Is expressive writing effective in decreasing depression and increasing forgiveness and emotional wellbeing of preadolescents?

La escritura expresiva: ¿Un método eficaz para reducir la depresión y facilitar el perdono y el bienestar de los preadolescentes?

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Abstract

Expressive writing (EW) can be an effective way to alter maladaptive emotional reactions to stressful life events, although little is known about how pre-adolescents may benefit from it. In this quasi-experimental study, we compared measures of depression, anger, forgiveness, positive and negative affect in pre-adolescents before and after EW in both an experimental group undergoing the EW paradigm and a control group (N=138). No significant effects between control and experimental groups were found for the considered variables, except for positive and negative affect. We suggest potential reasons accounting for these results. Given that the theorised mechanisms involved in the EW paradigm include executive functioning abilities, it is possible that preadolescents may not be able to benefit from it, due to not fully developed executive functioning skills. Our results provide useful information in order to better design future studies and prevention/intervention programmes to be implemented with preadolescents.

Key words: Expressive Writing, Pre-adolescents, Depression, Anger, Forgiveness

Introduction

Expressive Writing

Expressive writing is the process of expressing your feelings, thoughts, and experiences in written word (Pennebaker & Beall, 1986). Over the last 30 years, a growing body of literature has shown some health benefits to writing about the facts and emotions surrounding stressful and traumatic life events (Pennebaker & Chung, 2007). In the standard expressive writing intervention, over the course of four consecutive days, in daily sessions of about twenty minutes, participants are asked to write about their deepest thoughts and feelings about a negative life event (Pennebaker & Beall, 1986). This writing intervention is designed to improve emotional expression and processing, and to improve coping for stressful life events (Travagin, Margola, & Revenson, 2015). A comparison between pre- and post-assessment scales is used to isolate the effect of the expressive writing task. Studies indicate that the expressive writing intervention has small, but significant positive effects on physical and psychological health, including reduced blood pressure, improved immune system functioning, improved mood, and feelings of greater wellbeing compared to control groups (Baikie & Wilhelm, 2005; Baum & Rude, 2013; Hines, Brown, & Myran, 2016).

In a meta-analysis (Smyth, 1998), pre- and post-assessments of psychological functioning, physiological functioning, and general functioning demonstrated a significant effect size (d=.47) at a two months follow-up. In many studies, expressive writing has been found to increase blood pressure and negative moods immediately following an expressive
Forgiveness is a process implying modifications in emotions, cognitions and attitudes regarding an offender, and consists in quelling negative, aversive, or vengeful responses to interpersonal transgressions in favour of enacting positive ones. All the definitions of forgiveness entail the decrease in negative emotions toward the offender, the decrease in motivation to take revenge or to avoid the offender, and the increase in benevolent motivations (Berry, Worthington, O’Connor, Parrott, & Wade, 2005; Enright & Fitzgibbons, 2000; McCullough, Pargament, & Thoresen, 2000). Studies have demonstrated that forgiveness leads to improved affect, less psychiatric illness, and can facilitate closeness in a relationship between the transgressor and the offended (Enright & Fitzgibbons, 2000; McCullough et al., 2000). However, it has been shown that the tendency to seek retribution is ingrained in the psychology, biological, and cultural levels of human norms. For instance, scientists studying primates have noted retaliatory responses in chimpanzees against other animals that had transgressed against them, even after a considerable period of time has passed (Zechmeister & Romero, 2002). Therefore, forgiveness is theorised to be an effortful and voluntary process by which a person lets go of negative emotions against a transgressor, and subsequently cultivates positive emotions. It has been noted that reshaping intervention and prevention programs so that they include a part aimed at reducing psychopathology, and a part aimed at positive psychology (enhancing subjective well-being through forgiveness, e.g.) could be very beneficial for to those in need (Barcaccia, Schneider, Pallini, & Baiocco, 2017; Howell et al., 2016). Expressive writing can facilitate the effortful process of forgiveness by providing a platform for emotional disclosure. Some researchers have found that expressive writing paradigms that promote moderate negative affect and a focus on benefit finding may best facilitate forgiveness (King & Miner, 2000; McCullough, Root, & Cohen, 2006; Pennebaker & Chung, 2007). For instance, Harber and Wenberg (2005) found that the expression of negative emotions like anger, fear, and hurt during the expressive writing task correlated with the participant’s subjective feelings of closeness between themselves and the transgressor. Encourage writers to make the narrative meaningful: The more meaningful the narrative, the better the benefits will be. A writer is likely to experience more positive benefits from a narrative when they write about something that is especially meaningful to them (Hamby et al., 2016). Additionally, participants’ identification of the benefits of the offense, including personal meaning and meaning for the relationship are important aspects of an emotional disclosure exercise facilitating forgiveness (McCullough et al., 2006).
The second hypothesised mechanism is disinhibition/exposure, i.e. the expression of suppressed emotion: when traumatic events occur, individuals may try to block out painful thoughts and emotions associated with the event, which leads to ruminations and intrusive thoughts (Lotze, 2009). By the expressive writing paradigm’s ability to provide a platform for previously unexpressed emotion, and to stay in contact with it, it allows the individual to find closure for the event. As a result of the expression of and the exposure to suppressed thoughts and emotions, the individual is observed to experience a reduction in thoughts and emotions related to the event, as well as reduced blood pressure and muscle tension (Lotze, 2009).

The third hypothesised mechanism is self-regulation, according to which the expressive writing paradigm works by enhancing a participant’s confidence in their ability to regulate emotion (Lotze, 2009). Self-regulation is the process by which individuals come to control and modify their emotions, thoughts, and behaviours for an event (King & Miner, 2000). The self-regulation theory, therefore, suggests that the expressive writing paradigm helps individual to gain a sense of empowerment and control over their emotions, previously lost in the aftermath of a traumatic event.

In conclusion, due to a traumatic event’s ability to cause distress and promote maladaptive coping strategies, emotional disclosure and exposure to previously suppressed feelings and thoughts, is theorised to give individuals an opportunity to clarify one’s thoughts and emotions, and in turn strengthen adaptive self-regulation.

This study explored if an expressive writing paradigm can act as a cost-effective strategy to cope with interpersonal conflict in children suffering from a transgression by a friend. The expressive writing paradigm instructs participants to write for a period of twenty minutes over four consecutive sessions about a transgression, including details of the event, its consequences, and the emotional reactions it provoked in the individual. Though expressive writing has been shown to facilitate cognitive restructuring of negative events experienced in both clinical and non-clinical adult populations, less is understood about how expressive writing can help younger populations to alter their emotional reactions and experience greater psychological well-being as a result. We hypothesised that four consecutive sessions of expressive writing (every other day, during a period of one week) exercises, would decrease symptoms of anxiety, depression, and anger, and thus increase psychological health in preadolescents compared to a control group of the same age. We predicted that trait forgiveness and moral engagement would be correlated with a post-intervention reduction in levels of anger, depression, and negative affect, as well as an increase in positive affect.

Given that many of the theorised mechanisms involved in the expressive writing paradigm include executive functioning abilities, it is unclear if preadolescents may be able to benefit from its potential benefits. Studies show that adolescents only benefit marginally from the expressive writing paradigm (Travagin et al., 2015). It may be that because preadolescents do not have fully developed executive functioning skills, they may face a developmental limitation to benefitting from cognitive processing, disinhibition/exposure, or self-regulation. The experimental group was exposed to the expressive writing paradigm and instructed to write in detail about a traumatic event while the control group did not receive any intervention. We hypothesised that the expressive writing condition administered to preadolescents in the school setting would better facilitate forgiveness for a transgressor in an experimental group compared to a control group by reducing anger, depression, and negative affect.

Method

Participants

One hundred and thirty-eight participants (Females=68) between the ages of 11 and 15 attending second and third levels from junior high school in central Italy participated in the study. In terms of age there were: 8 eleven year olds, 82 twelve year olds, 42 thirteen year olds, 4 fourteen year olds, and 2 fifteen year olds. Participants were gathered from second and third levels from secondary schools in central Italy. Participants were unable to be randomly assigned due to logistical reasons, therefore statistical analysis was used to verify the homogeneity between the experimental and control groups. The statistical analyses indicated that there was no significant difference between the control and experimental samples.

Procedure

All the students completed the paper–pencil questionnaires collectively during classes, as well as the EW sessions. All procedures performed in this study were in accordance with the ethical standards of the institutional and national research committee (Department of Developmental and Social Psychology, Sapienza University of Rome, Italy) and
with the 1964 Helsinki declaration and its later amendments. Permission was obtained from the headmaster of the school and the institutional school committee, which includes teachers and parents. In conformity with Italian law, informed consent was obtained from parents of students, who brought the necessary forms home to be signed by the parents and returned to the school by the students. Pupils were assured that participation was optional, that their responses would remain anonymous, and gave informed consent. The consent rate was 97%.

Participants were first divided into two conditions: the control and the experimental. First, all subjects were administered the same psychological testing. Those in the experimental group subsequently underwent the treatment phase of the study. The intervention was administered using the following instructions: “For the exercise of writing today, we ask you to describe your deepest thoughts and feelings regarding a problem you have had with another boy / girl. In your writing, we’d like you to really let go and explore your deepest emotions and thoughts. After writing down everything that happened to you, you should write how this problem has affected the relationships that you have at school with classmates, teachers, and also with friends and family; to your past, your present or your future; or to who you have been, who you would like to be or who you are now. Don’t worry about spelling, grammar or sentence structure, this is not a school test! The only rule is that once you begin writing, you continue until the time is up.

All of your writing will be completely confidential, and no one will know what you wrote, neither teachers nor parents. If you realise after a while that you have no more ideas, try to describe in more detail what you already have written.”

After four biweekly sessions of expressive writing, at post-treatment, all participants, regardless of condition, were then administered the same psychological tests again. Six months after post-treatment, all participants were administered the psychological tests as a follow-up.

**Instruments**

**State-Trait Anger Expression Inventory-2 Child and Adolescent (STAXI-2 C/A).**

The STAXI-2 C/A (Brunner & Spielberger, 2009) is a 35 item self-report measure designed to reveal anger in children and adolescents (9-18 years old). This test is designed to measure both state and trait anger, as well as anger expression and anger control. There are five scales: State Anger, Trait Anger, Anger Expression-Out, Anger Expression-In, and Anger Control. Sample items include: “I feel like kicking somebody,” “I am hotheaded,” and “I lose my temper.” Convergent validity was found for the STAXI 2 through comparing it to two other instruments: the NAS-PI and the MAI. Cronbach alpha for the state anger subscale was found to be .79.

**Trait Forgivingness Scale (TFS).**

The TFS (Berry, Worthington, O’Connor, Parrott, & Wade, 2005) is aimed at assessing dispositional forgiveness. The scale contains 10 items, to which participants report their agreement on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). An example item is: *I can forgive a friend for almost anything.* The Cronbach alpha for this scale was found to be .72 when items 2, 4, 5, 9, and 10 were eliminated.

**Children’s Depression Inventory (CDI).**

The CDI is a 27-item, self-rated, symptom-oriented scale, which measures the severity of depressive symptoms in children aged 7-17 (Kovacs, 1992). The items are broken into 5 groups (Negative Mood, Interpersonal Problems, Ineffectiveness, Anhedonia, and Negative Self Esteem) and children indicate their level of agreement with statements by indicating 0-2. The Cronbach alpha in our sample was .81.

**Positive affect and negative affect scales (PANAS)**

The PANAS (Watson, Clark, & Tellegen, 1988) is a self-report measure of the degree to which children experience various positive and negative emotions, composed of 20 items. There are two subscales, the PA (Positive Affect) and the NA (Negative Affect). The participant rates an item (e.g. “anxious”, “happy”) on a scale from 1 to 5 (1= very slightly or not at all and 5= extremely). The Cronbach alpha for the positive affect scale from this data is .73 and for the negative affect scale is .76.

**Moral Disengagement**

The Moral Disengagement (MD) (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996) assesses proneness to MD from different forms of detrimental conduct in diverse contexts and interpersonal relationships. The full set of 32 items are divided into 8 subsets representing different moral
disengagement mechanisms. Sample items include: “To hit obnoxious classmates is just teaching them a lesson,” “Kids who get mistreated usually do things that deserve it,” and “Insults among children do not hurt anyone.”. For each of the 32 items individuals rate on a 5-point Likert-type scale their degree of acceptance of moral exonerations for such conduct on an agree-disagree continuum (from 1 = strongly disagree to 5 = strongly agree). The study found the measure to be internally valid: a tendency towards moral disengagement was positively correlated with aggressive behaviour and negatively related with pro-social behaviour. The instrument can also be considered internally reliable. Cronbach’s alpha in our study is .87.

Results

Equivalence of groups before the intervention

At the pre-intervention time point, the mean scores of the control and experimental groups for all four scales were not significantly different (p > .05). The alpha for all t-tests and repeated measures ANOVA was set at .05.

Group differences after the intervention

Anger
No significant effects were found between or within the participants on the STAXI scale.

Depression
For the CDI scale, a significant linear and quadratic effect was found for time for both groups; scores increased drastically between the pre and post intervention time points with no change at the follow-up point [F(1,50) = 2025.97; p < .001 | F(1,50) = 833.62; p < .001]. No significance was found for a group by time effect in the CDI scores.

Affect
In the scores for the Positive Affect subscale of the PANAS, a significant quadratic effect for group by time was found [F(1,104) = 8.54; p < .01]. There were no significant findings for the time interaction nor was a linear effect found for the group by time interaction. In the scores for the Negative Affect subscale, a significant time interaction quadratic effect was found [F(1,105) = 4.34; p < .05]. There was also a quadratic significant group by time interaction effect [F(1,105) = 7.42; p < .01].

Figure 1. Mean scores of Children’s Depression Inventory at pre-intervention, post intervention and follow-up.

Figure 2. Mean scores of Positive Affect (PANAS) at pre-intervention, post intervention and follow-up.
Trait forgiveness and moral disengagement as predictors of post-intervention change

Differences from scores on the CDI between pre and post intervention were negatively correlated for all participants with differences between scores on the Moral Disengagement (MD) scale ($p < .05$). There was no significant correlation found with the Trait Forgiveness scale (TFS). Differences on the scores from pre to post intervention on both the negative and positive affect subscales of the PANAS were not significantly correlated with differences in pre to post intervention responses to the MD scale and to the TFS. Similarly, there were no significant correlations among the STAXI scores and the TFS and the MD scale.

Discussion

Our study was intended to examine the effectiveness of expressive writing as a positive coping strategy for children who had experienced a transgression by a friend. The results did not support this hypothesis. Prior to the experiment, we predicted that pre-adolescents who underwent the expressive writing condition would display reduced anger, depression, and negative affect when compared to those of the control group. This hypothesis was based on the expectation that expressive writing would facilitate forgiveness for a transgression by a friend through acting as an outlet for the emotions associated with the event. The results we obtained showed little to no support for this hypothesis. We found no significant evidence that expressive writing affects anger.

We found significant modifications in positive and negative affects at post-treatment: there was a significant effect of expressive writing on positive and negative affect, both were found to decrease based on the Positive and Negative Affect Scale. Nevertheless, the decreases in positive and negative affect found after the expressive writing did not persist to the follow-up measures. Perhaps this can be explained because expressive writing is an emotional outlet that decreases all emotion immediately following an expressive writing task, with limited impact over time.

The reduction in general affect may be also due to the objective perspective that writing requires. The consideration of an event from the perspective as a writer, as opposed to a participant, may promote healthy rationalisations and cognitive processes that result from a more objective and less emotionally charged perspective. As a result, this increased objectivity towards situational factors may produce less emotion related to a specific event or situation. The exercise of re-evaluating a negative event from a more objective perspective reflects the practices of exposure therapy and cognitive processing therapy: repeatedly writing and talking about the details of the traumatic memory is not only the central therapeutic element of Prolonged Exposure (PE), but also of Cognitive Processing Therapy (CPT), two of the most effective treatments for trauma (Mott, Galovski, Walsh, & Elwood, 2015; Shipherd, Street, & Resick, 2006). In exposure therapy, mere exposure to a stimulus is shown to decrease sensitisation to the stimulus (desensitisation), and in CPT negative cognitive processes related to an event or situation are replaced with more healthy, positive processes. We hypothesise that expressive writing entails both these evidence-based interventions, and for this reason it is correlated with a decrease in general affect concerning the emotionally charged situation.

Our study also looked at correlations between trait forgiveness or moral disengagement and anger, depression, and affect changes. We found no significant correlations for most indicating that an individual’s trait forgiveness or moral disengagement does not predict their ability to benefit from the expressive writing paradigm.

In view of our results, we propose an explanation for the lack of effectiveness of the EW paradigm in preadolescents: it is hypothesised that expressive writing may be most beneficial to those with sound executive functioning, due to their ability to properly process new and stored information. Therefore, our findings may be because of the executive function differences
that exist between adult and preadolescent populations. These findings have resulted in the hypothesis that proper, higher level cognitive functioning is a requisite for clinical success of expressive writing. With this in mind, we propose that positive effects of expressive writing may rely heavily on the individual cognitive processes and abilities of the participant, and that the known cognitive differences that exist between preadolescent and adult populations most likely account for the differences between the results of previous research and the findings of this study. Overall, when narrators are capable of deriving profound meaning from suffering in their lives, they tend to show higher levels of psychological well-being, and quality of life, but exceptions to this rule are represented by young adolescents, particularly males, suggesting that future studies need to control for the moderating effects of demographics, developmental stage, and a range of other factors potentially affecting the effectiveness of EW protocol (Greenhoot & McLean, 2013).

Further research is needed to assess the psychological effects of expressive writing on preadolescents. An increased knowledge of how expressive writing can benefit preadolescents carries important implications: currently, many psychological treatments are both time-intensive and expensive. As a result, there exists a need to identify inexpensive and easily accessible treatments.

It is also possible that preadolescents need a more specific adaptation of the EW scheme, and a tailor-made set of instructions in order for them to benefit from the procedure. Facchin, Margola, Molgora and Revenson (2014), e.g., have shown that being asked to write specifically about benefits that occurred during the transition to high school was more effective than standard expressive writing. Travagin, Margola, Dennis and Revenson (2016) note that some adolescents may need a more structured writing task, providing examples, directions, or lines of reasoning. According to the authors (Travagin et al., 2016), a set of more specific indications may thus lead to self-distancing processes, particularly relevant for early adolescents dealing with severe interpersonal stressors, such as peer victimisation.

Our study has nevertheless some limitations, first of all data were all collected from self-report measures. Another limitation is that participants were not randomly assigned to the experimental and the control group. Moreover, our study involved junior high school students in Central Italy, and the results may not be generalisable to the general population of Italian junior high pupils. Therefore, although much was gained from the results of this study, more experimental research is needed on the specific comparison of the efficacy of expressive writing between preadolescents, adolescents, and adults. Additionally, controlling for the extraneous factor of environmental stressors on students is a challenge that future research must make an effort to do in order to ensure viable results. While our results did not support the initial hypotheses, literature shows that the utilisation of expressive writing as a therapy to reduce negative affect following emotionally charged situations, may have instead positive effects in other age populations.
References


