EFFECTS OF SELF VERSUS OTHER BLAME ON THE BENEFITS OF EXPRESSIVE WRITING

A Dissertation

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by

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Abstract

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Expressive writing has been established over the last several decades as an effective way to cope with distressing life events. Although the literature has clearly established the health benefits of expressive writing, the mechanisms that cause those benefits are still under debate. An area that has yet to be explored in the expressive writing literature is that of blame attributions in the writing. Previous research has shown that placing blame on oneself or others is associated with poorer physical and mental health outcomes. However, no studies have tested the effects of manipulating blame in the writing. The current study filled a gap in both the expressive writing and blame literatures by manipulating self versus other blame in the writing of participants. Approximately 217 undergraduates were randomly assigned to engage in one of five 25-min writing tasks. The first group wrote about a distressing event and served as a standard expressive writing control. A second control group wrote about trivial events. The remaining 3 groups were asked to write about a distressing event while engaging in
one of the following: (a) placing the blame for the event on oneself, (b) placing the blame for the event on someone else, or (c) not blaming anyone for the event. All groups completed pre- and post-test measures of psychological and physical symptomatology. Results found that participants in the other-blame group showed significantly less symptom reduction that those in the standard expressive writing group. However, participants in the self-blame group showed symptom reduction equivalent to that of the standard expressive writing group. The findings point to the study of self-blame, particularly behavioral self-blame, as a promising future research direction in the expressive writing literature.
To my parents, who have supported me steadfastly through two and half decades of formal education.
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INTRODUCTION

Every day people encounter a wide range of challenging and potentially distressing experiences. When deciding how to cope with a distressing event, there are many options. A versatile and low-cost option is to engage in expressive writing about the experience. Research on the expressive writing paradigm has grown tremendously since the 1980s. The first expressive writing study was published in 1986 (Pennebaker & Beall, 1986) and a decade later, in 1996, there were 20 published studies. As of 2006, the area had grown to over 150 published studies (Pennebaker & Chung, 2007). A more recent estimate of this rapidly growing research area placed the number of published studies at over 200 (Poon & Danoff-Burg, 2011).

In their pioneering study of expressive writing, Pennebaker and Beall (1986) examined the effects of writing about emotional experiences on physical health. The study involved college students, randomly assigned to one of four writing conditions: one that wrote only about superficial topics, one that wrote about the facts of a trauma, one that wrote about the emotions of a trauma, and a final group that wrote about both the facts and emotions of a trauma. All participants wrote about their assigned topic for fifteen minutes on four consecutive days. The number of health center visits a student made in the months preceding and following the writing intervention was used as a measure of health. The results of the study showed that students in the condition that wrote about the facts and emotions of a personal trauma showed the greatest health
benefits, evidenced by significantly fewer health center visits. This study then inspired a wealth of studies exploring the potential benefits of writing.

**Benefits of Expressive Writing**

Numerous studies have found significant health benefits for people who write about personal traumas (Booth, Petrie, & Pennebaker, 1997; Esterling, L’Abate, Murray, & Pennebaker, 1999; Kelly, 2002; Murray, Lamnin, & Carver, 1989; Pennebaker, 1990; Richards, Beal, Seagal, & Pennebaker; 2000; Rodriguez & Kelly, 2006; Gortner, Rude, & Pennebaker, 2006; Baikie, K.A., Geerligs, L., & Wilhelm, K., 2012). Several more recent studies also found the expected physical and psychological health benefits for participants who reported experiencing traumatic distress and engaged in expressive writing (Schoutrop, Lange, Hanewald, Davidovich, & Salomon, 2002; Schoutrop, Lange, Hanewald, Duurland, & Bermond, 1997; Sloan & Marx, 2004; Sloan, Marx, & Epstein, 2005; Smyth et al, 2002; Poon & Danoff-Burg, 2011; Sloan, Feinstein, & Marx, 2009). The writing paradigm has been found to be effective for a wide range of participants, from college students to prison inmates. It also has been found to remain effective when writing instructions, duration, or number of writing sessions is altered (see Pennebaker & Chung, 2007).

Several meta-analyses have been conducted on expressive writing studies. The first was conducted by Smyth (1998), who performed a meta-analysis of all studies using a variant of Pennebaker’s original writing task and using healthy participants. The analysis was based on 14 published studies and found a mean weighted effect size of $d = .47 (p<.0001)$. This represents a 23% improvement on health measures for the experimental group over the control group (Smyth, 1998). This medium effect size is
strong evidence that writing about emotional experiences really does lead to health benefits. Smyth (1998) also noted that this effect size was similar to or larger than the effect sizes produced by other psychological interventions.

A more recent meta-analysis was conducted on nine expressive writing studies, all of which used various clinical populations for participants (Frisna, Borod, & Lepore, 2004). They found that expressive writing was linked to significantly improved health outcomes \( (d = .19, p < .05) \). However, the effects varied based on type of health outcome, with stronger effects found for physical health outcomes \( (d = .21, p = .01) \). Expressive writing was also found to be more effective for physical illness populations than for psychiatric populations. The authors proposed that the heterogeneity of the samples of the studies analyzed may help to explain the smaller effect sizes (Frisna, Borod, & Lepore, 2004). Despite finding smaller effects, the benefits of expressive writing remained.

Another, perhaps secondary, benefit of expressive writing is its impact on the intrusive thoughts that often accompany distressing events. There is some debate in the literature about the effect expressive writing has on intrusive thoughts. Several studies have found that writing about a stressful event does not reduce the frequency of intrusive thoughts, but does attenuate the association between intrusive thoughts and negative affect (Lepore, 1997; Smyth et al, 2002). Several other studies have found that expressive writing does decrease the frequency of intrusive thoughts (Klein & Boals, 2001; Schoutrop et al, 2002). Despite the different findings, it seems clear that expressive writing does have a beneficial effect on intrusive thoughts about a stressful experience.
Mechanisms of Expressive Writing

Whereas the literature has shown that the benefits of expressive writing are robust, there is as of yet little consensus on what mechanisms may cause the benefits from writing. Over the years, several competing theories have developed. More recently it has been concluded that it is unlikely that a single mediator can fully explain the power of expressive writing (Pennebaker & Chung, 2007). Although a full discussion of the possible mechanisms is outside the scope of this study, several of the most common theories of the mechanisms behind the expressive writing paradigm are reviewed next.

One of the major theories proposes that the benefits of expressive writing occur because it allows participants to express their emotions and gain catharsis. Pennebaker and Chung (2007) reviewed essays from six previous writing studies, and analyzed them using the Linguistic Inquiry and Word Count (LIWC). They found that more positive emotion words in the writings were linked to greater health improvement. In regard to negative emotion words, there was a curvilinear pattern. Participants who used a moderate amount of negative emotion words fared best, while those who used either very few or very many negative emotion words were least likely to benefit from the writing. This review supports the idea that the emotion expressed in the writing is important to the benefits experienced.

Sloan, Marx, and Lexington (2007) examined the effects of changing the instructions for writing to either emphasize emotional expression or cognitive assimilation. Participants in the emotional expression group were encouraged to write about a traumatic experience with as much emotion as possible. Those in the emotional expression group reported significant improvements in physical and psychological health
at a one month follow-up, compared to those in the cognitive assimilation or control group. The cognitive assimilation group, against predictions, was not associated with any benefits (Sloan et al., 2007).

However, other studies have found contradictory results. Kelly and colleagues (2001) conducted an earlier study to directly compare writing to gain insight versus writing to gain catharsis. Participants who wrote about a secret while trying to gain new insights felt more positive about their secret and came to terms with their secret more than participants in the catharsis group (Kelly, Klusas, von Weiss, & Kenny, 2001). Ullrich and Lutengorf (2002) conducted a study in which the participants assigned to focus on emotional expression only in their writing about a stressful event actually reported more severe illness symptoms. The group that wrote to emphasize both emotional expression and cognitive assimilation reported the greatest increases in health benefits (Ullrich & Lutengorf, 2002). Emotional expression appears to be important in determining the benefits of expressive writing, but on its own cannot fully explain the paradigm.

A competing theory for the mechanism at work in the expressive writing paradigm is that of gaining insight. Participants are thought to benefit from gaining more insight into and a greater understanding of their experience through the writing. One study found that when participants who benefited from expressive writing were asked why they thought it was beneficial, many responded that it had helped them to gain insight into what happened to them (Pennebaker, Colder, & Sharp, 1990). For instance, it helped them to really think things through and discover the root of their problem.
The essays of expressive writing study participants also demonstrate the importance of gaining insight. Participants who increased their use of causal words (e.g. because, thus) and insight words (e.g. understand, realize) from the first to last day of writing were most likely to experience health benefits. The increase in causal and insight words has been linked to benefits in multiple studies (Klein & Boals, 2001; Petrie, Booth, & Pennebaker, 1998; Low, Stanton, & Danoff-Burg, 2006) and suggests that participants have changed their understanding of the event. However, it appears that the increase in causal and insight words is key, as participants who start the study with a coherent and good understanding of the past event generally do not benefit from the writing (Pennebaker & Chung, 2007).

A final and related possible mechanism for expressive writing is that helping participants to make meaning of their stressor leads to health benefits (Boals & Klein, 2005; Pennebaker, 1997). Writing about one’s thoughts and feelings about a distressing event can be viewed as a form of meaning making (Park, 2010). Meaning-making is widely considered essential to adjusting to a stressful event (e.g. Gillies & Neimeyer, 2006). Although meaning making is similar to gaining insight, the two concepts are not interchangeable. Presumably, participants could gain insight into their experiences but still not feel like they have found complete meaning.

The literature offers some support for the meaning-making mechanism in expressive writing. One study asked HIV+ participants to write about their experiences of living with HIV. Participants whose writing displayed increased meaning making reported more positive changes and had better immune functioning at follow-up (Rivkin, Gustafson, Weingarten, & Chin, 2006). There have been similar findings for the
survivors of breast cancer (Owen et al., 2005) and for caregivers of ill children (Schwartz & Drotar, 2004).

Although this review of possible mechanisms at work in the expressive writing paradigm covered emotional expression, gaining insight, and meaning making, there is further research needed to explore other possible mechanisms. As awareness grows that the value of expressive writing cannot be explained by a single cause or theory (Pennebaker & Chung, 2007), the search for new mechanisms continues. In a recent and comprehensive review of the meaning-making literature, Park (2010) commented on a promising new area of research. “Evidence is accumulating from various research areas that meaning making and meanings made that involve blame and negative evaluations typically lead to poorer outcomes and that those involving nonjudgmental reflection lead to better adjustment (see Gortner, Rude, & Pennebaker, 2006; Treynor, Gonzalez, & Nolen-Hoeksema, 2003; Watkins, 2008)” (Park, 2010, p. 290). Blame is an area that has been relatively untouched by the expressive writing research, but offers a promising potential mechanism.

**Blame – Defining Terms**

It is necessary to define some terms before a review of the blame and negative evaluation literature can begin. There are several different concepts that are important to differentiate and understand, as research from several different areas proves relevant to blame. The dictionary definition of blame is “to find fault with” or “to hold responsible” (Merriam-Webster, 2010). The concept of blame can then be split based on whom it is directed towards, either self-blame or other-blame. The literature makes a further distinction between behavioral self-blame and characterological self-blame (Janoff-
Bulman, 1979). In behavioral self-blame, individuals blame themselves for activities that they have chosen to engage or not engage in. Blame is linked to past behavior and can be associated with feelings of control (Janoff-Bulman, 1979). An example might be a woman blaming her being mugged on having walked through a bad part of town at night by herself. Characterological blame, on the other hand, involves individuals assigning blame to the personality or character traits they possess. Blame is linked to one’s character and is associated with feelings of esteem (Janoff-Bulman, 1979). An example of characterological blame would be a woman blaming a mugging on her being too foolish and weak a person to anticipate danger. Other-blame was used by Tennen and Affleck (1990) to mean “the belief that another person is the cause of one’s victimization or is in some way responsible or blameworthy for an untoward outcome” (p. 209). Furthering the mugging example, other-blame would entail the woman blaming the mugger or perhaps even a friend that had left her alone in the bad neighborhood.

*Self-blame and Well-being*

Many of the studies of adaptation to distressing events have focused on the effects of blaming oneself (Tennen & Affleck, 1990). However, the results of such research have proved inconsistent (Kingree & Thompson, 2000). This inconsistency has been theorized to exist because of the multidimensional nature of self-blame. Blaming one’s character may negatively impact well-being by increasing feelings of guilt and powerlessness. Blaming one’s behavior for negative events, on the other hand, may actually be adaptive by increasing feelings of perceived control (Janoff-Bulman & Lang-Gunn, 1988). A closer examination of the self-blame literature is needed to examine these inconsistencies.
Indeed, there is some research to support the adaptational nature of self-blame. Bulman and Wortman (1977) conducted a study of participants’ attributions of blame and their adaptation to serious accidents. They found that paralyzed individuals who blamed themselves and believed they acted in some way to cause their accident appeared to adapt more successfully to their paralysis (Bulman & Wortman, 1977). Other research has found an association between behavioral self-blame and better adaptation among rape victims (Janoff-Bulman, 1979), cancer patients (Timko & Janoff-Bulman, 1985), children with diabetes (Tennen, Affleck, Allen, McGrade, & Ratzan, 1984), and mothers of seriously ill infants (Affleck, McGrade, Allen, & McQueeney, 1985). Janoff-Bulman (1985) commented, “It is primarily the modifiability of behavior that renders behavioral self-blame adaptive, for this attribution enables the victim to believe in the future avoidability of the victimization” (p. 29). Thus, one may find behavioral self-blame adaptive because it allows one to feel an event can be changed and controlled.

However, other studies have failed to find a significant relationship between behavioral self-blame and adaptation. Studies with mothers of diabetic children (Affleck, Allen, Tennen, McGrade, & Ratzan, 1985), a group of cancer patients (Taylor, Lichtman, & Wood, 1984), and end-stage renal failure patients (Witenberg, Blanchard, Suls, Tennen, McCoy, & McGoldrick, 1983) have failed to find a relationship between behavioral self-blame and better adaptation.

The research to support the detrimental effects of self-blame is vast. There have been a number of studies that examined the impact of self-blame for rape victims. For instance, women who incorporated the victim-blame views of others into their views of themselves experienced the highest distress after a rape (Regehr, Marziali, & Jansen,
Research has found that self-blame among rape victims is predictive of greater depression (Meyer & Taylor, 1986; Frazier, 1990), decreased sexual satisfaction, greater fear (Meyer & Taylor, 1986), and lower self-esteem scores (Katz & Burt, 1988). One study (Branscombe, Wohl, Owen, Allison, & N’gabala, 2003) found that self-blame was the most crucial type of blame for well-being. Although rapist blame was higher than self-blame, it was self-blame that was found to be related to poorer well-being. Participants considered how changes in their own actions might have changed the traumatic outcome, which strongly predicted increased self-blame (Branscombe et al, 2003). Thus, it appears that asking rape victims to think about changes in their own behavior often leads them to increase feelings of self-blame. This counters the idea that focusing on their own behavior will maintain well-being by protecting feelings of perceived control. Muran and DiGiuseppe (2000) found negative effects for both behavioral and characterological self-blame, although the negative effects were strongest for individuals who placed blame on their personal character.

More recent research has also examined the impact of self-blame on PTSD symptoms specifically. Several studies found that self-blame is positively correlated with PTSD symptoms (Najdowski & Ullman, 2009; Gray, Pumphrey, & Lombardo, 2003; Diagneault, Hebert, & Tourigny, 2006; Williams, Evans, Needham, & Wilson, 2002). Self-blame has also been linked to an increase in PTSD symptoms in Hispanic populations (Pole, Best, Metzler, & Marmar, 2005) and more severe depression and dissociation symptoms after trauma for ethnic minorities (Ford, 2012).

Similar findings have been found among populations other than rape victims. An early study showed that characterological self-blame was a consistent way to differentiate
between depressed and non-depressed female college students (Janoff-Bulman, 1979). Self-blame has also been linked to increased depressive affect in individuals experiencing an unwanted end to a romantic relationship (Wohl, Deshea, & Wahkinney, 2008) and poorer psychological well-being among 12-step group participants (Kingree & Thompson, 2000). Several studies of women diagnosed with breast cancer have also found self-blame to be associated with negative outcomes (Malcarne, Compas, Epping-Jordan, 1995; Friedman, Barber, Chang, Tham, Kalidas, Rimawi, Dulay, & Elledge, 2009; Friedman, Romero, Elledge, Chang, Kalidas, Dulay, Lynch, & Osborne, 2007). Women who blamed themselves for their diagnosis of cancer, due to things like poor health habits or failure to manage stress levels, were found to have higher levels of mood disturbance and poorer quality of life (Friedman et al, 2009; Friedman et al, 2007). A study of newly diagnosed breast cancer patients found that both behavioral and characterological self-blame were related to increased anxiety and depression (Bennett, Compas, Beckjord, & Glinder; 2005). Therefore, it appears that self-blame has negative effects on a wide variety of populations with a range of distressing circumstances.

It has also been shown that is self-blame, rather than causal attributions in general, which is associated with higher levels of depressed mood (Wollert, Heinrich, Wood, & Werner, 1983; Wollert & Rowley, 1987). This may be because causal attributions imply only causal agency, whereas blame implies culpability and a deservingness of punishment (Shaver & Drown, 1986). Therefore it is the act of assigning blame that is problematic and has more negative connotations than simple causation. It is theorized that the emotional consequences of causal attributions are mediated by “sanctions” of credit or blame (Wollert, et al, 1983), and it has been found
that sanctions are much more strongly associated with mood than attributions (Wollert & Rowley, 1987). It has been suggested that a more powerful approach would include focusing on sanctions such as self-blame and other-blame, rather than general attributions that are limited in predictive power (Mittelstaedt & Wollert, 1991).

*Other-blame and Well-being*

Although more research has focused on the effects of self-blame, the findings on other-blame are more consistent. Blaming someone else as a way of adapting to a stressful experience is related to physical and emotional distress (Tennen & Affleck, 1990). Tennen and Affleck (1990) conducted a comprehensive review of studies that involved other-blame. Studies were included in their review only if they measured both attributions to others and adaptational outcomes or well-being in participants who had experienced a major victimizing event. A total of 25 studies were included in the review, though many of them were not designed with other-blame as the original focus of inquiry. Overall, blaming others for one’s problems or negative outcomes was related to poorer emotional well-being and physical health (Tennen & Affleck, 1990).

More specifically, the findings from reviewed studies showed higher levels of depression, distress, demoralization, and lower self-esteem for individuals who blamed others (Tennen & Affleck, 1990). The decreased self-esteem is perhaps the most surprising finding, as placing the blame for negative outcomes on others would intuitively seem to protect self-esteem by removing fault from oneself. Heinemann and colleagues (1988) also found that individuals who blame others were still trying to find meaning in their experiences. This may indicate that placing blame on others does not offer closure, and leaves individuals still searching for understanding. Blaming society
has also been found to have negative implications for rape victims' well-being (Meyer & Taylor, 1986). More generally, several types of victimized groups have been found to show decreased well-being when blaming power groups in society for harmful outcomes (Branscombe, Schmitt, & Harvey, 1999; Schmitt, Branscombe, Kobrynowicz, & Owen, 2002).

The finding that believing another person caused a negative event is related to poorer well-being appears robust. The studies reviewed by Tennen and Affleck (1990) included a wide range of variations. Differences in the nature of the distressing event, the timing of the study, and the measurement of attributions and adaptation occurred, but the association remained.

The way in which blaming others negatively impacts one’s health and well-being is up for debate, but several theories exist. Phillips (1968) theorized that blaming others is associated with immature psychosocial functioning. Therefore the negative impact on adaptation occurs due to immaturity, as it is immature psychosocial functioning that causes individuals to blame others (Phillips, 1968). Another theory is that of “paranoid dynamism” by Sullivan (1956): “It is not that I have something wrong with me, but that he does something to me. One is the victim, not of one’s own defects, but of a devilish environment. One is not to blame; the environment is to blame. Thus, we can say that the essence of the paranoid dynamism is the transference of blame” (p. 146). The only problem with the paranoid dynamism concept of transference of blame is that it is not always socially acceptable. Some forms of other blame will be resisted by others, depending on if the blamed person is viewed as blameworthy (Tennen & Affleck, 1990). Tennen and Affleck (1990) propose that blaming others decreases social support, view of
a benign world, and perceived sense of control and thus leads to decreased well-being. It is clear, however, that blaming others is linked to poor psychological outcomes.

**Self-blame vs. Other-Blame**

Despite the growing literature for both self-blame, and more recently, other-blame, few studies have directly compared the two types. Kingree and Thompson (2000) conducted a study of personal blame and other blame, specifically parental blame. The study involved participants who were adult children of alcoholics (ACOA). Half were assigned to attend ACOA group meetings, and the other half attended substance abuse education classes. It was predicted that ACOA group meeting participation would affect blame attributions, but this was not supported. However, results from across both groups found that only personal blame was significantly related to lower well-being. Parental blame was not related to well-being (Kingree & Thompson, 2000). A more recent study examined attributions among victims of sexual harassment, and found that both self-blame and harasser-blame were positively related to PTSD symptoms (Larsen & Fitzgerald, 2011). Another study examined participant’s moods after being given negative feedback about their performance on a task they were induced to view as either important or meaningless (Mittelstaedt & Wollert, 1991). Participants who engaged in self-blame had higher levels of depressed mood, particularly if they believed the task had been important. Participants who engaged in other-blame were also depressed, but did not show differences based on perceived importance of the task (Mittelstaedt & Wollert, 1991). This study suggests that both types of blame are problematic, but the severity of impact of self-blame may depend on how meaningful the event or mistake is perceived to be. A person who blames himself for a small, trivial mistake may be able to shake it off,
whereas one would have much more difficulty letting go of self-blame for a crucial mistake. However, it seems that a blaming response style is problematic for mood regardless of whom the blame is directed towards.

An understanding of the way that the two types of blame (a.k.a. sanctions) may affect mood is illustrated by case histories described by Wollert (1987):

“The client who negatively sanctions herself, for example, covertly enacts a series of derogatory and threatening behaviors that are self-directed. Disclosure of her self-conversation in therapy often reveals such sanctions as ‘I’m nothing but a useless jerk who’s always screwing up…I should run my car into a tree.’ Such an onslaught, difficult to escape because of its internal nature, directly and quickly causes the sadness, guilt, and self-disgust that are symptomatic of depression, and prepare a person for overt acts of self-destruction. In contrast, the client who applies negative sanctions to external objects experiences feelings of hostility towards his environment. He may not become directly and immediately depressed as a result of this, but it is likely that his covert resentments and preoccupations will produce some dysphoria, decrease his resiliency for dealing with other disappointments, and in some cases, lead to interpersonal alienation and low self-esteem.”

This quote provides a nice example of how the two types of blame (i.e., self versus other) may operate. Although they may function differently, they both ultimately might have negative consequences for one’s mood and well-being.

The Proposed Study

The proposed study will address several important gaps in the literature. First, it will use an experimental design to examine the effects of blame on the benefits of the expressive writing paradigm. Participants will be asked to write about a distressing experience in a manner that induces self-blame, other-blame, or an avoidance of blame attributions. Although the studies on the health benefits of written disclosure are experimental in nature, no studies in the blame literature have directly experimentally manipulated blame as proposed here. The proposed study differs from the studies in the
blame literature, which are almost all correlational in nature. It thereby fills an important gap in the literature by testing whether avoiding any blaming of self or others for emotional experiences can actually cause an improvement in the health benefits of written disclosure. Additionally, this design will allow for a direct comparison of self-blame and other-blame, which was established earlier as an area that has been often overlooked.

**Hypotheses**

The following hypotheses are predicted for the proposed study:

1) Participants in the standard expressive writing condition will show greater symptom reduction than those in the control writing group.

2) Participants in the self-blame writing condition will show greater symptom reduction than those in the other-blame writing condition.

3) Participants in the no-blame condition will show greater symptom reduction than those in the self-blame, other-blame, and standard expressive writing conditions.

4) Participants in the standard expressive writing condition will show greater symptom reduction than those in the self-blame or other-blame conditions.

5) Participants in the self-blame, other-blame, and no-blame conditions will show greater symptom reduction than those in the control writing group.

The first hypothesis involves the intended replication of the well-documented finding of health benefits for expressive writing as compared to control writing. In regard to the second hypothesis, research has consistently shown other-blame to be associated with detrimental health outcomes, whereas self-blame shows more mixed results. Due to
the research showing occasional beneficial effects for self-blame, it follows that the self-blame group will manifest greater symptom reduction than the other-blame group. The rationale for the third hypothesis stems from the strong support in the literature for the negative association between blame and health, and so it follows that minimizing blame in the writing should bolster health benefits for the no-blame group above the benefits of the other groups. The fourth hypothesis is suggested by the literature showing negative effects for both self and other blame. Therefore it is hypothesized that the standard expressive writing procedure will show greater benefit, as it does not induce blame attributions. Lastly, the fifth hypothesis stems from the long history of health benefits for expressive writing, which has consistently shown that those who engage in expressive writing, no matter the specific instructions, have improved over those who write about trivial matters.
METHOD

Overview of Design

The proposed experiment utilized a five cell, longitudinal design in order to test the effects that varying expressions of blame in the writing have on the health benefits associated with expressive writing. The five conditions were as follows: (a) a self-blame writing condition, (b) an other-blame writing condition, (c) a no-blame writing condition, (d) a standard expressive writing condition, and (e) a control writing condition. Having both a standard expressive-writing (EW) group and a control writing (CW) group allowed for determining both whether varying blame provided any health benefits over trivial writing and if those benefits were greater than those gained through the standard EW procedure. The study was conducted on the Internet, using a secure web interface. There is previous evidence that internet-based expressive writing is effective (Sheese, Brown, & Graziano, 2004), and there has been no difference in effectiveness found for typing versus handwriting (Frattaroli, 2006). All participants completed a pretest psychological and physical symptom measure. Participants then wrote about a distressing experience, in the manner prescribed by condition assignment, for one twenty-five-minute session. A posttest symptom measure was given three weeks after the writing exercise was completed. Previous studies have found a one-time, brief writing exercise to be effective in producing benefits (Pennebaker & Chung, 2007; Macready, Cheung, Kelly, & Wang, 2011). For example, in two separate experiments, Macready et al. (2011) found
significant symptom reduction at two-week or four-week time intervals caused by an initial one-time writing exercise.

Participants

Participants were 240 undergraduate psychology students at a private, Midwestern university. They received extra course credit in exchange for their participation. Of these, 23 were excluded from the final analyses. One refused to complete the writing task and two were excluded due to poor effort on the writing task (i.e. wrote a single sentence). The other 20 were excluded due to failure to complete the follow-up survey. Therefore 217 participants, 76 men and 141 women, are included in the final analyses. The mean age of participants was 19.06 (SD = 1.21). Of participants, 157 were White, 10 were Black, 22 were Hispanic, 18 were Asian, and 9 were classified as other. All participants were treated in accordance with the Ethical Standards of the American Psychological Association.

Measures

Participants completed questionnaires containing several measures over the course of the study. The Brief Symptom Inventory (BSI) is a 53-item measure of physical and psychological symptoms (Derogatis, 1993). The BSI is a shortened version of the Symptom Checklist 90 – Revised. Responses are given on a 5-point Likert-type scale, with ratings of 0 (not at all) to 4 (extremely). Participants rate how distressed they were by each symptom in the last 7 days. Sample items include: “Feeling lonely even when you are with people” and “Getting into frequent arguments.” Scores on all 53 items were summed for a total BSI score, as the research questions of interest involved overall
symptomatology, and previous research supports the appropriateness of using the whole scale for assessing symptomatology (Derogatis & Spencer, 1982). Reported test-retest reliability over a two-week time period was .90 and Cronbach’s alpha was reported at .94 (Derogatis, 1993). In the current sample, Cronbach’s alpha was .96 and .97 for pretest and posttest administrations respectively.

Participants also provided demographic information and were asked to rate their own writing for degree of disclosure, emotion, and blame. The questions addressing participants' impressions of their writing and reactions to completing the writing exercise presented participants with several statements and asked them to rate how much they thought about them on a scale from 1 (not at all) to 9 (to a great extent). Example statements include “The emotions I felt during the event” and “To what extent did you open up about yourself in your writing?” (see Appendix B). Participants also rated four blame-related statements: “To what extent did you blame yourself for what happened,” “To what extent did you blame what happened on specific behaviors or actions of yours,” “To what extent did you blame what happened on your character or personality traits,” and “To what extent did you blame other people for what happened?” (Appendix B).

To assess the effectiveness of the blame manipulation, a pair of Master’s level trained clinician judges who were blind to conditions independently read and rated participants’ writings. The judges made their ratings using 9-point Likert-type scales, ranging from 1 (not at all) to 9 (to a great extent). They coded to what extent participants (a) blamed themselves for what happened, (b) blamed others for what happened, and (c) described the event in a neutral, non-blaming manner (see Appendix C). The intraclass correlations between the judges’ ratings were .93 for self-blame, .91 for other-blame, and
In addition, judges further coded self-blame for the extent that participants (a) blamed what happened on his/her specific behaviors/actions and (b) blamed what happened on his/her character or personality traits (Appendix C). Intraclass correlations between the judges’ ratings were .92 for behavioral self-blame and .90 for characterological self-blame. The two judges’ ratings were then averaged for each of the dimensions coded.

Procedure

The study was conducted in two online sessions. The first session lasted approximately one hour and began with subjects reading and electronically signing an informed consent form. All participants then completed the BSI to assess pretest physical and psychological symptom level (see Appendix A). They were then randomly assigned to one of the five conditions: self-blame, other-blame, no-blame, standard expressive writing, or control writing.

Prior to being presented with the writing exercise, all participants received instructions asking them to select a distressing event for their writing topic. This was to ensure that topic choice was not a confounding factor in the experimental manipulation. The topic selection instructions for those in the self-blame, other-blame, no-blame, and standard expressive writing conditions were as follows:

“Shortly you will be asked to write about a distressing event that you have experienced at some point in your life. Please take a minute now to choose what experience you would like to write about. What experience you choose to write about is completely up to you, but please select an experience that was distressing to you in some way. Then in the space below, please type several, brief sentences describing the experience you have chosen as your topic. Remember all your responses will be kept completely confidential.”

Participants in the control writing condition were given the following instructions:
“Shortly you will be asked to complete a writing exercise about how you spend your time. Please take a minute now to think about how you have spent your time over the last two weeks. Then in the space below please type several, brief sentences summarizing how you have spent your time in the last two weeks. Remember all your responses will be kept completely confidential.”

Once participants selected their writing topic, or summarized it in the case of the control writing condition, they advanced to the next page and were presented with instructions for the writing exercise.

All participants then completed a writing exercise that asked them to write continuously for twenty-five minutes. The instructions for the writing exercises were adapted from common instructions used in expressive writing studies (see Pennebaker & Cheung, 2007). The writing instructions for the self-blame group were as follows:

“For the next 25 minutes, please write about your deepest thoughts and feelings about the distressing experience you just selected. In your writing, really let go and explore your very deepest emotions and thoughts. When writing about your distressing experience, write in a way where you take the blame for what happened and describe how your role contributed to the event. All of your writing will be completely confidential. Don't worry about spelling, sentence structure, or grammar. The only rule is that once you begin writing, continue to do so until your time is up. When the 25 minutes ends, the page will advance automatically. Again, please write about your distressing experience in a way in which you take the blame for what happened and describe your role in the event.”

Participants in the other-blame group received a variation of the same writing instructions:

“For the next 25 minutes, please write about your deepest thoughts and feelings about the distressing experience you just selected. In your writing, really let go and explore your very deepest emotions and thoughts. When writing about your distressing experience, write in a way where you place the blame for what happened on someone else and describe how their role contributed to the event. All of your writing will be completely confidential. Don't worry about spelling, sentence structure, or grammar. The only rule is that once you begin writing, continue to do so until your time is up. When the 25 minutes ends, the page will advance automatically. Again, please write about your distressing experience in a way in which you place the blame for what happened on someone else and describe their role in the event.”
Participants in the no-blame group received the following variation of writing instructions:

“For the next 25 minutes, please write about your deepest thoughts and feelings about the distressing experience you just selected. In your writing, really let go and explore your very deepest emotions and thoughts. When writing about your distressing experience, write in a way where you do NOT blame yourself or anyone else for what happened in the event. All of your writing will be completely confidential. Don’t worry about spelling, sentence structure, or grammar. The only rule is that once you begin writing, continue to do so until your time is up. When the 25 minutes ends, the page will advance automatically. Again, please write about your distressing experience in a way in which you do NOT blame yourself or anyone else for what happened.”

Participants in the standard expressive writing group received the same writing instructions as the other experimental groups, but the sentences referring to blame were removed:

“For the next 25 minutes, please write about your deepest thoughts and feelings about the distressing experience you just selected. In your writing, really let go and explore your very deepest emotions and thoughts. All of your writing will be completely confidential. Don’t worry about spelling, sentence structure, or grammar. The only rule is that once you begin writing, continue to do so until your time is up. When the 25 minutes ends, the page will advance automatically.”

Finally, participants in the control group received the following writing instructions:

“For the next 25 minutes, please write about how you have used your time over the past two weeks. In your writing, please go into as much detail as possible in how you have spent your days and managed your time. In your account of your activities, please be as objective as possible. You should describe your activities in detail without discussing any of your own thoughts or feelings related to the topic. All of your writing will be completely confidential. When the 25 minutes ends, the page will automatically advance.”

A page timer counted down the twenty-five minutes of writing time, automatically advancing the page when time ended. All participants then completed a final questionnaire regarding their reactions to the writing exercise and rating their writing for blame, emotion, and level of disclosure (see Appendix B).
The second and final session of the study was administered online three weeks after the first session and lasted approximately twenty minutes. Participants completed the BSI a final time (see Appendix A) in order to provide symptom change data. They then concluded the study by reading a debriefing statement.
RESULTS

Writing Samples

The writing topics of the 175 participants in the self-blame, other-blame, no-blame, and standard expressive writing conditions were categorized as follows: 35 chose to write about relationship problems (e.g. romantic relationships, friendships), 35 wrote about academics (e.g. poor grades, change of major), 32 selected a topic related to a physical illness/injury, 24 chose to write about grief/loss, 16 selected a fearful event (e.g. car accident, getting lost abroad), 10 wrote about a sporting event (e.g. losing an important game, making an error), 9 wrote about suicide, 7 selected substance abuse topics, 6 chose to write about divorce, and 1 wrote about a rape. It is important to note that participants selected their writing topic before they received their specific writing instructions, so topic choice was not influenced by condition.

In addition, a word count was calculated for the writing sample of participants in all conditions in order to provide a rough estimate of effort level. A one-way between-participants ANOVA (with 5 levels of condition) was performed on the word count of the writing samples. Results revealed no significant difference across the 5 conditions, $F (4, 212) = 1.69, p = .15$.

Manipulation Checks

Both participant ratings and judges’ ratings were used to check the effectiveness of the blame manipulation. The average of the two judges’ ratings for the level of self-
blame in the writing was used as the dependent variable in a one-way ANOVA (with four levels of condition) to test for an overall group difference. Results found a significant difference among groups, $F(3, 171) = 36.10, p < .0001$. The mean in the self-blame condition ($M = 5.98$) was significantly higher than the next highest mean ($M = 2.62$) in the EW condition, $F(1, 212), p < .0001$. A second ANOVA was run on the averaged judges’ ratings of other-blame in the writing. Results showed a significant group difference, $F(3, 171) = 57.87, p < .0001$. The mean in the other-blame condition ($M = 6.77$) was significantly higher than the next highest mean ($M = 2.69$) in the no-blame condition, $F(1, 212), p < .0001$. A third ANOVA tested for a group difference among the averaged judges’ ratings for neutral, non-blaming writing. Results showed an overall significant effect for condition, $F(3, 171) = 29.77, p < .0001$. The mean in the no-blame condition ($M = 6.15$) was significantly higher than the mean in either the self-blame ($M = 3.58$), $F(1, 212) = 39.04, p < .0001$, or other blame ($M = 2.65$), $F(1, 212) = 76.98, p < .0001$, conditions, but not significantly different from the standard expressive writing ($M = 6.03$) condition, $p = .77$. See Table 1 for group means on all manipulation checks.

Participants also rated to what extent they blamed themselves in their writing. An ANOVA found significant results for condition, $F(3, 169) = 6.84, p = .0002$. The mean in the self-blame condition ($M = 4.93$) was significantly higher than the next highest mean ($M = 3.74$) in the EW condition, $F(1, 210), p = .01$. The final manipulation check used participants’ ratings of other-blame in their writing. A significant difference between groups was found, $F(3, 169) = 10.15, p < .001$. The mean in the other-blame condition ($M = 5.40$) was significantly higher than the next highest mean ($M = 3.41$) in the no-blame condition, $F(1, 210), p < .0001$. See Table 1 for all the group means.
TABLE 1

MEAN SCORES ON MANIPULATION CHECKS

<table>
<thead>
<tr>
<th>Condition</th>
<th>Judges’ rating self-blame</th>
<th>Judges’ rating other-blame</th>
<th>Judges’ rating no-blame</th>
<th>Self-rating self-blame</th>
<th>Self-rating other-blame</th>
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</tr>
<tr>
<td>No-Blame Expression</td>
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<td>2.69&lt;sub&gt;a&lt;/sub&gt;</td>
<td>6.15&lt;sub&gt;c&lt;/sub&gt;</td>
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<td>3.29&lt;sub&gt;a&lt;/sub&gt;</td>
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</table>

Note: Within each column, means that share subscripts are not significantly different at \( p = .05 \)

The results of both self-rated and judge-rated manipulation checks provide evidence that the blame manipulation was effective. Participants were able to alter their writing in regard to blame attributions based on condition specific instructions.

**Primary Analyses**

To test the primary hypotheses, a series of planned pair-wise contrasts were performed using one-way between-participants analysis of covariance (ANCOVA) on final BSI scores using initial BSI scores as the covariate. The adjusted means of final BSI scores for all conditions can be seen in Table 2. In testing the first hypothesis, results of an ANCOVA on the contrast between standard expressive writing (EW) and control writing (CW) conditions was significant, \( F (1, 211) = 6.11, p = .01 \). As expected, participants in the EW group showed greater symptom reduction than those in the CW group. To test the second hypothesis, an ANCOVA was conducted to compare the self-blame and other-blame conditions on final symptom scores, but was not significant, \( p = .08 \).
The third hypothesis was tested with a series of separate, pair-wise ANCOVAs to compare the no-blame condition vs. self-blame condition, the no-blame condition vs. other-blame condition, and the no-blame condition vs. the EW condition. Results found a significant difference between the no-blame and self-blame conditions, $F(1, 211) = 3.85$, $p = .05$, with the self-blame group showing greater symptom reduction. The comparison of the no-blame and other-blame conditions was not significant, $p = .82$. A significant effect was found for the contrast of the no-blame condition versus the EW condition, $F(1, 211) = 7.70$, $p = .006$, with the EW group showing greater symptom reduction than the no-blame group.

ANCOVA was also used to test the fourth hypothesis with separate pair-wise contrasts for the EW condition vs. the self-blame condition and the EW condition vs. other-blame condition. No significant difference was found between the EW and self-blame groups, $p = .41$. A significant effect was found when comparing the EW condition to the other-blame condition, $F(1, 211) = 6.61$, $p = .01$, with the EW group showing greater symptom reduction. Finally, ANCOVA was used to test the fifth hypothesis, and contrasts were separately run to compare the CW condition vs. the self-blame condition,
the CW condition vs. the other-blame condition, and the CW condition vs. the no-blame condition. No significant effect was found when the CW group compared with the self-blame \((p = .09)\), other-blame \((p = .99)\), or no-blame \((p = .84)\) groups.

Lastly, although not part of the formal hypothesis testing, I conducted additional between-groups tests to examine whether the two different sub-types of blame -- behavioral and characterological -- differed across the 3 blame conditions. The reason for these tests was that, as mentioned earlier, the literature points to the notion that behavioral self-blame can be more healthful than characterological self-blame. The results showed that the mean judges’ rating of behavioral blame was significantly higher for the self-blame group \((M = 5.83)\) than for the other-blame group \((M = 1.86)\), \(F(1, 212) = 115.77, p < .0001\), or the no-blame group \((M = 1.88)\), \(F(1, 212) = 114.53, p < .0001\).

This result supports the idea that participants in the self-blame group engaged in significantly more behavioral self-blame than those in the other-blame or no-blame groups. The mean judges’ rating of characterological self-blame was also significantly higher in the self-blame group \((M = 3.15)\) than in the other-blame \((M = 1.34)\), \(F(1, 212) = 34.24, p < .0001\), or no-blame group \((M = 1.57)\), \(F(1, 212) = 25.98, p < .0001\).

Participants in the self-blame group engaged in significantly more characterological self-blame than those in the other-blame or no-blame groups. However, the amount of characterological blame present in the writing was still lower \((M = 3.15)\) than the amount of behavioral blame present in their writing \((M = 5.83)\). Additionally, participants’ ratings of characterological blame in the self-blame group were not significantly higher than ratings of characterological blame in the EW group \((M = 3.52)\), \(F(1, 210) = .93, p = .33\). This finding suggests that participants in the self-blame group did not blame the
distressing event on their personality/character to any greater extent than those in the standard expressive writing group. Given the differential effects of behavioral and characterological self-blame in the literature, these analyses helped to clarify the levels of these subtypes in the self-blame condition as compared to the other groups.
DISCUSSION

This study was conducted in an effort to examine the effects of blame on the health benefits associated with expressive writing. Participants were asked to write about a distressing experience in a way that (a) induced self-blame, (b) induced other-blame, or (c) avoided blame attributions. The study also included both a standard expressive writing condition and a control writing condition. The dependent measure was symptoms reported on the Brief Symptom Inventory from pretest to posttest. Both judges’ ratings and participants’ ratings were used to measure the amount of blame in the writing. Manipulation checks provided evidence that the study was successful in getting participants to alter their writing based on the writing instructions. For instance, participants in the self-blame condition wrote in a manner that included more self-blame than participants in the other conditions. The results of this study provided partial support for the hypotheses as explained next.

The first hypothesis predicted that this study would replicate the finding evidenced by the extensive research literature that engaging in expressive writing is linked to health benefits (Pennebaker & Beall, 1986; Smyth, 1998; Frisna, Borod, & Lepore, 2004). As expected, participants in the expressive writing group showed greater symptom reduction than those in the control writing group. This finding expands the expressive writing literature by providing evidence that a one-time, online writing exercise can still produce significant health benefits.
Results did not support the second hypothesis, which was that the self-blame group would show greater symptom reduction than the other-blame group. It is important to note that although the difference between the self-blame and other-blame groups was not statistically significant at $p = .05$, the result was marginally significant with a $p = .08$. The direction of the means, with the self-blame group showing a lower adjusted final mean on the BSI, was consistent with the hypothesis. However, greater power may be needed to detect this effect in future studies. The third hypothesis in this study predicted that the no-blame group would show greater symptom reduction than the self-blame, other-blame, and expressive writing groups. This hypothesis was not supported. The no-blame group actually showed significantly less symptom reduction than the expressive writing and self-blame groups, and was equivalent to the other-blame group. The poor outcome regarding the final symptomatology of the no-blame group was initially surprising, but further consideration suggests a possible theory to explain those findings, which will be discussed below.

The fourth hypothesis in this study predicted that the expressive writing group would show greater symptom reduction than those in the self-blame or other-blame groups. This was partially supported. The self-blame group and EW group were not significantly different. However, the EW group did show significantly greater symptom reduction than the other-blame group. This provides further support for the research that has consistently shown negative outcomes for those who blame others for their problems (e.g. Tennen & Affleck, 1990), and suggests that asking participants to blame others in their writing can significantly reduce the health benefits of expressive writing.
The fifth hypothesis predicted that all of the blame conditions (self-blame, other-blame, and no-blame) would show greater symptom reduction than the control writing condition. This was not supported, and none of the blame conditions were significantly different from the CW condition on final symptom scores. It was originally thought that the expressive writing effect was so robust that it would persist regardless of modifications to the writing instructions (e.g. Pennebaker & Cheung, 2007). However, these results suggest that there are some writing instructions that can interfere with the beneficial effects of expressive writing. For instance, the negative effects of placing blame on others appear to cancel out any positive effects from expressive writing. Therefore, all writing is not necessarily helpful writing. It will be important for further research to continue to explore the limits of expressive writing.

When the results are considered broadly, there are two major areas that emerge to account for the pattern of findings. The first area of consideration is that the self-blame condition performed better than expected in terms of symptom reduction. Given the large proportion of previous research that links self-blame to negative outcomes, it was predicted that self-blame would have caused fewer health benefits than standard expressive writing outcomes. However, our results aligned with previous literature that has found self-blame to have beneficial effects (e.g. Bulman & Wortman, 1977), particularly in regard to the benefits of behavioral self-blame (e.g. Janoff-Bulman, 1979; Timko & Janoff-Bulman, 1985). Indeed, in the current study, the results from judges’ ratings of the writing showed that the self-blame group did use higher levels of behavioral self-blame in their writing as compared to using the more detrimental, characterological self-blame. Moreover, participants’ ratings for the level of
characterological blame in the writing for the self-blame condition were not significantly different from the level of characterological blame in the writing of the other conditions. Therefore, it seems likely that the positive results in the self-blame condition are largely due to the utilization of the more beneficial behavioral self-blame.

These findings offer important implications about the potential beneficial effects of self-blame in expressive writing. This advances knowledge in both the blame and expressive writing literatures, as blame had never before been directly manipulated in an expressive writing study. Results showed that placing blame on others has negative effects on the health benefits of expressive writing, which corresponds to previous research showing the negative outcomes associated with other blame (Tennen & Affleck, 1990). However, participants who blamed themselves, particularly placing the blame on their behavior, may have gained a greater sense of control over their distressing event. This may serve as an important mechanism behind the health benefits of expressive writing. Future research will need to continue to explore these possible benefits.

The second area of consideration that accounts for the pattern of results in this study is the poor final symptomatology scores of the no-blame group. A plausible possible explanation for the poor performance of the no-blame condition stems from the theory of thought suppression and its paradoxical effects. Wegner, Schneider, Carter, & White (1987) conducted a seminal study to examine the difficulty people have with suppressing unwanted thoughts. They asked participants to try not to think of a white bear while verbalizing stream of consciousness for a 5-minute period. Participants were unable to avoid thoughts of the white bear during the verbalization period. In addition, participants were found to have a preoccupation with and increased thoughts of the white
bear in the period following the suppression attempt. Therefore, the authors concluded that attempted thought suppression has paradoxical effects as a self-control strategy, and can produce the very preoccupation it was directed against (Wegner et al., 1987). That classic psychological study has since fostered a wealth of follow-up studies that found further support for the theory (Wegner & Schneider, 2003). Despite being a well-known theory, this was not originally considered as relevant to the current study. However, it offers a likely explanation for the surprisingly high final symptomatology scores of the no-blame group. Participants in the no-blame condition were directed to write in a way where they did not place the blame of themselves or anyone else. The wording of the instructions asked them to “not blame” in the writing, which would have likely activated a suppression response. Participants in the no-blame condition, although able to produce writing with lower levels of blame, would likely have had increased thoughts about blame during the writing exercise. In addition, the participants may have continued to have increased blame thoughts after completing the writing exercise. Therefore, the writing instructions for the no-blame condition might have unintentionally turned blame into a “white bear” that participants could not suppress. The increased blame thoughts caused by such a suppression attempt could have then caused negative outcomes such as less symptom reduction. This explanation would need to be tested in future research, as the current study did not include questions to assess the thoughts of participants during or after the blame exercise.

Limitations

As stated above, a limitation to this study was the wording of the no-blame writing instructions in a way that likely triggered a thought suppression attempt. This
unintentional choice of wording might have interfered with the study’s direct test of the effects of non-blame on writing benefits. A change of wording in the writing instructions will allow for a direct test of this relationship in future studies.

Another limitation in the current study was the potential need for greater power. An a priori power analysis was conducted, and sufficient participants were recruited to replicate the major finding of health benefits for expressive writing as compared to control writing. Nevertheless, several analyses in the current study involving the self-blame group were approaching significance (i.e. $p = .08, p = .09$) and increased power may have allowed detection of these effects.

Future directions

Future research is needed to further examine the relationships between blame and the health benefits of expressive writing. The finding of possible benefits for writing in a self-blaming manner offers several opportunities for future studies. For instance, writing instructions that specifically ask participants to write in a way that emphasizes behavioral self-blame only may strengthen the possible benefits.

As discussed previously, an important future direction will be to explore the relationship between writing in a non-blaming way and health benefits. Wegner (2011) suggested that expressive writing may be one way to help get rid of unwanted thoughts. It appears that the writing instructions will have an important influence on whether or not expressive writing is helpful with unwanted thoughts. Other strategies that were suggested to help escape from thought suppression included meditation, mindfulness, acceptance and commitment therapy, and exposure approaches (Wegner, 2011). Indeed, a future study that asked participants to accept how their or others’ actions contributed to a
distressing event (as opposed to asking them to avoid placing blame) may be a more effective test of the effects of non-blame on written expression. Such a modification to the standard writing instructions may bolster the health benefits of expressive writing, which remains an important area to research as a low-cost, easily implemented intervention.

**Conclusion**

Previous research has shown the health benefits to be gained from expressive writing, as well as the many negative outcomes associated with self or other blame. However, no prior study has ever directly tested the effects of blame of the benefits of expressive writing. The results of this study indicate that writing in a way that blames others, as compared with engaging in a traditional expressive writing exercise, can cause less symptom reduction. However, the effects of blaming oneself, particularly with a focus on behavior, showed symptom reduction equivalent to that of traditional expressive writing. These findings advance knowledge in the emotional expression literature not only by being the first to test the role of blame in the benefits of expressive writing, but also by that showing that self-blame can be just as curative as traditional expressive writing. Participants who placed blame on themselves, and their behavior in particular, may have felt an increased sense of control about their distressing event. Therefore behavioral self-blame may serve as a potential mechanism behind the health benefits of expressive writing. Future experiments in which behavioral self-blame per se is manipulated in the expressive writing task are needed to examine further the potential health benefits of behavioral self-blame in emotional expression.
APPENDIX A

PRE AND POST MANIPULATION MEASURES

Below is a list of problems people sometimes have. Please read each one carefully, and circle the number that best describes HOW MUCH THAT PROBLEM HAS DISTRESSED OR BOTHERED YOU DURING THE PAST SEVEN DAYS INCLUDING TODAY. Circle only one number for each item and do not skip any items. If you change your mind, erase your first mark carefully. If you have any questions, please ask about them.

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1. Nervousness or shakiness inside
2. Faintness or dizziness
3. The idea that someone else can control your thoughts
4. Feeling others are to blame for most of your troubles
5. Trouble remembering things
6. Feeling easily annoyed or irritated
7. Pains in heart or chest
8. Feeling afraid in open spaces
9. Thoughts of ending your life
10. Feeling that most people cannot be trusted
11. Poor appetite
12. Suddenly scared for no reason
13. Temper outbursts that you could not control
14. Feeling lonely even when you are with people
15. Feeling blocked in getting things done
16. Feeling lonely
17. Feeling blue
18. Feeling no interest in things
19. Feeling fearful
20. Your feelings being easily hurt
21. Feeling that people are unfriendly or dislike you
22. Feeling inferior to others
23. Nausea or upset stomach
24. Feeling that you are watched or talked about by others
25. Trouble falling asleep
26. Having to check and double check what you do
27. Difficulty making decisions
28. Feeling afraid to travel on buses, subways, or trains
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<th>moderately</th>
<th>quite a bit</th>
<th>extremely</th>
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<td>Trouble getting your breath</td>
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<td>Hot or cold spells</td>
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<td>31.</td>
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<td>Having to avoid certain things, places, or activities because they frighten you</td>
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<td>32.</td>
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<td>Your mind going blank</td>
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<td>33.</td>
<td>0 1 2 3 4</td>
<td>Numbness or tingling in parts of your body</td>
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<tr>
<td>34.</td>
<td>0 1 2 3 4</td>
<td>The idea that you should be punished for your sins</td>
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<tr>
<td>35.</td>
<td>0 1 2 3 4</td>
<td>Feeling hopeless about the future</td>
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<tr>
<td>36.</td>
<td>0 1 2 3 4</td>
<td>Trouble concentrating</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>37.</td>
<td>0 1 2 3 4</td>
<td>Feeling weak in parts of your body</td>
<td></td>
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<tr>
<td>38.</td>
<td>0 1 2 3 4</td>
<td>Feeling tense or keyed up</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>39.</td>
<td>0 1 2 3 4</td>
<td>Thoughts of death or dying</td>
<td></td>
<td></td>
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<tr>
<td>40.</td>
<td>0 1 2 3 4</td>
<td>Having urges to beat, injure, or harm someone</td>
<td></td>
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</tr>
<tr>
<td>41.</td>
<td>0 1 2 3 4</td>
<td>Having urges to break or smash things</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>42.</td>
<td>0 1 2 3 4</td>
<td>Feeling very self-conscious with others</td>
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<td></td>
</tr>
<tr>
<td>43.</td>
<td>0 1 2 3 4</td>
<td>Feeling uneasy in crowds</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>44.</td>
<td>0 1 2 3 4</td>
<td>Never feeling close to another person</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45.</td>
<td>0 1 2 3 4</td>
<td>Spells of terror or panic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>46.</td>
<td>0 1 2 3 4</td>
<td>Getting into frequent arguments</td>
<td></td>
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<tr>
<td>47.</td>
<td>0 1 2 3 4</td>
<td>Feeling nervous when you are left alone</td>
<td></td>
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<tr>
<td>48.</td>
<td>0 1 2 3 4</td>
<td>Others not giving you proper credit for your achievements</td>
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</tr>
<tr>
<td>49.</td>
<td>0 1 2 3 4</td>
<td>Feeling so restless you couldn’t sit still</td>
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<tr>
<td>50.</td>
<td>0 1 2 3 4</td>
<td>Feelings of worthlessness</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>51.</td>
<td>0 1 2 3 4</td>
<td>Feeling that people will take advantage of you if you let them</td>
<td></td>
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</tr>
<tr>
<td>52.</td>
<td>0 1 2 3 4</td>
<td>Feelings of guilt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>53.</td>
<td>0 1 2 3 4</td>
<td>The idea that something is wrong with your mind</td>
<td></td>
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</tr>
</tbody>
</table>

What is your age? ____________________

What is your gender? _________________

What is your race? ___________________
APPENDIX B

WRITING REACTION QUESTIONNAIRE

*Items to be completed immediately after writing session, most of which are manipulation checks*

Please tell us what you were thinking about as you were writing:

1. The facts surrounding the event.
   
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<tr>
<th>1</th>
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<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all</td>
<td>to a great extent</td>
<td></td>
<td></td>
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</table>

2. The emotions I felt during the event.
   
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<thead>
<tr>
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<tbody>
<tr>
<td>not at all</td>
<td>to a great extent</td>
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</tbody>
</table>

3. How distressing do you consider the event you described?
   
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<tbody>
<tr>
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<td></td>
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<td></td>
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</table>

4. How positive/negative do you consider the event you described?
   
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<tbody>
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<td>extremely positive</td>
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7. How traumatic do you consider the event you described?
   
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<tbody>
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</table>

8. To what extent did you open up about yourself in your writing?
   
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<th>4</th>
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9. To what extent did you refrain from opening up about yourself in your writing?
   
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<tbody>
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</table>
10. To what extent did you blame yourself for what happened?

1  2  3  4  5  6  7  8  9
not at all  to a great extent

11. To what extent did you blame what happened on specific behaviors or actions of yours?

1  2  3  4  5  6  7  8  9
not at all  to a great extent

12. To what extent did you blame what happened on your character or personality traits?

1  2  3  4  5  6  7  8  9
not at all  to a great extent

13. To what extent did you blame other people for what happened?

1  2  3  4  5  6  7  8  9
not at all  to a great extent
APPENDIX C

BLAME RATING FORM FOR TRAED Raters

1. To what extent did the author blame him/herself for what happened?

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2. To what extent did the author blame what happened on specific behaviors or actions of his/hers?

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3. To what extent did the author blame what happened on his/her character or personality traits?

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4. To what extent did the author blame other people for what happened?

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5. To what extent did the author describe the event in a neutral, non-blaming manner?

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REFERENCES


Derogatis, L. R., & Spencer, M. S. (1982). *The Brief Symptom Inventory (BSI): Administration, scoring, and procedures manual* – 1. Baltimore: John Hopkins University School of Medicine, Clinical Psychometrics Research Unit.


