Distribution Agreement

In presenting this thesis as a partial fulfillment of the requirements for a degree from Emory University, I hereby grant to Emory University and its agents the non-exclusive license to archive, make accessible, and display my thesis in whole or in part in all forms of media, now or hereafter now, including display on the World Wide Web. I understand that I may select some access restrictions as part of the online submission of this thesis. I retain all ownership rights to the copyright of the thesis. I also retain the right to use in future works (such as articles or books) all or part of this thesis.

Si Woo Chae April 10, 2018

Qualitative Analysis of Self-Compassion and Its Relationship to Self-Report Rating Measures of Self-Compassion

by

Si Woo Chae

Linda W. Craighead, Ph.D.

Adviser

Department of Psychology

Linda W. Craighead, Ph.D.

Adviser

Marshall P. Duke, Ph.D.

Committee Member

Samira Banerjee, Ph.D.

Committee Member

2018

Qualitative Analysis of Self-Compassion and Its Relationship to Self-Report Rating Measures of Self-Compassion

By

Si Woo Chae

Linda W. Craighead, Ph.D.

Adviser

An abstract of
a thesis submitted to the Faculty of Emory College of Arts and Sciences
of Emory University in partial fulfillment
of the requirements of the degree of
Bachelor of Arts with Honors

Department of Psychology

2018

Abstract

Qualitative Analysis of Self-Compassion and Its Relationship to Self-Report Rating Measures of Self-Compassion

By Si Woo Chae

With the rise of self-compassion interventions as a novel approach to promote psychological well-being of individuals, a few studies have implemented self-compassion interventions to address psychological problems such as body image concerns (Albertson, Neff, Dill-Shackleford, 2014; Toole & Craighead, 2016). However, none of the studies attempted to analyze the self-compassionate letters that are often used in self-compassion intervention. The present study devised a coding scheme based on a qualitative content analysis of self-compassionate letters that indicated the degree of understanding of self-compassion. This study examined the relationships between two standard self-report measures, the Self-Compassion Scale (SCS) and Fear of Self-Compassion (FSC) and scores reflecting the level of self-compassion found in self-compassionate letter samples. The results indicated a significant negative correlation between the two self-report measures but no significant relationships between those measures and the letter scores. The findings suggest that assessing the level of self-compassion expressed in a writing sample which was written after exposure to psychoeducational information on self-compassion may be a useful indication of the degree to which an individual was able to learn and apply the constructs as instructed, i.e. a manipulation check. However, for many individuals, even the brief exposure to the psychoeducational information may have impacted the level of self-compassion they were able to reflect in their letter. Thus, their letter scores may not have accurately reflected their initial level of self-compassion, which would explain the low correlation with the pretest self-reports of self-compassion. The lack of correlation between the letter scores and the pre-post measures of self-

compassion suggests that differential ability to incorporate psychoeducational information into a self-compassionate letter does not predict who will benefit more from the intervention. Results support prior findings that even brief exposure to the concepts of self-compassion improves self-reported self-compassion.

Qualitative Analysis of Self-Compassion and Its Relationship to Self-Report Rating Measures of Self-Compassion

By

Si Woo Chae

Linda W. Craighead, Ph.D.

Adviser

A thesis submitted to the Faculty of Emory College of Arts and Sciences
of Emory University in partial fulfillment
of the requirements of the degree of
Bachelor of Arts with Honors

Department of Psychology

2018

Acknowledgements

The author is very grateful to Aubrey Toole for making this study possible and for providing consistent support, guidance, and inspiration throughout the research process. The author would also like to express a sincere gratitude to Dr. Linda Craighead for the research opportunity and for her supervision. Last but not least, I would like to show my deepest appreciation to my parents for supporting me throughout my four years in Emory University and for always providing me with unconditional love, trust, emotional support, and the best opportunities for me to grow and improve for the better.

Table of Contents

Introduction

In western culture today, the qualities of being hard on oneself or perfectionistic are often valued and associated with ideas of self-improvement. At the same time, however, an increasing number of individuals are suffering from stress, anxiety, and depression (Twenge, 2014). Self-compassion, which runs counter to perfectionistic self-critical thinking, may be a useful strategy to employ to promote greater psychological well-being.

Self-Compassion

Self-compassion, a construct derived from Buddhist philosophy, has received increasing attention in western culture in recent years. Self-compassion is having compassion for oneself; the construct involves three components: mindfulness, self-kindness, and common humanity (Watson, Batchelor, & Claxton, 1999; Neff, 2003a). Mindfulness is recognizing and accepting one's own suffering. It is being aware of one's failures and weaknesses without over-identifying them. The opposite side of mindfulness is over-identification, or exaggerating one's difficult circumstances, situations, reactions, etc. Self-kindness is a nonjudgmental attitude towards one's pain, inadequacies, and failures. It is not being self-critical but being accepting of one's flaws. On the opposite spectrum of being self-kind is being self-judgmental, or negatively evaluating one's actions and situations. Common humanity is viewing one's suffering as a part of a larger human experience, acknowledging that everyone undergoes difficult challenges and painful circumstances. The opposite of common humanity is isolation, or feeling different from others and alone (Neff, 2003a; Neff, 200b). Self-compassion can be misconstrued as being self-indulgent or self-pitying. However, it is simply being non-judgmentally accepting of oneself and recognizing one's weaknesses and difficulties as part of the human experience.

Self-Compassion and Psychological Well-being

Self-compassion has received a considerable amount of attention in recent years, and numerous studies have explored the ways it impacts psychological well-being. Self-compassion has been found to be significantly negatively correlated with depression and anxiety, and positively correlated with life satisfaction and healthy psychological functioning (e.g. Neff, 2003b; Gilbert & Practer, 2006; Macbeth & Gumley, 2012; Diedrich, Hofmann, Cuijpers, & Berking, 2016). Higher self-compassion is also related to lower negative affect when an individual experiences frustrating situations, suggesting that self-compassion may buffer individuals against the negative effects of challenging situations (Leary, Tate, Adams, Allen, & Hancock, 2007). Self-compassion has also been found to be an indicator of positive psychological strengths such as optimism and happiness, as well as personal initiative, curiosity, and exploration (Neff, Rude, & Kirkpatrick, 2007). These studies indicate that self-compassion may play a significant role in promoting healthy psychological functioning of individuals.

Self-Compassion and Body Image.

What is central to being self-compassionate is being less critical of oneself (e.g. Neff, 2003b; Neff, Rude, & Kirkpatrick, 2007). Studies indicate that highly self-critical individuals are more likely to evaluate their body shapes negatively and are vulnerable to developing eating disorders (Dunkley& Grilo, 2007; Kelly & Carter, 2012). Because part of practicing self-compassion is reducing self-criticism towards self, self-compassion may help individuals with eating disorders and feelings of insecurity related to body image (Ferreira, Pinto-Gouveia, & Duarte, 2013; Gilbert & Miles, 2002). A recent study by Duarte, Ferreira, Trindade, & Pinto-Gouveia (2015) found that self-compassion positively impacts one's subjective perception of quality of life, which may be compromised partly due to negative thoughts about one's body

image. With a rising awareness of the benefits of self-compassion, researchers are beginning to explore the value of embracing self-compassion through self-compassion interventions.

Self-compassion intervention.

One particular population characterized by high self-criticism is individuals with body image concerns such as body dissatisfaction and body shame (Gilbert & Procter, 2006). Given the relationship between self-compassion and body image, as mentioned earlier, some studies have explored the use of self-compassion as a novel intervention to address body image concerns (Albertson, Neff, Dill-Shackleford, 2014; Toole & Craighead, 2016). Self-compassion interventions often involve a writing exercise. The intervention provides explicit instructions about the components of self-compassion and guides individuals to think deeply about their responses to challenging life experiences (Albertson, Neff, &Dill-Shackleford, 2014; Neff & Germer, 2013). Writing exercises are used to encourage people to think about their current concerns and challenges, and to personally express self-compassion in these circumstances (Leary, Tate, Adams, Allen, & Hancock, 2007; Shapira & Mongrain, 2010). Several studies revealed that a self-compassion intervention reduced concerns about body image in individuals who reported body dissatisfaction and/or body shame (Albertson, Neff, Dill-Shackleford, 2014; Toole & Craighead, 2016). Results from these studies indicate that a self-compassion intervention could be a promising approach to improving body image concerns. However, despite the positive effects of boosting self-compassion, many individuals find it difficult to cultivate self-compassion.

Fear of Self-Compassion

Highly self-critical people, especially those with psychological disorders (specifically anxiety or depression), trauma, or abuse histories, tend to have difficulty in embracing self-

compassion (Gilbert, Mcewan, Gibbons, Chotai, Duarte & Matos, 2011; Gilbert, McEwan, Matos, & Rivis, 2011). People who are highly self-critical show a pattern of brain activity similar to a threat response when asked to be self-reassuring after thinking about their failures or difficulties (Rockliff, Gilbert, McEwan, Lightman, & Glover, 2008). This finding suggests that highly self-critical people may be fearful of self-compassion and thus may have more difficulty in adopting a self-compassionate mindset. Therefore, the construct of fear of self-compassion was developed and needs to be considered when assessing level of self-compassion. The Fear of Self-Compassion Scale (FSC) is used to assess the level of fear of self-compassion (Gilbert, McEwan, Matos, & Rivis, 2011).

Assessment of Self-Compassion

Kristin Neff is a pioneer researcher of self-compassion who first developed and validated the Self-Compassion Scale (SCS; Neff, 2003a), which is a self-report rating measure of self-compassion. Some studies state that self-compassion can be validly measured by using the overall score of SCS (Neff, 2016; Neff, Whittaker, & Karl, 2017). In addition to using the overall score to evaluate the level of self-compassion, Neff (2003a) also stated that self-compassion can be assessed by using a six-factor structure, which subdivides self-compassion into three positive components (mindfulness, self-kindness, and common humanity) and three negative components (over-identification, self-judgment, and isolation). The positive and negative components are opposites of each other as mentioned earlier and are separate, but correlated factors. When assessing self-compassion using the six-factor structure, the mean of each subscale is calculated (after reverse scoring the negative subscales) and these means are summed to obtain the overall self-compassion score (Neff 2003a; Neff 2003b).

Other studies (e.g. Lopez, Van Dam, Hobkirk, Danoff-Burg, & Earleywine 2012; Wood, Taylor, & Joseph, 2010) suggest that the SCS has two factors, one composed of positively phrased items (mindfulness, self-kindness, and common humanity) and one composed of negatively phrased items (over-identification, self-judgment, and isolation). Gilbert, McEwan, Matos, & Rivis (2011) argued that positively worded items are correlated with positive affect while negatively worded items are correlated with neuroticism and depression, which suggests that these factors are assessing two different constructs: self-compassion and self-criticism. Gilbert et.al (2011) found that the positively worded items on the SCS had small negative correlations with the fear of self-compassion while negatively worded items on the SCS had small positive correlations with the fear of self-compassion. Moreover, another study found that the neurological processes of self-assurance and self-critical thinking vary in terms of the areas that get activated in the brain, which further suggests that SCS may actually be measuring two different but related constructs, self-compassion and self-criticism (Longe, Maratos, Gilbert, Evans, Volker, Rockliff & 2010). However, Krieger, Berger, and Holtforth (2016) stated that self-compassion may be a single construct because the same results were found using the total SCS score, a positive factor only, or a negative factor only. Efforts to further study the validity of this measure, the SCS, are ongoing.

To date, research on self-compassion has mostly been conducted using the Self-Compassion Scale (SCS), which is a self-report rating measure. Self-compassion is difficult to assess because we can only rely on self-report as observable behavioral indicators of self-compassion have not been clearly established. Although self-report measures are used widely to collect information, from demographics to personality traits, there are a few drawbacks to relying solely on such measures (Austin, Gibson, Deary, McGregor, & Dent, 1998; Balakrishnan, 1999).

A notable drawback of self-report rating scales is response bias, meaning people may respond to the questions untruthfully or misleadingly. Response bias may be due to social desirability, which is a tendency to respond in a way that will be perceived as favorable or respectable by others. Responses may also vary depending on how individuals define self-compassion. Moreover, participants may lack the introspective ability to accurately assess their own attitudes; differences in understanding and interpreting questions may impact responses, especially when an individual is asked about abstract concepts such as self-compassion. Differences may also exist in individuals' perceptions of options on the rating scale. In other words, what some people would consider to be a strong agreement may be considered only moderate by others (Balakrishnan, 1999). Additional methods of assessing self-compassion are clearly needed.

One promising option is qualitative content analysis of participant writing samples. Qualitative content analysis is a method that is used to examine the text data materials through a systematic process of coding and thereby identifying themes and/or patterns. Qualitative content analysis is one of numerous research methods used to analyze text data (Hsieh & Shannon, 2005). Text data is a rich source of first-hand information obtained from subjects, so it is less likely to be influenced by some of the factors affecting direct self-report questions. This method of analysis may capture important information that quantitative rating scales potentially miss by constraining the participant to answering specific questions and ratings. Qualitative content analysis enables researchers to explore how individuals actually perceive and interpret a concept, allowing the researchers to quantify an individuals' understanding of an abstract concept such as self-compassion. Studying qualitative content analysis in self-compassion may allow exploration of how individuals process, understand, and practice self-compassion. While the self-report (SCS) only rates the frequency of thoughts that imply self-compassion, qualitative content analysis of

writing samples allows the individual to elaborate on the concept, generating a potentially richer understanding of what they define as self-compassion.

The Present Study

As mentioned earlier, the rise of self-compassion interventions and the use of writing exercises provide opportunities for researchers to qualitatively analyze the content of letters written by individuals. However, none of the studies so far have attempted to do a qualitative content analysis on letters despite the fact that self-compassion intervention studies (e.g. Leary, Tate, Adams, Allen, & Hancock, 2007; Shapira & Mongrain, 2010) often utilize writing exercises to encourage individuals to explicitly express self-compassion and further reread their letters as a way to practice self-compassion.

To assess participants' understanding of self-compassion in more depth, the present study conducted a qualitative analysis of the letters written by participants of a brief self-compassion intervention. This analysis aimed to assess the degree of understanding of self-compassion by using a coding scheme devised by the author in consultation with experts in the field. The method of qualitative content analysis may provide unique advantages compared to relying solely on rating scales to assess self-compassion. This study aimed to examine how individuals learn and understand the concept of self-compassion and whether scores on a self-report rating measures would be reflected in the participant's ability to express self-compassion to themselves through letter writing.

Specifically, the study aimed to explore relationships among different measures of self-compassion. First, we hypothesized that the self-reports, SCS and FSC, would be negatively correlated. Furthermore, the study examined the relationship of the coded letters that indicate the degree of individuals' understanding of self-compassion and the two self-report measures (SCS

and FSC). We hypothesized that the SCS score and the coded letter would be positively correlated and that FSC score and the coded letter would be negatively correlated. Lastly, we hypothesized that the level of change in SCS score would be positively correlated with the scores from the coded letter, which would indicate that individuals who initially were better able to reflect the components of self-compassion in their letters would benefit most from the intervention.

Method

Participants

The sample used in this study was recruited from the introductory psychology subject pool at Emory University and via flyers placed around Emory University and nearby neighborhoods in Atlanta, Georgia. The participants were young adult women, ages 18 to 24 (M=19.38, SD= 1.41). Only women were included in the present study because females are more likely to overestimate their body size and therefore frequently experience body image concerns than do young males (Bhurtun & Jeewon, 2013).

The inclusion criteria were as follows: (a) identify as a woman, (b) 18-25 years old, (c) self-report high English proficiency, (d) express body image/weight/shape concerns on brief screening questionnaire, and (e) agree to random assignment. All study procedures were reviewed and approved by the Emory University Institutional Review Board.

Procedure

Data for the present study was collected as part of a larger study comparing a self-compassion intervention for body image concerns to active and waitlist control conditions. The procedure reported here includes only the details relevant to the present study. This study focuses solely on the self-compassion intervention group.

The present study took place over two sessions. The first session was 60 to 90 minutes in duration, and took place in the Healthy Eating and Weight Support (HEWS) Laboratory at Emory University. After the initial visit, participants in the self-compassion group completed a week-long intervention program via email. All the participants completed the final part of the study two weeks after the lab visit via a questionnaire that was emailed to them.

Initial lab visit. Eligible participants underwent informed consent and then completed self-report measures on the computer.

Self-compassion intervention. After the completion of self-report measures, the participants received psychoeducation about the negative effects of self-criticism, the benefits of self-compassion, and how to practice self-compassion in daily life. The lab intervention broadly had three parts: watching two psychoeducational videos, reading and writing a self-compassionate letter, and receiving instructions about how to practice self-compassion in the week to follow.

The intervention began with a one-minute video of the HEWS lab researchers explaining the rationale for the self-compassion intervention. Participants then received a handout containing information about the three components of self-compassion and space to make notes on the second video if desired. After reading the handout, participants watched the second video, entitled "Overcoming Objections to Self-Compassion," in which Kristin Neff, Ph.D. counters common concerns about self-compassion (e.g., that it might lead to self-indulgence or self-pity). Participants then completed a writing exercise. The writing exercise first asked participants to identify insecurities about their physical appearance and describe how they felt about them. Then, they proceeded to write a letter to themselves in which they practiced embracing self-compassion to cope with their appearance concerns and/or other difficult circumstances and challenges that

they might have faced (See Appendix A for the instruction of the writing exercise). Before beginning their own writing exercise, they read a sample self-compassionate letter written by the principal investigator. The sample letter was about one and a half pages long and specifically included all three components of self-compassion (see Appendix B). After reading the sample letter, participants were given approximately 15 minutes to write their own self-compassionate letter.

Following the letter-writing exercise, participants were asked to practice self-compassion daily for the next week by setting a daily intention to be self-compassionate and completing a daily self-care practice. They were provided with a sheet containing a description of the self-compassionate mindset and a list of possible self-care practices. Each day for the following week, they were emailed a link to a questionnaire asking them to document their daily intention and self-care practice. These questionnaires prompted participants with several possible intentions and practices each day, and therefore also served as a reminder to complete their daily self-compassion activities. Questionnaires took no longer than two to four minutes to complete.

Post intervention questionnaire. All the participants were sent an email two weeks from the initial lab visit and asked to complete the self-report measures. The questionnaire was identical to the pre-intervention questionnaire except that the intervention group had additional open-ended questions that asked about their subjective experience of the intervention. After completing the post-intervention questionnaire, the participants from introductory psychology class were given a total of two credits, and the participants recruited via flyers received a $20 Amazon gift card via email.

Materials and Measures

Demographics. The demographics survey assessed gender identity, age, race, ethnicity, proficiency in English, educational background, height and weight, psychiatric diagnostic status and treatment history, dieting history, and experience with yoga and meditation.

Self-compassion. The Self-Compassion Scale (SCS; Neff, 2003a) is a 26-item survey that was used to assess participants' self-compassion. Participants rated each item on a scale from 1 to 5, with 1 being *almost never* and 5 being *almost always*. The survey assessed the three dimensions of self-compassion and included questions such as, "I try to be loving towards myself when I'm feeling emotional pain" (self-kindness), "I try to see my failings as part of the human condition" (common humanity), and "When something upsets me I try to keep my emotions in balance" (mindfulness). The total score is the average score of all the items and higher scores reflect higher level of self-compassion. We also assessed self-compassion using a six-factor structure; the mean of each subscale was calculated to yield scores for self-kindness, mindfulness, common humanity, self-judgment, over-identification, and isolation. Examples of the positive subscales (i.e., mindfulness, self-kindness, and common humanity) are mentioned above. The negative subscales included questions such as "I'm disapproving and judgmental about my own flaws and inadequacies" (self-judgment), "When I fail at something that's important to me, I tend to feel alone in my failure" (isolation), and "When I'm feeling down I tend to obsess and fixate on everything that's wrong" (over-identification). The SCS was internally consistent; Cronbach's alpha was .91.

Fear of self-compassion. Fear of Self-Compassion Scale (FSC; Gilbert, McEwan, Matos, & Rivis, 2011) is a 38-item questionnaire that was used to assess the extent to which participants fear expressing and embracing self-compassion. Items included questions such as "Getting on in

life is about being tough rather than compassionate." Participants rated items from 0 to 4, with 0 being *don't agree at all* and 4 being *completely agree*. The scale was internally consistent; Cronbach's alpha was .91.

Understanding of self-compassion. The self-compassionate letters were coded using a coding scheme created for the present study, to examine participants' understanding of the concept of self-compassion (See Appendix C). Each letter was read by two independent raters trained by the PI of the larger study, and received four scores: one score for each of the three components of self-compassion (0 = absent, 1 = present), and a final score reflecting the participant's overall understanding of self-compassion. This final score ranged from 1 to 3, with 1 reflecting a poor understanding of self-compassion (i.e., it did not include any self-compassion components or included a high level of demands on self to change and/or an authoritarian tone, e.g. you just have to try harder), 2 reflecting a mixed understanding of self-compassion (i.e., it included some or all self-compassion components, but also some self-critical statements, demands to change, and/or an authoritarian tone), and 3 reflecting a good/solid understanding of self-compassion (i.e., it included all self-compassion components and no harshly self-critical statements). Two raters evaluated the letters following the coding scheme and the differences in the ratings were resolved by discussion with advisers who have expertise in self-compassion.

Results

See Table 1 for Pearson correlation of the variables central to the analyses (self-compassion, fear of self-compassion, and self-compassionate letter code scores). For the score of the coded letter, the study focused on the overall score, which indicated the overall level of understanding of self-compassion.

Pearson correlations were used to examine the relationship between Self-Compassion Scale (SCS) scores, Fear of Self-Compassion (FSC) scale scores, and the coded self-compassionate letter scores.

The study first examined the hypothesis that self-compassion is negatively correlated with fear of self-compassion. The SCS was significantly and negatively correlated with the FSC, r=-.55, p<.001. This finding supported the hypothesis that participants who report high self-compassion also report low fear of self-compassion.

The study then examined the hypothesis that SCS scores would be positively correlated with the coded letter score of the self-compassionate letters, which reflect the degree of understanding of self-compassion. The result showed that the SCS was not significantly and positively correlated with the letter scores, r=.16, p=.28. Additionally, in consideration of SCS as a two-factor model as some studies suggested (e.g. Lopez, Van Dam, Hobkirk, Danoff-Burg, & Earleywine 2012; Wood, Taylor, & Joseph, 2010), this study independently examined both the correlation of self-compassion factor and self-criticism factor to coded letter scores. The result showed that the self-compassion factor was not significantly positively correlated with the letter scores, r=.078 p=.60 and that the self-criticism factor was not significantly negatively related to the letter scores, r= -.21 p=.15. The findings did not support the hypothesis, indicating no significant relationship between baseline SCS scores and ratings of the self-compassionate letters regardless of using either the overall SCS score or two-factor model SCS score.

The study also examined the hypothesis that fear of self-compassion would be negatively related to the understanding level of the self-compassion indicated in the letter score. Results indicated that fear of self-compassion was not significantly negatively correlated to the letter scores, r=-.10, p=.53. This finding did not support the hypothesis. Those individuals who might

have been resistant to embracing self-compassion were not less able to write a self-compassionate letter that reflected a good understanding of the construct. Fear of self-compassion had no significant negative relationship with the self-compassionate letter score.

The analyses further explored the degree to which initial level of expressing self-compassion (the letter score) would be related to the change in SCS from pre-intervention to post-intervention. The study first examined if the SCS score from pre-intervention to post-intervention was significant. A paired-samples t-test was conducted to compare SCS score of pre-intervention and post-intervention conditions. The results showed a significant difference in the SCS pre-intervention score (M=2.42, SD=0.59) and post-intervention score (M=2.92, SD=0.61), $t(49)$= -7.50, p<0.001. Thus, on average participants improved in self-compassion as a result of the intervention. To see if the change in pre-intervention to post-intervention SCS score had a relationship with the score of the coded letter, Pearson correlation was conducted with the mean of SCS change in score and the coded letter score. The result indicated that there was no significant correlation between the change in SCS score, r=.170 p=.28. The result did not support the hypothesis that score on the letter (better understanding of the construct) would predict greater improvement over the treatment period. Thus, participants did not respond differentially to treatment depending upon their ability to write a highly compassionate letter.

To further investigate the relationships between the three variables of interest, an exploratory one-way analysis of variance (ANOVA) was run to assess whether there were differences in self-compassion and/or fear of self-compassion across the participants who received an overall letter score of 1, 2, or 3.

There were no significant differences across the three groups in terms of self-compassion, F (2,43) =.58, p=.56, and fear of self-compassion, F (2,44) =.33, p=.72. As noted in the Methods

section, the SCS has also been conceptualized as consisting of two factors: a self-compassion factor (including only the positively phrased items) and a self-criticism factor (including only the negatively phrased items). Separate one-way ANOVAs revealed no significant difference in self-compassion factor scores, F (2,43) =.22, p=.81, and self-criticism factor scores, F (2,43) =.34, p=.34 across the three groups (i.e., letters coded 1, 2 or 3). The pattern of the means, however, were in the expected direction, with participants receiving a score of 3 on their self-compassion letter indicating slightly higher scores on the SCS than those receiving a 2, and those receiving a 2 indicating slightly higher SCS scores than those receiving a 1 (see Figure 1).

To further explore these relationships, another exploratory analysis was run. Participants were separated into two groups (instead of three), representing full understanding (letters originally coded as 3) versus limited understanding of self-compassion (letters originally coded as 1 or 2). Pearson point-biserial correlations were run to investigate relationships between the two letter codes and scores on the SCS, FSC, and change in SCS scores. There were no significant correlations between the letter codes and any of the variables of interest, SCS (r=.14 p=.35), FSC (r=-12, p=.43), and change in SCS (r=.10, p=.54). Exploratory one-way ANOVAs were then run to investigate if the two groups showed significant differences on SCS, FSC, Change in SCS, and any of the six subscales of the SCS. The results showed that the two groups did not significantly vary in SCS, FSC, and change in SCS (p>.05). However, the results showed that participants with letters evidencing full understanding of self-compassion, reported significantly lower self-judgment than letters evidencing limited understanding of self-compassion, F(1,44)=4.20, p=.046. Similarly, a point bi-serial correlation of the letter codes and self-judgment was further run and showed a significant negative correlation between letter code and self-judgement, (r=-.30, p=.046).

Discussion

This study takes a qualitative approach to measuring self-compassion by rating samples (letters) written by the participants early in the intervention. This study is noteworthy because no studies have yet attempted to examine the content of self-compassionate letters, although the writing of the self-compassionate letter has been used heavily in prior interventions. With the letters coded using the coding scheme devised from this study, we examined the relationship of the coded letters to standard self-reports of self-compassion. Our study predicted that the coded letter would be positively correlated to SCS, negatively correlated with FSC, and positively correlated with improvement on SCS score after intervention.

Contrary to the predictions, coded letters were not significantly related to SCS, FSC, and change in SCS score. These findings indicate that SCS, a measurement of self-reported self-compassion, and FSC, a measurement of how much individuals may be resistant to embracing self-compassion, may not be significantly related to how well the individuals understand and write a self-compassionate letter after having received a brief psychoeducation and a model letter. What was noteworthy from the findings were the differences in the individual's understanding of self-compassion. The assessment of the understanding level of self-compassion through the coded letters showed that a surprising number of individuals had difficulty grasping the concept of self-compassion, indicating that there are individual differences in the capacity to learn self-compassion from brief instruction. Assessment of self-compassion in the letters written may be useful in identifying individuals who have difficulty with the construct and who might benefit from additional intervention before being assigned to take the letter home and read it frequently during the week. Ensuring that a high quality letter is produced may enhance the effects of the intervention.

Self-Compassion Scale and Fear of Self-Compassion

As predicted, SCS was negatively related to FSC, a finding that replicated results from Gilbert et al, (2011). This finding once again underscores the importance of considering fear of self-compassion when attempting to use self-compassion intervention because individuals may not benefit from the intervention if they are resistant to embracing the concept of self-compassion.

Self-Compassion Scale and the Coded Letters

The study assessed the correlation between the SCS and the coded letters. Contrary to the prediction that SCS would be positively correlated with the coded letters, no significant positive correlation was found. This result did not confirm what the current study had originally hypothesized, indicating that these letter scores were assessing ability to learn from instruction more so than reflecting primarily the individuals' baseline level of self-compassion.

Fear of Self-Compassion and the Coded Letters

The study also assessed the correlation between the FSC and the coded letters. Contrary to the prediction that FSC would be negatively correlated with the coded letters, no significant negative correlation was found. This result indicates that even individuals who are resistant to the idea of self-compassion may be capable of writing a good self-compassionate letter.

The findings from the latter two predictions stated above suggest that the qualitative content analysis of the self-compassionate letter may have served more as a manipulation check on whether individuals fully understood all the components of self-compassion rather than an alternative, less obtrusive assessment of baseline self-compassion. Some individuals may have been able to grasp the concept of self-compassion and apply it to their own situation (in the letter) even though they may not have rated themselves as highly self-compassionate on the baseline

self-report. Furthermore, individuals' ability to write a highly compassionate letter did not predict their posttest self-reported compassion. The analysis of the letters reveals that individuals greatly vary in grasping the concept of self-compassion regardless of their self-reported SCS score.

Change in Self-Compassion Score and the Coded Letters

The study examined whether how much an individual changes (improve or worsen) on SCS score from pre-intervention to post-intervention is related to how much they understand self-compassion as indicated by the coded letter. The study predicted that how much individuals improved on SCS score would be positively related to the score on the coded letters. Contrary to the prediction, no relationship was found. The result may have been a product of a ceiling effect wherein people who already have a relatively high score in SCS have less room to increase SCS score or it may indicate that initial level of self-compassion does not moderate outcome, i.e. that all benefit about equally.

Although the results of the relationship of the coded letter to SCS and to FSC were not significant, the general pattern of the findings were in the direction of what we expected. People who scored 3 on the coded letter had the highest SCS mean score, followed by people who scored 2 and 1. Significant differences might be generated by creating a more refined coding scheme and/or by increasing sample size. To test the possibility that the coding was only able to differentiate full understanding (all components included and no negative tone) from limited understanding, we combined the two groups (originally group 1 and group 2) evidencing partial understanding and ran an exploratory analysis to determine if this scoring might be more useful. Results did confirm that individuals who evidenced full understanding of self-compassion reported less self-judgement than those with more limited understanding.

Implications, Limitations, and Future Directions

The results of the study indicate that there are individual differences in understanding and expressing self-compassion, regardless of the initial level of self-compassion or fear of self-compassion reported by the individual. These differences stress the necessity of a qualitative analysis of the self-compassionate letter because some people may have low self-compassion not because they lack an intellectual understanding of the components of self-compassion but due to some other factors, while others with poor understanding of self-compassion may need additional instruction to learn the components of self-compassion.

The results of this study should be interpreted in light of several limitations. First of all, the study had low power due to a relatively small sample size (N=50). Moreover, the study had a simple coding scheme with a restricted range of scores for evaluating self-compassionate letters. Lastly, because the letter was written after the psychoeducation and showing the sample letter, the coded letter may not have accurately reflected the baseline understanding of self-compassion.

For future studies, a more finely grained coding scheme could be developed to more accurately assess the degree of understanding of self-compassion. Instead of letting participants write the self-compassionate letter after the psychoeducation, a more valid assessment of baseline self-compassion would likely be generated by asking them to simply write a letter to themselves about their body, before they are provided psychoeducation and the sample letter. Participants might then be guided to revise or rewrite their letter after they are given psychoeducation and instructions in self-compassionate letter writing exercise, and be provided with feedback to include any missing elements or to moderate an authoritarian tone. Alternatively, asking individuals to write the self-compassionate letter before instruction and then to revise it after a few weeks of practicing self-compassion would be another way to better

understand any changes in cognitive processes that occur as participants practice implementing self-compassion. In addition to studying content analysis of self-compassionate letters, using other alternatives such as analyzing diaries may be useful options to assess self-compassion of individuals in less direct ways than direct self-report ratings.

Conclusion

To the best of our knowledge, this study was the first attempt to qualitatively analyze self-compassionate letters. Our findings indicate that initial level of self-reported self-compassion did not predict ability to write a highly self-compassionate letter once one had received instructions and psychoeducation. The fact that individuals varied in their ability to grasp the concept of self-compassion and apply it to their personal situations should be taken into account in developing more effective self-compassion intervention programs. Qualitative analysis of self-compassion letters could contribute to enriching self-compassion intervention programs that have shown promising improvement in psychological well-being.

References

Albertson, E. R., Neff, K. D., & Dill-Shackleford, K. E. (2014). Self-compassion and body dissatisfaction in women: A randomized controlled trial of a brief meditation intervention. *Mindfulness,* 6(3), 444-454. doi:10.1007/s12671-014-0277-3

Austin, E. J., Gibson, G. J., Deary, I. J., McGregor, M. J., & Dent, J. B. (1998). Individual response spread in self-report scales: personality correlations and consequences. *Personality and Individual Differences*, 24, 421–438. http://www.sciencedirect.com/science/article/pii/S019188699700175X

Balakrishnan, J. D. (1999). Decision processes in discrimination: Fundamental misrepresentations of signal detection theory. *Journal of Experimental Psychology*: *Human Perception & Performance*, 25, 1189-1206. http://psycnet.apa.org/psycinfo/1999-11444-002

Bhurtun, D. D., & Jeewon, R. (2013). Body weight perception and weight control practices among teenagers. *ISRN Nutrition, 2013* 1-6. doi:10.5402/2013/395125

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

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. doi:10.1177/1359105315573438

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. doi:10.1016/j.brat.2006.01.017

Ferreira, C., Pinto-Gouveia, J., & Duarte, C. (2013). Self-compassion in the face of shame and body image dissatisfaction: Implications for eating disorders. *Eating Behaviors*, 14(2), 207-210. doi:10.1016/j.eatbeh.2013.01.005

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., & Miles, J. (2007). Body shame: Conceptualisation, research, and treatment. Hove: Brunner-Routledge.

Gilbert, P., Mcewan, K., Gibbons, L., Chotai, S., Duarte, J., & Matos, M. (2011). Fears of compassion and happiness in relation to alexithymia, mindfulness, and self-criticism. *Psychology and Psychotherapy: Theory, Research and Practi*ce, 85(4), 374-390. doi:10.1111/j.2044-8341.2011.02046.x

Gilbert, P., Mcewan, K., Matos, M., & Rivis, A. (2011). Fears of compassion: Development of three self-report measures. *Psychology and Psychotherapy: Theory, Research and Practice*, 84(3), 239-255. doi:10.1348/147608310x526511

Hsieh, H., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research,15*(9), 1277-1288. doi:10.1177/1049732305276687

Kelly, A. C., & Carter, J. C. (2012). Why self-critical patients present with more severe eating disorder pathology: The mediating role of shame. *British Journal of Clinical Psychology*, 52(2), 148-161. doi:10.1111/bjc.12006

Krieger, T., Berger, T., & Holtforth, M. G. (2016). The relationship of self-compassion and depression: Cross-lagged panel analyses in depressed patients after outpatient therapy. *Journal of Affective Disorders*, 202, 39-45. doi:10.1016/j.jad.2016.05.032

Leary, M. R., Tate, E. B., Adams, C. E., Allen, A. B., & Hancock, J. (2007). Self-compassion and reactions to unpleasant self-relevant events: The implications of treating oneself kindly. *Journal of Personality and Social Psychology*, 92(5), 887-904. doi:10.1037/0022-3514.92.5.887

Longe, O., Maratos, F. A., Gilbert, P., Evans, G., Volker, F., Rockliff, H., & Rippon, G. (2010). Having a word with yourself: Neural correlates of self-criticism and self-reassurance. *NeuroImage,* 49(2), 1849-1856. doi:10.1016/j.neuroimage.2009.09.019

Lopez A, Sanderman R, Smink A, Zhang Y, Van Sonderen E, Ranchor A, & Schroevers, M. (2015). A reconsideration of the self-compassion scale's total score: Self-compassion versus self-criticism. *PLoS ONE* 10(7): e0132940. doi:10.1371/journal.pone.0132940

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

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

Neff, K. D. (2003b) Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, 2:2, 85-101. doi: 10.1080/15298860309032

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. doi:10.1016/j.jrp.2006.08.002

Neff, K. D., & Germer, C. K. (2013). A pilot study and randomized controlled trial of the mindful self-compassion program. *Journal of Clinical Psychology*, 6, 28–44

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 Assessment*, 99(6), 596-607. doi:10.1080/00223891.2016.1269334

Rockliff, H., Gilbert, P., McEwan, K., Lightman, S., Glover, D., (2008). A pilot exploration of heart rate variability and salivary cortisol responses to compassion-focused imagery. *Clinical Neuropsychiatry: Journal of Treatment Evaluation,* 5(3), 132–139.

Shapira, L. B., & Mongrain, M. (2010). The benefits of self-compassion and optimism exercises for individuals vulnerable to depression. *The Journal of Positive Psychology*, 5(5), 377-389. doi:10.1080/17439760.2010.516763

Toole, A. M., & Craighead, L. W. (2016). Brief self-compassion meditation training for body image distress in young adult women. *Body Image*, 19, 104-112. doi:10.1016/j.bodyim.2016.09.001

Twenge, J. M. (2014). Time period and birth cohort differences in depressive symptoms in the U.S., 1982–2013. *Social Indicators Research*, 121(2), 437-454. doi:10.1007/s11205-014-0647-1

Watson, G., Batchelor, S., & Claxton, G. (Eds.), (1999). The psychology of awakening, London: Rider

Wood, A. M., Taylor, P. J., & Joseph, S. (2010). Does the CES-D measure a continuum from depression to happiness? Comparing substantive and artifactual models. *Psychiatry Research*, 177(1-2), 120-123. doi:10.1016/j.psychres.2010.02.003

Appendix A

Self-Compassionate Letter Writing Exercise

First, identify something about your body/appearance that makes you feel ashamed, insecure, or not good enough. Once you identify something, write it down and describe how it makes you feel. Sad? Embarrassed? Angry? Try to be as honest as possible, remembering that this exercise is anonymous. The next step is to write a letter to yourself (at least one page) expressing compassion, understanding, and acceptance for the part of yourself that you dislike.

As you write, follow these guidelines:

1. Imagine that there is someone who loves and accepts you unconditionally for who you are. What would that person say to you about this part of yourself?
2. Remind yourself that everyone has things about themselves that they don't like, and that no one is without flaws. Think about how many other people in the world are struggling with the same thing that you're struggling with.
3. Consider the ways in which events that have happened in your life, the family environment you grew up in, or even your genes may have contributed to this negative aspect of yourself.
4. In a compassionate way, ask yourself whether there are things that you could do to improve or better cope with this negative aspect. Focus on how constructive changes could make you feel happier, healthier, or more fulfilled, and avoid judging yourself.
5. After writing the letter, put it down for a little while. Then come back to it later and read it again. It may be especially helpful to read it whenever you're feeling bad about this aspect of yourself, as a reminder to be more self-compassionate.

Appendix B

Example of Self-Compassionate Letter

December 1, 2016
Dear Lauren,

You've had a rough go of it these past few months! Between the tension in the family at Thanksgiving and finals coming up, it's understandable that you've been feeling extra stressed and anxious. I know how hard you are on yourself, and the super high standards you try to live up to. I've noticed that you've been especially critical of your appearance, specifically your weight lately. It breaks my heart to hear you talk to yourself the way you do. You say cruel things to yourself that I know you'd never say to your friends. It's always been hard for you to manage your weight – it's genetic, all of the women in our family struggle with it. It's not fair and it's not your fault – it's just the way it is. I know mom was always critical of your appearance growing up, and that has led you to feel as though the way you look defines you as a person and dictates whether you are worthy of love, attention, and friendship. But that's not true. You are amazing, just the way you are. You are a human being who is worthy of love, acceptance, kindness, and care. Nobody is perfect and so many women in our culture are struggling with this same sense of inadequacy and body dissatisfaction. Even Jenny, who you've always seen as so gorgeous is super self-conscious about her height and skin issues. And Rachel is always uncomfortable wearing anything for- fitting. We have to support each other and help each other through these issues.

Why don't you try being kinder to yourself? Stop beating yourself up when you look in the mirror and try to remember that you are worthy of love (just like everyone else), even from yourself. Accept that you might never be totally happy with the way you look, but that you shouldn't let that hold you back from doing the things you love. Remember to take care of

yourself and to give your body what it needs – good food, physical activity and rest, and take time to do things that make you happy like long walks with Rachel, movie nights in, dance classes, and trying new restaurants. Treat yourself like you would a good friend you love. Be gentle with yourself when you do something you regret or wish you hadn't done. Let it go; you're only human and nobody is perfect. I care about you and want you to be happy.

Lots of love, Lauren

Appendix C

Coding Scheme

Mindfulness	0 = no, 1 = yes	• I know/understand you have been…. • The past XX days/weeks/months/yrs have been tough/difficult (similar words will do); non-judgmental • I am mindful of… • I am aware that…"
Self-Kindness	0 = no, 1 = yes	• I accept you • You are enough/good enough • Supporting messages: you are strong, you are beautiful, you have done a great job, be kind to yourself (things you would say when you are trying to be kind to others) • Setting goals/ telling yourself to do something for you to" feel better" in terms of physical/mental health or to take care of yourself • Stop doing XXX things because it makes you feel bad, hurts you, etc. • Genetics not your fault, don' t beat yourself up • Cut yourself some slack, go easy on yourself, be gentle with yourself, etc.
Common Humanity	0 = no, 1 = yes	• Everybody has/experienced/does… • You are not the only one/ you are not alone in these problems/ troubles • You are only human
Overall Understanding	1=poor 2=mixed 3=good	• 1=poor understanding of SC (does not include SC components) OR includes frequent shoulds, musts, demands to change, forceful tone • 2=mixed understanding (includes SC components, but also some self-critical statements, OR some should/demands/forceful tones) • 3=good/solid understanding of SC (has all SC components and no self-critical statements)

Table 1

Correlations of SCS, FSC, and Coded Letters

		SCS Score	FSC Score	Letter Score
SCS Score	*r*	1	-.55*	.16
	p		<.001	.28
	N	50	49	46
FSC Score	*r*	-.55**	1	-.10
	p	<.001		.53
	N	49	49	45
Letter Score	*r*	.16	-.10	1
	p	.28	.53	
	N	46	45	46

Note. *p<.05, **p<.01

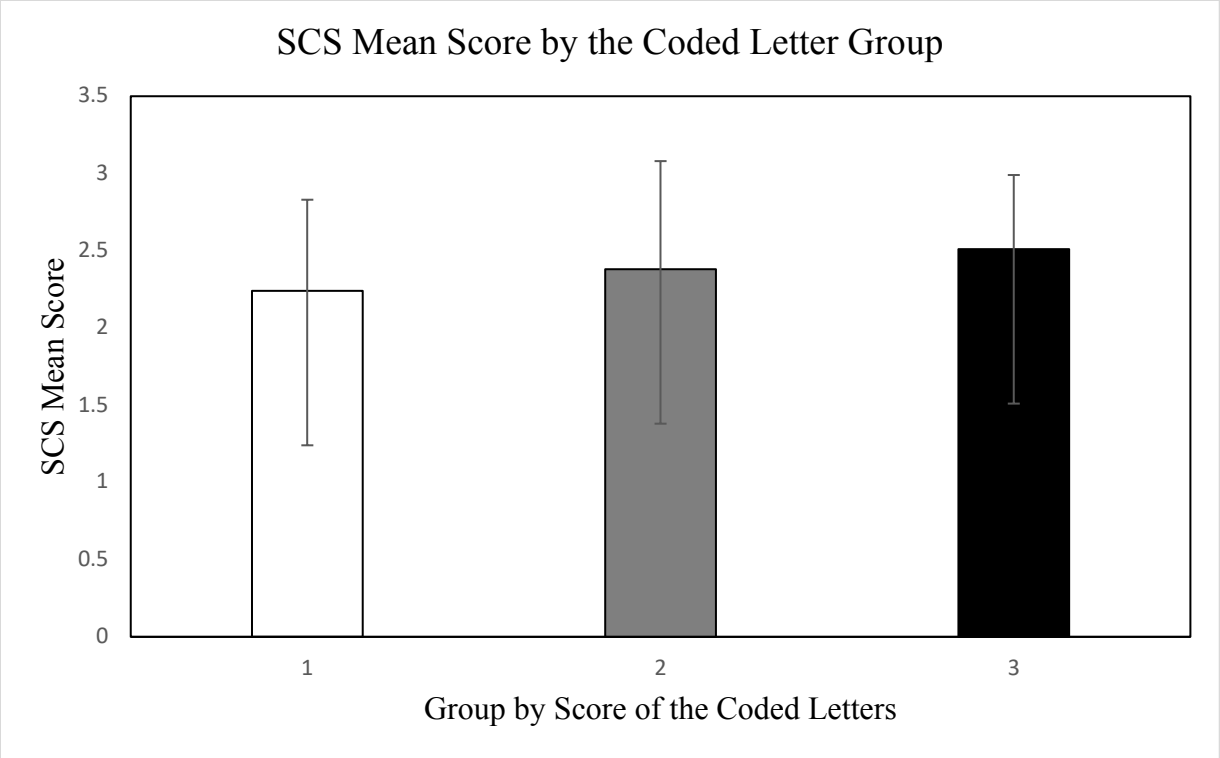

Figure 1. Mean SCS score of individuals grouped together by the letter score