Self-Distancing and Cognitive-Behavioral Therapy Homework Exercises:

A Longitudinal Study Examining the Completion of Daily Worry Logs in the Third Person

by

Mara T. Minasian

A Thesis Submitted in Partial Fulfillment of the

Requirements for the Degree of Bachelor of Arts

With Honors in Psychology from the

University of Michigan

2012

Advisors:

Dr. Ethan Kross

Dr. Ryan Bremner

Abstract

This study examined the effects of self-distancing in the domain of stress and well-being through the use of daily worry logs adapted from cognitive-behavioral therapy homework exercises. Participants completed daily worry logs for six days in either a first person writing condition (self-immersed) or a third person writing condition (self-distanced). Results showed that relative to participants writing in the first person, writing in the third person led people to report higher life satisfaction at the end of the study. Moreover, individual differences in worry, depression, and rumination did not moderate the effect of condition on life satisfaction. However, third person writing did not enhance homework compliance; nearly equal numbers of worry logs were completed in each condition. Findings and implications are discussed in the context of self-administered treatments and cognitive-behavioral therapy.

Keywords: self-distancing, homework, cognitive-behavioral therapy, self-help, stress, worry, life satisfaction

Self-Distancing and Cognitive-Behavioral Therapy Homework Exercises: A Longitudinal Study Examining the Completion of Daily Worry Logs in the Third Person

Cognitive-behavioral therapy (CBT) is well established as an empirically supported treatment for a variety of stress- and anxiety-related disorders in adults, including generalized anxiety disorder (GAD), social anxiety disorder, and panic disorder (Chambless & Ollendick, 2001; Deacon & Abramowitz, 2004; Stewart & Chambless, 2009). A meta-analysis by Norton and Price (2007) has shown treatments that utilize CBT techniques to have significantly larger treatment effect sizes than no treatment or a placebo across all anxiety disorders. Moreover, Stewart and Chambless' (2009) recent meta-analysis provides evidence to support the efficacy of CBT as a treatment for anxiety disorders not only under well-controlled conditions but also under clinically representative conditions.

Homework exercises form an integral component of CBT and have been incorporated into the treatment of several anxiety disorders, including GAD, obsessive-compulsive disorder, panic disorder, posttraumatic stress disorder, and social phobia (Dozois, 2010; Kazantzis, Deane, & Ronan, 2000). In a therapeutic setting, homework exercises serve several important purposes. They afford clients the opportunity to practice and apply the skills learned during therapy in their daily lives, helping clients gain confidence in their ability to solve problems and enhancing their self-awareness (Beck & Tompkins, 2007; Freeman, 2007). With regard to anxiety disorders, observing and recording one's own thoughts and behaviors through daily homework exercises better enables people to gain a more accurate and comprehensive understanding of the factors or situations that cause them to feel stress or anxiety (Craske & Barlow, 2006). Additionally, not only do homework exercises facilitate progress in therapy but they also help clients remain well longer, demonstrating the importance of homework exercises in maintaining gains from therapy

even after therapy ends (Beck & Tompkins, 2007; Edelman & Chambless, 1995; Kazantzis et al., 2000).

Homework Compliance

Homework compliance is a significant predictor of therapy outcome, yet problems with homework compliance are pervasive, occurring in more than 50% of cases (Helbig & Fehm, 2004; Kazantzis et al. 2000). A primary reason GAD patients do not comply with homework assignments is because they believe their worry serves a protective function and prevents negative outcomes (Leahy, 2002). Leahy and Holland have also identified several other factors that contribute to homework noncompliance, including beliefs that one's worries are realistic, an exaggerated focus on negative feelings, and difficulty identifying automatic thoughts (as cited in Leahy, 2002). Given the repetitive and ruminative nature of worry, individuals with GAD often focus excessively on negative thoughts and feelings, which, in turn, makes those thoughts and feelings more accessible (Leahy, 2002). Furthermore, many patients experience automatic anxious thoughts rapidly, and this makes it difficult for them to identify these thoughts, let alone reflect on and challenge them (Leahy, 2002). In light of the importance of homework compliance in therapy, identifying methods of enhancing homework compliance is an important goal for researchers and clinicians. One of the goals of the present research was to examine whether self-distancing provides a means of addressing some of these problems with homework compliance.

Self-Distancing

Self-distancing refers to the process of taking a third person perspective on oneself and thereby becoming a distanced observer of the self (Kross & Ayduk, 2008). By providing a more objective perspective on oneself and stress-inducing events or situations, self-distancing should

enable individuals to recognize that their worries are not realistic and should thereby facilitate an understanding of the maladaptive, rather than protective, qualities of their worry. Completing CBT homework exercises from a self-distanced, or third person, perspective should therefore help individuals identify and reflect on their automatic anxious thoughts in order to facilitate stress reduction and enhance well-being. Furthermore, by targeting some of the processes that inhibit homework compliance, self-distancing should improve homework compliance.

The theoretical basis for the proposed benefits of self-distancing in the domain of CBT homework exercises stems from previous research demonstrating that self-distancing yields favorable outcomes in clinical and non-clinical domains. Adopting a self-distanced perspective rather than a self-immersed (i.e., first person) perspective facilitates adaptive self-reflection and reflective processing of negative emotions (Ayduk and Kross, 2010b; Kross, Ayduk, & Mischel, 2005). Self-distancing also leads individuals to engage in less recounting and more reconstruing of a prior negative event in ways that foster insight and closure (Kross & Ayduk, 2008, 2009). In turn, engaging in less recounting and more reconstruing has been shown to yield lower levels of depressed affect (Kross & Ayduk, 2008).

Self-distancing has also been shown to reduce emotional reactivity, with the effectiveness of self-distancing on the reduction of emotional reactivity increasing linearly with depression symptoms (Ayduk & Kross, 2010a; Kross & Ayduk, 2009). Moreover, Kross and Ayduk (2008) found that both one and seven days after recalling a depression experience and being instructed to analyze their feelings from either a self-distanced or self-immersed perspective, self-distanced participants demonstrated significantly lower levels of depressed affect and reported fewer recurring thoughts related to the depression experience. These findings indicate that the

beneficial effects of self-distancing persist beyond an initial experimental manipulation (Kross & Ayduk, 2008).

The benefits of self-distancing have also been demonstrated when self-distancing is spontaneously implemented outside of a laboratory setting (Ayduk & Kross, 2010b). Spontaneous self-distancing has been linked to less emotional and cardiovascular reactivity in the short run, lower emotional reactivity and intrusive ideation—a defining component of rumination—in the long run, and more interpersonal problem-solving behavior (Ayduk & Kross, 2010b). Furthermore, Ayduk and Kross (2010b) found self-distancing to be unrelated to avoidance across three studies in which participants reflected on negative memories. The authors found the negative association between spontaneous self-distancing and emotional reactivity to be mediated by the way participants engaged in less recounting and more reconstruing of a past negative situation rather than by avoidance (Ayduk & Kross, 2010b).

Given the myriad benefits of self-distancing, there are many reasons to believe that self-distancing could help in the context of CBT homework exercises for stress reduction. In particular, self-distancing might target worry and rumination.

Worry and Rumination

Worry is a central defining feature of GAD and shares many characteristics with rumination (American Psychiatric Association, 2000; Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008; Segerstrom, Tsao, Alden, & Craske, 2000). Both worry and rumination have been described as repetitive, unproductive, and self-focused thought processes, with worry, rumination, depression, and anxiety being significantly interrelated (de Jong-Meyer, Beck, & Riede, 2009; Muris, Roelofs, Meesters, & Boomsma, 2004; Nolen-Hoeksema et al., 2008; Segerstrom et al., 2000). Segerstrom et al. (2000) found repetitive thought to be positively

correlated with both depression and anxiety in a sample of students as well as in a sample of patients referred to an outpatient clinic that specialized in CBT. Additionally, Muris et al. (2004) found worry and rumination to be significantly correlated with each other in a sample of nonclinical adolescents. They also found worry and rumination to be significantly associated with anxiety symptoms even when controlling for depression symptoms (Muris et al., 2004). Given that individuals adopting a self-distanced rather than self-immersed perspective have been shown to display lower levels of rumination and that spontaneous self-distancing is negatively associated with trait rumination, self-distancing has great potential to help people manage stress and worry by targeting the repetitive thoughts associated with worry and anxiety states (Ayduk & Kross, 2008, 2010a, 2010b).

It should be noted that in a study by Haeffel (2010), the completion of a self-administered cognitive skills workbook was found to lead to negative outcomes among participants high in rumination. In this study, cognitively vulnerable college freshmen were randomly assigned to complete a workbook in one of three conditions: a traditional cognitive skills workbook, a non-traditional cognitive workbook that did not ask participants to identify and challenge negative cognitions, and an academic skills workbook (Haeffel, 2010). Participants who experienced stress and were high in rumination showed significantly greater levels of depressive symptoms in the traditional workbook condition compared to the other two conditions, and this pattern was still evident at the four-month follow-up (Haeffel, 2010). These findings suggest that individual differences might moderate the effectiveness of CBT homework exercises. I therefore included measures of worry, depression, and rumination in the present study to examine this possibility. These measures will be discussed in greater detail in a subsequent section of this paper.

Imagery Perspective and Increased Emotionality

This review has demonstrated that a wealth of prior research suggests great potential for self-distancing to be beneficially integrated into CBT homework exercises. However, one caveat should be noted. Libby and Eibach (2011) propose that whether third person imagery facilitates improved or worsened coping depends on how individuals consider negative events in context with their lives as a whole. Third person imagery may be detrimental among individuals who consider a negative event as part of a broader negative theme in their lives (Libby & Eibach, 2011). However, third person imagery could be beneficial among those who engage in adaptive meaning-making efforts in response to a negative experience (Libby & Eibach, 2011). The authors suggest that in order to be effective at promoting adaptive coping, manipulations of perspective may need to be coupled with an adaptive framework to help guide meaning-making efforts surrounding a negative or traumatic experience (Libby & Eibach, 2011).

In previous studies examining self-distancing, such a framework may have been evoked through the instructions utilized to manipulate a self-distanced perspective (Libby & Eibach, 2011). For example, in five previous studies reported by Kross and Ayduk (2009), participants were instructed to call to mind a specific past negative experience and to either “replay the experience happening through your own eyes” (self-immersion) or “take a step back and watch the experience happening to your distant self” (self-distance; Ayduk & Kross, 2008; Kross & Ayduk, 2008; Kross et al., 2005). Previous research examining self-change and self-stability has shown that adopting a third person, rather than first person, perspective on past experiences is effective at producing greater judgments of self-change only when people are inclined to focus on self-change rather than continuity (Libby, Eibach, & Gilovich, 2005). Thus, Libby and Eibach (2011) suggest that instructions that highlight the “distant self” make the differences

between one's past and present selves salient and may serve to prevent individuals from incorporating prior negative experiences into a negative central theme in their lives (Libby & Eibach, 2011). These instructions may therefore play a key role in producing the beneficial effects of self-distancing, such as reduced negative affect (Ayduk & Kross, 2008, 2010a; Libby & Eibach, 2011).

In the present study, participants were instructed to write about current stressors in either the first person, by using the first person pronoun "I," or in the third person, by using the third person pronouns "he" or "she" as well as their own names. The goal of these simple instructions was to facilitate stress reduction and enhance well-being with the least invasive manipulation possible. Unlike the studies cited above, participants in the present study were not asked to consider stressors in context with the "distant self." However, as suggested by Libby and Eibach (2011), the benefits of self-distancing may be contingent on the inducement of self-distance within an adaptive framework that emphasizes the "distant self." It may be the case that without a more elaborate framework to separate a stressful event from the present or from one's life as a whole, individuals engaging in self-distancing will experience negative outcomes surrounding a stressful experience (Libby & Eibach, 2011). This conjecture will be discussed further at the end of this paper.

Overview of Present Research

Based on the research presented above, the present research had three primary goals. The first was to examine whether self-distancing enhances life satisfaction when utilized in context with CBT homework exercises for stress reduction. Self-distancing has been shown to decrease emotional reactivity and facilitate reflective processing of emotions (Ayduk & Kross, 2010a; Kross et al., 2005). Therefore, self-distancing should aid in stress management and enhance

well-being by helping people reconstrue stressful situations and reflectively process the emotions surrounding a current stressor. I hypothesized that participants in the third person writing condition would report higher life satisfaction at the end of the study compared to participants in the first person writing condition.

The second goal was to examine whether self-distancing enhances homework compliance. Self-distancing has been shown to lead people to exhibit lower levels of rumination and negative affect (Ayduk and Kross, 2008, 2010a). Therefore, by helping individuals reflect on their anxious thoughts and adopt a more objective perspective on a stress-inducing situation, self-distancing should inhibit some of the processes that contribute to homework noncompliance. I hypothesized that third person participants would demonstrate enhanced homework compliance, manifested in third person participants completing more worry logs than first person participants throughout the six days.

The final goal was to examine whether individual differences in worry, depression, or rumination would moderate the efficacy of the third person writing manipulation. Previous research has found the completion of a self-administered cognitive skills workbook to lead to negative outcomes for people high in rumination (Haeffel, 2010). However, the effectiveness of self-distancing on the reduction of emotional reactivity has been shown to increase linearly with depression symptoms, suggesting that self-distancing may buffer against the potential for these individual differences to attenuate the effectiveness of the intervention (Ayduk & Kross, 2010a; Kross & Ayduk, 2009). It was therefore unclear whether or how individual differences would influence the results of the present study. I included measures of worry, depression, and rumination to explore the idea that individual differences could moderate the efficacy of the self-distancing intervention.

Method

Participants

Participants were 102 University of Michigan undergraduates who received partial course credit in their introductory psychology class for participation in this study. Participants were randomly assigned to either a first person writing condition or a third person writing condition.

Materials

The primary measures utilized in this study were the Satisfaction With Life Scale (SWLS), the Penn State Worry Questionnaire (PSWQ), the Patient Health Questionnaire (PHQ-8), and the Ruminative Responses Scale (RRS). I measured life satisfaction to test my hypothesis that self-distancing would enhance life satisfaction. The latter three measures were included to assess whether individual differences in worry, depression, or rumination would moderate the efficacy of the self-distancing intervention.

SWLS. The SWLS is a five-item scale that is used to assess overall life satisfaction (Diener, Emmons, Larsen, & Griffin, 1985; Pavot & Diener, 1993). Respondents evaluate five statements (e.g., “In most ways my life is close to my ideal”; “If I could live my life over, I would change almost nothing”) using a seven-point Likert scale anchored at 1 = *strongly disagree* and 7 = *strongly agree* (Diener et al., 1985; Pavot & Diener, 1993). The SWLS has good convergent validity with other measures of subjective well-being and also shows discriminant validity from measures of emotional well-being (Diener et al., 1985; Pavot & Diener, 1993). It also has high internal consistency and moderate temporal stability, but it is sufficiently sensitive to identify changes in life satisfaction over the course of a clinical intervention (Diener et al., 1985; Pavot & Diener, 1993). Furthermore, scores on the SWLS have

been found to be significantly negatively correlated with college student stress, making this a particularly relevant measure for the present study (Weinstein & Laverghetta, 2009).

PSWQ. The PSWQ is a 16-item questionnaire that is used to assess the trait of worry (Brown, Antony, & Barlow, 1992; Meyer, Miller, Metzger, & Borkovec, 1990). Respondents evaluate 16 statements (e.g., "I never worry about anything"; "Once I start worrying, I cannot stop") and indicate how characteristic or typical each statement is of themselves on a scale of 1 = *not at all typical* to 5 = *very typical* (Meyer et al., 1990). The PSWQ has been shown to have good validity for measuring worry, with high internal consistency and good test-retest reliability (Brown et al., 1992; Meyer et al., 1990).

PHQ-8. The PHQ is a 9-item instrument that is used to make criteria-based diagnoses of depressive disorders (Kroenke & Spitzer, 2002; Kroenke, Spitzer, & Williams, 2001). Respondents indicate how often they have been bothered by certain problems (e.g., "Feeling down, depressed or hopeless"; "Feeling tired or having little energy") over the past two weeks, on a scale of 0 = *not at all* to 3 = *nearly every day* (Kroenke & Spitzer, 2002; Kroenke et al., 2001). The PHQ-9 is diagnostically valid and is a reliable and valid measure of depression severity (Kroenke & Spitzer, 2002; Kroenke et al., 2001; Spitzer, Kroenke, & Williams, 1999). For the present study, the ninth item, which asks about "thoughts that you would be better off dead or hurting yourself in some way," was eliminated. The elimination of the ninth item of the PHQ-9, yielding the PHQ-8, has been shown to have a minimal effect on the PHQ-9 score (Kroenke & Spitzer, 2002). It has therefore been deemed acceptable to eliminate the ninth item if the study meets at least one of three criteria, of which the present study meets all three (Kroenke & Spitzer, 2002). First, a non-clinical sample was used for this study so the risk of serious suicidal ideation in the sample was presumed to be low. Second, depression was not the

primary outcome of interest for this study. Third, the PHQ was administered through a computer-based survey, so there was not a direct means to address responses to this question that indicated a participant was experiencing suicidal ideation.

RRS. The RRS is a 22-item instrument used to measure rumination (Nolen-Hoeksema, Larson, & Grayson, 1999; Nolen-Hoeksema & Morrow, 1991; Treynor, Gonzalez, & Nolen-Hoeksema, 2003). The RRS is a subscale of the Response Styles Questionnaire and consists of statements describing responses to negative emotion or depressed mood that focus on the self (e.g., “Think about all of your shortcomings, failings, faults, mistakes”), on symptoms (e.g., “Think about your feelings of fatigue or achiness”), or on possible causes and consequences of the mood (e.g., “Think, ‘I won’t be able to do my job if I don’t snap out of this’”; Nolen-Hoeksema & Morrow, 1991; Roelofs, Muris, Huibers, Peeters, & Arntz, 2006; Treynor et al., 2003). Respondents indicate whether they *never*, *sometimes*, *often*, or *always* do what is described in each statement when they feel sad or depressed (Nolen-Hoeksema & Morrow, 1991). The RRS has good construct validity, test-retest reliability, and internal consistency as well as acceptable convergent and predictive validity (Butler & Nolen-Hoeksema, 1994; Nolen-Hoeksema & Davis, 1999; Nolen-Hoeksema & Jackson, 2001; Nolen-Hoeksema & Morrow, 1991).

Procedure

This study took place over the course of eight days. On day one, participants came into the lab and were told that the study was investigating the completion of a daily worry log as a means of managing stress and reducing worry and anxiety. They were told they would be asked to complete a daily worry log on the computer each day for the next week before returning to the lab on day eight.

First, participants completed a survey on the computer that included demographic questions as well as the measures listed above (i.e., SWLS, PSWQ, PHQ-8, and RRS). The SWLS was presented first so that participants' life satisfaction scores would not be influenced by the questions assessing worry, depression, and rumination on the remaining three measures.

Next, participants received an information sheet explaining how to fill out the daily worry log as well as a sample worry log completed in either the first or third person, depending on condition. A college-age research assistant also verbally explained how to fill out the worry log. The worry log used in this study was adapted from homework exercises in Craske and Barlow's (2006) *Mastery of Your Anxiety and Worry: Client Workbook* and Rygh and Sanderson's (2004) *Treating Generalized Anxiety Disorder: Evidence-Based Strategies, Tools, and Techniques*. Both of these books utilize CBT treatment techniques that have proven to be effective in the treatment of GAD (Craske & Barlow, 2006; Rygh & Sanderson, 2004). After participants understood how to fill out the worry log, they practiced filling out the worry log on the computer in either the first person, by using the first person pronoun "I," or in the third person, by using the third person pronouns "he" or "she" as well as their own names, depending on condition.

Before leaving the lab, participants were told they would be e-mailed a link to the online survey containing the daily worry log each morning for the next six days. They were instructed to fill out the worry log at least once per day for the next six days, but were encouraged to fill it out every time they noticed an increase in stress throughout the day. Participants were also instructed to try to complete their worry logs in a quiet setting where they had privacy and no distractions.

After filling out the worry logs for six days in either the first or third person, depending on condition, participants returned to the lab on day eight. They completed a survey on the

computer that included the same measures they completed on day one as well as follow up questions about their experience filling out the daily worry log.

Results

Four participants' responses were excluded from the analyses. Three participants reported that they did not take the study seriously and one participant mistakenly received access to both conditions of the online daily worry log. After these responses were eliminated, I was left with 98 participants whose data was included in the following analyses.

Homework Compliance

A total of 735 worry logs were completed, with nearly equal numbers in the first (n = 364) and third (n = 371) person writing conditions. There was no difference in homework compliance between the two conditions ($t < 1$).

Day One to Day Eight Change

There were no significant differences (ts < 1) between the two groups on any of the individual difference measures we administered at baseline (e.g., SWLS, PSWQ, PHQ-8, and RRS). As expected, participants in the third person group displayed a significantly larger increase in life satisfaction from pretest to posttest compared to the first person group, $F(1, 89) = 7.92$, $p = .006$ (see Figure 1), controlling for gender and difficulty in following the instructions about how to fill out the worry log. This result remained significant when controlling for the number of worry logs that participants completed throughout the week, $F(1, 88) = 9.37$, $p = .003$, as well as when controlling for mean stress reported on the worry logs throughout the week, $F(1, 88) = 9.42$, $p = .003$. Controlling for day one scores on the PSWQ, PHQ-8, and RRS had no effect on the results. Furthermore, day one scores on the PSWQ, PHQ-8, and RRS did not moderate the effect of condition on life satisfaction, PSWQ, $F(1, 90) = .060$, $p = .806$; PHQ-8,

$F(1, 90) = 1.161$, $p = .284$; RRS, $F(1, 90) = 2.328$, $p = .131$. No significant differences (ts < 1) were found between the two groups when examining pretest-posttest changes on the PSWQ, PHQ-8, or RRS.

Discussion

The present study aimed to enhance well-being and help people manage stress through the use of self-distancing utilized in context with daily worry logs adapted from CBT homework exercises. Participants completed a daily worry log for six days in either a first person writing condition or a third person writing condition. This research had two primary hypotheses. The first was that participants in the third person writing condition would report higher life satisfaction at the end of the study compared to participants in the first person writing condition. This hypothesis was supported. Results showed that participants in the third person writing condition reported significantly higher life satisfaction on day eight, as measured by the SWLS, compared to participants in the first person writing condition.

The second hypothesis was that, compared to first person participants, third person participants would demonstrate greater homework compliance by completing more worry logs throughout the six days. This hypothesis was not supported. Participants in the first person writing condition completed nearly the same number of worry logs as did participants in the third person writing condition.

In addition to these two hypotheses, I explored the idea that individual differences in worry, depression, and rumination could moderate the efficacy of the self-distancing manipulation. Results showed that there was no significant interaction of condition with individual differences in worry, depression, or rumination, as measured by scores on the PSWQ, PHQ-8, and RRS at baseline.

These findings are relevant in the context of previous research on self-administered treatments (SATs). Gould and Clum (1993) define SATs as "media-based treatment approach[es] (book, manual, audiotape, videotape, or some combination) … that are used largely by an individual independent of a helping professional" (p. 170). Several previous studies have shown that these treatments are not always effective and can sometimes lead to unintended harmful consequences. For example, Menchola, Arkowitz, and Burke (2007) conducted a meta-analysis of 24 studies to examine the efficacy of SATs for clinical levels of depression and anxiety. The authors found that SATs were more effective than no-treatment control groups but facilitated significantly less improvement than did interventions led by a therapist (Menchola et al., 2007). Rosen, Glasgow, and Moore (2003) also caution that treatment techniques that are successfully administered by a therapist are not always effectively implemented in a self-help context, and this can lead to negative outcomes.

The present study suggests that completing CBT homework exercises in the third person can attenuate the detrimental consequences that sometimes occur when people complete these exercises using the traditional first person perspective. First person writers' lower life satisfaction scores relative to third person writers in the present study could be attributed to the fact that the worry logs required them to think and write about stressful experiences in more detail than they might typically do on a daily basis. These individuals may not have been adequately able to manage this increased focus on stressful events without the aid of an experienced professional. Conversely, third person writers' relatively higher life satisfaction scores suggest that self-distancing enabled them to achieve sufficient distance from the heightened focus on stressful events so that they could cope with these stressors in adaptive ways. This is consistent with previous research demonstrating that self-distancing decreases

emotional reactivity and negative affect and facilitates reflective processing of emotions (Ayduk & Kross, 2008, 2010a; Kross et al., 2005).

Third person writers' higher life satisfaction scores on day eight relative to first person writers are also significant in light of previous research examining the benefits associated with life satisfaction. The SWLS has been shown to have good convergent validity with other measures of subjective well-being and to be negatively correlated with clinical measures of distress (Diener et al., 1985; Pavot & Diener, 1993). For example, Arrindell, Meeuwesen, and Huyse (1991) found the SWLS to be negatively correlated with all of the symptom dimensions on a Dutch version of the Symptom Checklist-90 (SCL-90-R), including anxiety, depression, and general psychological distress (Derogatis, 1977). Furthermore, high levels of life satisfaction and positive affect are linked to outcomes in several important life domains, including physical and mental health and social relations (Pavot & Diener, 2008). For instance, Siahpush, Spittal, and Singh (2008) found that people who were happier and more satisfied with their lives at baseline reported better health according to three different indicators of health—self-reported health, physical health, and the absence of long-term, limiting health conditions—at the two-year follow up after adjusting for several relevant variables, including baseline health.

The present study's findings also have important implications for the application of self-help exercises and CBT because despite some of the pitfalls of self-help books and SATs, they continue to be widely used among the general public and by mental health professionals. The self-improvement industry is a multi-billion dollar business, with thousands of new self-help books being released each year (Norcross, 2006; Salerno, 2005). Moreover, in a large study of over 1,200 clinical and counseling psychologists, Norcross et al. found that 85% were recommending self-help books to their patients (as cited in Norcross, 2006). Given the

pervasiveness of self-help and homework exercises both within and outside of the therapeutic context, there are potentially wide-ranging applications of the current research.

The present study has revealed promising benefits of integrating third person writing into self-help books and the therapeutic process in order to enhance the benefits of SATs and CBT homework exercises. Since homework exercises are already a central component of CBT, the third person writing manipulation used in the present study could easily be incorporated into the homework exercises that therapists assign to their patients (Dozois, 2010; Kazantzis et al., 2000). It is also notable that individual differences in worry, depression, and rumination measured at baseline did not moderate the effect of condition on life satisfaction in the present study. This suggests that regardless of individual differences in worry, depression, and rumination, people can benefit from the completion of CBT homework exercises in the third person, providing further support for the proposed benefits of implementing this technique in a clinical therapeutic setting.

Although third person writing did not enhance homework compliance in the present study, this may be because the intervention only lasted six days. Future research should explore whether this third person writing manipulation enhances homework compliance over the course of several weeks or months. Another important avenue of future research is to examine how long third person writers' higher life satisfaction scores relative to first person writers persists after the third person writing manipulation.

Finally, as noted previously, Libby and Eibach (2011) suggest that utilizing third person imagery to cope with negative events could have harmful effects on well-being if people consider negative events to be part of a broad negative theme in their lives. The authors suggest that manipulations of perspective may need to incorporate an adaptive framework to help people

separate negative events from their lives as a whole (Libby & Eibach, 2011). The present study does not support this account. The perspective manipulations in the present study were not elaborate and did not emphasize the "distant self." Despite the absence of such an adaptive framework, participants in the third person writing condition displayed a significantly larger increase in life satisfaction from day one to day eight compared to the first person group.

Conclusion

This study has demonstrated that completing daily worry logs in the third person can lead to higher life satisfaction relative to completing them in the first person. Self-distancing therefore provides a valuable framework to help people reframe stressful events in adaptive ways. Utilizing self-distancing techniques in conjunction with CBT homework exercises is an exciting and important avenue of future research. Given the widespread use of self-help books among the general public and psychotherapists, this research has significant and far-reaching implications for the way these self-help exercises are implemented, with great potential to improve upon the way CBT is applied to individuals with anxiety disorders and to enhance well-being and life satisfaction by helping people cope with daily stressors.

References

American Psychiatric Association. (2000) *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.

Arrindell, W. A., Meeuwesen, L., & Huyse, F. J. (1991). The satisfaction with life scale (SWLS): Psychometric properties in a non-psychiatric medical outpatients sample. *Personality and Individual Differences, 12*(2), 117-123.

Ayduk, Ö., & Kross, E. (2008). Enhancing the pace of recovery: Self-distanced analysis of negative experiences reduces blood pressure reactivity. *Psychological Science, 19*(3), 229-231.

Ayduk, Ö., & Kross, E. (2010a). Analyzing negative experiences without ruminating: The role of self-distancing in enabling adaptive self-reflection. *Social and Personality Psychology Compass, 4*(10), 841-854.

Ayduk, Ö., & Kross, E. (2010b). From a distance: Implications of spontaneous self-distancing for adaptive self-reflection. *Journal of Personality and Social Psychology, 98*(5), 809-829.

Beck, J. S., & Tompkins, M. A. (2007). Cognitive therapy. In N. Kazantzis & L. L'Abate (Eds.), *Handbook of homework assignments in psychotherapy: Research, practice, prevention* (pp. 51-63). New York, NY: Springer Science + Business Media.

Brown, T. A., Antony, M. M., & Barlow, D. H. (1992). Psychometric properties of the Penn State Worry Questionnaire in a clinical anxiety disorders sample. *Behaviour Research and Therapy, 30*(1), 33-37.

Butler, L. D., & Nolen-Hoeksema, S. (1994). Gender differences in responses to depressed mood in a college sample. *Sex Roles, 30*(5-6), 331-346.

Chambless, D. L., & Ollendick, T. H. (2001). Empirically supported psychological interventions: Controversies and evidence. *Annual Review of Psychology, 52*, 685-716.

Craske, M. G., & Barlow, D. H. (2006). *Mastery of your anxiety and worry: Client workbook* (2nd ed.). New York, NY: Oxford University Press, Inc.

de Jong-Meyer, R., Beck, B., & Riede, K. (2009). Relationships between rumination, worry, intolerance of uncertainty and metacognitive beliefs. *Personality and Individual Differences, 46*(4), 547-551.

Deacon, B. J., & Abramowitz, J. S. (2004). Cognitive and behavioral treatments for anxiety disorders: A review of meta-analytic findings. *Journal of Clinical Psychology, 60*(4), 429-441.

Derogatis, L.R. (1977). SCL–90: *Administration, scoring & procedures manual-I for the r(evised) version and other instruments of the psychopathology rating scale series*. Baltimore, MD: Clinical Psychometrics Research Unit, Johns Hopkins University School of Medicine.

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment, 49*(1), 71-75.

Dozois, D. A. (2010). Understanding and enhancing the effects of homework in cognitive-behavioral therapy. *Clinical Psychology: Science and Practice, 17*(2), 157-161.

Edelman, R. E., & Chambless, D. L. (1995). Adherence during sessions and homework in cognitive-behavioral group treatment of social phobia. *Behaviour Research and Therapy, 33*(5), 573-577.

Freeman, A. (2007). The use of homework in cognitive behavior therapy: Working with complex anxiety and insomnia. *Cognitive and Behavioral Practice, 14*(3), 261-267.

Gould, R. A., & Clum, G. A. (1993). A meta-analysis of self-help treatment approaches. *Clinical Psychology Review, 13*(2), 169-186.

Haeffel, G. J. (2010). When self-help is no help: Traditional cognitive skills training does not prevent depressive symptoms in people who ruminate. *Behaviour Research and Therapy, 48*(2), 152-157.

Helbig, S., & Fehm, L. (2004). Problems with homework in CBT: Rare exception or rather frequent? *Behavioural and Cognitive Psychotherapy, 32*(3), 291-301.

Kazantzis, N., Deane, F. P., & Ronan, K. R. (2000). Homework assignments in cognitive and behavioral therapy: A meta-analysis. *Clinical Psychology: Science and Practice, 7*(2), 189-202.

Kroenke, K., & Spitzer, R. L. (2002). The PHQ-9: A new depression diagnostic and severity measure. *Psychiatric Annals, 32*(9), 509-515.

Kroenke, K., Spitzer, R. L., & Williams, J. W. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine, 16*(9), 606-613.

Kross, E., & Ayduk, Ö. (2008). Facilitating adaptive emotional analysis: Distinguishing distanced-analysis of depressive experiences from immersed-analysis and distraction. *Personality and Social Psychology Bulletin, 34*(7), 924-938.

Kross, E., & Ayduk, Ö. (2009). Boundary conditions and buffering effects. Does depressive symptomology moderate the effectiveness of self-distancing for facilitating adaptive emotional analysis? *Journal of Research in Personality, 43*(5), 923-927.

Kross, E., Ayduk, Ö., & Mischel, W. (2005). When asking 'why' does not hurt: Distinguishing rumination from reflective processing of negative emotions. *Psychological Science, 16*(9), 709-715.

Leahy, R. L. (2002). Improving homework compliance in the treatment of generalized anxiety disorder. *Journal of Clinical Psychology, 58*(5), 499-511.

Libby, L. K., & Eibach, R. P. (2011). Visual perspective in mental imagery: A representational tool that functions in judgment, emotion, and self-insight. In M. P. Zanna & J. M. Olson (Eds.), *Advances in experimental social psychology, Vol. 44* (pp. 185-245). San Diego, CA: Academic Press.

Libby, L. K., Eibach, R. P., & Gilovich, T. (2005). Here's looking at me: The effect of memory perspective on assessments of personal change. *Journal of Personality and Social Psychology, 88*(1), 50-62.

Menchola, M., Arkowitz, H. S., & Burke, B. L. (2007). Efficacy of self-administered treatments for depression and anxiety. *Professional Psychology: Research and Practice, 38*(4), 421-429.

Meyer, T. J., Miller, M. L., Metzger, R. L., & Borkovec, T. D. (1990). Development and validation of the Penn State Worry Questionnaire. *Behaviour Research and Therapy, 28*(6), 487-495.

Muris, P., Roelofs, J., Meesters, C., & Boomsma, P. (2004). Rumination and worry in nonclinical adolescents. *Cognitive Therapy and Research, 28*(4), 539-554.

Nolen-Hoeksema, S., & Davis, C. G. (1999). 'Thanks for sharing that': Ruminators and their social support networks. *Journal of Personality and Social Psychology, 77*(4), 801-814.

Nolen-Hoeksema, S., & Jackson, B. (2001). Mediators of the gender difference in rumination. *Psychology of Women Quarterly, 25*(1), 37-47.

Nolen-Hoeksema, S., Larson, J., & Grayson, C. (1999). Explaining the gender difference in depressive symptoms. *Journal of Personality and Social Psychology, 77*(5), 1061-1072.

Nolen-Hoeksema, S., & Morrow, J. (1991). A prospective study of depression and posttraumatic stress symptoms after a natural disaster: The 1989 Loma Prieta earthquake. *Journal of Personality and Social Psychology, 61*(1), 115-121.

Nolen-Hoeksema, S., Wisco, B. E., & Lyubomirsky, S. (2008). Rethinking rumination. *Perspectives on Psychological Science, 3*(5), 400-424.

Norcross, J. C. (2006). Integrating self-help into psychotherapy: 16 practical suggestions. *Professional Psychology: Research and Practice, 37*(6), 683-693.

Norton, P. J., & Price, E. C. (2007). A meta-analytic review of adult cognitive-behavioral treatment outcome across the anxiety disorders. *Journal of Nervous and Mental Disease, 195*(6), 521-531.

Pavot, W., & Diener, E. (1993). Review of the Satisfaction with Life Scale. *Psychological Assessment, 5*(2), 164-172.

Pavot, W., & Diener, E., (2008). The Satisfaction With Life Scale and the emerging construct of life satisfaction. *The Journal of Positive Psychology, 3*(2), 137-152.

Roelofs, J., Muris, P., Huibers, M., Peeters, F., & Arntz, A. (2006). On the measurement of rumination: A psychometric evaluation of the ruminative response scale and the rumination on sadness scale in undergraduates. *Journal of Behavior Therapy and Experimental Psychiatry, 37*(4), 299-313.

Rosen, G. M., Glasgow, R. E., & Moore, T. E. (2003). Self-help therapy: The science and business of giving psychology away. In S. O. Lilienfeld, S. J. Lynn, & J. M. Lohr (Eds.), *Science and pseudoscience in clinical psychology* (pp. 399-424). New York, NY: Guilford Press.

Rygh, J. L., & Sanderson, W. C. (2004). *Treating generalized anxiety disorder: Evidence-based*

strategies, tools, and techniques. New York, NY: The Guilford Press.

Salerno, S. (2005). Introduction: Hopelessly hooked on help. In *SHAM: How the self-help movement made America helpless* (pp. 1-19). New York, NY: Crown Publishers.

Segerstrom, S. C., Tsao, J. I., Alden, L. E., & Craske, M. G. (2000). Worry and rumination: Repetitive thought as a concomitant and predictor of negative mood. *Cognitive Therapy and Research, 24*(6), 671-688.

Siahpush, M., Spittal, M., & Singh, G. K. (2008). Happiness and life satisfaction prospectively predict self-rated health, physical health and the presence of limiting, long-term health conditions. *American Journal of Health Promotion, 23*(1), 18-26.

Spitzer, R. L., Kroenke, K., & Williams, J. W. (1999). Validation and utility of a self-report version of PRIME-MD: The PHQ Primary Care Study. *JAMA: Journal of the American Medical Association, 282*(18), 1737-1744.

Stewart, R. E., & Chambless, D. L. (2009). Cognitive-behavioral therapy for adult anxiety disorders in clinical practice: A meta-analysis of effectiveness studies. *Journal of Consulting and Clinical Psychology, 7*(4), 595-606.

Treynor, W., Gonzalez, R., & Nolen-Hoeksema, S. (2003). Rumination reconsidered: A psychometric analysis. *Cognitive Therapy and Research, 27*(3), 247-259.

Weinstein, L., & Laverghetta, A. (2009). College student stress and satisfaction with life. *College Student Journal, 43*(4, PtA), 1161-1162.

Author Note

Mara T. Minasian, Department of Psychology, University of Michigan, Ann Arbor.

I would like to thank Dr. Ethan Kross and Dr. Ryan Bremner for collaborating with me on this project and sharing their knowledge and experience with me. Their continued support and guidance has been instrumental in shaping the course of this project. I would also like to thank the Emotion and Self-Control Lab at the University of Michigan for their valuable suggestions and feedback. Finally, many thanks to all of the research assistants in the Bremner Lab who assisted me in running my research study.

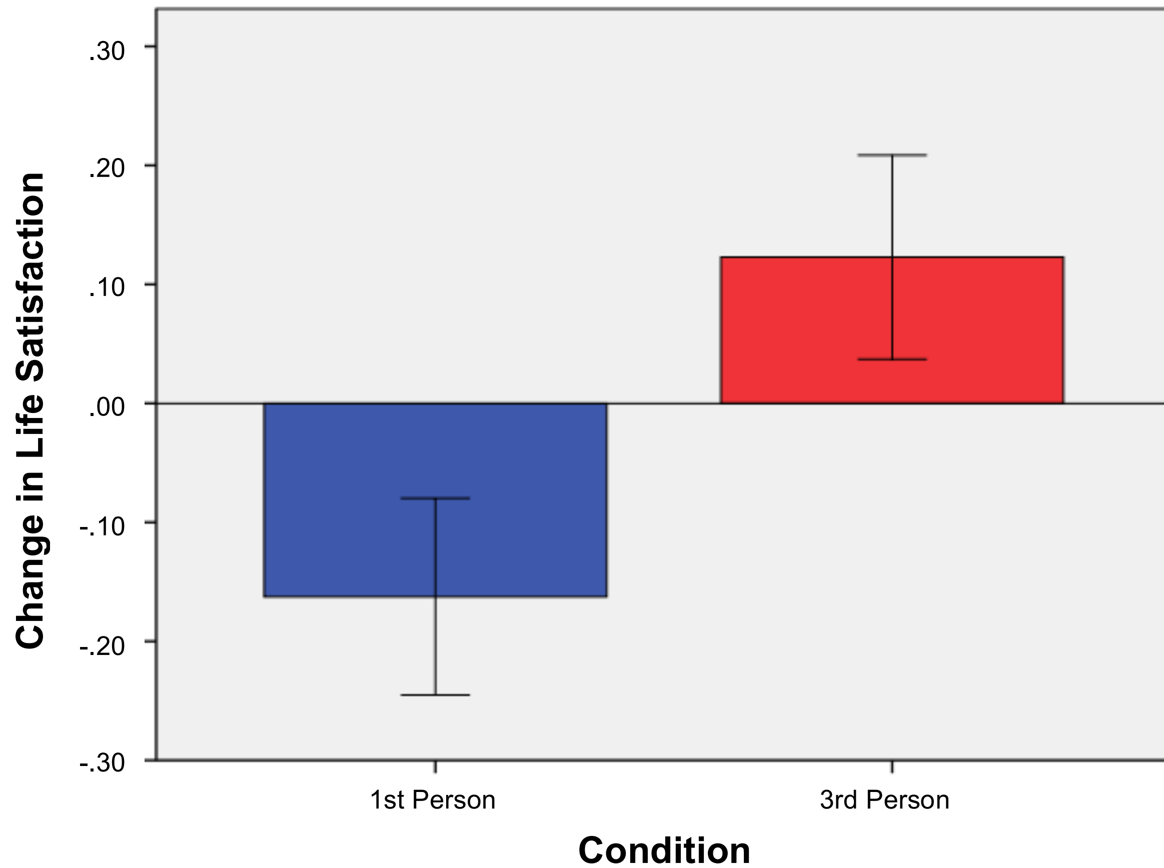

Figure 1. Effects of first and third person writing on changes in life satisfaction from day one to day eight. Positive change scores indicate that participants experienced an increase in life satisfaction; negative change scores indicate that participants experienced a decrease in life satisfaction. Capped vertical bars denote +/- 1 standard error.