score.

Despite the limitations of the SCS regarding its the factor structure and stability across different contexts, it remains the only widely used self-report measure that assesses one's compassionate attitude towards the self. Thus, the current study used the SCS with the inclusion of commonly applied goodness of fit indices (Hu & Bentler, 1999; Marsh *et al.*, 2005) while using the recently suggested method for examining the psychometric properties of the scale (i.e.,

single-bifactor model and six-correlated model). Because self-compassion can be a meaningful factor in explaining how individuals respond to negative life events, the current study also considered an individual's current stressors and situations by assessing other mental health and psychological functioning variables when examining the level of self-compassion. This preliminary analysis of self-compassion with South Korean and American samples was an initial step before a fuller exploration of the relationship among the components of self-compassion across different contexts and diverse populations can be initiated.

Self-Compassion, Mental Health, and Psychological Well-Being

Self-compassion has received increasing attention in Western psychological research principally because of its association with elements of well-being (Booker & Dunsmore, 2019; Neff, 2004; Neff, Kirkpatrick, *et al.*, 2007). Previously, the construct of self-esteem was the most widely used indicator of psychological well-being (Branden, 1969; Rosenburg, 1979). Self-esteem refers to how much an individual prizes, values, approves, or likes oneself (Blascovich *et al.*, 1991). It involves evaluating one's own performance in the domains one values, especially in relation to social standards (James, 1890) and to other people's performances (Deci & Ryan, 1995). Although numerous studies indicate positive benefits of self-esteem (e.g., Pyszczynski *et al.*, 2004), other studies also indicate that the construct has limitations. Studies suggest that self-esteem is associated with narcissism, self-absorption, self-centeredness, and a lack of concern for others (Damon, 1995; Seligman, 1995) and with a lack of self-knowledge that impedes one's ability to change or improve flaws (Baumeister *et al.,* 1993). Although self-compassion and self-esteem are moderately correlated (Neff, 2003a) and both are sources of "positive self-regard" (Albertson *et al.*, 2015), self-compassion is not dependent upon perceived success in valued areas (Crocker & Wolfe, 2001). Self-compassion does not involve feeling pressured to excel in

one's performance or be better than others to address one's self-critical thoughts and behaviors (Neff, 2011). Self-compassion allows individuals to keep balanced perspectives about self, rather than thinking positively about oneself. Self-compassion promotes the notion that to be human is to have imperfections, which are accepted rather than criticized; accordingly, perceived flaws can be used to connect with, rather than to distance oneself from other people (Neff, 2003a). With its emphasis on shifting from positive self-evaluation to balanced self-reflection with kindness and nonjudgment of oneself, self-compassion has been suggested as an alternative conceptualization of a healthy attitude towards the self.

Neff (2003a) conceptualizes self-compassion as showing understanding and care for oneself when faced with suffering and difficulties to generate a sense of well-being that is rooted in the experience of being human. Preliminary findings on self-compassion have indicated positive association with overall psychological well-being. Self-compassion has been reported to be related to positive psychological variables such as optimism and happiness, as well as personal initiative, curiosity, and exploration (Neff, 2009; Neff, Rude, *et al.*, 2007). Unlike the common misconception that being self-compassionate is being self-indulgent, self-compassion has been shown to be associated with self-improvement and motivation (Breines & Chen, 2012), as well as with eudemonic happiness, which involves purpose and meaning in one's life (Ryan & Deci, 2001).

A series of studies has indicated that self-compassion is not only associated with positive psychological variables, but also negatively associated with psychopathology (e.g., Diedrich *et al.*, 2016; Gilbert & Procter, 2006), suggesting self-compassion as a predictive correlate of mental health. A meta-analysis conducted by MacBeth and Gumley (2012) indicated that self-compassion is negatively associated with common expressions of psychopathology such as

depression, anxiety, and stress. These studies are consistent with the findings from Neff's initial research (2003b), in which self-compassion was found to be negatively associated with self-criticism, depression, anxiety, rumination, thought suppression, and neurotic perfectionism, and positively correlated with life satisfaction and social connectedness. Neff (2003b) explained these associations by conjecturing that when individuals are faced with negative events, self-compassion helps them to respond less extremely, to engage in fewer spiraling thoughts of worrying, and to experience more positive emotions. This has been further supported by another study (Neff *et al.*, 2007) in which individuals with higher self-compassion reported fewer anxiety symptoms compared to those with lower self-compassion after they were prompted reflect and write about their greatest weaknesses, suggesting buffering effects of self-compassion.

Several studies also suggest that self-compassion may be a helpful practice in enhancing adaptive functioning in the midst of challenging life events. Leary and colleagues (2007) found higher self-compassion to be related to lower negative affect when an individual is exposed to frustrating events (Leary *et al.*, 2007), further supporting that self-compassion may buffer individuals against the negative effects of challenging situations. They conjectured that by developing perspectives that provide realistic self-appraisals with less negativity bias (Leary *et al.*, 2007), self-compassion may increase growth-related outcomes such as self-regulated learning and more willingness to incorporate feedback (Kim *et al.*, 2010). Such preliminary findings have prompted researchers to implement compassionate practice towards oneself in different work settings. For example, among healthcare professionals, coping with isolation and practicing mindfulness were suggested as the potential targets in a well-being program (Benzo, *et al.*, 2017).

Self-Compassion Interventions

Given the positive relationship between psychological well-being and self-compassion, as well as the negative relationship between self-compassion and various mental disorders, several self-compassion intervention studies have been conducted in both general and clinical populations to explore the potential benefits of fostering compassion toward oneself.

Compassion-Mind Training (CMT), developed by Gilbert and Proctor (2006), involves developing new self-to-self relations that are rooted in kindness, care, and warmth and generating a compassionate insight. Preliminary research on CMT with clinical populations demonstrated a significant impact on reducing depression, anxiety, self-attacking, feelings of inferiority, submissive behavior, and shame (Gilbert & Proctor, 2006).

Building upon CMT, Compassion-Focused therapy (CFT) was developed by Gilbert (2009) to help individuals address their self-critical and self-perceived shameful moments. The treatment goal of CFT is to help individuals cultivate and maintain a compassionate mindset in their daily functioning as well as cope with distress associated with psychological disorders (Gilbert, 2010). CFT has been used in the treatment of social anxiety (e.g., Boersma *et al.*, 2015) and eating disorders (e.g., Gale *et al.*, 2014; Goss & Allan, 2010), as well as to support general mental health for nonclinical populations (e.g., Sommers-Spijkerman *et al*., 2018).

Neff and Germer (2013) developed a mindfulness self-compassion program (MSC) designed to enhance emotional resilience and overall psychological well-being (Neff & Germer, 2013). The MSC program is an 8-week training with weekly 2-hour sessions that involved topics such as introduction to self-compassion and mindfulness, coping strategies for difficult emotions and interpersonal relationships, and ways to appreciate positive aspects of oneself and one's life. To assess the effectiveness of the MSC program, the authors conducted a pilot randomized

controlled trial with the general population. Compared with the wait-list control group, participants in the MSC program showed reduced anxiety and stress levels and a lasting positive effect on life satisfaction at a one-year follow-up (Neff & Germer, 2013). A similar finding has been reported by Germer and Neff (2013) in a case study with an adult man who had been in psychotherapy for anxiety and depression.

These preliminary studies suggest that self-compassion interventions help individuals build a healthier relationship with themselves and address negative thoughts and feelings associated with the self in a number of psychiatric disorders. It is reasonable to suggest that a clinical population characterized by high levels of self-criticism such as individuals with eating disorders may particularly benefit from showing compassion towards the self.

Self-Compassion, Body Image, and Eating Disorders

Individuals struggling with body image disturbances and eating disorders are characterized by high levels of self-criticism (Fennig *et al.*, 2008), which involves maladaptive emotion regulation process that arises when individuals cope with shortcomings of inadequate or inferior perceived self (Gilbert *et al*., 2004). This sense of inferiority leads to critical self-evaluation, which can contribute to a drive for thinness and lead to disordered eating in an effort to rectify perceived flaws or cope with emotional distress (Dunckley & Grilo, 2007; Pinto-Gouveia *et al.*, 2014). As an emotional regulatory strategy that teaches self-acceptance despite one's imperfections, self-compassion introduces an alternative way of thinking about one's body that has clear potential for alleviating the suffering associated with body dissatisfaction (Albertson *et al.*, 2015). According to Albertson and colleagues (2015), each component of self-compassion plays a critical role in mitigating body image disturbances. First, being kind and understanding instead of harsh and judgmental toward oneself directly counters the root of body

dissatisfaction, which involves self-criticism and negative evaluation of one's own body. Second, having a sense of common humanity, which allows one to recognize imperfection as part of human nature, may address body dissatisfaction and body shame that stem from not meeting societal ideals. Finally, being mindful of painful thoughts and feelings about one's body, and learning to relate to such experiences without over-identifying with disliked physical characteristics, may further mitigate body dissatisfaction.

Several studies have suggested that self-compassion is negatively correlated with body image disturbance and disordered eating behaviors (e.g., Adams & Leary, 2007; Barnett & Sharp, 2016; Braun *et al*., 2016; Duarte *et al.*, 2015). One study found that the effect of maladaptive perfectionism on body image satisfaction was mediated by self-compassion (Barnett & Sharp, 2016), consistent with a previous finding that self-compassion is positively associated with body image satisfaction (Wasylkiw *et al.*, 2012). Recently, a significant negative association was observed between self-compassion and body dysmorphic symptoms (BDS) among adolescents (Allen *et al.*, 2020). Veale and Gilbert (2014) suggest that it may be helpful to integrate a self-compassionate approach into CBT for BDS, through addressing shame and self-criticism, exploring the roots of fear and concerns associated with body image (e.g., rejection, isolation), and cultivating skills to develop empathetic understanding towards the self.

Given previous research that suggests a negative relationship between body image disturbances and self-compassion, researchers have begun to conduct intervention research. In one study (Gale *et al*., 2014), CFT was used in combination with CBT, which is widely viewed as the treatment of choice for patients with eating disorders. After the four-week psychoeducation period, 20 sessions were delivered over 16 weeks. The results indicated that participants showed reduced eating disorder symptoms measured by Eating Disorder

Examination Questionnaire (EDE-Q; Fairburn & Beglin, 1994). In a separate study, Albertson and colleagues (2015) conducted a randomized controlled trial of a 3-week self-compassion meditation intervention with adult female participants with body image concerns. Compared to the waitlist control group, participants in the intervention group reported significant reductions in body dissatisfaction, body shame, the extent to which one's worth is based on appearance as well as increases in body appreciation and self-compassion. Improvements were maintained at three-month follow-up.

An exercise that involves writing a compassionate letter to the self over a two-week period has also been shown to reduce body-specific and general senses of shame and fear of showing compassion towards the self among nontreatment-seeking individuals with typical and atypical anorexia nervosa (Kelly & Waring, 2018). Notably, this study indicated considerable day-to-day variability in the level of self-compassion, suggesting the need to assess self-compassion in a continuous, daily manner and to capture intraindividual processes involved in self-compassion, which may be examined in the self-writing exercises.

In addition to reducing body image concerns, self-compassion intervention may boost positive body image. Altman and colleagues (2017) reported a case study of mindfulness-acceptance based treatment with a 40-year-old-man who manifested a high level of body dissatisfaction. The results from the preliminary case study were consistent with a previous study conducted with women struggling with body image concerns in which self-compassion meditation increased body appreciation by raising body awareness in a kind, non-judgmental, and accepting manner (Albertson *et al.*, 2015).

In sum, the self-compassion interventions for body image concerns and eating disorders described to date have included a range of techniques such as psychoeducation, letter writing

exercise, meditation, and cognitive changes. Preliminary findings suggest potential benefits in reducing body image concerns and increasing positive body image, which may collectively address eating disorder symptoms. Overall, self-compassion and preliminary interventions designed to enhance it have indicated potential benefits that may be utilized flexibly across various disorders, suggesting that the topic warrants additional research and exploration. Because the correlates of self-compassion may vary across cultures and perhaps are tied to the assumptions of specific individual or cultural groups, it is also worth examining self-compassion, its correlates, and its potential positive functions while incorporating cultural context.

Cross-Cultural Studies of Self-Compassion

Neff and colleagues (2008) conducted a cross-cultural study among Thai, Taiwanese, and American undergraduate students to explore the relationship between self-construal and self-compassion. In this study, the United States was selected to represent Western cultures, while Thailand and Taiwan were selected to represent Asian cultures that reflect different ways of relating to the self. Western cultures are often identified as independent, with one's behavior strongly influenced by one's own thoughts, feelings, and actions, while Eastern cultures are often described as interdependent, with the assumption that one's behavior is contingent upon the thoughts, feelings, and actions of others (Markus and Kitayama, 1991). Within interdependent countries, however, self-to-self relations may vary. In Thailand, people's lifestyles and attitudes are greatly influenced by Buddhism (Limanonda, 1995), which emphasizes seeing suffering as part of human experience, understanding the temporary nature of every aspect of life, and showing compassion towards oneself and others (Neff *et al.*, 2008; Weisz *et al.*, 1988). Taiwanese cultures are strongly influenced by the values and teachings of Confucianism, which stresses the importance of good conduct, proper social relations, humility, and self-improvement

in order to harmoniously interact with one another as a group (Zhang, 2003). People are encouraged to examine themselves to identify and correct their faulty behaviors (DeVos, 1998), which is often reflected in the use of shame in Taiwanese parenting style (Neff *et al.*, 2008). The results of the comparative study indicated that Thai participants scored highest on the SCS while Taiwanese scored lowest. The authors conjectured that although Confucian values promote a constructive philosophical way of living a better life, the use of shame and harsh parenting styles may result in negative self-to-self relations among Taiwanese participants. The authors suggested that the average self-compassion level of American participants, which was intermediate to that of the Taiwanese and Thai samples, might be explained by the presence of both a competitive, hard-driving ethos and the emphasis on positive regard for oneself (Neff *et al.*, 2008; Taylor & Brown, 1988). This study indicates that the self-to-self relations may vary depending on specific cultural and philosophical values of different countries regardless of their self-construal, which may impact self-compassion scores for each population.

Yamaguchi and colleagues (2014) also conducted a cross-cultural study between American and Japanese undergraduate students to explore associations among self-construal, self-compassion, comparative versus internalized self-criticism, and depressive symptoms. It was found that in American samples, independent self-construal demonstrated a stronger relationship with both types of self-criticism while interdependent self-construal indicated a stronger relationship with both types of self-criticism among Japanese samples. This illustrates that the type of self-construal (i.e., interdependent vs. independent) may not be the factor that is associated with higher levels of self-criticism, a negative attitude that is linked to depressive symptoms (e.g., Thompson & Zuroff, 2004). In interdependent cultures, it is possible that the emphasis on interconnectedness may promote self-compassion while concerns associated with

social conformity and harsh self-regulatory discipline may hinder self-compassion (Yamaguchi *et al.*, 2014). By contrast, in independent cultures, care and concern for the self may increase self-compassion while the sense of isolation may undermine self-compassion (Yamaguchi *et al.*, 2014).

In research with a German population, it was found that self-compassion was significantly and negatively associated with measures of negative self-evaluations, anxiety, and depression (Coroiu *et al.*, 2018), but minimally associated with positive self-evaluations, which is contradictory to the previous studies (e.g., Neff, 2004; Neff *et al.*, 2007). By contrast, in a Greek sample, it was found that self-kindness, mindfulness, and common humanity were significantly and positively correlated with positive emotions, life satisfaction, and presence of meaning in life, and significantly and negatively related to negative emotions, stress, anxiety, and depression (Karakasidou *et al.*, 2017). These findings suggest that although both cultures are conceptualized as independent in self-construal ideology, the pattern of relationship between self-compassion and psychological constructs may vary depending on the specific group of people examined.

In sum, these studies illustrate that self-compassion has both similar and different patterns across different countries, likely because characteristic ways of relating to the self may be distinct across countries even among those that share broad cultural ideologies. This implies that self-compassion may be related differently to psychological well-being and mental health dimensions in different cultures, highlighting the importance of conducting cross-cultural studies before generalizing associations between elements of psychological well-being and self-compassion. It is possible as well that some translations of the SCS may fail to capture the construct's intended messages in the original scale. This underscores the importance of revisiting

the translation and psychometrics properties of the SCS in cross-cultural research to gauge whether the observed discrepancies are due to actual cultural differences rather than translational inequivalence.

South Korea and Cultural Background

South Korea may be an instructive focus for self-compassion research in view of its unique cultural and historical context as well as its high rates of mental health problems and body image concerns. As evident in previous cross-cultural studies among Thai, Taiwanese, and Americans, self-compassion levels may depend not only on self-construal but also on philosophical perspectives (e.g., Buddhism, Confucianism) taken by a specific population (Neff *et al.*, 2008). In South Korea, however, the values and virtues of both Buddhism and Confucianism are commonly instilled, making it difficult to predict whether the high self-compassion scores linked to the former or the low levels associated with the latter might prevail. This preliminary exploration may provide better ideas on how self-compassion is associated with one's attitude towards stressful and challenging situations, and generate possible approaches to self-compassion intervention that may be suitable for Korean populations.

South Koreans are commonly described as multi-religious. A large number of Koreans have family values based in Confucianism and take Buddhist perspectives when contemplating life, while also holding a Shamanist view of fate (Yun & Park, 2019). Confucianism and Buddhism have profoundly different world-views and intricate doctrines that have influenced Korean culture for at least 22 centuries and remain strongly influential in contemporary South Korea. Korean Buddhism is classified under the umbrella of Mahayana Buddhism, which centers on the teachings and values of Bodhisattva (Harvey, 2012). One of the central doctrines of Bodhisattva is the value of compassion and act of care (Lee, 2006). This renders a philosophical

perspective that "*nothing can exist apart from its relation to other things, which can only exist through their relation to other things that support them, and so on to infinity*" (Harvey, 2012). Korean Buddhism is also influenced by the spirit of Zen, which focuses on meditation (Doumouli, 2005; Jeong, 2012). The goal of this meditational practice is to seek and express one's pure, innate Buddha-nature, which underscores the values of awareness and compassion (Harvey, 2012). The Four Noble Truths of Buddhism emphasize temporary suffering such as loss of loved ones, sickness, pain, failure, and the impermanence of pleasure as part of the human experience. These core teachings and values of Korean Buddhism resemble those of self-compassion conceptualized by Neff (2003a, b).

These philosophical perspectives have been rooted in Korean culture since the revival of Buddhism after the Korean War when the nation suffered a downfall from the Japanese invasion. Subsequently, rapid industrialization contributed to a sense of anxiety and alienation, encouraging the pursuit of solace through religious activities (Yun & Park, 2019). This implies that for Koreans, Buddhism is not only a religion, but a philosophy of life that has helped the nation face difficult times in their history.

Korean values may also have contributed to the radical changes that occurred in South Korea in recent decades. Following the Korean War (1950 – 1953), Korea has transformed from one of the poorest countries to one of the most developed countries in Asia. This transformation is often characterized as miraculous because of its unparalleled pace: South Korea achieved economic growth in three decades, substantially faster than the century it took for many other industrialized countries (Kim, 1991). It is believed that Confucian values have played a significant role in the economic growth of South Korea, particularly in the development of a work ethic that catalyzed the industrial transformation (Kim & Park, 2003). Its emphasis on

diligence, hard work, education, and collectivistic lifestyle influenced the establishment of cultural and institutional basis for Korean capitalism and work ethics (Chan, 1996; Kim & Park, 2003). The Confucian value of complete allegiance underscored in the work environment also resulted in strong human capital force and smooth operation of the industrial bureaucracy (Kim & Park, 2003). Furthermore, Confucian values of respect and loyalty to authority figures as well as consensus and conformity in a group setting allowed formation of industrial organization characterized by cooperation, sincerity, responsibility, sacrifice, service, teamwork, and mutual respect (Chowdhury & Islam, 1993; Kim & Park, 2003). Other Confucian values such as self-cultivation and improvement also led South Koreans to prioritize education (Hassink, 1999), which in turn may have further boosted economic growth by contributing to country's intellectual capacities (Park, 2010).

Koreans perceive success as moving up the socioeconomic hierarchy, creating a competitive environment for both adolescents and adults in educational and occupational contexts. Kim and Dahlaman (1992) stated that a large part of South Korea's success in the later stage of the economic transformation was due to its heavy investment in human resources. The value placed on education is reflected in the finding that Koreans have the strongest parental commitment to education (Porter, 1990), as well as by the intensive academic hours promoted in Korean education system (Lee & Larson, 2000). Furthermore, the importance of good conduct, proper social relations, and humility to maintain group harmony encourages individuals to raise awareness of their own faults through self-examination (DeVos, 1998). These values help to explain why South Koreans are often disciplined by the use of shame and criticism (Hui and Triandis, 1986).

Thus, given the interplay of Buddhism and Confucianism in the everyday life of South Koreans, it is unclear how self-compassion and its associated correlates in previous research would be manifested in Korean populations. In a study conducted by Neff and colleagues (2008) with Thai, Taiwanese, and Americans, it was found that Buddhism-influenced Thai participants had the highest level of self-compassion, while Confucianism-influenced Taiwanese had the lowest level among the populations tested. Exploring self-compassion and its correlates while considering unique cultural values and practices that stem from both Confucianism and Buddhism may provide a better understanding of the context of mental health problems in South Korea.

Mental Health in South Korea

South Korea may particularly benefit from self-compassion research and interventions because a high number of Koreans suffer from the consequences of poor mental health. A nationwide epidemiological survey reported that the rate of depression is continuously increasing (Cho *et al.*, 2015), which can be partially explained by high levels of stress prevalent in both academic and occupational contexts (Jarvis *et al*., 2020; Park *et al.,* 2009) and a low treatment rate for individuals with depression (Cho *et al.*, 2011). South Korea is reported to have high rates of suicide across all ages (Lee, Hong, *et al*., 2010), ranking first among OECD countries (Organization for Economic Co-operation and Development [OECD], 2019).

In Korean society, academic stress is a significant factor that may contribute to problems with mental health. Consistent with Confucian values of hard work and education (Hassink, 1997), Korean values include a strong expectation and aspiration pertaining to high academic achievement (Lee, Puig, *et al.*, 2010). Attending a prestigious college is considered as an indicator of success and a medium to improve one's social status (Sorensen, 1994). South Korea

has achieved remarkable success in educational achievement by ranking first among OECD countries for completing 12 years of education (OECD, 2019), and attaining one of the highest average achievement test scores in the world (Korea Institute of Curriculum and Evaluation, 2005). However, despite this record of success, Korean students have among the lowest self-perceived levels of academic competence (Korea Institute of Curriculum and Evaluation, 2005), which may be indicative of self-critical thoughts and lack of mindfulness.

The intense pressure for academic performance begins as early as elementary school. Several studies have reported high levels of concern regarding test scores among elementary students (Han, 2005; Yang *et al.*, 2005). Consistently, adolescents in South Korea are under great academic pressure due to the highly competitive educational environment and college entrance examination (Shin & Kim, 2014). South Korean students spend twice as much time as American students on schoolwork (Lee & Larson, 2000), often attending private tutoring institutes outside of school rather than spending time on social activities, leisure, and sleep (Chung *et al.*, 1993; Lee & Larson, 2000). Consequently, South Korean students have identified academic stress as the biggest stressor in their life (Hwang, 2006), indicated by high levels of emotional exhaustion, cynicism, and negative self-esteem (Lee, Puig, *et al*., 2010).

This chronic stress related to academic performance extends to the work environment as well. In Korean society, the rapid social, economic, and cultural changes have contributed to occupational stress (Chang *et al.*, 2005; Khang *et al.*, 2005; Kim *et al*., 2006). With an increasing rate of precarious employment and decreasing job security, Koreans have experienced substantial occupational strain in recent years, with the current labor market situation identified as a major problem in the Korean healthcare system (Yoo *et al*., 2016). South Korea is identified as the most difficult country in which to transition from precarious to permanent jobs (OECD, 2013).

Furthermore, it is also reported that even after enduring academically competitive environment in order to go to college, the amount of premium wage earned from a tertiary qualification is below the average among OECD countries (OECD, 2019). It is perhaps not surprising that adults working in this context become anxious, self-critical, and harsh on themselves in an effort to survive in the competitive employment environment.

Immersion in such stressful academic and work environments may contribute to the development of mental disorders. Prolonged exposure to severe academic stress has been suggested to bring negative consequences to mental health, as evidenced by the high prevalence rate of depression reported among South Koreans between 15-18 years old (Park & Kim, 2011). In the occupational context, longitudinal research indicates that precarious employment has a lasting relationship with depression (Yoo *et al*., 2016), and is associated with the development of severe depressive symptoms (Jang *et al*., 2015). Additionally, the work environment characterized by collectivism and hierarchical relationships (Yun, 2006) may be related to depressive symptoms (Park *et al*., 2009). Confucian values (e.g., collectivism and respect to authority figures; Hassink, 1997) that are prevalent in work culture pressure employees to participate in informal after-work dinners (usually involving heavy alcohol consumption) to please supervisors and participate in work-related tasks (Park *et al.*, 2009). It is estimated that one in four Koreans will suffer from depressive symptoms and one in eleven will experience severe depression in their lifetime (Cho *et al*., 1998).

In Korea, suicide is the fifth leading cause of death, ranking higher than deaths caused by diabetes, cirrhosis, and hypertension (Statistics Korea, 2017). It is reported that suicide is the most common cause of death in adolescent populations (Im *et al.*, 2017), with multiple suicides reported each year due to failure of college entrance exams (Kim & Cho, 2011; Oh, 2009).

Korean adolescents have the highest rate of suicidal ideation and attempts among all age groups (Statistics Korea, 2017). Among suicide attempters, 75.3 percent experienced more than one mental disorder, which further highlights the importance of addressing the consequences of poor mental health (Cho *et al*., 2011).

In view of the challenging academic and career environments and the high rates of stress, perceived incompetence, and suicide attempts among South Koreans, self-compassion may be particularly helpful in improving resilience and well-being.

Self-Compassion Studies in South Korea

To examine the potential benefits of self-compassion in South Korean populations, Cho and colleagues (2011) explored self-compassion and its relationship to mental disorders. Results indicated that self-compassion moderated the negative effect of stress and self-criticism on the development of depression. A meta-analysis conducted by Kim and colleagues (2017) illustrated significant, positive associations between self-compassion and positive affect, positive interpersonal relationships, and psychological well-being, while depression, anxiety, and stress as well as negative interpersonal relationships were found to be significantly and negatively correlated with self-compassion.

Park and Lee (2015) conducted a comparative study between self-esteem and self-compassion enhancement programs with Korean young adults, both consisting of a total of six 2.5-hour sessions. Both programs resulted in decreased symptoms of depression and borderline personality disorder, and increased level of satisfaction with life. When compared to the self-esteem enhancement program, the self-compassion enhancement program was found to be more effective after a one-month follow-up, which was evidenced by persistent improvements. In a separate study (Kang & Jang, 2017), the use of a mindful self-compassion program (Neff &

Germer, 2013) with highly self-critical college students resulted in increased levels of self-compassion, positive affect, and psychological well-being, as well as decreased levels of self-criticism and negative affect. More recently, Noh and colleagues (2020) conducted a Mindful Loving-kindness Compassion intervention study among highly self-critical Korean undergraduate students. The results indicated that mindfulness meditation, and loving-kindness and compassion practices led to a decrease in shame, self-criticism, depression, anxiety, stress, as well as an increase in self-reassurance, mindfulness, compassion, and life satisfaction. One month and three-month follow-up assessments indicated that these changes persisted.

These preliminary studies imply that self-compassion research has gained increasing attention in South Korea particularly with an aim to promote psychological well-being and address psychological distress. As evidenced by intervention studies, self-compassion that teaches positive attitude and resiliency in the midst of stressful, competitive, and challenging situations may be a meaningful treatment approach that may support mental, emotional, and psychological health. However, before conducting intervention studies, it is desirable to thoroughly investigate how Koreans perceive self-compassion and to explore its relationship with various psychological well-being and mental health indices. The body image and eating disorder field is another arena that may benefit from research on self-compassion in Korean populations. It is important to begin such inquiry by considering the ecocultural context.

South Korea, Body Image Disturbances, and Eating Disorders

Until recent decades, women from East Asian countries (i.e., China, Korea, and Japan) were assumed to be at very low risk for the development of body dissatisfaction, pathological weight concerns, and disordered eating (Jung & Forbes, 2007). This can be partly explained by the traditional beauty standards that valued round faces and plump body shapes (Han, 2003)

while considering slenderness as an indicator of poverty and poor health (Lee, 1999). However, the belief that eating disorders, dieting, and weight concerns were restricted to Western countries no longer holds true (Gordon, 2001; Keel & Klump, 2003; Pike & Dunne, 2015). This apparent change in prevalence can be better understood by considering the historical and ecocultural context of South Korea.

With reference to self-construal, Korean culture can be defined as interdependent, with people constructing their sense of self within a broader social context, with individuals' behaviors determined by and contingent upon the thoughts, feelings, and actions of others (Markus & Kitayama, 1991). In such cultures, actions tend to be influenced more by social norms than by personal concerns and interests (Triandis, 1989), and are often controlled by shame (Hui & Triandis, 1986). With reference to physical appearance, thinness is considered the normative body ideal (Brewis *et al.*, 2016) and the key to self-presentation (Han, 2003; Kim, 2014). The combination of the thin-ideal and emphasis on conformity may explain why Koreans are highly concerned with dieting and body size regardless of their actual weight (Han, 2003). It may also account for burgeoning rates of eating disorders (Pike & Dunne, 2015), which were previously considered culture-bound syndromes found principally in Western cultures (Prince, 1985).

Several comparative studies suggest that problematic eating attitudes and body dissatisfaction in South Korea are now comparable to or higher than those in Western countries (Jung *et al.*, 2009; Jung & Forbes, 2006; Tsai, 2000). A study with Korean, Chinese, and American samples demonstrated that body dissatisfaction, distorted perception of weight and body image, and disordered eating behaviors were more widespread in South Korean samples compared to American and Chinese samples (Jung & Forbes, 2007). In fact, South Korea was

reported to be the most diet-conscious country among Asian countries that belong to the OECD (Oh, 2004), consistent with other studies indicating a high prevalence of weight control behaviors in Koreans (Lim *et al.*, 2015; Wardle *et al.*, 2006). Another study indicated that native South Koreans and South Korean immigrants to the United States reported significantly higher scores on eating disorder symptoms, measured by the Eating Attitude Test-26, when compared to Korean Americans (Jackson *et al.*, 2006). These findings may be further understood by examining the cultural and contextual characteristics unique to South Korea that may have contributed to the widespread of body dissatisfaction and thin-ideal internalization.

In Korean society, everyday conversation commonly includes weight-related comments (Kim, 2014; Schwekendiek *et al.*, 2013). Media sources frequently make degrading references to individuals with large bodies, casting these remarks as humorous (Lim & Kim, 2012), while praising those who are tall, muscular, or thin (Kim, 2005). The prevalence of these messages may contribute to the finding that South Koreans tend to perceive themselves as overweight or obese even when they are within the normal range of weight (Lim *et al.*, 2015), and are more likely to overestimate their weight compared with individuals in other East Asian countries such as Taiwan (Noh *et al*., 2018). Given the prevalence of body image disturbances and disordered eating behaviors in South Korea, self-compassion that promotes self-acceptance, self-love, and non-judgmental views of the self (Albertson *et al.* 2014; Neff, 2003a, b) may be a characteristic from which Koreans can benefit to mitigate eating and weight concerns and foster a positive body image.

Overall, the brief summary of mental health issues, including those linked to eating disorders, indicates that self-compassion may be a potentially beneficial intervention tool that may promote mental health and psychological well-being. However, it is important to consider

the translation, cultural appropriateness, and psychometric properties of the previously translated SCS before pursuing additional research in this field. Without accurate measurement, findings from self-compassion studies may not be meaningful.

Cultural Considerations in Translation of Measures

It is common in the field of psychology for clinicians and researchers to adopt measures that were developed in other countries. Since the development and validation of the SCS, the measure has been widely used in various domains of mental health (e.g., depression, anxiety disorder, eating disorders, stress) across culturally diverse populations (e.g., Albertson *et al.*, 2015; Aritmitsu *et al.*, 2019; Bakker *et al.*, 2019; Chishima *et al.*, 2018; Dundas *et al.*, 2016; Neff *et al.*, 2008). As discussed extensively elsewhere (e.g., Haynes *et al.*, 2018), the psychometric soundness of a measure established for a particular language and country does not guarantee its reliability and validity in other languages and countries.

One indispensable factor to consider in the process of translation and validation of measures is the incorporation of the country's cultural beliefs and values, as these attitude shape people's understanding, interpretation, and response to measurement instruments (Warnecke *et al.*, 1997). Failure to consider cultural characteristics may result in inconsistency with the original measure (Sidani *et al.*, 2010). The use of previously developed measures in cross-cultural research is meaningful only when the translated scales are consistent with the cultural beliefs of the targeted population (Sidani *et al.*, 2010). Another factor to consider is measurement invariance, which refers to the degree to which a measure derived and validated with one cultural group shares a common validity, meaning, and relevance when used with a culturally different group (Chin & Kameoka, 2006). Establishing measurement invariance between the original and

translated measure is critical because the use of previously developed measures is warranted only when the translated instrument is reliable, valid, and culturally appropriate (Cha *et al.*, 2007).

Researchers need to design careful translation procedures that retain the content of the original scale, ensure sound psychometric properties, and consider the quality of the translation and cultural factors when using previously translated versions of the scales (Behling & Law, 2000). To examine the accuracy of the translated SCS for the present study, the previously translated K-SCS (Kim *et al.*, 2008) was reviewed.

Korean Version of the Self-Compassion Scale

Kim and colleagues (2008) translated the SCS to create a measurement tool for South Koreans (K-SCS) and examined its properties in a sample of Korean college students. More specifically, SEM was used to examine whether the K-SCS had a factor structure consistent with the original SCS and to evaluate model fit of the three-factor structure, six-factor structure, and a single higher-order structure of self-compassion. Results revealed that the six-factor structure provided a moderate model fit, which was further improved by adjusting some items in the questionnaire to be included in two subscales (cross loading) and by correlating the error terms for some items. This modified six-factor structure provided a good model fit among Korean college students.

Nonetheless, a review of the K-SCS suggests some bases for concern about this version of the scale. Kim and colleagues did not specify whether the translators were bilinguals who had an in-depth understanding of both Korean and American culture, as recommended by Brislin (1970). Such knowledge is crucial to ensure that translators can capture nuanced phrases and deliver the intended meaning of the items. For example, a decentering translation procedure may

be required when direct translation does not successfully convey the contents of the original scale (Brislin *et al.*, 1973).

Furthermore, the intercorrelations among subscales of the K-SCS differed from those of the original SCS. For example, self-judgment and self-kindness are positively related in the K-SCS, but negatively in the SCS. Although Neff (2003b) stated that endorsing one component of self-compassion does not mean that an individual cannot endorse another component of self-compassion and that it is possible that cultural differences lead to different interrelations among the six components of the scale, it is yet unclear whether the different pattern of association is due to translational issues or cultural differences. Finally, the K-SCS was developed before Neff (2016) suggested the use of a bifactor model in analyzing the model fit of the scale, suggesting that it may be desirable to revisit the K-SCS.

Accordingly, there are a number of bases for suggesting that retranslation of the SCS should precede further research on the nature and correlates of self-compassion in South Korean populations. In order to address the issues raised above regarding the current K-SCS, it seems necessary to recruit bilinguals who are not only fluent in both languages, but also knowledgeable in both cultures. A thorough examination of self-compassion and its relevant constructs as well as cross-cultural research can only proceed after a thorough examination of the translated SCS and its psychometric properties.

Current Study

Findings from previous research suggest that practicing self-compassion may have significant benefits for the mental health of Koreans. However, given that South Korean culture includes both Buddhist and Confucian values, it is not clear how these influences will interact to affect average levels of self-compassion in Korean populations. It is also possible that self-

compassion may show different patterns of association with other psychological variables in different countries, as suggested by a German study that found minimal relationship between self-compassion and psychological well-being in general population (Coroiu *et al.*, 2018).

In order to examine self-compassionate attitude and its association with constructs studied in previous research, the current explored self-compassion and its association with: self-construal; psychological distress such as stress, anxiety, and depression; eating disorder symptoms and body image disturbance; psychological well-being and life satisfaction. As an initial step, the SCS was retranslated and examined for its translational equivalence and psychometric properties. In the process of model assessment, a bifactor model and six-factor correlated model were used as recently suggested by Neff (2017).

Pilot Investigation

Previously, feedback was collected from 15 native Korean speakers who graduated from Seoul Women's University or Yonsei University and 15 Korean students who graduated from Emory University or University of Hawai‘i at Mānoa (UH) and are bilingual in English and Korean. The purpose of collecting feedback from the bilingual Koreans was to examine whether the translated phrases are captured better by English speakers who may be more exposed to phrases and idioms that are characteristic of English. Discussion groups were held by the researcher separately for these two groups, each involving three participants who evaluated the meaning and clarity of the K-SCS. Feedback from these groups indicated similar concerns, with participants noting that the wording of some sentences was confusing, vague, and/or awkward. Some of the translated items were also deemed to convey different meanings from the original items. For example, the use of the Korean word "gotong (고통)" that was used to refer to "suffering" conveys a sense of physical pain, contrary to the broader meaning of the term in

English that may refer to emotional, psychological, and physical challenges. The phrase “down and out” was translated as “galpangjilpang (갈팡질팡)”, which was understood by both native and bilingual Koreans as emotional ups and downs. Furthermore, “failings” was translated as “silpae (실패)”, which means failure, rather than shortcomings or weaknesses. This preliminary examination of the K-SCS suggested that retranslation of the measure is warranted to clarify some of the words that connote different messages and to capture American idioms in a more comprehensible manner.

In the retranslation process, the current study considered each of equivalence problems described by Sechrest and colleagues (1972). After translation and back-translation procedures were completed, bifactor ESEM as well as six-factor CFA analyses were conducted to examine whether the newly translated version has the same factor structure as the SCS, using a Korean sample that includes participants across a wider age range. After analyzing the model fit of the translated items, measurement invariance tests were conducted between the SCS and the New K-SCS. Lastly, the New K-SCS was examined in relation to other related constructs such as self-construal, happiness, life satisfaction, negative emotions, and eating disorders. These patterns of associations were compared with an American population.

Although there was no clear basis for hypothesizing whether general levels of self-compassion among Koreans would be high or low relative to other tested populations, it was anticipated that a similar pattern of relationship would be obtained, with self-compassion positively predicting self-esteem, life satisfaction, and subjective happiness, and negatively predicting depression, stress, anxiety, thin-ideal internalization, and eating disorder symptoms.

Identifying similarities and differences in the level and correlates of self-compassion across Korean and American samples may enhance our understanding of cultural influences on

self-compassionate attitudes. Specifically, the results may be useful in understanding the influences of Buddhist and Confucian values on Koreans' tendency to show compassion towards the self. The findings may also inform efforts to generate self-compassion interventions that specifically target Korean populations.

Methods

The current research was conducted in collaboration with the Sociocultural Laboratory run by Professor Young Hoon Kim at Yonsei University in South Korea. The current research was conducted via online survey portals: Amazon Mechanical Turk (MTurk) for American participants and Data Spring for Korean participants. Both provided $1 for those who completed the survey, funded by the Social Sciences Korea Institute department of National Research Foundation of Korea. With the funding supported by the National Research Foundation of Korea, the initial IRB (Institutional Review Board) application was approved by the Yonsei University IRB; subsequently, the UH IRB approved the application, designating the current study as Non-Human Subject Research.

It is important to note that there are potential limitations to using online survey platforms to collect survey data. Several researchers have raised concerns such as increased likelihood of participant inattention (e.g., Meade & Craig, 2012; Zhou & Fishbach, 2016), which impacts the accuracy of results. Potential threats and risks to using online survey platforms, as well as efforts made to mitigate them, will be discussed further in a subsequent section.

Participants and Recruitment

Participants were recruited from an online survey portal. Inclusion criteria for the Korean sample were Korean citizenship and age 18 or older. For American participants, inclusion criteria specified American citizenship and age 18 or above. Participants were recruited via

MTurk for Americans and Data Spring for South Koreans. The project was described as an assessment of attitudes towards the self. After providing informed consent, interested individuals completed self-report measures.

For the Korean group, a total of 837 respondents attempted to answer the survey. Among these, 209 failed to answer the attention check items correctly, 32 did not meet the qualifications for the study (e.g., younger than 18 years old), and 86 did not fully complete the survey. Overall, responses from 510 Korean participants (47.5% male; M_{age}= 43.32 [SD = 13.08]) were used in the current study. For the American group, responses from a total of 747 people were collected. Among these respondents, 54 failed to answer the attention check items correctly, 34 did not meet criteria for the study, and 196 did not finish the survey. Data from 463 American participants (59.6% male; M_{age}= 36.69 [SD = 10.44]) were used for the current study.

Translation Procedure

Translators for the study were volunteers drawn from alumni of Emory University or Yonsei University, who met the following criteria: the individual has (a) lived in both countries for at least 4 years during middle school, high school, and/or college, (b) is proficient in both languages, and (c) graduated from college. Following the guidelines provided by Brislin (1970) and Sinaiko and Brislin (1973), the SCS used for Korean participants in the study was translated from English to Korean by a translator and then back-translated to English by another translator. Then, a group of three other translators compared the original and back-translated versions to evaluate concept equivalence. Any discrepancies between the two versions were addressed by retranslation of that item by the group of translators. This third step was repeated with a new group of translators until both versions were judged to have the same content. The third step of this sequence is referred to as the decentering procedure, which focuses on the meaning and

context of the instruments rather than on verbatim literal translation (Brislin, 1970; Werner & Campbell, 1970). Five considerations are outlined for achieving translational equivalence.

Five Considerations in Translational Equivalence

When using decentering procedures, translators in the present study considered five problems of equivalence: vocabulary, idiomatic, grammatical-syntactical, experiential, and conceptual equivalences (Sechrest *et al.*, 1972). Vocabulary equivalence problems may arise when there is no direct translation of an English word in Korean. In this case, the translators were instructed to find phrases in Korean that mean the same as the English word. Idiomatic equivalence problems happen when English idioms are directly translated to a Korean sentence that conveys a different meaning. In such instances, translators were directed to capture the meaning of the idioms and translate that message into Korean. Grammatical-syntactical equivalence problems are not uncommon, particularly for long passages, as different languages have different grammar and syntax. However, the SCS items have simple sentence structures using 9 to 23 words; as a result, grammatical-syntactical equivalence problems did not arise during the translation process. Experiential equivalence problems may happen when translators lack cultural experiences particular to the country in which the original measure was developed, which impacts how the statement is interpreted. In order to address this problem, the translators discussed the meaning of each item while considering the cultural context of the participants. Finally, the conceptual equivalence problem, which can arise when the same word in English and Korean has different meanings in a situation, was assessed by discussing the meaning of the word in a particular context described in the item. These five translation equivalence problems were carefully considered by the translators of the present study while following the Brislin's (1970) back-translation method.

Prior to translating the measure, a training session was held to inform the translators regarding the decentering technique and Brislin's (1970) back-translation method. Examples were provided for each of the five considerations used in the decentering techniques and for the back-translation process. The translators practiced both English to Korean and Korean to English translations with items from another measure not used in the present study. Additionally, they were assigned to groups of three and practiced identifying and addressing discrepancies between the original and translated measure. After the training session, an information sheet detailing these five considerations was provided to the translators, and they were asked to mark particular problems they addressed for each item in the translation process for the SCS.

Materials and Measures

A total set of nine measures were assessed for all participants. For measures other than the New K-SCS, previously translated versions were used for Korean participants. The order of the measures is consistent for both American and Korean participants: 1) Demographics, 2) Sociocultural Attitude Towards Appearance Questionnaire – 4 (SATAQ-4), 3) Self-Compassion Scale, 4) Rosenburg's Self-Esteem Scale (RSES), 5) Self-Construal Scale, 6) Depression, Anxiety, and Stress Scale – 21 (DASS-21), 7) Subjective Happiness Scale, 8) Satisfaction with Life Scale (SWL Scale), and 9) Eating Attitude Test – 26 (EAT-26).

Demographics

All participants provided their age, date of birth, educational background, and race. They were also asked to report current/prior psychiatric diagnoses, their experiences with yoga, mindfulness meditation, and/or self-compassion, and religious affiliation.

Internalization and Pressures of Body Image Ideals

The Sociocultural Attitudes Towards Appearance Questionnaire-4 (Schaefer *et al.*, 2015; Appendix A) is a 22-item survey that assesses internalization of appearance ideals and appearance pressures, and is comprised of 5 subscales. The Internalization of Appearance Ideals scale includes two subscales: muscularity/athletic and thin/low body fat subscales. The Appearance Pressures scale assesses perceived pressure from family, peers, and media to meet certain body ideals. Items are rated on a 5-point scale (1 = *definitely disagree*, 5 = *definitely agree*) and include questions such as "I want my body to look very lean" and "I feel pressure from my peers to look in better shape." Subscales are scored by obtaining the average of the corresponding items, with higher scores indicating higher ideal appearance internalization and pressures. Schaefer *et al.* (2015) studied this measure with U.S female, non-US female, and male samples. Cronbach's alphas for the SATAQ-4 subscale scores were .82 or higher for US female, .84 or higher for non-US female, and .75 or higher for men. A Korean version of the SATAQ-4 has been widely used across various populations including female adolescents (Lee, 2014) and female adults (Lee & Lee, 2017, 2019). Lee and Lee (2019) examined the psychometric properties of SATAQ-4 with 379 female adults and reported Cronbach's alphas of .89 or higher for all subscales. In the current study, McDonald's omega (ω) was .91 and Cronbach's alpha (α) was .91 for the Korean sample; McDonald's omega (ω) was .95 and Cronbach's alpha (α) was .95 for the American group.

Self-Compassion

The Self-Compassion Scale (Neff, 2003b; Appendix B) is a 26-item survey that assesses the three dimensions of self-compassion: self-kindness, mindfulness, and common humanity. The items are rated on a 5-point scale (1 = *almost never,* 5 = *almost always*). The survey includes

questions such as “I try to be loving towards myself when I’m feeling emotional pain” and “When something upsets me, I try to keep my emotions in balance.” Items are averaged for each subscale, and subscale scores are summed to yield an overall score, with higher scores reflecting greater self-compassion. In a study with 232 undergraduate students in the United States (Neff, 2003b), psychometrics properties for the SCS demonstrated good internal consistency (Cronbach’s alpha = .94) and test-retest reliability (r = .94). The scale shows evidence of convergent validity with the Satisfaction with Life Scale (r = .45, p < .01) and divergent validity with the Beck Depression Inventory (r = -.51, p < .01) and Speilberger Trait Anxiety Inventory (r = -.65, p < .01). The newly translated version of the K-SCS constructed for this study is referred to as the New K-SCS. In the current study, McDonald’s omega (ω) was .92 and Cronbach’s alpha (α) was .92 for the Korean sample, and .76 and .83 respectively for the American sample.

Self-Esteem

The Rosenberg Self-Esteem Scale (Rosenberg, 1965; Appendix C) is a 10-item measure of global trait-level self-esteem. Items are rated on a 4-point scale (1 = *Strongly agree*, 4 = *Strongly disagree*) and include questions such as “I feel that I have a number of good qualities”. Scale items are summed to obtain an overall score, with higher scores reflecting greater self-esteem. A study of 508 undergraduate students (Robins *et al.*, 2001) indicated good internal consistency (Cronbach’s alpha = .88), convergent validity with the Overall Life Satisfaction Scale (r = .54, p = < .01), and divergent validity with the Perceived Stress Scale (r = -.39, p < .01). Lee and colleagues (2009) translated the measure to Korean and examined its psychometric properties with 3,498 participants. The translated measure reported good internal consistency indicated by Cronbach’s alphas ranging from .75 to .87 across various populations

including child, adolescent, and adult populations. In the current study, McDonald's omega (ω) was .90 and Cronbach's alpha (α) was .89 for the Korean sample; McDonald's omega (ω) was .73 and Cronbach's alpha (α) was .72 for the American sample.

Self-Construal

The Self-Construal Scale (Singelis, 1994; Appendix D) is a 24-item measure that assesses how individuals view themselves in relation to others. The measure includes independent and interdependent subscales, each with 14 questions. Items are rated on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*) and includes questions such as "Speaking up during a class is not a problem for me" and "It is important to me to respect decisions made by the group." Each subscale score is obtained by adding corresponding items. One study of the psychometric properties of the measure included 421 undergraduate students (Wang, 2000). The scale demonstrated acceptable internal consistency, indicated by Cronbach's alphas of .74 for the independent subscale and .70 for the interdependent subscale. Sung and Choi (2012) translated the measure to Korean and examined its psychometric properties in a sample of 215 undergraduate students from two universities. The study reported acceptable internal consistency indicated by Cronbach's alphas of .70 for the independent subscale and .72 for the interdependent scale. In the current study, McDonald's omega (ω) was .78 and Cronbach's alpha (α) was .78 for the interdependent subscale for the Korean group; McDonald's omega (ω) was .88 and Cronbach's alpha (α) was .87 for the American group. For the independent subscale, McDonald's omega (ω) was .78 and Cronbach's alpha (α) was .78 for the Korean sample, and.88 and .87 respectively for the American sample.

Negative Emotions

The Depression, Anxiety, and Stress Scale-21 (Lovibond & Lovibond, 1995; Appendix E) is a 21-item version of the original 42-item scale. DASS-21 assesses three related negative emotional states of depression, anxiety, and tension/stress. Items are rated on a 5-point scale (0 = *did not apply to me at all* and 5 = *applied to me very much or most of the time)*. The survey includes questions such as "I found it hard to wind down" and "I experienced trembling (e.g., in the hands)." Subscale scores are obtained by adding corresponding items multiplied by two. The overall score is the sum of the three subscales. Antony *et al.* (1998) examined the psychometric properties of the measure in a sample of 307 participants, including clinical and nonclinical subgroups, and reported Cronbach's alphas of .94 for Depression, .91 for Anxiety, and .87 for Stress. Lee and colleagues (2019) translated the measure to Korean and examined its psychometric properties in a sample of 430 adults from community health care centers (nonclinical subgroup) and 50 adults from community mental health centers (clinical subgroup). The results demonstrated good internal consistency indicated by Cronbach's alphas of .81 for Depression, .84 for Anxiety, and .85 for Stress subscales. In the current study, McDonald's omega (ω) was .90 for Depression, .86 for Anxiety, and .89 for Stress subscales for the Korean group; Cronbach's alpha (α) was .90 for Depression, .85 for Anxiety, and .89 for Stress subscales. For the American group, both McDonald's omega (ω) and Cronbach's alpha (α) resulted in the same values in Depression (.90), Anxiety (.93), and Stress (.92) subscales.

Happiness

The Subjective Happiness Scale (Lyubomirsky & Lepper, 1999; Appendix F) is a 4-item survey that assesses global subjective happiness. Items are rated on a 7-point scale (1= *not a very happy person,* 7 = *a very happy person)* and include questions such as "Some people are

generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you?" The total score is obtained by calculating the average of the items after reverse coding the fourth item (e.g., 7 = 1, 6 = 2), with higher scores indicating greater self-reported happiness. One study of the psychometric properties of the measure included 2,732 participants, representing eight U.S. college student samples, one U.S high school student sample, four U.S community samples, and one Russian community sample (Lyubomirsky & Lepper, 1999). The scale demonstrated good internal consistency indicated by Cronbach's alphas ranging from .79 to .92. The study also reported good test-retest reliability when assessed with three college student samples, one high school sample, and one community sample with Pearson correlations ranging from .61 to .90 at $p < .001$. The reported convergent validity indicated moderate correlation with the Self-Esteem scale among 2 college student samples ($r = .53$, $p < .001$). A Korean version of the measure has been widely used with Korean populations including adolescents (Kim, 2009), college students (Jang, 2016), and older adults (Jo & Song, 2012; Lee, 2011). In the current study, McDonald's omega (ω) was .83 and Cronbach's alpha (α) was .81 for Koreans. McDonald's omega (ω) was .75 and Cronbach's alpha (α) was .74 for Americans in our sample.

Life Satisfaction

The Satisfaction with Life Scale (Diener *et al.*, 1985; Appendix G) is a 5-item survey that assesses subjective judgement of one's life satisfaction. Items are rated on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree)* and include questions such as "In most ways my life is close to my ideal." Items are summed to obtain an overall score, with higher scores reflecting greater life satisfaction. Psychometric properties reported by Diener and colleagues (1985) indicated good internal consistency (Cronbach's alpha = .87) and 2-month test-retest reliability (*r*

= .82). A Korean version of the Satisfaction with Life Scale (Cho & Cha, 1998) has been used with adolescents, young adults, and police officers (Lim, 2012) as well as with geriatric populations (Seo *et al.*, 2013). In the current study, the results demonstrated McDonald's omega (ω) of .91 and Cronbach's alpha (α) of .90 for the Korean sample, and McDonald's omega (ω) of .88 and Cronbach's alpha (α) of .88 for the American sample.

Eating Disorders

The Eating Attitudes Test-26 (Garner & Garfinkel, 1979; Appendix H) is a 26-item survey that assesses symptoms and concerns associated with eating disorders. The measure has three subscales: dieting, bulimia/food preoccupation, and oral control. Items are rated on a 4-point scale (0 = *Never, 3 = Always*) and include descriptors such as "Avoid eating when I am hungry" and "Take longer than others to eat my meals." When scoring, the following values are used: *always* = 3, *usually* = 2, *often* = 1, while *sometimes, rarely,* and *never* = 0; item 26 is reverse-scored. Subscale scores and total score are obtained by summing items. In a study of 160 women with anorexia nervosa (Garner *et al.*, 1982), Cronbach's alpha for the EAT-26 was .90. Rhee and colleagues (1998) translated the measure to Korean and examined its psychometric properties in a sample of 1,422 male adults and 2,074 female adults. The translated version demonstrated a good internal consistency indicated by Cronbach's alphas of .83 for male adults and of .81 for female adults. In the current study, McDonald's omega (ω) was .81 and Cronbach's alpha (α) was .80 for the Korean sample. McDonald's omega (ω) was .97 and Cronbach's alpha (α) was .97 for the American sample.

Procedure

Interested and qualified participants completed the measures via MTurk and Data Spring after providing informed consent. Language for the instructions and surveys were Korean for Korean participants and English for American participants.

Limitations of Using Online Survey Platforms

Although there are advantages to using online survey platforms such as expedited data collection, cost-effectiveness, and increased diversity (Buhrmester *et al.*, 2011; Goodman *et al.,* 2013; Peer *et al.*, 2017), a number of researchers have raised concerns regarding the quality of data obtained from online survey portals (Chmielewski & Kucker, 2020; Smith *et al.*, 2016). Follmer and colleagues (2017) indicated that the demographics of individuals who participate in online survey studies are skewed towards certain groups of people, which may lead to conclusions that are less representative of the general population. Other studies have identified inattentiveness as a major concern that may threaten the validity of results (Aruguete *et al.*, 2019; Buhrmester *et al.*, 2018). A study that compared four sets of data collected annually through MTurk from 2016 to 2019 found that the percentage of low-quality data has increased, indicated by response inconsistency, statistically improbable responses, and disqualified participants (Chmielewski & Kucker, 2020). However, this study also indicated that the quality of data improved in 2019 when compared with data obtained from 2018, possibly due to efforts made by researchers and online survey portal companies in response to increased concerns. A recent meta-analysis of 90 online survey studies indicated that data obtained from online platforms yielded psychometric properties and validity indicators comparable to those collected from conventional sources such as college students (Walter *et al.*, 2019).

For the present study, due to the outbreak of COVID-19 and the preference of the Sociocultural Laboratory at Yonsei University for this means of data collection, online survey platforms were used, with care taken to incorporate measures that may reduce some of the shortcomings of this data source. As a part of the screening procedure, attention checks were used (e.g., an item stating "For this item, please click on 'strongly disagree'"). A total of two attention check items were included in both English and Korean versions of the survey. Participants who failed to pass attention check items were compensated for completing the survey but excluded from data analyses.

Analytical Strategies

The factor structure of the New K-SCS was examined using a bifactor model and six-factor correlated model to determine whether the newly translated version would replicate the factor structure of the original SCS. Prior to conducting measurement invariance analyses between the retranslated K-SCS and SCS, Cronbach's alpha and McDonald's omega were analyzed to assess the reliability of the reported scales.

Model Estimation and Specification

The analyses were conducted with Mplus 8 (Muthén & Muthén, 2017). The model assessment of the K-SCS used maximum likelihood estimation. Following previous studies (Neff *et al.*, 2019; Neff *et al.*, 2018; Tóth-Király *et al.*, 2018), the bifactor-exploratory structural equation modeling (ESEM) framework as well as the six-factor correlated CFA were used for model assessment. In the bifactor ESEM approach, both bifactor and ESEM components were included, in which items were allowed to define one global construct (i.e., self-compassion) and their *a priori* specific factors; cross-loadings were freely estimated across specific factors, but were targeted as close to zero as possible with orthogonal target rotation (Browne, 2001). In the

six-factor correlated CFA, items were allowed to only load on their *a priori* target factors (six subscales) with cross-loadings being constrained to zero.

Tests of Measurement Invariance

The current study performed tests of measurement invariance between South Korean and American participants. Tests of measurement invariance followed the typically suggested sequence in which equality constraints were gradually added to various parameters, ranging from a model in which all parameters were freely estimated to a highly restrictive model in which all parameters were constrained (Meredith, 1993). Thus, successive analyses applying increasingly strict criteria were run to evaluate how the New K-SCS compares to the SCS.

First, configural invariance was assessed to examine equality of factor structure between the original SCS and the newly translated K-SCS; second, weak invariance, which examines equality of factor loadings, was assessed to investigate whether the magnitude of the factor loadings is statistically identical between both scales; third, strong invariance was assessed by examining the equality of item thresholds.

Model Evaluation

Models were evaluated using typical goodness-of-fit indices (Hu & Bentler, 1999; Marsh *et al.*, 2005), which include the chi-square test (χ^2), the comparative fit index (CFI), the Tucker-Lewis Index (TLI), and the root mean square error of approximation (RMSEA) with its 90% confidence interval (90% CI). For CFI and TLI, values above .90 were considered adequate and .95 as excellent; for RMSEA, values below 0.08 were considered adequate and those below 0.06 as excellent. For the chi-square difference test, p-values greater than .05 were considered good fit, indicating invariance between the SCS and New K-SCS.

Preliminary Predictions and Their Rationale for the Present Study

Previous studies have explored self-compassion and its association with psychological well-being (e.g., Neff *et al.*, 2007; Booker *et al.*, 2019) and mental health indices predominantly with American populations (e.g., Neff, 2003b; Diedrich *et al.*, 2016; Macbeth *et al.*, 2016). After retranslation of the K-SCS with close attention to translational and model equivalence, the current study explored whether the Korean sample would yield the same patterns of relationship found in previous studies with Western population and Korean college students. The study conducted linear regression analyses to examine the associations between self-compassion and indices of life satisfaction, happiness, and psychiatric symptoms. Furthermore, associations between self-compassion and body image and eating-related behaviors were explored to examine the comparability of results to previous studies in western countries (e.g., Adams *et al.*, 2007; Barnett *et al.*, 2016; Braun, *et al.*, 2016; Duarte *et al.*, 2015).

With a culturally appropriate translation procedure and recently suggested statistical approach (Neff, 2016), it was anticipated that the New K-SCS would achieve measurement invariance with the original SCS (Neff, 2003b). Thus, it was anticipated that the New K-SCS would hold the same factor structure as the original SCS, in which the six subscales of self-compassion constitute the overall self-compassion score. Due to limited cross-cultural studies of self-compassion, there was no clear basis for hypothesizing whether general levels of self-compassion among Koreans would be high or low relative to other tested populations. However, it was anticipated that a similar pattern would be obtained for self-compassion and its association with psychological well-being and mental health indices for both American and Korean samples. Specifically, self-compassion was anticipated to be positively related to self-esteem, life satisfaction, and subjective happiness, and negatively related to psychiatric symptoms such as

depression, stress, anxiety, thin-ideal internalization, and eating disorder symptoms for both American and Korean samples. Analyses of the relationship between self-compassion and self-construal were exploratory, as previous research (Yamaguchi *et al.*, 2014) suggests that it is possible for self-compassion to have differing relationships with psychological variables (e.g., self-criticism, depressive symptoms) based on one's perceived sense of self. The preliminary comparative analyses between these groups were hypothesized based on the studies conducted for each cultural group as well as on a few comparative analyses between the two groups.

First, with reference to self-construal, it was expected that American samples would have higher scores on the independent subscale while Korean samples would have higher scores on the interdependent subscale. Second, with studies suggesting that South Koreans may have higher levels of body image disturbance compared with Americans (e.g., Jung & Lee, 2006; Forbes & Lee, 2009; Lim *et al*., 2015; Wardle *et al.*, 2006), it was anticipated that South Korean samples would have higher average scores on the EAT-26 scale and SATAQ-4, which were conjectured to be negatively associated with the SCS score. Third, it was hypothesized that average scores on the RSES would be higher for American participants than for Korean participants, as suggested by prior research (e.g., Jung & Lee, 2006). Consistent with previous findings (Neff, 2003a), it was also hypothesized that scores on the RSES would be positively related to scores on the SCS for both American and Korean samples. Fourth, in view of the highly stressful and self-critical environment of Korean society, it was predicted that average scores on all subscales of the DASS-21 would be higher in Korean samples, which were anticipated to be associated with lower SCS scores compared with American participants. Fifth, it was hypothesized that South Korean participants would have lower scores on the SWL Scale and the Subjective Happiness scale, which were predicted to be associated with lower SCS

scores compared with American participants. No studies have conducted comparative analyses between American and Korean populations on levels of self-compassion; however, considering the hypothesized patterns of relationship between American and Korean samples in regard to various indices of psychological well-being and mental health, it was anticipated that Koreans would generally have lower SCS scores compared with those of Americans.

Results

Preliminary Observations on Sample Characteristics

An examination of descriptive statistics for the US and Korean groups revealed a number of anomalies in the mean scores of US participants (see Tables 1, 2, and 3), suggesting that recruitment may not have yielded a representative sample. First, an unbalanced number of males submitted responses in the American group (276 males; 59.6%). This imbalance could have been addressed through additional data collection; however, several other unusual findings may not have been rectified by enlisting more participants through the same recruitment method. Mean scores were atypically elevated on a number of indices for both male and female US participants, notably on the DASS-21, EAT-26, and SATAQ-4. Although statistical analysis of apparent discrepancies in average scores is not warranted across studies, the magnitude of these elevations is striking. For example, the mean score for DASS-21 anxiety was 10.9 for the American group in the current study, compared to reported means ranging from 1.2 to 2.9 in three other studies using the same measure with nonclinical US samples (Antony *et al*., 1998; Osman *et al.*, 2012; Sinclair *et al.*, 2012). For DASS-21 depression, a mean of 11.1 was obtained for Americans in this study, compared to previously reported means of 2.1, 2.8, and 4.1 in the cited investigations. Similarly, the current US sample's EAT-26 subscale means of 15.9 for dieting, 7.4 for bulimic behaviors, and 8.7 for oral control behaviors were markedly discrepant from those reported for a

North American standardization sample (with subscale means of 7.1, 1.0, and 1.9 respectively; Garner *et al*., 1982) and subsequent research using the same measure. Furthermore, a mean score of SATAQ-4 family pressure subscale was 3.62 for the US group in the current study, compared to reported mean score of 2.40 in the previous study with nonclinical US sample (Schaefer *et al.*, 2015). A mean score of SATAQ-4 peer pressure subscale was 3.58, compared to the reported mean score of 2.27 in the cited previous study.

In addition, an unusual pattern was evident by gender for the EAT-26 and some of the subscales on the SATAQ-4. In contrast to previous studies reporting higher scores for females (e.g., Schaefer et al., 2015), US males in this data set, on average, scored higher than US females on the three EAT-26 subscales. Likewise, US males in the current study reported higher mean scores than US females on the family and peer pressure subscales of the SATAQ-4, which is contrary to previous studies reporting higher scores for females on those domains. These unusual patterns further suggest that an atypical sample was recruited for the US sample in the current study. The overrepresentation of males thus contributed to the higher mean scores obtained for the total US sample; however, EAT-26 scores for American females were also unusually high.

None of these anomalous patterns was evident for the Korean data in the current investigation: approximately equal numbers of male and female participants were enrolled (242 males; 47.5%); mean scores on psychopathology measures were consonant with previous findings in Korean and Western samples (Choi & Cheon, 2007; Lee *et al*., 2019; Osman *et al*., 2012); and the expected pattern of higher EAT-26 scores as well as higher SATAQ-4 thin-ideal subscale for females were observed.

As outlined further in the Discussion section, it is not clear why the recruitment method for American participants appeared to produce an atypical sample. Although analyses using the

American group are reported below, these data should be interpreted with particular caution, as they may not be representative of the general US population.

Examination of the Factor Structure of the Self-Compassion Scale

Initially, bifactor exploratory structural equation modeling (bifactor ESEM) was conducted for both the original SCS and the New K-SCS. The New K-SCS demonstrated poor model fit (CFI = .84, TLI = 0.80, RMSEA= 0.13) with a factor loading lower than .50 for several items (Table 4). The original SCS also demonstrated poor model fit (CFI = .78, TLI = 0.74, RMSEA = 0.14) with a factor loading lower than .50 for several items (Table 5). Although the bifactor ESEM has been suggested as a desirable approach for examining the factor structure of the SCS by Neff and colleagues (2017), only a few studies have attempted to replicate the validation study using this analysis. As an alternative model, six-factor structure confirmatory factor analyses (CFA) were conducted for both versions of the scale. The six-factor structure model of the SCS has been consistently replicated across various studies (e.g., Costa *et* al., 2017, Neff 2003a; Neff, *et al.,* 2017) despite some issues regarding one-factor versus two-factor structure for the SCS.

For the K-SCS, the results from the CFA demonstrated acceptable model fit (CFI = .92, TLI = 0.90, RMSEA = 0.06), with the exception of two items in the self-judgment subscale with a factor loading below .50. Specifically, item number 8 (factor loading of .36) and item number 21 (factor loading of .06) indicated that these two items do not demonstrate the construct of self-compassion for the Korean population. When these items were removed, model fit for the New K-SCS improved (CFI = .96, TLI = 0.95, RMSEA = 0.05; Table 6; Figure 1), with acceptable factor loadings for all items. For the original SCS, the result of the six-factor CFA demonstrated good model fit (CFI = .95, TLI = 0.95, RMSEA = 0.05) with factor loadings greater than .50 for

all items. When items 8 and 21 were removed from the original SCS, the results demonstrated good model fit (CFI = .96, TLI = 0.95, RMSEA = 0.05; Table 7; Figure 1). The results indicated that the modified version of the scale with the two items removed is acceptable for the measurement invariance analyses (see Table 8 and Table 9 for correlations of items for the New K-SCS and the SCS respectively).

Measurement Invariance of the SCS and the New K-SCS

To examine the measurement invariance between the original SCS and the New K-SCS, analyses were conducted with items 8 and 21 removed for both versions of the scale. Configural invariance was supported with both versions of the scale, demonstrating a six-factor structure with identical items for each subscale as initially proposed by Neff (2003a). Second, metric invariance was explored by examining model fit as well as chi-square difference test between the configural and metric invariance results. Based on the modification indices, the following items were correlated freely for the New K-SCS: items 1 and 5 (self-kindness and self-judgment), items 5 and 12 (self-kindness), items 7 and 10 (common humanity), and items 18 and 25 (isolation). For the original SCS, items 1 and 5 (self-kindness and self-judgment) were freely correlated. After the modifications, metric invariance analysis demonstrated good model fit (CFI = .97, TLI = 0.96, RMSEA = 0.04). The chi-square difference test also indicated that the two versions of the scale are not significantly different from one another (χ^2 (18, N = 973) = 16.61, p = .550). Finally, scalar measurement invariance analyses were conducted by incorporating suggested modification indices from the Mplus. The results indicated good model fit (CFI = .96, TLI = 0.95, RMSEA = 0.05). However, the chi-square difference test between the configural and scalar measurement invariance indicated that the original SCS and the New K-SCS function differently on a scalar level (X^2 (18, N = 970) = 179.49, p < .001).

Overall, the measurement invariance analyses illustrated that the items in the original SCS and the New K-SCS measure the construct (i.e., self-compassion) with equivalent factor loadings across all items. These two versions of the scale differ, however, on the intercepts on the observed variable (i.e., SCS). This means that the interpretation of the results drawn from the average total scores of SCS is different for both groups in which the same average total score does not indicate the same level of self-compassion for the two groups. Thus, instead of comparing the level of self-compassion indicated by the average score on the SCS, the analyses focused on exploring the associations between self-compassion and its relevant mental health and well-being indices.

Initially, multigroup factor analyses were conducted to explore relationships among self-compassion and other relevant constructs such as indicators of psychological well-being, mental health, and one's sense of self. The results indicated poor model fit, which may be due to lack of scalar invariance between the SCS and New-KSCS. Because the current study's main purpose was to explore the patterns of relationships between self-compassion and other relevant constructs rather than considering various model modifications to improve the model fit of the multigroup factor analyses, linear regression analyses were conducted. Due to non-scalar invariance, instead of comparing the total score of the SCS, the current study investigated patterns of relationship between self-compassion and related constructs for both groups.

Self-Compassion and Self-Construal

Linear regression analyses were conducted to explore the relationship between self-compassion and interdependent or independent sense of self. Results indicated that self-compassion did not explain a significant portion of the variance in level of interdependent sense of self for Koreans ($R^2 = 0.00$, F (1, 508) = .09, p = .769). For the Korean sample, self-

compassion did not significantly predict one's level of interdependent sense of self (t = .29, β = .01, p = .769). In contrast, self-compassion explained a significant amount of variance in independent sense of self (R^2 = .14, F (1, 508) = 79.89, p < .001), significantly and positively predicting the tendency to construe oneself with an emphasis on one's separateness and unique traits and accomplishments (t = 15.34, β = .37, p < .001). Similar findings were indicated for the American sample, for whom self-compassion did not explain a significant proportion of variance in the interdependent sense of self (R^2 = .01, F (1, 461) = 2.61, p = .107). Self-compassion did not predict level of interdependent sense of self (t = -1.62, β = .09, p = .107). Instead, self-compassion explained a significant amount of variance of in the independent sense of self (R^2 = .009, F (1, 461) = 4.10, p =.044) and was predictive of independent sense of self (t = 19.88, β = .09, p = .044).

Self-Compassion and Mental Health Indicators

Linear regression analyses were conducted to explore relationships between self-compassion and relevant mental health indices such as depression, anxiety, stress, and eating disorder symptoms.

Self-Compassion, and Depression, Anxiety, and Stress

The results of the linear regression analyses demonstrated that self-compassion is negatively associated with depressive, anxiety, and stress symptoms. At a subscale level, self-compassion explained 32.3 % of the variance in stress symptoms for the Korean sample (F (1, 508) = 242.90, p < .001) and 21.4% for the American sample (F (1, 461) = 125.77, p < .001). Self-compassion significantly and negatively predicted symptoms of anxiety for both populations (t = -15.59, β = -.57, p < .001for Koreans; t = -11.22, β = -.46, p < .001 for Americans). Self-compassion explained 37% of the variance in depressive symptoms for the Korean sample (F (1,

508) = 299.54, $p < .001$) and 24% for American sample (F (1, 461) = 144.69, $p < .001$). The results showed that self-compassion significantly and negatively predicted depressive symptoms for both the Korean (t = -17.31, β = -.61, $p < .001$) and American samples (t = -12.03, β = -.49, $p < .001$). Likewise, it was found that self-compassion explained 18% of the variance in anxiety symptoms for the Korean sample (F (1, 508) = 114.77, $p < .001$) and 17% for the American sample (F (1, 461) = 125.77, $p < .001$). Self-compassion significantly and negatively predicted anxiety symptoms for both groups (t = -10.71, β = -.43, $p < .001$ for Koreans; t = -9.69, β = -.41, $p < .001$ for Americans). However, these findings should be interpreted with caution due notably higher mean scores reported in the US sample compared to the standardization sample reported in the previous studies (e.g., Osman *et al*., 2012).

Self-Compassion, Body Image, and Eating Disorder Symptoms

Linear regression analyses were conducted to explore whether self-compassion predicts one's desire to look thin or muscular and perceived sociocultural pressures to look thin from family, friends, and media. The results indicated that self-compassion significantly explained 10% of the variance in the tendency to internalize thin-ideal for the Korean sample (F (1, 508) = 56.59, $p < .001$), and 9.4% of the variance for the American sample (F (1, 461) = 47.82, $p < .001$). Self-compassion significantly and negatively predicted thin-ideal internalization for both groups (t = - 4.77, β = -.32, $p < .001$ for Koreans; t = - 6.92, β = -.31, $p < .001$ for Americans). For the tendency to internalize muscular or athletic ideal, self-compassion significantly explained 4.2% of the variance (F (1, 461) = 20.00, $p < .001$) for the American sample. Self-compassion significantly and negatively predicted muscular ideal internalization for Americans (t = - 4.47, β = -.20, $p < .001$). In contrast, self-compassion did not explain significant proportion of the variance (F (1, 508) = 0.59, p = .450) for the Korean group. Regarding perceived pressures from

family, self-compassion was found to explain 1.8% of the variance (F (1, 508) = 9.22, $p < .001$), significantly and negatively predicting family-influenced pressures to achieve the thin ideal for the Korean sample (t = -3.04, β = -.13, p = .003). For the American group, self-compassion explained 9.4% of the variance on the family pressures subscale (F (1, 461) = 47.74, $p < .001$), significantly and negatively predicting one's desire to look thin due to the influence of family members (t = -6.91, β = -.31, $p < .001$). Likewise, self-compassion explained 2.5% of the variance of the peer pressures subscale for the Korean group (F (1, 508) = 13.82, $p < .001$), negatively predicting pressures imposed by peers to look thin (t = - 3.72, β = -.16, $p < .001$). For the American group, self-compassion explained 9.4% of the variance on the peer pressure subscale (F (1, 461) = 47.74, $p < .001$), significantly predicting the experience of feeling pressured to look thin from peers (t = -6.91, β = -.31, $p < .001$). Among the three different areas of pressures assessed by the SATAQ-4, media was found to be most variant depending on level of self-compassion for both the Korean (R^2 = 0.07, F (1, 508) = 40.41, $p < .001$) and the American groups (R^2 = 0.15, F (1, 461) = 83.66, $p < .001$). Self-compassion significantly predicted how much media influences the experience of feeling pressured to achieve ideal appearances for both groups (t = -6.36, β = -.27, $p < .001$ for Koreans; t = -9.15, β = -.39, $p < .001$ for Americans). Although the predictive patterns of relationships were observed to be in the anticipated direction, unusually high mean scores on the family and peer pressure subscales as well as atypical patterns of gender differences indicate that these findings should be considered with caution.

Linear regression analyses were conducted to examine the relationship between self-compassion and symptoms and concerns characteristic of eating disorders, which are broadly categorized as dieting, bulimia, and oral control behaviors. Similar to the SATAQ-4, it is

important to interpret these findings while considering the unusually high mean scores and atypical patterns of gender differences observed in the US sample. A linear regression analysis indicated that self-compassion significantly explained 3.2% of the variance of dieting symptoms on the Eating Attitude Test – 26 scale for the Korean sample (F (1, 508) = 17.65, $p < .001$) and 10.2 % for the American sample (F (1, 461) = 52.33, $p < .001$). For both groups, level of compassionate attitude towards the self significantly and negatively predicted dieting symptoms (t = -4.20, β = -.18, $p < .001$ for Koreans; t = -7.23, β = -.32, $p < .001$ for Americans). Self-compassion explained 4.3% of the variance in bulimic symptoms for the Korean group (F (1, 508) = 22.56, $p < .001$) and 11.1% for the American group (F (1, 461) = 57.68, $p < .001$). Self-compassion significantly predicted fewer bulimic symptoms for both samples (t = -4.75, β = -.21, $p < .001$ for Koreans; t = -7.60, β = -.33, $p < .001$). A different pattern was observed between the two groups regarding oral control behaviors. Self-compassion did not explain significant variance in oral control behaviors for Koreans (R^2 = 0.00, F (1, 508) = 0.98, p = .322), but explained 6.8% of the variance for the Americans (F (1, 461) = 33.52, $p < .001$). Self-compassion significantly and negatively predicted behaviors and concerns related to self-control of eating only for the American group (t = -5.79, β = -.26, $p < .001$).

Self-Compassion and Psychological Well-being Indicators

Linear regression analyses were conducted to explore whether self-compassion predicts higher levels of psychological well-being. Self-compassion explained a significant proportion of the variance in subjective level of happiness (R^2 = 0.39, F (1, 508) = 324.46, $p < .001$) for Koreans, significantly and positively predicting level of happiness (t = 18.01, β = .62, $p < .001$). For Americans, self-compassion explained a significant proportion of the variance (R^2 = 0.24, F (1, 461) = 149.18, $p < .001$), positively predicting level of happiness (t = 12.21, β = .49, p

< .001). Self-compassion explained a significant amount of the variance in satisfaction with life for both groups ($R^2 = 0.30$, F (1, 508) = 214.39, $p < .001$ for Koreans; F (1, 461) = 19.34, $p < .001$ for Americans). Self-compassion was predictive of scores on the satisfaction with life scale ($t = 14.64$, $\beta = .55$, $p < .001$ for Koreans; $t = 11.26$, $\beta = .20$, $p < .001$ for Americans). In contrast, the relationship between self-compassion and self-esteem was found to differ between the Korean and American samples. For both populations, self-compassion explained a significant amount of variance in level of self-esteem ($R^2 = 0.51$, F (1, 508) = 533.58, $p < .001$ for Koreans; $R^2 = 0.08$, F (1, 461) = 37.37, $p < .001$ for Americans). However, the directionality of the prediction differed, with self-compassion negatively predicting level of self-esteem for the Korean group ($t = -23.10$, $\beta = -.72$, $p <.001$) while positively predicting for the US group ($t = 6.11$, $\beta = .27$, $p <.001$).

In summary, self-compassion was predictive of higher levels of independent sense of self, subjective happiness, and satisfaction with life for both groups. Similar patterns were observed for both groups in relation to various indices of mental health, with self-compassion predictive of lower levels of depression, anxiety, and stress symptoms as well as drive for thinness and other eating disorder-related behaviors. A differing pattern was observed in the relationship between self-compassion and self-esteem, which may be due to cultural differences in sense of self-worth and the impact of maintaining compassionate attitude towards the self.

Discussion

The current study attempted to retranslate and conduct a validation study of the Korean SCS with the goal of providing a reliable version of the K-SCS that can be used in further research on self-compassion in South Korea. As an initial step, bilingual Koreans used Brislin's back translation method (Brislin, 1971) while considering translational equivalence to accurately

capture the intended meaning of each item on the scale. As part of the validation analyses, the current study examined the factor structure of the scale, conducted measurement invariance tests, and explored the relationship between self-compassion and other related constructs (i.e., indices of psychological well-being and mental health) for both Korean and American samples.

Sample of the Current Study

The descriptive statistics of the sample for the US group indicated that the mean scores of DASS-21, EAT-26, and SATAQ-4 are noticeably higher than those reported in previous studies (e.g., Garner *et al*., 1982; Osman *et al.*, 2012). Although attention check items were included in the survey to screen out respondents who may not be answering each item carefully, mean scores on some of the measures from the current study were observed to be strikingly higher than those reported in previous studies. Furthermore, unusual patterns of gender differences were noted in the eating disorder-related behaviors, in which males reported higher mean scores on the three subscales of EAT-26 scale (i.e., dieting, bulimic behaviors, and oral control behaviors) as well as family and peer pressure subscales of SATAQ-4. The overall issues regarding the quality of data for the US group may have further widened the gap between the male and female mean scores for EAT-26 scale and the noted subscales for SATAQ-4. It is also possible that the difference in the sample size collected for the male and the female group may have impacted the results. Overall, these results indicate that the US sample from the current study may not accurately represent the US population, which impacts the generalizability of findings from the current study.

Model Assessment and Measurement Invariance

As an initial step prior to conducting measurement invariance analyses, bifactor exploratory structural equation modeling (bifactor ESEM) was conducted for both the original

SCS and the New K-SCS. Results from both versions of the scale indicated poor model fit, which implies that for the current study, the SCS is not suitable to be conceptualized as bifactorial in nature as proposed by Neff (2016). It is important to note that finding inconsistency in the factor structure of the SCS is not unique to this investigation. Over the past two decades, several studies have raised concerns regarding the factor structure of the SCS. Some studies supported the use of a single-factor structure as well as a six-factor structure model, while other studies argued for the use of a two-factor structure in addition to the six-factor structure model. Although Neff (2016) aimed to address the inconsistencies regarding factor structure by proposing the use of bifactor ESEM, relatively few replication studies have been reported and it is possible that this approach may not be the most accurate representation of the factor structure of the SCS. Thus, the current study focused on examining the six-factor structure of the SCS, as this model has been supported by the majority of studies regardless of their support for single-factor or two-factor models of the SCS.

The six-factor model of the SCS demonstrated acceptable model fit for the New-KSCS with the exception of two items on the self-judgment subscale (i.e., “When times are really difficult, I tend to be tough on myself” and “I can be a bit cold-hearted towards myself when I’m experiencing suffering”). In Korean culture, examining and identifying one’s own faulty behaviors are important Confucian values for work ethic and personal growth (DeVos, 1998). Although the mindfulness component of self-compassion includes recognizing one’s flaws and mistakes (Neff 2003a, b), it is possible that for Korean population, the drive for self-correction and self-improvement stems from Confucian principles about the value of raising awareness of one’s own faults through strict discipline and self-examination (DeVos, 1998), which often involves the use of shame and criticism (Hui & Triandis, 1986). This in turn may influence views

in such a way that having a cold-hearted or tough attitude towards oneself is not construed as self-judgmental, but rather as an indicator of self-awareness and striving for self-improvement. It is notable that the three items that were retained on the self-judgment scale (i.e., “I’m disapproving and judgmental about my own flaws and inadequacies”, “I’m intolerant and impatient towards those aspects of my personality I don’t like”, and “When I see aspects of myself that I don’t like, I get down on myself.”) have a somewhat different focus from the items that were excluded. The latter refer to self-criticism in the context of challenging situations, while the former allude to more global, stable aspects of the self, such as personality traits. It may be that Koreans perceive intolerance toward stable personal characteristics as self-judgmental, while viewing a tough-minded stance toward oneself under pressure as a self-disciplinary practice that is desirable for personal development. In the context of the competitive academic and occupational environment, in combination with Confucian values that prioritize hard work and personal growth, being strict with oneself during challenging periods may be viewed as a personal strength and a means of self-betterment.

Based on theoretically and culturally plausible differences in how Koreans evaluate themselves and what they view as self-judgmental, in addition to the results from the six-factor CFA, the two items were removed. Subsequently, the results demonstrated good model fit. Following the six-factor structure model of the New-KSCS, the same two items were removed from the original SCS to conduct measurement invariance analyses. The results demonstrated good model fit, with all items showing factor loadings greater than .50.

The measurement invariance test was conducted using the 24-item SCS for both versions of the scale. The results indicated that configural invariance and metric invariance were supported. Configural invariance indicates that the 24 items in the original SCS and the new K-

SCS have the same factor structure (i.e., self-compassion). Support for metric invariance indicates that the factor loadings (i.e., the degree to which differences among participants' responses to the item arise from differences among their levels of the underlying construct) are equivalent across groups. Scalar invariance was not achieved in the current study despite several attempts to modify the model based on suggested modification indices in Mplus. This implies that the values reported by the participants may indicate different meaning across groups.

Initially, the current study aimed to compare levels of self-compassion and related variables between American and Korean samples. However, the lack of scalar invariance indicates that the mean comparisons between the American and Korean groups cannot be justified due to differences in the values on the latent construct and the items upon which the construct is based. Therefore, instead of identifying which group has higher or lower values on each variable as initially planned, the current study focused only on analyzing the patterns of relationship between self-compassion and other related constructs for both American and Korean groups. To explore these relationships, linear regression analyses were used.

Self-Compassion and Self-Construal

The results of the linear regression analyses showed that self-compassion was predictive of independent self-construal but not predictive of interdependent self-construal for both American and Korean groups. This is similar to previous findings which showed that self-compassion is positively correlated with independent self-construal in Taiwan and the United States (Neff *et al*., 2018). Neff and colleagues (2018) conjectured that the Confucian emphasis on self-improvement in Taiwanese culture often involves the use of shame and self-punishment, which is contrary to the principles of Buddhism that promote compassionate attitudes towards the self in the midst of failure and self-inadequacies. Additionally, the authors postulated that the

meaning of independence and interdependence may vary depending on cultural contexts. For example, people living in societies that emphasize self-compassion may experience higher levels of self-compassion when they are interdependent, whereas people living in societies that do not actively promote self-compassion may have higher levels of self-compassion when they are independent. Although South Korea includes a unique blend of Confucian and Buddhist principles in its culture, its emphasis on the Confucian values of self-improvement via self-awareness and harsh discipline (DeVos, 1998) might explain why self-compassion may be a significant predictor of independent sense of self rather than interdependent sense of self.

Self-Compassion and Indicators of Mental Health

Depression, Anxiety, and Stress

Similar patterns were demonstrated between the U.S and Korean groups regarding the relationship between self-compassion and the DASS-21. However, although the patterns of relationships replicated those of previous studies, findings from the US group should be taken with caution due to issues observed in this sample regarding its unusually high mean scores. Self-compassion was a significant, negative predictor of depressive, anxiety, and stress symptoms for both groups. This finding is consistent with the previous studies in which self-compassion was reported to be negatively associated with depression, anxiety, and stress (e.g., Macbeth & Gumley, 2012; Neff 2003a). Several studies have supported the buffering effects of self-compassion in the midst of anxiety-provoking or challenging life situations in which individuals with higher self-compassion tended to experience lower levels of anxiety symptoms and general negative affect (Leary *et al*., 2007; Neff *et al*., 2007). Similar findings have been reported in preliminary studies in South Korea (e.g., Kim *et al*., 2017; Park & Lee, 2015), further supporting the putative benefits of self-compassion in alleviating symptoms of depression,

anxiety, and stress. The findings suggest that self-compassion may be a beneficial attitude to promote in Korean society, given the culture's emphasis of the Confucian values of hard work and education (Hassink, 1997) that result in high levels of academic stress (Hwang, 2006), occupational stress (e.g., Chang *et al*., 2005), and suicide rate (Im *et al*., 2017).

Body Image and Eating Disorders

The current study explored the relationship between self-compassion and sociocultural attitudes towards appearance as well as between self-compassion and eating disorder symptoms. As noted, these predictive relationships should be interpreted with caution, particularly for the US group due to its discrepancy from the US standardization sample reported in previous studies (e.g., Schaefer *et al.,* 2015). For both groups, self-compassion was found to significantly predict lower levels of internalization of the thin-ideal and experiences of sociocultural pressures (i.e., pressure from family, friends, and media) to look thin. Among the three subscales assessing different sources of pressure, striving for ideal appearances due to media exposure was found to be the most variable depending on level of self-compassion. This finding is particularly noteworthy among South Koreans because studies in Korea have illustrated the negative influence of media on body image (Lim & Kim, 2012; Kim, 2005), resulting in overestimation of weight and internalization of the thin-ideal (Lim *et al*., 2015), which may contribute to the onset of eating disorders (Thompson and Stice, 2001). Similarly, results from the current study indicated that self-compassion negatively predicts symptoms and concerns related to dieting and bulimic behaviors for both Korean and American participants. This implies that a self-compassionate attitude is associated with a lower tendency to scrutinize caloric intake and food items (i.e., carbohydrates and sugar), to preoccupy oneself with food-related thoughts, and to purge after excessive eating. Although similar patterns were observed for most eating disorder

symptoms, a different pattern was evident for oral control behavior. The findings suggested that self-compassion was predictive of oral control behaviors for the American group but not for the Korean group. Due to the scarcity of cultural studies on the manifestations of eating disorders, a clear explanation cannot be derived from the present results. The current study conjectured that the discrepancy may be due to differences in how Koreans and Americans view thoughts and actions related to self-control. Despite possible cultural differences in manifestations of oral control behaviors, self-compassion was found to be a negative predictor of other eating disorder symptoms such as dieting and bulimic behaviors as well as tendency to internalize sociocultural pressures to look thin. These findings suggest that cultivating compassionate attitudes toward oneself may be potentially helpful as part of intervention programs for individuals struggling with body image disturbances and eating disorder symptoms.

Self-Compassion and Psychological Well-Being

Consistent with previous findings, the results of the current study indicated that self-compassion is predictive of subjective happiness and satisfaction with life. Neff (2003a) conceptualized self-compassion as showing understanding and care for oneself even in the midst of suffering, which may explain why self-compassion predicts higher levels of subjective happiness and life satisfaction. Self-compassion intervention studies have also reported positive and lasting effects of self-compassion programs on life satisfaction and positive affect for both Americans (Neff & Germer, 2013) and Koreans (Kang & Jang, 2017; Noh *et al*., 2020).

Although similar patterns were observed in the relationship between self-compassion and happiness as well as satisfaction with life, a differing pattern was evident for self-esteem between American and Korean groups. In the current study, consonant with previous research (e.g., Neff 2003a, Albertson *et al*., 2015), self-compassion positively predicted self-esteem for

the American group. In contrast, self-compassion negatively predicted self-esteem for the Korean group. Although these constructs are positively correlated in western cultures, Neff (2003a; 2011) emphasized the importance of distinguishing between them. Previous studies (Neff, 2003a; Neff & Vonk, 2009) have indicated that although both self-compassion and self-esteem are indicators of psychological well-being, these two constructs are different in their ways of contributing to psychological well-being. Self-esteem refers to the degree to which one evaluates oneself favorably. High self-esteem is related to an increased tendency for positive self-regard, which results in a sense of personal self-worth. The process of maintaining high self-esteem involves assessing one's self-worth based on competency in the domains of life one values, which is often influenced by other people's judgment (Crocker *et* al., 2003). On the other hand, self-compassion refers to how one relates to oneself with kindness and understanding regardless of one's perceived flaws and failures. Unlike self-esteem, self-compassion does not involve self-evaluation or judgment from others in order to feel good about oneself (Neff 2003a, Neff & Vonk, 2009).

With these underlying differences between self-compassion and self-esteem, it is possible that the two variables are not significantly associated for Koreans who are raised in an extremely competitive society that demands constant objective comparison and evaluation of one's performance relative to others. For Koreans, showing understanding and kindness toward oneself in the midst of failures may not predict a positive evaluation of one's own successes and performances, which is a contributor to self-esteem (Crocker & Wolfe, 2001). Considering the competitive environment of South Korea in both academic and occupational contexts (Shin & Kim, 2014; Yoo *et al*., 2016) combined with the Confucian values of self-discipline and self-improvement (DeVos, 1998), Koreans' sense of self-worth may be derived from variables other

than self-compassion. Furthermore, a differing effect of self-compassion and self-esteem interventions was noted in a study conducted in South Korea (Park & Lee, 2015). Participants in the self-compassion enhancement program reported lasting improvements in symptoms of psychopathology and life satisfaction, while participants in the self-esteem enhancement program did not report persistent improvements. This further indicates that self-compassion and self-esteem may vary in how they contribute to psychological well-being.

Overall, although scalar invariance was not established in the current study, support for configural and metric invariance indicates that the New-KSCS can be used to capture the construct of holding compassionate attitudes towards oneself among South Koreans. The sound psychometric properties of the New-KSCS were further supported by the theoretically coherent patterns of relationship found between self-compassion and related constructs. However, unusually high mean scores and atypical patterns of gender differences for the US sample should be noted when interpreting these findings. Given the anomalies observed in the US sample and preliminary nature of the current study for the exploration of self-compassion and related variables for Koreans, a particular caution is required when interpreting these findings.

Limitations and Future Directions

The current study has added to the growing body of literature conducting cross-cultural studies on self-compassion and its relationships with numerous variables related to mental health and psychological well-being. The current study demonstrated a culturally appropriate approach to adapting existing psychological measures for the Korean population, emphasizing the importance of translational and measurement equivalence. The results must also be examined, however, within the context of the study's limitations.

The current study analyzed how self-compassion is related similarly and/or differently across various indicators of psychological well-being and mental health between Korean and American groups; however, due to the lack of scalar invariance, it was not possible to statistically compare each group's level of self-compassion or examine whether it predicts similar and/or different levels of outcome variables. Additionally, the cross-sectional nature of the study cannot establish causal relationships between self-compassion and other variables of interest.

Moreover, as outlined in the Results section, a number of patterns in the current data set suggest that the US sample may not be representative of the US population as a whole. Mean scores on several measures, notably the DASS-21, EAT-26, and SATAQ-4, were markedly higher than normative data from previous studies, while characteristic gender patterns on the EAT-26 and family and peer pressure subscales of SATAQ-4 were reversed. Data were thoroughly reviewed three times to ensure that the atypical patterns were not due to errors during the data collection and analysis processes. The presentation of items on the survey portal was checked, followed by reexamination of how measures were scored and analyzed. No errors were found that could explain the unusually high mean scores and atypical patterns of gender differences observed in the US sample. Accordingly, alternative explanations for the anomalous findings must be considered.

When data were collected for the current study, the impact of the COVID-19 pandemic was still substantial. The United States reported highest cases of COVID-19 compared to other countries in 2020, which resulted in several states imposing a complete lockdown (WHO, 2020). Limited access to public areas, changes in school and work environment, and reduced social support may have contributed to the higher scores observed in the DASS-21, EAT-26, and

SATAQ-4. In April 2020, Wang and colleagues (2021) assessed mental health of 584 Americans (community sample) via online survey platforms (i.e., MTurk and Google Forms Online Survey). They reported mean scores of 9.28 for DASS-21 stress, 5.70 for DASS-21 anxiety, and 8.33 for DASS-21 depression scales. It is possible that the results from this study may have also been affected by the use of online survey platform. However, although these means are higher than those reported in the pre-pandemic era for nonclinical US samples, their reported mean scores are not as elevated as those obtained in the current study. Furthermore, although limited studies have been conducted regarding the change in the rate of development of eating disorders among the US general public during the pandemic, Lin and colleagues (2021) reported a sharp rise in the number of inpatient eating disorder medical admissions in one hospital in Boston, suggesting an increase in the severity of eating disorder cases during the pandemic. Although factors related to pandemic conditions may have contributed to some of the patterns observed in the current sample, it is improbable that they explain the strikingly high mean scores observed on some indices. Moreover, the reversed patterns of gender differences are not readily interpretable as stress-related effects.

Another possible explanation for the atypical mean scores and patterns of gender differences is the method of recruitment used in the study. The use of Amazon Mechanical Turk (MTurk) is a convenient and efficient method of collecting data from a large number of participants within a short period of time. However, studies have raised concerns regarding the utility of the data collected by this means, which may have been compounded by pandemic effects. Lee and Hoffman (2020) indicated that compared to the pre-COVID-19 era, the engagement of respondents from MTurk has significantly decreased. Arechar and Rand (2020) noted that with the rise of unemployment and lockdown, many new participants were observed

in online survey portals. They conjectured that these new participants' personal and demographic characteristics may be different from those of pre-COVID-19 respondents. Although attention check questions were included in the survey in an effort to screen out those respondents who are not reading each item on the survey carefully, alternative methods of recruitment may further resolve issues regarding the quality of data being collected from different survey platforms. This process may be particularly important, given that the reported mean scores in the current study for the US sample were observed to be deviant from normative data reported in previous studies.

Future studies should consider obtaining data from a wide range of sources. For example, future researchers can collect data from college samples via university research survey platforms (e.g., Sona system), community samples via online advertisements, and general population samples via survey platforms such as MTurk.

In addition to exploring various methods of recruitment, future studies should continue to design and evaluate psychological measures and methodologies for conducting cross-cultural studies. In the current study, findings indicated a noticeable difference in the relationship between self-compassion and self-esteem. Future researchers should explore these two constructs while also focusing on ways to better capture differences in cultural contexts between the Korean and US groups.

In the context of analytical methodologies for cross-cultural studies, future research should continue to explore various statistical approaches to achieve measurement invariance for the SCS. Should the original SCS be used across diverse cultures, investigators may consider other statistical approaches to examining measurement invariance. The Item Response Theory (IRT) model has been introduced as an alternative method to CFA in conducting measurement invariance tests for psychological measures (e.g., Kankaraš *et* al., 2011; Kim & Yoon, 2011).

The IRT model has been suggested to be more sensitive to nuanced group differences, detecting nonequivalence in the intercept and slope parameters both at the scale and the item level (Kankaraš *et al.*, 2011). It is important to note that the IRT model has been used less frequently than the CFA method to test measurement invariance. It is possible that other statistical issues may arise in achieving equivalence of the measure (in this particular study, the SCS) when conducting measurement invariance analyses using the IRT model. Thus, continuous efforts should be made to discover appropriate approaches to achieving measurement invariance for the SCS if the scale is to be used to measure self-compassion comparably across Korean and the US population.

Measurement invariance means that a construct measures the same property in different groups, and more studies should consider testing measurement invariance as a prerequisite when conducting studies that examine cultural differences. However, despite efforts to achieve measurement equivalence, it is possible that the scale does not capture the construct (i.e., self-compassion) similarly within the two groups. In order to examine this issue, future studies may also conduct exploratory analyses of how self-compassion is perceived and practiced in Korean populations. Although the definition of self-compassion remains the same, the manifestations of showing compassionate attitudes towards the self may vary between Korean and American populations. In addition to collecting data from various psychological measures including the SCS, studies may consider using qualitative measures to capture differences in daily self-compassionate practices among culturally diverse participants.

References

Adams, C. E., & Leary, M. R. (2007). Promoting self–compassionate attitudes toward eating among restrictive and guilty eaters. *Journal of social and clinical psychology*, *26*(10), 1120-1144.

Albertson, E. R., Neff, K. D., & Dill-Shackleford, K. E. (2015). Self-compassion and body dissatisfaction in women: A randomized controlled trial of a brief meditation intervention. *Mindfulness*, 6(3), 444-454.

Allen, A. B., & Leary, M. R. (2014). Self-compassionate responses to aging. *The gerontologist*, *54*(2), 190-200.

Allen, L. M., Roberts, C., Zimmer-Gembeck, M. J., & Farrell, L. J. (2020). Exploring the relationship between self-compassion and body dysmorphic symptoms in adolescents. *Journal of obsessive-compulsive and related disorders*, *25*, 100535.

Altman, J. K., Zimmaro, L. A., & Woodruff-Borden, J. (2017). Targeting body compassion in the treatment of body dissatisfaction: A case study. *Clinical case studies*, *16*(6), 431-445.

Antony, M. M., Bieling, P. J., Cox, B. J., Enns, M. W., & Swinson, R. P. (1998). Psychometric properties of the 42-item and 21-item versions of the Depression Anxiety Stress Scales in clinical groups and a community sample. *Psychological assessment*, *10*(2), 176.

Arechar, A. A., & Rand, D. G. (2021). Turking in the time of COVID. *Behavior research methods*, *53*(6), 2591-2595.

Arimitsu, K., Hitokoto, H., Kind, S., & Hofmann, S. G. (2018). Differences in compassion, well-being, and social anxiety between Japan and the USA. *Mindfulness*, 10(5), 854–862. doi: 10.1007/s12671-018-1045-6

Aruguete, M. S., Huynh, H., Browne, B. L., Jurs, B., Flint, E., & McCutcheon, L. E. (2019). How serious is the 'carelessness' problem on Mechanical Turk?. *International journal of social research methodology*, *22*(5), 441-449.

Bakker, A.M., Cox, D.W., Hubley, A.M., & Owens, R.L. (2019). Emotion regulation as a mediator of self-compassion and depressive symptoms in recurrent depression. *Mindfulness, 10*(6), 1169-1180.

Barnett, M. D., & Sharp, K. J. (2016). Maladaptive perfectionism, body image satisfaction, and disordered eating behaviors among US college women: The mediating role of self-compassion. *Personality and individual differences*, *99*, 225-234.

Baumeister, R. F., Heatherton, T. F., & Tice, D. M. (1993). When ego threats lead to self-regulation failure: Negative consequences of high self-esteem. *Journal of personality and social psychology*, *64*(1), 141.

Behling, O., & Law, K. S. (2000). *Translating questionnaires and other research instruments: Problems and solutions* (Vol. 133). sage.

Benzo, R. P., Kirsch, J. L., & Nelson, C. (2017). Compassion, mindfulness, and the happiness of healthcare workers. *Explore*, *13*(3), 201-206.

Birkett, M. A. (2013). Self-compassion and empathy across cultures: Comparison of young adults in China and the United States. *International journal of research studies in psychology*, 3(1). doi: 10.5861/ijrsp.2013.551

Blascovich, J., Tomaka, J., Robinson, J. P., Shaver, P. R., & Wrightsman, L. S. (1991). Measures of self-esteem. *Measures of personality and social psychological attitudes*, *1*, 115-160.

Boersma, K., Håkanson, A., Salomonsson, E., & Johansson, I. (2015). Compassion focused therapy to counteract shame, self-criticism and isolation. A replicated single case experimental study for individuals with social anxiety. *Journal of contemporary psychotherapy*, *45*(2), 89-98.

Booker, J. A., & Dunsmore, J. C. (2019). Testing direct and indirect ties of self-compassion with subjective well-being. *Journal of happiness studies*, 20(5), 1563-1585.

Branden, N. (1969). *The Psychology of Self Esteem*. New York: BantamBooks.

Braun, T. D., Park, C. L., & Gorin, A. (2016). Self-compassion, body image, and disordered eating: A review of the literature. *Body image*, *17*, 117-131.

Breines, J. G., & Chen, S. (2012). Self-compassion increases self-improvement motivation. *Personality and Social Psychology Bulletin*, *38*(9), 1133-1143.

Brenner, R. E., Heath, P. J., Vogel, D. L., & Credé, M. (2017). Two is more valid than one: Examining the factor structure of the Self-Compassion Scale (SCS). *Journal of counseling psychology*, *64*(6), 696.

Brewis, A. A., Han, S. Y., & SturtzSreetharan, C. L. (2017). Weight, gender, and depressive symptoms in South Korea. *American journal of human biology*, *29*(4), e22972.

Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of cross-cultural psychology*, 1, 185-216

Brislin, R. W., Lonner, W. J., & Thorndike, R. M. (1973). *Cross-cultural research methods* (Vol. 11). New York: J. Wiley.

Browne, M. W. (2001). An overview of analytic rotation in exploratory factor analysis. *Multivariate behavioral research*, *36*(1), 111-150.

Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk a new source of inexpensive, yet high-quality, data? Perspectives on Psychological Science, 6, 3–5.

Buhrmester, M. D., Talaifar, S., & Gosling, S. D. (2018). An evaluation of Amazon's Mechanical Turk, its rapid rise, and its effective use. *Perspectives on psychological science*, *13*(2), 149-154.

Cha, E. S., Kim, K. H., & Erlen, J. A. (2007). Translation of scales in cross-cultural research: issues and techniques. *Journal of advanced nursing*, *58*(4), 386-395.

Chan, A. (1996). Confucianism and development in East Asia. *Journal of contemporary Asia*, *26*(1), 28-45.

Chang, S. J., Koh, S. B., Kang, D., Kim, S. A., Kang, M. G., Lee, C. G., ... & Kim, J. W. (2005). Developing an occupational stress scale for Korean employees. *Korean journal of occupational and environmental Medicine*, *17*(4), 297-317.

Chen, J., Yan, L. S., & Zhou, L. H. (2011). Reliability and validity of Chinese version of self-compassion compassion. *Mindfulness*, *7*(1), 264-274. scale. *Chinese journal of clinical psychology*.

Chin, D., & Kameoka, V. A. (2006). Sociocultural influences.

Chishima, Y., Mizuno, M., Sugawara, D., & Miyagawa, Y. (2018). The influence of self-compassion on cognitive appraisals and coping with stressful events. *Mindfulness*, *9*(6), 1907-1915.

Chmielewski, M., & Kucker, S. C. (2020). An MTurk crisis? Shifts in data quality and the impact on study results. *Social psychological and personality science*, *11*(4), 464-473.

Cho, H., & Hyun, M. (2011). The effects of perceived stress and self-compassion on the relationship between self criticism and depression. *Korean journal of health psychology*, *16*(1), 49-62.

Cho, M. J., Nam, J. J., & Suh, G. H. (1998). Prevalence of symptoms of depression in a nationwide sample of Korean adults. *Psychiatry research*, *81*(3), 341-352.

Cho, M. J., Seong, S. J., Park, J. E., Chung, I. W., Lee, Y. M., Bae, A., ... & Hong, J. P. (2015). Prevalence and correlates of DSM-IV mental disorders in South Korean adults: the Korean epidemiologic catchment area study 2011. *Psychiatry investigation*, *12*(2), 164.

Cho, M. J., Sung, S., Shin, S., Kim, J., Jeon, S., & Kim, M. (2011). The epidemiological survey of mental disorders in Korea. *Seoul: Ministry of health and welfare*.

Cho, M.H. & Cha, K.H. (1998). Comparative analyses of well-being across countries. Seoul: Jipmoondang.

Choi, M. S., & Cheon, S. H. (2007). Internalization of the sociocultural attitudes, body shape satisfaction, anger and eating attitudes in college women. *Korean journal of women health nursing*, *13*(4), 327-335.

Chowdhury, A., & Islam, I. (1993). *The newly industrializing economies of East Asia.* Routledge.

Chung, B., Kim, H., Lee, S., Kwon, K., & Lee, J. (1993). Restoring Korean education from the bandage of entrance examination education. *Seoul: Nanam publication*.

Coroiu, A., Kwakkenbos, L., Moran, C., Thombs, B., Albani, C., Bourkas, S., ... & Körner, A. (2018). Structural validation of the Self-Compassion Scale with a German general population sample. *PloS one*, *13*(2), e0190771.

Costa, J., Marôco, J., Pinto-Gouveia, J., Ferreira, C., & Castilho, P. (2015). Validation of the psychometric properties of the Self-Compassion Scale. Testing the factorial and factorial invariance of the measure among borderline personality disorder, anxiety disorder, eating disorder and general populations. *Clinical psychology psychotherapy*.

Crocker, J., Luhtanen, R. K., Cooper, M. L., & Bouvrette, A. (2003). Contingencies of self-worth in college students: theory and measurement. *Journal of personality and social psychology*, *85*(5), 894.

Crocker, J., & Wolfe, C. T. (2001). Contingencies of self-worth. *Psychological review*, *108*(3), 593.

Damon, W. (1995). *Greater expectations: Overcoming the culture of indulgence in America's homes and schools*. The Free Press, 200 Old Tappan Road, Old Tappan, NJ 07675-7095.

Deci, E. L., & Ryan, R. M. (1995). Human autonomy. In *Efficacy, agency, and self-esteem* (pp. 31-49). Springer, Boston, MA.

DeVos, G. A. (1998). Confucian family socialization: The religion, morality, and aesthetics of propriety. *Confucianism and the family*, 329-380.

Diedrich, A., Hofmann, S. G., Cuijpers, P., & Berking, M. (2016). Self-compassion enhances the efficacy of explicit cognitive reappraisal as an emotion regulation strategy in individuals with major depressive disorder. *Behaviour research and therapy*, 82, 1-10. doi:10.1016/j.brat.2016.04.003

Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of personality assessment*, *49*(1), 71-75.

Duarte, C., Ferreira, C., Trindade, I. A., & Pinto-Gouveia, J. (2015). Body image and college women's quality of life: The importance of being self-compassionate. *Journal of health psychology*, *20*(6), 754-764.

Dumoulin, H. (2005). *Zen Buddhism: India and China* (Vol. 1). World Wisdom, Inc.

Dundas, I., Svendsen, J. L., Wiker, A. S., Granli, K. V., & Schanche, E. (2016). Self-compassion and depressive symptoms in a Norwegian student sample. *Nordic psychology*, *68*(1), 58-72.

Dunkley, D. M., & Grilo, C. M. (2007). Self-criticism, low self-esteem, depressive symptoms, and over-evaluation of shape and weight in binge eating disorder patients. *Behaviour research and therapy*, *45*(1), 139-149.

Fairburn, C. G., & Beglin, S. J. (1994). Assessment of eating disorders: Interview or self-report questionnaire?. *International journal of eating disorders*, *16*(4), 363-370.

Fennig, S., Hadas, A., Itzhaky, L., Roe, D., Apter, A., & Shahar, G. (2008). Self-criticism is a key predictor of eating disorder dimensions among inpatient adolescent females. *International journal of eating disorders*, *41*(8), 762-765.

Follmer, D. J., Sperling, R. A., & Suen, H. K. (2017). The role of MTurk in education research: Advantages, issues, and future directions. *Educational researcher*, *46*(6), 329-334.

Gale, C., Gilbert, P., Read, N., & Goss, K. (2014). An evaluation of the impact of introducing compassion focused therapy to a standard treatment programme for people with eating disorders. *Clinical psychology & psychotherapy*, *21*(1), 1-12.

Garcia-Campayo, J., Navarro-Gil, M., Andrés, E., Montero-Marin, J., López-Artal, L., & Demarzo, M. M. P. (2014). Validation of the Spanish versions of the long (26 items) and short (12 items) forms of the Self-Compassion Scale (SCS). *Health and quality of life outcomes*, *12*(1), 1-9.

Garner, D. M., & Garfinkel, P. E. (1979). The Eating Attitudes Test: An index of the symptoms of anorexia nervosa. *Psychological medicine*, *9*(2), 273-279.

Garner, D. M., Olmsted, M. P., Bohr, Y., & Garfinkel, P. E. (1982). The eating attitudes test: psychometric features and clinical correlates. *Psychological medicine*, *12*(4), 871-878.

Germer, C. K., & Neff, K. D. (2013). Self-compassion in clinical practice. *Journal of clinical psychology*, *69*(8), 856-867.

Gilbert, P. (2005). Social Mentalities: A Biopsychosocial and Evolutionary Approach to Social Relationships.

Gilbert, P. (2009). Introducing compassion-focused therapy. *Advances in psychiatric treatment*, *15*(3), 199-208.

Gilbert, P. (2010). An introduction to compassion focused therapy in cognitive behavior therapy. *International journal of cognitive therapy*, *3*(2), 97-112.

Gilbert, P., & Gilbert, H. (2011). Spiritual healing in the context of the human need for safeness, connectedness and warmth: A biopsychosocial approach. *Spiritual Healing: Scientific and religious perspectives.*,112-27.

Gilbert, P., & Procter, S. (2006). Compassionate mind training for people with high shame and self-criticism: Overview and pilot study of a group therapy approach. *Clinical psychology & psychotherapy*,13(6), 353-379. doi:10.1002/cpp.507

Gilbert, P., Clarke, M., Hempel, S., Miles, J. N., & Irons, C. (2004). Criticizing and reassuring oneself: An exploration of forms, styles and reasons in female students. *British journal of clinical psychology*, *43*(1), 31-50.

Goodman, J. K., Cryder, C. E., & Cheema, A. (2012). Data collection in a flat world: Accelerating consumer behavior research by using mechanical turk. *Journal of behavioral decision making*, *26*(3), 213-224.

Gordon, R. A. (2000). *Eating disorders: Anatomy of a social epidemic*. Blackwell Publishing.

Goss, K., & Allan, S. (2010). Compassion focused therapy for eating disorders. *International journal of cognitive therapy*, *3*(2), 141-158.

Han, M. (2003). Body image dissatisfaction and eating disturbance among Korean college female students: Relationships to media exposure, upward comparison, and perceived reality. *Communication studies*, *54*(1), 65-78.

Han, T. Y. (2005). Adolescents' stress at school: Moderation effects of personality and emotional intelligence. *The Korean journal of school psychology*, *2*(2), 177-197.

Harvey, P. (2012). *An introduction to Buddhism: Teachings, history and practices*. Cambridge University Press.

Hassink, R. (1999). South Korea's economic miracle and crisis: Explanations and regional consequences. *European planning studies*, *7*(2), 127-143.

Haynes, S. N., Kaholokula, J. K. A., & Tanaka-Matsumi, J. (2018). Psychometric foundations of psychological assessment with diverse cultures: What are the concepts, methods, and evidence?. In *Cultural competence in applied psychology* (pp. 441-472). Springer, Cham.

Homan, K. J. (2016). Self-compassion and psychological well-being in older adults. *Journal of adult development*, *23*(2), 111-119.

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal*, *6*(1), 1-55.

Hui, C. H., & Triandis, H. C. (1986). Individualism-collectivism: A study of cross-cultural researchers. *Journal of cross-cultural psychology*, *17*(2), 225-248.

Hupfeld, J., & Ruffieux, N. (2011). Validierung einer deutschen version der Self-Compassion Scale (SCS-D). *Zeitschrift für klinische psychologie und psychotherapie*.

Hwang, H. J. (2006). A study on the stress and its relative effects of variables among children and adolescents. *The Journal of elementary education*, *19*(1), 193-216.

Im, Y., Oh, W. O., & Suk, M. (2017). Risk factors for suicide ideation among adolescents: five-year national data analysis. *Archives of psychiatric nursing*, *31*(3), 282-286.

Jackson, S. C., Keel, P. K., & Ho Lee, Y. (2006). Trans-cultural comparison of disordered eating in Korean women. *International journal of eating disorders*, *39*(6), 498-502.

Jang, H. J. (2016). Comparative study of health promoting lifestyle profiles and subjective happiness in nursing and non-nursing students. *Adv sci technology letter*, *128*(7), 78-82.

Jang, S. Y., Jang, S. I., Bae, H. C., Shin, J., & Park, E. C. (2015). Precarious employment and new-onset severe depressive symptoms: a population-based prospective study in South Korea. *Scandinavian journal of work, environment & health*, 329-337.

Jarvis, J. A., Corbett, A. W., Thorpe, J. D., & Dufur, M. J. (2020). Too Much of a Good Thing: Social Capital and Academic Stress in South Korea. *Social Sciences*, *9*(11), 187.

Jeong, J.Y. (2012). A Study on the role of Lay Buddhists in Theravada Buddhism and Korean Buddhism. Hanguk Bulkyo Hak, *The journal of the korean association for buddhist studies* 64(0), 33-78.

Jo, K. H., & Song, B. S. (2012). Effect of family cohesion, subjective happiness and other factors on death anxiety in Korean elders. *Journal of korean academy of nursing*, *42*(5), 680-688.

Jung, J., & Forbes, G. B. (2006). Multidimensional assessment of body dissatisfaction and disordered eating in Korean and US college women: A comparative study. *Sex roles*, *55*(1-2), 39-50.

Jung, J., & Forbes, G. B. (2007). Body dissatisfaction and disordered eating among college women in China, South Korea, and the United States: Contrasting predictions from sociocultural and feminist theories. *Psychology of women quarterly*, *31*(4), 381-393.

Jung, J., Forbes, G. B., & Lee, Y. J. (2009). Body dissatisfaction and disordered eating among early adolescents from Korea and the US. *Sex roles*, *61*(1-2), 42-54.

Kankaraš, M., Vermunt, J. K., & Moors, G. (2011). Measurement equivalence of ordinal items: A comparison of factor analytic, item response theory, and latent class approaches. *Sociological methods & research*, *40*(2), 279-310.

Kang, J.Y. & Jang, J.H. (2017). The effectiveness of a Mindful Self-Compassion (MSC) group program for self-critical university students. *The Korean journal of counseling and psychotherapy, 29*(2), 335-356.

Karakasidou, E., Pezirkianidis, C., Galanakis, M., & Stalikas, A. (2017). Validity, reliability and factorial structure of the Self Compassion Scale in the Greek population. *Journal of psychology and psychotherapy*, *7*(313), 2161-0487.

Keel, P. K., & Klump, K. L. (2003). Are eating disorders culture-bound syndromes? Implications for conceptualizing their etiology. *Psychological bulletin*, *129*(5), 747.

Kelly, A. C., & Waring, S. V. (2018). A feasibility study of a 2-week self-compassionate letter-writing intervention for nontreatment seeking individuals with typical and atypical anorexia nervosa. *International journal of eating disorders*, *51*(8), 1005-1009.

Khang, Y. H., Lynch, J. W., & Kaplan, G. A. (2005). Impact of economic crisis on cause-specific mortality in South Korea. *International journal of epidemiology*, *34*(6), 1291-1301.

Kim, C. S. (2009). A study of determinants of happiness on adolescents. *Korean journal of health psychology*, *14*(3), 649-665.

Kim, E. S., & Yoon, M. (2011). Testing measurement invariance: A comparison of multiple-group categorical CFA and IRT. *Structural equation modeling*, *18*(2), 212-228.

Kim, I. H., Muntaner, C., Khang, Y. H., Paek, D., & Cho, S. I. (2006). The relationship between nonstandard working and mental health in a representative sample of the South Korean population. *Social science & medicine*, *63*(3), 566-574.

Kim, J. J., & Cho, G. P. (2011). The effect of stress and stress-coping on adolescents' suicidal ideation and plans. *Korea journal of counseling*, *12*(1), 301-314.

Kim, K. B. (2014). Narratives about the media, diet, and body image: A cross-cultural comparison between young female adults in the Midwestern United States and South Korea. *Journal of intercultural communication research*, *43*(4), 283-303.

Kim, K. E., Yi, G. D., Cho, Y. R., Chai, S. H., & Lee, W. K. (2008). The validation study of the Korean version of the Self-Compassion Scale. *Korean journal of health psychology*, 13(4), 1023-1044.

Kim, K. S. (1991). *The Korean miracle (1962-1980) revisited: myths and realities in strategy and development*. Helen Kellogg Institute for International Studies, University of Notre Dame.

Kim, L., & Dahlman, C. J. (1992). Technology policy for industrialization: An integrative framework and Korea's experience. *Research policy*, *21*(5), 437-452.

Kim, S. B., Chong, Y. J., & Chong, Y. S. (2017). Meta-analytic review on the relationship between self-compassion and psychological health of Korean. *Korean journal of psychology*, *36*(3), 325-358.

Kim, Y. (2005). *Women, television and everyday life in Korea: Journeys of hope*. Routledge.

Kim, Y. H., Chiu, C. Y., & Zou, Z. (2010). Know thyself: Misperceptions of actual performance undermine achievement motivation, future performance, and subjective well-being. *Journal of personality and social psychology*, *99*(3), 395.

Kim, A. E., & Park, G. S. (2003). Nationalism, Confucianism, work ethic and industrialization in South Korea. *Journal of contemporary Asia*, *33*(1), 37-49.

Korea Institute for Curriculum and Evaluation. (2005). *The international student assessment of middle and high school students in Korea*. Seoul, South Korea: Author.

Leary, M. R., Tate, E. B., Adams, C. E., Batts Allen, A., & Hancock, J. (2007). Self-compassion and reactions to unpleasant self-relevant events: the implications of treating oneself kindly. *Journal of personality and social psychology*, *92*(5), 887.

Lee, C.H. (2006). Life and awakening of the moderns; Buddhism and Modern Society. *Issues in East-Asian Philosophy* (14), 165-185

Lee, S. (1999). Fat, fatigue and the feminine: the changing cultural experience of women in Hong Kong. *Culture, medicine and psychiatry*, *23*(1), 51-73.

Lee, J. Y., & Hoffman, E. (2020). The Effect of COVID-19 on Amazon Mturk. *Available at SSRN 3712660*.

Lee, E. H., Moon, S. H., Cho, M. S., Park, E. S., Kim, S. Y., Han, J. S., & Cheio, J. H. (2019). The 21-item and 12-item versions of the Depression Anxiety Stress Scales: Psychometric valuation in a Korean population. *Asian nursing research*, *13*(1), 30-37.

Lee, H. (2014). Effects of sociocultural attitude toward appearance, body image, and self-esteem on appearance management in middle and high school girls. *Journal of the korea academia-industrial cooperation society*, *15*(2), 914-922.

Lee, S. Y., Hong, J. S., & Espelage, D. L. (2010). An ecological understanding of youth suicide in South Korea. *School psychology international*, *31*(5), 531-546.

Lee, M., & Larson, R. (2000). The Korean 'examination hell': Long hours of studying, distress, and depression. *Journal of youth and adolescence*, *29*(2), 249-271.

Lee, M., & Lee, H. H. (2017). The effects of SNS appearance-related photo activity on women's body image and self-esteem. *Journal of the Korean society of clothing and textiles*, *41*(5), 858-871.

Lee, M., & Lee, H. H. (2019). Effects of family, friends, and social media pressures on acceptance of cosmetic surgical procedures via internalization and appearance satisfaction. *Journal of the Korean society of clothing and textiles*, *43*(5), 620-633.

Lee, E. H., Moon, S. H., Cho, M. S., Park, E. S., Kim, S. Y., Han, J. S., & Cheio, J. H. (2019). The 21-item and 12-item versions of the depression anxiety stress scales: psychometric evaluation in a Korean population. *Asian nursing research*, *13*(1), 30-37.

Lee, J. Y., Nam, S. K., Lee, M. K., Lee, J. H., & Lee, S. M. (2009). Rosenberg'self-esteem scale: analysis of item-level validity. *The Korean journal of counseling and psychotherapy*, *21*(1), 173-189.

Lee, J., Puig, A., Kim, Y. B., Shin, H., Lee, J. H., & Lee, S. M. (2010). Academic burnout profiles in Korean adolescents. *Stress and health*, *26*(5), 404-416.

Lim, Y. J. (2012). Psychometric properties of the satisfaction with life scale among Korean police officers, university students, and adolescents. *Korean journal of psychology: General*, *31*(3), 877-896.

Lim, I. S., & Kim, M. J. (2012). Reproduction of obesity stigma in Korean TV diet survival programs: focused on 'BIGsTORY'and 'Diet War'. *Korean journal of women's studies*, *28*(4), 1-38.

Lim, Y. S., Park, N. R., Jeon, S. B., Jeong, S. Y., Tserendejid, Z., & Park, H. R. (2015). Analysis of weight control behaviors by body image perception among Korean women in different age groups: Using the 2010 Korea national health and nutrition examination survey data. *Korean journal of community nutrition*, *20*(2), 141-150.

Limanonda, B. (1995). Families in Thailand: Beliefs and realities. *Journal of comparative family studies*, *26*(1), 67-82.

Lin, J. A., Hartman-Munick, S. M., Kells, M. R., Milliren, C. E., Slater, W. A., Woods, E. R., ... & Richmond, T. K. (2021). The impact of the COVID-19 pandemic on the number of adolescents/young adults seeking eating disorder-related care. *Journal of adolescent health*, *69*(4), 660-663.

López, A., Sanderman, R., Smink, A., Zhang, Y., Van Sonderen, E., Ranchor, A., & Schroevers, M. J. (2015). A reconsideration of the Self-Compassion Scale's total score: self-compassion versus self-criticism. *PloS one*, *10*(7), e0132940.

Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour research and therapy*, *33*(3), 335-343.

Lyubomirsky, S., & Lepper, H. S. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. *Social indicators research*, *46*(2), 137-155.

Macbeth, A., & Gumley, A. (2012). Exploring compassion: A meta-analysis of the association between self-compassion and psychopathology. *Clinical psychology review*, 32(6), 545–552. doi:10.1016/j.cpr.2012.06.003

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological review*, *98*(2), 224.

Marsh, H. W., Hau, K. T., & Grayson, D. (2005). Goodness of fit in structural equation models.

Meade, A. W., & Craig, S. B. (2012). Identifying careless responses in survey data. *Psychological methods*, *17*(3), 437.

Meredith, W. (1993). Measurement invariance, factor analysis and factorial invariance. *Psychometrika*, *58*(4), 525-543.

Moore, P. (2008). Introducing mindfulness to clinical psychologists in training: An experiential course of brief exercises. *Journal of clinical psychology in medical settings*, *15*(4), 331-337.

Muthén, L. K., & Muthen, B. (2017). *Mplus user's guide: Statistical analysis with latent variables, user's guide*. Muthén & Muthén.

Neff, K. D. (2003a). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and identity*, *2*(2), 85-101.

Neff, K. D. (2003b). The development and validation of a scale to measure self-compassion. *Self and Identity*, 2, 223–250. doi:10.1080/15298860309027

Neff, K. D. (2004). Self-compassion and psychological well-being. *Constructivism in the human Sciences*, 9(2), 27.

Neff, K. D. (2009). The role of self-compassion in development: A healthier way to relate to oneself. *human development*, *52*(4), 211.

Neff, K. D. (2011). *Self-compassion: The proven power of being kind to yourself*. Hachette UK.

Neff, K. D. (2016). The self-compassion scale is a valid and theoretically coherent measure of self-compassion. *Mindfulness*, *7*(1), 264-274.

Neff, K. D., & Germer, C. K. (2013). A pilot study and randomized controlled trial of the mindful self-compassion program. *Journal of clinical psychology*, *69*(1), 28-44.

Neff, K. D., Kirkpatrick, K. L., & Rude, S. S. (2007). Self-compassion and adaptive psychological functioning. *Journal of research in personality*, 41(1), 139-154.

Neff, K. D., Pisitsungkagarn, K., & Hsieh, Y.-P. (2008). Self-Compassion and Self-Construal in the United States, Thailand, and Taiwan. *Journal of cross-cultural psychology*, 39(3), 267–285. doi:10.1177/0022022108314544

Neff, K. D., Rude, S. S., & Kirkpatrick, K. L. (2007). An examination of self-compassion in relation to positive psychological functioning and personality traits. *Journal of research in personality*, *41*(4), 908-916.

Neff, K. D., Tóth-Király, I., Yarnell, L. M., Arimitsu, K., Castilho, P., Ghorbani, N., ... & Mantzios, M. (2019). Examining the factor structure of the Self-Compassion Scale in 20 diverse samples: Support for use of a total score and six subscale scores. *Psychological assessment*, *31*(1), 27.

Neff, K. D., Tóth–Király, I., & Colosimo, K. (2018). Self–compassion is best measured as a global construct and is overlapping with but distinct from neuroticism: A response to Pfattheicher, Geiger, Hartung, Weiss, and Schindler (2017). *European journal of personality*, *32*(4), 371-392.

Neff, K. D., & Vonk, R. (2009). Self-compassion versus global self-esteem: Two different ways of relating to oneself. *Journal of personality*, *77*(1), 23-50.

Neff, K. D., Whittaker, T. A., & Karl, A. (2017). Examining the factor structure of the self-compassion scale in four distinct populations: Is the use of a total scale score justified? *Journal of personality assessme*nt, 99(6), 596-607. doi:10.1080/00223891.2016.1269334

Noh, J. W., Kwon, Y. D., Yang, Y., Cheon, J., & Kim, J. (2018). Relationship between body image and weight status in east Asian countries: comparison between South Korea and Taiwan. *BMC public health*, *18*(1), 814.

Noh, S., & Cho, H. (2020). Psychological and physiological effects of the mindful lovingkindness compassion program on highly self-critical university students in South Korea. *Frontiers in psychology*, *11*, 2628.

OECD (2013), Strengthening Social Cohesion in Korea, OECD Publishing, Paris, https://doi.org/10.1787/9789264188945-en.

OECD (2019), Education at a Glance 2019: OECD Indicators, OECD Publishing, Paris, https://doi.org/10.1787/f8d7880d-en.

OECD (2019), Suicide rates (indicator). doi: 10.1787/a82f3459-en (Accessed on 02 August 2021).

Oh, S. H. (2009). A study on the influence of stress on the adolescents' suicidal ideation. *Journal of School social work*, *16*, 53-73.

Oh, Y. H. (2004). Korean women live to be thin and slim. *The Korea herald A*, *11*.

Osman, A., Wong, J. L., Bagge, C. L., Freedenthal, S., Gutierrez, P. M., & Lozano, G. (2012). The depression anxiety stress Scales—21 (DASS-21): further examination of dimensions, scale reliability, and correlates. *Journal of clinical psychology*, *68*(12), 1322-1338.

Park, J. (2010). Confucianism in Korea's Economic Revolution. *History*, *2*, 71-81.

Park, J. H., & Kim, K. W. (2011). A review of the epidemiology of depression in Korea. *Journal of the Korean medical association*, *54*(4), 362-369.

Park, S. R., & Lee, H. J. (2015). The effectiveness of the self-compassion enhancement program. *The Korean journal of counseling and psychotherapy*, *27*(3), 583-611.

Park, S. G., Min, K. B., Chang, S. J., Kim, H. C., & Min, J. Y. (2009). Job stress and depressive symptoms among Korean employees: the effects of culture on work. *International archives of occupational and environmental health*, *82*(3), 397-405.

Peer, E., Brandimarte, L., Samat, S., & Acquisti, A. (2017). Beyond the Turk: Alternative platforms for crowdsourcing behavioral research. *Journal of experimental social psychology*, *70*, 153-163.

Petrocchi, N., Ottaviani, C., & Couyoumdjian, A. (2014). Dimensionality of self-compassion: translation and construct validation of the self-compassion scale in an Italian sample. *Journal of mental health*, *23*(2), 72-77.

Pike, K. M., & Dunne, P. E. (2015). The rise of eating disorders in Asia: a review. *Journal of eating disorders*, *3*(1), 33.

Pinto-Gouveia, J., Ferreira, C., & Duarte, C. (2014). Thinness in the pursuit for social safeness: An integrative model of social rank mentality to explain eating psychopathology. *Clinical psychology & psychotherapy*, *21*(2), 154-165.

Porter, M. E. (1990). The competitive advantage of nations. *Competitive intelligence review*, *1*(1), 14-14.

Prince, R. (1985). The concept of culture-bound syndromes: Anorexia nervosa and brain-fag. *Social science & medicine*, *21*(2), 197-203.

Pyszczynski, T., Greenberg, J., Solomon, S., Arndt, J., & Schimel, J. (2004). Why do people need self-esteem? A theoretical and empirical review. *Psychological bulletin*, *130*(3), 435.

Reise, S. P., Moore, T. M., & Haviland, M. G. (2010). Bifactor models and rotations: Exploring the extent to which multidimensional data yield univocal scale scores. *Journal of personality assessment*, *92*(6), 544-559.

Rhee, M. K., Lee, Y. H., Park, S. H., Sohn, C. H., Chung, Y. C., Hong, S. K., ... & Yoon, A. (1998). A standardization study of the Korean version of eating attitudes test-26 I: reliability and factor analysis. *Korean journal of psychosomatic medicine*, *6*(2), 155-175.

Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: Construct validation of a single-item measure and the Rosenberg Self-Esteem Scale. *Personality and social psychology bulletin*, *27*(2), 151-161.

Rosenberg, M. (1965). Rosenberg self-esteem scale (RSE). *Acceptance and commitment therapy. Measures package*, *61*(52), 18.

Rosenberg, M. (1979). Conceiving the Self. New York: Basic Book.

Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual review of psychology*, *52*(1), 141-166.

Schaefer, L. M., Burke, N. L., Thompson, J. K., Dedrick, R. F., Heinberg, L. J., Calogero, R. M., ... & Swami, V. (2015). Development and validation of the sociocultural attitudes towards appearance questionnaire-4 (SATAQ-4). *Psychological assessment*, *27*(1), 54.

Schwekendiek, D., Yeo, M., & Ulijaszek, S. (2013). On slimming pills, growth hormones, and plastic surgery: The socioeconomic value of the body in South Korea. In *When culture impacts health* (pp. 141-153). Academic Press.

Sechrest, L., Fay, T. L., & Zaidi, S. H. (1972). Problems of translation in cross-cultural research. *Journal of cross-cultural psychology*, *3*(1), 41-56.

Seligman, M. E. P. (1995). The optimistic child: How learned optimism protects children from depression.

Seo, S., Cho, M., Kim, Y., & Ahn, J. (2013). The relationships among satisfaction with food-related life, depression, isolation, social support, and overall satisfaction of life in elderly South Koreans. *Journal of the Korean eietetic association*, *19*(2), 159-172.

Shin, R., & Kim, J. (2014). A comparative cross-cultural examination of community art education programs in South Korea and the United States. *Studies in art education, 55*(3), 227-240.

Sidani, S., Guruge, S., Miranda, J., Ford-Gilboe, M., & Varcoe, C. (2010). Cultural adaptation and translation of measures: an integrated method. *Research in nursing & health*, *33*(2), 133-143.

Sinaiko, H. W., & Brislin, R. W. (1973). Evaluating language translations: Experiments on three assessment methods. *Journal of applied psychology*, *57*(3), 328.

Sinclair, S. J., Siefert, C. J., Slavin-Mulford, J. M., Stein, M. B., Renna, M., & Blais, M. A. (2012). Psychometric evaluation and normative data for the depression, anxiety, and stress scales-21 (DASS-21) in a nonclinical sample of U.S. adults. *Evaluation & the health professions,* 35(3), 259–279. https://doi.org/10.1177/0163278711424282

Singelis, T. M. (1994). The measurement of independent and interdependent self construals. *Personality and social psychology bulletin*, *20*(5), 580-591.

Smith, S. M., Roster, C. A., Golden, L. L., & Albaum, G. S. (2016). A multi-group analysis of online survey respondent data quality: Comparing a regular USA consumer panel to MTurk samples. *Journal of business research*, *69*(8), 3139-3148.

Sommers-Spijkerman, M., Trompetter, H., Ten Klooster, P., Schreurs, K., Gilbert, P., & Bohlmeijer, E. (2018). Development and validation of the forms of Self-Criticizing/Attacking and Self-Reassuring Scale—Short Form. *Psychological assessment*, *30*(6), 729.

Sorensen, C. W. (1994). Success and education in South Korea. *Comparative education review*, *38*(1), 10-35.

Statistics Korea (2015). Korean mortality rate. *Daejeon: Statistics Korea*.

Statistics Korea (2017). Causes of death statistics in 2017. *Daejeon: Statistics Korea*.

Sung, Y., & Choi, S. M. (2012). The influence of self-construal on self-brand congruity in the United States and Korea. *Journal of Cross-Cultural Psychology*, *43*(1), 151-166.

Taylor, S. E., & Brown, J. D. (1988). Illusion and well-being: a social psychological perspective on mental health. *Psychological bulletin*, *103*(2), 193.

Thompson, R., & Zuroff, D. C. (2004). The Levels of Self-Criticism Scale: comparative self-criticism and internalized self-criticism. *Personality and individual differences*, *36*(2), 419-430.

Tóth-Király, I., Morin, A. J., Bőthe, B., Orosz, G., & Rigó, A. (2018). Investigating the multidimensionality of need fulfillment: A bifactor exploratory structural equation modeling representation. *Structural equation modeling: A Multidisciplinary journal*, *25*(2), 267-286.

Triandis, H. C. (1989). The self and social behavior in differing cultural contexts. *Psychological review*, *96*(3), 506.

Tsai, G. (2000). Eating disorders in the Far East. *Eating and weight Disorders-studies on anorexia, bulimia and obesity*, *5*(4), 183-197.

Veale, D., & Gilbert, P. (2014). Body dysmorphic disorder: The functional and evolutionary context in phenomenology and a compassionate mind. *Journal of obsessive-compulsive and related Disorders*, *3*(2), 150-160.

Walter, S. L., Seibert, S. E., Goering, D., & O'Boyle, E. H. (2019). A tale of two sample sources: Do results from online panel data and conventional data converge?. *Journal of business and psychology*, *34*(4), 425-452.

Wang, C., Tripp, C., Sears, S. F., Xu, L., Tan, Y., Zhou, D., ... & Ho, R. (2021). The impact of the COVID-19 pandemic on physical and mental health in the two largest economies in the world: a comparison between the United States and China. *Journal of behavioral medicine*, *44*(6), 741-759.

Wang, Q. (2000). Reliability and Validity Tests of Singelis's Self-Construal Scale (1994).

Wardle, J., Haase, A. M., & Steptoe, A. (2006). Body image and weight control in young adults: international comparisons in university students from 22 countries. *International journal of obesity*, *30*(4), 644-651.

Warnecke, R. B., Johnson, T. P., Chávez, N., Sudman, S., O'rourke, D. P., Lacey, L., & Horm, J. (1997). Improving question wording in surveys of culturally diverse populations. *Annals of epidemiology*, *7*(5), 334-342.

Wasylkiw, L., MacKinnon, A. L., & MacLellan, A. M. (2012). Exploring the link between self-compassion and body image in university women. *Body image*, *9*(2), 236-245.

Weisz, J. R., Suwanlert, S., Chaiyasit, W., Weiss, B., Walter, B. R., & Anderson, W. W. (1988). Thai and American perspectives on over-and undercontrolled child behavior problems: Exploring the threshold model among parents, teachers, and psychologists. *Journal of consulting and clinical psychology*, *56*(4), 601.

Werner, O., & Campbell, D. T. (1970). Translating, working through interpreters, and the problem of decentering. *A handbook of method in cultural anthropology*, *398*, 420.

Williams, M. J., Dalgleish, T., Karl, A., & Kuyken, W. (2014). Examining the factor structures of the five facet mindfulness questionnaire and the self-compassion scale. *Psychological assessment*, *26*(2), 407.

Yamaguchi, A., Kim, M. S., & Akutsu, S. (2014). The effects of self-construals, self-criticism, and self-compassion on depressive symptoms. *Personality and individual differences*, *68*, 65-70.

Yang, C. K., Kim, J. K., Patel, S. R., & Lee, J. H. (2005). Age-related changes in sleep/wake patterns among Korean teenagers. *Pediatrics*, *115* (Supplement 1), 250-256.

Yoo, K. B., Park, E. C., Jang, S. Y., Kwon, J. A., Kim, S. J., Cho, K. H., ... & Park, S. (2016). Association between employment status change and depression in Korean adults. *BMJ open*, *6*(3), e008570.

Yun G.W. (2006). Similarities and differences in Korean, Chinese, and Japanese corporate cultures. *Hanyang university Asia-pacific research center,* 29:47–99

Yun, W., & Park, B. S. (2019). Responses of Korean Buddhism to the Ethos of Contemporary Korea: Three Discourses in the Wake of Modernization. *Religions*, *10*(1), 6.

Zhang, W. B. (2003). *Taiwan's modernization: Americanization and modernizing Confucian manifestations*. World Scientific.

Zhou, H., & Fishbach, A. (2016). The pitfall of experimenting on the web: How unattended selective attrition leads to surprising (yet false) research conclusions. *Journal of personality and social psychology*, *111*(4), 493.

Table 1

Means and Standard Deviations for the Korean and US Samples

	US (N = 463)		Korea (N = 510)	
Measures	Mean	SD	Mean	SD
SATAQ-4				
Internalization				
Low Fat	3.80	0.73	3.24	0.80
Muscular	3.75	0.86	2.90	0.79
Pressures				
Family	3.63	1.00	2.15	0.90
Peers	3.58	1.07	1.97	0.84
Media	3.77	0.90	2.59	1.11
Self-Compassion Scale	3.13	0.46	3.23	0.53
Self-Esteem Scale	19.40	4.42	22.63	4.75
Self-Construal				
Independent	5.51	0.79	4.39	0.71
Interdependent	5.37	0.86	4.36	0.68
DASS-21				
Depression	11.11	5.98	4.57	4.34
Anxiety	10.94	6.10	2.71	3.23
Stress	11.34	5.74	4.58	4.08
Subjective Happiness Scale	19.62	3.22	17.49	4.43
Satisfaction with Life Scale	27.52	5.63	18.01	6.51
EAT-26				
Dieting	15.92	9.80	4.49	4.44
Bulimia/Food Preoccupation	7.48	5.49	0.81	1.89
Oral Control	8.71	6.15	1.53	2.16

Table 2

Means and Standard Deviations by Gender for the US Sample

	US Male ($N = 276$)		US Female ($N = 187$)	
Measures	Mean	SD	Mean	SD
SATAQ-4				
Internalization				
Low Fat	3.87	0.74	3.71	0.71
Muscular	3.93	0.75	3.47	0.93
Pressures				
Family	3.73	1.00	3.48	1.00
Peers	3.73	1.00	3.37	1.14
Media	3.84	0.90	3.67	0.90
Self-Compassion Scale	3.10	0.38	3.17	0.56
Self-Esteem Scale	18.90	4.74	20.13	3.79
Self-Construal				
Independent	5.63	0.80	5.33	0.76
Interdependent	5.50	0.87	5.18	0.81
DASS-21				
Depression	11.88	6.12	9.98	5.61
Anxiety	11.59	6.18	10.00	5.87
Stress	11.95	5.86	10.43	5.43
Subjective Happiness Scale	19.76	2.98	19.42	3.55
Satisfaction with Life Scale	28.13	5.45	26.60	5.80
EAT-26				
Dieting	17.77	10.32	13.18	8.26
Bulimia/Food Preoccupation	8.47	5.68	6.02	4.86
Oral Control	9.98	6.35	6.83	5.34

Table 3

Means and Standard Deviations by Gender for the Korean Sample

	Korean Male (N = 242)		Korean Female (N = 268)	
Measures	Mean	SD	Mean	SD
SATAQ-4				
Internalization				
Low Fat	3.87	0.74	3.71	0.71
Muscular	3.93	0.75	3.47	0.93
Pressures				
Family	3.73	1.00	3.48	1.00
Peers	3.73	1.00	3.37	1.14
Media	3.84	0.90	3.67	0.90
Self-Compassion Scale	3.10	0.38	3.17	0.56
Self-Esteem Scale	18.90	4.74	20.13	3.79
Self-Construal				
Independent	5.63	0.80	5.33	0.76
Interdependent	5.50	0.87	5.18	0.81
DASS-21				
Depression	11.88	6.12	9.98	5.61
Anxiety	11.59	6.18	10.00	5.87
Stress	11.95	5.86	10.43	5.43
Subjective Happiness Scale	19.76	2.98	19.42	3.55
Satisfaction with Life Scale	28.13	5.45	26.60	5.80
EAT-26				
Dieting	17.77	10.32	13.18	8.26
Bulimia/Food Preoccupation	8.47	5.68	6.02	4.86
Oral Control	9.98	6.35	6.83	5.34

Table 4

Standardized Factor Loadings of the Bifactor Exploratory Structural Equation Modeling for the New Korean Self-Compassion Scale

	Subscale Factor Loadings	Self-Compassion Factor Loading
Self-kindness		
5. I try to be loving towards myself when I'm feeling emotional pain.	.56	.57
12. When I'm going through a very hard time, I give myself the caring and tenderness I need.	.64	.63
19. I'm kind to myself when I'm experiencing suffering.	.38	.55
23. I'm tolerant of my own flaws and inadequacies.	.33	.61
26. I try to be understanding and patient towards those aspects of my personality I don't like.	.29	.60
Common humanity		
3. When things are going badly for me, I see the difficulties as part of life that everyone goes through.	.33	.63
7. When I'm down and out, I remind myself that there are lots of other people in the world	.68	.45
feeling like I am.	.77	.46
10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.	.47	.53
Mindfulness		
9. When something upsets me I try to keep my emotions in balance.	.52	.60
14. When something painful happens I try to take a balanced view of the situation.	.64	.62
17. When I fail at something important to me I try to keep things in perspective.	.58	.60
22. When I'm feeling down I try to approach my feelings with curiosity and openness.	.36	.66
Self-judgment		
1. I'm disapproving and judgmental about my own flaws and inadequacies.	.44	.60
8. When times are really difficult, I tend to be tough on myself.	.70	.12
11. I'm intolerant and impatient towards those aspects of my personality I don't like.	.43	.66
16. When I see aspects of myself that I don't like, I get down on myself.	.40	.69
21. I can be a bit cold-hearted towards myself when I'm experiencing suffering.	.63	-.21
Isolation		
4. When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world.	.33	.66
13. When I'm feeling down, I tend to feel like most other people are probably happier than I am.	.66	.59
18. When I'm really struggling, I tend to feel like other people must be having an easier time of it.	.62	.60
25. When I fail at something that's important to me, I tend to feel alone in my failure.	.38	.73
Over-identification		
2. When I'm feeling down I tend to obsess and fixate on everything that's wrong.	.45	.71
6. When I fail at something important to me I become consumed by feelings of inadequacy	.37	.71
20. When something upsets me I get carried away with my feelings.	.60	.63
24. When something painful happens I tend to blow the incident out of proportion.	.46	.70

Table 5

Standardized Factor Loadings of the Bifactor Exploratory Structural Equation Modeling for the Self-Compassion Scale

	Subscale Factor Loadings	Self-Compassion Factor Loading
Self-kindness		
5. I try to be loving towards myself when I'm feeling emotional pain.	.64	-.39
12. When I'm going through a very hard time, I give myself the caring and tenderness I need.	.43	-.51
19. I'm kind to myself when I'm experiencing suffering.	.54	-.48
23. I'm tolerant of my own flaws and inadequacies.	.39	-.53
26. I try to be understanding and patient towards those aspects of my personality I don't like.	.54	-.45
Common humanity		
3. When things are going badly for me, I see the difficulties as part of life that everyone goes through.	.44	-.52
7. When I'm down and out, I remind myself that there are lots of other people in the world	.53	-.51
feeling like I am.	.47	-.55
10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.	.52	-.45
Mindfulness		
9. When something upsets me I try to keep my emotions in balance.	.52	-.38
14. When something painful happens I try to take a balanced view of the situation.	.68	-.45
17. When I fail at something important to me I try to keep things in perspective.	.37	-.49
22. When I'm feeling down I try to approach my feelings with curiosity and openness.	.40	-.56
Self-judgment		
1. I'm disapproving and judgmental about my own flaws and inadequacies.	.35	.63
8. When times are really difficult, I tend to be tough on myself.	.18	.72
11. I'm intolerant and impatient towards those aspects of my personality I don't like.	.28	.72
16. When I see aspects of myself that I don't like, I get down on myself.	.24	.77
21. I can be a bit cold-hearted towards myself when I'm experiencing suffering.	.28	.73
Isolation		
4. When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world.	.11	.77
13. When I'm feeling down, I tend to feel like most other people are probably happier than I am.	.37	.74
18. When I'm really struggling, I tend to feel like other people must be having an easier time of it.	.24	.70
25. When I fail at something that's important to me, I tend to feel alone in my failure.	.29	.75
Over-identification		
2. When I'm feeling down I tend to obsess and fixate on everything that's wrong.	.15	.78
6. When I fail at something important to me I become consumed by feelings of inadequacy	.24	.74
20. When something upsets me I get carried away with my feelings.	.22	.75
24. When something painful happens I tend to blow the incident out of proportion.	.25	.75

Table 6

Standardized Factor Loadings of the Six-Factor Confirmatory Factor Analysis for the New Korean Self-Compassion Scale

	Factor Loadings
Self-kindness	
5. I try to be loving towards myself when I'm feeling emotional pain.	.64
12. When I'm going through a very hard time, I give myself the caring and tenderness I need.	.71
19. I'm kind to myself when I'm experiencing suffering.	.63
23. I'm tolerant of my own flaws and inadequacies.	.70
26. I try to be understanding and patient towards those aspects of my personality I don't like.	.70
Common humanity	
3. When things are going badly for me, I see the difficulties as part of life that everyone goes through.	.70
7. When I'm down and out, I remind myself that there are lots of other people in the world	.66
feeling like I am.	.68
10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.	.69
Mindfulness	
9. When something upsets me, I try to keep my emotions in balance.	.75
14. When something painful happens I try to take a balanced view of the situation.	.81
17. When I fail at something important to me, I try to keep things in perspective.	.78
22. When I'm feeling down, I try to approach my feelings with curiosity and openness.	.73
Self-judgment	
1. I'm disapproving and judgmental about my own flaws and inadequacies.	.69
11. I'm intolerant and impatient towards those aspects of my personality I don't like.	.76
16. When I see aspects of myself that I don't like, I get down on myself.	.79
Isolation	
4. When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world.	.73
13. When I'm feeling down, I tend to feel like most other people are probably happier than I am.	.74
18. When I'm really struggling, I tend to feel like other people must be having an easier time of it.	.72
25. When I fail at something that's important to me, I tend to feel alone in my failure.	.81
Over-identification	
2. When I'm feeling down, I tend to obsess and fixate on everything that's wrong.	.81
6. When I fail at something important to me, I become consumed by feelings of inadequacy	.78
20. When something upsets me, I get carried away with my feelings.	.78
24. When something painful happens I tend to blow the incident out of proportion.	.76

Table 7

Standardized Factor Loadings of the Six-Factor Confirmatory Factor Analysis for the Self-Compassion Scale

	Factor Loadings
Self-kindness	
5. I try to be loving towards myself when I'm feeling emotional pain.	.61
12. When I'm going through a very hard time, I give myself the caring and tenderness I need.	.65
19. I'm kind to myself when I'm experiencing suffering.	.71
23. I'm tolerant of my own flaws and inadequacies.	.65
26. I try to be understanding and patient towards those aspects of my personality I don't like.	.63
Common humanity	
3. When things are going badly for me, I see the difficulties as part of life that everyone goes through.	.67
7. When I'm down and out, I remind myself that there are lots of other people in the world	.69
feeling like I am.	.69
10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.	.65
Mindfulness	
9. When something upsets me, I try to keep my emotions in balance.	.55
14. When something painful happens I try to take a balanced view of the situation.	.66
17. When I fail at something important to me, I try to keep things in perspective.	.61
22. When I'm feeling down, I try to approach my feelings with curiosity and openness.	.68
Self-judgment	
1. I'm disapproving and judgmental about my own flaws and inadequacies.	.68
11. I'm intolerant and impatient towards those aspects of my personality I don't like.	.78
16. When I see aspects of myself that I don't like, I get down on myself.	.81
Isolation	
4. When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world.	.77
13. When I'm feeling down, I tend to feel like most other people are probably happier than I am.	.78
18. When I'm really struggling, I tend to feel like other people must be having an easier time of it.	.74
25. When I fail at something that's important to me, I tend to feel alone in my failure.	.78
Over-identification	
2. When I'm feeling down, I tend to obsess and fixate on everything that's wrong.	.79
6. When I fail at something important to me, I become consumed by feelings of inadequacy	.77
20. When something upsets me, I get carried away with my feelings.	.75
24. When something painful happens I tend to blow the incident out of proportion.	.77

Table 8

Correlations of Items for the New Korean Self-Compassion Scale for the Korean Sample

Item Number	1	2	3	4	5	6	7	9	10	11	12	13	14	15	16	17	18	19	20	22	23	24	25	26
1	1.00																							
2	.44**	1.00																						
3	.29**	.31**	1.00																					
4	.41**	.48**	.28**	1.00																				
5	.25**	.29**	.45**	.20**	1.00															.		.		
6	.46**	.63**	.27**	.53**	.23**	1.00																		
7	.17**	.14**	.49**	.17**	.40**	.15**	1.00																	
9	.27**	.30**	.46**	.22**	.38**	.19**	.33**	1.00																
10	.15**	.15**	.45**	.18**	.39**	.16**	.66**	.35**	1.00															
11	.52**	.49**	.30**	.49**	.24**	.49**	.17**	.27**	.13**	1.00														
12	.35**	.35**	.42**	.27**	.67**	.27**	.67**	.27**	.40**	.39**	1.00													
13	.36**	.50**	.24**	.58**	.18**	.52**	.13**	.17**	.14**	.44**	.25**	1.00												
14	.25**	.31**	.45**	.29**	.38**	.24**	.34**	.63**	.38**	.28**	.40**	.23**	1.00											
15	.23**	.19**	.42**	.17**	.37**	.16**	.47**	.34**	.55**	.24**	.46**	.23**	.40**	1.00										
16	.54**	.53**	.25**	.49**	.18**	.58**	.10**	.28**	.11**	.60**	.25**	.44**	.25**	.11**	1.00									
17	.23**	.34**	.44**	.26**	.38**	.23**	.32**	.58**	.37**	.27**	.37**	.20**	.67**	.36**	.25**	1.00								
18	.34**	.48**	.30**	.51**	.20**	.52**	.14**	.21**	.16**	.44**	.26**	.70**	.25**	.21**	.41**	.23**	1.00							
19	.28**	.29**	.38**	.27**	.43**	.29**	.40**	.31**	.34**	.25**	.53**	.19**	.29**	.37**	.25**	.32**	.26**	1.00						
20	.42**	.63**	.24**	.50**	.20**	.61**	.05	.30**	.08	.43**	.28**	.47**	.34**	.12**	.53**	.31**	.42**	.23**	1.00					
22	.26**	.26**	.47**	.27**	.53**	.20**	.44**	.53**	.47**	.24**	.47**	.23**	.56**	.46**	.23**	.55**	.24**	.42**	.26**	1.00				
23	.30**	.32**	.41**	.21**	.44**	.21**	.33**	.43**	.33**	.35**	.46**	.20**	.42**	.36**	.24**	.43**	.25**	.42**	.26**	.43**	1.00			
24	.42**	.62**	.28**	.52**	.26**	.54**	.14**	.31**	.31**	.15**	.44**	.31**	.43**	.36**	.17**	.47**	.36**	.43**	.27**	.64**	.30**	1.00		
25	.43**	.60**	.35**	.56**	.22**	.58**	.18**	.26**	.17**	.45**	.31**	.61**	.34**	.25**	.50**	.34**	.62**	.27**	.50**	.28**	.24**	.52**	1.00	
26	.29**	.28**	.44**	.22**	.37**	.21**	.35**	.44**	.36**	.35**	.45**	.16**	.42**	.41**	.22**	.41**	.17**	.41**	.25**	.41**	.56**	.26**	.26**	1.00

** $p < 0.01$. * $p < 0.05$

Table 9

Correlations of Items for the Self-Compassion Scale for the US Sample

Item Number	1	2	3	4	5	6	7	9	10	11	12	13	14	15	16	17	18	19	20	22	23	24	25	26
1	1.00																							
2	.51**	1.00																						
3	-.16**	-.19**	1.00																					
4	.55**	.65**	-.20**	1.00																				
5	-.30**	-.05	.40**	-.16**	1.00																			
6	.28**	.61**	-.14**	.59**	-.06**	1.00																		
7	-.15**	-.18**	.41**	-.19**	.40**	-.16**	1.00																	
9	-.04**	-.09**	.40**	-.14**	.30**	-.06**	.28((	1.00																
10	-.18**	-.19**	.47**	-.23**	.36**	-.21**	.51**	.30**	1.00															
11	.51**	.59**	-.13**	.56**	-.07**	.60**	-.16**	-.11	-.21	1.00														
12	-.13**	-.15**	.52**	-.17**	.37**	-.13**	.41**	.39**	.49**	-.17**	1.00													
13	.49**	.60**	-.14**	.56**	-.08**	.64**	-.18**	-.13**	-.19**	.59**	-.14**	1.00												
14	.08	-.12*	.42**	-.16**	.36**	-.10*	.46**	.46**	.34**	-.08	.35**	-.18**	1.00											
15	-.16**	-.08**	.44**	-.17**	.38**	-.14**	.50**	.28**	.42**	-.13**	.36**	-.12**	.45**	1.00										
16	.50**	.64**	-.17**	.60**	-.09*	.59**	-.21**	-.08	-.27**	.65**	-.24**	.56**	-.14**	-.12*	1.00									
17	-.08	-.12**	.44**	-.13**	.33**	-.16**	.34**	.34**	.47**	-.15**	.44**	-.14**	.39**	.40**	-.20**	1.00								
18	.48**	.59**	-.16**	.57**	-.07	.58**	-.18**	-.12*	-.21**	.46**	-.18**	.60**	-.14**	-.11*	.55**	-.17**	1.00							
19	-.09**	-.15**	.43**	-.17**	.51**	-.15**	.54**	.36**	.49**	-.19**	.43**	-.17**	.48**	.45**	-.13**	.38**	-.14**	1.00						
20	.49**	.59**	-.19**	.57**	-.13**	.56**	-.24**	-.11*	-.30**	.56**	-.21**	.57**	-.13**	-.20**	.62**	-.16**	-.16**	.58**	1.00					
22	-.15**	-.22**	.43**	-.26**	.43**	-.19**	.46**	.33**	.42**	-.20**	.42**	-.21**	.57**	-.13**	-.20**	.62**	-.16**	.58**	-.20**	1.00				
23	-.14**	-.20**	.46**	-.21**	.35**	-.21**	.35**	-.21**	.43**	.40**	.47**	-.17**	.42**	-.18**	.39**	.37**	-.24**	.45**	-.17**	.42**	1.00			
24	.47**	.58**	-.21**	.57**	-.10*	.61**	-.22**	-.01*	-.30**	.55**	.24**	.61**	-.11*	-.17**	.62**	-.14**	.57**	-.15**	.61**	-.27**	-.22**	1.00		
25	.53**	.63**	-.14**	.58**	-.13**	.56**	-.14**	-.15**	-.22**	.64**	-.16**	.64**	-.12*	-.12**	.58**	-.17**	.57**	-.16**	.55**	-.17**	-.14**	.60**	1.00	
26	-.20**	-.10*	.36**	-.18**	.47**	-.16**	.38**	.31**	.42**	-.15**	.42**	-.17**	.41**	.43**	-.18**	.39**	-.16**	.41**	-.15**	.47**	.41**	-.17**	-.15**	1.00

** $p < 0.01$. * $p < 0.05$

Figure 1. ***Path Diagram of the Six-Factor Correlated Confirmatory Factor Analysis for the New Korean Self-Compassion Scale***

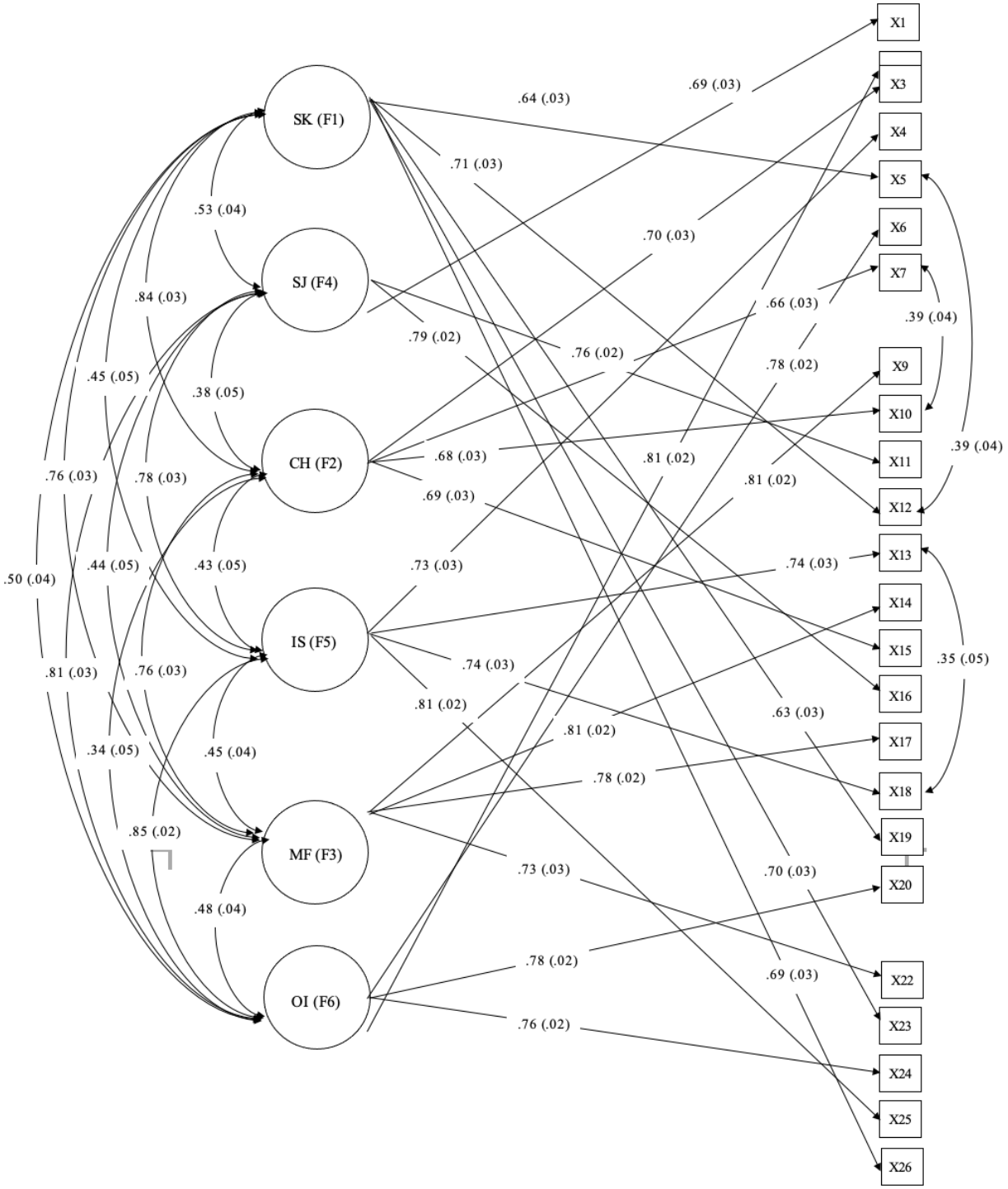
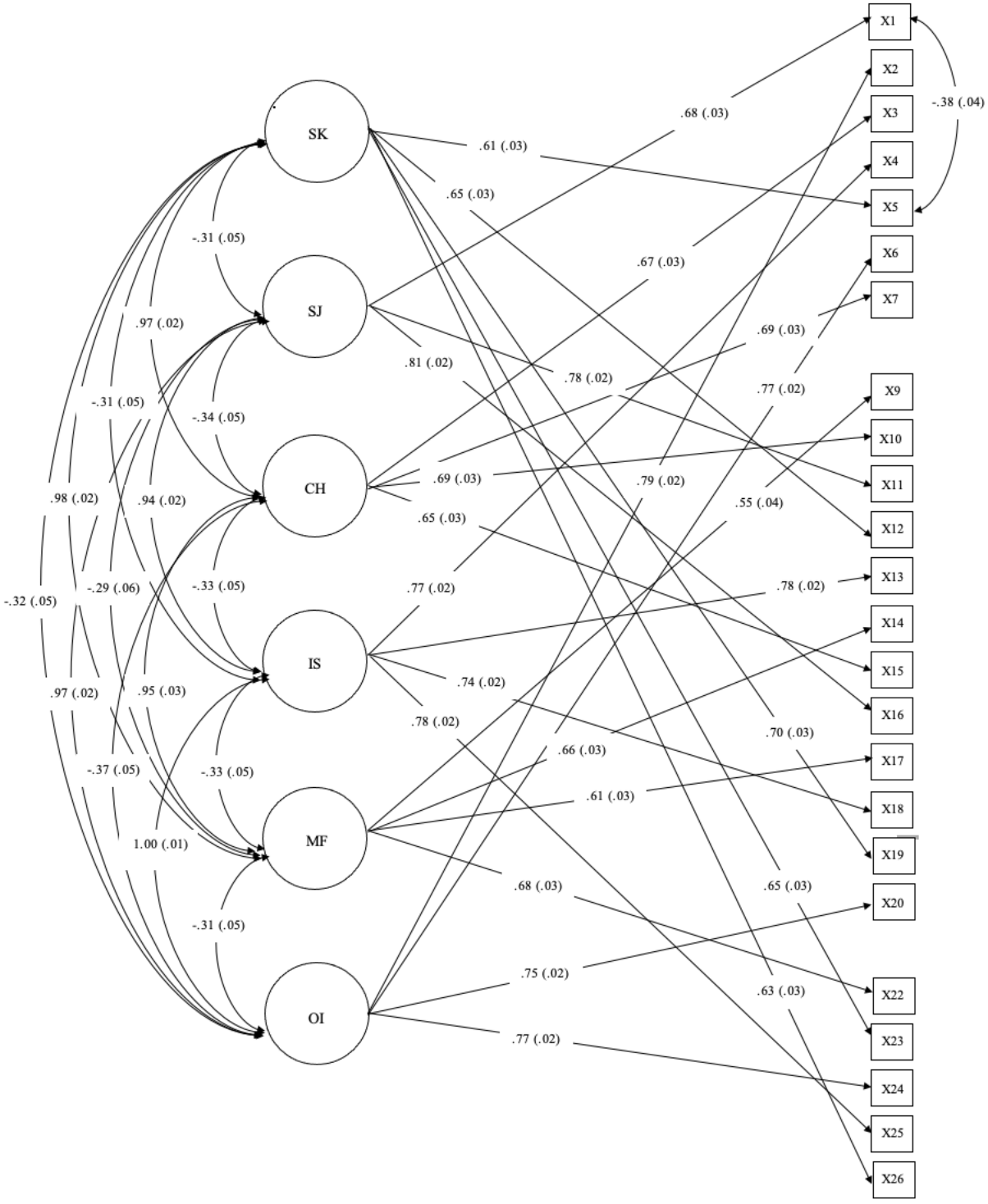


Figure 2. ***Path Diagram of the Six-Factor Correlated Confirmatory Factor Analysis for the Self-Compassion Scale***



Appendix A. Sociocultural Attitude Towards Appearance Questionnaire (SATAQ-4)

Please read each of the following items carefully and indicate the number that best reflects your agreement with the statement.

Definitely Disagree = 1
Mostly Disagree = 2
Neither Agree Nor Disagree = 3
Mostly Agree = 4
Definitely Agree = 5

1. It is important for me to look athletic.
2. I think a lot about looking muscular.
3. I want my body to look very thin
4. I want my body to look like it has little fat
5. I think a lot about looking thin
6. I spend a lot of time doing things to look more athletic.
7. I think a lot about looking athletic.
8. I want my body to look very lean
9. I think a lot of time doing things to look more muscular
10. I spend a lot of time doing things to look more muscular.

Answer the following questions with relevance to your FAMILY (include parents, brothers, sisters, relatives):

11. I feel pressure from family members to look thinner.
12. I feel pressure from family members to improve my appearance.
13. Family members encourage me to decrease my level of body fat.
14. Family members encourage me to get in better shape.

Answer the following questions with relevance to your PEERS (include close friends, classmates, and other social contacts):

15. My peers encourage me to get thinner.
16. I feel pressure from my peers to improve my appearance.
17. I feel pressure from my peers to look in better shape.
18. I get pressure from my peers to decrease my level of body fat.

Answer the following questions with relevance to the MEDIA (include television, magazines, the internet, movies, billboards, and advertisements):

19. I feel pressure from the media to look in better shape.
20. I feel pressure from the media to look thinner.
21. I feel pressure from the media to improve my appearance.
22. I feel pressure from the media to decrease my level of body fat.

Appendix B. Self-Compassion Scale

HOW I TYPICALLY ACT TOWARDS MYSELF IN DIFFICULT TIMES

Please read each statement carefully before answering. For each item, indicate how often you behave in the stated manner, using the following 1-5 scale. Please answer according to what really reflects your experience rather than what you think your experience should be.

Almost never				Almost always
1	2	3	4	5

1. I'm disapproving and judgmental about my own flaws and inadequacies.
2. When I'm feeling down I tend to obsess and fixate on everything that's wrong.
3. When things are going badly for me, I see the difficulties as part of life that everyone goes through.
4. When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world.
5. I try to be loving towards myself when I'm feeling emotional pain.
6. When I fail at something important to me I become consumed by feelings of inadequacy.
7. When I'm down, I remind myself that there are lots of other people in the world feeling like I am.
8. When times are really difficult, I tend to be tough on myself.
9. When something upsets me I try to keep my emotions in balance.
10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.
11. I'm intolerant and impatient towards those aspects of my personality I don't like.
12. When I'm going through a very hard time, I give myself the caring and tenderness I need.
13. When I'm feeling down, I tend to feel like most other people are probably happier than I am.
14. When something painful happens I try to take a balanced view of the situation.
15. I try to see my failings as part of the human condition
16. When I see aspects of myself that I don't like, I get down on myself.
17. When I fail at something important to me I try to keep things in perspective.
18. When I'm really struggling, I tend to feel like other people must be having an easier time of it.
19. I'm kind to myself when I'm experiencing suffering.
20. When something upsets me I get carried away with my feelings.
21. I can be a bit cold-hearted towards myself when I'm experiencing suffering.
22. When I'm feeling down I try to approach my feelings with curiosity and openness.
23. I'm tolerant of my own flaws and inadequacies.
24. When something painful happens I tend to blow the incident out of proportion.
25. When I fail at something that's important to me, I tend to feel alone in my failure.
26. I try to be understanding and patient towards those aspects of my personality I don't like.

Appendix C. Rosenburg's Self-Esteem Scale

Below is a list of statement dealing with your general feelings about yourself. There are four possible answers for each of the 10 questions, from "strongly agree" to "strongly disagree". Indicate how strongly you agree or disagree with each statement (1 = strongly agree, 2 = agree, 3 = disagree, 4 = strongly disagree).

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

Appendix D. Self-Construal Scale

This is a questionnaire that measures a variety of feelings and behaviors in various situations. Listed below are a number of statements. Please indicate how much you agree or disagree to each statement listed below.

1 = Strongly Disagree	4 = Don't agree or Disagree	5 = Agree Somewhat
2 = Disagree		6 = Agree
3 = Somewhat Disagree		7 = Strongly Agree

1. I have respect for the authority figures with whom I interact.
2. It is important for me to maintain harmony within my group.
3. My happiness depends on the happiness of those around me.
4. I would offer my seat in a bus to my professor.
5. I respect people who are modest about themselves.
6. I will sacrifice my self-interest for the benefit of the group I am in.
7. I often have the feeling that my relationships with others are more important than my own accomplishments.
8. I should take into consideration my parents' advice when making education/career plans.
9. It is important to me to respect decisions made by the group.
10. If my brother or sister fails, I feel responsible.
11. I will stay in a group if they need me, even when I am not happy with the group.
12. Even when I strongly disagree with group members, I avoid an argument.
13. I'd rather say "No" directly, than risk being misunderstood.
14. Speaking up during a class is not a problem for me.
15. Having a lively imagination is important to me.
16. I am comfortable with being singled out for praise or rewards.
17. I am the same person at home that I am at school.
18. Being able to take care of myself is a primary concern for me.
19. I feel comfortable **using** someone's first name soon after I meet them, even when they are much older than I am.
20. I prefer to be direct and forthright when dealing with people I've just met.
21. I act the same way no matter who I am with.
22. I enjoy being unique and different from others in many respects.
23. My personal identity, independent of others, is very important to me.
24. I value being in good health above everything.

Appendix E. Depression, anxiety, and Stress Scale -21

Please read each statement and indicate how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:

0 = Did not apply to me at all

1 = Applied to me to some degree, or some of the time
2 = Applied to me to a considerable degree or a good part of time
3 = Applied to me very much or most of the time

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

Appendix F. Subjective Happiness Scale

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

1. In general, I consider myself:

Not a very happy person						A very happy person
1						7

2. Compared with most of my peers, I consider myself:

Less happy						More happy
1						7

3. Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you?

Not at all						A great deal
1						7

4. Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To what extent does this characterization describes you?

Not at all						A great deal
1						7

Appendix G. Satisfaction with Life Scale

Below are five statements that you may agree or disagree with. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

7 – Strongly agree
6 – Agree
5 – Slightly agree
4 – Neither agree nor disagree
3 – Slightly disagree
2 – Disagree
1 – Strongly disagree

1. In most ways my life is close to my ideal.
2. The conditions of my life are excellent.
3. I am satisfied with my life
4. So far I have gotten the important things I want in life.
5. If I could live my life over, I would change almost nothing.

Appendix H. Eating Attitude Test-26

Please indicate below as accurately, honestly, and completely as possible. There are no right or wrong answers.

	Always	Usually	Often	Some-times	Rarely	Never
1. Am terrified about being overweight.						
2. Avoid eating when I am hungry.						
3. Find myself preoccupied with food.						
4. Have gone on eating binges where I feel that I may not be able to stop.						
5. Cut my food into small pieces.						
6. Aware of the calorie content of foods that I eat.						
7. Particularly avoid food with a high carbohydrate content (i.e. bread, rice, potatoes, etc.)						
8. Feel that others would prefer if I ate more.						
9. Vomit after I have eaten.						
10. Feel extremely guilty after eating.						
11. Am preoccupied with a desire to be thinner.						
12. Think about burning up calories when I exercise.						
13. Other people think that I am too thin.						
14. Am preoccupied with the thought of having fat on my body.						
15. Take longer than others to eat my meals.						
16. Avoid foods with sugar in them.						
17. Eat diet foods.						
18. Feel that food controls my life.						
19. Display self-control around food.						
20. Feel that others pressure me to eat.						
21. Give too much time and thought to food.						
22. Feel uncomfortable after eating sweets.						
23. Engage in dieting behavior.						
24. Like my stomach to be empty.						
25. Have the impulse to vomit after meals.						
26. Am terrified about being overweight.						