Murray State Theses and Dissertations   Graduate School

2017

DOES BEING KIND TO ONESELF HELP FIGHT AGAINST DEPRESSION? THE POTENTIAL MODERATING ROLE OF SELF-COMPASSION IN THE RELATIONSHIP BETWEEN ROMANTIC REJECTION AND DEPRESSION

Imfong Chan

Follow this and additional works at: https://digitalcommons.murraystate.edu/etd

Part of the Clinical Psychology Commons

DOES BEING KIND TO ONESELF HELP FIGHT AGAINST DEPRESSION? THE
POTENTIAL MODERATING ROLE OF SELF-COMPASSION IN THE
RELATIONSHIP BETWEEN ROMANTIC REJECTION AND DEPRESSION

A Thesis
Presented to
the Faculty of the Department of Psychology
Murray State University
Murray, Kentucky

In Partial Fulfillment
of the Requirements for the Degree
of Master of Arts in Clinical Psychology

by Flora Chan

December, 2017

Acknowledgments

The primary investigator would like to thank both Michael Bordieri, Ph.D. for his supervision and guidance throughout this process, and all the suggestions given by Laura Liljequist, Ph.D., Jana Hackathorn, Ph.D., and Alan Bakes, Ph.D..

Abstract

A large body of research has shown that romantic rejection is significantly related to the presence of clinical depression. Growing evidence suggests that self-compassion is significantly negatively associated with depression and other psychopathologies. However, no research has explored the interactive role that self-compassion plays in the relationship between romantic rejection and depression. The present study is the first of the literature to investigate the interaction of self-compassion and romantic rejection on depression. Consistent with the previous studies, romantic rejection was significantly associated with depression. However, a moderation analysis indicated that self-compassion did not moderate the relationship between romantic rejection and depression. Specifically, the conditional effect of self-compassion was the only significant predictor that accounted for the variance in depression. Notably, romantic rejection did not account for variance in predicting depression when self-compassion was also considered. Results suggest the importance of self-compassion as a potential protective factor to psychopathology, particularly depression. The implications for clinical application and future research studies are discussed.

TABLE OF CONTENTS

Lists of Illustrations

Chapter I: Review of the Literature

Depression is one of the most commonly diagnosed mental disorders among the adults in the United States. In 2004, the World Health Organization identified depressive disorders as the fourth leading cause of diseases and a major contributor to the burden of disease in the world. Research from the Baltimore Epidemiologic Catchment Area Survey (ECA) indicated that the lifetime prevalence estimate for major depressive disorder in the United States is 29.9 % (Kessler, Petukhova, Sampson, Zaslavsky, & Wittchen, 2012). Another large US survey, the National Comorbidity Survey (NCS), revealed that the 12-month prevalence for major depressive disorder is 8.6% in the population (Kessler et al., 2012). Additionally, the ECA and the NCS surveys found an onset of depression in the early ages of 15 and 29 years old (Craighead, Miklowitz, Vajk, & Frank, 1998; Kessler et al., 2012).

An early age onset and high occurrence of major depressive disorder causes individuals to become vulnerable to subsequent comorbid psychological disorders, including an increased risk of physical illness, academic, social and occupational impairment, poor quality of life, increased suicidal ideations and suicidal behavior (Weissman & Paykel, 1974; Zisook et al., 2007). In the United States, major depressive episodes are associated with higher rates of substance abuse or dependency among adults from ages of 18 or more (21.5%) and youth ages 12-17 (18.9%), compared to those who do not have any major depressive episodes (8.2% and 6.7%, respectively; SAMHSA, 2011). Furthermore, both the research studies (ECA, 2012 & NCS, 2005) uncovered a strong comorbidity of major depressive disorder with other mental disorders in the

Diagnostic and Statistical Manual of Mental Disorders (DSM IV & DSM V), such as generalized anxiety disorders, social anxiety disorders, obsessive-compulsive disorders, post-traumatic stress disorders and panic disorders (APA, 1994, APA, 2013; Kessler et al., 1994; Robins & Regier, 1991). Comorbidity is related to greater severity of depressive symptoms, greater social and occupational impairment, and lower treatment response rates (Young, Mufson, & Davies, 2006). Moreover, depression increases the risk of heart attacks and occurs more frequently to those with chronic conditions, such as cardiovascular disease, obesity, and diabetes.

The most detrimental consequence of depression is increased risk of suicide, suicidal attempts and thoughts (Donohue & Pincus, 2007). One study showed that 48% of depressed patients presented suicidal ideations and half of the depressed patients had attempted suicide (Pagura, Fotti, Katz, & Sareen, 2009). Another related study demonstrated that completed suicides are most likely to occur during major depressive episodes (Holma, Melartin, Haukka, Holma, Sokero & Isometsä, 2010). Depression's high prevalence rate, strong comorbidity with other mental disorders, and the associated impairment in physical, social and occupational functioning together impair all aspects of psychological functioning. As such, understanding depression and its risk factors has important theoretical and clinical implications.

Risk factors of depression

A large body of research has discovered that low social support increases the risk of depression (Cobb, 1976; Cohen & Wills, 1985; Ibarra-Rovillard & Kuiper, 2011; Lewinsohn et al., 1994; Wade, & Kendler, 2000). For instance, Brown, Harris, Adler, and Bridge (1986) found that low self-esteem and lack of social support from romantic

partners measured at baseline, and consequently, predicted the risk of depression in the following year once a stressor had occurred. This study demonstrates that lack of social support and low self-esteem make individuals susceptible to the risk of depression during significant life events. A longitudinal research study exploring the interaction between depression and social support discovered that the higher the social support satisfaction, the lower the following 1-year symptom score (Monroe, Bromet, Connell, & Steiner, 1986). In other words, lower marital support was predictive of the subsequent development of depressive symptoms in women one year after the initial assessment. Marital support appears to directly impact the subsequent development of depressive symptoms (Monroe et al., 1986). Taken together, these findings indicate a strong association between social support deficits and a greatly increased risk of subsequent depression, suggesting that impaired social support is strongly related to depression.

Other studies have suggested an inverse association between social support and major depressive disorders. This line of research contends that the observed associations between social support and major depressive disorder are not causal, but more likely to be bidirectional (Henderson, 1992). In other words, while acknowledging that impaired social support can lead to an increased risk of depression, these researchers also believe that experiencing depression may diminish social support, including a reduction in social interactions and weakened social networks. In order to clarify the causality of the relationship between social support and depression, Wade and Kendler (2000) conducted a year-long study to examine the direction and strength of the types of the perceived social support on depression. They discovered that the perceived social support in Time 1 and Time 2 was significantly related to the onset of major depressive disorder.

Conversely, the experience of depressive disorder in Time 1 was significantly associated with a subsequent reduction in social support in Time 2. Specifically, results indicated that there was a robust association between social support and major depressive disorder, but only when the social support consisted of close members of social networks (e.g., spouse, parents;Wade & Kendler, 2000). These results establish a predictive relationship between social support and depression, that is, major depression tends to associate with lower social support which increases the risk of depression, whereas higher social support appears to buffer against major depression. Additionally, the results imply that different types of social support and their relative intimacy may intensify or weaken the risk of depression.

Fewer close relationships, and smaller social networks have all been shown to be associated with depressive symptoms (Billings & Moos, 1985; Monroe, Imhoff, Wise, & Harris, 1983). Monroe and colleagues (1983) examined the impact of the number of best friends and group memberships to depression. Results demonstrated that fewer social resources were significantly related to an increase in depression. Also, Billings and Moos (1985) revealed that individuals assessed 12 months after accessing treatment, reported having fewer friends and fewer close relationships than the non-depressed participants in a community sample.

Lewinsohn et al. (1994) discovered that depressed adolescents reported less social support from friends and family. This suggests that the quantity of social support plays a crucial role in the development of depression in adolescence. The quality of social support appeared to be an important factor in intensifying the development of depressive symptoms in adolescents (La Greca & Harrison, 2005). When examining the qualities of

best friendships and romantic relationships, the negative qualities of relationships predicted the subsequent emergence of depressive symptoms.

As noted previously, positive social support from family, friends and romantic relationships seems to protect individuals from experiencing depressive symptoms, and reducing onset of major depressive episodes. Nasser and Overholser (2005) found important associations between perceived social support and depression severity in depressed adults three months after the initial diagnosis. In other words, higher levels of perceived support from friends and family were significantly associated with lower levels of depression three months after the initial assessment. Specifically, depressed adults with higher levels of overall social support from friends and family showed greater improvement in depression as compared to the individuals with lower levels of social support. Additionally, depressed adults who recovered from depression reported perceiving higher levels of social support from friends and family after three months. Interestingly, studies revealed that subjective report of perceived social support was more predictive of recovery from depression than objective measures of social support. In other words, the strongest predictor of recovery appears to be the individual's subjective perception of social support from their social network (Nasser & Overholser, 2005).

Similar results were revealed by a study which aimed at assessing the role of subjective social support in the outcome of treatment for depression (George, Blazer, Hughes, & Fowler, 1989). This study demonstrated that those with a lower baseline of perceived social support did not recover as well as others, and that subjective social support was more predictive of recovery status than an objective measure of social support (George et al., 1989). Besides social support, personality traits and interpersonal

orientations may also predispose individuals to become vulnerable to depression. Lewinsohn and colleagues (1994) demonstrated that individuals who were excessively dependent on others for emotional support were significantly associated with future depressive episodes. Similar results were found in other studies. Barnet and Gotlib (1988) indicated that individuals with high dependency tended to have difficulties in establishing secure social relationships and were more vulnerable to depression. These studies suggest that social support plays an important role in maintaining normal psychological functioning in humans.

Rejection

Human beings possess a need to maintain social bonds or relations to ensure continual social support from one another, which from an evolutionary perspective, assists in surviving in perilous and hazardous environments by forming social groups with common goals (Baumeister & Leary, 1995). Therefore, bonding closely to each other and ensuring social support from social networks is necessary for survival. Losing social bonds threatens this need which can lead to tremendous distress and an increase in vulnerability to depression. One such shared human experience of losing social bonds is rejection.

A considerable body of research has discovered robust findings which suggest that parental rejection is strongly related to the subsequent levels of depressive symptoms, increased risk of becoming depressed, suicidal thoughts, and suicidal attempts in children and adolescents (Akse, Hale III, Engels, Raaijmakers, & Meeus; 2004, Campos & Holden, 2015; Magaro & Weisz, 2006; Nolan, Flynn, & Garber, 2003; O'Donnell, Moreau,Cardemil, & Pollastri, 2010; Pepping, Davis, O'Donovan, & Pal,

2015). Similarly, peer rejection is a significant prospective predictor of depressive symptoms in adolescents (Nolan, Flynn, & Garber, 2003; Platt, Kadosh, & Lau, 2013; Prinstein & Aikins, 2004).

Rejection from romantic partners is a common occurrence among young adults and older adolescents (La Greca & Harrison, 2005). Previous research has shown that individuals with low levels of romantic relationship satisfaction and experiences of romantic rejection were at a greater risk of experiencing depressive symptoms (Monroe, Rohde, Seeley, & Lewinsohn, 1999; Welsh, Grello, & Harper, 2003). For instance, La Greca and Harrison (2005) discovered that negative qualities of romantic relationships were the strongest predictors of subsequent depressed mood or depressive effects, even when controlling for other relationship variables. Zimmer-Gembeck and Vickers (2007) also demonstrated that the level of satisfaction in romantic relationships was significantly negatively associated with distress and depressed moods. These findings imply that romantic relationships are especially crucial to mental health and psychological well-being. Thus, losing a significantly valued partner, being rejected via partner-initiated break-up, or perceived rejection from a significant other in a romantic relationship may give rise to deleterious effects to mental health.

Indeed, some studies have uncovered a direct relationship between rejection from romantic partners and depression. For instance, Slavich, Thornton, Torres, Monroe, and Gotlib (2009) tried to assess the effects of "Targeted Rejection" and "Severe Non-Targeted Rejection" on the onset of a major depressive episode. "Targeted Rejection" involves the exclusive and the intentional social rejection of a targeted individual by others, including the domains of life events at work, at school, and in relationships.

"Severe Non-Targeted Rejection Event" refers to all of the life events that do not meet the definition of "Targeted Rejection". They compared depressed individuals who had experienced a "Targeted Rejection" to those who had not before the onset of a major depressive episode (Slavich et al., 2009). Confirming their hypothesis, results demonstrated that individuals who had experienced targeted rejection before the onset of depression became depressed approximately three times faster than participants who experienced a severe life event (i.e., non-targeted-rejection). Furthermore, a six-month test-retest correlation study showed that in a sample of individuals who had experienced rejection, over 40% of participants experienced clinical depression, and 12% experienced moderate to severe depression (Mearns, 1991).

Finlay-Jones and Brown (1981) found that events that were rated as "severe losses," such as losing a valued person or separation by a valued person, were more associated with subsequent onset of depression than events that were rated as "less severe losses," such as expected separation or mutual-agreed termination. Other studies also discovered consistent findings and showed that exposure to rejection and interpersonal losses were associated with the onset of depression (Kendler, Hettema, Butera, Gardner, & Prescott, 2003; Monroe, Rohde, Seeley, & Lewinsohn, 1999).

Consistent negative impacts of rejection from romantic relationships also occur in adolescents. In particular, a romantic break-up in a previous year was found to significantly predict the onset of a first major depressive episode (Monroe et al., 1999) Specifically, almost half (46%) of participants who presented with a first major depressive episode reported experiencing a break-up in the previous year; in contrast, one quarter (24%) of participants who had a break-up in the preceding year did not become

depressed (Monroe et al., 1999). This implies that relationship loss, rejection, and/or break-ups may create vulnerability for developing depression across the lifespan.

Romantic rejection is pervasive and detrimental. A romantic breakup or rejection was rated as one of the most frequent "worst events" (p.606) by adolescences in a survey (Monroe et al., 1999). Rejection from a valued romantic partner has also been shown to decrease self-worth and lower self-esteem (Leary, 2001). Some researchers tried to gain a deeper understanding of the impacts from romantic rejection on college students. Individuals who have been rejected or experienced a break-up of a romantic relationship scored higher on break-up distress scales and reported depression, feelings of being betrayed, intrusive thoughts, and sleep disturbance (Field, Diego, Pelaez, Deeds & Delgado, 2009). Specifically, depression occurred more frequently among those who had been rejected compared to those who initiated the rejection. This is consistent with previous research by Ayduk, Downey, and Kim (2001), who discovered that individuals who had been rejected presented higher levels of depressed mood than individuals who initiated the rejection. Howa and Dweck (2016) discovered that individuals who attributed their negative personality traits to the cause of romantic rejections reported experiencing more negative emotions than those who attributed rejections to many possible reasons. Individuals seem to criticize themselves harshly, and experienced more negative self-evaluation after rejection. Specifically, individuals reported irrational and negative beliefs towards themselves and their environment, such as "Why wasn't I good enough?" (p.58) or "Is there something wrong with me?" (p.58; Howe & Dweck, 2016). According to Beck's (1979) cognitive triad theory, irrational, negative and pessimistic views of the self, the world, and the future can fuel the development of clinical

depression. Critical evaluation and self-criticism upon rejection may further exacerbate the negative emotion from rejection and enhance the risk of developing depression.

Mearns (1991) found that approximately one half of individuals who experienced rejection subsequently developed depression. While this finding supports the relationship between rejection and depression, it is important to consider that half of the participants did not experience subsequent depression. This indicates that experience of rejection is not the single cause of the developmental course of depression. There are many other factors impacting the development of depression, including many outside the scope of this review (e.g., neurochemistry, genetics, etc.). This review will consider a related cause discussed earlier; the fact that individuals who experienced higher negative emotions after rejection also tend to experience increased self-criticism tendency and negative self-attributions with regards to the failed relationship.

Self-Compassion

According to Neff (2003), the opposite dimension of self-criticism is self-compassion. Neff's (2003) definition of self-compassion consists of three main components, self-kindness (versus self-judgment), common humanity (versus isolation), and mindfulness (versus over-identification). Self-kindness is the tendency to treat oneself with kindness and non-judgmental understanding rather than with self-criticism when experiencing suffering. Common humanity refers to an inclination to recognize that encountering imperfection, failures, and negative experiences are a part of the shared human experience instead of feeling isolated from others by one's own failures. Mindfulness describes a non-judgmental, equilibrated stance to process painful feelings without trying to suppress or deny them. In the Self-Compassion Scale (Neff, 2003), each

component is measured through two subscales which theoretically define the positive and negative aspects of the component. Neff (2003) found that there was a negative association between self-compassion and psychological dysfunction, in that the higher scores were negatively associated with self-criticism, depression, anxiety, rumination, thought suppression, and neurotic perfectionism. Studies have shown that self-critical individuals tend to lack self-compassion (Marshall, Zuroff, McBride, & Bagby, 2008; Zuroff, Igreja, & Mongrain, 1990). A meta-analysis composed of 14 studies which used the self-compassion scale conducted in adult samples, demonstrated a large effect size for the negative association between psychopathology (included anxiety, depression, and stress) and self-compassion (MacBeth & Gumley, 2012). These results suggest that self-compassion is negatively associated with depression, and positively related to emotional well-being.

It appears that depression may impair an individuals' ability to adopt a self-compassionate attitude. Krieger, Altenstein, Baettig, Doerig, and Holtforth (2013) found that self-compassion was negatively associated with depressive symptoms. That is, depressed patients displayed significantly lower self-compassion scores compared to never depressed individuals, even when controlling for depressive symptoms suggests that self-compassion may act as a buffer against depression.

Leary, Tate, Adams, Allen and Hancock (2007) investigated the impact of self-compassion on individual reactions to negative events involving failure, loss, rejection or humiliation. Specifically, results indicated that individuals with higher self-compassion reported less negative emotions, less catastrophizing, and less personalizing thoughts when exposed to hypothetical negative events (Leary et al., 2007). This suggests that

adopting a self-compassionate stance may reduce the likelihood of experiencing negative emotions when experiencing negative events.

Self-compassion has been negatively associated with many types of psychopathology (MacBeth & Gumley, 2012; Krieger et al., 2013). Self-compassion seems to protect against depression by mitigating negative emotional reactions and self-criticism. Indeed, individuals with major depressive episodes reported less self-compassion when experiencing negative emotions than individuals not suffering from a major depressive episode (Krieger et al., 2013). In another study, Raes (2011) found self-compassion performs as an important protective factor against psychopathology (such as depression) in an adult population. In his longitudinal study, Raes (2011) discovered that the levels of self-compassion measured at the baseline prospectively predicted greater reductions in depressive symptoms over a five-month interval.

Similar effects of self-compassion serving as a protective factor for depression have been consistently demonstrated in research. Trompetter, Kleine, and Bohlmeijer (2016) found that self-compassion functions as a protective factor against psychopathology, reducing factors like self-criticism or rumination when activated by negative affective experiences. This may help individuals perceive a distressing event as more controllable and less aversive, which then leads to less avoidant behaviors and erroneous cognitive schemas (Trompetter et al., 2016; see also Allen & Leary 2010; Barnard & Curry 2011; Leary et al., 2007).

Overall, these studies support the notion that individuals with high depressive symptoms have difficulty experiencing a self-compassion attitude. This is likely due to the features associated with a negative dimension of self-compassion including isolation,

catastrophizing, and narrowed judgmental thinking (Trompetter et al., 2016). Thus, self-compassion may function as a moderator of the relation between negative affect and psychopathology. The purpose of the current study was to explore the role of self-compassion in the relationship between depression and romantic rejection. A moderation analysis was used to examine whether the relationship between the experience of romantic rejection and depressive symptoms varies as a function of self-compassion. Given that previous research has linked low self-compassion with depression and other psychopathology, it was anticipated that the relationship between breakup distress and depression severity would be less pronounced in individuals with higher level of self-compassion. In contrast, it was hypothesized that the relationship between breakup distress and depression severity would be stronger among individuals with low self-compassion.

Chapter II: Method

Participants

Individuals over the age of 18 who reported experiencing a romantic rejection in the past two years were recruited from the Murray State University Psychology Department participant pool. To ensure optimum results for the current study, only those who reported having a significant other break up with them in the last two years were included in the present study. Individuals who experienced a breakup more than two years ago or who only reported initiating a breakup were excluded from this study.

A total of 108 Murray State University undergraduates (N = 108, 22 males, 54 females) with ages ranging from 18 to 34 ($M = 19.76$, $SD = 2.75$) participated in this study in exchange for credit in a psychology course. Due to missing values in study measures, a total of 19 participants were removed from the analysis. A total of nine participants who missed one or more attentional questions out of three attentional questions were removed. Also, three more participants were removed from the analysis due to reporting that they had never experienced a romantic breakup. A total of 78 participants were included in the main study analyses.

The majority of the sample self-reported their race/ethnicity as Caucasian (87.2%), followed by African/African-American (6.4%), and Asian/Asian-American (1.3%). Fifty-eight percent of the sample reported being freshman, 19.2% sophomores, 9% juniors, and 11.5% being seniors in college. The majority of the sample was female (69.2%) with 28.2% endorsing a male gender. Demographic analyses revealed that 91%

of the participants in this study were identified as heterosexual, followed by 2.6%

bisexual, 1.3% lesbian or gays, and 1.3% preferred not to disclose. Regarding current

relationship status, 56.4% of the participants reported being currently single, 24.4% of

participants were dating exclusively, 12.8% of participants were dating casually, 1.3% of

participants were engaged, and 5.1% preferred not to disclose. With regard to religious

affiliation, 67.9% of the sample identified as Christian, 11.5% as Catholic, 6.4% as

Atheist, 5.1% as Agnostic, and 3.8% as having no affiliation.

Materials

   Self-Compassion Scale (SCS; Neff, 2003). The SCS is a 26-item self-report

inventory that assesses six factors: self-kindness, self-judgment, common humanity,

isolation, mindfulness, and over-identification. Each item is rated on a 5-point scale (1 =

strongly disagree to 5 = strongly agree). Studies (Neff, 2003a) demonstrated that the self-

compassion scale has a good internal consistency (α = .92), and test–retest reliability

coefficients range from .80 - .93 over a three-week interval for all of the SCS subscales.

The present study also revealed a high reliability of the SCS (α = .94). Overall, higher

scores on the SCS indicate higher levels of self-compassion. Specifically, a total score of

1-2.5 on the SCS indicates the individual is low in self-compassion. A total score of 2.5-

3.5 suggests the individual has a moderate self-compassion and a total score of 3.5-5.0

indicates that the individual is high in self-compassion. Also, the SCS scale demonstrated

a good construct validity and displayed no significant correlation with social desirability

biases, suggesting that responses to the scale do not represent a predisposition toward

presenting oneself in a socially advantageous manner. Furthermore, discriminant and

convergent validity for the SCS scale were also examined. Self-compassion scores were

significantly negatively correlated to self-criticism (r = -.65), indicating that self-compassion scores were not associated with a measure of self-criticism. Instead, self-compassion showed a significant positive correlation with a sense of social connectedness (r = .41), implying that the scores of self-compassion were related to a presence of social connectedness (Neff, 2003a). In the present study, the SCS is used to measure the current sense of self-compassion that the participants have towards themselves. The participants were instructed to indicate how they generally behaved and felt, according to the manners specified in the SCS's questionnaire (e.g., please read each statement carefully before answering. To the left of each item, indicate how often you behave in the stated manner, using the following scale).

Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977). The CES-D is a 20-item self-report scale that was designed to measure current level of depressive symptomology, with an emphasis on the affective component. The severity of each depressive item is rated on a 4-point scale ranging from 0 (rarely or none of the time) to 4 (all of the time). Scores are obtained by summing relevant items. The scores can range from 0 to 60, with high scores indicating greater depressive symptoms. Results of the CES-D validation study yielded a Cronbach's alpha coefficient range from .85 to .95, suggesting the CES-D scale was consistent and has high reliability (Radloff, 1977). The present study also demonstrated high reliability for the CES-D ($\alpha = .92$). Additionally, the scale items showed significant correlations with the Hamilton Clinician's Rating Scale (r = .69) and the Raskin Rating Scale (r = .75) which are designed to measure the presence of depression or depressive symptomology. These findings indicate that the constructs tested by the CES-D scale are good predictors in

detecting the presence of depressive symptoms. In the present study, the CES-D was utilized to measure how the participants felt during last two weeks. Participants were asked to answer how they felt during the past week (i.e., "Below is a list of some of the ways you may have felt or behaved. Please indicate how often you have felt this way during the past week).

        Breakup distress scale (BDS; Field, Diego, Pelaez, Deeds & Delgado, 2009). The Breakup distress scale was adapted from the Inventory of Complicated Grief (Prigerson, Maciejewski, Reynolds, Bierhals, Newsom, Fasiczka, & Miller, 1995). The 16-item scale assesses distress related to experiencing a romantic breakup with responses ranging from 1(not at all) to 4 (very much so). Items on the breakup distress are related to reactions or feelings after experiencing a breakup (e.g., "I think about this person so much that it is hard for me to do the things I normally do."). The internal consistency of this 16-item scale is high (α = .91; Field, Diego, Pelaez, Deeds & Delgado, 2009). Consistent with the previous study, the BDS scale also demonstrated a high internal consistency (α = .95) in the present study. In the present study, the Breakup distress scale was used to measure retrospective feelings towards a previous romantic breakup. Participants were instructed to reflect back on how they felt about a previous romantic breakup on the questionnaire (i.e., "Please fill in the circle next to the answer which best describes how you felt RIGHT AFTER THE BREAKUP HAPPENED"). The instructional words "right after the breakup happened" were capitalized for emphasis in order to capture retrospective feelings towards a past break up only. Distress from

current break ups was also measured, however, it was dropped due to its poor

psychometric performance. [1]

Descriptive Information. Major demographic variables regarding participants

and their romantic relationships history were assessed, including gender, age, ethnicity,

the length of romantic relationship (i.e., how long was the relationship), commitment to

the romantic relationship (i.e., how invested were you in the romantic relationship),

length of time since breakup (i.e., how long since the breakup), engagement in new

relationships since the breakup, commitment to current relationship (if applicable), and

quality of the current relationship (i.e., casual or serious, if applicable). The demographic

section on the survey in the present study was split into two parts, personal information

and romantic relationship history (see Appendix I for questions from the romantic

relationship history questionnaire; see Appendix III for questions from the demographic

questionnaire).

Procedure

Approval from the IRB was obtained prior to the data collection. The current

study was an online study. Participants provided their informed consent prior to

beginning the study. They then completed the CES-D (measuring levels of depression in

past two weeks) followed by the romantic relationship history (RRH) questions. After

that the following measures were presented in a random order: Breakup Distress Scale

(which was designed to measure retrospective breakup distress towards a previous

---

[1] The scores on the current Breakup Distress Scale were not normally distributed and violated

liner regression assumption. Therefore, the measure was excluded from further analysis.

romantic breakup) and Self-Compassion Scale (which measured current levels of self-compassion). Following those measures, participants were asked to complete the demographic questions. Finally, the participants were debriefed upon the completion of the questionnaires.

Chapter III: Results

In the current study, a linear regression model was conducted using SPSS version 22 to explore the relationship among the independent, dependent, and moderating variables. PROCESS (version 2.10; Hayes, 2013) was used to test the potential moderating role of self-compassion between depressive symptoms and the experience of romantic rejection. The Johnson-Neyman regions of significant analysis (Johnson & Neyman, 1936) was planned as a follow-up analysis to explore the hypothesized interaction. In addition, the pick-a-point technique (Rogosa, 1980) at the self-compassion mean and one standard deviation below and above the mean was planned to visualize the hypothesized interaction if it was significant. The independent variable was the experience of romantic rejection as measured by the breakup distress scale (BDS), the dependent variable was the severity of depressive symptoms on the CES-D, and the moderating variable was self-compassion measured via the SCS. Prior to the primary analysis, baseline correlations between study variables and demographic factors were calculated. Any statistically significant demographic variable was entered as a covariate in the primary analysis. A power analysis testing the three predictors (depressive symptoms, self-compassion and combined depressive symptoms and self-compassion) was run with G*Power (version 3.1.9.2), which indicated that a total of 77 participants were needed to detect a medium effect size using power $(1 - \beta)$ set at 0.80 and $\alpha = 0.05$. The present research successfully recruited 108 participants with 78 retained for analysis indicating that study analyses were adequately powered.

According to Radloff's study (1977), a mean score of 16 or higher indicated as a high depressive symptom on the CES-D scale. The present results indicated that participants experienced a high level of depressive symptoms on the CES-D ($M = 18.97$, $SD = 11.24$). This suggests that the sample, which consisted of participants who all experienced romantic rejection, presented with above average depressive symptoms. See Table 1 for means, standard deviations, and correlations among study variables.

In order to identify the associations between demographic variables (i.e., months since breakup, length of the relationship, level of commitment to the relationship, experiencing *a breakup worse than the* most recent breakup, current romantic relationship status, biological sex, commitment to current romantic relationship, and sexual orientation) and the main variables of interest (i.e., past breakup distress, self-compassion, and depression severity), a series of preliminary analyses were conducted. There was no significant correlation between months since breakup, length of the relationship, level of commitment to the relationship, experiencing a breakup worse than the most recent breakup, and current romantic relationship status between the main variables of interest in the present study. Due to the non-significant relationship between these demographic variables and the main interest of variables, they were excluded from further analyses. (See Table 1 for means, standard deviations, and correlations among study variables). It is important to note that there were high standard deviations for the variables of months since breakup and length of the relationship, suggesting that the scores in these two variables were spread out over a large range and not normally distributed. Thus, these variables might not be valid and generalizable to the larger population.

Significant correlations were found among biological sex, level of commitment, and sexual orientation and the main variables of interest. Specifically, a significant positive correlation was found between biological sex and depression severity, $r = .313$, $p = .006$, indicating that the female participants had significantly higher levels of depressive symptoms than the male participants. Also, there was a significant negative correlation between biological sex and self-compassion, $r = -.243$, $p = .035$, indicating that the female participants had significantly higher self-compassion than the male participants. Moreover, a significant positive correlation was discovered between biological sex and past breakup distress, $r = .356$, $p < .001$, suggesting that *the* female participants experienced higher breakup distress than the male participants. Additionally, there was a significant positive correlation between the level of commitment and the past breakup distress, $r = .458$, $p < .001$, indicating that the more devoted participants were in romantic relationship, the higher the breakup distress they experienced. Furthermore, a significant negative correlation between depression severity and sexual orientation was discovered, $r = -.258$, $p = .023$, suggesting that the non-heterosexual participants experienced more severe depressive symptoms than heterosexual participants. Due to the significant correlations between biological sex, level of commitment, sexual orientation and the main variables of interest, they were considered as covariates in the primary study analyses.

A moderation regression analysis was conducted to test the hypotheses that the relationship between romantic rejection (independent variable) and depression (dependent variable) varies as a function of self-compassion (moderator), while controlling for biological sex, level of commitment, and sexual orientation. Past breakup

distress and self-compassion were mean-centered prior to entering it into the analysis and the interaction term was based on that centered score. Depression severity was first regressed on past breakup distress, self-compassion, biological sex, level of commitment, and sexual orientation. The interaction term between past breakup distress and self-compassion was entered in the second step. The step one model resulted in an R^2 of .361, which was significant, $F (5, 70) = 7.90$, $p < .001$. The overall model accounted for 36.1% of the variance in the levels of depressive symptoms. The interaction term between self-compassion and previous breakup distress from romantic rejection indicated that self-compassion did not significantly moderate the relationship between romantic rejection and depression. The interaction term did not account for a significant additional proportion of variance in depression severity, $R^2\Delta = .007$, $F (1, 69) = .810$, $p = .371$. The final model accounted for 36.8% of the variance in depression severity and was significant, $F (6, 69) = 6.701$, $p < .001$. The results of overall model and interaction term are presented in Table 2. These results revealed that self-compassion did not moderate the relationship between breakup distress and depression severity. However, depression severity was significantly related to the levels of self-compassion, such that the higher the self-compassion, the lower the depressive symptoms individuals experienced, whereas the lower the self-compassion, the stronger the depressive symptoms individuals experienced.

Table 1

Means, standard deviations, and correlations among primary study variables and demographic variables.

	CESD	SCS	BDS	Mean	SD
1. CESD(Center for Epidemiologic Studies Depression Scale)	---	-.54**	.33**	18.97	11.24
2. SCS(Self-Compassion Scale)		---	-.44**	2.84	.73
3. BDS Past (Breakup distress scale)			---	34.14	16.22
4. Months Since Breakup	-.11	-.01	-.03	13.76	13.61
5. Lengths of the relationship (in months)	-.09	.01	.18	14.55	17.08
6. Level of commitment to the relationship	.16	-.13	.46**	5.58	1.82
7. Biological Sex/Gender (Female = 1)	.31**	-.24*	.36**	.71	71% Female
8. Sex Orientation(Heterosexual=1)	-.31**	.13	-.06	1.7	91% Heterosexual
9. Experienced worse breakup (Yes = 1)	.07	-.06	-.20	.20	19.7% Yes
10. Currently in relationship (Yes =1)	.00	-.14	-.02	.32	32% Yes,
11. Race (White =1)	.08	.05	.05	1.12	91.9% White
12. Religion (Christian/Catholic = 1)	.12	.03	-.16	1.91	79.5% Christian/Catholic

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

Table 2.

Moderated regression predicting depression severity

Predictor Variable	*B*	SE	t	*p*
Step 1				
Intercept	20.87	6.36	3.28	.002
Biological Sex (Female = 1)	4.76	2.60	1.83	.072
Level of Commitment	.39	.69	0.57	.573
Sexual Orientation (Heterosexual = 1)	-7.93	4.41	-1.80	.077
Past Breakup Distress	.002	.08	.02	.982
Self-Compassion	-7.16	1.68	-4.26	<.001
Step 2				
Intercept	21.02	6.37	3.29	.002
Biological Sex (Female = 1)	5.18	2.65	1.96	.055
Level of Commitment	.35	.69	.50	.616
Sexual Orientation (Heterosexual)	-7.72	4.42	-1.75	.085
Past Breakup	.00	.09	.00	.999
Self-Compassion	-6.43	1.87	-3.44	.001
Breakup Distress X Self-Compassion	.09	.10	.90	.371

Chapter IV: Discussion

Findings from this study suggest that breakup distress from previous romantic rejection was significantly correlated to depressive symptoms. However, when self-compassion was entered as a moderator into the analysis, romantic rejection did not account for unique variance in predicting the changes in depression. Instead, the conditional effect of self-compassion was the only significant predictor of depression in the primary analytic model. While self-compassion did not moderate the relationship between depression and romantic rejection, it did parse significant variance in the model.

Results indicated that the present study fails to offer significant evidence to support the hypotheses that self-compassion moderates the relationship between romantic rejection and depression. There are several reasons to explain why this might be. It is possible that the effect on depression severity would not depend on the breakup distress since these two variables are conceptually related. Specifically, some of the presented depressive symptoms on the CES-D are similar to the manifested symptoms on the breakup distress scale. Higher self-compassion predicted both lower past break-up distress and lower depressive symptoms in the current sample, suggesting a high degree of conceptual overlap between the two variables. It is also possible that the moderating relationship does exist, but didn't materialize in the present study due to the measurement of retrospective distress instead of distress experienced in the recent break up. Future researchers should consider collecting longitudinal data following break ups, as this would also provide valuable data about the patterns and trends of individuals following a break up.

These results suggest that self-compassion plays a crucial role in determining the development of subsequent depression after the occurrence of romantic rejection (Raes, 2011; Trompetter, Kleine, & Bohlmeijer, 2016). Correlational findings indicated that individuals who experienced romantic rejection were more likely to become depressed. Consistent with the previous research findings, the present study replicated a large range of studies which suggested that romantic rejection predicted the presence of subsequent clinical depression (Ayduk, Downey, & Kim, 2001; Field, Diego, Pelaez, Deeds & Delgado, 2009; Finlay-Jones & Brown, 1981; Monroe, Rohde, Seeley, & Lewinsohn, 1999; Slavich, Thornton, Torres, Monroe, & Gotlib, 2009; Welsh, Grello, & Harper, 2003). However, it is important to note that these effects did not remain significant while also considering the conditional and interactive effect of self-compassion. Growing evidence suggests that self-compassion is negatively associated with psychopathology and positively related to psychological well-being and positive mental health (MacBeth & Gumley, 2012; Raes, 2011; Trompetter, Kleine, & Bohlmeijer, 2016; Neff, Kirkpatrick, & Rude, 2007; Neff, 2003; Van Dam, Sheppard, Forsyth, & Earleywine, 2011). The present study was the first to explore the role of self-compassion in the relationship between romantic rejection and depression. Findings from this study extend the existing literature and further support the role of self-compassion as a potentially protective factor for psychopathology, especially to depression, perceived social marginalization in schizophrenia-spectrum disorder, self-criticism, shame or interpersonal problems (Braehler, Gumley, Harper, Wallace, Norrie, & Gilbert, 2013; Van Dam et al., 2011). Findings of the current study can be used to offer effective psychotherapeutic

interventions to cope with depression associated with romantic rejections and against psychopathology in the long term.

Clinical Implication

Although the relationship between romantic rejection and depression did not vary as a function of self-compassion, the present results revealed a substantial role that self-compassion played in depression. Also, the present study provides novel insights into clinical practice for depression. Reviewing present literature, a specific psychotherapeutic approach in coping with depression associated with romantic rejection has yet to be developed. Yet, the present study as well as past studies showed that individuals experiencing romantic rejection are at a greater likelihood to develop clinical depression (Ayduk, Downey, & Kim, 2001; Field, Diego, Pelaez, Deeds & Delgado, 2009; Finlay-Jones & Brown, 1981; Monroe, Rohde, Seeley, & Lewinsohn, 1999; Slavich, Thornton, Torres, Monroe, & Gotlib, 2009; Welsh, Grello, & Harper, 2003).

Although specific therapeutic approaches for dealing with romantic rejection have not yet been developed, there are many techniques for dealing with depression related to romantic rejection. Existing therapeutic interventions for depression include Interpersonal Psychotherapy, Behavioral Activation, and Cognitive Behavioral Therapy. These interventions all have demonstrated efficacy in treating depression, and also addressed coping with romantic rejection. Cognitive Behavioral Therapy emphasizes how negative cognitions impact emotions and behaviors, with the purpose of modifying behaviors and emotions through altering negative cognitions (Beck, 1979). Cognitive behavioral therapy emphasizes how negative cognitions impact emotions and behaviors, with the purpose of modifying behaviors and emotions through altering negative cognitions

(Beck, 1979). Cognitive behavioral therapy has been used to reduce breakup distress through altering distorted beliefs and dysfunctional attitudes towards rejection. Additionally, Maertz (n.d.) suggested a number of strategies of coping with the imminent risk of breakup distress through cognitive behavioral techniques, such as identifying the emotions and cognitions through writing out, or reducing self-blame/self-criticism for the loss. On the other hand, Interpersonal Psychotherapy emphasizes the role of interpersonal relationship (i.e., loss of a loved one, role disputes, life-role transitions, relational conflict, and grief) on depression. Interpersonal Psychotherapy is utilized to decrease the breakup distress through changing expectations towards the intimate relationship and enhancing other social supports (Klerman, Dimascio, Weissman, Prusoff, & Psykel, 1974; Klerman & Weissman, 1994). Behavioral Activation underscores the significant relationship between behaviors and emotions. More specifically, Behavioral Activation underlines the importance of scheduling daily pleasant activities that generate a sense of positive reinforcement which further improve the depressed moods and symptoms of depression (Cuijpers, Straten, & Warmerdam, 2007; Hopko, Lejuez, Ruggiero, & Eifert, 2003). Behavioral Activation has been applied to diminish depressed moods or breakup distress to the loss of a significant person through consistently scheduling pleasant daily activities (Cuijpers, Straten, & Warmerdam, 2007; Hopko, Lejuez, Ruggiero, & Eifert, 2003). Cognitive Behavioral Therapy, Interpersonal Psychotherapy, and Behavioral Activation have been shown to help clients struggling with grief, or loss of significant others (Beck, 1979; Cuijpers, Straten, & Warmerdam, 2007; Hopko, Lejuez, Ruggiero, & Eifert, 2003; Klerman, Dimascio, Weissman, Prusoff, & Psykel, 1974; Klerman & Weissman, 1994). Although these approaches are effective for depression in general,

depression can manifest itself in many forms and it would benefit to future psychologists and researchers to explore therapy specific to romantic rejection as this is a common source of depression.

However, due to the underpinning distinction between grief and romantic rejection, a therapeutic intervention corresponding to the theoretical definition of romantic rejection may be more beneficial to the population struggling with romantic rejection. The current study suggests that self-compassion is an important protective factor to mitigate the risk of depression to romantic rejection and against psychopathology in the long term. Therefore, as an alternative or adjunct to altering negative cognitions, modifying the interpersonal relationship, scheduling pleasant daily activities, or reducing the acute distress of romantic rejection, approaches that emphasize building up a sense of self-compassion as a protective factor may be another plausible psychotherapeutic intervention for preventing depression and increasing emotional resilience. There is an emerging therapeutic approach known as compassion-focused therapy which aims to reduce self-criticism, shame, interpersonal problems, and negative affect through enhancing self-compassion (Gilbert, & Procter, 2006; Gilbert,2009).

Growing evidence suggests the efficacy of compassion-focused therapy in coping with depression, anxiety, self-criticism, negative effects, rejection, and interpersonal problems (Gilbert, & Procter, 2006; Braehler, Gumley, Harper, Wallace, Norrie, & Gilbert, 2013; Kelly, Zuroff, & Shapira, 2009; Leary, Adams, Allen & Hancock, 2007; Leaviss, & Uttley, 2015). Leary and his colleagues (2007) explored the impact of self-compassion on individual reactions to negative events involving failure, loss, rejection or humiliation. In particular, the results showed that individuals with higher self-compassion

reported less negative emotions, less catastrophizing, and less personalizing thoughts when exposed to hypothetical events that generate rejection (Leary et al., 2007). This indicates that increasing a sense of self-compassion reduces the possibilities of experiencing negative affect when experiencing negative events or distressing social rejections. Moreover, individuals with lower levels of self-compassion demonstrated the most negative reactions towards the given unfavorable feedback, after a personal introduction relative to individuals with greater self-compassion (Leary et al., 2007). Furthermore, results also revealed that self-compassion influences the accuracy of one's perceived performance. Specifically, individuals with lower self-compassion rated their own performance lower than the people with higher levels of self-compassion, even though the actual performance was rated equally by observers. In contrast, the people with higher levels of self-compassion were more accurate in judging their actual performance, and less likely to feel isolated by distressing events (e.g., embarrassment and rejection; Leary et al., 2007). Additionally, experimental manipulation (augmentation) of subjects' sense of self-compassion was shown to increase self-compassion and reduce clinical depression (Neff, Kirkpatrick, & Rude, 2007).

Neff and Germer (2013) conducted a pilot study integrating self-compassion into mindfulness training, which is known as mindful self-compassion training (MCS). Mindful self-compassion training (MCS) was designed for developing a sense of self-compassion and augmenting self-compassion in enhancing psychological functioning and life-satisfaction. Consistent to their hypotheses, participants experienced greater life satisfaction, lower anxiety, depression, and avoidance after the eight weeks of training.

More importantly, these positive effects from the mindful self-compassion training were shown to be maintained at the 6-months and 1 year follow-ups.

Germer and Neff (2013) further investigated the effectiveness of Mindful self-compassion focused therapy in treating depression, anxiety, and suicidality by cultivating a sense of self-compassion (i.e., self-compassion letter writing, or soothing touch) over eight weeks. Results demonstrated that augmenting the sense of self-compassion reduced depression, anxiety, and suicidal ideations, which further enhanced individual life-satisfaction.

Taken together with the present results, these studies suggest that self-compassion functions as a protective factor which not only improves depression or other psychopathologies but also increases emotional resilience and regulates positive mental health (Trompetter, Kleine, & Bohlmeijer, 2016).

Research Implication

The present study revealed the complex psychopathological phenomenon of mental disorders (i.e., depression). Experiencing romantic rejection increases the likelihood of developing subsequent depression; however, individual self-compassion had a substantial impact on mitigating the severity of depression when included in the analysis. These results highlight the unique impact of individual differences on the diverse manifestation of disorders (i.e., variations of frequency, severity, and the duration of symptoms in clinical disorders) and further support the need for multidimensional etiological models of clinical disorder (Brown, & Barlow, 2009). Evaluating previous and current studies together, the future research concerning clinical depression will have to

consider investigating the interaction of multidimensional factors which affect the presentation of mental disorders (Brown, & Barlow, 2009).

Also, a wealth of evidence from previous studies demonstrated that romantic rejection is related to subsequent development of depression (Ayduk, Downey, & Kim, 2001; Field, Diego, Pelaez, Deeds & Delgado, 2009; Monroe, Rohde, Seeley, & Lewinsohn, 1999; Raes, 2011; Slavich, Thornton, Torres, Monroe, & Gotlib, 2009). However, the current study extends the existing literature by suggesting that individual variations in self-compassion appear to be a stronger conditional predictor of depression than breakup distress. Therefore, future research has to be cautious in analyzing and interpreting studies in which investigating a single dimensional effect or a factor influences the outcome of clinical disorders (i.e., depression; Brown, & Barlow, 2009).

Limitations

There are several limitations that have to be considered in interpreting and generalizing the results of this study. The sample was mainly young college students who appeared to be experiencing a high level of depressed mood. Therefore, current results may not generalize to other populations (adults or elder adults). A study demonstrated that young adulthood and elder adulthood went through different romantic stage development according to theories of romantic stage development (Shulman & Connolly, 2013). Specifically, elder adults are included in a stage of engaging in long-term and involving in deeper commitment. On the other hand, young adults are in a transitional stage which involves coordinating life plans and romance, and tend to engage in short-term or non-committed relationships (Shulman & Connolly, 2013). Future research may consider conducting studies in adult populations to further assess the working mechanism

of depression and self-compassion in this population due to the developmental stage difference in romantic relationships. Also, the current sample was disproportionately female (70%). Thus, the current results may underrepresent male experience in romantic rejection and its relationship to depression and self-compassion (Field, Diego, Pelaez, Deeds, & Delgado, 2009). The present results indicated that the male participants had significantly lower levels of self-compassion than the female participants. Given that self-compassion plays a crucial role in the development of depression, the observed tendency of having lower self-compassion in males may lead to different experiences of both depression and romantic rejection as compared to females. Therefore, future research should collect more male participants for study.

Most of the participants in the current sample were Caucasian. Races and its underpinning cultural differences may affect the experience of romantic rejection, individual variance in self-compassion and presentation of depression (Gould, Denton, & Mendes, 2014). A study conducted by Sprecher and Toro-Morn showed that Chinese and American had different attitude and behavioral approaches to romantic rejection (2002). Embracing different attitudes and adopting different behavioral approaches may lead to differences in emotional distress towards romantic rejection. As such, future studies should conduct cross-cultural studies or collect a sample of participants with a variety of racial and ethnic backgrounds. Moreover, lesbians, gays, bisexual, and transgender populations have been under-represented in the studies of romantic rejection and clinical disorders. Our results suggested that the non-heterosexual population (including gays, lesbians, bisexual, or transgender) experienced more severe depressive symptoms than the heterosexual population (See Table 1). Additionally, studies have shown that the

perceived discrimination and the lack of social supports increased depressive symptoms, suicidal ideation, and non-suicidal self-injuries (NSSI) in the LGBT population (Almeida, Johnson, Corliss, Molnar, & Azrael, 2009; Budge, Adelson, & Howard, 2013; Claes, Bouman, Witcomb, Thurston, Fernandez-Aranda, & Arcelus, 2015; McConnell, Birkett, & Mustanski, 2015) and had a negative impact on mental health. Hence, future studies should further investigate the distress of romantic rejection in the LGBT populations and compare the results to the heterosexual populations.

The present study revealed a distinct result from other findings, that is, the months passed since breakup and lengths of the relationship were not significantly associated with depression severity or breakup distress as has been previously demonstrated in studies (Field, Diego, Pelaez, & Delgado, 2009). According to the present results, the months since breakup and lengths of the relationship did not appear to be related to depression and breakup distress. It is important to note that the large standard deviation in these two variables indicated that the scores are spread out widely from the centered mean and not normally distributed. Thus, this result may be an anomaly. Future studies should examine the influences of these variables with adequate power and sampling to reduce the large variances observed in this sample.

Other limitations are related to the measures used. Although the Breakup Distress Scale has been shown to have a high reliability, more research is needed to further assess its validity and psychometric properties. Moreover, the scale instructions are unclear and the options on the scale ratings vary from scale to scale in the existing literature. That is, while the current study adopted the rating scale from the original Inventory of Complicated Grief (ICC; Prigerson, Maciejewski, Reynolds, Bierhals, Newsom,

Fasiczka, & Miller, 1995), it is unclear what Likert anchors and instructions were used in the validation of the BDS as they were not included in the publication (Field, Diego, Pelaez, Deeds, & Delgado, 2009). This ambiguity could have had led to unknown effects on the results of the study, and future research should seek to validate and disseminate a more psychometrically sound version of the measure.

The present study invited the participants to reflect back on how they felt about a previous romantic breakup. The way of measuring past breakup distress may lead to retrospective bias (Eastwick, Finkel, Krishnamurti, & Loewenstein, 2008). Thus, future research should utilize longitudinal studies to better capture individual breakup distress, from right after the occurrence of breakup through a follow-up period of several years. The present study utilized self-report inventories in measuring breakup distress, self-compassion, and depression. However, self-report measures may not always be reliable and valid due to the variations of personal biases, social preferences or other individual variances (Furnham & Henderson, 1982; Mortel, 2008). Also, studies have shown that self-report assessments are often less capable than clinical interviewing of capturing the severity, duration, and functional relationships of symptoms in clinical disorders (Brown, & Barlow, 2009). Therefore, future research may consider using clinical assessment which is conducted by professional clinicians using Hamiltion Depression Rating Scale (Hamiltion, 1960) to measure depressive symptoms. Results from clinical interview may yield more valid and reliable results. Additionally, romantic rejection and depression are likely to influence other aspects of psychological well-being. Thus, future studies may adopt inventories that are designed to measure broader psychological symptoms, such as Personality Assessment Inventory (Morey, 1991).

Conclusions

The present study replicated a large body of previous studies and demonstrated that romantic rejection was significantly correlated with depression, such that individuals who experience romantic rejection are more likely to become depressed after rejection. The present study also revealed the important role that self-compassion plays in this relationship. While self-compassion did not moderate the relationship between romantic rejection and clinical depression as hypothesized, it was the only significant predictor of depressive symptoms in the model, suggesting that the conditional effect of self-compassion was more substantial than the conditional effect of break-up distress.

The current results provide a novel insight to the treatment of depression in clinical practice. In addition to the therapeutic interventions such as Cognitive Behavioral Therapy, Interpersonal Psychotherapy, or Behavioral Activation, the present study suggests that building up self-compassion as a protective factor may be an effective and plausible therapeutic intervention to reduce the acute distress of romantic rejection. Preliminary evidence suggests that Compassion focused therapy not only improves the negative affect of psychopathology but also enhances the emotional resilience and develops positive mental health (Raes, 2011; Trompetter, Kleine, & Bohlmeijer, 2017)

The present study also offers evidence supportive of the multidimensional etiology of depression. More specifically, the present study demonstrated the conditional effects of individual differences (i.e., self-compassion) and exposure to psychological stressor (i.e., romantic rejection) may further mitigate or exacerbate the underpinning psychopathological mechanisms of major depressive disorder. Therefore, future studies should consider the interactional effects of multidimensional factors and cautiously

interpret and analyze studies which investigate psychopathology with a single etiological dimension or factor.

Despite limitations, this study highlights the critical role of self-compassion in the relationship between romantic rejection and depression. The current findings also suggest that distress at the time of the breakup is not the best predictor of depression. Rather, self-compassion functions as an imperative protective factor which appears to mitigate the development of depression in the long term after the occurrence of romantic rejection.

Appendix I: Romantic Relationship History

1.) Have you experienced a romantic breakup (i.e., somebody breaking up with you)?

___ Yes   ___ No

2.) What are the initials of the person who initiated a breakup with you most recently?

3.) How long ago was your breakup with INTIALS (in months)?

4.) How long was the relationship with INTIALS (in months)?

5.) How invested were you in the romantic relationship with INTIALS?

   Not invested at all   Very invested

      0   1   2   3   4   5   6   7

6.) Have you been in a romantic relationship with INTIALS before your most recent

breakup?

___ Yes   ___ No

7.) If yes, how many times have you been in a relationship with INITIALS?

Appendix II: Breakup Distress Scale

For this next set of questions think about your breakup with INTIALS. Please fill in the circle next to the answer which best describes how you felt RIGHT AFTER THE BREAKUP HAPPENED:

For the next set of questions, I should answer from the perspective of

A.) The present (i.e., right now).

B.) The past (i.e., how I felt when the breakup happened).

1) I thought about this person so much that it was hard for me to do things I normally did

     Never   Rarely   Sometimes   Often   Always

2) Memories of the person upset me

     Never   Rarely   Sometimes   Often   Always

3) I felt I could not accept the breakup I had experienced

     Never   Rarely   Sometimes   Often   Always

4) I felt drawn to places and things associated with the person

     Never   Rarely   Sometimes   Often   Always

5) I could not help feeling angry about the breakup

     Never   Rarely   Sometimes   Often   Always

6) I felt disbelief over what happened

     Never   Rarely   Sometimes   Often   Always

7) I felt stunned or dazed over what happened

       Never   Rarely   Sometimes   Often   Always

8) It was hard for me to trust people

       Never   Rarely   Sometimes   Often   Always

9) I felt like I had lost the ability to care about other people or I felt distant from people I cared about

       Never   Rarely   Sometimes   Often   Always

10) I experienced pain

       Never   Rarely   Sometimes   Often   Always

11) I went out of my way to avoid reminders of the person

       Never   Rarely   Sometimes   Often   Always

12) I felt that life was empty without the person

       Never   Rarely   Sometimes   Often   Always

12) Please select rarely as your response to this item

       Never   Rarely   Sometimes   Often   Always

13) I felt bitter over this breakup

       Never   Rarely   Sometimes   Often   Always

14) I felt envious of others who had not experienced a breakup like this

       Never   Rarely   Sometimes   Often   Always

15) I felt lonely a great deal of the time

       Never   Rarely   Sometimes   Often   Always

16) I felt like crying when I thought about the person.

Never   Rarely   Sometimes   Often   Always

Appendix III: Demographic Questionnaire

1. What is your age? _____

2. What academic year are you currently in?

___Freshman

___Sophomore

___Junior

___Senior

3. What is your biological sex? ___ Male   ___ Female

4. What is your gender?

___ Male

___Female

___Non-binary/third gender

___Prefer not to say

5. What is your race?

___Caucasian

___Black

___Hispanic or Latino

___Native American or American Indian

___Asian or Pacific Islander

___Other

6. What is your religious affiliation?

___Christian

___Catholic

___Jewish

___Muslim

___Atheist

___Agnostic

___No affiliation

7. What is your Sexual Orientation?

___Straight/Heterosexual

___Gay

___Lesbian

___Bisexual

___Prefer not to say

8. Have you experienced a breakup worse than your breakup with INITIALS?

_____Yes   _____No

9. If yes, how long ago (in months) was the worst breakup you have experienced

10.   If yes, how long was that romantic relationship?   _____

11. If yes, how invested were you in that romantic relationship?

   Not invested at all   Very invested

   0   1   2   3   4   5   6   7

12. Are you currently engaged in romantic relationship?

   _____Yes   _____No

13. If yes, how long is you current romantic relationship (in months)?   _____

14. If yes, How invested are you in your current relationship?

   Not invested at all   Very invested

   0   1   2   3   4   5   6   7

15. Which of the following best describes your current relationship status?

   1. Single

   2. Dating Casually

   3. Dating Exclusively

   4. Engaged

   5. Married

16. How many romantic relationships have you had in your life?   _____

Appendix IV: IRB Approval Letter

MURRAY STATE
U N I V E R S I T Y

Institutional Review Board

328 Wells Hall
Murray, KY 42071-3318
270-809-2916● msu.irb@murraystate.edu

TO: Michael Bordieri
Psychology

FROM: Institutional Review Board
Jonathan Baskin, IRB Coordinator

DATE: 3/27/2017

RE: Human Subjects Protocol I.D. – IRB #17-128

The IRB has completed its review of your student's Level 1 protocol entitled *Romantic Rejection and Self-Compassion*. After review and consideration, the IRB has determined that the research, as described in the protocol form, will be conducted in compliance with Murray State University guidelines for the protection of human participants.

The forms and materials that have been approved for use in this research study are attached to the email containing this letter. These are the forms and materials that must be presented to the subjects. Use of any process or forms other than those approved by the IRB will be considered misconduct in research as stated in the MSU IRB Procedures and Guidelines section 20.3.

Your stated data collection period is from 3/27/2017 to 3/26/2018.

If data collection extends beyond this period, please submit an Amendment to an Approved Protocol form detailing the new data collection period and the reason for the change.

This Level 1 approval is valid until 3/26/2018.

If data collection and analysis extends beyond this date, the research project must be reviewed as a continuation project by the IRB prior to the end of the approval period, 3/26/2018. You must reapply for IRB approval by submitting a Project Update and Closure form (available at murraystate.edu/irb). You must allow ample time for IRB processing and decision prior to your expiration date, or your research must stop until such time that IRB approval is received. If the research project is completed by the end of the approval period, then a Project Update and Closure form must be submitted for IRB review so that your protocol may be closed. It is your responsibility to submit the appropriate paperwork in a timely manner.

The protocol is approved. You may begin data collection now.
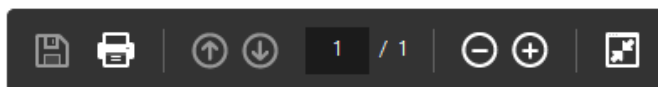
portunity
afforded

Bibliography

Akse, J., Hale, W. W., Engels, R. C., Raaijmakers, Q. A., & Meeus, W. H. (2004).
Personality, perceived parental rejection and problem behavior in
adolescence. *Social Psychiatry and Psychiatric Epidemiology*, *39*(12), 980-988.
doi:10.1007/s00127-004-0834-5

Allen, A. B., & Leary, M. R. (2010). Self-compassion, stress, and coping. *Social and
Personality Psychology Compass, 4*(2), 107-118. doi.org/10.1111/j.1751-
9004.2009.00246.x

Almeida, J., Johnson, R. M., Corliss, H. L., Molnar, B. E., & Azrael, D. (2009). Emotional
distress among LGBT youth: The influence of perceived discrimination based on
sexual orientation. *Journal of Youth and Adolescence*, *38*(7), 1001-1014.
doi:10.1007/s10964-009-9397-9

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental
disorder (DSM-IV).* Washington D.C.: American Psychiatric Association.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental
disorders* (*DSM-V*). Washington, D.C.: American Psychiatric Association.

Ayduk, O., Downey, G., & Kim, M. (2001). Rejection sensitivity and depressive
symptoms in women. *Personality and Social Psychology Bulletin, 27,* 868-877.
doi.10.1177/0146167201277009

Barnard, L. K., & Curry, J. F. (2011). Self-compassion: Conceptualizations, correlates, & interventions. *Review of General Psychology*, *15*(4), 289-303. doi.org/10.1037/a0025754

Barnett, P. A., & Gotlib, I. H. (1988). Psychosocial functioning and depression: distinguishing among antecedents, concomitants, and consequences. *Psychological Bulletin*, *104*, 97.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497-529. doi.org/10.1037/0033-2909.117.3.497

Beck, A. T. (1979). *Cognitive therapy of depression*. New York: Guilford Press.

Billings, A. G., & Moos, R. H. (1985). Psychosocial processes of remission in unipolar depression: Comparing depressed patients with matched community controls. *Journal of Consulting and Clinical Psychology*, *53*(3), 314. doi.org/10.1037/0022-006X.53.3.314

Braehler, C., Gumley, A., Harper, J., Wallace, S., Norrie, J., & Gilbert, P. (2013). Exploring change processes in compassion focused therapy in psychosis: Results of a feasibility randomized controlled trial. *British Journal of Clinical Psychology*, *52*(2), 199-214. doi: 10.1111/bjc.12009

Brown, G. W., Andrews, B., Harris, T., Adler, Z., & Bridge, L. (1986). Social support, self-esteem and depression. *Psychological Medicine*, *16*(4), 813-831. doi: 10.1017/S0033291700011831

Brown, T. A., & Barlow, D. H. (2009). A proposal for a dimensional classification system based on the shared features of the DSM-IV anxiety and mood disorders:

Implications for assessment and treatment. *Psychological Assessment*, *21*(3), 256-271. doi:10.1037/a0016608.

Budge, S. L., Adelson, J. L., & Howard, K. A. (2013). Anxiety and depression in transgender individuals: The roles of transition status, loss, social support, and coping. *Journal of Consulting and Clinical Psychology*, *81*(3), 545-557. doi: 10.1037/a0031774

Campos, R. C., & Holden, R. R. (2015). Testing models relating rejection, depression, interpersonal needs, and psychache to suicide risk in nonclinical individuals. *Journal of Clinical Psychology*, *71*(10), 994-1003. doi: 10.1002/jclp.22196

Claes, L., Bouman, W. P., Witcomb, G., Thurston, M., Fernandez-Aranda, F., & Arcelus, J. (2015). Non-suicidal self-injury in trans people: Associations with psychological symptoms, victimization, interpersonal functioning, and perceived social support. *The Journal of Sexual Medicine*, *12*(1), 168-179. doi: 10.1111/jsm.12711

Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine*, *38*(5), 300-314. doi:10.1097/00006842-197609000-00003

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, *98*(2), 310-357.

Craighead, W. E., Miklovitz, D. J., Vajk, F. C., & Frank, E. (1998). Psychological treatments for bipolar disorder. In P.E. Nathan & J. M. Gorman (Eds.), *A guide to treatments that work (pp*. 240-248). New York: Oxford University Press.

Cuijpers, P., Van Straten, A., & Warmerdam, L. (2007). Behavioral activation treatments of depression: A meta-analysis. *Clinical Psychology Review*, *27*(3), 318-326. doi: 10.1016/j.cpr.2006.11.001

Donohue, J. M., & Pincus, H. A. (2007). Reducing the societal burden of depression: A review of economic costs, quality of care and effects of treatment. *Pharmacoeconomics*, *25*, 7–24. doi:10.2165/00019053-200725010-00003.

Diamond, L. M., Savin-Williams, R. C., & Dubeʹ, E. M. (1999). Sex, dating, passionate friendships, and romance: Intimate peer relations among lesbian, gay, and bisexual adolescents. In W. Furman, B. B. Brown, & C. Feiring (Eds.), *The development of romantic relationships in adolescence* (pp. 175–210). New York: Cambridge University Press.

Eastwick, P. W., Finkel, E. J., Krishnamurti, T., & Loewenstein, G. (2008). Mispredicting distress following romantic breakup: Revealing the time course of the affective forecasting error. *Journal of Experimental Social Psychology*, *44*(3), 800-807.

Field, T., Diego, M., Pelaez, M., Deeds, O., & Delgado, J. (2009). Breakup distress in university students. *Adolescence, 44* (176), 461-480.

Finlay-Jones, R., & Brown, G. W. (1981). Types of stressful life event and the onset of anxiety and depressive disorders. *Psychological Medicine, 11*(4), 803-815. doi.org/10.1017/S0033291700041301

Furnham, A., & Henderson, M. (1982). The good, the bad and the mad: Response bias in self-report measures. *Personality and Individual Differences*, *3*(3), 311-320. doi.org/10.1016/0191-8869(82)90051-4

Germer, C. K., & Neff, K. D. (2013). Self-compassion in clinical practice. *Journal of Clinical Psychology*, *69*(8), 856-867. doi:10.1002/jclp.22021.

George, L. K., Blazer, D. G., Hughes, D. C., & Fowler, N. (1989). Social support and the outcome of major depression. *The British Journal of Psychiatry*, *154*(4), 478-485.

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. (2009). Introducing compassion-focused therapy. *Advances in Psychiatric Treatment*, *15*(3), 199-208. doi:10.1192/apt.bp.107.005264

Hamilton, M. (1960). A rating scale for depression. *Journal of Neurology, Neurosurgery, and Psychiatry*, *23*, 56-62.

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: Guilford Press.

Henderson, A. S. (1992). Social support and depression. In H. O. F. Veiel & U. Baumann (Eds.), *The meaning and measurement of social support* (pp. 85-92). New York: Hemisphere.

Holma, K. M., Melartin, T. K., Haukka, J., Holma, I. A., Sokero, T. P., & Isometsä, E. T. (2010). Incidence and predictors of suicide attempts in DSM–IV major depressive disorder: A five-year prospective study. *American Journal of Psychiatry*, *167*(7), 801-808. doi: 10.1176/appi.ajp.2010.09050627

Hopko, D. R., Lejuez, C. W., Ruggiero, K. J., & Eifert, G. H. (2003). Contemporary behavioral activation treatments for depression: Procedures, principles, and

progress. *Clinical Psychology Review*, *23*(5), 699-717. doi:10.1016/S0272-7358(03)00070-9

Howe, L. C., & Dweck, C. S. (2016). Changes in self-definition impede recovery from rejection. *Personality and Social Psychology Bulletin*, *42*, 54-71. doi: 10.1177/0146167215612743

Ibarra-Rovillard, M. S., & Kuiper, N. A. (2011). Social support and social negativity findings in depression: Perceived responsiveness to basic psychological needs. *Clinical Psychology Review*, *31*(3), 342-352. doi:10.1016/j.cpr.2011.01.005

Johnson, P., & Neyman, J. (1936). Tests of certain linear hypotheses and their application to some educational problems. *Statistical Research Memoirs*, *1*, 57–93. doi: 10.2307/2278685

Kelly, A. C., Zuroff, D. C., & Shapira, L. B. (2009). Soothing oneself and resisting self-attacks: The treatment of two intrapersonal deficits in depression vulnerability. *Cognitive Therapy and Research*, *33*(3), 301-313. doi: 10.1007/s10608-008-9202-1

Kendler, K. S., Hettema, J. M., Butera, F., Gardner, C. O., & Prescott, C. A. (2003). Life event dimensions of loss, humiliation, entrapment, and danger in the prediction of onsets of major depression and generalized anxiety. *Archives of General Psychiatry, 60*, 789-796. doi:10.1001/archpsyc.60.8.789

Kessler, R. C., McGonagle, K. A., Zhao, S., Nelson, C. B., Hughes, M., Eshleman, S., & Kendler, K. S. (1994). Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States: Results from the national comorbidity survey. *Archives of General Psychiatry*, *51*, 8-19. doi:10.1001/archpsyc.1994.03950010008002

Kessler, R. C., Petukhova, M., Sampson, N. A., Zaslavsky, A. M., & Wittchen, H. U. (2012). Twelve-month and lifetime prevalence and lifetime morbid risk of anxiety and mood disorders in the United States. *International Journal of Methods in Psychiatric Research*, *21*(3), 169-184. doi:10.1002/mpr.1359.

Klerman, G. L., Dimascio, A., Weissman, M., Prusoff, B., & Paykel, E. S. (1974). Treatment of depression by drugs and psychotherapy. *American Journal of Psychiatry*, *131*(2), 186-191. doi:10.1176/ajp.131.2.186

Klerman, G. L., Weissman, M. M., Rounsaville, B. J., & Chevron, E. S. (1984). *Interpersonal psychotherapy of depression*. New York: Basic Books.

Krieger, T., Altenstein, D., Baettig, I., Doerig, N., & Holtforth, M. G. (2013). Self-compassion in depression: Associations with depressive symptoms, rumination, and avoidance in depressed outpatients. *Behavior Therapy*, *44*(3), 501-513. doi:10.1016/j.beth.2013.04.004.

La Greca, A. M., & Harrison, H. M. (2005). Adolescent peer relations, friendships, and romantic relationships: Do they predict social anxiety and depression? *Journal of Clinical Child and Adolescent Psychology*, *34*, 49-61. doi:10.1207/s15374424jccp3401_5

Leary, M. R. (2001). Towards a conceptualization of interpersonal rejection. In M. R. Leary (Ed.), *Interpersonal rejection* (pp. 4 –20). Oxford, England: Oxford University Press.

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), 887-904. doi:10.1037/0022-3514.92.5.887

Leaviss, J., & Uttley, L. (2015). Psychotherapeutic benefits of compassion-focused therapy: An early systematic review. *Psychological Medicine*, *45*(5), 927-945. doi: 10.1017/S0033291714002141

Lewinsohn, P. M., Roberts, R. E., Seeley, J. R., Rohde, P., Gotlib, I. H., & Hops, H. (1994). Adolescent psychopathology: II. Psychosocial risk factors for depression. *Journal of Abnormal Psychology*, *103*, 302-315. doi.org/10.1016/S0006-3223(02)01410-5

MacBeth, A., & Gumley, A. (2012). Exploring compassion: a meta-analysis of the association between self-compassion and psychopathology. *Clinical Psychology Review*, *32*, 545-552. doi:10.1016/j.cpr.2012.06.003.

Maertz, K. (n.d.). *Surviving a Relationship Break-up-Top 20 Strategies.* Retrieved from https://www.mcgill.ca/counselling/files/counselling/surviving_a_break-up_-_20_strategies_0.pdf

Magaro, M. M., & Weisz, J. R. (2006). Perceived control mediates the relation between parental rejection and youth depression. *Journal of Abnormal Child Psychology*, *34*(6), 863-872. doi: 10.1007/s10802-006-9072-5

Marshall, M. B., Zuroff, D., McBride, C., & Bagby, R. M. (2008). Self-criticism predicts differential response to treatment for major depression. *Journal of Clinical Psychology*, *64*, 231-244. doi:10.1002/jclp.20438.

Mcconnell, E. A., Birkett, M. A., & Mustanski, B. (2015). Typologies of social support and associations with mental health outcomes among LGBT youth. *LGBT Health*, *2*(1), 55-61. doi: 10.1089/lgbt.2014.0051

Mearns, J. (1991). Coping with a breakup: Negative mood regulation expectancies and depression following the end of a romantic relationship. *Journal of Personality and Social Psychology*, *60*(2), 327-334. doi:10.1037/0022-3514.60.2.327.

Monroe, S. M., Bromet, E. J., Connell, M. M., & Steiner, S. C. (1986). Social support, life events, and depressive symptoms: A 1-year prospective study. *Journal of Consulting and Clinical Psychology*, *54*(4), 424-431. doi:10.1037/0022-006X.54.4.424

Monroe, S. M., Imhoff, D. F., Wise, B. D., & Harris, J. E. (1983). Prediction of psychological symptoms under high-risk psychosocial circumstances: Life events, social support, and symptom specificity. *Journal of Abnormal Psychology*, *92*(3), 338-350.

Monroe, S. M., Rohde, P., Seeley, J. R., & Lewinsohn, P. M. (1999). Life events and depression in adolescence: Relationship loss as a prospective risk factor for first onset of major depressive disorder. *Journal of Abnormal Psychology, 108*(4), 606-614. doi.org/10.1037/0021-843X.108.4.606

Morey, L. C. (1991). *Personality Assessment Inventory*: *Professional manual*. Odessa, FL: Psychological Assessment Resources.

Mortel, T. F. (2008). Faking it: Social desirability response bias in self-report research. *Australian Journal of Advanced Nursing, 25*(4), 40-48.

Nasser, E. H., & Overholser, J. C. (2005). Recovery from major depression: The role of
support from family, friends, and spiritual beliefs. *Acta Psychiatrica
Scandinavica*, *111*(2), 125-132. doi:10.1111/j.1600-0447.2004.00423.x

Neff, K. D. (2003). The development and validation of a scale to measure self-
compassion. *Self and Identity*, *2*(3), 223-250. doi:10.1080/15298860309027

Neff, K. D., & Germer, C. K. (2013). Self-compassion in clinical practice. *Journal of
Clinical Psychology*, *69*(8), 856-867. doi: 10.1002/jclp.22021.

Neff, K. D., Kirkpatrick, K. L., & Rude, S. S. (2007). Self-compassion and adaptive
psychological functioning. *Journal of Research in Personality*, *41*, 139-154.
doi.org/10.1016/j.jrp.2006.03.004

O'Donnell, E. H., Moreau, M., Cardemil, E. V., & Pollastri, A. (2010). Interparental
conflict, parenting, and childhood depression in a diverse urban population: The
role of general cognitive style. *Journal of Youth and Adolescence*, *39*(1), 12-22.
doi:10.1007/s10964-008-9357-9

Page, Gould, E., Mendoza, Denton, R., & Meddes, W. B. (2014). Stress and coping in
interracial contexts: The influence of race-based rejection sensitivity and cross-group
friendship in daily experiences of health. *Journal of Social Issues*, *70*(2), 256-278.
doi: 10.1111/josi.12059

Pagura, J., Fotti, S., Katz, L. Y., & Sareen, J. (2009). Help seeking and perceived need for
mental health care among individuals in Canada with suicidal behaviors. *Psychiatric
Services, 60*(7), 943–949. doi:10.1176/appi.ps.60.7.943.

Pepping, C. A., Davis, P. J., O'Donovan, A., & Pal, J. (2015). Individual differences in self-compassion: The role of attachment and experiences of parenting in childhood. *Self and Identity*, *14*(1), 104-117. doi.org/10.1080/15298868.2014.955050

Platt, B., Kadosh, K. C., & Lau, J. Y. (2013). The role of peer rejection in adolescent depression. *Depression and Anxiety*, *30*(9), 809-821. doi:10.1002/da.22120

Prigerson, H. G., Maciejewski, P. K., Reynolds, C. F., Bierhals, A. J., Newsom, J. T., Fasiczka, A., & Miller, M. (1995). Inventory of complicated grief: A scale to measure maladaptive symptoms of loss. *Psychiatry Research*, *59*(1), 65-79. doi:10.1016/0165-1781(95)02757-2

Prinstein, M. J., & Aikins, J. (2004). Cognitive moderators of the longitudinal association between peer rejection and adolescent depressive symptoms. *Journal of Abnormal Child Psychology*, *32*(2), 147-158. doi:10.1023/B:JACP.0000019767.55592.63

Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurements, 1*, 385-401. doi:10.1177/014662167700100306

Raes, F. (2011). The effect of self-compassion on the development of depression symptoms in a non-clinical sample. *Mindfulness*, *2*, 33-36. doi:10.1007/s12671-011-0040-y

Robins, L. N., & Regier, D. A. (1991). *Psychiatric disorders in America: The epidemiologic catchment area study*. *Journal of Psychiatry and Neuroscience*, *17*, 34–36. doi.org/10.1176/ps.43.3.289

Rogosa, D. (1980). Comparing nonparallel regression lines. *Psychological Bulletin*, *88*, 307–321.doi:10.1037/0033-2909.88.2.307

Shulman, S., & Connolly, J. (2013). The challenge of romantic relationships in emerging adulthood: Reconceptualization of the field. *Emerging Adulthood*, *1*(1), 27-39. doi: 10.1177/2167696812467330

Slavich, G. M., Thornton, T., Torres, L. D., Monroe, S. M., & Gotlib, I. H. (2009). Targeted rejection predicts hastened onset of major depression. *Journal of Social and Clinical Psychology*, *28*(2), 223-243. doi:10.1521/jscp.2009.28.2.223

Sprecher, S., & Toro-Morn, M. (2002). A study of men and women from different sides of earth to determine if men are from Mars and women are from Venus in their beliefs about love and romantic relationships. *Sex Roles*, *46*(5), 131-147. doi: 10.1023/A:1019780801500

Trompetter, H. R., de Kleine, E., & Bohlmeijer, E. T. (2016). Why does positive mental health buffer against psychopathology? An exploratory study on self-compassion as a resilience mechanism and adaptive emotion regulation strategy. *Cognitive Therapy and Research*, *41*(3), 459-468. doi:10.1007/s10608-016-9774-0

Substance Abuse and Mental Health Services Administration (SAMHSA). (2008). Results from 2007 *National Survey on Drug Use and Health*: National Findings (Office of Applied Studies, NSDUH Series H-34, DHHS Publication No. SMA 08-4343). Rockville, MD: U.S. Department of Health and Human Services.

Van Dam, N. T., Sheppard, S. C., Forsyth, J. P., & Earleywine, M. (2011). Self-compassion is a better predictor than mindfulness of symptom severity and quality

of life in mixed anxiety and depression. *Journal of Anxiety Disorders*, *25*(1), 123-130. doi: 10.1016/j.janxdis.2010.08.011.

Wade, T. D., & Kendler, K. S. (2000). The relationship between social support and major depression: cross-sectional, longitudinal, and genetic perspectives. *The Journal of Nervous and Mental Disease*, *188*(5), 251-258.

Weissman, M. M., & Paykel, E. S. (1974). *The depressed woman: A study of social relationships*. Oxford, England: University Chicago Press.

Welsh, D. P., Grello, C., & Harper, M. S. (2003). When love hurts: Depression and adolescent romantic relationships. In P. Florsheim (Ed.), *Adolescent romantic relations and sexual behavior: Theory, research, and practical implications* (pp. 185-211). Mahwah, NJ: Erlbaum.

World Health Organization (WHO). (2004). The Global Burden on Disease 2004 Update. Retrieved from *www.who.int/healthinfo/global_burden_disease/GBD_report2004update_full.pdf.*

Young, J. F., Mufson, L., & Davies, M. (2006). Impact of comorbid anxiety in an effectiveness study of interpersonal psychotherapy for depressed adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry*, *45*(8), 904-912. doi:10.1097/01.chi.0000222791.23927.5f.

Zimmer-Gembeck, M. J., & Vickers, C. (2007). Romantic experiences and depressive symptoms: testing the intensifying roles of rejection sensitivity and relationship commitment. *Conference Proceedings of the Combined 7th Annual APS PORIG Conference*, 112-118.

Zisook, S., Lesser, I., Stewart, J. W., Wisniewski, S. R., Balasubramani, G. K., Fava, M., & Trivedi, M. H. (2007). Effect of age at onset on the course of major depressive disorder. *American Journal of Psychiatry*, *164*(10), 1539-1546. doi:10.1176/appi.ajp.2007.06101757.

Zuroff, D. C., Igreja, I., & Mongrain, M. (1990). Dysfunctional attitudes, dependency, and self-criticism as predictors of depressive mood states: A 12-month longitudinal study. *Cognitive Therapy and Research*, *14*, 315-326. doi: 10.1007/BF01183999