THE EFFECTS OF SELF-PRESENTATION ON AN EXPRESSIVE WRITING TASK FOR TRAUMA SURVIVORS

by

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Abstract

Expressive Writing (EW) involves writing in an emotionally expressive manner about an experienced event, and has been shown to be related to increases in psychological and physical well-being. The purpose of the current study was to extend previous work by examining how self-presentation affects psychological and physical gains following the EW task. Forty one participants who have experienced a traumatic event were recruited from the community and given either an EW or control activity. Measures assessing self-presentation and various indices of health were administered at baseline and again at one month follow-up to determine changes in symptomatology. Results indicated that higher levels of perfectionistic self-presentation were significantly associated with less improvement in symptoms of depression and posttraumatic stress. Further, a nonsignificant moderation trend emerged whereby higher levels of perfectionistic self-presentation were associated with more improvement in symptoms of depression and posttraumatic stress in the EW group but not control group.
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Chapter 1: 
Literature Review

The question of whether emotional expression is beneficial has been the subject of much debate in the theoretical and empirical literature. Research has often revealed paradoxical findings, with some studies suggesting that emotional expression can lead to positive psychological and physical gains, while others report that emotional avoidance may serve a similar coping function (Kennedy-Moore & Watson, 2001). In their conceptualization of emotional expression, however, Kennedy-Moore and Watson (1999; 2001) reject this linear explanation and instead suggest that the benefits of emotional expression depend on whether the expression facilitates resolution or new insight and understanding. The current study addresses these theories and builds upon previous research by investigating how the desire to construct desirable identities affects well-being following emotional expression. Specifically, the influence of self-presentation on psychological and physical outcomes following emotionally expressive writing was examined.

The Expressive Writing Paradigm

The notion that expressive writing could be therapeutic was originally sparked by Pennebaker and Beall (1986), who set out to empirically test whether writing about traumatic events in specific ways could lead to psychological and physical gains. In their influential study, 46 undergraduate students were randomly assigned to one of four conditions: (a) a control condition, where participants wrote about trivial topics; (b) a trauma-fact condition, where the events of an upsetting experience were recounted without any reference to emotions; (c) a trauma-emotion condition, where participants wrote about the emotions experienced as a result of the upsetting event without describing what the event entailed; and (d) a trauma-combination
condition, where participants were instructed to describe both the details of the traumatic experience as well as the emotions they had in response to it. Participants in all groups wrote about their respective topics for 15 minutes on each of four consecutive days.

Results indicated that, compared to those in the control and trauma-fact conditions, participants in the trauma-emotion and trauma-combination conditions (i.e., those who wrote emotionally) experienced significantly more negative mood and heightened physiological reactivity immediately following the writing sessions. When assessed four months later, however, more positive effects began to emerge, with those in the emotion conditions reporting fewer physical health problems. Further gains were found at six month follow-up, with participants in the trauma-combination condition reporting fewer visits to a campus health centre. These results led the authors to speculate that the expression of emotion is crucial to the success of EW, paving the way for future empirical examinations of the task.

In the time since Pennebaker and Beall’s (1986) initial study, research into EW has come in several waves, each focusing on a particular subset of the population (Frattaroli, 2006). Specifically, the EW task was tested on university students and employees, members of the general community, individuals suffering from medical ailments, and those reporting psychological and psychiatric issues. Together, these studies have produced mixed yet promising results.

In a meta-analysis of 13 studies investigating the use of EW with healthy participants (i.e., those who did not present with physical or psychological issues), for instance, Smyth (1998) reported an overall effect size of .47 ($p < .0001$). This suggests that, following the EW task, participants experienced a 23% improvement in overall health. Further analyses treating outcome variables as moderators revealed that EW participants experienced improvements in
reported health ($d = .42$), psychological well-being ($d = .66$), psychological functioning ($d = .68$), and general functioning ($d = .33$). The task was not found, however, to lead to improvements in health behaviors ($d = .03$). Overall, these findings provide further support for the notion that the EW task is effective in spurring positive change in healthy participants.

Although the Smyth (1998) meta-analysis produced some positive results, the author’s focus on already healthy participants limited the scope of the findings. Accordingly, Frisina, Borod and Lepore (2004) set out to determine whether the research into EW also pointed towards gains in participants suffering from mental or physical difficulties. In their analysis of nine studies, the authors uncovered a relatively modest yet statistically significant effect size of .19 ($p < .05$) for overall health. Interestingly, subsequent analysis revealed that the EW task was more successful in bringing about positive change on physical health measures ($d = .21$) as compared to measures of psychological well-being ($d = .07$). Despite these general findings, a closer look at individual psychological measures included in the analysis reveals that participants experienced significant improvements in depression ($d = .56$), positive affect ($d = .55$), anxiety ($d = .39$) and sleep quality ($d = .68$), indicating that EW may have some helpful psychological effects. Results of this meta-analysis also suggest that EW is less effective for those participants with psychiatric illnesses as opposed to physical ailments. Frisina and colleagues (2004), however, speculate that the failure to exclude participants undergoing psychotherapy or receiving psychotropic medications may have confounded the results, citing several studies in which EW was found to improve psychiatric health in clinical populations (e.g., L’Abate & Baggett, 1997; L’Abate, Boyce, Fraizer & Russ, 1992; Schoutrop et al., 2002).
Finally, a recent comprehensive meta-analysis by Frattaroli (2006) has helped to reinforce the findings that EW can lead to positive outcomes. In this examination of 146 published and unpublished studies, EW was found to have an overall unweighted r-effect size of .075. Although this result is considerably smaller than those found in the other meta-analyses, the author still concludes that EW should be seen to have positive health benefits. For one, this is because the benefits of EW appear to significantly outweigh the costs, which is important to take into account when determining the practical importance of a task (Glass, McGaw, & Smith, 1981). As well, it is comparable in effect size to accepted interventions in other areas of study. When it comes to improving learning abilities and achievement, for instance, effect sizes as small as .050 have been considered clinically significant (Lanahan, McGrath, McLaughlin, Burian-Fitzgerald, & Salganik, 2005). In addition, although the effect sizes for psychotherapy have been found to be considerably higher (e.g., .322 in a meta-analysis by Smith & Glass, 1977), the simple, short term and cost effective nature of EW makes even relatively small effect sizes worth noting.

A recent collection of empirical studies spearheaded by Denise Sloan and colleagues (e.g., Epstein, Sloan, & Marx, 2005; Sloan, Marx, & Epstein, 2005; Sloan, Marx, Epstein, & Dobbs, 2008; Sloan, Marx, Epstein, & Lexington, 2007) are worth noting here, as results have tended to show more positive effects of EW on psychological outcomes measures. The college participants in these studies, for instance, have repeatedly demonstrated improvements on symptoms of PTSD, depression, physical health and stress response as measured by physiological activity. Since the success of these studies may be due, in part, to the consistency of methods and outcome measures used, the current study closely replicated the procedures employed by Sloan and colleagues.
Moderating Variables

The meta-analysis conducted by Frattaroli (2006) examined how variables associated with setting, population, participants, methodology and treatment in the EW task moderated its success. Results indicate larger effect sizes for those EW studies that included participants who reported a physical health problem, had a history of trauma or other stressors, or were part of the general population (as opposed to college samples). Other participant variables that were found to positively affect the success of EW include higher levels of distress, lower optimism and poorer physical health. In terms of methodology, participants who disclosed at home or were given increased privacy displayed higher overall and psychological health effect sizes than their counterparts. As well, amount of sessions (more than three), length of sessions (more than 15 minutes), and more detailed instructions were found to be associated with more positive gains. Lastly, studies that included follow-up periods of less than one month also reported higher effect sizes than those with follow-up periods of one month or more.

Although some personal variables have been examined for their potential to act as moderators in EW (e.g., alexithymia, repressive coping, optimism, and neuroticism; see Baikie, 2008), results have been inconsistent. In the current study, the possible moderating role of participant self-presentation in the EW task will be explored.

Overview of Self-Presentation

Self-presentation, a concept first described by sociologist Erving Goffman in his book *The Presentation of Self in Everyday Life* (1959), has recently gained attention by researchers interested in both its social psychological and psychotherapeutic applications. In his seminal work, Goffman compares the tendency of individuals to construct desired public identities to the work of theatrical stage actors; both require the cooperation of an audience, a focus on aspects of
the self that are seen as most pertinent to desired identity construction, the ability to anticipate and manage resistance, and confinement to a frame of believability in accordance with perceived reality (Bonsu, 2007). In the contemporary literature, the construct of self-presentation refers broadly to the desires harboured and attempts made by individuals to control the impressions that others form of them (Leary & Kawalski, 1990). This concept bears close resemblance to the idea of impression management, with the majority of authors using the terms interchangeably. Some, however, differentiate between the two concepts; impression management can refer to any attempt to shape others’ impressions, including those regarding the self, others, objects or events (Shlenker & Weigold, 1992). When this is the case, self-presentation is used more narrowly, describing only those impression management attempts that apply directly to the self (Leary, 1993). Although this distinction is sometimes made in the theoretical literature, the terms are generally used synonymously in empirical research to refer only to impression management attempts that are self-relevant. Accordingly, the terms self-presentation and impression management will be used in this paper to refer to the same construct.

Much of the existing literature on self-presentation is rooted in a theory of strategic self-presentation put forth by Jones and Pittman (1982). In their conceptualization, self-presentation is a strategic portrayal of the self in which behaviors are driven “by power augmentation motives designed to elicit or shape others’ attributions of the actor’s dispositions” (p. 233). This definition is relatively restricted compared to more current models, which have come to view self-presentation as the more general and partially unconscious attempt to shape impressions in everyday interpersonal interactions (Kelly, 2000). This is exemplified in the two-component model developed by Leary and Kawalski (1990), where self-presentation is divided into two discrete processes, each governed by its own set of principles. According to the authors,
impression motivation describes the desire to engage in impression management, while impression construction involves the actual performance of behaviors designed to create the desired impression. Further, the characteristics of each of these processes for a given individual in a specific situation depends on several variables, such as the status of the audience, the likelihood of future contact with them, and how public the projected image will be. Rather than simply an instrument of power acquisition, impression management in the two-component model is a means of gaining desired social and material outcomes, maintaining self-esteem and developing identity. In order to achieve these ends, individuals have been shown to employ a wide assortment of behavioral strategies and tactics.

These behaviors have been found to take many forms, each chosen according to the motives of the actor and the impressions that he or she wishes to construct. While a degree of deceit may be involved, self-presentational strategies are more commonly characterized by subtle toning, selective disclosures and semantic tactics that remain within the bounds of perceived reality (Jones & Pittman, 1982). Several authors have made attempts to create taxonomies of self-presentational behaviors, describing common strategies and the tactics with which they are associated (e.g., Jones & Pittman, 1982; Schlenker, 1980; Tedeschi & Norman, 1985). That offered by Friedlander and Schwartz (1985), for instance, has its theoretical framework based on the client-therapist dynamic and is theoretically applied to the therapeutic interaction; their categorization is offered in the context of a reciprocal view of social influence, where clients are in a constant struggle to influence their therapists’ behaviors and impressions. In this categorization, five classes of self-presentations are identified: Facework describes the attempt to gain empathy by utilizing tactics such as excuses, apologies and self-handicapping; ingratiation is used to gain affection through other-enhancement, conformity or modesty; supplication is
employed when seeking nurturance and is often characterized by self-deprecation; *self-promotion* is used when the actor seeks respect and is associated with performance claims; and *intimidation* uses volatility and threats in order to instil fear and anxiety. Although this does not represent an exhaustive list, the authors argue that it is these behaviors that have the most relevance to psychotherapy process and outcome, since most other behaviors can be subsumed under these five categories. Despite the fact that the number and characteristics of self-presentational strategies differs across authors and theories, most make the general distinction between those strategies that seek to gain positive impressions and outcomes and those that aim to avoid negative ones.

Tedeschi and colleagues (Tedeschi & Lindskold, 1976; Tedeschi & Melburg, 1984), for instance, suggest that self-presentational behaviors can be categorized as either *protective* or *assertive*. While protective self-presentation strategies are used to avoid or counteract negative impressions of the self, assertive self-presentation strategies are used to gain positive or desired impressions. Applied to the Friedlander and Schwartz (1985) taxonomy, for instance, facework (e.g., justification, excuse, apology) is regarded as a protective approach, while ingratiation, supplication, self-promotion and intimidation are considered assertive approaches. Other authors offer differing terms in making similar distinctions, such as Arkin’s (1981) use of the word *acquisitive* instead of assertive, and Roth and colleagues’ (1986) reference to *repudiative* and *attributive* tactics to describe protective and assertive tactics, respectively. Though some contemporary theorists have attempted to refine this distinction by adding further categories (e.g., Schutz, 1998), the majority of research into self-presentation continues to divide behaviors into the two established categories.
In this study, the potential for self-presentation to moderate the effectiveness of an expressive writing (EW) task will be explored. Before examining the empirical research that points to such a relationship, the work of Kennedy-Moore and Watson (1999; 2001) will be used to provide a theoretical foundation for this line of enquiry.

**Theoretical Framework: Emotional Expression and Self-Presentation**

An exploration of the theories of emotional expression put forth by Kennedy-Moore and Watson (1999; 2001) provide some theoretical rationale for why levels of self-presentation in EW participants may affect treatment outcome. In their Process Model of Expression and Nonexpression, for instance, the authors describe a “series of cognitive-evaluative steps that are driven by affective experience and in turn influence that experience” (p. 8), as well as several disruptions that can occur at each step. Although the stages may vary in the order in which they are experienced and individuals may cycle through them repeatedly, the process often involves a progression through prereflective reaction, conscious perception of response, labeling and interpretation of response, evaluation of response as acceptable, and perceived social context for expression. Most important to the current analysis is the final step in the process, where individuals must decide whether their social environments allow for the expression of emotions. It is at this stage where the anticipation of an undesired response from others can facilitate nonexpression.

As discussed, those individuals who have a strong motivation to engage in impression management are especially concerned with how they will be viewed by others. Thus, they are more likely to inhibit expression when the expression is expected to lead to impressions that they perceive as undesirable, an idea that is at least partially supported in the empirical research (for a review, see Farber, 2003). It follows that this disruption at the final stage of the Process Model
will disproportionately lead to nonexpression in those who are highly concerned with certain
kinds of self-presentation. In their description of goal-based models of personality, Kennedy-
Moore and Watson (1999) provide examples of goals and traits that are associated with
expression, nonexpression or both. They identify the goal of social approval, for instance, as
being linked with the expression of socially desirable emotions and nonexpression of socially
undesirable emotions. It can be reasoned, thus, that those with a strong propensity for impression
management will, on average, engage in full emotional expression less often than their
counterparts with less self-presentational goals, as they are likely to express only those emotions
that are congruent with their desired impressions.

When considering this idea in light of the research into EW by Pennebaker and others,
one may question whether these individuals will also experience less positive gains following the
task. More specifically, results of these studies have consistently shown that emotional
expression, and not a description of facts alone, is a necessary ingredient of the EW task
(Pennebaker & Beall, 1986). Moreover, positive gains following EW have been found to be
associated with negative affect immediately following the writing sessions, suggesting that the
experience of at least some distress when writing is helpful in bringing about positive gains
(Smyth, 1998). Accordingly, it appears as though the expression of both desirable (i.e., positive
and/or compatible with desired impressions) and undesirable emotions (i.e., negative and/or
incompatible with desired impressions) increases the likelihood that EW will be beneficial. Since
the theoretical literature suggests that relatively high impression managers will fully express their
emotions less often than their counterparts, it seems logical to infer that these individuals will
also experience less positive outcomes following the EW task.
In addition to engaging in emotional expression less often, those high in self-presentational motives may experience discomfort in the expression of positive and/or negative emotions, since the expression may be discordant with the impressions they wish to convey. This discomfort and reluctance to express makes it less likely, even when these individuals do express, that they will experience therapeutic benefits (Kennedy-Moore & Watson, 2001). Overall, the potential increase in discomfort with disclosure and concealment in those who are relatively likely to engage in self-presentational strategies may not allow for the reduction in distress about distress, facilitation of insight, and positive change in interpersonal relationships; Since, according to Kennedy-Moore and Watson (2001), these are all possible mechanisms through which emotional expression alleviates distress, this idea provides further theoretical evidence for the idea that self-presentation may affect the successful outcome of the EW task.

A review of the theoretical literature on self-presentation, psychotherapy and expressive writing suggests that levels of self-presentation may affect the therapeutic success of an EW task. Further support for this notion can be found in some of the empirical research on self-presentation and psychotherapy.

**Self-Presentation and Psychotherapy**

Currently, theorists generally accept the notion that self-presentation, whether conscious or unconscious, deliberate or inadvertent, is a prominent feature of all interpersonal interactions. In concordance with this school of thought, the psychotherapeutic interaction can be seen as necessarily involving a dynamic interplay of impression management motives and behaviors between therapists and their clients (Kelly, 2000). Research investigating this perception of psychotherapy has lent considerable support to these claims, often finding that clients do present themselves differently in accordance with how they wish to be seen and what their goals are for
the interaction (Kelly, Kahn, & Coulter, 1996). Subsequently, although no studies to date directly address the issue, some researchers have begun to undertake studies that provide insight into how self-presentation may affect the process and outcome of psychotherapy.

It has been repeatedly demonstrated, for instance, that many clients attempt to conceal negative information about themselves (Farber, 2003) or negative emotions (Kennedy-Moore & Watson, 1999) from their therapists. Several explanations are offered for this phenomenon, including the need for privacy, being unready to confront a problem or being uncomfortable with the power imbalance in therapy (Hill, Gelso, & Mohr, 2000). The tendency to conceal, however, is likely to be at least partially explained by the need for clients to create certain impressions of themselves in the eyes of their therapists (Hill et al., 1993; Kelly, 2000). Research into the consequences of client concealment in therapy has produced some mixed yet promising results. Kahn, Achter, and Shambaugh (2001), for instance, examined the effects of self-concealment on psychotherapy outcome using self-report measures completed by 45 college counselling centre clients. Results indicate that the tendency to disclose is significantly associated with a decrease in the levels of client perceived stress and symptomatology over the course of therapy. Similarly, in an earlier study conducted by Wright and colleagues (1985), it was found that the satisfaction of individual therapy group members, as well as the group as a whole, was negatively related to the amount of things (including emotions) left unsaid.

Interestingly, research undertaken by Kelly (1998) has led her to refute these findings. In her study, 42 outpatients undergoing therapy in a hospital setting were assessed for psychological distress, social desirability, the tendency to self-conceal and actual concealment behavior in therapy. Overall results support those of Kahn and colleagues (2001), showing that higher levels of self-concealment is associated with less symptom improvement. After controlling for initial
symptomatology, social desirability and a general propensity for keeping secrets, however, Kelly (1998) found that clients who kept more secrets from their therapists tended to report a reduction in symptoms significantly greater than their disclosing counterparts. Although this has led her to conclude that self-disclosure may result in more negative therapeutic outcomes, this notion has been vehemently argued against by other researchers in the field. Hill, Gelso and Mohr (2000), for instance, argue that the lack of clinical experience of many of the therapists used in these studies caused them to be less comfortable and more anxious when clients disclosed negative information. Consequently, these therapists may have responded less effectively, leading to more negative outcome when self-disclosures were high. Hill and colleagues (2000) also identify general methodological problems with Kelly’s (1998) study and their own studies which did not find a positive correlation between self-disclosure and therapy outcome (e.g., Hill et al., 1993), arguing that the differing definitions and content of concealments, settings, time-frames and participant characteristics makes the results questionable.

A recent review by Farber (2003) does little to settle the dispute, but does offer some endorsement of the idea that self-presentation can act as a moderator in psychotherapy. In reviewing the research, the author cites his own findings (Farber & Sohn, 2001) of a nonsignificant positive correlation between self-disclosure in therapy and positive outcome. The authors did, however, report that client self-disclosure was significantly positively associated with increased self-understanding. This finding is especially important, as this has been proposed as a possible mechanism of action in the EW task (Kennedy-Moore & Watson, 1999). More specifically, Kennedy-Moore and Watson (1999; 2001) suggest that, rather than being universally beneficial, emotional self-disclosure may only be helpful when it leads to resolution or to new insights and understanding. This takes into account the influence of the quality of the
expression, which is in contrast to the more linear models proposed by other theorists. Overall, the research findings are inconsistent about whether increased disclosure in therapy leads to positive outcomes.

Recently, researchers have begun to investigate how those high in perfectionistic self-presentation (a particular form of impression management) fare in therapy. Perfectionistic self-presentation refers to the attempt to create in others the impression that one is perfect (Hewitt et al., 2003). This differs from traditional perfectionism in that it is largely an interpersonal construct, referring only to the need to appear perfect to others and not to the desire to actually be perfect. As with self-presentation in general, perfectionistic self-presentation can be categorized as either protective or assertive (Flynn, 2001). Those who score highly on measures of this form of impression management are thought to be likely to employ a wealth of self-presentation strategies; for instance, these individuals might use self-promotion to highlight their accomplishments or facework to excuse any behavior that could be viewed as negative. The three main self-presentational strategies associated with perfectionistic self-presentation are self-promotion, nondisplay of imperfection and nondisclosure of imperfection (Hewitt et al., 2003). Accordingly, perfectionistic self-presentation can be viewed as a special case of the more general construct of self-presentation; those who engage in perfectionistic self-presentation selectively draw from the set of available self-presentational strategies. Information regarding the associations between perfectionistic self-presentation and therapeutic process and outcome, thus, may provide insight into to the effects that self-presentation in general has in these domains.

The literature on the topic overwhelmingly supports the notion that perfectionistic self-presentation has a negative effect on the experience of psychotherapy. Hewitt and colleagues (2008), for example, used several outcome measures to assess the effects of trait perfectionism
and perfectionistic self-presentation on a sample of 90 participants undergoing a clinical interview. Results indicate that those who scored relatively highly on measures of perfectionistic self-presentation experienced more distress and less interview satisfaction than those who scored lower. In addition, those with higher levels of perfectionistic self-presentation were found to have significantly increased heart rates when past mistakes were being discussed. These findings are in line with previous studies by Flynn (2001), who found that perfectionistic self-presentation is associated with higher numbers of missed therapy sessions and an increase in anxiety late in therapy, and Habke (1998), who reported that those high in perfectionistic self-presentation experienced more disappointment following a clinical interview and had an increased perception of threat from the therapist.

Based on the research investigating client concealment and perfectionistic self-presentation, there is reason to believe that the levels of self-presentation of clients may affect the process and outcome of psychotherapy. One may speculate, thus, that self-presentation may play a role in the effectiveness of the expressive writing task designed by James Pennebaker and colleagues (Pennebaker & Beall, 1986).

**Self-Presentation and Expressive Writing**

As with self-presentation and psychotherapy, there is a lack of research that directly assesses the effects of self-presentation in EW. There are, however, several studies that shed considerable light on the topic. Pennebaker, Kiecolt-Glaser and Glaser (1988), for example, had participants undergoing an EW task rate the extent to which they had actively held back the information included in their written disclosures from others. Results indicate that those who were labelled high-disclosers (i.e., those who had expressed previously held secrets in the EW task) showed gains in immune responsiveness that were significantly greater than those who
were deemed low-disclosers and those in a control group. This supports the extension of findings on self-concealment in psychotherapy to the EW task; if those high in impression management are less likely to disclose, and disclosure is positively associated with outcome in an EW task, then it follows that high impression managers may experience less positive outcomes than low impression managers. Although psychotherapy and EW differ in that psychotherapy involves interpersonal interaction, the self-presentational motives that limit self-disclosure in therapy may still influence self-disclosure in EW to some degree.

Since impression managers are highly concerned with how they will be perceived by others, the audience of disclosure (i.e., who reads what is written) may also play a role in the effectiveness of EW for this population. The theoretical literature appears to be divided on the topic, offering theories as to why an audience may facilitate or hinder positive outcomes. Smyth and Pennebaker (1999), for instance, posit that forming a narrative of a traumatic event leads to a reorganization of the emotions experienced and of the event itself. Based on this idea, Clark (1993) argues that, since distress disclosures targeted to an audience require more comprehensive and chronological accounts of experience, they will result in stronger narratives and, subsequently, more positive therapeutic outcomes. Kunkel (2001) further suggests that disclosing to an audience increases the likelihood that individuals will consider the perspectives of others, leading to reappraisals and changes in understanding of the event.

Pennebaker and colleagues (Harber & Pennebaker, 1992; Pennebaker et al., 1987), contrarily, argue that the presence of an audience increases the likelihood that disclosers will inhibit the expression of emotions. Since emotional expression is so important to the EW task (Pennebaker & Beall, 1986), the presence of an audience will likely result in more negative outcomes. As well, the possibility that individuals will not be candid when they think their
disclosures will be examined may lead to decreases in perspective taking, forming new understandings, and reappraisals of distressing events. This may be due to the belief that the audience being disclosed to will negatively evaluate the discloser, leading to more negative impressions (Pennebaker, 1997; Shortt & Pennebaker, 1992). Overall, Kunkel (2001) speculates that individuals disclosing only to themselves will be less inhibited and therefore more able to benefit from the positive outcomes associated with emotional expression in the EW task.

When considering the theoretical perspectives on the audience of disclosure in light of self-presentational theory, it is logical to conclude that the presence of an audience will disproportionately lead to negative outcomes for high self-presenters in the EW task. This is because, relative to low self-presenters, these individuals are exceedingly concerned with how others will perceive them and are highly motivated to engage in behaviors designed to manage their impressions. Knowing that their disclosures will be examined by others is likely to cause the high self-presenters to inhibit expression and, thus, relinquish the positive therapeutic gains that they may have otherwise experienced. The empirical research regarding audience of disclosure in EW lends some support to this notion, but produces mixed results.

In Frattaroli’s (2006) meta-analysis of 146 studies involving experimental disclosure, for instance, the moderating role of the audience of disclosure in studies that did not directly manipulate this variable was examined. This analysis reveals that studies where disclosures were turned in to experimenters (i.e., had an audience) had significantly smaller psychological health effect sizes ($r = 0.050$) than those where the disclosures were kept private ($r = 0.178$). It is speculated that this may be attributable to the participants’ increased concern with self-presentation when their disclosures were going to be reviewed (Hall, 2005, as cited in Frattaroli, 2006). These results should be interpreted with caution, however, since the significance of the
difference in effect sizes disappeared when the location of disclosure was controlled; the studies where disclosures were kept private were more likely to have participants writing from home, and writing from home has been found to be correlated with better outcome.

Randomized control trials that investigate the effects of audience on EW have provided some support for the conclusions of Frattaroli’s (2006) meta-analysis, though results are inconsistent. In an early study by Pennebaker and colleagues (1987), 48 students were randomly assigned to one of two groups, both of which required them to talk aloud about extremely distressing events. In one condition, participants were alone in a room and spoke into a tape recorder, while in the other condition the participants spoke to an anonymous individual behind a curtain. Results show that, in comparison to those who spoke into a tape recorder (i.e., no audience), participants who disclosed to an audience (i.e., an anonymous experimenter) had significantly higher skin conductance levels, increased inhibition in the expression of feelings and less beneficial health outcomes. An experiment by Raval (2000), however, had conflicting findings. In her study, 78 undergraduate students who had experienced a traumatic event were assigned to one of two experimental groups: an EW group where disclosures were shared with experimenters (Trauma-Share; TS) or an EW group where disclosures were kept private (Trauma-No Share; TN). Results indicate that those in the TS group experienced significant improvements in mood as compared to those in the TN group, as well as fewer days of restricted activity following the task. In a similar study, Kunkel (2001) failed to replicate these findings, showing no differences on any psychological or physiological measures between participants who were told their writing would be reviewed by the investigators and those who were told that their writing was for themselves. The validity of these findings, however, can be called into questions due to the author’s use of brief intervals (ranging from 7 to 25 days) between posttests.
Since it is generally believed that the true effects of EW unfold over time (Pennebaker, Colder, & Sharp, 1990), the measures administered at follow-up may have failed to capture changes that had not yet crystallized.

When considering the disparate effects found regarding audience of disclosure in the EW task, it is important to take into account the fact that none of the studies directly tested for participants’ levels of self-presentation. Though some studies report an overall positive effect of audience, this may reflect the positive effects of audience on low self-presenters but fail to capture the differing outcomes experienced by high self-presenters. Accordingly, the current study addresses this limitation and helps to fill this gap in the literature.

**Purpose**

Current research into expressive writing has attempted to identify variables that may moderate the effectiveness of the task. Based on the potential links found between self-presentation, psychotherapy and EW, as well as the theoretical framework described by Kennedy-Moore and Watson (1999; 2001), it seems reasonable to speculate that levels of self-presentation may have an effect on the outcome of an EW task for trauma survivors. The purpose of the current study, therefore, was to examine whether there is an association between levels of self-presentation and outcome following an EW task.

**Hypothesis**

It is hypothesized that baseline scores of self-presentation will be a moderator of improvements on outcome measures in the EW task, such that scores on measures of self-presentation will be inversely related to treatment outcome.
Chapter 2:  
Method

Participants

Overall, 43 participants for this study were recruited from the community. Two of these participants failed to attend all four sessions, resulting in a 95% retention rate and a sample size of 41 participants. In order to be included in this study, participants were required to meet the following eligibility criteria:

1. identify as having experienced a past traumatic event (excluding bereavement);
2. be currently experiencing distress as a result of this event;
3. be fluent in English;
4. report no use of a personal diary for the past 12 months;
5. not currently be involved in psychotherapy or on any psychotropic medications.

As well, individuals who were deemed at risk or indicated an urgent need for assistance were excluded from the study and given an appropriate referral.

Demographic data indicating age, sex, marital status, amount of previous disclosure and previous experience with psychotherapy and psychotropic mediation was collected (see Tables 1 and 2). Ages of participants ranged from 19 to 62, with a mean age of approximately 32 years and a standard deviation of approximately 11 years. Of the total sample, 43.9% were male ($n = 18$) and 56.1% were female ($n = 23$). With regards to marital status, the vast majority of participants were single ($n = 33, 80.4$%), with six participants (14.5%) either married or in a common law relationship and two participants (4.8%) who were divorced. Participants also varied in their level of previous disclosure about their traumatic experiences, with eight participants (19.5%) having never disclosed before, 18 participants (43.9%) disclosing a little,
nine participants (21.9%) disclosing a moderate amount and six participants (14.6%) disclosing a lot. Participants were also asked about previous psychotherapy experience and whether they had ever taken psychotropic medications. Sixteen participants (39%) reported having been involved in psychotherapy at some point in their lives, while five participants (12.5%) reported having taken psychotropic medications in the past. Participants in the EW and Control groups did not significantly differ in any of these domains.

Table 1

*Age of Participants in the Expressive Writing (n = 22) and Control (n = 19) Groups*

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<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>M</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
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<td>N</td>
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Measures

Baseline Measures

**Self-Presentation Tactics Scale (SPTS; Lee et al., 1999).** The SPTS is a self-report measure that was developed to assess the individual tendency for using 12 self-presentation tactics that have been identified as either defensive or assertive. Defensive tactics included in the scale are excuse, justification, disclaimer, self-handicapping, and apology, which can all be considered part of Friedlander and Schwartz’s (1985) category of facework. Assertive strategies incorporated into the scale are ingratiating, intimidation, supplication, entitlement, enhancement, blasting, and exemplification. Participants were asked to rate 63 items on a Likert-type scale ranging from 1 (very infrequently) to 9 (very frequently), depending on how often they engage in certain self-presentation behaviors. Ratings were then totalled to get 12 subscale scores as well as an overall self-presentation score. Research has found that the SPTS has good psychometric properties, demonstrating a high internal reliability ($\alpha = 0.94$), high internal consistency ($\alpha = 0.93$), high test-retest correlations ($r = 0.89$), and high construct validity (Lee et al., 1999).

**Perfectionistic Self-Presentation Scale (PSPS; Hewitt et al., 2003).** The PSPS is comprised of 27-items that use self-reports to assess the three main components of perfectionistic self-presentation: self-disclosure, non-display of imperfections, and non-disclosure of imperfections. Items were rated on a Likert scale ranging from 1 (disagree strongly) to 7 (agree strongly). Ratings were used to determine a score for each subscale as well as an overall perfectionistic self-presentation score. An empirical analysis of the scale reveals coefficient alphas ranging from .75 to .90 (Habke, Hewitt, & Flett, 1999). As well, a multitude of studies involving both university and clinical subjects conducted by Hewitt and colleagues (2003) have “supported the multidimensionality, internal reliability, test-retest reliability, predictive validity,
convergent validity, incremental validity and discriminate validity of the PSPS” (Hewitt et al., 2008, p. 100).

**Psychological and Physical Outcome Measures**

*Posttraumatic Diagnostic Scale (PDS; Foa, 1996).* The PDS is a 49-item self-report measure of posttraumatic stress related symptoms that participants can endorse experiencing over the past month. Participants rated whether or not they have experienced a particular symptom and, if they have, they rated the severity of that symptom. Symptom severity scores range from 0-51, with scores below 10 considered mild, from 10-20 considered moderate, from 21-35 considered moderate to severe, and scores above 35 regarded as severe. In addition to providing an overall score, the PDS provides scores that correspond to each of the symptom clusters characteristic of PTSD (i.e., reexperiencing, avoidance/emotional numbing, and hyperarousal). Research has demonstrated that the PDS symptoms severity scale has good psychometric properties, with high test-retest reliability (.83), high internal consistency (.92), and high convergent validity. The PDS was administered at baseline as well as at follow-up to measure changes in symptoms of posttraumatic stress.

*Beck Depression Inventory, Second Version (BDI-II; Beck, Steer, & Brown, 1996).* The BDI-II is a 21-item self-report measure of current depression related symptoms. It measures symptoms related to the cognitive, affective, motivational, and physiological aspects of depression. Each item consists of four statements that reflect severity level, and participants are asked to select a statement that best reflects their feelings and experiences from the past two weeks. This measure has been repeatedly used and has been shown to have good to excellent psychometric properties in terms of test-retest reliability, internal consistency, and convergent
and divergent validity. The BDI-II was administered at baseline as well as follow-up to measure changes in depressive symptomatology.

*Pennebaker Inventory of Limbic Languidness (PILL; Pennebaker, 1982).* The PILL is a 54-item self-report measure of common physical symptoms and sensations. The PILL was scored by summing up the total number of items that are endorsed to have occurred at least once every month. Research has demonstrated that two-month test-retest reliability ranges from .79-.83, and cronbach’s alpha ranges from .88-.91. According to data collected on a college sample, the mean score of the PILL is 17.9 (SD = 4.5). The PILL was administered at baseline as well as follow-up to measure changes in physical health symptomatology.

**Other Measures**

*Demographic.* A number of demographic information variables were collected during the baseline measure session (see Appendix A). These included: age, gender, marital status, education, occupation, primary language used to speak/write, ethnicity, previous treatment/medication use, amount of previous disclosure about their traumatic experience, amount of time that the traumatic experience occurred for, and the number of years since last exposed to the trauma.

*Manipulation check questionnaire.* This was administered at one-month follow up. On 7-point rating scales ranging from “not at all” to “a great deal”, participants answered six questions pertaining to the extent to which their writing was personal, emotional, difficult to do, disclosing, beneficial, and valuable to them (see Appendix B).

*Open-ended question.* For exploratory purposes, an open ended question was included at the end of the study (see Appendix C). This allowed participants to indicate why they thought that the writing was or was not helpful in dealing with their trauma.
Procedure

Recruitment

The overwhelming majority of participants for this study were recruited through advertisements placed online. Specifically, contact information, select study details and the inclusion criteria were posted on free websites that use a classifieds style of advertising, such as Craigslist and Kijiji (Appendix D). Individuals who browse these websites and who came across the advertisement were encouraged to call our office if they were interested in participating or to pass the information along to others who might be eligible. Further, a group was created on the online social networking site Facebook in order to generate interest and disseminate information about the study. Individuals with Facebook accounts who came across the group (either by chance or invitation) were presented with the same information as the online classified advertisements, with the added option of “joining” the group and inviting friends. It was made explicitly clear that joining the group was not necessary, and that the purpose of doing so would be solely for passing along the information. At its height, the group reached a total of 190 members. In addition to the online campaign, other more traditional means of recruitment were also utilized. Posters, for instance, were put up in various public locations around an urban area in Southern Ontario (Appendix E).

Screening

Interested individuals who contacted the investigators via the office number provided were given a very brief explanation of what the study would entail. Prior to asking any questions pertaining to the eligibility criteria, individuals were informed that their answers to these questions would be used to determine whether they could be included in the study. When consent to continue was given, potential participants were screened using the inclusion criteria. Those
who were deemed ineligible were informed that the tasks in the study were not suitable for their particular needs, and were given specific information in regards to why their particular answers made them ineligible. A comprehensive list of emergency contact resources was also offered (Appendix F). Individuals who did meet the eligibility criteria were provided with further details of the study and scheduled to come into the offices on three consecutive days. Once booked, participants were assigned the next available identification number; participants assigned to odd numbers were placed into the expressive writing (experimental) group, and those assigned to even numbers were placed into the control group.

**First Session**

Participants arriving for their first sessions were told to meet the experimenter in the lobby of a university building. Participants were then brought to one of two private testing rooms. Both rooms were made to look exactly alike, with each containing two chairs, one desk, a box of tissues and a container holding pens, pencils and an eraser. Upon arriving in the testing room, the experimenter provided participants with a consent form (Appendix G), explained the main issues, and offered to answer any questions or address any concerns. Once the consent form was signed, participants were instructed to work through the questionnaire package in order and were left alone in the room to do so. When the questionnaires were complete (approximately 40 minutes later), participants were instructed to place them into a confidential envelope. They were then provided with their first writing task (either EW or control) as well as a blank booklet to write in. The experimenter informed participants that there would be a knock on the door 20 minutes later and that this was the signal to stop writing.

Once participants began the writing session, the experimenter would bring the questionnaire package to a research assistant, who did not know the name or any other
information about the individual being tested. It was the responsibility of the research assistant to check for suicide risk as indicated by the BDI-II. Protocol dictated that participants scoring either a two (indicating “I would like to kill myself”) or a three (indicating “I would kill myself if I had the chance”) on question number nine were considered to be at risk. In these cases, one of the principal investigators was to intervene in the study, pay the participant for the current session, and work together with him or her to figure out the most appropriate next steps (e.g., community referral, contacting the authorities). Fortunately, there were no participants who were deemed to be at risk, so this course of action was never taken.

Once the 20 minutes expired, the experimenter would enter the room and ask participants to place their writing into an envelope. The experimenter would once again bring the materials to the research assistant so the writing could be screened for risk. Essays were checked for content relating to suicidal or homicidal intent, and research assistants were instructed to inform one of the principle investigators if there was the possibility of risk. If there was reason to believe that a participant may be a risk to themself or to someone else (i.e., this was suggested in the writing), the same protocol would be followed as outlined above in regards to risk on the BDI-II. As with the BDI-II, no risk was ever identified and this course of action was never taken. Before ending the session, participants were compensated ten dollars ($10.00), were given the list of emergency contact resources and were reminded of their sessions on the following days.

Second and Third Sessions

On the second and third days of the experiment, participants again met the experimenter and were brought into one of the private testing rooms. They were then given the next set of writing instructions that corresponded to their group as well as a blank writing booklet. Writing procedures then followed those outlined above for session one. At the end of the third session,
participants were booked for their one month follow-up session and were informed that they would receive a reminder call a week before the session was to take place.

**Follow-up**

The fourth and final session took place an average of approximately 29 days following the third session, with a range between 26 and 50 days. In this session, participants were asked to work through the series of follow-up questionnaires (approximately 30 minutes). When the questionnaires were complete, the experimenter would provide participants with a debriefing form (Appendix H); while this was being read, the experimenter would once again bring the materials to a research assistant so that the BDI-II could be checked for risk. When no risk was determined (as was always the case), the experimenter would fully debrief the participant, providing information about the purpose, the different writing conditions, and the main hypotheses of the study. A copy of all writing instructions for both groups was also offered, along with another copy of the emergency contact list. Participants were then given as much time as they desired to ask any questions about the study. For those who were interested, email addresses were collected for the purpose of sending the results of the study once all analyses were complete. Before ending the session, participants were compensated the final ten dollars ($10.00) and were informed that, for finishing the study, they would be entered into a draw to win a one hundred dollar ($100.00) cash prize.

**Writing Conditions**

The writing instructions used closely resemble those outlined by Sloan and her colleagues (e.g., Sloan, Marx, Epstein, & Lexington, 2007; see Appendix I). For the control condition, participants were asked to write on three consecutive days about how they use their time. Each set of instructions stressed that the writing was to be as objective and factual as possible, with no
reference to thoughts or emotions. Specifically, on the first day participants were instructed to write about what they did the day before, from the moment they woke up to the moment they went to bed. On the second day they were instructed to write about what they had done on the present day since waking up. Lastly, on the third day they were asked to write about what they will be doing over the coming week.

For the EW condition, participants were asked to write on three consecutive days about the most traumatic event that they have ever experienced. In their writing, they were instructed to explore their deepest emotions and thoughts related to the experience. On the first day participants were encouraged to write about the event itself and how it may have affected them in various ways. On the second day they were instructed to continue writing about the same traumatic event, exploring their deepest thoughts and emotions. On the third day participants were instructed to continue writing about the same traumatic event, with a focus on how it continues to affect them currently.
Chapter 3:
Results

Description of Sample

The minimum, maximum, mean, standard deviation, skewness and kurtosis for measures of self-presentation and all outcome measures at Time 1 and Time 2 are presented in Table 3. The descriptive information for both the Pre BDI and Post BDI are based on a sample size of 40 participants due to the elimination of one univariate outlier. Univariate outliers were defined as any data point falling either 3.29 standard deviations above or below the mean (i.e., z-score larger than 3.29). In addition, both Pre PILL and Post PILL scores were found to be in violation of assumptions of normality. Accordingly, the Ln transformation was applied in order to correct the distribution. All subsequent analyses involving PILL scores are estimated using these transformed values.

Table 3
Descriptive Statistics for Measures of Self-Presentation and Outcome Measures (N = 41)

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<th>Variable</th>
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<td>Post PDS</td>
<td>0.00</td>
<td>40.00</td>
<td>15.80</td>
<td>10.58</td>
<td>.42</td>
<td>-.64</td>
</tr>
</tbody>
</table>

Note. *n = 40 due to the elimination of a univariate outlier (Pre BDI = 49, Post BDI = 50).
**Relationships Between Variables**

To examine the relationships between self-presentation and outcome, Pearson correlations were computed (see Table 4). The SPTS and the PSPS are significantly correlated, \( r_{(41)} = .398, p < .01 \). This suggests that participants who show more variety and/or frequency of self-presentation tactics are more likely to have a strong desire to appear perfect to others. In addition, SPTS is significantly correlated with the PILL both at Time 1, \( r_{(41)} = .333, p < .05 \), and Time 2, \( r_{(41)} = .321, p < .05 \). PSPS is also significantly correlated with PILL scores, though only at Time 1, \( r_{(41)} = .351, p < .05 \). This indicates that higher use and/or more variety of self-presentation tactics are associated with more physical symptoms of stress both at baseline and at follow-up, and that higher levels of perfectionistic self-presentation are associated with more physical symptoms of stress at baseline only. Finally, scores on the PSPS correlated significantly with scores on Pre BDI, \( r_{(41)} = .313, p < .05 \), suggesting that those who are higher in perfectionistic self-presentation are more likely to report higher levels of depression at baseline.

To examine the relationship between outcome measures, Pearson correlations were also computed (see Table 4). Scores on Pre PDS are significantly correlated with scores on BDI both at Time 1, \( r_{(40)} = .613, p < .01 \) and Time 2, \( r_{(40)} = .526, p < .01 \), indicating that more variety and/or higher severity of symptoms of posttraumatic stress at baseline predict higher depression scores both at baseline and follow-up. Scores on Post PDS are also correlated with Post BDI scores, \( r_{(40)} = .486, p < .01 \), meaning that symptoms of posttraumatic stress at follow-up are positively associated with symptoms of depression at follow-up. With regards to physical symptoms of stress, scores on Pre PILL are significantly correlated with scores on the PDS at Time 1, \( r_{(41)} = .373, p < .05 \) and Time 2, \( r_{(41)} = .486, p < .01 \). This indicates that more physical symptoms of stress at baseline are associated with more symptoms of posttraumatic stress both at
baseline and at follow-up. Finally, scores on the Post PILL are significantly correlated with scores on the Post BDI, $r_{(40)} = .363$, $p < .05$, indicating that symptoms of stress at follow-up are associated with symptoms of depression at follow-up.

Table 4

Intercorrelations between Measures of Self-Presentation and Outcome Measures (N = 41)

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SPTS</td>
<td></td>
<td>.398**</td>
<td>.176</td>
<td>.236</td>
<td>.333*</td>
<td>.321*</td>
<td>.111</td>
<td>.106</td>
</tr>
<tr>
<td>2. PSPS</td>
<td></td>
<td></td>
<td>.313*</td>
<td>.244</td>
<td>.351*</td>
<td>.235</td>
<td>.162</td>
<td>.249</td>
</tr>
<tr>
<td>3. Pre BDI$^a$</td>
<td></td>
<td></td>
<td></td>
<td>.489**</td>
<td>.290</td>
<td>.103</td>
<td>.613**</td>
<td>.220</td>
</tr>
<tr>
<td>4. Post BDI$^a$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.269</td>
<td>.363*</td>
<td>.526**</td>
<td>.486**</td>
</tr>
<tr>
<td>5. Pre PILL$^b$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.816**</td>
<td>.373*</td>
<td>.486**</td>
</tr>
<tr>
<td>6. Post PILL$^b$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.169</td>
<td>.304</td>
</tr>
<tr>
<td>7. Pre PDS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.659**</td>
</tr>
<tr>
<td>8. Post PDS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. $^a n = 40$ due to the elimination of a univariate outlier (Pre BDI = 49, Post BDI = 50).

$^b$Values derived from natural logarithm (Ln) transformation to correct for violations in assumptions of normality.

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

Comparison of Groups at Baseline

In order to ensure that groups did not differ on measures of self-presentation and all outcome measures at baseline, a series of independent samples $t$-tests were performed using group (expressive writing versus control) as the independent variable and all other measures as the dependent variables. As shown in Table 5, all $t$-tests were nonsignificant. Accordingly, it can be assumed that both groups were similar on all measures at baseline.
### Table 5

*Comparison of Expressive Writing and Control Groups on Measures of Self-Presentation and All Outcome Measures (n = 22 for Expressive Writing, n = 19 for Control)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPTS</td>
<td>-.167</td>
<td>39</td>
<td>.868</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EW</td>
<td>264.27</td>
<td>79.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>268.26</td>
<td>72.52</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSPS</td>
<td>1.191</td>
<td>39</td>
<td>.241</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EW</td>
<td>113.54</td>
<td>28.80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>102.68</td>
<td>29.47</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre BDI&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-.319</td>
<td>38</td>
<td>.752</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EW</td>
<td>11.45</td>
<td>8.02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>12.22</td>
<td>6.98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre PIL&lt;sup&gt;IL&lt;/sup&gt;&lt;sub&gt;b&lt;/sub&gt;</td>
<td>-.360</td>
<td>39</td>
<td>.721</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EW</td>
<td>4.64</td>
<td>.28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>4.67</td>
<td>.33</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre PDS</td>
<td>-1.388</td>
<td>39</td>
<td>.173</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EW</td>
<td>16.45</td>
<td>8.61</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>20.68</td>
<td>10.89</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* <sup>a</sup>n = 22 for expressive writing and n = 18 for control due to the elimination of a univariate outlier.

<sup>b</sup>Values based on scores derived from natural logarithm (Ln) transformation to correct for violations in assumptions of normality.
**Self-Presentation as Moderator in EW**

As shown in Table 6, a hierarchical multiple regression was conducted to examine whether the linear combination of Pre BDI, PSPS, Group and the interaction of PSPS by Group significantly predicts scores on Post BDI. In Step 1, Pre BDI scores were found to significantly predict Post BDI scores, $R^2 = .240$, $F_{(1, 38)} = 11.973$, $p < .01$. This indicates that Pre BDI accounts for 24% of variance in Post BDI scores. In Step 2, PSPS, Group (expressive writing versus control) and the interaction of PSPS by Group were found to significantly predict Post BDI scores, controlling for Pre BDI scores, $R^2 = .425$, $F_{(1, 38)} = 6.456$, $p < .01$. Accordingly, the linear combination of all four predictors explained 42.5% of the variance in Post BDI scores. The additional contribution of the linear combination of PSPS, Group and the PSPS by group interaction over and above Pre BDI scores significantly increased the explained variance in Post BDI scores by 18.5%, $\Delta R^2 = .185$, $F_{(3, 35)} = 3.75$, $p < .05$.

Examining the regression coefficients in Step 2, it is evident that Pre BDI scores significantly predict Post BDI scores, such that one unit change in Pre BDI is associated with a .415 unit change in Post BDI scores, controlling for all other predictors. Similarly, a one unit increase in PSPS scores is significantly associated with a .108 unit increase in Post BDI scores, controlling for Pre BDI, Group, and the PSPS by Group interaction. Moreover, being in the expressive writing group was found to predict a significant decrease of 5.213 units in Post BDI scores, controlling for all other predictors. Finally, the PSPS by Group interaction was found to predict a .123 unit decrease in Post BDI scores, controlling for all other predictors. This effect, however, approaches but does reach significance ($p = .068$). Looking at standardized coefficients, or beta weights, it can be seen that PSPS is the most influential predictor of Post BDI scores, followed by Pre BDI, Group, and then the interaction of PSPS by Group.
With regards to self-presentation, these findings suggest that those individuals who scored higher on perfectionistic self-presentation at baseline showed significantly higher levels of depressive symptoms at follow-up than those who scored relatively low. This relationship held even after baseline depressive symptoms were taken into account. Contrarily, a trend emerged suggesting that those in the EW group who scored higher on perfectionistic self-presentation showed significant decreases in depressive symptoms at follow-up compared to those in the control group.

Table 6
Summary of Hierarchical Regression Analysis for Predicting Post BDI Scores Using Pre BDI, PSPS, Group, and the PSPS by Group Interaction in the Model (N = 40)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre BDI</td>
<td>.481**</td>
<td>.139</td>
<td>.489</td>
</tr>
<tr>
<td>Intercept</td>
<td>10.300</td>
<td>1.029</td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre BDI</td>
<td>.415**</td>
<td>.134</td>
<td>.422</td>
</tr>
<tr>
<td>PSPS</td>
<td>.108*</td>
<td>.049</td>
<td>.432</td>
</tr>
<tr>
<td>Group</td>
<td>-5.213**</td>
<td>1.914</td>
<td>-.357</td>
</tr>
<tr>
<td>PSPS x Group</td>
<td>-.123</td>
<td>.065</td>
<td>-.355</td>
</tr>
<tr>
<td>Intercept</td>
<td>13.466</td>
<td>1.419</td>
<td></td>
</tr>
</tbody>
</table>

Note. B = partial regression coefficient; SE B = standard error of B; β = standardized regression coefficient; \( R^2 = .240 \) for Step 1 \( (p < .01) \); \( \Delta R^2 = .185 \) for Step 2 \( (p < .05) \). *\( p < .05 \), **\( p < .01 \).
As shown in Table 7, a hierarchical multiple regression was conducted to examine whether the linear combination of Pre PDS, PSPS, Group and the interaction of PSPS by Group significantly predicts scores on Post PDS. In Step 1, Pre PDS scores were found to significantly predict Post PDS scores, $R^2 = .434, F_{(1, 39)} = 29.866, p < .01$. This indicates that Pre PDS accounts for 43.4% of variance in Post PDS scores. In Step 2, Pre PDS, PSPS, Group (expressive writing versus control) and the interaction of PSPS by Group significantly predicted Post PDS scores, $R^2 = .715, F_{(1, 39)} = ., p < .01$. Accordingly, the linear combination of all four predictors explained 71.5% of the variance in Post PDS scores. The additional contribution of the linear combination of PSPS, Group and the PSPS by group interaction over and above Pre PDS scores, however, was nonsignificant, $\Delta R^2 = .078, F_{(3, 36)} = 1.913, p > .05$.

Examining the regression coefficients in Step 2, it is evident that Pre PDS scores significantly predict Post PDS scores, such that one unit change in Pre PDS is associated with a .642 unit change in Post PDS scores, controlling for all other predictors. Similarly, a one unit increase in PSPS scores is significantly associated with a .149 unit increase in Post PDS scores, controlling for Pre PDS, Group, and PSPS by Group interaction. The effect of expressive writing was nonsignificant, controlling for all other predictors. Finally, the PSPS by Group interaction predicts a .166 unit decrease in Post PDS scores, controlling for all other predictors. This effect, however, approaches but does reach significance ($p = .062$). Looking at standardized coefficients, or beta weights, it can be seen that Pre PDS is the most influential predictor of Post PDS scores, followed by PSPS, and then the interaction of PSPS by Group.

With regards to self-presentation, these findings suggest that those individuals who scored higher on perfectionistic self-presentation at baseline showed significantly higher levels of posttraumatic stress at follow-up than those who scored relatively low. This relationship held
even after baseline symptoms were taken into account. Contrarily, a trend emerged suggesting that those in the EW group who scored higher on perfectionistic self-presentation showed significant decreases in symptoms of posttraumatic stress at follow-up compared to those who scored higher on perfectionistic self-presentation in the control group.

Table 7

*Summary of Hierarchical Regression Analysis for Predicting Post PDS Scores Using Pre PDS, PSPS, Group, and the PSPS by Group Interaction in the Model (N = 41)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre PDS</td>
<td>.708**</td>
<td>.130</td>
<td>.659</td>
</tr>
<tr>
<td>Intercept</td>
<td>15.805</td>
<td>1.260</td>
<td></td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre PDS</td>
<td>.642**</td>
<td>.132</td>
<td>.597</td>
</tr>
<tr>
<td>PSPS</td>
<td>.149*</td>
<td>.064</td>
<td>.412</td>
</tr>
<tr>
<td>Group</td>
<td>-2.062</td>
<td>2.576</td>
<td>-0.098</td>
</tr>
<tr>
<td>PSPS x Group</td>
<td>-.166</td>
<td>.086</td>
<td>-.330</td>
</tr>
<tr>
<td>Intercept</td>
<td>17.306</td>
<td>1.863</td>
<td></td>
</tr>
</tbody>
</table>

*Note. B = partial regression coefficient; SE B = standard error of B; β = standardized regression coefficient; R² = .434 for Step 1 (p < .01); ΔR² = .078 for Step 2 (ns).
*p < .05, **p < .01.*
As shown in Table 8, a hierarchical multiple regression was conducted to examine whether the linear combination of Pre PILL, PSPS, Group and the interaction of PSPS by Group significantly predicts scores on Post PILL. In Step 1, Pre PILL scores were found to significantly predict Post PILL scores, \( R^2 = .667, F_{(1, 39)} = 77.998, p < .01 \). This indicates that Pre PILL accounts for 66.7% of variance in Post PILL scores. In Step 2, Pre PILL, PSPS, Group (expressive writing versus control) and the interaction of PSPS by Group significantly predicted Post PILL scores, \( R^2 = .707, F_{(1, 39)} = 21.682, p < .01 \). Accordingly, the linear combination of all four predictors explained 70.7% of the variance in Post PILL scores. The additional contribution of the linear combination of PSPS, Group and the PSPS by group interaction over and above Pre PILL scores, however, was nonsignificant, \( \Delta R^2 = .040, F_{(3, 36)} = 1.637, p > .05 \).

Examining the regression coefficients in Step 2, it is evident that Pre PILL scores significantly predict Post PILL scores, such that one unit change in Pre PILL is associated with a .923 unit change in Post PILL scores, controlling for all other predictors. Further, being in the expressive writing group was found to predict a decrease of 1.125 units (or .118 units in Ln transformed values) in Post PILL, controlling for all other predictors. This effect, however, approaches but does not reach significance (\( p = .068 \)). Finally, PSPS and the PSPS by Group interaction were nonsignificant.

With regards to self-presentation, these findings suggest that baseline levels of perfectionistic self-presentation have no effect on physical symptoms of stress at follow up regardless of group.
### Table 8

*Summary of Hierarchical Regression Analysis for Predicting Post PILL Using Pre PILL, PSPS, Group, and the PSPS by Group Interaction in the Model (N = 41)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre PILL</td>
<td>.919**</td>
<td>.104</td>
<td>.816</td>
</tr>
<tr>
<td>Intercept</td>
<td>4.624</td>
<td>.031</td>
<td></td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre PILL</td>
<td>.923**</td>
<td>.110</td>
<td>.820</td>
</tr>
<tr>
<td>PSPS</td>
<td>.001</td>
<td>.002</td>
<td>.079</td>
</tr>
<tr>
<td>Group</td>
<td>-.118</td>
<td>.063</td>
<td>-.174</td>
</tr>
<tr>
<td>PSPS x Group</td>
<td>-.002</td>
<td>.002</td>
<td>-.136</td>
</tr>
<tr>
<td>Intercept</td>
<td>4.693</td>
<td>.046</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* B = partial regression coefficient; SE B = standard error of B; β = standardized regression coefficient; \( R^2 = .667 \) for Step 1 (\( p < .01 \)); \( \Delta R^2 = .040 \) for Step 2 (ns).

Values based on PILL scores derived from natural logarithm (Ln) transformation to correct for violations in assumptions of normality.

*p < .05, **p < .01.*
As shown in Table 9, a hierarchical multiple regression was conducted to examine whether the linear combination of Pre BDI, SPTS, Group and the interaction of SPTS by Group significantly predicts scores on Post BDI. In Step 1, Pre BDI scores were found to significantly predict Post BDI scores, $R^2 = .240$, $F_{(1, 38)} = 11.973, p < .01$. This indicates that Pre BDI accounts for 24% of variance in Post BDI scores. In Step 2, Pre BDI, SPTS, Group (expressive writing versus control) and the interaction of SPTS by Group significantly predicted Post BDI scores, $R^2 = .358$, $F_{(1, 38)} = 4.887, p < .01$. Accordingly, the linear combination of all four predictors explained 35.8% of the variance in Post BDI scores. The additional contribution of the linear combination of SPTS, Group and the SPTS by Group interaction over and above Pre BDI scores, however, was nonsignificant, $\Delta R^2 = .119$, $F_{(3, 35)} = 2.160, p > .05$.

Examining the regression coefficients in Step 2, it is evident that Pre BDI scores significantly predict Post BDI scores, such that one unit change in Pre BDI is associated with a .442 unit change in Post BDI scores, controlling for all other predictors. Similarly, being in the expressive writing group was found to predict a significant decrease of 4.535 units in Post BDI, controlling for all other predictors. Finally, SPTS and the SPTS by Group interaction were nonsignificant.

With regards to self-presentation, these findings suggest that baseline levels of self-presentation tactics have no effect on depressive symptoms at follow up regardless of group.
Table 9
Summary of Hierarchical Regression Analysis for Predicting Post BDI Using Pre BDI, SPTS, Group, and the SPTS by Group Interaction in the Model (N = 40)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre BDI</td>
<td>.481**</td>
<td>.139</td>
<td>.489</td>
</tr>
<tr>
<td>Intercept</td>
<td>10.300</td>
<td>1.029</td>
<td></td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre BDI</td>
<td>.442**</td>
<td>.135</td>
<td>.449</td>
</tr>
<tr>
<td>SPTS</td>
<td>.012</td>
<td>.022</td>
<td>.117</td>
</tr>
<tr>
<td>Group</td>
<td>-4.535*</td>
<td>1.987</td>
<td>-.310</td>
</tr>
<tr>
<td>SPTS x Group</td>
<td>.003</td>
<td>.028</td>
<td>.022</td>
</tr>
<tr>
<td>Intercept</td>
<td>12.802</td>
<td>1.474</td>
<td></td>
</tr>
</tbody>
</table>

*Note. B = partial regression coefficient; SE B = standard error of B; β = standardized regression coefficient; R² = .240 for Step 1 (p < .01); ΔR² = .119 for Step 2 (ns).
*p < .05, **p < .01.
As shown in Table 10, a hierarchical multiple regression was conducted to examine whether the linear combination of Pre PDS, SPTS, Group and the interaction of SPTS by Group significantly predicts scores on Post PDS. In Step 1, Pre PDS scores were found to significantly predict Post PDS scores, $R^2 = .434$, $F_{(1, 39)} = 29.866$, $p < .01$. This indicates that Pre PDS accounts for 43.4% of variance in Post PDS scores. In Step 2, Pre PDS, SPTS, Group (expressive writing versus control) and the interaction of SPTS by Group significantly predicted Post PDS scores, $R^2 = .439$, $F_{(1, 39)} = , p < .01$. Accordingly, the linear combination of all four predictors explained 43.9% of the variance in Post PDS scores. The additional contribution of the linear combination of SPTS, Group and the SPTS by group interaction over and above Pre PDS scores, however, was nonsignificant, $\Delta R^2 = .005$, $F_{(3, 36)} = .117$, $p > .05$.

Examining the regression coefficients in Step 2, it is evident that Pre PDS scores significantly predict Post PDS scores, such that one unit change in Pre PDS is associated with a .700 unit change in Post PDS scores, controlling for all other predictors. The SPTS, Group, and the SPTS by Group interaction were nonsignificant.

With regards to self-presentation, these findings suggest that baseline levels of self-presentation tactics have no effect on symptoms of posttraumatic stress at follow up regardless of group.
Table 10

*Summary of Hierarchical Regression Analysis for Predicting Post PDS Using Pre PDS, SPTS, Group, and the SPTS by Group Interaction in the Model (N = 41)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre PDS</td>
<td>.708**</td>
<td>.130</td>
<td>.659</td>
</tr>
<tr>
<td>Intercept</td>
<td>15.085</td>
<td>1.260</td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre PDS</td>
<td>.700**</td>
<td>.139</td>
<td>.651</td>
</tr>
<tr>
<td>SPTS</td>
<td>.013</td>
<td>.027</td>
<td>.091</td>
</tr>
<tr>
<td>Group</td>
<td>-.910</td>
<td>2.682</td>
<td>-.043</td>
</tr>
<tr>
<td>SPTS x Group</td>
<td>-.014</td>
<td>.036</td>
<td>-.077</td>
</tr>
<tr>
<td>Intercept</td>
<td>16.279</td>
<td>1.944</td>
<td></td>
</tr>
</tbody>
</table>

*Note. B = partial regression coefficient; SE B = standard error of B; β = standardized regression coefficient; R² = .434 for Step 1 (p < .01); ΔR² = .005 for Step 2 (ns).**p < .01.
As shown in Table 11, a hierarchical multiple regression was conducted to examine whether the linear combination of Pre PILL, SPTS, Group and the interaction of SPTS by Group significantly predicts scores on Post PILL. In Step 1, Pre PILL scores were found to significantly predict Post PILL scores, $R^2 = .667$, $F_{(1, 39)} = 77.998$, $p < .01$. This indicates that Pre PILL accounts for 66.7% of variance in Post PILL scores. In Step 2, Pre PILL, SPTS, Group (expressive writing versus control) and the interaction of SPTS by Group significantly predicted Post PILL scores, $R^2 = .704$, $F_{(1, 39)} = 21.390$, $p < .01$. Accordingly, the linear combination of all four predictors explained 70.4% of the variance in Post PILL scores. The additional contribution of the linear combination of SPTS, Group and the SPTS by group interaction over and above Pre PILL scores, however, was nonsignificant, $\Delta R^2 = .037$, $F_{(3, 36)} = 1.507$, $p > .05$.

Examining the regression coefficients in Step 2, it is evident that Pre PILL scores significantly predict Post PILL scores, such that one unit change in Pre PILL is associated with a .923 unit change in Post PILL scores, controlling for all other predictors. Further, being in the expressive writing group was found to predict a decrease of 1.127 units (or .120 units in Ln transformed values) in Post PILL, controlling for all other predictors. This effect, however, approaches but does not reach significance ($p = .060$). Finally, SPTS and the SPTS by Group interaction were nonsignificant.

With regards to self-presentation, these findings suggest that baseline levels of self-presentation tactics have no effect on physical symptoms of stress at follow up regardless of group.
Table 11

Summary of Hierarchical Regression Analysis for Predicting Post PILL Using Pre PILL, SPTS, Group, and the SPTS by Group Interaction in the Model (N = 41)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>SE $B$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre PILL</td>
<td>.919**</td>
<td>.104</td>
<td>.816</td>
</tr>
<tr>
<td>Intercept</td>
<td>4.624</td>
<td>.031</td>
<td></td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre PILL</td>
<td>.882**</td>
<td>.109</td>
<td>.784</td>
</tr>
<tr>
<td>SPTS</td>
<td>.001</td>
<td>.001</td>
<td>.125</td>
</tr>
<tr>
<td>Group</td>
<td>-.120</td>
<td>.062</td>
<td>-.176</td>
</tr>
<tr>
<td>SPTS x Group</td>
<td>-.001</td>
<td>.001</td>
<td>-.092</td>
</tr>
<tr>
<td>Intercept</td>
<td>4.688</td>
<td>.045</td>
<td></td>
</tr>
</tbody>
</table>

*Values based on PILL scores derived from natural logarithm (Ln) transformation to correct for violations in assumptions of normality.

**$p < .01$.**
Chapter 4: Discussion

Overall, the hypotheses for this research study were not supported. Specifically, self-presentation and perfectionistic self-presentation were not found to act as moderators of outcome in the Expressive Writing task. Findings do indicate, however, that there were some associations between self-presentation and reports of distress.

Participants in both the EW and control groups who use self-presentation tactics more frequently, for instance, reported more physical symptoms of stress both before writing and one month following the final writing session. Similarly, those participants who are highly concerned with appearing perfect to others reported more physical symptoms of distress as well as higher levels of depression before the writing task. Together, these findings indicate that those individuals who are more concerned with their impressions may be at higher risk for experiencing ongoing negative symptomatology following a traumatic event. This appears to fit within the theoretical literature, and is largely congruent with the theories of emotional expression put forth by Kennedy-Moore and Watson (1999; 2001). Specifically, relative to their counterparts who are less concerned with impression management, these individuals may express emotions less often and experience increased discomfort when expressing emotions that are discordant with their desired impressions.

Many theories of emotional expression do purport that such expression can lead to psychological and physical well-being. It has been suggested, for instance, that self-disclosure helps to form a narrative to strengthen cognitive-affective integration (Park & Blumberg, 2002), to habituate the fear/anxiety response (Sloan & Marx, 2004), to enhance positive emotional reflection (King, 2001) and to increase affect regulation abilities (Smyth, Nazarian, & Arigo,
The findings from this study, however, suggest that these beneficial effects will occur less frequently in those who are highly concerned with self-presentation, leading to higher incidences of depressive symptoms and physical symptoms of stress. This idea is supported by much empirical research and is in line with many of the studies examining the effects of emotional self-disclosure on psychological and physical well-being (Farber & Sohn, 2001; Flynn, 2001; Habke, 1998; Hewitt et al., 2008; Kahn, Achter, & Shambaugh, 2001; Wright et al., 1985). Further, these findings are in accord with the assertion that emotional expression is only beneficial if it is accompanied by a sense of resolution or shift (Kennedy-Moore & Watson, 1999; 2001). High self-presenters may have experienced less beneficial outcome by virtue of their relative inability to express emotions in a way that may facilitate such shift.

In addition, since disclosure to others about an experienced traumatic event may be more limited in and/or more uncomfortable for those who are highly concerned with impressions, these individuals may be less able to access social support surrounding a traumatic event than those who are less concerned. More specifically, the increased need for social approval and the fear of being evaluated in an undesirable manner may restrict help-seeking behaviors and thus reduce access to interpersonal support systems. A relative lack of social support is likely to lead to some negative consequences (or the absence of benefit), as social support has been repeatedly shown to be related to posttraumatic growth (for a review, see Prati & Pietrantoni, 2009). By not sharing the experience with others, the high self-presenters were likely unable to experience the same benefit from interpersonal support systems as those who did share their experience.

Further to the correlations between self-presentation and negative symptomatology, perfectionistic self-presentation was also found to have a significant effect on whether participants improved following their writing. Specifically, increased attempts and motivation to
appear perfect to others were associated with increases in both depressive symptoms and symptoms of posttraumatic stress following the writing tasks in both the EW and control groups. This relationship held even after controlling for these symptoms prior to writing sessions (i.e., at baseline). Again, this finding fits within the theoretical framework put forth by Kennedy-Moore and Watson (1999; 2001); these individuals are likely to have disclosed less and, when they did disclose, may have experienced marked discomfort. Important here is that, regardless of whether participants were placed into the EW or control groups, the writing instructions explicitly called for a high level of self-disclosure. Accordingly, the option of not disclosing was only open to those who were willing to overtly ignore the instructions. This may help to explain why participants with relatively high levels of perfectionistic self-presentation experienced decreases in well-being rather than simply remaining stable; individuals who would normally avoid self-disclosing were essentially forced to do so, and thus may have experienced more discomfort than their counterparts. There is support for this notion in the empirical literature, which finds that perfectionistic self-presentation is associated with negative therapeutic experiences (Flynn, 2001; Habke, 1998; Hewitt et al., 2008).

With regards to the moderation effect of self-presentation on outcome following the EW task, no significant results emerged. There were, however, two relationships that approached significance and that may represent notable trends. Namely, higher levels of perfectionistic self-presentation showed some association with decreases in reports of depressive symptoms and symptoms of posttraumatic stress in the EW group but not control. The lack of significant findings for a moderation effect may reflect several methodological shortcomings of the current study.
Limitations

First, the measures used to assess self-presentation may not have accurately tapped into the desired constructs. The Self-Presentation Tactics Scale (Lee et al., 1999), for instance, measures the tactics that one might use to achieve a desired impression. Although it covers many of the most popular and heavily researched tactics, it does not represent an exhaustive list. Accordingly, those who use tactics other than those included on the SPTS may have scored in the lower range on self-presentation despite being highly concerned about their impressions. Similarly, individuals who have a strong desire to construct desirable identities but do not reflect this in overt behavior would score in the lower range of self-presentation, making them appear as though this desire is not present. Thus, despite having similar experiences as those who scored in the higher range (e.g., discomfort with expression), these individuals would have been deemed low self-presenters. Finally, individuals may use self-presentation tactics for purposes other than constructing desirable identities. Apologies, for instance, can be used to enhance the self-esteem of another individual rather than protecting personal identity. In cases such as these, higher scores on measures of self-presentation may reflect a construct other than the need for impression management.

As well, while they are among the simplest methods of obtaining information from participants, measures that rely on self-report data come with some significant drawbacks. Most prominently, these types of questionnaires are prone to many types of response bias (Stone et al., 2000). Participants, for instance, might deliberately or inadvertently answer questions in ways that they believe are expected of them, or may manipulate their answers in order to create specific impressions. In the current study, this problem may be exacerbated by the fact that one of the major variables that was examined was the motivation to manage impressions using
several tactics or to appear perfect to others. Individuals who are high in these characteristics may show an increase in biased responses, as the “true” responses might not mesh with the impressions that they are trying to create. Accordingly, the measures might not accurately reflect changes in symptomatology in two ways. First, participants high in self-presentation may underplay or exaggerate their symptoms in order to avoid negative evaluation or to garner sympathy, respectively. Thus, any changes in symptomatology would not accurately represent the effects of the writing task. Second, participants who have a strong desire to appear perfect may be at an increased likelihood of altering their responses in order to conform to what they speculate the study’s hypotheses are. If it is assumed that writing about a traumatic event should bring about positive changes, for example, then these individuals may purposely report improvements on outcome measures regardless of whether any change has actually taken place. Accordingly, the relationships discovered could be the product of biases in responding rather than true relationships.

Another aspect of the study design that may have limited the ability to obtain significant results was the requirement that a research assistant read all of the participants’ written disclosures. Although participants never met this research assistant and no personal identification information was ever shared, participants were told about the procedure as part of the informed consent process. Thus, participants were aware that their written self-disclosures, while remaining anonymous, would be subject to some judgment. Although this may not elicit the same type or intensity of self-presentation behavior as might be seen with disclosure to others or when written self-disclosures are overtly judged, this may have caused participants who are concerned with impression management to withhold information from their writing or to write in ways that are congruent with their desired impressions. Accordingly, the possible negative
effects of expressing emotions that are not in line with desired impressions would not emerge, causing the high self-presenters to perform as well as low self-presenters. This effect might have been significantly lessened had the requirement to read the essays not been present. If, for instance, participants were allowed to take their essays home after writing, they may have felt more freedom to explore emotions that conflict with the public impression they wish to create.

Aside from the methodological shortcomings, this study may also have been limited by the small sample size, which reduced the possibility of obtaining significant findings. As well, the limited sample size did not allow for analyses using the various subscales of the self-presentation measures, which may have revealed some important effects. Overall, a larger sample would help to determine whether there are other effects that did not emerge in this study and would increase the ability to determine whether nonsignificant trends represent notable findings.

**Future Directions**

In the future, research addressing the relationship between self-presentation and self-disclosure would benefit from certain methodological changes. First, a larger sample size (e.g., 40 participants per group) would allow for more confidence in results obtained. This would also permit analyses using various subscales, which may permit more nuanced findings to emerge. Second, follow-up sessions that extend past one month would be beneficial in determining whether changes in symptoms persist over time. Since benefits from self-disclosure may weaken or intensify in the period after writing, this would be crucial in determining whether EW promotes any lasting changes in psychological and physical well-being. Third, participants could be checked for risk (e.g., suicidal intent) in person before the writing takes place. This would eliminate the need for essays to be read, likely giving participants more freedom to be fully
disclosing in their writing. Fourth, measures assessing the desire to construct certain identities could be used in conjunction with measures that assess the use of self-presentation tactics. This would help to ensure that those with a motivation to present themselves in certain ways will not be inaccurately labelled as low self-presenters. Lastly, measures that directly assess levels of comfort while writing could be added in order to more overtly assess whether high self-presenters are more uncomfortable when being emotional expressive. By empirically testing whether those who are relatively high in the desire to manage their impressions experience more discomfort when expressing emotions, relevant theories can be more directly addressed.
References


Appendix A
Demographic Information

Age: _______________
Gender: _____________

Marital Status: □ Single
□ Common Law
□ Married
□ Divorced
□ Widowed

Highest level of Education Completed: □ Some high school
□ High school diploma
□ Some university / college
□ Associate Degree
□ Bachelors Degree
□ Advanced Degree

Occupation: ____________________________________________________________

Primary language: _______________________________________________________

Ethnicity: ______________________________________________________________

Previous psychotherapy experience: _____________________________ or N/A
Previous psychotropic medication(s): ________________________________________ or N/A

Amount of previous disclosure about trauma: □ None
□ Little
□ Moderate
□ A lot

Amount of time the traumatic experience occurred for (in days / months / years): __________
Amount of time since the trauma occurred (in days / months / years): _________________
Appendix B

Manipulation Check Questionnaire

Listed below are a group of statements that address the writing that you have completed in this study. Please rate the extent to which you feel each statement corresponds with your writing experience. If you do not feel that the statement corresponds with your experience at all, circle 1. If you feel that the statement corresponds a great deal, circle 7. If you feel somewhere in between, circle any of the numbers between 1 and 7. Please respond honestly, since there are no right or wrong answers.

1            2            3            4            5            6            7
Not at All   Somewhat     A Great Deal

1. I feel that my writing was personal ................................................ 1    2    3    4    5    6    7

2. I feel that my writing was emotional ........................................... 1    2    3    4    5    6    7

3. I found it difficult to write ............................................................. 1    2    3    4    5    6    7

4. I feel that my writing was disclosing ............................................. 1    2    3    4    5    6    7

5. I feel that my writing was beneficial .............................................. 1    2    3    4    5    6    7

6. I feel that my writing was valuable ................................................ 1    2    3    4    5    6    7
Appendix C

Open Ended Question

Do you feel that your writing was helpful in dealing with your trauma? If so, please explain why you think it may have helped.

______________________________________________________________________________
______________________________________________________________________________
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Appendix D

Online Advertisement

You are invited to participate in a research study being conducted by Justin Mattina, M.A., Ph.D. candidate, and Jonathan Danson, B.A., M.A. candidate, from the department of Adult Education and Counselling Psychology at the Ontario Institute for Studies in Education at the University of Toronto. This study is being conducted under the supervision of Dr. Jeanne Watson, Ph.D., C.Psych.

The purpose of this study is to investigate the process of recovering from a trauma. If you have ever experienced an event that YOU would consider traumatic (e.g., bullying, assault, accident, robbery, injury, witness to a trauma, etc.), and are currently feeling some distress related to this event, you may be eligible to participate. Qualifying participants must also meet the following criteria:

1) Between the ages of 18 and 65
2) Able to speak, write and read English fluently
3) Have not written in a personal diary for at least 12 months
4) Do not identify the death of a loved one as the traumatic event
5) Not currently involved in psychotherapy
6) Not currently taking any psychotropic medications (e.g., antidepressants)
7) Not currently at risk of harming yourself or another individual

Qualifying individuals who participate in all phases of the study will be compensated $40, and be entered into a draw to win an additional $100. Participation will involve coming to our offices at OISE/UT, located at 252 Bloor Street West (Bloor & St. George).

If you are interested in participating or have any questions, please contact us at 416-978-0702. If you know anyone who might be interested, we would appreciate it if you would pass along this message.

Thanks!
Participants Needed

To take part in a study investigating the process of recovering from a traumatic event

Have you ever experienced an event that you would consider traumatic (e.g., bullying, assault, accident, robbery, injury, witness to a trauma)? Does this event still cause you to feel some distress? If so, you may be eligible to take part in this research.

Qualifying participants must also meet the following criteria:

1) Between the ages of 18 and 65
2) Able to speak, write, and read English fluently
3) Have not written in a personal diary for at least 12 months
4) Do not identify the death of a loved one as the traumatic event
5) Not currently involved in psychotherapy
6) Not currently taking any psychotropic medications (i.e., antidepressants)
7) Not currently at risk of harming yourself or another individual

Qualifying participants will be compensated $40 and will have the chance to win an additional $100 upon completion.

Interested? Please call 416-978-0702
Appendix F

Emergency Contact Resources

If you feel that you are need of assistance, please refer to the numbers below. **Helplines** should be called if you wish to talk to someone anonymously, or if you would like advice on what to do next. **Hospital emergency rooms** should be called and/or visited if you feel that you are at risk for harming yourself, harming someone else, or if you feel you cannot cope with your current distress. **University counselling centres** should be called and/or visited if, during regular business hours, you would like to schedule a future appointment with a counsellor or if you are interested in obtaining resources that might help with your distress (e.g., information booklets). **Crisis teams** should be contacted if you feel you are in need of immediate assistance and are not sure what to do next.

**Helplines**

**Kids Helpline (up to age 20)**
1-800-668-6868

**Assaulted Women’s Helpline**
1-866-863-0511

**Sexual Abuse Hotline**
416-597-8808

**Distress Centres of Toronto**
416-408-4357

**Telehealth Ontario**
1-866-797-0000
Hospital Emergency Rooms

North York General
(Sheppard & Leslie)
416-756-6001

Humber River Regional
(400 & Finch)
416-747-3833

St. Michael’s
(Yonge & Queen)
416-864-5346

Toronto Western
(Bathurst & Dundas W)
416-603-5757

Scarborough General
(Lawrence & McCowan)
416-431-8200 ext. 6300

Toronto General
(College & University)
416-340-3946

York Central
(Major MacKenzie, between Bathurst and Yonge)
905-883-2041

Centre for Addiction and Mental Health
(Queen & Ossington)
416-979-6855

Hamilton General
(Barton, between Wellington and Victoria)
905-521-2100
University Counselling Centres

Ryerson University Centre for Student Development and Counselling
(Jogenson Hall, Room 07)
416-979-5195

University of Toronto Counselling and Learning Skills Service
(Koffler Student Services Centre, Room 111)
416-978-7970

York University Counselling and Development Centre
(Bennett Centre for Student Services, Room N110)
416-736-5297

McMaster University Centre for Student Development
(McMaster University Student Centre, B107)
905-525-9140

Crisis Teams

Durham Mental Health Services
1-800-742-1890 or 905-666-0483

The Gerstein Centre
(Toronto)
416-929-5200

The Integrated Community Mental Health Crisis Response Program
(North York and Etobicoke)
416-498-0043

Peel Crisis Team
905-278-9036

Scarborough Mobile Crisis Team
416-289-2434

York Support Services
310-2673

Crisis Outreach and Support Team
(Hamilton)
905-972-8338
Appendix G
Consent Form

Exploring the Effects of Writing on Recovery from Trauma

You are invited to participate in a research study being conducted by Justin Mattina, M.A., Ph.D. student, and Jonathan Danson, B.A., M.A. student, from the department of Adult Education and Counselling Psychology at the Ontario Institute for Studies in Education at the University of Toronto. This study is being conducted under the supervision of Dr. Jeanne Watson, Ph.D., C.Psych. Results obtained will contribute to the thesis and dissertation of the investigators.

If you have any questions or concerns about the research, please feel free to contact the above researchers at 416-978-0702, or Dr. Jeanne Watson at 416-978-0705. In emergency situations, please refer to the Emergency Contact List provided.

PURPOSE OF THE STUDY

The purpose of this study is to investigate the role that writing may play in the process of recovering from trauma. We intend to have different people write about different topics to determine which types of writing instructions might be most beneficial.

PROCEDURE

This study will consist of 3 parts:

1. Questionnaires

   In the first session, participants will complete a series of written questionnaires, which will take approximately 35 minutes.

2. Writing

   Participants will be asked to complete three 20-minute writing sessions, one on each of three consecutive days. The first writing session will begin today after participants complete the series of questionnaires that will be provided. Details regarding the topic to be written about will be provided to the participant prior to the initial writing session. All writing sessions will take place here at the University of Toronto in one of our private office spaces. After the writing has taken place, and you have filled out a short questionnaire, you will be asked to submit your essay and questionnaire in an envelope which will not be looked at by your primary experimenter. Although we prefer to have you submit your essay(s), if you chose not to have anyone read it you may keep it and take it home with you.
3. Follow up

At the end of the third writing session a follow-up appointment will be set, which will take place approximately one-month from the third session. This session will be dedicated to filling out a series of questionnaires. Completion of the questionnaires will take approximately 35 minutes; since these are invaluable to the research study, it is important that participants intend to complete all phases of the experiment. Upon completion, participants will have the opportunity to learn more about the study, and will be provided with all instruction sets used within the study. Additionally, when the data collection phase of the study is complete and the results are analyzed, participants will be emailed information about which instruction set was most beneficial and other related findings of the study.

PARTICIPATION AND WITHDRAWAL

Participation in this study is voluntary. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also exercise the option of removing your data from the study or refusing to submit your essay(s) at any time. You may also refuse to answer any questions you don’t want to answer and still remain in the study.

CONFIDENTIALITY

Any data obtained through this study is confidential and will be kept in a locked cabinet, which is accessible only to the experimenters and the supervisor Psychologist. The participant number that was previously assigned will act as the only identifying marker on any work submitted. Additionally, when submitting information to the experimenter, participants will be provided with an envelope in which all questionnaire data and writing packages will be placed. As such, all participants and the work they submit will remain anonymous and unknown to the experimenter. The one exception to this is if your writing/questionnaires indicate that you intend to harm yourself or others. In cases like this, we are legally and ethically bound to match your ID number with your name and inform the authorities to ensure the safety of you and others. It is important to mention, however, that your particular experimenter will not read any of your questionnaire or writing materials. Instead, a research assistant, who you will never meet, will review your materials immediately after they are submitted. We will only match your ID number with your name if the research assistant believes it is legally/ethically necessary. This is the only case in which your experimenter will be alerted and asked to read your essay/questionnaires and be aware that it is yours.
POTENTIAL RISKS AND DISCOMFORTS

Participants in the study may experience some emotional or physical distress. This distress, however, is usually minimal and short lived. In case this occurs, a list of emergency and other contact resources will be provided.

In addition, the therapeutic value of this study to participants may vary depending on which set of writing instructions they are given. Upon study completion, however, all participants will be given all instruction sets that were used in our study. Also, once data is collected and analyzed, you will be able to gain information about which instruction set was deemed to be most beneficial.

PAYMENT FOR PARTICIPATION

Participants in this study will be compensated ten dollars ($10.00) for each writing session attended and the follow up session. Accordingly, participants who complete the study will receive a total of forty dollars ($40.00).

In addition, participants who take part in the one-month follow up session will be entered into a draw to win a one hundred dollar ($100.00) cash prize.

RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time and discontinue participation without penalty. Results obtained through this study will be made available upon request. If you have questions regarding your rights as a research participant, please contact:

Office of Research Ethics
University of Toronto
McMurrich Building, 3rd Floor
12 Queens Park Crescent West
Toronto, ON, M5S 1S8
Telephone: 416-946-3273
Fax: 416-946-5763
E-mail: ethics.review@utoronto.ca
I, __________________________________ have read and understood the information above, and give my consent to participate in the current study. As well, I agree to have the data collected used for future projects, including scholarly presentations, journal articles and research studies (to be conducted under the supervision of Dr. Jeanne Watson and/or Justin Mattina, M.A.).

NOTE: all data used for future projects, presentations, or journal articles will ensure anonymity by removing all identifying information.

I also acknowledge that a copy of this form has been provided to me.

Please sign and date below if you agree to all of the above conditions.

_________________________________                                    _________________________________  
Signature                                                                           Date
Appendix H

Debriefing Form

Thank you for participating in the final phase of the study. Your commitment to completing all portions of our study is greatly appreciated.

As stated earlier, the purpose of this study is to investigate the role that writing may play in recovery following a traumatic event. Specifically, we are interested in examining whether expressive writing (EW) is helpful to people who are experiencing ongoing distress. Some studies have found that writing about a traumatic event can be beneficial for some people. We wanted to investigate the effect of different instructions. In this study, one group was asked to write about an assigned topic that did not relate to a previously experienced traumatic event in a factual, non-emotional way, while the second group was asked to describe a previously experienced traumatic event with as much emotion as possible. The goal is to determine whether instructions that ask for emotionally expressive writing leads to greater self-reported changes on measures of mood, emotional processing, physical symptoms, and bodily sensations than general instructions to write. Secondly, we are investigating whether writing emotionally about a traumatic event is influenced by a participant’s level of self-presentation and emotional processing.

Given the two groups received different writing instructions, we are going to provide you with the instructions for both groups used within our study so that you can use either one on your own at home. We will also provide you with a summary of the findings of this study, including which instruction sets were beneficial, when we have completed our investigation. If you have any questions about the instructions, please feel free to contact the researchers at the number provided.

For completing the final phase of the study, your name has been entered into a draw to win a one hundred dollar ($100.00) cash prize. The draw will take place as soon as all participants have completed the study, and you will be contacted if you are the winner.

Thank you again for all of your help in completing this study!!

If you have any further comments, questions, or concerns feel free to contact the experimenters at 416-978-0702, or Dr. Jeanne Watson at 416-978-0705.
Appendix I

Writing Instructions

Instructions given to all participants

This study is an extremely important project looking at the effects of writing. Over the next three days, you will be asked to write about one of two different topics for 20 minutes each day. You will be situated in a private location where you will be left alone to write after reading the instructions. The person who takes you to the office will close the door: this will be your sign to begin writing. At the end of 20 minutes of writing, the experimenter will knock on the door to let you know that the 20 minutes is up. At this point we would like for you to stop writing, and to place your essay in the envelope provided.

The only rule we have about your writing is that you write continuously for the entire time. If you happen to run out of things to say, just repeat what you have already written. In your writing, don’t worry about grammar, spelling, or sentence structure. Just write. Different people will be assigned to write about different topics so it is important that you refrain from discussing this experiment with anyone. Because it is a rigid experiment, we can’t tell you what other people are writing about or anything about the predictions of the experiment. Once the study is complete, however, we will tell you everything. Another thing to mention is that sometimes people feel a little sad or anxious after writing. If this occurs, it is completely normal. Most people say that the feelings go away within a couple of hours. If at any time during the experiment you feel upset or distressed and would like to talk to a trained counsellor, please contact Dr. Jeanne Watson, Justin Mattina, or Jonathon Danson immediately, or call the crisis telephone number which will be provided to you.

One last thing to mention is that your writing is completely anonymous and confidential. Your information is coded with an ID number, so please refrain from writing your name anywhere in the booklet. Some people in the past have preferred that nobody read their writing. This is OK. However, we do prefer that you turn in your writing samples, as we are interested in what people write. I promise that your experimenter will not be able to link your writing to you. The one exception to this is if your writing indicates you intend to harm yourself or others. In cases like this, we are legally bound to match your ID with your name and inform the authorities to ensure the safety of you and others. In order to do this and respect your privacy we will have a research assistant (in which you will not meet) read your essays once you submit your information, and only have your experimenter alerted if it is deemed legally/ethically necessary. Above all, we respect your privacy. Do you have any questions at this point? Do you still wish to participate?
Experimental Condition Writing Instructions

On the first day of Writing:

For the next 3 days, we would like for you to write about the most stressful, upsetting, and traumatic experience of your entire life. In your writing, we want you to really let go and explore your very deepest emotions and thoughts about the experience. Whatever you choose to write about, please keep in mind that it is critical that you really delve into your deepest emotions and thoughts. Ideally, we would also like you to write about a traumatic event that you have not discussed in great detail with others. Remember that you have three days to write. You might want to tie your experience to other parts of your life. How it has impacted you personally, emotionally, and socially, how it is related to your childhood and your development, the people you love, or how it has shaped who you are today and who you want to be. Again, in your writing please examine your deepest emotions and thoughts.

On the second day of Writing:

How did yesterday’s writing go? Today, we want you to continue writing about the same traumatic experience that you wrote about yesterday. Today, what is important is that you express your deepest emotions and thoughts about the experience.

On the third day of Writing:

Today is the last writing session. In your writing today, we again want you to continue writing about the most traumatic and upsetting event that you have wrote about for the last two days. Remember that today is your last writing day so you may want to wrap everything up. For instance, how is this traumatic event related to your current life situation and future? But feel free to go in any direction you feel most comfortable with. What is important is that you delve into your deepest emotions and thoughts.
Control Condition Writing Instructions

On the first day of Writing:

For the next 3 days we would like for you to write about how you use your time. Each day we will be giving you a different writing assignment on how you use your time. In your writing, we would like for you to be as objective as possible. We are not interested in your emotions or your opinions. Instead, we would like for you to be as factual and objective as possible. Feel free to be as detailed about the facts as you like. For today’s topic, describe what you did yesterday from the time you got up until the time you went to bed. For example, you may start when your alarm went off and you got out of bed. You could include the things you ate, where you went, which buildings or objects you passed by as you walked from place to place. The most important thing is that you only write objectively and factually about how you spent your time, refraining from including any information about your opinions or emotions.

On the second day of Writing:

How did yesterday’s writing go? Today, we would like you to describe what you have done today since you woke up. Again, be as objective as possible, with no description of emotions or opinions. Please describe exactly what you have done up until starting this experiment.

On the third day of Writing:

You have now written for two days and today is the last writing session. Today, we would like you to describe what you will be doing over the next week in as much detail and as accurately as possible. The most important thing is that you only write objectively and factually about this topic, refraining from including any information about your opinions or emotions.