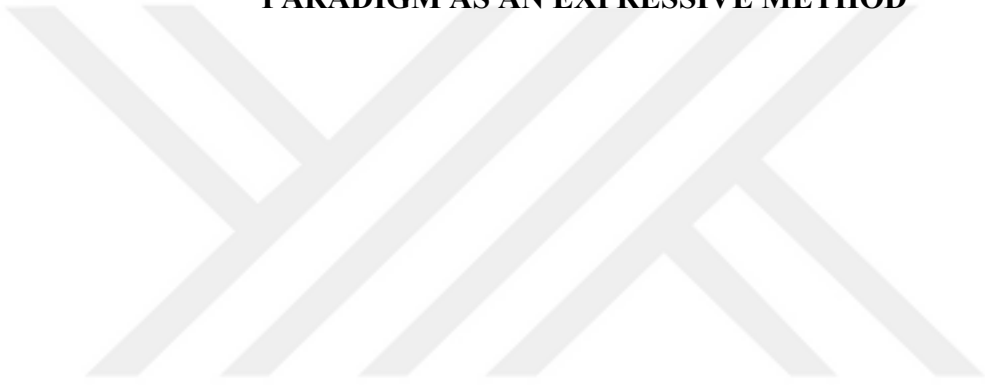


T.C.
BAHCESEHIR UNIVERSITY
GRADUATE SCHOOL
THE DEPARTMENT OF CLINICAL PSYCHOLOGY

**WRITING IT OUT: EXAMINING WRITTEN EMOTIONAL DISCLOSURE
PARADIGM AS AN EXPRESSIVE METHOD**



MASTER'S THESIS

AYŞE BETÜL İLGEN

ISTANBUL 2024

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THESIS ADVISOR
DR. GAMZE GÜLTEKİN ALTINBAŞ

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ABSTRACT

WRITING IT OUT: EXAMINING WRITTEN EMOTIONAL DISCLOSURE PARADIGM AS AN EXPRESSIVE METHOD

Ayşe Betül İlgen

Master's Program in Clinical Psychology

Supervisor: Gamze Gültekin Altınbaş

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This study aimed to explore the effects of the written emotional disclosure paradigm on well-being, experiential avoidance, and positive and negative affect. The study included 68 participants, with the mean age of 28.31 ($SD = 9.37$), who were randomly assigned to one of three groups: an expressive writing group ($n = 22$), a positive expressive writing group ($n = 24$), or a control group ($n = 22$). Participants in the writing groups engaged in writing sessions over three consecutive days (Monday, Thursday, Sunday), with pre-test measurements taken immediately before the first session and post-test measurements immediately after the final session. The control group did not participate in the writing sessions and only completed the pre-test and post-test assessments during the same time frame. For the assessment, the Warwick-Edinburgh Mental Well-Being Scale Short Form, the Acceptance and Action Questionnaire-II, and the Positive and Negative Affect Schedule were utilized. The results revealed significant changes only in the positive expressive writing group, where positive affect scores increased notably after the writing sessions. While no other significant differences were observed, there were changes in the mean scores between the pre-test and post-test measurements. Conclusions and recommendations have been drawn based on these findings.

Key Words: Written Emotional Disclosure Paradigm, Expressive Writing, Well-being, Experiential Avoidance

ÖZ

Yazılı Duygusal Dışavurum Paradigmasının Dışavurumcu Bir Yöntem Olarak İncelenmesi

Ayşe Betül İlgen

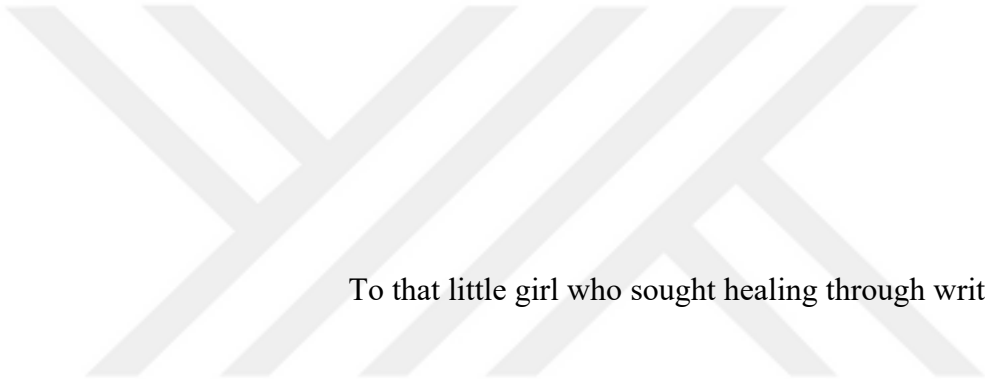
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Bu çalışma, Yazılı Duygusal Dışavurum Paradigmasının iyi-oluş, deneyimsel kaçınma ve pozitif ve negatif duygulanım üzerindeki etkilerini araştırmayı amaçlamıştır. Yaş ortalaması 28.31 olan 68 kişiden oluşan bu araştırma, üç grubu içeren bir deney olarak tasarlanmıştır: Dışavurumcu yazma grubu ($n = 22$), pozitif dışavurumcu yazma grubu ($n = 24$) ve kontrol grubu ($n = 22$). Yazma gruplarındaki katılımcılar, bir haftanın üç günü boyunca (pazartesi, perşembe, pazar) yazma seanslarına katılmış; ilk seansın hemen öncesinde ön-test ölçümleri, son seansın hemen sonrasında ise son-test ölçümleri alınmıştır. Kontrol grubu yazma seanslarına katılmamış, yalnızca aynı zaman diliminde ön-test ve son-test değerlendirmelerini tamamlamıştır. Belirtilmiş olan değişkenleri değerlendirmek için Warwick-Edinburgh Mental İyi-Oluş Ölçeği Kısa Formu, Kabul ve Eylem Formu-II ve Pozitif ve Negatif Duygu Durum Ölçeği kullanılmıştır. Sonuçlar, yalnızca pozitif dışavurumcu yazma grubunda anlamlı değişiklikler ortaya koymuş ve bu gruptaki pozitif duygulanım puanları yazma seanslarından sonra belirgin bir şekilde artmıştır. Diğer gruplarda anlamlı farklar gözlenmemekle birlikte, ön-test ve son-test ölçümleri arasında ortalama puanlarda değişiklikler olmuştur. Bu bulgulara dayanarak sonuçlar ve gerekli öneriler paylaşılmıştır.

Anahtar Kelimeler: Yazılı Duygusal Dışavurum Paradigması, Dışavurumcu Yazma, İyi-oluş, Deneyimsel Kaçınma



To that little girl who sought healing through writing it out...

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Chapter 1

Introduction

1.1 Statement of the Problem

"When I started boarding school in a city where I was separated from my mother, father, and my brothers, the only solution left for me to endure the pain of separation was to write." says Ágota Kristóf in her book called *The Illiterate* (Kristóf, 2000, p.14). The ways people cope with the stressors of life differs tremendously. Each method serves as functional tools to deal with challenges in various areas of life. Such coping methods are especially vital for individuals who are going through or have experienced traumas or stressful life events. Hence, it is worth studying the possible psychological impacts of writing, which is one of the important methods of coping. By understanding how writing influences mental health, its role in emotional resilience and recovery can be appreciated better.

In an era where opportunities for private, undisturbed time are increasingly restricted, writing offers a unique portal for individuals to be truly alone with their own thoughts. Creating a space for singular opinions for oneself seems to be more challenging than before. Even basic activities such as eating, cleaning, or walking are often accompanied by external stimuli such as TV shows or podcasts. People seem to wander away from their own selves which leads to an unfamiliarity with one's own feelings, opinions or individual stances in life. In these circumstances, writing serves as a significant tool to understand and get to know many aspects about oneself. Whether in the form of a letter, a diary entry, or another medium, writing provides a means to reconnect with one's inner world. This process of self-exploration can be beneficial or challenging, but it is undeniably significant. Given its potential to promote introspection and personal growth, writing emerges as an essential practice worthy of further study. The aim of the present study is to explore the psychological impacts of writing on well-being and experiential avoidance, particularly in relation to individual differences. This research is especially significant as it addresses a gap in

the existing literature, being the first of its kind in Türkiye to examine these variables together with individual differences in the general population. By investigating these dimensions, the study hopes to provide deeper insights into how writing can serve as a therapeutic tool across diverse psychological profiles.

1.2 Purpose Of The Study

The promising findings in the literature demonstrates that writing could have various impacts on individuals. However, while there is a substantial body of research examining the written emotional disclosure paradigm, much of this work has focused on specific groups, such as healthcare workers (Procaccia, Segre, Tamanza, & Manzoni, 2021), depression-vulnerable students (Gortner, Rude, & Pennebaker, 2006), women with breast cancer (Çıvgın, 2020), or individuals with mood disorders (Baikie, Geerligs, & Wilhelm, 2012). The current study aims to investigate the possible psychological outcomes of this paradigm on the broader community. The current study aims to investigate the possible psychological outcomes of this paradigm on the community with no psychiatric diagnosis, thereby providing insights applicable to a nonclinical population as well.

Furthermore, there are relatively few studies on the written emotional disclosure paradigm conducted in Türkiye, with most focusing on specific groups again, such as cancer patients (Çıvgın, 2020) or the partners of the cancer patients (Acar & Dirik, 2018). This highlights a significant gap in the literature regarding the effects of written emotional disclosure on the undiagnosed individuals in Türkiye. The objective of the current study is to address this gap by exploring the impact of the written emotional disclosure paradigm on a nonclinical population. By doing so, the study aims to provide more comprehensive insights into the broader applicability and benefits of writing. For this purpose, the current study was structured as an experiment with three distinct groups to rigorously explore the causal relationship between writing and its psychological impacts. The design includes an expressive writing group, a positive expressive writing group, and a control group that did not participate in any writing.

This setup aims to provide clear evidence on how different writing activities affect mental well-being.

1.3 Research Questions

In this current study, it is aimed to find an answer to following research question: Do the act of writing and the content of writing have an effect on individuals' well-being levels, experiential avoidance levels and their experience of positive or negative emotions?

Hypotheses are stated below as:

H1: In terms of the well-being and positive affect measures, post-test scores of the writing groups are expected to be higher in compared to their pre-test scores and also post-test scores of the control group.

H2: In terms of negative affect and experiential avoidance measurements, post-test scores of the writing groups are expected to be lower in compared to their pre-test scores and also post-test scores of the control group.

1.4 Significance of the Study

In light of the information from previous findings in the literature, writing has demonstrated its potential as a powerful therapeutic tool. Beyond its integration into therapeutic approaches, writing can also play a crucial role in self-help, independent of traditional therapy settings. In a world where many people are dealing with the global economic crisis, fewer individuals can afford the costs of therapy. Mental health professionals should take the initiative to make psychotherapy more accessible. This effort involves not only reducing the financial burden of therapy but also introducing alternative methods through which people can support themselves.

While psychotherapy is undoubtedly necessary in certain circumstances and writing cannot replace the nuanced guidance of a skilled psychotherapist, self-help

methods can be valuable for individuals who are unable to continue therapy or are resistant to speaking with a therapist. In such situations, writing serves as an effective coping mechanism, allowing individuals to navigate life's stressors. Given the substantial scientific support for the benefits of writing on well-being, it is essential to further explore its efficacy as a coping strategy. This would allow more people to take charge of their mental health proactively and affordably.

As previously noted, the existing research on the writing paradigm conducted in Türkiye has primarily concentrated on specific clinical samples (Acar & Dirik, 2018; Çıvgın, 2020). Therefore, the present study aims to extend the scope of research to include non-clinical samples.

1.5 Definitions

In the following study, the concepts of the written emotional disclosure paradigm, well-being, experiential avoidance and positive and negative affects will be thoroughly examined.

1.5.1 Written Emotional Disclosure Paradigm (Expressive Writing Paradigm). As stated by Pennebaker (1997) in recent years, research has shown that writing or talking about emotional experiences can improve physical health, subjective well-being, and certain adaptive behaviors. The intervention of the written emotional disclosure paradigm was initially applied in the study by Pennebaker and Beall (1986) in which 46 undergraduate students were randomly assigned to one of four different writing groups or a control group. Their results indicated that writing about past experiences was linked to short-term raise in physiological arousal and long-term decline in health issues. The written emotional disclosure paradigm is also referred to as the expressive writing (EW) paradigm, with the latter term being primarily used throughout the present study.

1.5.2 Well-being. According to Kiefer (2008), well-being can be described as a combination of an individual's physical health, mental state, social relationships, and environmental conditions; each of these aspects influences and interacts with the

others, and their importance and impact can vary greatly depending on the person. In this current study, well-being of the participants was measured by using Warwick-Edinburgh Mental Well Being Scale which will be discussed in the methodology.

1.5.3 Experiential avoidance. Experiential avoidance is recognized in multiple theoretical frameworks as a potential pathological process where individuals avoid engaging with specific private experiences and try to change their nature or occurrence (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). The Acceptance and Action Questionnaire II, which will be thoroughly discussed in the methodology section, is specifically designed to assess individuals' levels of experiential avoidance. Psychological inflexibility is another term which should be mentioned in relation to experiential avoidance. It refers to the tendency to avoid or control one's internal experiences, such as thoughts and feelings, rather than engaging in more efficient and purposeful actions (Büyükoğuz & Tekin, 2023).

1.5.4 Positive and negative affect. As stated by Watson, Clark and Tellegen (1988), although the terms positive affect and negative affect might imply that they are opposites, meaning they would be strongly negatively correlated, research has demonstrated that they are distinct dimensions that can be effectively represented as independent factors in factor analytic studies of affect. It is claimed that positive affect indicates a person's degree of energy, enthusiasm, and involvement, whereas negative affect reflects experiences of distress and various negative emotions. High positive affect is linked to elevated energy and enjoyment, while high negative affect is associated with negative moods such as anger and fear (Watson, Clark, & Tellegen, 1998).

Chapter 2

Literature Review

2.1 Expressive Writing (EW)

The efficient articulation of one's thoughts and feelings holds significant potential for emotional processing and regulation. This ability to express oneself through writing has the potential to generate substantial benefits across various contexts and produce a range of effects. As detailed previously in the definitions section, expressive writing, rooted in Pennebaker's written emotional disclosure paradigm, refers to a form of writing that can induce cognitive, emotional, and physical changes (Pennebaker, 2004). These changes, which span different areas of life, deserve careful examination. Understanding these multifaceted impacts requires a thorough exploration of how expressive writing affects individuals in various life situations, thereby highlighting its broad applicability and therapeutic value.

Gortner et al. (2006) have found that expressive writing helps reduce depressive symptoms among 90 college students vulnerable to depression, as observed in a six-month follow-up. Similarly, the results of one other study shows that 55 healthcare workers who underwent the expressive writing intervention exhibited greater enhancements in symptoms related to PTSD, depression, and overall psychopathology (Procaccia et al., 2021). Managing depressive symptoms can be a challenging struggle for anyone, even for those who are receiving professional psychological support. The complexity and persistence of depression often make it difficult to find effective treatment strategies that are both accessible and manageable. Therefore, these findings are particularly significant. This alternative approach can provide individuals with a simple, self-administered tool that complements existing psychological treatments and potentially enhances overall therapeutic outcomes. By integrating such practices, individuals suffering from depression may find an additional layer of support that empowers them to manage their symptoms more effectively and with greater autonomy.

In a study with 74 college students, grade point averages (GPAs) of the students who were in disclosure group were found to be higher on the next semester compared to the GPAs of the participants in the time management writing (control group) (Lumley and Provenzano, 2003). Likewise, according to Argudo (2021), expressive writing positively contributes to reducing academic stress and addressing challenges associated with it for 157 undergraduate students. Furthermore, follow-up results at one month and six months from a study involving first-year college students revealed that participants in both the expressive writing group and the non-emotional writing group, who wrote about objects or events without emotional expression, exhibited a significant decrease in anxiety levels over time (Robertson, Short, Sawyer, & Sweazy, 2020). The results of the latter study is significant not only for demonstrating the effectiveness of expressive writing in diminishing anxiety of college students but also for highlighting that the mere act of writing, apart from the content, can have considerable impact. This suggests that the process of writing itself may facilitate therapeutic benefits, which could be crucial for designing interventions that capitalize on the general act of writing as a tool for mental health improvement. Similarly, in a study conducted with participants with mood disorders, it was found that all the groups including expressive writing, positive writing and the control group, which wrote about how they spend their time, reported a notable reduction in mental and physical symptoms including anxiety and depression symptoms that remained for at least four months after writing (Baikie, Geerligs, & Wilhelm, 2012). They suggest that the structured nature of all three interventions may contribute to fostering emotional regulation in the participants. Additionally, according to the same authors, the combined expressive and positive writing groups, referred to as the emotional writing group, consistently demonstrated lower stress levels compared to the control group. While not as effective as the emotional writing groups, this study further shows that writing by itself can also be impactful since the control group, who only wrote objectively about how they spend their time without focusing on their emotions, showed decrease in their symptoms as well.

In a study of 63 recently unemployed professionals, those who engaged in expressive writing about their job loss found new employment faster than those who wrote about non-traumatic topics or did not write at all, suggesting that expressive

writing helped improving their attitudes towards their previous employment and the process of seeking new jobs (Spera, Buhrfeind, & Pennebaker, 1994). Likewise, Pennebaker and Chung (2007) state that the university staff members who engage in writing about emotional subjects showed lower rates of absenteeism compared to those in the control group. These findings illustrate the broader behavioral and work-related impacts of writing, highlighting its potential to influence not just personal well-being but also professional conduct and performance. Maintaining a consistent presence at work often requires stable motivation, which appears to be positively affected by expressive writing. Understanding these effects is crucial, as it underscores the significance of writing as a tool that can help individuals manage their emotional states more effectively, thereby promoting better engagement and productivity in the workplace. This connection between writing and performance-related outcomes suggests that integrating writing exercises into a professional context could be beneficial for both individuals and organizations aiming to enhance commitment and reduce absenteeism. Although the current study does not examine performance-related impacts of expressive writing, it is important to highlight writing's potential benefits in various areas of life as well.

Furthermore, in a comprehensive meta-analysis of 11 studies with the total number of 764 participants examining the impact of expressive writing on well-being, Tekin (2023) found that participants demonstrated an increase in well-being scores post-intervention, although with a modest effect size. Despite the limited magnitude of this effect, it is important to recognize the practical significance and convenience of expressive writing (Tekin, 2023). Nevertheless, it is also important to consider the modesty of the effect size, as it may indicate that writing alone may not be a sufficiently effective method to significantly enhance individuals' well-being. This suggests that while expressive writing can be a valuable component of a broader therapeutic approach, it might require complementary strategies to achieve more substantial improvements in well-being. Furthermore these studies in the meta-analysis were conducted on various and distinct specific groups, such as chronic pain patients, cancer patients, and university students (Tekin, 2023). This is another gap that this study aims to address, as the current exclusion criteria are limited to participants under 18 or over 65 years of age and those with a psychiatric diagnosis.

Finally, although only few relevant findings have been identified in the existing literature regarding the effectiveness of expressive writing on experiential avoidance, Sabo Mordechay, Nir and Eviatar (2019) found that participants in the expressive writing (EW) group with higher levels of experiential avoidance showed greater improvements in psychological symptoms, suggesting that EW provided a safe environment for them to begin processing their emotions, effectively serving as a form of mild exposure therapy for those typically avoiding emotional experiences. This finding supports the hypothesis regarding the influence of individual differences on the efficacy of expressive writing, which will be elaborated upon in detail, since the research indicates that individuals with high neuroticism are more likely to use their inhibition system, making them avoid more stimuli and react more sensitively to potential negative outcomes, compared to those with low neuroticism (Zakowski, Herzer, Barrett, Milligan, & Beckman, 2011). In this study, one of the objectives is to explore the impact of expressive writing on individuals' levels of experiential avoidance, rather than focusing on the moderating role of experiential avoidance. This aspect of the research aims to understand how expressive writing interventions might directly affect the degree to which individuals engage in experiential avoidance. This allows for a detailed examination of expressive writing as a potential therapeutic tool for reducing avoidance behaviors associated with various psychological conditions.

2.1.1 Positive expressive writing (PEW). While the majority of studies adhere to the original expressive writing paradigm, where participants are asked to write about their traumatic and challenging experiences, a smaller number of studies have explored the effects of positive expressive writing, where participants focus on their most positive experiences. The inclusion of this latter approach is crucial as it allows for an examination of the role content plays in the effectiveness of expressive writing. Since the traditional expressive writing paradigm emphasizes processing negative experiences, comparing it with positive expressive writing offers valuable insights into whether the nature of the content—negative versus positive—significantly influences the outcomes. Understanding these differences can shed light on the broader potential of expressive writing as a therapeutic tool, helping to determine whether focusing on

positive experiences can yield benefits comparable to or even greater than those derived from focusing on more negative, traumatic events.

In a study examining the impacts of positive expressive writing on full-time workers, participants in the positive writing condition experienced a greater reduction in anxiety immediately after writing and reported increased satisfaction with contingent rewards, compared to those who wrote about neutral topics (Round, Wetherell, Elsey, & Smith, 2022). This finding is particularly significant in today's context, where many individuals are dealing with burnout and work-related stress. The results suggest that integrating positive expressive writing into the daily routines of full-time workers could be a valuable strategy for reducing anxiety and enhancing overall well-being. By encouraging employees to engage in brief sessions of positive writing, organizations might foster a more resilient and mentally healthy workforce. However, it is important to note that this study did not include a traditional expressive writing group for comparison, so no definitive conclusions can be drawn regarding the relative effectiveness of positive expressive writing versus the standard expressive writing approach. Çıvgın (2020), on the other hand, compared the impacts of expressive writing and positive writing groups on breast cancer patients and it was found that expressing positive emotions reduced depression levels in breast cancer patients whereas no effect was seen in expressive writing group and mixed writing group in which participants wrote about both positive and negative aspects related to their cancer experiences. Although this finding contradicts the initial hypotheses of the current study, it is important to consider the context in which the aforementioned study was conducted. The study focused exclusively on participants' experiences with cancer, which likely influenced the outcomes. The specificity of the writing sessions, centered solely on such a significant and emotionally charged topic, may have played a critical role in shaping the results. Furthermore, it was also found that there was an increase in perceived social support among the participants

Baikie, Geerligs, and Wilhelm (2011) observed significant improvements in physical and emotional health self-report measures from pre- to post-intervention across expressive writing, positive writing, and control groups, however, with no notable differences in the extent of improvement between these groups. Similarly,

Kloss and Lisman (2002) found no differences in physical health outcomes among trauma-disclosure writing, positive emotion writing and neutral writing groups by the end of the semester, and psychological measures showed no change from baseline to follow-up. Together, these results indicate that the type of writing intervention may not be a critical factor in influencing mental and emotional health outcomes.

2.2 How Does Expressive Writing Work?

2.2.1 Emotional expression. Writing alone can be considered as a beneficial tool in terms involving emotional expression. In their pioneering study, Pennebaker and Beall (1986) reference the cathartic method as one of the key explanations for the therapeutic benefits of writing. According to their article, the cathartic method, developed by Freud and Breuer, emphasizes the connection between cognition and affect in relation to significant or threatening experiences. When such experiences are particularly disturbing, the memory may be suppressed, but the associated emotions can persist as anxiety; however, Breuer and Freud observed that detailed descriptions of these events often led to the relief of hysterical symptoms (Pennebaker & Beall, 1986). Moreover, Valtonen (2020) claims that the primary psychological explanation for the benefits of expressive writing posits that the adverse effects of a stressful experience are intensified when kept secret, and that emotional disclosure through writing can mitigate these effects. Individuals may initially find it challenging to discuss their traumas with others. However, writing offers a distinct form of emotional expression that can serve as an alternative to verbal communication. While it differs from conversing with a professional about one's trauma, writing can act as a preliminary step towards emotional disclosure. Engaging in expressive writing may help individuals become more comfortable with their emotions, potentially facilitating their readiness to seek professional assistance in the future. This initial self-expression through writing can thus be a crucial component in the therapeutic process, providing a foundation for subsequent therapeutic interventions.

2.2.2 Exposure and habituation. Exposure theory, often examined within clinical psychology and anxiety disorder treatment, suggests that deliberately facing and processing feared stimuli in our environment is linked to long-term reductions in

anxiety and enhancements in well-being (Robertson et al., 2020). In this context, writing about traumatic experiences can function as a tool for exposure. When individuals engage in expressive writing over the course of three to four consecutive days about a specific traumatic event, it constitutes a form of sustained cognitive exposure. According to Pennebaker and Chung (2007) this form of engagement with the traumatic memory can facilitate habituation. Habituation is the process by which a response decreases due to repeated exposure to a stimulus (Moscovitch, Antony & Swinson, 2008). Through this habituation process, individuals may experience a decrease in the severity of their emotional distress, thereby contributing to long-term improvements in psychological well-being. This aligns with the principles of exposure therapy, where repeated and controlled exposure to feared stimuli leads to desensitization and emotional regulation.

2.2.3 Cognitive processing and perspective shift. According to Pennebaker and Chung (2007), expressive writing is believed to be effective because it facilitates life course correction by allowing individuals to reflect on their experiences and consider their broader implications. Often, upheavals catch people unprepared, leaving insufficient time for such reflection; by encouraging a shift in perspective and a detachment from immediate surroundings, expressive writing enables individuals to stand back and examine their lives (Pennebaker & Chung, 2007). Thus, it can be suggested that writing about a traumatic experience functions differently than simply thinking about it, as expressing thoughts externally can change how they are perceived in mind. As Pennebaker and Chung (2007) state, writing coherently about an emotional experience is healthier than writing chaotically, as one of the fundamental functions of language and conversation is to communicate in an understandable manner. The process of writing allows individuals to construct a narrative, which involves translating experiences into a coherent story through words. This act of organization helps people reframe and reassess the event, potentially leading to new insights. By articulating the facts and emotions associated with their experiences, individuals can shift their perspectives and discover overlooked aspects of the situation. Such a transformation in viewpoint can enable them to perceive the same event in a new light, fostering a deeper understanding and altering their emotional responses. This narrative construction not only aids in emotional processing but also in cognitive restructuring,

which can have therapeutic benefits by providing a more comprehensive and balanced perspective of past events.

2.2.4 Social effects of writing. Pennebaker and Chung (2007) claim that the effects of expressive writing extend beyond experimental settings, leading to notable social changes as individuals often discuss their writing topics with others. For individuals who struggle to find topics of conversation in social interactions, engaging in structured writing exercises can offer a new and enriching subject to discuss within their social circles. This novel experience not only provides them with material to talk about but also enhances their communication skills. Furthermore, as previously mentioned, for those who are hesitant to share their difficult experiences verbally, writing about these challenges can serve as a critical initial step. By articulating their experiences in writing, they can begin to process and understand their emotions, making it subsequently easier to verbalize these thoughts and feelings in their interpersonal relationships. This progression from writing to speaking can significantly facilitate emotional openness, improving their ability to connect with others on a deeper level. Additionally, writing about troubling events reduces the cognitive effort spent on them, potentially making individuals better listeners and friends, and more open in discussing previously kept secrets with others (Pennebaker & Chung, 2007). Often, individuals find their own issues consuming an overwhelming amount of mental space, which can unintentionally prevent them from recognizing the problems of others. However, engaging in writing about these personal challenges can serve a therapeutic function, much like a scheduled appointment to address and process distressing thoughts. This deliberate allocation of time to confront and manage their issues through writing enables individuals to free up mental resources. As a result, they are better able to focus on and nurture their relationships during other times. By setting aside specific times to deal with personal challenges, individuals can engage more fully and attentively with the people in their lives, enhancing their capacity for empathy and connection.

2.3 Writing As A Therapeutic Tool

The impacts of expressive writing on well-being have been extensively examined. Incorporating these influences into therapeutic settings could enhance the efficacy of therapy. Also, this approach could provide clients with greater autonomy between sessions by offering them dedicated time to engage in self-help practices. Pennebaker (2010) suggests that expressive writing has been a component of psychotherapy homework for over 50 years, and rather than advocating for a single method, therapists are encouraged to explore various writing techniques in their treatment approaches. In his same article, it is recommended that clients write for 5-10 minutes prior to therapy sessions to improve their concentration, even though therapists do not review these writings; moreover, incorporating diverse homework assignments such as drawing, finger writing, and online writing can effectively meet various therapeutic goals (Pennebaker, 2010). His recommendation that writing before therapy sessions enhances client focus underscores how writing acts as a mechanism for regulating thoughts and emotions, thereby helping individuals become more problem-focused as they strive to improve themselves. Supporting this idea, according to Ruini and Mortara (2021), therapeutic aspects of expressive writing include enhanced introspective ability and the capacity to establish causal connections between life events. Such aspects can be helpful for clients to focus more efficiently to their therapy sessions.

Writing is also a commonly used tool of Cognitive Behavioral Therapy (CBT). As stated by Ruini and Mortara (2021), in the traditional CBT framework, the therapeutic advantages of keeping a structured diary involve assisting clients in enhancing their awareness of automatic thoughts and beliefs that impact their emotions and actions. In addition, positive psychotherapy incorporates writing techniques throughout the therapeutic process, such as having clients write a personal presentation in positive terms at the start of therapy (Ruini & Mortara, 2021). They claim that this exercise is significant because it encourages clients to emphasize their positive traits and recall instances where these strengths were evident, thereby enhancing self-esteem and self-awareness. However, although these approaches have expressive elements of writing as well, expressive writing paradigm differs from these methods as it involves writing freely on a chosen topic. Expressive writing allows individuals to freely and honestly express themselves in a private, safe context without sharing the content,

whereas discussing trauma orally requires a listener who must understand and accept the narrative (Ruini & Mortara, 2021). For some individuals, revealing their private thoughts can be difficult if they are aware that their written content will be examined. By ensuring a private and unexamined space, expressive writing allows individuals to write freely and candidly without fear of judgment. This level of privacy is particularly beneficial for those who may feel uneasy or vulnerable when disclosing personal details to others. As a result, expressive writing can serve as a therapeutic tool, enabling individuals to explore and express their emotions in a secure and supportive environment.

2.4 Role of Individual Differences

Determining whether writing yields greater benefits for certain individuals while being less effective for others is a significant question. A review of the literature on this topic reveals that the impacts of expressive writing are not consistent but vary according to individual differences.

Pennebaker and Chung (2007) claims that no consistent personality traits have been identified that predict who benefits from writing, with some variables like age and anxiety showing no effect, and only a few studies indicating potential effects that are promising but not definitive. However, there are novel studies that will be discussed suggesting that certain personality traits might have an influence.

Neuroticism is one of the personality traits most frequently studied in relation to expressive writing. According to Sabo Mordechay et al. (2019), higher levels of neuroticism were associated with greater reductions in psychological symptoms among participants in the expressive writing group, indicating that those with higher neuroticism benefited more than those with moderate levels. Since neuroticism refers to emotional instability, it can be suggested that engaging in writing exercises might assist participants in managing and regulating their emotions more effectively. This form of expression allows individuals to articulate their feelings and experiences, potentially leading to improved emotional equilibrium and resilience over time.

On the contrary, one other study have found that patients with high levels of neuroticism did not benefit from the intervention and actually showed increased levels of distress at a 6-month follow-up, in contrast to those with lower levels of neuroticism, who reported reduced distress after writing (Zakowski et al., 2011). However, it is important to recognize that this study specifically involved gynecological cancer patients, who were asked to write about their emotional experiences related to their cancer diagnosis and treatment. This context may influence the findings, as the act of writing in such a situation could have more distressing outcomes. Regarding the results about neuroticism, Zakowski et al. (2011) claims that individuals with high levels of this trait would find emotional disclosure distressing, leading to increased negative mood following each writing session. It could be suggested that the role of neuroticism on the effectiveness of writing interventions can be interpreted in two divergent ways: On one hand, individuals scoring higher in neuroticism might find that writing provides a beneficial avenue for managing their emotions, as the act of expressing their thoughts and feelings in a structured manner may help them achieve a better emotional balance. This could lead to an efficient regulation of their emotional states during and after the writing sessions. On the other hand, the same trait of neuroticism might make other individuals more susceptible to distress when asked to articulate their emotions. For these people, the act of confronting and detailing their emotional experiences through writing could intensify the feelings of anxiety or sadness, leading to a negative experience with the intervention. Therefore, the role of neuroticism in writing interventions presents a complex dynamic where it can either facilitate emotional regulation or heighten emotional distress, depending on the individual's unique characteristics.

There is substantial evidence within the academic literature suggesting that expressive writing may have a more pronounced benefit for males. Notably, a meta-analysis conducted by Smyth (1998) provides compelling evidence that males derive greater advantages from the written emotional disclosure paradigm compared to females. This finding is supported by additional research, including a study by Procaccia et al. (2021), which observed a more significant reduction in psychological symptoms among male participants compared to female participants following expressive writing. This gender-specific response could be influenced by various

factors, including differences in emotional processing or societal norms regarding the expression of feelings. According to Range and Jenkins (2010) individuals with masculine gender schemas may experience cognitive dissonance when acknowledging traumas, as feelings of fear and helplessness conflict with their perceptions of masculinity, leading to avoidance; however, these individuals could benefit more from expressive writing as it helps them confront and make sense of emotions they typically disregard. Gender schema theory posits that differences in behavior between men and women stem from individual perceptions, evaluations, and regulations of behavior, which are shaped by internalized gender schemas reflecting cultural norms of gender appropriateness, although there are some individual variations (Range & Jenkins, 2010). Therefore, it can be concluded that societal norms and individual gender schemas influence the extent to which people benefit from expressive writing.

On the other hand, Stickney (2010) states that the effects of Pennebaker's expressive writing paradigm are inconsistent, with some research indicating gender-based differences in its efficacy, sometimes favoring men and other times women, contributing to the complexity and ongoing questions in this area of study. This discussion returns the discussion to the observations made by Pennebaker and Chung (2007), who noted the absence of consistent individual differences impacting the effectiveness of expressive writing. They suggested that the variability in responses to expressive writing could stem from a multitude of psychological, social, and physiological factors that have not yet been fully explored. Therefore, there is a clear need for further research to delve deeper into these potential influences.

In the present study, one of the primary objectives was to explore how individual differences might influence the effectiveness of expressive writing interventions. The role of personality traits was particularly of interest, as these characteristics could potentially moderate the impact of expressive writing on psychological outcomes. However, due to issues with the reliability of the personality trait measurements—discussed in more detail in the methodology section—these variables were excluded from the final analysis. Consequently, the study's ability to draw conclusions regarding the interaction between personality differences and the effectiveness of expressive writing was limited. Future research might consider utilizing more reliable or

alternative measures to address this gap and better understand the role of personality in writing interventions. However, while no definitive claims regarding personality trait differences can be made due to the limitations mentioned earlier, the current study did examine individual differences in relation to sociodemographic variables. These variables, such as gender, education, income level, and diary-keeping status were explored to assess their potential impact on the effectiveness of the writing interventions and to provide further insights into how such demographic factors might influence the outcomes of expressive writing.

2.5 Various Types of Writing

When examining the psychological effects of writing, it is crucial to consider the impact of different types of writing. Individuals engage in various forms of writing, such as keeping a diary, journaling, maintaining online journals, or writing for posts on social media. Each of these methods offers a unique way for individuals to express themselves and process their emotions. Unlike these more informal or spontaneous forms of writing, expressive writing is distinct because it is more structured and goal-oriented, involving specific instructions for participants to follow. This structured approach is designed to enhance the therapeutic benefits by guiding individuals through a process of reflection and emotional exploration. However, it is important to acknowledge that the informal types of writing also hold potential as expressive methods. They allow individuals to articulate their thoughts and feelings, potentially providing similar psychological benefits. Thus, while expressive writing has its unique characteristics and established benefits, other forms of writing should not be overlooked for their capacity to serve as therapeutic tools, each contributing in different ways to emotional well-being. Nonetheless, Pennebaker (1997) discovered no link between diary keeping and health, and while current findings indicate a slight negative relationship between diary keeping and well-being, the reasons remain unclear, possibly because those who keep diaries may face more frequent and severe stressful events, or have more symptoms that provide them with the time and content to maintain a diary (cited in Duncan & Sheffield, 2008). This practice of diary-keeping might be allowing individuals to articulate their emotions and thoughts, creating a form of emotional release that can be crucial for managing stress. Consequently, the

motivation to use diary-keeping as a method to pour out one's troubles may lead to more consistent engagement with this activity.

Individuals often exhibit distinct preferences for specific writing methods, which can vary from person to person. For instance, while some individuals may favor typing for its speed and efficiency, others might prefer the tactile experience of handwriting. These personal preferences can influence the effectiveness and satisfaction derived from the writing process. No studies have directly compared different writing methods on health outcomes, but some research, like Brewin and Lennard (1999), has shown that handwriting may evoke more negative affect and greater self-disclosure than typing, possibly because it allows for deeper processing of thoughts and feelings due to its slower pace (cited in Pennebaker & Chung, 2007). It is worth noting that technological advancements have increasingly distanced particularly younger individuals from traditional writing tools such as pencil and paper. In contemporary settings, most daily writing activities are performed digitally, utilizing devices like computers, tablets, and smartphones. This shift has rendered the act of handwriting somewhat unfamiliar to some younger individuals who are more used to digital platforms. Conversely, older generations, who grew up before the digital age took full effect, might be more likely to show a preference for handwriting. Understanding these preferences can be significant as they can affect the psychological and emotional benefits derived from the writing process. Pennebaker and Chung (2007) also mentions that women significantly prefer finger writing, which is writing only by using their finger as a pen, over men; often reporting that it enables them to express their most secretive thoughts more freely, and often use more swear words in finger writing than when writing with a pen. Consequently, it may be suggested that women prefer to keep their disclosures private, whereas men may not regard privacy as critically. This preference could be linked to societal expectations and the roles that individuals feel compelled to adhere to. Further research is essential to determine whether various writing methods produce different effects. In the present study, the focus was not on comparing various types of writing; instead, all writing sessions were conducted digitally due to the online nature of data collection. To avoid creating an artificial environment, participants were encouraged to write in their own comfortable settings. If the writing sessions had involved handwriting with pen and paper, it would have

been difficult to verify whether participants had actually completed the task. Although the content of the writing was not analyzed, digital writing was chosen in this study to ensure that all participants in the writing groups had participated in the sessions. Participants were provided the flexibility to use any technological device that suited their preference, such as computers, tablets, or smartphones, ensuring that they could engage in the writing exercises in a manner that felt most comfortable and accessible to them.



Chapter 3

Methodology

3.1 Research Design

The current study was conducted using a 3x2 experimental method, with three participant groups and two measurements (pre-test and post-test). As the primary aim was to investigate how writing could influence individuals' well-being, their scores of experiential avoidance and positive and negative affect, this approach was chosen to establish a cause-and-effect relationship between writing and these psychological outcomes.

This study included three different groups: the expressive writing group, the positive expressive writing group, and the control group. Participants in the expressive writing group were asked to write about traumatic experiences in their lives, while those in the positive expressive writing group wrote about their most positive experiences. The study adhered to the classic instructions of the expressive writing paradigm. For the expressive writing group, the Turkish translation of the instructions provided by Pennebaker and Chung (2007) was used (see Appendix A). For the positive expressive writing group, the Turkish translation of the instructions from Baikie et al. (2012) was utilized (see Appendix B). To ensure the most effective design for the current study, methodologies from similar studies were reviewed. One commonality between this study and Çıvgın's (2020) research is the inclusion of a control group where participants only completed pre-test and post-test questions without participating in any writing sessions which is very rare in the literature. This differs from other studies (Gortner et al., 2006; Baikie et al., 2012; Procaccia et al., 2021; Tsai, Lee, & Monte, 2021; Round, Wetherell, Elsey, & Smith, 2022) that used a neutral writing group as the control group, where participants wrote about neutral topics without focusing on emotions. By having the control group refrain from writing entirely, this study also aimed to examine the isolated effects of the act of writing itself, thus providing a clearer understanding of the psychological impacts of writing.

3.2 Participants

The G*Power 3.1 program was utilized to conduct the power analysis, which indicated that a minimum of 66 participants were required to detect the desired effect in the study (Faul, Erdfelder, Lang, & Buchner, 2007). Ultimately, 68 participants successfully completed all phases of the study. These participants were randomly divided into three groups: 22 in the expressive writing group, 24 in the positive expressive writing group, and 22 in the control group. There were no specific inclusion criteria for the group assignment. The general recruitment of the study was conducted through convenience sampling, targeting individuals who were available and willing to participate voluntarily. The exclusion criteria for the study included participants who were under the age of 18 or over the age of 65, as well as those with a diagnosed psychiatric disorder. The latter criterion was implemented to ensure that the study focused on examining the effects of expressive writing within a sample that had not been diagnosed with any psychiatric conditions.

Total of 276 individuals have submitted the initial recruitment form. During the initial screening, 27 individuals who disclosed having psychiatric disorders were excluded from the study and did not receive the second form that required to confirm their participation in subsequent phases. Additionally, two participants were excluded for being under the age of 18, and four more were excluded due to incomplete information provided. Out of the initial applicants, 104 participants applied to the study but did not proceed after the first form. Additionally, 71 participants agreed to continue but dropped out midway through the study.

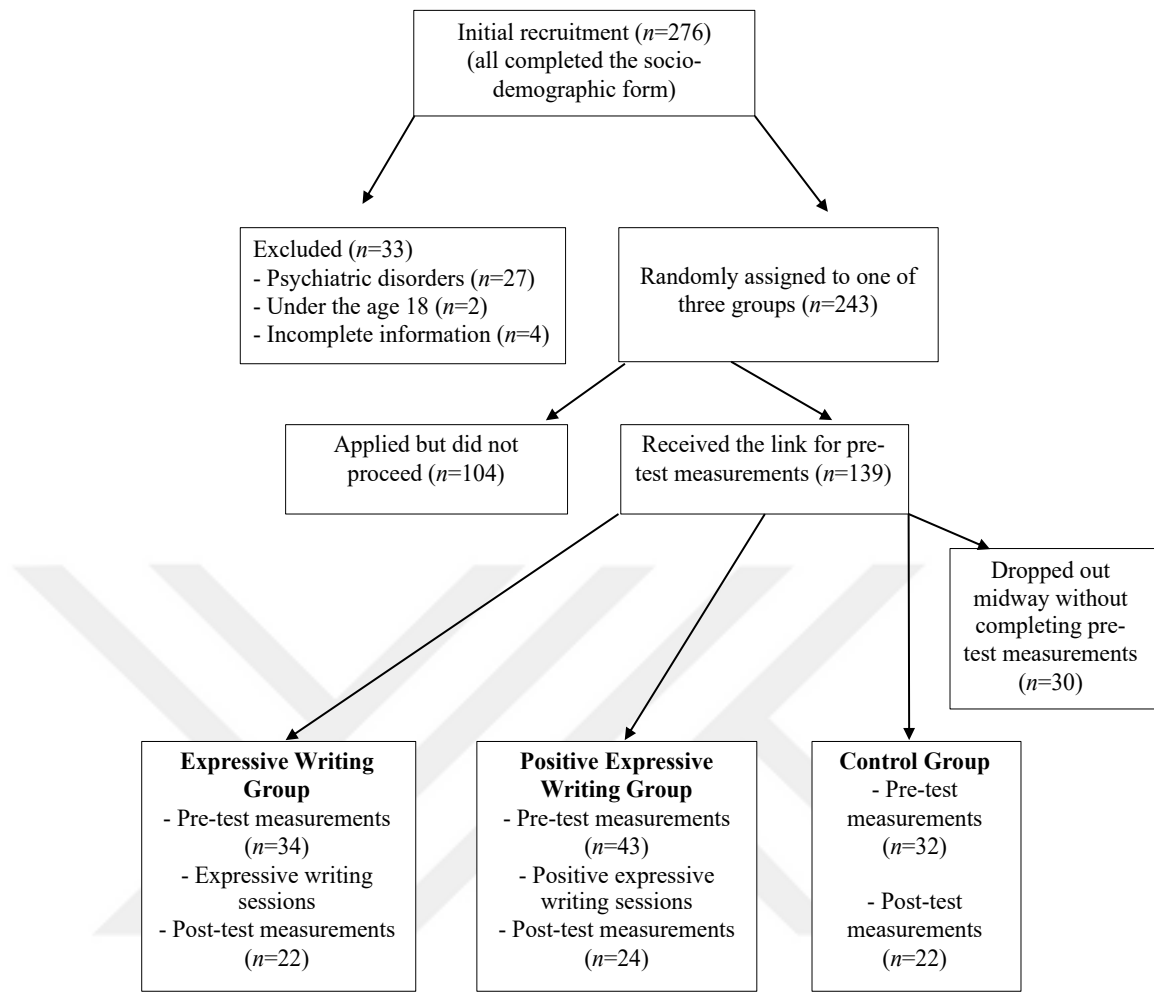


Figure 1. Flowchart showing the process of participation through the study

As shown in Table 1, the demographic profile of the participants in the study exhibited a broad age range from 19 to 61 years, with mean age of 28.31 ($SD = 9.37$). The majority of participants were female, comprising 77.9% ($n=53$), while males accounted for 22.1% ($n=15$). All participants were Turkish speakers, though details regarding their ethnicity or nationality were not collected. Educational backgrounds varied: 30.9% ($n=21$) had completed high school, 54.4% ($n=37$) had obtained a university degree, 8.8% ($n=6$) held a master's degree, and 5.9% ($n=4$) were PhD graduates. Additionally, 39.7% ($n=27$) of the participants reported that they regularly kept a diary.

Table 1

Sociodemographic Information

		<i>M</i>	Range	<i>SD</i>	<i>N</i>	%
Age		28.31	43	9.37		
Gender	Female				53	77.9%
	Male				15	22.1%
Education	High school				21	30.9%
Level	graduate					
	University				37	54.4%
	graduate					
	Master's or				10	14.7%
	PhD graduate					
Income	Low				5	7.4%
Level	Low/Medium				14	20.6%
	Medium				33	48.5%
	High				16	23.5%
Keeping a	Yes				27	39.7%
diary	No				41	60.3%

Note. *M* = Mean, *SD* = Standard Deviation, *N* = 68

3.3 Data Collection

3.3.1 Data Collection Instruments

3.3.1.1 Sociodemographic Information Form. This form was designed to collect essential information about the participants, with a focus on their demographic characteristics, including age, gender, education and income levels. Additionally, the form seeks to determine whether participants engage in diary-keeping or not. Lastly, the form seeks to ascertain whether participants have any diagnosed psychiatric disorders, which were an exclusion criterion for the study.

Sociodemographic information form is presented in Appendix C.

3.3.1.2 Big Five Personality Traits Scale. This inventory, initially developed by Rammstedt and John (2007), is designed to assess the dimensions of the Big Five Personality Theory. While other inventories exist for the Big Five dimensions, which are extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience, this particular scale condenses the original 44-item Big Five Inventory into

a more concise 10-item version. The selection of this abbreviated scale for the current study was deliberate, as it was intended to minimize participant fatigue due to the multiple measurements involved in the research. The internal consistency reliability, as measured by Cronbach's alpha, for the Big Five Inventory-10 (BFI-10) dimensions were as follows: Extraversion ($\alpha = .89$), Agreeableness ($\alpha = .74$), Conscientiousness ($\alpha = .82$), Neuroticism ($\alpha = .86$), and Openness to Experience ($\alpha = .79$) (Rammstedt & John, 2007). It is stated that although these values are somewhat lower than those observed in longer scales, they are considered acceptable considering the concise nature of the measure. Participants self-assess by responding to various statements related to each trait, and these responses are averaged to produce a mean score for each personality dimension.

Item 1 and 6 measure extraversion; item 2 and 7 measure agreeableness; item 3 and 8 measure conscientiousness, item 4 and 9 measure neuroticism; and item 5 and 10 measure openness to experience. Items 1, 3, 4, 5, and 7 were reverse-scored. The scale was responded to using a 5-point Likert scale (1= disagree strongly, 5= agree strongly).

The Turkish standardization of the scale was conducted by Horzum, Ayas and Padır (2017). The scale's reliability was assessed through Cronbach's alpha for internal consistency and by calculating composite reliability coefficients. For the five personality factors measured by the scale, the internal consistency and composite reliability values are as follows: for extraversion, internal consistency is .88 and composite is .83; for agreeableness, internal consistency is .81 and composite is .73; for conscientiousness, internal consistency is .90 and composite is .85; for neuroticism, internal consistency is .85 and composite is .79; and for openness to experience, internal consistency is .84 and composite is .78. The fact that all internal consistency and composite reliability values are above .70 indicates that the scale produces reliable and consistent data (Horzum, Ayas, & Padır, 2017). As they also state, for convergent validity, the AVE (Average Variance Extracted) values for each factor were examined and the AVE values for each factor were found to be 0.70, 0.57, 0.74, 0.65, and 0.64, respectively.

In the reliability analysis of the current study, Cronbach's alpha levels were as follows: .86 for extraversion, .03 for agreeableness, .26 for conscientiousness, .56 for neuroticism, and .47 for openness to experience. Results show that only extraversion demonstrated good reliability in the present study, while the other subscales exhibited low and unacceptable reliability. Consequently, data from the Big Five Personality Traits were not included in further analysis. This outcome may be attributed to the scale's design, which includes only two items per dimension. The initial intention was to use a shorter scale to minimize the potential for participant fatigue. However, given the already small sample size in this study, the items did not exhibit sufficient reliability. Big Five Personality Scale items are presented in Appendix D.

3.3.1.3 Acceptance and Action Questionnaire-II (AAQ-II). This questionnaire was initially developed by Bond et al. (2011) to measure experiential avoidance and it was found that the mean Cronbach's alpha coefficient across six samples was 0.84, with individual alpha values ranging from 0.78 to 0.88. The questionnaire includes seven items, none of which are reverse-coded. Item scoring was conducted using a 7-point Likert scale (1= never true, 7= always true). The total score, reflecting an individual's experiential avoidance or psychological inflexibility, is calculated by summing the item responses, with higher scores indicating greater inflexibility (Bond et al., 2011).

The Turkish adaptation of the Acceptance and Action Questionnaire-II was conducted by Yavuz et al. (2017). The Turkish version of the AAQ-II demonstrated strong internal consistency, reflected by a Cronbach's alpha of 0.84. The 60-day test-retest reliability indicated robust temporal stability with a Pearson's correlation of 0.85. Additionally, convergent validity of the Turkish AAQ-II was assessed through Pearson's correlation, revealing moderate correlations with Ruminative Thinking Style Questionnaire and State-Trait Anxiety Inventory-II total scores, with coefficients of 0.57 and 0.67, respectively. In the current study, AAQ-II scale demonstrated good reliability, with a Cronbach's alpha coefficient of .86. The items of the Acceptance and Action Questionnaire-II are presented in Appendix E.

3.3.1.3 Warwick-Edinburgh Mental Well-Being Scale Short Form. This scale was originally developed by Tennant et al. (2007) to measure individuals' mental well-being levels. It consists of 7 items that are measured with 5-point Likert scale (1= none of the time, 5= all of the time). None of the items were reverse coded in the measure. The internal consistency reliability of the scale was high, with Cronbach's alpha values of .89 in the student sample and .91 in the population sample (Tennant et al., 2007). This scale was used in the current study to measure participants' levels of well-being before and after the writing interventions.

The Turkish standardization of the scale was conducted by Demirtaş and Baytemir (2019). A confirmatory factor analysis (CFA) was conducted for the structural validity of the short form of the Warwick-Edinburgh Mental Well-Being Scale, which includes 7 items in its original form. The analysis results show that all t-values are significant (ranging from 6.83 to 11.11) and the model fit indices are good. The factor loadings of the scale vary between .57 and .82 (Demirtaş & Baytemir, 2019). They also state that the Turkish version of the scale, with Cronbach's Alpha reliability coefficients of .86 and .84 for two study groups respectively, is confirmed as a valid and reliable instrument. In the present study, the Warwick-Edinburgh Mental Well-Being Scale demonstrated good reliability, with a Cronbach's alpha coefficient of .83. Warwick-Edinburgh Mental Well-Being Scale items are presented in Appendix F.

3.3.1.4 Positive and Negative Affect Schedule (PANAS). The scale was initially designed by Watson, Clark and Tellegen (1988) to measure the affect of individuals. It consists 10 positive and 10 negative affect items and they are measured with 5-point Likert scale (1= very slightly or not at all, 5= extremely). Positive affects encompass items such as "interested," "proud," and "inspired," while negative affects include items such as "distressed," "scared," and "nervous." Positive items and negative items are measured separately by adding up the scores. The internal consistency reliability of the PANAS was high, with Cronbach's alpha values ranging from .86 to .90 for the Positive Affect (PA) scale and from .84 to .87 for the Negative Affect (NA) scale (Watson, Clark, & Tellegen, 1988). PANAS was utilized in the present study to measure individuals' affect before and after the writing interventions.

Gençöz (2000) conducted the Turkish adaptation of the scale and it was found that internal reliability of the scale was .85 for positive affect and .86 for negative affect. It was also found that test retest reliability was .40 and .54, respectively for positive and negative affect. In the current study, the scale exhibited good reliability, with a Cronbach's alpha of .87 for positive affect and .82 for negative affect. Positive and Negative Affect Schedule items are presented in Appendix G.

3.3.1.5 Post-Experiment Evaluation Form. In this questionnaire, the objective was to gather insights into how participants responded to the experiment, excluding those in the control group who did not answer the questionnaire. This form was adapted from the study of Çıvgın (2020). Participants were asked to rate the extent to which they focused on facts, emotions, and their own opinions during the writing process. Additionally, for those in the expressive writing groups, a specific question inquired whether they felt that writing about the event had lessened its impact on them. There was also a question asking all participants whether they think that participating in this study was helpful for them. Alongside the close-ended questions there was also an open-ended component where participants were asked to express their feelings about the writing sessions once they had completed all the required steps. This form was administered to participants to gather detailed information about their subjective experiences following the experimental manipulations. Post-Experiment Evaluation Form is presented in Appendix H.

3.3.2 Data Collection Procedures.

Before data collection began, approval was obtained from the Ethics Committee of Bahçeşehir University. The data collection process then started in April 2024 and continued until July 2024.

Data collection for the study was conducted entirely online. As detailed in the following, Google Forms was used for both the initial recruitment form and the subsequent informative form. The initial data collected through Google Forms were systematically transferred to Microsoft Excel to facilitate the random assignment of

participants into the three experimental groups. To ensure true randomness in the assignment process, a random sequence generator (random.org/sequences) was employed to generate three distinct columns of random numbers. Participants were then assigned to these groups based on their order of application, as reflected in the Excel dataset. Once participants confirmed their commitment to continue with the study, the JotForm platform was employed for the writing sessions as well as the pre-test and post-test measurements. Communication with participants during the writing session days was primarily conducted via email. A few participants who preferred using their phone numbers received the necessary links and reminders through text messages.

The research announcement was shared through social media accounts and also via direct messages. The initial form served two purposes: to obtain participants' consent to take part in the study and to collect socio-demographic information. Participants were first presented with a consent form (see Appendix I) that provided general information about the study and their rights as participants. Only after they had carefully reviewed the consent form and indicated their agreement to participate were they granted access to the sociodemographic form. Importantly, no personal identifying information was requested, though participants were required to provide contact details (either an email address or phone number) to facilitate communication during the writing sessions. To ensure the confidentiality of their responses, participants used nicknames at each stage of the study, allowing their data to be accurately matched across different phases.

As shown in Table 2, upon completing the first recruitment form, participants received a second informed consent form detailing the procedure both for the writing groups (see Appendix J) and the control group (see Appendix K). In this second form, they confirmed their commitment to continue with the following steps of the study and selected a convenient week for their writing sessions. Similarly, participants in the control group received a corresponding form to indicate their available week, during which they would complete the pre-test and post-test questionnaires only. This structured process ensured that all participants, whether in the writing groups or the control group, had a clear understanding of the study timeline and their involvement.

Participants in the writing groups were instructed to attend the writing sessions three times during the week they had chosen, specifically on Monday, Thursday, and Sunday. On each of these days, the link to the online platform was sent to participants early in the morning, allowing them the flexibility to attend the session at any convenient time throughout the day. If participants did not attend the sessions initially, two additional reminder emails were sent later in the day. Each writing session page featured a 20-minute countdown timer, and participants were encouraged to write continuously until the timer expired. However, due to the platform's fixed design, participants also had the option to submit their writing before the countdown ended. Therefore, it is possible that some participants may have submitted their writing tasks before the 20-minute countdown expired, without the awareness of the researcher. The instructions for the writing tasks were consistent across all sessions. Participants completed pre-test questionnaires before the first writing session on Monday and post-test questionnaires after the final writing session on Sunday, ensuring comprehensive data collection on their well-being, experiential avoidance, and positive and negative affect scores. Pre-test measurements consisted of the Big Five Personality Traits Scale, the Acceptance and Action Questionnaire-II, the Warwick-Edinburgh Mental Well-Being Scale, and the Positive and Negative Affect Schedule. The post-test measurements included all of these, plus the Post-Experiment Evaluation Form, but excluded the Big Five Personality Traits Scale. Upon completing the post-test measures on the final day of the study, participants were provided with detailed information about the objectives of the research, giving them a clearer understanding of the study's purpose and how their contributions were integral to the research. Furthermore, participants were invited to contact the research team via email if they wished to receive updates about the study results, ensuring they had the opportunity to stay informed about the outcomes and implications of their involvement. Lastly, the debriefing section (see Appendix L) included crucial information about the psychological counseling and guidance services offered by Bahçeşehir University. This resource was highlighted for participants who might have experienced any distress during the writing sessions and were seeking psychological support. This provision aimed to ensure the well-being of the participants by offering immediate

access to professional help if needed, emphasizing the study's commitment to ethical standards and participant care.

Table 2

Data Collection Procedures

Initial Recruitment Form	Second Form Informing Participants	Pre-Test Measurements	Three Writing Sessions	Post-test Measurements
Included brief information about the study and socio-demographic information form.	Included more detailed information about the study procedures and differed for the writing groups and the control group.	Applied right before the first writing session for the writing groups. Applied at the first day of the week for the control group.	Each session lasted 20 minutes.	Applied right after the last writing session for the writing groups. Applied at the last day of the week for the control group.
Informed Consent Form		Warwick-Edinburgh Mental Well-Being Scale		Warwick-Edinburgh Mental Well-Being Scale
Sociodemographic Information Form		Acceptance and Action Questionnaire – II		Acceptance and Action Questionnaire – II
		Positive and Negative Affect Schedule		Positive and Negative Affect Schedule
		Big Five Personality Traits Scale		Post-Experiment Evaluation Form

3.3.3 Data Analysis Procedures

All the data transferred to Excel for comprehensive analysis. In this phase, variable coding was applied within Excel to organize the dataset effectively, enabling subsequent statistical analysis. This coding process involved categorizing responses

and ensuring that all relevant data points were accurately labeled, thus preparing the dataset for more advanced statistical procedures. No data was excluded from the analyses concerning the content of the writings, as participants were informed that their entries would not be examined in relation to the study's objectives.

For the data analysis, SPSS version 29.0.2.0 (20) was employed. The data values were appropriately labelled, and normality tests were conducted to determine if the data followed a normal distribution. Skewness and kurtosis values were checked, confirming that the data was normally distributed. One-Way ANOVA indicated no significant differences among the pre-test scores of the three groups. Also, no difference was found between demographic variables across measurements according to One-Way ANOVA and Chi-Square tests. Subsequently, the frequency distribution of the sociodemographic variables was analyzed. Following this, reliability assessments of the scales were carried out. A descriptive statistics table was then generated. After that, Pearson correlation analysis was conducted to explore potential relationships between the research variables. Separate mixed ANOVA analyses were conducted for well-being, experiential avoidance, positive and negative affect. For the mixed ANOVA analyses, Mauchly's Test of Sphericity indicated that the assumption of sphericity was met, therefore, no corrections for sphericity were necessary. Additionally, in order to examine the possible effect of writing intervention on well-being, experiential avoidance, and positive and negative affects, Paired-Sample T-Test was conducted for each group. Lastly, in order to examine the demographic differences between groups Independent Samples T-Test was conducted.

3.4 Limitations

Current study has several limitations that should be acknowledged. Firstly, there was a noticeable gender imbalance among participants, with male participants comprising only 22.1% of the sample. Ideally, a more balanced representation of genders would have been preferred to ensure more generalizable results. However, due to time constraints during the data collection phase, it was not possible to recruit additional male participants to equalize the numbers.

Furthermore, the process of reaching the desired sample size was prolonged by a significant dropout rate, as discussed in previous sections. The study involved multiple phases, which may have posed a challenge for participants, particularly since no incentives, such as gift cards or other rewards, were offered upon completion of the tasks. It is possible that offering such incentives might have reduced the dropout rate and facilitated a quicker recruitment process. These limitations suggest that future research could benefit from more balanced participant demographics and the inclusion of incentives to maintain participant engagement throughout the study.

Conducting the study online presents another notable limitation, primarily due to the absence of a controlled environment. In a traditional, in-person setting, researchers have the ability to closely monitor participants and ensure adherence to the study protocols. However, in this online format, there was no mechanism to verify whether participants engaged in the writing tasks for the entire 20-minute duration as instructed. The online platform's design allowed participants to submit their sessions before the countdown concluded, which limited the researcher's ability to enforce consistent time use across all participants.

Additionally, despite explicit instructions encouraging participants to continue writing for the full 20 minutes, even if it meant repeating themselves, some of the submissions were noticeably brief. This variation in writing length suggests that not all participants utilized the entire allotted time, potentially impacting the depth and quality of their engagement with the writing task. This inconsistency introduces variability in the data, which could influence the study's findings. Future studies might consider alternative approaches to ensure more uniform participation, such as incorporating automated reminders or adjusting the platform's design to better enforce time requirements.

Furthermore, one of the significant limitations of the current study was the exclusion of the Big Five Personality Traits Scale due to the unacceptable reliability levels of its items. As a result, the role of individual differences, which could have provided valuable insights into how personality traits influence the outcomes, could not be examined. Including a more reliable and comprehensive measure of the five-

factor personality traits, such as a longer version, would have allowed for a more thorough exploration of these individual differences. This would have enriched the study's findings by providing a deeper understanding of how personality traits might interact with or influence the variables under investigation.

Lastly, a significant limitation of the current study was the absence of follow-up measurements, largely due to time constraints. While the study provides valuable insights into the immediate psychological impacts of writing, it falls short in assessing the long-term effects of such interventions. Understanding the sustained impact of expressive writing on participants' well-being and psychological functioning is crucial for determining the true efficacy and lasting benefits of this therapeutic approach. Without follow-up assessments, it remains unclear whether the outcomes observed shortly after the writing sessions are maintained over time or whether they diminish as time progresses. Future research should prioritize the inclusion of follow-up measurements to capture a more comprehensive view of the enduring effects of writing interventions, thereby offering a fuller understanding of their potential as long-term therapeutic tools.

Chapter 4

Findings

4.1 Preliminary Analysis

To assess the normality of the variables, both skewness and kurtosis values were examined along with Kolmogorov-Smirnov Test. Since the sample size was larger than 50, Kolmogorov-Smirnov Test is more appropriate compared to Shapiro-Wilk Test (Ghasemi & Zahediasl, 2012).

Table 3

Findings Regarding Skewness and Kurtosis Values of Variables

Groups	Variables	<i>M</i>	Median	<i>SD</i>	Kurtosis	Skewness
Control Group	Well-being (pre-test)	26.18	26.50	3.38	.63	-.001
	Well-being (post-test)	26.27	26.00	3.07	-.33	.38
	AAQ-II (pre-test)	22.73	22.00	8.28	-1.30	.02
	AAQ-II (post-test)	21.86	22.00	7.38	-.88	.46
	Positive Affect (pre-test)	32.77	32.00	4.77	-.80	-.04
	Positive Affect (post-test)	33.73	33.50	6.39	-.76	.09
	Negative Affect (pre-test)	19.91	20.00	5.55	-.46	.18
	Negative Affect (post-test)	19.64	20.00	5.96	-.34	.30
EW Group	Well-being (pre-test)	24.86	24.50	4.89	.72	-.37
	Well-being (post-test)	25.45	25.50	3.91	.21	.37
	AAQ-II (pre-test)	21.77	23.00	8.37	-1.29	.03
	AAQ-II (post-test)	21.73	17.50	9.16	.25	.77
	Positive Affect (pre-test)	31.18	31.00	6.72	-.22	.13
	Positive Affect (post-test)	31.86	31.50	6.75	-.14	-.07
	Negative Affect (pre-test)	20.64	20.50	6.78	-.77	.29
	Negative Affect (post-test)	21.68	21.50	7.46	-.67	.29
PEW Group	Well-being (pre-test)	25.50	25.00	3.80	.24	-.37
	Well-being (post-test)	26.54	26.50	4.44	-.40	.28
	AAQ-II (pre-test)	22.92	23.00	7.18	-.66	-.02
	AAQ-II (post-test)	21.17	22.00	6.91	-1.17	-.27
	Positive Affect (pre-test)	33.04	33.50	8.97	-.27	-.21
	Positive Affect (post-test)	36.25	38.50	9.40	2.02	-1.29
	Negative Affect (pre-test)	22.25	24.00	6.84	-.84	-.13
	Negative Affect (post-test)	21.17	21.00	7.14	-1.12	-.03

Note. *M* = Mean, *SD* = Standard Deviation, EW = Expressive Writing, PEW = Positive Expressive Writing.

To decide on the distribution of the data obtained from the research, initially, the central tendency measures of the mean and median were examined, and it was determined that the mean and median values converged. It is stated that the normal distribution is accepted when skewness and kurtosis values are within the range of +3 to -3 (Matis, Birbilis, & Kontogianidis, 2009). According to this, the data was accepted to be normally distributed.

As shown in Table 4, Kolmogorov-Smirnov test results demonstrated significant deviation from normality only for post-test of AAQ-II, $D(68) = 0.12$, $p = 0.02$. However, since skewness and kurtosis scores are in the acceptable range, the data is accepted as normally distributed.

Table 4

Normality Tests Regarding Pre-test and Post-test Measurements

	Kolmogorov-Smirnov ^a		
	<i>D</i>	<i>df</i>	<i>p</i>
AAQ-II (pre-test)	.105	68	.061
AAQ-II (post-test)	.120	68	.017*
Well-being (pre-test)	.092	68	.200
Well-being (post-test)	.075	68	.200
Positive Affect (pre-test)	.095	68	.200
Positive Affect (post-test)	.066	68	.200
Negative Affect (pre-test)	.072	68	.200
Negative Affect (post-test)	.091	68	.200

Note. *D* = Test Statistic for Kolmogorov-Smirnov, *df* = degrees of freedom, AAQ-II = Acceptance and Action Questionnaire – II, * $p < .05$

Additionally, One-Way ANOVA was conducted to examine whether there are any significant difference between the pre-test measurements of the three groups. The results revealed that there was no significance between the groups for well-being

scores, $F(2, 65) = 0.58, p = .56$; AAQ-II scores, $F(2, 65) = 0.13, p = .88$; positive affect scores, $F(2, 65) = 0.45, p = .64$; or negative affect scores, $F(2, 65) = 0.81, p = .45$.

Furthermore, One-Way ANOVA and Chi-Square Tests were conducted to examine whether there were any differences in the demographic variables across the three groups. Results showed that the age variable was not significantly different across the groups, $F(2, 65) = 1.56, p = .22$. Also there was no significant difference in the other variables between the groups as well. Results were as follows: $X^2(2) = .76, p = .68$ for gender; $X^2 = 7.74, p = .26$ for education level, $X^2(2) = 3.47, p = .90$ for income level; $X^2(2) = 1.03, p = .60$ for relationship status; and $X^2(2) = .15, p = .93$ for diary keeping status.

4.2 Descriptive Statistics

The means, standard deviations, and minimum and maximum values for the variables—including pre-test and post-test scores of the Acceptance and Action Questionnaire-II, Warwick-Edinburgh Mental Well-Being Scale, and Positive and Negative Affect Schedule—were calculated and are presented in Table 5.

Table 5

Descriptive Statistics

	<i>M</i>	<i>SD</i>	Min.	Max.
AAQ-II (pre-test)	22.49	7.84	8.00	37.00
AAQ-II (post-test)	21.57	7.74	8.00	45.00
Well-Being (pre-test)	25.51	4.04	13.00	35.00
Well-Being (post-test)	26.10	3.84	19.00	35.00
Positive Affect (pre-test)	32.35	7.04	16.00	49.00
Negative Affect (pre-test)	20.97	6.41	10.00	34.00
Positive Affect (post-test)	34.01	7.79	10.00	49.00
Negative Affect (post-test)	20.84	6.85	10.00	38.00

Note. *M* = Mean, *SD* = Standard Deviation, Min. = Minimum Value, Max. = Maximum Value, AAQ-II = Acceptance and Action Questionnaire – II

4.3 Correlational Analyses

Pearson correlation analysis was applied to examine whether there was a relationship between positive-negative affects, experiential avoidance and well-being levels of the participants.

As shown in Table 6 the results of Pearson Correlation analysis demonstrated that there was a strong positive relationship between pre-test scores of well-being and pre-test scores of positive affect ($r = .63, p < .05$). On the other hand, there was a negative significant relationship between the pre-test scores of well-being and pre-test scores of AAQ-II ($r = -.53, p < .05$) and also pre-test scores of negative affect ($r = -.54, p < .05$).

Results also showed that pre-test scores of AAQ-II were positively related to pre-test scores of the negative affect ($r = .64, p < 0.05$). In addition, there was a significantly negative relationship between pre-test scores of AAQ-II and the pre-test scores of the positive affect ($r = -.43, p < 0.05$). Finally, positive affect and negative affect were also negatively correlated, $r = -.26, p < .05$.

Table 6

Results of Correlational Analysis on the Relationship Between Participants' Positive-Negative Affects, AAQ-II and Well-Being Values

Variables		1	2	3	4
Well-being (pre-test)(1)	<i>r</i>	1			
AAQ-II (pre-test)(2)	<i>r</i>	-.532**	1		
Positive Affect (pre-test)(3)	<i>r</i>	.625**	-.428**	1	
Negative Affect (pre-test)(4)	<i>r</i>	-.537**	.637**	-.255*	1

Note. AAQ-II = Acceptance and Action Questionnaire-II. *r* = Pearson Correlation, * $p < .05$, ** $p < .001$

4.4 Analyses Between Groups

4.4.1 Mixed-Design ANOVA Analyses

In order to examine the possible effects of expressive writing on well-being, experiential avoidance (AAQ-II) and positive and negative affects, Mixed-Design ANOVA analyses were conducted.

4.4.1.1 Well-being. The interaction effect between time and groups was not statistically significant for well-being measures, $F(2, 65) = 0.81, p = 0.45$. This indicates that the change in well-being over time did not differ significantly between the groups. The main effect of time on well-being was also not statistically significant, $F(1, 65) = 3.51, p = 0.065$. This suggests that there was no significant change in the well-being scores across the different time points. The main effect of groups was also not significant, $F(2, 65) = 0.50, p = 0.61$.

Although no significant difference was found between pre-test and post-test measurements of well-being, there was an increase in the overall well-being scores. The mean difference between pre-test and post-test scores of the writing groups were higher than the mean difference in the control group, as shown in Table 7.

Table 7

Descriptive Statistics of Pre-test and Post-test Measurements of Well-being

	Groups	<i>M</i>	<i>SD</i>	<i>N</i>
Well-being (pre-test)	EW	24.86	4.89	22
	PEW	25.50	3.80	24
	Control	26.18	3.38	22
	Total	25.51	4.04	68
Well-being (post-test)	EW	25.45	3.91	22
	PEW	26.54	4.44	24
	Control	26.27	3.07	22
	Total	26.10	3.84	68

Note. *M* = Mean, *SD* = Standard Deviation, *N* = 68, EW = Expressive Writing, PEW = Positive Expressive Writing

The mean well-being scores in the pre-test measurements were as follows: 24.86 for the expressive writing group, 25.50 for the positive expressive writing group, and 28.18 for the control group. The post-test measurements were as follows: 25.45 for the expressive writing group, 26.54 for the positive expressive writing group, and 26.27 for the control group. Lastly, no notable mean differences were observed between the post-test well-being scores of the writing groups and the control group.

4.4.1.2 Acceptance and Action Questionnaire – II. The interaction between time and groups was not significant, $F(2, 65) = 0.82, p = 0.45$. This indicates that the change in AAQ-II scores over time did not differ significantly between the groups. Also, no significance was found for the effect of time on experiential avoidance, $F(1, 65) = 2.61, p = 0.11$. This suggests that there was no significant change in the experiential avoidance across two measurement points. The main effect of groups was also not significant, $F(2, 65) = 0.03, p = 0.97$.

Although the results regarding AAQ-II scores were not statistically significant, there was a slight reduction in experiential avoidance scores for the positive writing group (as shown in Table 8), with pre-test scores averaging 22.92 and post-test scores averaging 21.17. Lastly, no notable mean differences were observed between the post-test AAQ-II scores of the writing groups and the control group.

Table 8

Descriptive Statistics of Pre-test and Post-test Measurements of AAQ-II

	Groups	<i>M</i>	<i>SD</i>	<i>N</i>
AAQ-II (pre-test)	EW group	21.77	8.37	22
	PEW group	22.92	7.18	24
	Control group	22.73	8.28	22
	Total	22.49	7.84	68
AAQ-II (post-test)	EW group	21.73	9.16	22
	PEW group	21.17	6.91	24
	Control group	21.86	7.38	22
	Total	21.57	7.74	68

Note. AAQ-II = Acceptance and Action Questionnaire – II, *M* = Mean, *SD* = Standard Deviation, *N* = 68, EW = Expressive Writing, PEW = Positive Expressive Writing

4.4.1.3 Positive and negative affect. A Repeated Measures ANOVA results showed that the interaction effect between time and groups was not statistically significant for positive affect, $F(2, 65) = 1.50, p = 0.23$. This indicates that the change in the positive affect over time did not differ significantly between groups. The main effect of groups was also not significant, $F(2, 65) = 1.19, p = 0.31$. However, the effect of time on the positive affect was statistically significant, $F(1, 65) = 5.92, p = 0.018$. This suggests that there was a significant change in positive affect from pre-test to post-test.

The interaction effect between time and groups was not statistically significant for negative affect, $F(2, 65) = 1.30, p = 0.28$. This indicates that the change in the negative affect over time did not differ significantly between the groups. The effect of time on the negative affect was also not statistically significant, $F(1, 65) = 0.04, p = 0.85$. This suggests that there was no significant change in negative affect across the measurements. The main effect of groups was also not significant for negative affect, $F(2, 65) = 0.57, p = 0.57$.

In terms of positive affect measures, all groups actually showed an increase in the mean scores of the measurement, as shown in Table 9. Also, although the results regarding negative affect were not statistically significant, there was a decrease in the mean negative affect for participants in the positive expressive writing group, from 22.25 to 21.17. Contrary to the initial expectations, participants in the expressive writing group experienced an increase in negative affect, rising from 20.64 to 21.68. Finally, there were no noticeable mean differences between the post-test AAQ-II scores of the writing groups and the control group.

Although the mixed design ANOVA results did not reveal a significant interaction effect between group and time, further examination is warranted to explore within-group changes due to both theoretical and statistical concerns. Theoretically, expressive writing and positive expressive writing interventions are expected to yield psychological benefits that may not be uniformly captured across all groups in the ANOVA. Additionally, given the possibility of subtle or group-specific effects that

might be masked in the overall analysis, especially with a limited sample size, Paired-Samples T-Tests were conducted to explore potential meaningful changes from pre-test to post-test within each group.

Table 9

Descriptive Statistics of Pre-test and Post-test Measurements of Positive and Negative Affect

	Groups	<i>M</i>	<i>SD</i>	<i>N</i>
Positive Affect (pre-test)	EW group	31.18	6.72	22
	PEW group	33.04	8.97	24
	Control group	32.77	4.77	22
	Total	32.35	7.04	68
Positive Affect (post-test)	EW group	31.86	6.75	22
	PEW group	36.25	9.40	24
	Control group	33.73	6.39	22
	Total	34.01	7.79	68
Negative Affect (pre-test)	EW group	20.64	6.78	22
	PEW group	22.25	6.84	24
	Control group	19.91	5.55	22
	Total	20.97	6.41	68
Negative Affect (post-test)	EW group	21.68	7.46	22
	PEW group	21.17	7.14	24
	Control group	19.64	5.96	22
	Total	20.84	6.85	68

Note. *M* = Mean, *SD* = Standard Deviation, *N* = 68, EW = Expressive Writing, PEW = Positive Expressive Writing

4.4.2 Expressive Writing Group

As shown in Table 10, Paired-Samples T Test was conducted to compare the pre-test and post-test scores for mental well-being, AAQ-II, and positive and negative affect in the participants of the expressive writing group. According to the T-test results, no significant difference was found between the pre-test and post-test scores ($p > 0.05$).

Table 10

Paired-Samples T-Test Results Regarding the Expressive Writing Group

<i>Variables</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Well-being (pre-test)	22	24.86	4.89	-0.976	21	0.340
Well-being (post-test)	22	25.45	3.91			
AAQ-II (pre-test)	22	21.77	8.37	0.049	21	0.961
AAQ-II (post-test)	22	21.73	9.16			
Positive Affect (pre-test)	22	31.18	6.72	-0.709	21	0.486
Positive Affect (post-test)	22	31.86	6.75			
Negative Affect (pre-test)	22	20.64	6.78	-1.122	21	0.274
Negative Affect (post-test)	22	21.68	7.46			

Note. AAQ-II = Acceptance and Action Questionnaire – II, *M* = Mean, *SD* = Standard Deviation, *t* = Paired Sample T-Test, *df* = degrees of freedom

4.4.3 Positive Expressive Writing Group

A Paired-Samples T Test was conducted to compare the pre-test and post-test scores for mental well-being, AAQ-II, and positive and negative affect in the participants of the positive expressive writing group (as shown in Table 11).

Table 11

Paired-Samples T Test Results Regarding the Positive Expressive Writing Group

<i>Variables</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Well-being (pre-test)	24	25.50	3.80	-1.91	23	0.07
Well-being (post-test)	24	26.54	4.44			
AAQ-II (pre-test)	24	22.92	7.18	1.58	23	0.13
AAQ-II (post-test)	24	21.17	6.91			
Positive Affect (pre-test)	24	33.04	8.97	-3.13	23	0.005*
Positive Affect (post-test)	24	36.25	9.40			
Negative Affect (pre-test)	24	22.25	6.84	1.11	23	0.28
Negative Affect (post-test)	24	21.17	7.14			

Note. AAQ-II = Acceptance and Action Questionnaire – II, *M* = Mean, *SD* = Standard Deviation, *t* = Paired Sample T-Test, *df* = degrees of freedom, **p* < .05

According to the T-test results, the positive affect pre-test scores were 33.04 ± 8.97 , and the post-test scores increased to 36.25 ± 9.40 . It was determined that the difference between the pre-test and post-test scores for positive affect was significant, $t(23) = -3.13, p = 0.005$.

4.6 Group Differences by Participant Characteristics

The group differences were examined in terms of participants' gender, income level, education level and whether they keep diary or not.

4.6.1 Expressive Writing Group

4.6.1.1 Well-being. Mean well-being scores of females increased from 24.24 to 25.12; whereas there was a slight decrease for male participants, from 27.00 to 26.60. Even though no significant differences were found, it can be noted that the mean well-being scores of female participants increased while the mean well-being scores of male participants decreased after the expressive writing sessions. Also, while mean score of well-being increased among high school and university graduates, there was a slight decrease for master's or PhD graduates. Furthermore, mean well-being score of the diary-keepers increased from 25.00 to 26.63, while mean well-being score of the participants who do not keep a diary remained the same. There was no distinct mean score differences for income level groups.

4.6.1.2 AAQ-II. As shown in Table 12, Independent Samples T-Test results showed that the difference between the average AAQ-II (post-test) scores of the gender groups within the expressive writing group was found to be statistically significant ($p < .05$). Moreover, the results demonstrate that whereas the mean AAQ-II score of female participants remained almost the same; the mean AAQ-II score of male participants decreased from 16.20 to 14.20. Although no significant differences were found, it can be noted that the mean AAQ-II scores of female participants remained the same, while the mean AAQ-II scores of male participants decreased after the expressive writing sessions. Also, mean AAQ-II score of the participants who keep

diary decreased from 20.50 to 18.00, whereas mean AAQ-II score of the participants who do not keep a diary increased from 22.50 to 23.86. Also, whereas mean AAQ-II scores of graduates of master's or PhD decreased, mean scores of high school graduates increased and mean scores of university graduates remained the same. The similar decrease was observable among participants with low and high income levels; although there was an increase in mean AAQ-II scores among participants with low/medium and medium income levels.

Table 12

Comparison of the Well-Being and AAQ-II Scores of the Expressive Writing Group According to Demographic Variables

Demographics	Groups	Well-being (pre-test)	Well-being (post-test)	AAQ-II (pre- test)	AAQ-II (post-test)
		Mean±SD	Mean±SD	Mean±SD	Mean±SD
Gender	Female	24.24±4.68	25.12±3.39	23.41±8.26	23.94±9.13
	Male	27.00±5.52	26.60±5.68	16.20±6.69	14.20±3.90
	<i>t</i>	-1.117	-0.737	1.778	3.457
	<i>p</i>	0.277	0.470	0.091	0.003
Education level	Highschool				
	Graduate	28.25±5.32	29.25±3.86	15.25±6.70	17.00±8.83
	University				
	Graduate	23.81±4.74	24.50±3.69	23.63±8.20	23.63±9.35
	Master's or PhD Graduate	26.50±3.54	25.50±0.71	20.00±9.90	16.00±1.41
	<i>F</i>	1.509	1.752	1.772	1.305
	<i>p</i>	0.246	0.089	0.197	0.294
Income level	Low	17.00±5.66	21.00±0.00	26.00±4.24	22.50±7.78
	Low/Medium	25.83±6.91	25.67±6.12	22.67±12.29	24.17±13.67
	Medium	26.11±3.02	25.44±3.17	19.33±7.63	20.56±8.62
	High	24.60±1.95	27.00±0.71	23.40±5.59	20.60±5.37
	<i>F</i>	1.402	1.155	0.472	0.196
	<i>p</i>	0.101	0.354	0.706	0.898
Diary-keeping	Yes	25.00±6.37	26.63±4.72	20.50±7.98	18.00±7.67
	No	24.79±4.10	24.79±3.38	22.50±8.79	23.86±9.50
	<i>t</i>	0.096	1.064	-0.530	-1.484
	<i>p</i>	0.924	0.300	0.602	0.153

Note. AAQ-II = Acceptance and Action Questionnaire, *SD* = Standard Deviation, *t* = Independent Samples T Test, *F* = One-Way ANOVA, **p* < .05

4.6.1.3 Positive and Negative Affect. As shown in Table 13, it was found that the education level groups of the participants in the emotional writing group showed

differences according to their post-test scores of positive affect, $p < .05$. Scheffe test was conducted to examine which specific groups differed, and it was found that the difference was between participants with a university degree and those with a high school degree. It was also determined that participants with a university degree had lower post-test scores of positive affect.

Independent Samples T-Test results showed that the mean positive affect score of the diary keepers increased from 31.25 to 34.50; whereas mean positive affect score of the participants who do not keep a diary decreased from 31.14 to 30.36. In terms of the income level groups, most increase in the mean score was among the participants with high income level. There was no distinct differences observed for the mean scores of gender and education level groups.

For the negative affect, although there was an increase in the mean scores for the participants with high school and university degree, mean score of those with master's or PhD degree decreased from 23.00 to 19.00. There were both reductions and increases among income level groups as well. Also, negative affect mean score of the diary-keepers decreased from 20.00 to 19.13, whereas it increased for non-diary-keepers, from 21.00 to 23.14. There was no distinct mean score differences for gender groups.

Table 13

Comparison of the Positive and Negative Affect Scores of the Expressive Writing Group According to Demographic Variables

Demographics	Groups	Positive Affect (pre-test)	Positive Affect (post-test)	Negative Affect (pre-test)	Negative Affect (post-test)
		Mean±SD	Mean±SD	Mean±SD	Mean±SD
Gender	Female	30.94±5.71	31.35±6.53	21.12±7.05	22.41±7.73
	Male	32.00±10.3	33.60±7.99	19.00±6.16	19.20±6.57
	<i>t</i>	-0.303	-0.645	0.605	0.840
	<i>p</i>	0.765	0.526	0.552	0.411

Table 13 (cont'd)

Education level	Highschool Graduate	37.25±6.95	40.00±4.08	18.50±10.28	19.75±8.81
	University Graduate	29.50±6.15	29.56±6.03	20.88±6.42	22.50±7.72
	Graduate of Master's or PhD	32.50±6.36	34.00±1.41	23.00±0.00	19.00±1.41
	<i>F</i>	1.472	5.698	0.308	0.337
	<i>p</i>	0.111	0.012	0.738	0.718
	Scheffe	2<1			
Income level	Low	26.00±2.83	27.50±2.12	27.00±7.07	26.00±2.83
	Low/Medium	33.17±9.22	33.33±8.82	19.67±10.11	23.33±11.06
	Medium	31.22±6.94	30.56±6.50	19.44±3.81	21.11±4.96
	High	30.80±3.63	34.20±5.72	21.40±6.80	19.00±8.06
	<i>F</i>	0.538	0.652	0.712	0.516
	<i>p</i>	0.662	0.592	0.558	0.677
Diary-keeping	Yes	31.25±7.36	34.50±6.91	20.00±6.23	19.13±6.31
	No	31.14±6.62	30.36±6.42	21.00±7.27	23.14±7.88
	<i>t</i>	0.035	1.418	-0.326	-1.23
	<i>p</i>	0.972	0.172	0.748	0.233

Note. *SD* = Standard Deviation, *t* = Independent Samples T Test, *F* = One-Way ANOVA

4.6.2 Positive Expressive Writing Group

4.6.2.1 Well-being. It was found that the income level groups of participants in the positive expressive writing group showed differences according to both pre-test and post-test scores of well-being, $p < 0.05$. Scheffe test was conducted to examine which specific groups differed, and it was found that the difference was between participants with low and medium income levels and those with low/medium and high income levels. It was also determined that participants with low and medium income levels had lower mental well-being pre and post-test scores. There was no other observable difference in the mean scores of well-being across demographic groups.

4.6.2.2 AAQ-II. It was found that the education level groups of participants in the positive expressive writing group showed differences according to their pre-test

scores of AAQ-II, $p < 0.05$. Scheffe test was conducted to examine which specific groups differed, and it was found that the difference was between participants with a university degree and those with a master's or PhD degree. It was determined that participants with a university degree had higher AAQ-II (pre-test) scores compared to those with a master's or PhD degree.

Independent Samples T-Test results demonstrated that although there was no significant difference, mean AAQ-II scores of male participants decreased more dramatically compared to mean AAQ-II scores of females (as shown in Table 14). It can be said that, in terms of the mean scores related to their experiential avoidance measures, male participants benefitted more from positive expressive writing compared to female participants, although no significance was found. In terms of the income level groups, mean AAQ-II scores of all the groups reduced except the low income group with mean scores increased from 24.00 to 26.00. In the positive expressive writing group, no difference for diary-keeping status was observed across the measurements.

Table 14

Comparison of the Well-Being and AAQ-II Scores of the Positive Expressive Writing Group According to Demographic Variables

Demographics	Groups	Well-being (pre-test)	Well-being (post-test)	AAQ-II (pre-test)	AAQ-II (post- test)
		Mean±SD	Mean±SD	Mean±SD	Mean±SD
Gender	Female	25.40±4.08	26.45±4.84	23.25±7.61	22.10±6.70
	Male	26.00±2.16	27.00±1.63	21.25±4.92	16.5±6.86
	t	-0.283	-0.406	0.500	1.522
	p	0.780	0.691	0.622	0.142
Education level	Highschool				
	Graduate	25.10±3.28	26.5±3.37	21.90±6.08	21.50±5.70
	University				
	Graduate	25.27±4.45	26.18±5.58	26.09±6.50	22.18±7.63
	Graduate of				
	Master's or	27.67±3.21	28.00±4.00	14.67±7.23	16.33±8.39
	PhD				
	F	0.540	0.184	3.970	0.854
	p	0.590	0.833	0.034	0.440
	Scheffe			2>3	

Table 14 (cont'd)

Income level	Low	22.50±3.54	23.50±2.12	24.00±1.41	26.00±1.41
	Low/Medium	28.20±3.56	29.60±3.05	18.80±7.69	17.40±6.54
	Medium	23.83±3.24	24.58±4.06	24.42±5.50	21.92±6.89
	High	28.00±2.92	29.40±4.45	23.00±11.18	21.20±8.32
	F	3.726	3.361	0.710	0.853
	p	0.028	0.039	0.557	0.482
	Scheffe	1.3<2.4	1.3<2.4		
Diary-keeping	Yes	25.50±3.57	25.70±2.71	24.80±6.66	23.10±6.67
	No	25.50±4.09	27.14±5.38	21.57±7.47	19.79±6.97
	t	0.000	-0.862	1.090	1.168
	p	1.000	0.399	0.287	0.255

Note. AAQ-II = Acceptance and Action Questionnaire, *SD* = Standard Deviation, *t* = Independent Samples T Test, *F* = One-Way ANOVA

4.6.2.3 Positive and Negative Affect. In terms of positive affect, although there was an insignificant increase in the means scores across all of the demographic groups, the mean increase for males was greater than of females. Moreover, the increase in the mean positive affect score among low income level group was greater compared to other income levels. Similarly, the mean score for participants who do not keep a diary increased from 34.86 to 35.57; whereas the mean score for diary-keepers increased from 30.50 to 37.20, which is a greater rise (as shown in Table 15).

For the negative affect, it was determined that the income level groups of participants in the positive expressive writing group showed differences according to their post-test scores of negative affect ($p < 0.05$). Scheffe test was conducted to examine which specific groups differed, and it was found that the difference was between participants with low/medium income levels and those with low and medium income levels. It was determined that participants with low/medium income levels had lower post-test scores of negative affect. Moreover, it was observed that while mean negative affect score of the female participants decreased from 21.95 to 20.20, mean negative affect score of the male participants increased from 23.75 to 26.00. In the education level groups, mean negative affect scores of high school and university graduates decreased as expected whereas there was an increase for the master's or PhD graduates. Similarly, mean negative affect of participants with low and medium income levels increased while there was a decrease in the mean scores among participants with low/medium and high income levels.

Table 15

Comparison of the Positive and Negative Affect Scores of the Positive Expressive Writing Group According to Demographic Variables

Demographics	Groups	Positive Affect (pre-test)	Positive Affect (post-test)	Negative Affect (pre-test)	Negative Affect (post-test)
		Mean±SD	Mean±SD	Mean±SD	Mean±SD
Gender	Female	32.35±9.51	35.15±9.90	21.95±7.44	20.20±7.19
	Male	36.50±4.93	41.75±2.75	23.75±2.06	26.00±5.16
	<i>t</i>	-.840	-1.302	-.920	-1.525
	<i>p</i>	0.410	.206	.369	0.142
Education level	Highschool				
	Graduate	34.10±7.00	38.80±5.20	24.40±6.26	21.70±7.29
	University Graduate	31.27±11.38	33.55±12.46	22.36±6.77	22.27±6.60
	Graduate of Master's or PhD	36.00±4.58	37.67±6.43	14.67±4.73	15.33±8.39
	<i>F</i>	0.425	0.847	1.686	1.178
	<i>p</i>	0.659	0.443	0.091	0.327
Income level	Low	31.00±1.41	39.00±5.66	25.00±5.66	27.50±4.95
	Low/Medium	36.40±11.39	40.40±6.47	17.80±8.17	13.00±2.83
	Medium	30.83±8.46	32.92±11.29	25.08±5.32	25.42±4.68
	High	35.80±9.73	39.00±6.28	18.80±6.98	16.60±5.94
	<i>F</i>	0.637	1.033	1.237	11.167
	<i>p</i>	0.600	0.399	0.115	0.001
Diary-keeping	Yes	30.50±6.49	37.20±5.14	25.30±6.98	23.60±7.35
	No	34.86±10.23	35.57±11.69	20.07±6.06	19.43±6.71
	<i>t</i>	-1.184	0.411	1.958	1.443
	<i>p</i>	0.249	0.685	0.063	0.163

Note. *SD* = Standard Deviation, *t* = Independent Samples T Test, *F* = One-Way ANOVA

Chapter 5

Discussions and Conclusions

This study aimed to investigate the impact of expressive writing on individuals' well-being, experiential avoidance, and levels of positive and negative affect. The initial hypotheses anticipated an increase in well-being and positive affect scores, alongside a decrease in experiential avoidance and negative affect scores. The current hypotheses were tested using three distinct groups: an expressive writing group, a positive expressive writing group, and a control group that did not engage in writing. Participants in the writing groups took part in writing sessions on three separate days within a week. Pre-test measurements were conducted immediately before the first writing session, and post-test measurements were taken right after the final session. The control group underwent the same measurements at the beginning and end of the week without participating in any writing sessions. While some of the initial expectations were partially met, others were not fully supported by the data. In the following chapter, a detailed analysis of these findings will be provided, offering interpretations and insights that reflect the study's outcomes.

5.1 Discussion of Findings for Research Questions

5.1.1 Comparison of sample characteristics. In the present study, the demographic characteristics of participants were not differed across the writing groups and the control group, ensuring that no significant differences emerged between these groups that might confound the results. A notable aspect of the sample, however, was the disproportionate gender distribution, with a substantial majority of participants being female (77.9%). This imbalance in gender representation was previously identified as a limitation of the study. Nevertheless, this phenomenon is not unique to the current research. Similar gender disparities have been observed in other studies within the field of expressive writing research. For example, Robertson et al. (2020) conducted a study on the effects of expressive writing on anxiety levels, in which 78 of the 90 participants were female, yet the study still yielded significant findings. Furthermore, the research by Gortner et al. (2006) that found significant effects of

expressive writing on depression-vulnerable students also exhibited a considerable gender gap, with female participants ($n = 66$) more than doubling the number of male participants ($n = 24$). These precedents suggest that while a more balanced gender representation would enhance the generalizability of the findings, the gender imbalance in the sample does not necessarily undermine the validity or significance of the observed effects of expressive writing. However, future research would benefit from striving for a more equitable gender distribution to ensure that the findings can be generalized across different demographic groups more effectively.

Moreover, the educational background of the participants in the current study was diverse, with the majority holding a university degree (54.4%), while others were high school graduates, and some had completed master's or PhD programs. This diversity in educational attainment stands in contrast to many existing studies on expressive writing, which predominantly focus on undergraduate student populations (Greenberg & Stone, 1992; Gortner et al., 2006; Robertson et al., 2020; Tsai, Lee, & Monte, 2020; Argudo, 2021). By including a broader range of participants with varied educational levels, this study offers a more comprehensive understanding of the effects of expressive writing across different segments of the population. The inclusion of non-student participants enhances the generalizability of the findings, thereby contributing a valuable dimension to the literature on expressive writing.

5.1.2 Well-being. In the present study, it was hypothesized that the post-test well-being scores of the writing groups would be higher than the pre-test well-being scores and also post-test of the control group. Although there was a slight increase in well-being scores from pre-test to post-test within the both writing groups, this increase was not significant. However, it is important to highlight that the change in well-being scores from pre-test to post-test in the positive expressive writing group approached marginal significance. Therefore, a noticeable change was seen in for well-being, although not significant. This increase in the positive expressive writing group aligns with Çıvgın's (2020) study, in which significant reduction in the depressive symptoms were observed only in the positive expressive writing group in the short term. Similarly, in a study examining positive expressive writing for improving well-being in workers, PEW was found be effective on decreasing anxiety and increasing

satisfaction with recognition and approval for successful job performance (Round, Wetherell, Elsey, & Smith, 2022). Still, it is important to stress that the change in well-being among participants in the PEW group of the current study was not statistically significant, though it was close to reaching significance.

Several interpretations can be drawn from findings regarding well-being showing no significance. Firstly, it may suggest that writing alone is insufficient as a tool for significantly enhancing well-being. To achieve and maintain higher levels of well-being, more comprehensive strategies may be required, with writing serving as a supportive, complementary practice rather than a standalone solution.

Secondly, although the study met the minimum required sample size, the results might differ in a similar study with a larger sample size, potentially yielding more conclusive findings. Additionally, according to available knowledge, as this is among the few studies that directly examine the impact of expressive writing on well-being by its own measurement, there are not many comparable studies within the region, limiting the ability to draw comparisons or contextualize the results further. However, well-being measurement was also used in the study by Mohamed et al, (2023), in which they found significantly improved well-being levels following expressive writing sessions. However, it should be noted that this study was a quasi-experiment and did not include a control group to compare the results. This highlights the need for more research in this area to better understand the potential role of expressive writing in enhancing well-being. Understanding and integrating more strategies related to positive psychology might be an effective solution for improved well-being levels. As stated by Seligman and Csikszentmihalyi (2000), positive psychology studies and promotes aspects of life that contribute to happiness, well-being, and personal growth, focusing on strengths and virtues to enhance mental health and fulfilment. Supporting this suggestion, it was found that students enrolled in the positive psychology course that was strength focused, experienced notable increases in happiness and well-being (Smith, Ford, Erickson, & Guzman, 2020). Therefore, considering the marginal significance observed in the positive expressive writing group of the current study, it is plausible to suggest that incorporating additional

positive-focused practices, such as those emphasized in positive psychology, could potentially yield greater benefits for enhancing well-being.

5.1.3 Experiential avoidance. The second hypothesis of the current study proposed that post-test measures of experiential avoidance would be lower than pre-test scores within the writing groups. However, the results revealed no significant difference in the pre-test and post-test measurements of the Acceptance and Action Questionnaire-II (AAQ-II) in both the writing groups and the control group. As previously noted, this study is among the first to explore the impact of expressive writing on experiential avoidance. The assumption that writing about traumatic events might reduce the tendency to avoid negative experiences was not supported by the data. This finding aligns with Wilson's (2012) study, which also found no significant effect of narrative disclosure tasks on experiential avoidance when examining attachment, mindfulness, and experiential avoidance together.

It could be inferred that experiential avoidance, as a component of psychological inflexibility, may require more comprehensive and sustained interventions to be effectively addressed. Perhaps more consistent and focused writing about personal challenges could lead to a reduction in experiential avoidance levels, an idea that requires further investigation.

Nonetheless, it is noteworthy that, although the differences were not statistically significant, there was a slight decrease in AAQ-II scores, particularly in the positive expressive writing group, from pre-test to post-test. This suggests that focusing on and writing about positive experiences may have a subtle impact on reducing experiential avoidance, indicating that positive expressive writing could potentially serve as a modest intervention for enhancing psychological flexibility. Further research is needed to explore these possibilities and to better understand the nuanced effects of writing interventions on experiential avoidance.

5.1.4 Positive and negative affect. The current study hypothesized that participants in the writing groups would show an increase in positive affect and a decrease in negative affect from pre-test to post-test measures. The results partially

supported this hypothesis: No significant decrease in negative affect was observed across the three groups. This result may be partly attributed to the timing of the post-test measurements, which were taken immediately after the final writing session. Previous research aligns with this, as Pennebaker and Beall's (1986) foundational study noted that participants reported elevated negative moods following writing sessions. Similarly, Lumley and Provenzano (2003) found that participants' negative mood significantly increased after each writing session. Given these findings, it was anticipated that a decrease in negative affect might still emerge in the present study due to the expected increase in well-being. However, both the literature and the results of the current study suggest that expressive writing may not effectively reduce negative affect, at least in the short term. This reinforces the idea that the emotional impact of expressive writing might take longer to manifest, especially regarding reductions in negative affect. In contrast to short-term findings, Çıvgın's (2020) study observed a decrease in participants' depression levels during a one-month follow-up, rather than the measurements immediately after the writing sessions. It is worth noting, however, that this result was found in a mixed-writing group, where participants wrote about both the negative and positive aspects of their experiences with breast cancer. Considering that the current study targeted a broader nonclinical population rather than focusing on a specific challenge like a disease, it was anticipated that there would be significant reductions in negative affect.

Although no significance was found for negative affect, participants in the positive expressive writing group experienced a significant increase in positive affect. This suggests that writing about positive experiences effectively enhances positive emotions. This outcome is consistent with the study's findings on well-being, which also indicated an improvement in well-being scores within the positive expressive writing group, although not significant. Taken together, these results suggest that focusing on positive aspects of life through writing cultivates a more positive emotional state. Therefore, it can be suggested that this specific focus on the positive and appreciating the positive aspect in one's life might be significantly valuable. Supporting this notion, a study by Lai (2017) found that participants assigned to a gratitude journaling condition showed higher positive affect scores in post-test measures compared to those in a control group with no writing. Moreover, another

study found that after eight weeks of the gratitude intervention, gratitude groups, which wrote and thought about the things they are grateful about, experienced significant increases in well-being and reductions in negative affect, stress, and anxiety, while the control group did not demonstrate any related improvements over time (Tolcher, Cauble, & Downs, 2022). This finding is particularly significant when considering the psychological benefits of focusing on the positive aspects of one's life. It highlights the potential for positive expressive writing to enhance mental well-being by encouraging individuals to shift their attention towards the good in their lives. Such a focus can lead to increased feelings of gratitude, reduced stress, and an overall improvement in emotional health. While positive expressive writing differs from gratitude journaling, both practices involve reflecting on positive experiences in life. This shared focus highlights the significance of appreciating life's blessings.

These findings are consistent with previous research in positive psychology, which emphasizes the significance of focusing on the positive aspects of both one's surroundings and inner self. In alignment with this perspective, Raftopoulou, Karakasidou, Daoultzis, Kanellakis, and Stalikas (2022) found that a positive psychology intervention led to increased levels of hope and positive affect among children, while also reducing their anxiety levels. This further underscores the potential of positive psychological practices in fostering emotional well-being and resilience.

5.1.5 Individual differences. In the present study, the potential benefits of the writing sessions for specific participants were examined based on demographic variables. It is important to note that the following interpretations are based solely on comparisons of mean scores since only few significant differences were observed.

5.1.5.1 Gender. For the expressive writing group, where participants were asked to write about their traumatic experiences, the levels of experiential avoidance remained relatively unchanged for female participants but showed a noticeable decrease for male participants. This suggests that the process of reflecting on and writing about traumatic events may have helped male participants reduce their tendency to avoid difficult emotions and experiences. On the other hand, in the positive

expressive writing group, where participants focused on their most positive experiences, there was a pronounced decrease in experiential avoidance levels, particularly among male participants. This difference could be attributed to societal norms, as discussed earlier in the literature review. Men may be less accustomed to expressing their emotions openly, and when given the opportunity to do so, it appears to lead to significant psychological outcomes. The substantial reduction in experiential avoidance among male participants, especially in the context of positive writing, underscores the potential impact of these writing exercises in challenging and transforming traditional gender-related emotional expression patterns.

However, in the expressive writing group, a slight decrease in well-being levels was observed among male participants following the writing sessions, in contrast to an increase in well-being reported by female participants. This difference may again be linked to the unfamiliarity with emotional expression among men. The act of writing about traumatic experiences, particularly for those who are less accustomed to articulating their emotions, could have been more emotionally challenging or even triggering for male participants. This suggests that while expressive writing can be beneficial for processing emotions, it may also have varying effects based on the individual's comfort with emotional expression.

5.1.5.2 Education and income level. The current study examined the mean differences between pre-test and post-test scores across various educational and income level groups to understand the potential impact of these factors on the outcomes of expressive writing interventions. It was observed that in the EW group, participants with a high school education reported significantly higher post-test positive affect scores compared to those holding a university degree. This finding suggests that the level of education may influence how individuals respond to expressive writing, with high school graduates potentially deriving more immediate emotional benefits. Regarding income levels, in the PEW group, participants with low/medium and high income levels showed significantly higher post-test well-being scores compared to those in the low and medium income brackets. This result highlights the potential role of financial stability in enhancing the effectiveness of positive writing interventions on well-being. However, since the income groups were

not distinctly categorized, drawing concrete conclusions from this data is challenging. Furthermore, the analysis revealed that participants in the low and medium income groups had significantly higher post-test negative affect scores than those in the low/medium income group. This outcome points to the complexity of income's role in influencing the potential psychological impact of expressive writing.

Although few differences were observed in certain measurements, as discussed in the findings section, no consistent pattern emerged that would indicate a specific education or income level group benefitted more significantly from the writing sessions. This suggests that the effects of expressive writing may not be directly influenced by these demographic factors, indicating that the benefits of such interventions are accessible to individuals regardless of their educational background or economic status. It is also important to acknowledge that the uneven distribution of demographic factors might have influenced the results. However, this preliminary observation requires further investigation. Future research could focus on a more detailed examination of how individual differences, including education and income, might interact with the effectiveness of writing interventions, potentially uncovering subtle influences that were not captured in the current study.

5.1.5.3 Diary-keeping. In the expressive writing group, experiential avoidance levels decreased among diary-keepers, while these levels increased among participants who do not keep a diary. Additionally, well-being levels remained almost unchanged for non-diary-keepers but increased among diary-keepers. Positive affect also increased for diary-keepers, whereas it declined in the other group. Similarly, negative affect decreased among diary-keepers but increased for those who do not keep a diary. Although not significant again, these findings suggest that individuals who are already accustomed to writing regularly may derive greater benefits from expressive writing sessions. Regular writing habits may enhance the positive effects of such interventions.

Although there are not many studies examining the impact of diary-keeping, Hiemstra (2002) suggests that journaling significantly enhances personal growth and development by integrating life experiences with learning, encouraging freedom of expression, stimulating mental development, and fostering new insights and

ambitions. Given these interpretations, further research is essential to isolate the specific psychological effects of diary keeping. Understanding these dynamics could have important implications for the use of diary keeping as a tool for personal development.

5.2 Conclusions

The present study makes a contribution to the literature by demonstrating the significant impact of positive expressive writing on positive affect. The findings revealed a notable increase in positive affect scores among participants in the positive expressive writing group. As discussed in the previous section, this outcome underscores the importance of directing attention towards positive aspects of life, suggesting that such a focus can foster an overall more positive perspective.

This insight is particularly meaningful as it proposes a complementary strategy that can be utilized alongside psychotherapy. Given that therapy may not be accessible to everyone, promoting practices like positive writing or gratitude journaling could serve as effective tools for individuals to maintain and enhance their perspective in a positive manner. Encouraging these practices could provide an accessible means of fostering emotional resilience in everyday life.

Further recommendations based on these findings will be explored in the following sections. However, before proceeding, it is important to consider the subjective feedback from participants, which may offer additional insights and reinforce the significance of these findings. The personal reflections and experiences shared by participants will be examined to draw more comprehensive conclusions about the broader implications of expressive writing.

5.2.1 Insights Regarding the Reflections from Participants. Although the results of the study did not fully align with the initial expectations, the subjective feedback provided by participants at the conclusion of the writing sessions offers valuable insights. In the post-experiment evaluation form, participants in the writing groups were asked whether they found participating in the study helpful. While examining the subjective feedback from the four participants who responded slightly more negatively to post-experiment evaluation form, distinct themes emerged that offer valuable insights into their experiences. Two participants indicated that the writing sessions did not provide any new insights or benefits because they simply repeated thoughts and feelings they had already been contemplating. For them, the exercise lacked novelty and did not contribute to further emotional processing or growth. Another participant compared the writing sessions to a summary of their ongoing therapy, acknowledging that both the writing and therapy helped them recognize and analyse aspects of themselves. However, they expressed a sense of isolation and frustration in dealing with these realizations, as they felt unsupported in the process of making the necessary changes. It appears that these participants may prefer receiving feedback when they express themselves, as they seem to dislike one-sided communication. The fourth participant shared that the writing sessions made them uncomfortable, as they became acutely aware of how disconnected they were from their emotions. They stated that writing might have been more beneficial if the emotions were expressed in real-time, rather than reflecting on them after the fact. This feedback highlights the complex and varied responses participants can have to expressive writing, underscoring the importance of considering individual differences in emotional processing and the timing of such interventions to maximize their therapeutic potential.

On the other hand, two other participants mentioned that while writing about emotionally charged topics was initially challenging, they found the process significantly easier by the third day. This observation suggests that repeated engagement in expressive writing may contribute to habituation. This finding underscores the potential therapeutic benefit of sustained writing practices, as participants may gradually become more comfortable confronting and articulating their emotions.

Feedback from another participant revealed that the writing experience felt profoundly therapeutic, allowing them to express themselves freely without the concern of how others might perceive them. This observation reinforces the idea that the fear of judgment can significantly hinder emotional expression, serving as a barrier to genuine self-disclosure. In a related sentiment, another participant noted that they would not have expressed themselves as openly to others. The anonymity provided by the study's structure, where participants knew that the researcher would not be aware of their identities, likely contributed to a heightened sense of comfort and security. This sense of anonymity may have encouraged participants to be more honest and introspective in their writing, leading to a more authentic and potentially more impactful emotional release. These insights suggest that the anonymity and non-judgmental space offered by such interventions are crucial elements in facilitating deep emotional expression and could be important considerations in the design of future therapeutic writing programs.

One participant shared a particularly insightful reflection, noting that the writing process reminded them of the strength they had gained from their past challenging experiences. This realization not only highlighted their inner strength but also helped them envision a life worth striving for the "little wounded child" within them. They stated that:

"I had neglected to nourish my soul. Writing reminded me that I needed to read and write more on this subject, so I started doing just that. It also led me to embrace myself, telling myself repeatedly, 'You're doing great, and even when things were not going well, you were still doing great; in short, I love you just the way you are.'"

This feedback clearly demonstrates how writing could lead into positive changes in one's perspective and it also underscores the potential of expressive writing to facilitate personal growth and foster a deeper understanding of one's emotional journey. By reflecting on past hardships, the participant was able to transform their narrative into one of empowerment, emphasizing the therapeutic power of writing in

helping individuals reframe their challenges as sources of strength and motivation for future growth.

Given that the results showed significant differences primarily for the positive expressive writing, it is important to highlight a recurring theme from the feedback provided by participants in the positive expressive writing group. Many participants noted a heightened sense of gratitude, often expressing how the act of positive writing helped them recognize their personal strengths and life resources.

"I saw myself once again while writing. First, I realized how well I had managed to cope with the feelings that hurt me, and then I saw how much those pains had strengthened me. After that, I recognized my goals, dreams, and desire for success once again. I also noticed the value of my loved ones in my life all over again, and even though I was already aware of these things, becoming aware of them once more felt good..."

This recurring emphasis on gratitude underscores the potential effectiveness of positive expressive writing in enhancing well-being. The participants' reflections align with existing literature on gratitude journaling, further supporting the idea that focusing on positive aspects of life and expressing gratitude can be a powerful tool for improving mental health and fostering personal growth.

"I actually felt like I was keeping a diary, but I focused more on the positive aspects, which I paid a lot of attention to. It was nice. I realized that there are a lot of beautiful things in my life, even in just one day."

This feedback not only validates the impact of positive writing but also suggests that the integration of gratitude-focused practices within writing interventions could be particularly beneficial in promoting a more positive outlook in life.

5.3 Recommendations

As outlined in the methodology, the current study is subject to several limitations. One of the most notable limitations was the significantly lower number of male participants, which may have impacted the generalizability of the findings. Future research should aim for a more balanced representation of genders to enhance the reliability and applicability of the results across different populations.

Another limitation relates to the study's online format, which, although required, did not offer the level of control that a more structured environment could have provided. Conducting writing interventions in a controlled setting could help standardize the conditions under which participants write, thereby producing more consistent and reliable data. However, it is also important to acknowledge that such a controlled environment might create an artificial atmosphere, potentially influencing participants' natural responses. The lack of control over the writing sessions resulted in variability in the data, as some participants produced significantly shorter writings than others, and there was no way to ensure that all participants adhered to the 20-minute writing requirement. This unstandardized approach may have influenced the study's outcomes, highlighting the need for future studies to implement mechanisms for better monitoring and consistency. Furthermore, feedback from a participant revealed that they encountered difficulties writing in their home environment, as their family members expected them to engage in other activities during the writing sessions. This feedback suggests that the initial intention to avoid an artificial environment by allowing participants to write at home may not have been effective for everyone. Consequently, conducting similar studies in work or school environments could potentially yield better results. These settings may strike a balance between being less artificial than a laboratory environment while providing more privacy and fewer distractions than a home setting. By creating a more suitable atmosphere for focused writing, participants may be better able to engage fully in the expressive writing process, leading to more reliable and meaningful outcomes.

As highlighted in the limitations section, the current study did not thoroughly examine the potential role of personality traits due to the unreliable findings associated

with the scale used. This limitation suggests that future research should consider employing more suitable scales to accurately assess the influence of individual differences on the outcomes of writing interventions. Understanding the role of personality traits in this context could provide valuable insights into tailoring expressive writing practices to different personality profiles, thereby enhancing the overall efficacy of these interventions.

Perhaps the most crucial recommendation for future research is to explore the long-term effects of writing interventions, particularly if the focus is on their therapeutic benefits. Understanding how writing impacts individuals over an extended period would provide clearer insights into how writing can be effectively integrated into people's daily lives as a sustainable tool for mental well-being.

Moreover, incorporating writing into people's lives through a longitudinal study could yield significant findings. For instance, rather than having participants engage in a few writing sessions within a week, a study could involve participants writing once a week over a six-month period. Such a design would allow researchers to assess the cumulative and enduring effects of writing on mental health. Longitudinal studies are crucial for determining the lasting impact of writing practices and for exploring how these practices can support long-term personal growth and emotional healing.

REFERENCES

- Acar, D., & Dirik, G. (2018). Written Emotional Disclosure Paradigm: Effects on Posttraumatic Stress Symptoms and Posttraumatic Growth among Spouses of Cancer Patients. *Journal of Clinical Psychiatry*, 21(2), 154–167. doi:10.5505/kpd.2018.48343
- Argudo, J. (2021). Expressive writing to relieve academic stress at university level. *PROFILE Issues in Teachers Professional Development*, 23(2), 17–33. doi:10.15446/profile.v23n2.90448
- Baikie, K. A., Geerlings, L., & Wilhelm, K. (2012). Expressive writing and positive writing for participants with mood disorders: An online randomized controlled trial. *Journal of Affective Disorders*, 136(3), 310–319. doi:10.1016/j.jad.2011.11.032
- Bond, F. W., Hayes, S. C., Baer, R. A., Carpenter, K. M., Guenole, N., Orcutt, H. K., . . . Zettle, R. D. (2011). Preliminary Psychometric Properties of the Acceptance and Action Questionnaire–II: A Revised Measure of Psychological Inflexibility and Experiential Avoidance. *Behavior Therapy*, 42(4), 676–688. doi:10.1016/j.beth.2011.03.007
- Büyüköksüz, E., & Tekin, I. (2023). Self-compassion as a mediator of the relationship between psychological inflexibility and resilience. *Spiritual Psychology and Counseling*, 8(2), 179–193. doi:10.37898/spiritualpc.1276031
- Çıvgın, U. (2020). *Yazılı Duygusal Dışavurum Paradigmasının Meme Kanseri Olan Bireylerin Psikolojik Sağlıkları Üzerindeki Etkilerinin İncelenmesi [Examining the Effects of Written Emotional Disclosure Paradigm on the Psychological Health of Individuals with Breast Cancer]*. (Doctoral Thesis). Dokuz Eylül University, İzmir, Türkiye.
- Demirtaş, A., ve Baytemir, K. (2019). Warwick-Edinburgh Mental İyi Oluş Ölçeği Kısa Formunun Türkçeye uyarlanması: Geçerlik ve güvenirlik çalışması [Adaptation of Warwick-Edinburgh Mental Well-being Scale Short Form into Turkish: Validity and Reliability Study]. *Elektronik Sosyal Bilimler Dergisi*, 18(70), 654–666. doi:10.17755/esosder.432708

- Duncan, E., & Sheffield, D. (2008). Diary Keeping and Well-Being. *Psychological Reports, 103*(2), 619–621. doi:10.2466/pr0.103.2.619-621
- Faul, F., Erdfelder, E., Lang, A., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods, 39*(2), 175–191. doi:10.3758/bf03193146
- Gençöz, T. (2000). Pozitif ve Negatif Duygu Durum Ölçeği: Geçerlik ve güvenirlik çalışması [Positive and Negative Affect Schedule: A study of validity and reliability]. *Türk Psikoloji Dergisi, 15* (46), 19-28.
- Ghasemi, A., & Zahediasl, S. (2012b). Normality Tests for Statistical Analysis: A Guide for Non-Statisticians. *International Journal of Endocrinology and Metabolism, 10*(2), 486–489. doi:10.5812/ijem.3505
- Gortner, E. M., Rude, S. S., & Pennebaker, J. W. (2006). Benefits of Expressive Writing in Lowering Rumination and Depressive Symptoms. *Behavior Therapy, 37*(3), 292–303. doi:10.1016/j.beth.2006.01.004
- Greenberg, M. A., & Stone, A. A. (1992). Emotional disclosure about traumas and its relation to health: Effects of previous disclosure and trauma severity. *Journal of Personality and Social Psychology, 63*(1), 75–84. doi:10.1037/0022-3514.63.1.75
- Hayes, S. C., Wilson, K. G., Gifford, E. V., Follette, V. M., & Strosahl, K. (1996). Experiential avoidance and behavioral disorders: A functional dimensional approach to diagnosis and treatment. *Journal of Consulting and Clinical Psychology, 64*(6), 1152–1168. doi:10.1037/0022-006x.64.6.1152
- Hiemstra, R. (2001). Uses and benefits of journal writing. *New Directions for Adult and Continuing Education, 2001*(90), 19–26. doi:10.1002/ace.17
- Horzum, M. B., Ayas, T. ve Padır, M. A. (2017). Beş Faktör Kişilik Ölçeğinin Türk Kültürüne Uyarlanması [Adaptation of Big Five Personality Traits Scale to Turkish Culture]. *Sakarya University Journal of Education, 7*(2), 398-408. doi:10.19126/suje.298430
- Kiefer, R. A. (2008). An Integrative Review of the Concept of Well-Being. *Holistic Nursing Practice, 22*(5), 244–252. doi:10.1097/01.hnp.0000334915.16186.b2
- Kloss, J. D., & Lisman, S. A. (2002). An exposure-based examination of the effects of written emotional disclosure. *British Journal of Health Psychology, 7*(1), 31–46. doi:10.1348/135910702169349

- Kristóf, A. (2023). *Okumaz Yazmaz* [The Illiterate] İstanbul: Can Sanat Yayınları
- Lai, S. T. & O'Carroll, R. E. (2017). "The Three Good Things" – The effects of gratitude practice on wellbeing: A randomised controlled trial. *ResearchGate*. Retrieved from <https://www.researchgate.net/publication/313845439>
- Lumley, M. A., & Provenzano, K. M. (2003). Stress management through written emotional disclosure improves academic performance among college students with physical symptoms. *Journal of Educational Psychology*, 95(3), 641–649. doi:10.1037/0022-0663.95.3.641
- Matis, G., Birbilis, T., & Kontogianidis, K. (2009). Glasgow coma scale and APACHE II system data--are they normally distributed? *PubMed*, 104(1), 73–78.
- Mohamed, N. H., Beckstein, A., Winship, G., Mou, T. a. K., Pang, N. T. P., & Relajo-Howell, D. (2023). Effects of self-expressive writing as a therapeutic method to relieve stress among university students. *Journal of Poetry Therapy*, 36(3), 243–255. doi:10.1080/08893675.2023.2174678
- Moscovitch, D. A., Antony, M. M., & Swinson, R. P. (2008). Exposure-Based Treatments for Anxiety Disorders: Theory and Process. *Oxford University Press eBooks*. doi:10.1093/oxfordhb/9780195307030.013.0035
- Pennebaker, J.W. (1997). Writing about Emotional Experiences as a Therapeutic Process. *American Psychological Society*. 8(3), 162-166.
- Pennebaker, J. W. (2004). Theories, therapies, and Taxpayers: on the complexities of the expressive writing paradigm. *Clinical Psychology Science and Practice*, 11(2), 138–142. doi:10.1093/clipsy.bph063
- Pennebaker, J. W. (2010). Expressive writing in a clinical setting. *Independent Practitioner*, 30, 23–25.
- Pennebaker, J. W. & Beall, S. K. (1986). Confronting A Traumatic Event: Toward An Understanding Of Inhibition And Disease. *Journal of Abnormal Psychology* 95: 274- 281.
- Pennebaker, J. W., & Chung, C. K. (2007). Expressive writing, emotional upheavals, and health. *Foundations of Health Psychology*, 263-284
- Procaccia, R., Segre, G., Tamanza, G. & Manzoni, G.M. (2021) Benefits of Expressive Writing on Healthcare Workers' Psychological Adjustment During the COVID-19 Pandemic. *Front. Psychol.* 12:624176. doi:10.3389/fpsyg.2021.624176

- Raftopoulou, G., Karakasidou, E., Daoultzis, K., Kanellakis, K., & Stalikas, A. (2022). Thumbs up! A pilot study of a positive psychology intervention for children in Greece. *Psychology*, 13(08), 1299–1313. doi:10.4236/psych.2022.138084
- Rammstedt, B. ve John, O. P. (2007). Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German. *Journal of research in Personality*, 41(1), 203-212. doi: 10.1016/j.jrp.2006.02.001
- Range, L. M., & Jenkins, S. R. (2010). Who Benefits from Pennebaker’s Expressive Writing Paradigm? Research Recommendations from Three Gender Theories. *Sex Roles*, 63(3–4), 149–164. doi:10.1007/s11199-010-9749-7
- Robertson, S. M. C., Short, S. D., Sawyer, L., & Sweazy, S. (2020). Randomized controlled trial assessing the efficacy of expressive writing in reducing anxiety in first-year college students: the role of linguistic features. *Psychology and Health*, 36(9), 1041–1065. doi:10.1080/08870446.2020.1827146
- Round, E. K., Wetherell, M. A., Elsey, V., & Smith, M. A. (2022). Positive expressive writing as a tool for alleviating burnout and enhancing wellbeing in teachers and other full-time workers. *Cogent Psychology*, 9(1). doi:10.1080/23311908.2022.2060628
- Ruini, C., & Mortara, C. C. (2021). Writing Technique across Psychotherapies—From traditional expressive writing to new positive Psychology Interventions: A Narrative review. *Journal of Contemporary Psychotherapy*, 52(1), 23–34. doi:10.1007/s10879-021-09520-9
- Sabo Mordechay, D., Nir, B., & Eviatar, Z. (2019). *Expressive writing - Who is it good for? Individual differences in the improvement of mental health resulting from expressive writing. Complementary Therapies in Clinical Practice*, 101064. doi:10.1016/j.ctcp.2019.101064
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5–14. doi:10.1037/0003-066x.55.1.5
- Smith, B. W., Ford, C. G., Erickson, K., & Guzman, A. (2020). The effects of a Character Strength Focused Positive Psychology Course on Undergraduate Happiness and Well-Being. *Journal of Happiness Studies*, 22(1), 343–362. doi:10.1007/s10902-020-00233-9

- Smyth, J. M. (1998). Written emotional expression: Effect sizes, outcome types, and moderating variables. *Journal of Consulting and Clinical Psychology*, 66(1), 174–184. doi:10.1037/0022-006x.66.1.174
- Spera, S. P., Buhrfeind, E. D., & Pennebaker, J. W. (1994). Expressive Writing and Coping With Job Loss. *Academy of Management Journal*, 37(3), 722–733. doi:10.2307/256708
- Stickney, L. T. (2010). Who Benefits from Pennebaker’s Expressive Writing? More Research Recommendations: A Commentary on Range and Jenkins. *Sex Roles*, 63(3–4), 165–172. doi:10.1007/s11199-010-9771-9
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using Multivariate Statistics (6th ed.)*. Boston, MA: Pearson.
- Tekin, I. (2023). Dışavurumcu yazma uygulamasının iyi oluş üzerine etkisi: Meta-analiz çalışması. *Humanistic Perspective*, 5(3), 1290–1310. doi:10.47793/hp.1353331
- Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., Parkinson, J., Secker, J., & Stewart-Brown, S. (2007). The Warwick-Edinburgh Mental Well-Being Scale (WEMWBS): Development and UK validation. *Health and Quality of Life Outcomes*, 5(1), 50–63. doi:10.1186/1477-7525-5-63.
- Tolcher, K., Cauble, M., & Downs, A. (2022). Evaluating the effects of gratitude interventions on college student well-being. *Journal of American College Health*, 72(5), 1321–1325. doi:10.1080/07448481.2022.2076096
- Tsai, W., Lee, C. S., & Monte, V. (2021). Comparing the effects of emotional disclosure and peer helping writing on psychological distress among Chinese international students: The moderating role of rumination. *Journal of Clinical Psychology*, 77(7), 1556–1572. doi:10.1002/jclp.23135
- Valtonen, J. (2020). The Health Benefits of Autobiographical Writing: An Interdisciplinary perspective. *Journal of Medical Humanities*, 42(4), 1–19. doi:10.1007/s10912-020-09631-9
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063–1070. doi:10.1037/0022-3514.54.6.1063

- Wilson, V. R. (2012). Attachment, experiential avoidance, and mindfulness in the narrative disclosure task. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 73(6-B), 3969.
- Yavuz, F., Ulusoy, S., Iskin, M., Esen, F. B., Burhan, H. S., Karadere, M. E., & Yavuz, N. (2016). Turkish Version of Acceptance and Action Questionnaire-II (AAQ-II): A reliability and Validity Analysis in Clinical and Non-Clinical Samples. *Klinik Psikofarmakoloji Bülteni-Bulletin of Clinical Psychopharmacology*, 26(4), 397–408. doi:10.5455/bcp.20160223124107
- Zakowski, S. G., Herzer, M., Barrett, S. D., Milligan, J. G., & Beckman, N. (2011). *Who benefits from emotional expression? An examination of personality differences among gynaecological cancer patients participating in a randomized controlled emotional disclosure intervention trial. British Journal of Psychology*, 102(3), 355–372. doi:10.1348/000712610x524949