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The Association Between Diary Writing and Mental Well-Being Among Lebanese Young Adults: Evidence From a High-Adversity Context

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Abstract

Diary writing and well-being have been shown to be positively associated across various populations. However, this relationship remains unexplored within Middle Eastern cultural contexts. This study investigates the relationship between diary writing and well-being among English-speaking Lebanese young adults aged 20 to 25. The primary aim is to determine whether diary writing is linked to well-being, including social, psychological, and emotional well-being. A cross-sectional survey was conducted with 385 participants, recruited through snowball sampling (university outreach). Data were collected via self-reported questionnaires, including the Mental Health Continuum – Short Form (MHC-SF) and a diary-keeping habits questionnaire. Contrary to expectations and previous findings, the results did not reveal any significant relationship between diary writing and well-being in this population, held across diary-keeping status, duration, and frequency. These findings suggest that, within the Lebanese cultural context, diary writing may not have a meaningful impact on well-being in contrast to studies conducted in Western contexts. Further research is needed to explore potential cultural or contextual factors unique to the Lebanese context. that may influence the relationship between personal writing practices and well-being.

1. Introduction

Research on expressive writing, pioneered by Pennebaker and colleagues, has consistently demonstrated its potential benefits for both mental and physical health [1–3]. Expressive writing, typically involving the disclosure of traumatic or emotionally significant experiences, has been associated with reduced healthcare utilization and improved immune functioning [4–7]. Moreover, writing about future-oriented goals has also been shown to enhance subjective well-being [8]. These findings suggest that writing may function as a self-regulatory process, facilitating emotional processing, meaning-making, and psychological adaptation.

Within this framework, writing can be conceptualized as a contributor to well-being, defined by the World Health Organization (WHO) as a positive state encompassing quality of life and the capacity to live meaningfully and productively [9]. Contemporary models of well-being further distinguish between emotional, psychological, and social dimensions, as operationalized by the Mental Health Continuum–Short Form (MHC-SF), which is widely used in research on flourishing and mental health.

Despite the promising evidence supporting writing as a beneficial practice, findings remain inconsistent. While some studies report positive associations between journaling and well-being, particularly in contexts of stress, such as during the COVID-19 pandemic [10], others have found null or even negative relationships, especially for certain populations or forms of writing [11,12]. Earlier work also reported that individuals who did not keep a diary exhibited higher well-being than those who did, although methodological limitations (e.g., gender-restricted samples) constrain the interpretation of these findings [13]. Taken together, the literature suggests that the relationship between journaling and well-being is complex, context-dependent, and not yet fully understood.

This ambiguity is particularly pronounced in non-Western contexts, where research on journaling remains scarce. In the Middle East and the Arab world, and especially in Lebanon, there is a notable lack of empirical studies examining diary writing and its psychological correlates. This gap is significant given the broader mental health context [14]. Global epidemiological data indicate that approximately 50% of individuals will develop a mental disorder by the age of 75, with depression, post-traumatic stress disorder, and anxiety-related conditions among the most prevalent [15].

In Lebanon, multiple structural and societal stressors further heighten vulnerability to poor mental health outcomes. Economic instability, unemployment, and financial hardship have been linked to increased psychological distress, substance use, and suicidal behaviors [16,17]. More recently, the cumulative impact of the economic crisis, the COVID-19 pandemic, and the Beirut port explosion has been associated with severe levels of distress in the population, raising concerns about a potential mental health crisis [18]. Individuals from lower socioeconomic backgrounds, who currently represent a large proportion of the population, are particularly at risk for depression and anxiety [19]. Furthermore, university students constitute a high-risk group, with evidence suggesting elevated levels of psychological distress among Lebanese students [20].

In such contexts, individuals often turn to accessible coping strategies, including physical activity, psychotherapy, and writing [21,22]. However, while anecdotal and qualitative accounts suggest that journaling may serve as a tool for emotional expression and coping, as illustrated, for example, in narratives reported by humanitarian organizations [23], systematic empirical evidence in this cultural context remains lacking.

In a study published in 2001, researcher Zammuner concluded that adolescents who keep a diary feel better after writing and have a better understanding of their emotions [24].

Dowrick [25], describes diary writing in “Creative Journal Writing: The Art and Heart of Reflection” as a space for emotional relief that allows individuals who write to vent. It is also a tool that offers writers the opportunity to be in the present moment, to engage in introspection, and to discover themselves.

Likewise, MacIsaac [26] found that time spent journaling was associated with a decrease in negative affect and an increase in self-regulation and psychological well-being over time among university students aged 18 to 23 [26].

Moreover, keeping a diary allows children and young people to express themselves, enhances their creativity, and serves as a support for their mental well-being [24].

Writing about cognitions and emotions (in other words, making an effort to understand and give meaning to a traumatic event) provides significant benefits compared to writing that focuses solely on the expression of negative emotions [25]. The latter may contribute to an increase in physical symptoms. The results of this study show that combining thoughts and emotions allows for better management of

the traumatic event, which reduces negative physical effects and improves well-being. This highlights the importance of a more comprehensive approach in expressive writing to achieve lasting benefits.

However, a cross-sectional study published in 2008 [13] showed a negative correlation between well-being and diary writing.

1.1 Diary Writing and Therapy

Diary writing shares key psychodynamic mechanisms with psychotherapy such as catharsis, narcissistic processes, repression, and transference [29 (p.189)]. Which can be considered as a tool for self-therapy (30)], through writing, one is able to distance him/herself from conflicts onto a blank page and potentially saving the individual from fragmentation [30 (p.61),31]. This is especially true for traumatized individuals who feel the strongest need to write, and it stems from the necessity to bear witness, explains [31]. Writing materializes symbolic connections and helps erase thoughts, memory, and temporality to be reconstructed, as they are all affected by trauma. In other words, writing would be beneficial for psychological reconstruction. From a cognitive perspective, Chidiac speaks of psychological flexibility and the transcendence of thought, which facilitates awareness at multiple stages such as writing, reading, and when the subject reflects on the therapy/writing session [31].

However, diary writing can also be a narcissistic trap, and this is one of the risks to consider [27]. Indeed, according to these authors, it can lead the person to focus solely on their own thoughts and feelings, thus amplifying egocentrism. Writing then becomes a space where the individual loops around their problems without seeking external perspectives or solutions, which can ultimately reinforce isolation and limit their ability to evolve. Furthermore, it also has limitations as a therapeutic tool [30 (p.61),31], especially through the frequent rumination and repetitive writing without elaboration.

In therapeutic writing workshops, the therapist uses diary writing as a prompt. The main differences between therapeutic writing and diary writing are threefold [30 (p.84)].

First, diary writing is free writing, whereas therapeutic writing is based on instructions and exercises. Second, diary writing describes the facts and feelings of the individual, whereas therapeutic writing focuses more on interaction, analysis, and observation of the environment and the inner world of the writer. Finally, diary writing is an intrinsically personal and individual experience, whereas therapeutic writing is guided by a professional [30 (p.84)]. The structured and interactive framework of therapeutic writing promotes emotional processes such as catharsis, that is, the release of repressed emotions related to traumatic events [30]. On the other hand, catharsis is only one of the different goals of therapeutic writing workshops and not the main goal, which distinguishes them from expression workshops [29].

Similarly, the case study by Ennis & Cartagena [31] found that therapeutic writing reduced symptoms and improved the sense of psychological well-being and overall quality of life in patients living with HIV (Human Immunodeficiency Virus) suffering from depression [31]. The results of the narrative review by

Ruini & Mortara [32] show that therapeutic writing is effective in reducing symptoms of psychological distress and increasing well-being. In summary, writing can be used as a standalone tool or alongside a therapeutic approach.

There are several forms of therapeutic writing: letter writing, for example, as well as more controlled and specific interventions such as expressive writing, or more recent approaches like creative writing, positive writing and epistolary approaches such as blogging [33].

1.2 Expressive Writing

Expressive writing was developed by James Pennebaker in the 1980s [1] as an intervention designed to improve emotional expression and processing during periods of adaptation to stressful events, resulting in improved mental and physical health for those who practice it [34].

Bhullar and colleague [35] studied the effects of expressive writing on well-being satisfaction. The results indicated that writing focused on rewarding experiences was associated with significantly higher levels of well-being, including greater life satisfaction, enhanced positive emotions, psychological and social well-being, and a notable reduction in depression, anxiety, and stress [37].

Moreover, expressive writing was particularly effective in reducing depressive symptoms six months after the intervention, but only among participants who initially had mild, moderate, or severe symptoms of depression. Those with minimal symptoms showed no significant change [36].

Similarly, Birchall et al. [9] note that expressive writing is more effective for certain populations, such as those with pre-clinical symptoms, compared to clinically diagnosed populations, who face more difficulty improving symptoms through expressive writing. These researchers recommend cautious use in clinical populations.

Expressive writing can be either positive or negative. When positive, it can serve as an early intervention tool for stress reduction [37]. Cheung et al. [38] also found a significant link between well-being and expressive writing practice. It can contribute to the improvement of PTSD symptoms in the medium and long term. Interestingly, even neutral writing (e.g., writing about daily life) showed symptom reduction compared to control groups [39].

Online expressive writing has also been found effective in improving mental health by reducing perceived stress [40].

During the pandemic, expressive writing reduced psychological distress in asymptomatic individuals who tested positive for COVID-19 [41]. However, a randomized controlled study of 120 participants found that expressive writing increased stress levels [8].

1.3 Positive Writing (Positive Psychology Exercises)

Positive writing is generally used in positive psychotherapy at various stages [42]. It differs from traditional psychotherapy by focusing equally on symptoms and strengths [43]. At the beginning of therapy, clients write positively about themselves, promoting self-esteem and awareness of strengths. Midway, they reframe negative past events to identify positive outcomes. In the final phase, they identify strengths and how they wish to be remembered. Common exercises include gratitude letters, gratitude journals, and recalling positive memories. These enhance well-being, positive mood, and emotional regulation. Forgiveness writing also improves well-being by reducing anger and increasing emotional and physical health. Self-forgiveness writing fosters self-empathy and positive self-beliefs. Autobiographical writing exercises (e.g., self-acceptance, perspective-taking) develop wisdom-related traits such as honesty, responsibility, and compromise, which are linked to psychological well-being. Hope-enhancing exercises include writing about the “best possible future self” and keeping a “three good things” journal, which foster agency and optimism [43].

1.4 Creative Writing

Creative writing includes diaries, memoirs, fiction, and poetry. It is one of the oldest forms of creative art therapy. Its benefits include highlighting personal voice and identity, recording experiences and memories, serving as a communication channel, developing ideas, emotions, and skills, and supporting individuality within groups. Studies show that it improves mood and well-being [44].

1.5 Rationale, Objectives, and Hypotheses

The present study aims to examin the relationship between diary writing and well-being among Lebanese young adults. Specifically, it investigates whether individuals who engage in journaling report higher levels of emotional, psychological, and social well-being, compared to those who do not. By situating journaling within a context characterized by cumulative stressors and limited mental health resources [45,46], this research seeks to contribute to a more nuanced understanding of writing as a potential well-being practice beyond Western populations. Previous research has highlighted the potential impact of this practice across various contexts; however, data specific to Lebanon remain nonexistent.

Based on the existing literature, which suggests both beneficial and context-dependent effects of writing, this study adopts an exploratory approach while testing the general expectation that journaling is positively associated with well-being.

2. Methods

In this chapter, we present in detail the methodology used to conduct our study on the relationship between diary writing and the well-being of Lebanese young adults. This methodology was adopted because of its relevance in addressing our research questions and achieving our objectives. As it’s an exploratory study to assess the prevalence of diary writing and its relationship with well-being. And the fact that time and resources were limited due to the volatility of the Lebanese socio-economic situation.

To ensure the credibility of our findings and allow for a fair evaluation of our research, we placed great importance on transparency in our methodological approach.

We begin by presenting the study design and data collection procedures, followed by the ethical aspects of our research and the sample size. Next, we examine participant selection, variables, and measurement instruments, and finally conclude with the statistical analysis methods. Each methodological choice is aligned with our research objectives, thereby contributing to the validity and credibility of the study.

2.1 Study Design and Procedures

The present study is cross-sectional, involving 385 participants, and was conducted between January 31, 2024, and May 30, 2024. Participants were English-speaking Lebanese young adults aged 20 to 25 years. They were selected through a snowball sampling method, in which the initial participants were strategically recruited from Lebanese universities to ensure representation across all governorates of Lebanon (Beirut, Akkar, Baalbek-Hermel, Mount Lebanon, North, Bekaa, South Lebanon, and Nabatieh).

The necessary survey data were collected through an online form in order to reach the largest possible number of participants despite geographical distance and to allow accessibility at any time. Our primary concern was to respect participants' anonymity and confidentiality. We chose this method because online forms can provide an environment that fosters comfort when sharing sensitive and personal information.

Two stages were followed in data collection. First, we contacted departments from different universities located across several Lebanese regions (Beirut, Mount Lebanon, and North Lebanon) to explain the entire procedure, obtain their approval, clarify the objective of our study, and present the electronic questionnaire (Microsoft Forms), while guaranteeing student anonymity.

Second, the questionnaire was sent by email to the universities, which in turn distributed it to students. It was also sent directly to students by email or through WhatsApp (electronic communication). Participants then shared the questionnaire on WhatsApp through their contact lists with other young adults. This allowed us to expand the sample and cover all governorates in Lebanon. Participant consent was considered obtained once they clicked: "I confirm that I have read and understood the conditions of this study."

It should be noted that the purpose of the study, participant anonymity, absence of personal gain, ethics committee approval, lack of compensation of any kind, and the freedom to choose whether or not to participate were all explained through a virtual consent form (Microsoft Forms) sent to students. Completion time ranged from 10 to 14 minutes.

2.2 Ethical Approval

The Ethics Committee of the Holy Spirit University of Kaslik, at the Higher Center of Research (HCR), approved the study protocol under the following number: HCR/EC 2024-001 on 22/01/2024.

Because this was an observational study and participant autonomy, anonymity, and confidentiality were respected, no harm was caused during questionnaire administration. The purpose and criteria of the study were communicated to each participant. Submission of the online questionnaire was considered equivalent to signing written informed consent.

To ensure participant anonymity and confidentiality, several measures were taken: no participant was required to provide their name or other identifying information, such as student ID number, phone number, or email address. Each questionnaire response was automatically transcribed into a spreadsheet and assigned a number. Only the student researcher, the statistician, and the research supervisor, had access to the data.

2.3 Minimum Sample Size

According to G*Power software (version 3.1.9.7), which is used to calculate minimum sample size, with a 95% confidence level and a ±5% margin of error, the minimum required sample size was determined to be approximately 385 participants.

This estimate was based on the assumption that 50% of participants would show better mental health through diary writing, and on a standard deviation of 0.25 for the well-being scale, the Mental Health Continuum – Short Form (MHC-SF) [47].

This sample size was expected to provide adequate statistical power to detect any significant difference in well-being between individuals who keep a diary and those who do not. The required number of participants was reached, making the statistical results of the study valid.

2.4 Participants

A total of 476 participants initially took part in this study. They were English-speaking Lebanese young adults aged 20 to 25 years. They were mainly recruited through questionnaires distributed via university institutional emails.

We excluded 91 participants who did not meet our criteria, as well as young adults who reported a psychiatric diagnosis (specifically depression and anxiety), and those who refused to participate in the study. Questionnaire responses were collected between 31/01/2024 and 30/05/2024.

2.5 Data Collection: Variables and Measurement Instruments

The variables examined in our study were diary writing as the independent variable and well-being as the dependent variable.

Independent Variable: Diary Writing

Theoretical definition [51] : “a person’s private record of events, thoughts, feelings, etc., that are written down every day”

Operational definition: this variable was defined using the questionnaire from the study conducted in 2003 by Elaine Duncan and David Sheffield [10].

Dependent Variable: Well-Being

Theoretical definition: according to Galderisi et al. [48], well-being includes the ability to cope with adverse life events and function in social roles, while recognizing that mentally healthy individuals may still experience appropriate negative emotions.

Their definition emphasizes universal values such as respect and care for oneself and other living beings, recognition of human interconnectedness, respect for the environment, and respect for one’s own freedom and that of others.

According to the WHO [49], well-being is a positive state experienced by individuals and societies. It encompasses quality of life as well as the ability of people and societies to contribute to the world with meaning and purpose. It is a resource for everyday life and is determined by social, economic, and environmental conditions.

We consider it important to clarify that well-being is not solely focused on positive affect and optimal functioning, as this would exclude individuals experiencing negative feelings due to difficult life situations.

Well-being is influenced by multiple factors, including sleep quality, nutrition, hydration, social relationships, physical activity, gratitude practices, and relaxing activities [50].

In our study, the measurement instrument assessed psychological, emotional, and social well-being.

Operational definition: operationally, well-being was measured using the Mental Health Continuum – Short Form (MHC-SF) [51].

2.5.1 Presentation of Measurement Instrument No. 1

We present the questionnaire “Questions in Mental Health Continuum Short Form (MHC-SF)” [53].

Validity.According to the systematic review and meta-analysis of the MHC-SF [52], the MHC-SF is a valid and acceptable scale for both clinical and non-clinical use in measuring mental well-being. Its content validity is satisfactory [53]. Cronbach’s alpha ranges from 0.87 to 0.92 [54].

Composition. It consists of 14 items, including examples such as: “During the past month, how often did you feel…”, “happy?”, “interested in life?”. The 14 items assess what individuals have felt over the past two weeks regarding their emotional, social, and psychological well-being. Six response options on a

frequency scale are possible: Every day = 5, Almost every day = 4, About two or three times a week = 3, About once a week = 2, Once or twice = 1, Never = 0

Hypothesis-Based Scoring.Flourishing mental health requires responding “almost every day” or “every day” to at least one of the three emotional well-being questions (items 1–3), and to at least six of the eleven positive functioning questions (items 4–14). Languishing mental health requires responding “once or twice” or “never” to at least one of the three emotional well-being questions and to at least six of the eleven positive functioning questions. Moderately good mental health applies to all other participants. The total score is calculated by summing the 14 responses. Raw scores range from 0 (lowest well-being) to 70 (highest well-being).

2.5.2 Presentation of Measurement Instrument No. 2

We continue with the “Diary Keeping Questionnaire (Version 2.0, March 10th, 2003)”, designed by Elaine Duncan and David Sheffield [10].

Validity.To our knowledge, no specific validation or reliability study has been conducted. Therefore, the reliability of this instrument remains questionable. In the absence of alternatives, this questionnaire was selected because it aligns with our objective and allows us to explore links between diary writing and well-being.

Composition.The questionnaire consists of 12 multiple-choice questions, along with open-ended and filter questions, such as: “Have you ever kept a diary? Yes / No”, “At what age did you start keeping a diary and until what age did you continue?”

Hypothesis-Based Scoring. This questionnaire aims to explore whether participants habitually keep a diary. It was self-administered in English and consisted of two parts, requiring approximately 10–14 minutes to complete. The first part included sociodemographic questions such as age, sex, academic level, number of siblings, parental marital status, governorate of residence, and household crowding index. The household crowding index was considered important because it reflects family socioeconomic status. It was calculated by dividing the number of people in the household by the number of rooms, according to criteria specified by INSEE [55]. The second part consisted of the two questionnaires related to the independent variable (diary writing) and the dependent variable (well-being). No translation was provided for participants who were not fluent in English.

2.6 Statistical Analysis

Data were analyzed using SPSS software. Results are presented in the Results chapter in the form of descriptive and inferential statistics, summarized in a table where appropriate.

Statistical analyses were performed to test the study hypotheses. The tests used included Levene's test to verify equality of variances between groups (diary writing: Yes/No), independent-samples t-tests to compare group means across the different dimensions of the MHC-SF score, one-way ANOVAs to

examine whether the duration and frequency of diary writing were associated with well-being, and a multiple linear regression to assess whether the relationship between diary writing and well-being remained non-significant after accounting for relevant demographic covariates (sex, household crowding, and employment status).

3. Results

3.1 Descriptive Statistics

3.1.1 Participant Characteristics

The final sample consisted of 385 Lebanese young adults aged 20 to 25 years (M = 21.77). Of these, 70.9% were women and 29.1% were men.

Most participants resided in Mount Lebanon (62.1%), followed by North Lebanon (12.7%), Beirut (12.2%), Bekaa (6.0%), and South Lebanon (6.0%), with a smaller proportion from Akkar (1.0%).

Socioeconomic characteristics indicated that 85.7% were students, 23.1% worked full-time, 25.2% worked part-time, and 51.7% were unemployed. Regarding monthly income during the previous year (2023–2024), 13.8% reported earning less than USD 500, while 23.4% preferred not to disclose their income.

Participants reported an average of 30.58 working hours per week (SD = 19.83). The household crowding index averaged 0.96 (SD = 0.45), with 68.8% living in non-crowded conditions, 21.3% in crowded conditions, and 9.9% in severe crowding conditions.

In terms of social context, 91.2% reported having siblings, 89.9% reported having close friends, and 25.7% had experienced a major life change in the recent period, including relocation, bereavement, divorce, family conflict, illness, or immigration.

Satisfaction with university peers was generally moderate to high, with 42.9% reporting satisfaction and 11.7% reporting high satisfaction.

3.1.2 Diary Writing Habits

Among the 385 participants, 250 (64.9%) reported having kept a diary at some point in their lives.

The age of diary initiation ranged from 5 to 24 years, with the most common starting ages being 10 and 12 years. Discontinuation age also ranged from 5 to 24 years, with the most common stopping age being 20 years.

At the time of survey completion, 40.0% (n = 154) reported currently keeping a diary. Among current diary writers, 56.7% had been writing for years, indicating continuity from adolescence into young adulthood.

The most frequently reported motivations for diary writing were:

Emotional regulation (30.7%)

Memory preservation (27.2%)

Personal growth and perspective (10.7%)

Lack of safe communication with others (8.3%)

The most common diary format was a personal journal focused on daily life events (59.4%), followed by agenda/to-do journals (24.0%).

Regarding writing frequency:

30.6% wrote weekly

16.7% wrote daily

16.6% wrote monthly

26.5% did not currently write

More than half of participants (56.9%) reported rereading previous diary entries.

Additionally, 59.5% had written about distressing or traumatic events, and 89.1% of those individuals reported that doing so helped them manage the experience.

Among participants who had never written about traumatic experiences, 76.4% believed that doing so could be helpful.

3.1.3 Well-Being Scores

Descriptive statistics for the Mental Health Continuum–Short Form (MHC-SF) indicated a moderately high level of global well-being.

The mean total score was 37.32 out of 70 (SD = 15.95).

Subscale means were as follows:

Emotional well-being: M = 8.69, SD = 3.79

Social well-being: M = 10.67, SD = 6.38

Psychological well-being: M = 17.96, SD = 7.61

Overall, emotional and psychological well-being scores were in the moderate range, while social well-being scores were comparatively lower.

3.2 Inferential Statistics

To examine whether current diary writing was associated with well-being, independent-samples t-tests were conducted comparing participants who currently kept a diary (n = 154) with those who did not (n = 231). To further test whether the duration and frequency of diary writing were associated with well-being, one-way ANOVAs were conducted for each of the four MHC-SF outcomes.

3.2.1 Assumption Testing

Levene's tests for equality of variances were non-significant across all dimensions (total well-being: p = .900; emotional well-being: p = .927; social well-being: p = .353; psychological well-being: p = .376), indicating that the assumption of homogeneity of variance was met for the independent-samples t-tests.

3.2.2 Group Comparisons

No statistically significant differences were found between current diary writers and non-writers on any well-being dimension. Effect sizes (Cohen's d) were small to negligible across all comparisons, consistent with the absence of statistically significant differences.

Table 1 Independent-samples t-test results: current diary writing and well-being (N = 385)

Outcome	t(383)	p	Cohen's d	95% CI for mean difference
Total MHC-SF	-1.19	.235	-0.12	[-5.23, 1.29]
Emotional well-being	-0.93	.351	-0.10	[-1.14, 0.41]
Social well-being	-1.32	.188	-0.14	[-2.18, 0.43]
Psychological well-being	-0.92	.358	-0.10	[-2.29, 0.83]

Note. Cohen's d calculated as $d = t \times \sqrt{(1/n_1 + 1/n_2)}$, where $n_1 = 154$ (current diary writers) and $n_2 = 231$ (non-writers). All effect sizes fall well below the conventional threshold for a small effect (d = 0.20), suggesting that the null findings are unlikely to reflect insufficient statistical power given the sample size.

3.2.3 Diary Writing Duration, Frequency, and Well-Being

To examine whether the duration or frequency of diary writing, rather than current diary-keeping status alone, was associated with well-being, separate one-way ANOVAs were conducted for each MHC-SF outcome.

Duration of diary writing (categorized as weeks, months, or years) was not significantly associated with any well-being dimension: total well-being, $F(2, 207) = 0.27$, $p = .767$, $\eta^2 = .003$; emotional well-being, $F(2, 207) = 2.22$, $p = .112$, $\eta^2 = .021$; social well-being, $F(2, 207) = 0.34$, $p = .710$, $\eta^2 = .003$; psychological well-being, $F(2, 207) = 0.11$, $p = .900$, $\eta^2 < .001$.

Frequency of diary writing (never, daily, weekly, monthly, or yearly) was similarly unrelated to well-being: total well-being, $F(4, 380) = 0.70$, $p = .590$, $\eta^2 = .007$; emotional well-being, $F(4, 380) = 0.33$, $p = .856$, $\eta^2 = .003$; social well-being, $F(4, 380) = 1.39$, $p = .238$, $\eta^2 = .014$; psychological well-being, $F(4, 380) = 0.64$, $p = .635$, $\eta^2 = .007$.

All effect sizes (η^2) were small, again indicating that the lack of significant findings is unlikely to be attributable to low statistical power.

3.2.4 Adjusted Analysis: Multiple Regression

To assess whether the absence of association between diary writing and well-being held after accounting for relevant demographic factors, a multiple linear regression was conducted with total MHC-SF score as the outcome and sex, household crowding index, employment status, and the three diary-writing variables (ever kept a diary, currently keeping a diary, and duration) entered simultaneously as predictors (N = 209): whether participants had ever kept a diary at any point in their life (irrespective of current status), whether they were currently keeping a diary at the time of the survey, and the duration for which they had been practicing diary writing.

The overall model was not significant, $R^2 = .026$, $F(6, 202) = 0.90$, $p = .499$, indicating that this set of predictors did not meaningfully explain variance in well-being. None of the individual predictors reached statistical significance, including all three diary-related variables: ever having kept a diary ($\beta = -.02$, $p = .797$), currently keeping a diary ($\beta = .12$, $p = .089$), and duration of diary writing ($\beta = .06$, $p = .368$). Collinearity diagnostics indicated no concerns (all VIF < 1.1, all tolerance values > .90).

Although currently keeping a diary showed a somewhat larger standardized coefficient than in the unadjusted comparison reported in Section 3.2.2, it did not reach conventional significance after accounting for sex, household crowding, and employment status. This adjusted analysis reinforces that the absence of a significant relationship between diary writing and well-being is robust to the inclusion of relevant demographic covariates.

3.3 Summary of Main Findings

Overall, the statistical analyses indicate that young Lebanese adults who currently keep a diary do not significantly differ in well-being from those who do not, and that neither the duration nor the frequency of diary writing was associated with well-being. Effect sizes across all analyses were consistently small, suggesting that these null findings reflect a genuine absence of association in this sample rather than insufficient statistical power. A multiple regression accounting for sex, household crowding, and employment status confirmed that this absence of association held even after adjusting for these

demographic factors. Although diary writing was highly prevalent and frequently described by participants as emotionally helpful, neither its presence, duration, nor frequency was significantly associated with measured well-being outcomes in this study.

4. Discussion

Although numerous studies have investigated the relationship between writing (including diary, expressive, positive, creative, and therapeutic writing) and well-being, research on this topic in Lebanon remains almost non-existent. Therefore, this cross-sectional study aimed to determine whether a relationship exists between diary writing and well-being among a sample of the Lebanese population. The results showed that there is no relationship (neither positive nor negative) between these two variables.

In addition to these findings, our study did not identify a significant relationship between participants who wrote about traumatic or distressing events and those who did not, although the difference was close to the threshold of significance. The same applies to emotional and psychological well-being. However, social well-being decreased significantly among participants who wrote about traumatic or distressing events. Moreover, those who reported finding such writing useful did not show any significant improvement in their well-being. Only emotional well-being approached the threshold of significance, but the analyses did not confirm a statistically valid effect in most cases. Thus, according to our findings, there is no notable difference in well-being between individuals who consider writing about a traumatic or distressing event useful and those who do not.

Most studies on well-being and writing originate from Western contexts, which raises the possibility that Lebanon's cultural specificities influence the relationship between diary writing and well-being in ways not accounted for in previous research. The Lebanese context has been marked by multiple crises (economic, health-related, the Beirut port explosion, and confrontations in southern Lebanon at the time the questionnaire was administered), all of which are traumatic events that may significantly affect the well-being of young adults [15]. In the face of these crises, anxiety among Lebanese individuals is heightened by their perceived sense of control over events that is, their perceived ability to manage or prevent situations, such as during the COVID-19 health crisis [56,57].

These factors may render the effect of diary writing less significant, as individuals in such contexts may require more professional support and guidance. Indeed, in the face of such challenges, writing alone may not be sufficient to improve well-being. Moreover, Bosqui [58] argues that an individualized approach is insufficient in the face of the accumulation of crises and disasters in Lebanon. A more contextual and collective approach, one that takes into account social and economic factors as well as community resilience is more relevant in the Lebanese context.

The review by Birchall et al. [9] notes that expressive writing is more effective for individuals with subclinical symptoms of mental illness compared to those with a clinical diagnosis. Thus, by selecting participants without a diagnosis, the effect of diary writing on well-being may be less pronounced.

Furthermore, the dual-continua model proposed by Keyes [59] posits that mental health and mental illness are two distinct but coexisting dimensions: the absence of mental illness does not guarantee optimal well-being (flourishing). Consequently, our participants, although undiagnosed, may not necessarily be in a state of flourishing.

The WHO defines mental health as a state of well-being that enables individuals to cope with stress, realize their potential, and contribute to society. This definition encompasses not only mental disorders but also other forms of psychological distress. It is therefore possible that, even without a formal diagnosis, our participants experienced difficulties affecting their well-being, making diary writing less effective as a tool for expressing or processing their thoughts and emotions.

On the other hand, a 2008 study found a negative correlation between well-being and diary writing [10]. Although conducted in a different context, it suggests that diary writing may, in some cases, be associated with decreased well-being. This negative association may be explained by the tendency of writing to foster rumination on negative thoughts or to intensify focus on painful aspects of life without necessarily leading to emotional resolution [27,29]. Thus, writing can reinforce negative emotions if it is not accompanied by constructive reflection or therapeutic support.

Additionally, Bourgeois and Masson [27] highlight that diary writing can become a narcissistic trap, where individuals focus exclusively on their own thoughts and feelings, reinforcing isolation, limiting personal growth, and reducing social interactions key components of well-being. It is therefore possible that some participants in our study used journaling in this way, which could explain the absence of a significant relationship with well-being. Indeed, studies suggest that excessive introspection, when not oriented toward constructive solutions (i.e., rumination), can hinder emotional and social development [60,61]. Moreover, when such ruminations are self-critical, they can intensify feelings of stress and shame [62].

Furthermore, cultural factors may help explain our findings. For example, the concept of “preserving family honor” is a significant cultural value among Arabs in the Middle East and North Africa [63], shaped by social expectations and cultural norms specific to the region. Individuals’ actions especially those of women are often seen as reflections of the family, and any “dishonorable” behavior may bring shame upon the entire family. This fear of judgment and shame may lead individuals to conceal their emotions and present a positive image to others. Moreover, Awad et al. [65] emphasize the central role of the family in this culture, where family obligations often take precedence over individual needs. This focus may discourage individuals from expressing personal thoughts or emotions, as doing so could be perceived as betraying family trust or creating conflict.

In Abu-Lughod’s [64] work, the Bedouin code of honor emphasizes self-control, autonomy, and resistance to weakness. Men are expected to be perceived as strong, capable of protecting their families and overcoming adversity. Similarly, Gilsenan [65] and Cohen-Mor [66] describe the glorification of physical strength and courage in Akkar (Lebanon) and across the Middle East. Men gain respect by demonstrating their ability to defend themselves and assert their will. Revealing vulnerability or inner

doubts is seen as a threat to this image of strength and masculinity. This cultural norm of strength and resilience is widespread in the Arab world [63].

Moreover, Šarābī [67] highlights the central role of oral tradition in Arab societies, particularly in rural areas where oral culture predominates. He notes that the everyday dialect spoken by largely illiterate populations tribes, peasants, and villagers remained, as of the late 1980s, the language of more than three-quarters of members of neopatriarchal society (a hybrid product of the encounter between European modernity and traditional Arab patriarchal structures). This results in a culture that appears modernized on the surface but remains deeply rooted in traditional values and social relations. Oral culture transmits beliefs, legends, and traditional practices of village and desert life.

The importance of oral tradition is reinforced by the dichotomy between classical arabic (fusha) and colloquial language. This linguistic division strengthens social inequalities and masks cultural disparities based on social class. Mastery of classical arabic confers status and power, excluding illiterate and semi-literate individuals from access to knowledge and influence.

The dominance of classical arabic in education and public discourse shapes how individuals acquire knowledge and internalize values. The emphasis on memorization and the discouragement of questioning from an early age foster a non-critical, passive mode of thinking what Šarābī [69] describes as a monological culture. In such a culture, validation relies on spoken authority rather than written evidence (“so-and-so said that so-and-so said”), rendering empirical proof secondary or even irrelevant. Consequently, the world of objects and events is reduced to authoritative verbal representations with their own system of validation.

Abu-Lughod [64] also emphasizes that poetry and oral storytelling play a crucial role in emotional expression in Bedouin society, particularly among the Awlad ‘Ali. Poetry especially the ghinnawa genre is deeply embedded in daily life. People recite or sing poems in informal conversations, often in response to specific situations or emotions. Poetry is particularly significant because it allows the expression of feelings that are not easily conveyed in ordinary social interactions. In public, Bedouins often respond to personal difficulties with humor, denial, or anger, adhering to a code of honor that values strength and independence. Poetry, however, provides a space to express vulnerability, sadness, dependence, and deep attachment often linked to experiences of love, loss, and separation.

Thus, in a context where direct expression of vulnerability is restricted, poetry functions as an alternative form of expression, enabling discreet emotional release similar to the therapeutic role that individual diary writing can serve. This illustrates how different culturally shaped forms of expression allow individuals to explore and communicate emotional experiences that might otherwise remain inaccessible.

In summary, oral tradition plays a central role in the transmission of values and emotions in Arab societies, particularly in rural contexts. The linguistic divide between classical and colloquial arabic reinforces this dynamic by limiting access to knowledge and power for those who do not master the

written language. The emphasis on speech and authority in monological culture further diminishes the importance of writing in shaping collective consciousness [64].

Therefore, it is possible that the concept of writing as a tool for well-being aligns more closely with Western individualistic values than with Lebanese and broader Middle Eastern cultural norms, which may help explain the absence of associations in our findings.

Similarly, the diversity of journaling practices among participants along with variations in frequency and duration may have diluted the results, making it difficult to establish a clear relationship between writing and well-being. Indeed, certain forms of writing, particularly those that are introspective or emotionally expressive, appear to have a more direct impact on well-being [38]. For example, expressive writing where individuals explore deep and challenging emotions is often associated with positive mental health outcomes, unlike more superficial or utilitarian writing, which may not provide the same psychological benefits [38]. Future studies could therefore focus on specific types of journaling (e.g., emotional reflection and exploration of significant life events, including associated thoughts and emotions) and group participants more homogeneously in terms of writing frequency and duration.

In conclusion, it is essential to consider participants' cultural context when interpreting these results. The diversity of diary types, the influence of social norms, and Lebanon's unique sociopolitical context are all factors that may have shaped the relationship between diary writing and well-being in our study.

4.1 Clinical Implications

Given that, the study did not find significant links between diary writing and well-being, this does not mean that writing cannot be beneficial for certain individuals. Rather, it suggests that writing-based interventions may need to be more personalized according to individual needs and preferences. Moreover, the findings may indicate that, to have a meaningful impact on well-being, writing should be combined with other types of interventions. For example, integrating writing into therapy sessions could help enhance psychological benefits, as it would allow for deeper exploration and understanding of the emotions and experiences expressed through writing [28]. Journaling interventions may need cultural and contextual adaptation, and future studies should distinguish emotional vs instrumental journaling types.

5. Strengths and Limitations of the Study

Despite the strengths of this study, particularly the novelty of the topic within the Middle Eastern context, several limitations must be considered. One limitation lies in the cross-sectional design, which does not allow for the establishment of causal relationships or clarification of the direction of influence between writing and well-being. Future research could extend this work by using longitudinal data. Additionally, no correction for multiple comparisons was applied across the t-tests; however, the consistency of null findings across all outcomes makes Type I error inflation a minor concern here.

It should also be noted that the comparison group of participants not currently keeping a diary was heterogeneous, comprising both individuals who had never kept a diary and those who had done so in the past but discontinued the practice. As these two subgroups were not analyzed separately, any distinct relationship between discontinuing diary writing and well-being (e.g., if stopping coincided with a life change) cannot be ruled out and warrants attention in future research.

Although the sample consisted exclusively of Lebanese English-speaking young adults (aged 20–25), the results may not be generalizable to other age groups, non-English speakers, or populations from different cultural backgrounds due to the sample's homogeneity. Cultural differences and age may influence how journals are used and their effects on well-being.

However, the sampling process was strengthened by distributing the questionnaire through university institutions, which helped mitigate some limitations of snowball sampling. Additionally, all data were collected through self-report questionnaires, meaning that participants may have consciously or unconsciously altered their responses, potentially introducing response bias (e.g., social desirability and/or recall bias).

Furthermore, online data collection introduces additional limitations. First, access to the internet may not be uniform, thereby excluding potential participants who lack access to a computer or smartphone. Participants' technological skills may also vary, affecting their ability to complete the questionnaire effectively.

Online questionnaires may also lead to distractions, as participants could be less focused due to other activities on their devices, which may compromise the quality of responses. Finally, technical issues such as connection interruptions or software bugs (i.e., flaws in a computer program causing malfunction) could prevent some participants from submitting their responses or even from properly understanding the questions. Additionally, concerns about data security may have discouraged participants from responding honestly. This is compounded by the lack of validation studies for diary-related questionnaires in general, and especially those targeting Eastern populations.

Moreover, as mentioned earlier, by excluding participants with diagnosed mental health conditions, we may have limited the ability to observe a significant effect of diary writing on well-being, as such individuals might benefit more from this practice due to their emotional and psychological vulnerabilities.

6. Conclusion

The absence of a significant relationship between diary writing and well-being raises several questions and calls for deeper analysis. Contextual and methodological factors may explain this lack of correlation, particularly the cultural specificity of Lebanon. First, most studies on the relationship between writing and well-being come from Western contexts. It is therefore possible that Lebanon's cultural characteristics marked by multiple economic, health, and political crises shape the relationship between

diary writing and well-being in ways not captured by previous research. Second, the current Lebanese context, characterized by an accumulation of crises and trauma, may reduce the impact of diary writing. In the face of such challenges, writing alone may not be sufficient to improve well-being. Third, the central role of oral tradition in Lebanese and broader Middle Eastern cultures may mean that writing as a tool for well-being is less aligned with local cultural norms than with Western individualistic values [68–70]. Finally, a methodological factor must be considered: participants used their diaries for diverse purposes, with varying frequencies and durations. This heterogeneity may have diluted the results and made it difficult to establish a clear relationship between writing and well-being.

It is essential to consider diary writing as an individual practice, whose effects may vary depending on each person's needs, motivations, and context. The absence of a significant relationship does not mean that writing cannot be beneficial for some individuals.

The findings of this study may open the door to further research aimed at deepening the understanding of the relationship between diary writing and well-being in Lebanon. Longitudinal studies would allow researchers to observe changes in participants' well-being over time and to analyze the impact of diary writing on these changes. It would also be valuable to broaden the sample to include participants of different ages, socioeconomic backgrounds, and cultural contexts in order to obtain results that are more representative of the Lebanese population. Future research could focus on specific types of diaries, such as emotional reflection journals, to identify which forms of writing are most beneficial for well-being. Qualitative studies, using individual interviews or focus groups, would also help explore participants' experiences and perceptions of diary writing and provide deeper insight into the mechanisms involved.

In conclusion, this study represents an initial step in exploring the relationship between diary writing and well-being in Lebanon. The absence of a significant relationship does not diminish the potential value of this practice but rather calls for caution in interpreting the findings and highlights the need for further research in this area. It is crucial to take cultural context into account when studying well-being and its determinants. Social norms, cultural values, and historical events can all influence how individuals perceive and experience well-being.

Writing practices should therefore be adapted to the cultural specificities of each population. What proves effective in a Western context may not have the same impact in a Lebanese context, where oral traditions play a significant role [68–70].

By further investigating this topic, future research can enrich the literature and contribute to the development of therapeutic tools such as guided writing programs or expressive writing interventions tailored to cultural contexts similar to that of Lebanon, ultimately leading to a more nuanced understanding of the complex relationships between writing, well-being, and culture.

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Competing interest

The authors have no competing interests to declare that are relevant to the content of this article.

Ethics declarations

This study was performed in line with the principles of the Declaration of Helsinki. Approval was granted by the Ethics Committee of the Holy Spirit University of Kaslik, Higher Center of Research (HCR) (January 22, 2024 / No. HCR/EC 2024-001).

Informed Consent

Informed consent was obtained from all individual participants included in the study. Submission of the online questionnaire was considered equivalent to signing written informed consent.

Data Availability Statement

The datasets generated and analyzed during the current study are not publicly available due to participant privacy concerns but are available from the corresponding author on reasonable request and with the approval of the research supervisor.

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