

Using Patient Writings in Psychotherapy: Review of Evidence for Expressive Writing and Cognitive-Behavioral Writing Therapy

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Expression of thoughts and emotions has been a core aspect of psychotherapy dating back to its creation. Over the years, this expression has taken multiple forms, from traditional use of talking to writing, art, and music. Alternative forms of expression—writing in particular—have the advantage of being able to reach populations that may otherwise be unwilling or unable to engage in traditional psychotherapy. Some individuals feel comfortable writing about things they would not feel comfortable talking about (1). In addition, writing provides the benefit of being inexpensive and portable and often results in a product people can share with others.

Although writing has been used as a method of expression both in and out of psychotherapy for many years, Pennebaker was the first individual to systematically study the beneficial effects of writing with the development of expressive writing (2). Multiple therapies have incorporated writing since that time, including cognitive-behavioral writing therapy. The present article will review the evidence for expressive writing and cognitive-behavioral writing therapy.

EXPRESSIVE WRITING

Theoretical Background and Initial Study

In Pennebaker's theory of emotional inhibition (3), he hypothesized that individuals who have experienced traumatic events want to share their experiences with others for social support. However, feared or actual negative responses from others inhibit them from sharing their feelings and thoughts. Pennebaker theorized that this inhibi-

tion resulted in chronic low levels of stress, which placed individuals at increased risk of both physical and mental disorders. Pennebaker designed the expressive writing technique as a means for testing whether disclosing previous trauma was associated with decreased stress and subsequently improved physical and mental outcomes.

The initial study by Pennebaker and Beall (2) involved college students writing about either a previous trauma or a trivial topic. Students were asked to write for 15 minutes for 4 consecutive days. Assessments were completed before and 4 months after the intervention, including self-report of mood and different physical symptoms, such as headache, racing heart, and tense stomach. There was a significant decrease in the number of physical symptoms between the individuals who wrote about their trauma versus those who wrote about a trivial topic ($F=3.05$, $df=3, 38$, $p=0.04$); however, there were no significant differences between the groups in terms of mood.

Subsequent Research and Meta-Analyses

Since this initial trial, a large number of studies examining expressive writing for a variety of different populations and settings have been completed. The majority of studies examining psychiatric symptoms involve samples of individuals who have been exposed to either a major adversity, such as cancer (4, 5), or to significant trauma, such as sexual abuse (6, 7). There are a limited number of studies looking specifically at individuals with preexisting psychiatric diagnoses (Table 1). The studies on

expressive writing have generally used interventions similar to Pennebaker's initial study, with participants writing for 20–30 minutes for three to five sessions (4). Participants in these studies are usually given a prompt such as: "I would like for you to write about your very deepest thoughts and feelings about the most traumatic experience of your entire life. In your writing, I'd like you to really let go and explore your very deepest emotions and thoughts" (8).

There have been multiple meta-analyses examining the efficacy of expressive writing (9–11). An initial meta-analysis by Smyth (9) found a moderate effect size of expressive writing on physical health (Cohen's $d=0.421$, $p<0.0001$), psychological well-being (Cohen's $d=0.661$, $p<0.0001$), and biophysical measures (Cohen's $d=0.681$, $p<0.0001$) but not on health behaviors, such as sleep, drug use, and exercise.

Several years later, Mogk et al. (10) completed a meta-analysis that included a larger number of studies than the number included in the Smyth study ($N=30$ versus $N=13$), which were completed in a larger array of settings by a more diverse group of researchers (Pennebaker was listed as an author in 23% of the studies versus 62% in the Smyth meta-analysis). Both meta-analyses only included randomized controlled studies in which the control group was asked to write about a neutral topic. However, Mogk et al. only included studies that examined the effect of expressive writing at least 4 weeks after the last writing session. Four of the 13 studies included in the Smyth meta-analysis were excluded from the meta-analysis by Mogk et al.

TABLE 1. Randomized Controlled Studies Comparing Expressive Writing Participants With a Control Group^a

Study	Psychiatric Diagnosis of Individuals Included in the Study	Location From Where Participants Were Recruited	Number of Participants/Percentage Completion	Duration and Timing of Expressive Writing	Timing of Assessments	Primary Outcome Measures	Summary of Results
Baikie et al. 2012 (17)	Mood disorders (85% of participants had depression, 21% had depression and anxiety)	Advertisement on website about depression	688/40%	Four 20-minute sessions over 2 weeks	After completion of expressive writing and after 1 month and 4 months	Center for Epidemiologic Studies Depression Scale, Depression Anxiety Stress Scale, Pennebaker Inventory of Limbic Languidness, overall health questions, Temperament and Personality Questionnaire (TPQ), and COPE Inventory (COPE).	Individuals receiving active interventions (expressive writing and writing about positive events) demonstrated significant improvement in the stress subscale of the Depression Anxiety Stress Scale compared to controls
Krpan et al. 2013 (18)	Major depressive disorder	Local advertisements	44/90%	Three 20-minute sessions over 3 days	After completion of expressive writing and after 1 month	Beck Depression Inventory and Patient Health Questionnaire 9 (PHQ-9)	Individuals using expressive writing showed significant decreases in depression compared to controls
Sloan and Marx 2004 (11)	PTSD	Introductory psychology college course	51/96%	Three 20-minute sessions over 3 days	After completion of expressive writing and after 1 month	Posttraumatic Stress Diagnostic Scale, Beck Depression Inventory, Pennebaker Inventory of Limbic Languidness, cortisol level	Significant decreases in PTSD symptoms, depression and physical symptoms
Smyth et al. 2008 (19)	PTSD	Trauma care agencies	25/96%	Three 20-minute sessions over 1 day	After completion of expressive writing and after 3 months	PTSD Symptom Scale Interview (PSS-I), Profile of Mood States (POMS), Post-Traumatic Growth Inventory (PTGI), cortisol level	No significant difference in PTSD symptoms between groups, individuals using expressive writing showed significantly larger reduction in tension and anger in comparison with controls
Meshberg-Cohen et al. 2014 (20)	Substance use disorders (more than 50% had comorbid PTSD)	Residential treatment facility	129/95%	Four 20-minute sessions over 4 days	After completion of expressive writing and after 2 weeks and 1 month	Posttraumatic Stress Diagnostic Scale, Center for Epidemiologic Studies Depression Scale, Pennebaker Inventory of Limbic Languidness, Brief Symptom Inventory (BSI), Positive and Negative Affect Scale (PANAS)	Significant difference between groups at 2 but not 4 weeks

^a Writing was about a neutral topic among psychiatric populations.

In their meta-analysis, Mogk et al. found no significant effects of expressive writing on either physical or psychological health. It is difficult to apply these findings to individuals with psychiatric disorders because the majority of these studies used nonclinical samples, largely students. Mogk et al. completed an exploratory analysis that examined the six studies in the meta-analysis that included posttraumatic symptoms as an outcome. They found no significant ef-

fect on arousal, intrusion, or avoidance. Although these six studies were conducted with individuals who had been exposed to some type of trauma, only one of the studies included individuals diagnosed with posttraumatic stress disorder (PTSD) (11).

Frisina et al. (12) conducted a meta-analysis examining the effect of expressive writing on clinical populations, unlike previous meta-analyses that combined studies of clinical and

nonclinical populations. Of the nine studies included, four examined patients with psychiatric diagnoses and the remaining five examined patients with diagnoses of cancer, asthma, and rheumatoid arthritis. They found that expressive writing had a significant effect on physical health (Cohen's $d=0.21$, $p=0.01$) but not on psychological health (Cohen's $d=0.07$, $p=0.17$). No exploratory analyses were completed to examine whether the effect size differed

for psychiatric versus nonpsychiatric samples.

COGNITIVE-BEHAVIORAL WRITING THERAPY

Interapy

Lange et al. (13, 14) incorporated this research on expressive writing to develop a psychotherapy that integrated writing and cognitive-behavioral therapy (CBT). The theoretical basis for their therapy was that the three components crucial to the efficacy of CBT are exposure, cognitive restructuring, and social sharing and support (13). They utilized 1) structured writing assignments as a means for exposure, 2) therapist feedback and rewriting of assignments to facilitate cognitive restructuring, and 3) sharing of the final writing for garnering social support and connectedness.

Their therapy, called interapy, is completed entirely on the Internet. It includes three phases with a total of 10 writing assignments that are 45 minutes in length and occur over a 5-week period. Therapists read the assignments and then give feedback through the website between assignments. The first phase is self-confrontation, in which patients write four assignments about their previous trauma. The second phase is cognitive restructuring, comprised of four assignments with the goal of assisting patients in challenging automatic thoughts and gaining a new perspective on the trauma. The last phase is social sharing, with psychoeducation about the benefits of sharing and having patients write a letter to someone involved in the trauma or a person who is significant in their life.

Lange et al. (14) completed a randomized controlled study examining the efficacy of interapy. Participants were individuals who went to the interapy website after learning about the trial through media coverage and completed online screening for participation. Of the 437 individuals who passed the screening, 184 committed themselves to the study. Participants were assigned to either a control group (being on a waitlist) (N=62) or to therapy (N=122). There was a high dropout rate in both arms of the study (N=30 in the control group;

N=44 in the treatment group). However, there were no significant differences between people who completed the study and those who dropped out of the study in terms of measures of trauma or psychological functioning prior to starting the therapy.

The results demonstrated that the improvement in the treatment group was significantly larger than that in the control group, with large effect sizes for intrusion (Cohen's $d=1.28$, $p<0.0001$) and avoidance (Cohen's $d=1.39$, $p<0.001$). These effects decreased slightly, although not significantly, at the 6-week follow-up. There were also significant decreases in anxiety, depression, somatization, and sleep problems, with large effect sizes for depression (Cohen's $d=1.04$, $p=0.0001$) and anxiety (Cohen's $d=0.76$, $p=0.001$).

Subsequent Research

Cognitive-behavioral writing therapy was adapted for use in children with PTSD, with therapists completing the writing assignments in person with the children. An uncontrolled pilot study of this therapy found a significant decrease in PTSD and depression symptoms, in addition to a significant decrease in internalizing and externalizing behavior problems (15).

Van Emmerik et al. (16) completed a study examining the efficacy of CBT versus a structured writing therapy, which had been adapted from the interapy program for PTSD. Unlike the study by Lange et al. (14), patients were

recruited from a psychiatric clinic, and diagnosis was based on structured clinical interview versus online screening. In addition, writing assignments were reviewed during in-person therapy sessions rather than over the Internet. Similar to the Lange et al. study, there was a high dropout rate, although this was not found to be related to which treatment a participant was receiving. Participants in structured writing therapy and CBT groups did better than those in a control group, with significant reductions in intrusion, avoidance, depression, anxiety, and dissociative symptoms. No significant differences were found between structured writing therapy and CBT in terms of efficacy.

CONCLUSIONS

Although writing has been incorporated into psychotherapy for many years, the effects of writing on physical and mental health have only been empirically studied in the last several decades through the development of expressive writing. Most recent meta-analyses have found limited to no benefit of expressive writing, although the number of studies on expressive writing in psychiatric samples is limited. Cognitive-behavioral writing therapy incorporates expressive writing and CBT. It involves individuals writing narratives about previous traumas, rewriting these narratives using cognitive restructuring, and then sharing revised narratives with others. Studies thus far have found cognitive-

KEY POINTS/CLINICAL PEARLS

- The expressive writing technique was developed to empirically examine whether disclosure of previous adversities and traumas had benefit on physical and psychological health.
- Although there is mixed evidence, most recent meta-analyses on expressive writing have found minimal to no benefit of expressive writing, although there are limited studies examining expressive writing with psychiatric patients.
- Cognitive-behavioral writing therapy incorporates expressive writing and cognitive-behavioral therapy to help individuals write narratives of previous trauma, to assist them in altering these narrative using cognitive restructuring, and then to share these narrative with others.
- Multiple studies have found cognitive-behavioral writing therapy to be effective for posttraumatic stress disorder.

behavioral writing therapy to have similar efficacy to CBT in treating PTSD. Cognitive-behavioral writing therapy is a promising therapy and would benefit from further studies exploring the application of this therapy to other psychiatric disorders.

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REFERENCES

1. Gold R: Writing With At-Risk Youth: The Pongo Teen Writing Method. Lanham, Md, Rowman and Littlefield, 2013
2. Pennebaker JW, Beall SK: Confronting a traumatic event: toward an understanding of inhibition and disease. *J Abnorm Psychol* 1986; 95:274–281
3. Pennebaker JW: Traumatic experience and psychosomatic disease: exploring the roles of behavioural inhibition, obsession, and confiding. *Can Psychol* 1985; 26:82–95
4. Lepore SJ, Revenson TA, Roberts KJ, et al: Randomised controlled trial of expressive writing and quality of life in men and women treated for colon or rectal cancer. *Psychol Health* 2015; 30:284–300
5. Mosher CE, Duhamel KN, Lam J, et al: Randomised trial of expressive writing for distressed metastatic breast cancer patients. *Psychol Health* 2012; 27:88–100
6. Batten SV, Follette VM, Rasmussen-Hall ML, et al: Physical and psychological effects of written disclosure among sexual abuse survivors. *Behav Ther* 2002; 33:107–122
7. Lorenz TA, Pulverman CS, Meston CM: Sudden gains during patient-directed expressive writing treatment predicts depression reduction in women with history of childhood sexual abuse: results from a randomized clinical trial. *Cognit Ther Res* 2014; 37:690–696
8. Smyth J, Helm R: Focused expressive writing as self help for stress and trauma. *J Clin Psychol* 2003; 59:227–235
9. Smyth JM: Written emotional expression: effect sizes, outcome types, and moderating variables. *J Consult Clin Psychol* 1998; 66:174–184
10. Mogk C, Otte S, Reinhold-Hurley B, et al: Health effects of expressive writing on stressful or traumatic experiences: a meta-analysis. *Psychosoc Med* 2006; 3:doc06
11. Sloan DM, Marx BP: A closer examination of the structured written disclosure procedure. *J Consult Clin Psychol* 2004; 72:165–175
12. Frisina PG, Borod JC, Lepore SJ: A meta-analysis of the effects of written emotional disclosure on health outcomes of clinical populations. *J Nerv Ment Dis* 2004; 192:629–634
13. Lange A, Van de Ven JP, Schrieken B: Intertapy: treatment of post-traumatic stress via the internet. *Cogn Behav Ther* 2003; 32:110–124
14. Lange A, Rietdijk D, Hudcovicova M, et al: INTERAPY: a controlled randomized trial of the standardized treatment of posttraumatic stress through the Internet. *J Consult Clin Psychol* 2003; 71:901–909
15. Van der Oord S, Lucassen S, Van Emmerik AAP, et al: Treatment of post-traumatic stress disorder in children using cognitive behavioral writing therapy. *Clin Psychol Psychother* 2010; 17:240–249
16. Van Emmerik AAP, Kamphuis JH, Emmelkamp PMG: Treatment of acute stress disorder and posttraumatic stress disorder with cognitive behavioral therapy or structured writing therapy: a randomized controlled trial. *Psychother Psychosom* 2008; 77:93–100
17. Baikie KA, Geerligs L, Wilhelm K: Expressive writing and positive writing for participants with mood disorders: an online randomized controlled trial. *J Affect Disord* 2012; 136:310–319
18. Krpan KM, Kross E, Berman MG, et al: An everyday activity as treatment for depression: the benefits of expressive writing for people diagnosed with major depressive disorder. *J Affect Disord* 2013; 150:1148–1151
19. Smyth JM, Hockemeyer JR, Tulloch H: Expressive writing and post traumatic stress disorder: effect on trauma symptoms, mood states and cortisol reactivity. *Br J Health Psychol* 2008; 13:85–93
20. Meshberg-Cohen S, Svikis D, McMahon TJ: Expressive writing as a therapeutic process for drug-dependent women. *Subst Abus* 2014; 35:80–88

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