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Stress and Anxiety Reduction Due to Writing Diaries, Journals, E-mail, and Weblogs

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Stress and Anxiety Reduction Due to Writing Diaries, Journals, E-mail, and Weblogs

Abstract
Stress and anxiety are very common factors in the everyday lives of college students. Although some students have found ways to reduce them, others have not. Student participants (N = 165) indicated whether they used one or more of four different mediums for personal writing, and, if so, when and why they started to use them, how frequently they used them, and whether the use relieved their stress and reduced their anxiety. These four mediums included two traditional styles of writing (diary and journal) and two newer styles of writing (e-mail and weblogs). Results showed that e-mail was used most frequently; however, following emotional hardship, students were more likely to turn to journaling. Diary writers started at a younger age than bloggers, and diary writers tended to be younger than individuals who relied on none of these mediums for stress relief and anxiety reduction.

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Stress and Anxiety Reduction due to Writing Diaries, Journals, E-mail, and Weblogs

by

Briana Murnahan

In partial fulfillment of the Honors Program in Psychology

Briana Murnahan       Date

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Abstract

Stress and anxiety are very common factors in the everyday lives of college students. Although some students have found ways to reduce them, others have not. Student participants ($N = 165$) indicated whether they used one or more of four different mediums for personal writing, and, if so, when and why they started to use them, how frequently they used them, and whether the use relieved their stress and reduced their anxiety. These four mediums included two traditional styles of writing (diary and journal) and two newer styles of writing (e-mail and weblogs). Results showed that e-mail was used most frequently; however, following emotional hardship, students were more likely to turn to journaling. Diary writers started at a younger age than bloggers, and diary writers tended to be younger than individuals who relied on none of these mediums for stress relief and anxiety reduction.

Introduction

For many centuries, writing has been an important form of self-description, self-reflection, and self-therapy. Self-disclosure, which consists of writing about one’s thoughts and feelings, is one of the important factors that make emotional writing therapeutic (Pennebaker, 1997). One of the main benefits of emotional expression is that it can release pent-up emotional energy, and this has positive health effects (Pennebaker, Colder, & Sharp, 1990). For example, writing about emotional topics has been associated with fewer physician visits (Pennebaker, 1997). When participants of a study were asked to recall traumatic events from their past, they reported less anxiety and insomnia in a follow up thirty weeks after the writing study took place (Sheffield, Duncan, Thomson, Johal, 2002). Moreover, personal writing has been known to cause effects other than positive ones immediately following
writing. In this same study participants showed less positive moods immediately after writing about their traumatic experience. Another study found three common effects of home-based personal writing using a group which wrote about a previously undisclosed traumatic event (the Emotive group) and another which did not (the Unemotive group). First, on the day participants wrote, the Emotive group reported less positive moods than the Unemotive group. They also reported more physical symptoms and took off more days from college due to illness. Second, the Emotive group reported less anxiety and insomnia and an enhanced positive mood following the study (Sheffield, Duncan, Thomson, & Johal, 2002). Thus, writing has been shown to have positive effects in the long run but the short-term effects of writing may be either positive or negative.

Kerner and Fitzpatrick (2007) reviewed the research of different studies done on personal writing, and found that the research suggests that multiple populations can benefit from writing. These populations included victims of severe trauma, clients suffering from a terminal illness, and clients experiencing symptoms of depression and anxiety. They concluded that personal writing can have positive benefits for those who have had difficulties in their past or present. Other research suggests that writing can also benefit other members of society who are not affected by serious illnesses or victims of a severe trauma. For example, free writing was found to be a good method for relieving tensions, conflict, and anxiety, and for moderating periods of confusion for many college students (Mckinney, 1976). The results of another experiment demonstrated that writing about basic thoughts and feelings about coming to college reduced the number of illnesses which led college freshman to visit a health center (Pennebaker, Colder, & Sharp, 1990).
These studies suggest that students of many different backgrounds usually benefit from writing. The amount of time spent disclosing, in order to be beneficial, can vary. Frattaroli (2006) reported that the effects of disclosing tended to be larger when the disclosure sessions lasted at least 15 minutes. Pennebaker, Kiecolt-Glaser, and Glaser (2004) found enhanced immune function in college students who were asked to write about their most traumatic experiences for 15-20 minutes per day for four days. This past research shows that writing for at least 15 minutes a day can be beneficial, but for how many days or years may vary. Lepore, Greenberg, Bruno, and Smyth (2002) reported that expressive writing interventions are exciting to clinicians and researchers because of their effects on mental and physical health outcomes, and their relative simplicity. It is clear that personal writing has been around for a long time, but the way in which it is being done changes with the time. The medium in which the writing is done has changed dramatically as technology has changed. From writing in journals and diaries to writing e-mails and weblogs, these different mediums have produced different content, personal development, privacy issues, and stress and anxiety reducing effects.

**Diaries**

Many women write diaries. This is one of the oldest forms of personal writing. Diaries have often been associated with young women, so men sometimes feel as though diaries are not the proper way of expressing their emotions. The diary has been around for so long because of its ability to help in the coping process, act as a friend to confide in, and much more. Miller (2003) states that diary writing can be used as a tool for reflection, self-improvement, emotional-release, preserving family history, and recording milestones or events. Davis (1987) reviewed the diaries of the pioneer women involved in the westward
migration and hypothesized that keeping a diary could be seen as a mechanism for coping with the need to adjust to hardships, freedom, and challenges. She also stated that diaries could function as souvenirs, by writing down their experiences and memories in order to make sure they are not forgotten. This article clearly shows the benefits of confiding in a diary throughout a person’s life. Hymer (1991) states that a diary can serve as a time capsule to conserve one’s thoughts and feelings from critical periods in their life. Kawaura, Kawakami, and Yamashita (1998) classified diaries into four types: memoirs (records of fact oriented toward the self); journals (records of fact oriented toward the reader); narrowly defined diaries (expressions of sentiment oriented toward the self); and open diaries (expressions of sentiment oriented toward a reader). There are many ways to classify a diary; however, diaries are usually considered to be a medium of expression and a record of fact as seen by the writer.

The therapeutic effects of diaries are often researched as well. Many studies have concluded that the writing processes involved in diary writing can be very therapeutic. Processes involved in diary writing include self-reflection, self-analysis, and narcissistic enhancement (Hymer, 1991). Writing can help people organize their thoughts, and this helps them to find a reasonable solution to their problem and reducing the stress or anxiety caused by these thoughts. Lynton and Salovey (1997) found that people who were experiencing a negative mood while writing tended to write in diary form. They felt that their writing helped to clarify their moods, and they tended to feel better about finding solutions. They concluded that nearly all of their participants’ moods were improved as a result of the writing.

As well as assisting in finding solutions, there are many reasons why a diary can help promote self-therapy and better health. Hymer (1991) points out that a diary can become a
special object that is commonly viewed as a friend or even a surrogate therapist, and, therefore, it is seen as safe. This is a very important factor as to why people write in diaries, namely, the writer feels that he or she can trust the diary and will reveal information not otherwise revealed. Another reason someone might choose to confide in a diary might be that it can serve as a barometer for their self-esteem by reflecting changes (Hymer, 1991). Finally, by providing a kind of audience for the author’s private feelings, diaries can address the loneliness sometimes felt by the men and women writers (Davis, 1987). Thus, there are many reasons why people have chosen to confide in diaries; these include writing to organize thoughts and feelings, reflecting on changes, reducing stress and anxiety, monitoring changes in self-esteem, addressing loneliness, and providing a means for recording milestones in a person’s life.

**Journals**

A second medium used for personal writing is in a journal. The term “journal” seems to be a more generic label than “diary,” making it more comfortable for men to take part in the writing process. Journals are very similar to diaries when it comes to content, except that they are different in that they require less privacy. One study regarding journals found that two thirds of the research participants said they were willing to share their journals, and some had already done so (Brady & Sky, 2003). Since journals require less privacy, many educators are using journals in their curriculum. Cisero’s (2006) study on reflective journal writing in her undergraduate psychology course showed that students with lower grades (C and D) were positively impacted by the chapter prompt that required the student participants to reflect in their journal on what they read. However, there was only a slight increase in the impact of students with higher grades (A and B).
Journals also can be used as a therapeutic tool. Brady and Sky (2003) found that older adults who write journals benefited in three different areas: coping, joy of discovery, and the nurturing of voice and spirit. Journals, like diaries, are known to provide a medium for reflection and self-understanding, and thus they are a form of therapy. In a study about journals and reflection, Spalding and Wilson (2002) reported that reflective thinking begins with doubt, hesitation, or perplexity and then moves to searching to resolve, clarify, or at the least address the doubt; journals offer a person a medium to do this in. Other than just choosing to do personal writing in a journal, attitudes are important when it comes to self-reflection. Open-mindedness (freedom from prejudice and other such habits), wholeheartedness, and responsibility, are the attitudes to be considered when partaking in self-reflection (Spalding & Wilson, 2002). Self-reflection by means of the journaling process may provide more benefit to a person who is open-minded than to a person who is closed-minded. Journaling has been found to have its advantages on regular people just wanting to reflect on everyday life, but journals have also been found to help people who have been through traumatic events. One study that used journal writing as a therapy, found that structured writing improved symptoms of traumatic stress in as little as three sessions (Largo-Marsh & Spates, 2002). They provided a structured writing treatment in which they asked the participant to visualize the event, label it, and then rate their level of distress. They found the structured writing therapy most effective when it targeted a specific memory and the emotions that are tied up with it. In a study by Brady (2005) the interviewer asked, “What benefits do you derive from keeping a journal?” The participants found that the journals helped them learn to cope, and thirteen of fifteen respondents talked about their journals being some form of self-therapy. Brady also found that journals helped the respondents
clarify feelings about relationships and increased awareness about these relationships. Students from a private university in Northern California who were not directly impacted by the attacks on 9/11 showed significant improvements in trauma symptoms after writing in their journals for 20 minutes for four consecutive days after the attacks. This strategy is known as the Pennebaker’s paradigm (Honos-Webb, Sunwolf, Hart & Scalise, 2006).

Personal writing in journals has been found to have positive outcomes in people who take part in the process; however, some problematic issues also have been found. Peterson and Jones (2001) discussed a few barriers that journal writers might experience. These barriers included attitudinal barriers, situational barriers, and institutional barriers. The attitudinal barriers had to do with self-doubt, lack of trust in the journal writing process, and fear of exposure. The situational barriers included lack of time. The institutional barriers referred to the teachers who did not know how to evaluate their classroom journals efficiently, thereby making the journal process less effective. Whether the reason a person takes up journal writing is for personal or academic reasons, journal writing, like diary writing, promotes self-reflection and, therefore, may provide therapeutic help.

E-mail

Writing on the Internet, using electronic mail is one of the newest forms of writing. E-mail is an electronic message sent between users. It is very similar to how letters would be sent through the U.S. postal system, but it is much faster and more efficient. The mailer can choose to write the e-mail and send it to just one person or send it to many more. Emarketer, an online company that researches trends on the Internet, reported that in 2008, 100.4 million females and 93.5 million males went online at least once a month (Williamson, 2008). With these large numbers online, the use of e-mail has gone up as well. Although e-mail is
generally used for communication, some people find e-mailing to be helpful when it comes to their personal feelings and emotions. Some studies have shown the effects that e-mailing can provide. If a person is looking to communicate with someone in order to receive feedback about a certain situation, e-mail seems ideal. An e-mail message can be very personal like the writer’s voice (Roy & Gillet 2008). E-mails can be helpful, because distance is never a factor. If a person is uncomfortable talking about certain subjects face-to-face, e-mail can become an alternative. Roy and Gillet (2008) found that e-mailing gave their patient a sense of distance and control, so that the patient wouldn’t become overwhelmed. Their patient had control over the information sent to her and sent from her, and this could ultimately lead to a sense of safety. E-mail can increase the amount of direct contact between patients and clinicians (Yager, 2003). In fact, he also found that patients felt as though they had constant access to clinicians at all times. This type of access to clinicians over the Internet can help a person using e-mail feel a sense of belonging and relief, knowing they can get in contact with help whenever needed. However, Roy & Gillet (2008) also found some disadvantages to e-mail, such as, having to bring up difficult subjects gradually, because they could not gauge how their patient was feeling through a single e-mail. Another possible negative effect of using e-mail for personal writing and therapy has to do with privacy. Unwanted disclosures to third parties can have a negative effect on e-mail writing. Privacy becomes more of an issue if the patient shares a computer or an e-mail address with anyone else (Yager, 2003). E-mail is different than other forms of personal writing in the sense that the type of therapy most people experience through e-mail involves another party, while diaries and journals typically just involve the author’s thoughts and feelings.
Weblogs

Weblogs are the newest form of personal writing to date. Weblogs, also known as “blogs” are webpages that contain entries that are presented in reverse chronological order. These webpages are frequently updated and modified. Weblogs have been found to have many different uses and effects on a person similar to the other mediums used for personal writing. However, blogs are different in one major aspect from the other mediums discussed so far in that the author starts a blog knowing and willing to let other people read the entries. Blogs may be started by private and self-conscious authors in order to gain better understanding of themselves. Authors who expect to be understood by others may start writing a blog in order to verify these expectations (Miura & Yamashita, 2007). Research has shown that 52% of weblogs authors were males and 48% were females (Herring, Scheidt, Kouper, & Wright, 2006). They also found that 51% of blog authors were adults older than 25; 10% were emerging adults between the ages of 20 and 25; and finally, 39% of blog authors were teens under 20 years old. Further they found that the content in weblogs consisted of three different types. Filters were blogs that discuss world events and what was happening online. This included news or politics. Filter information was considered external to the writer. Personal Journals were more internal to the author. This internal information included the author’s thoughts, emotions, and internal workings. Finally, k-logs (knowledge-logs) included information and observations from the blogger (Herring, Scheidt, Bonus & Wright, 2006). Moreover, they also found that gender and age varied with blog type. The journal type of blog was found to be the most common blog written. Teenage females wrote the most journal blogs, and emerging males between the ages of 20 and 25 wrote the second most journal blogs. Teenage females and emerging females between the ages of 20 and 25
took no interest in writing filter blogs, with adult males writing the most filter blogs. And finally, K-logs were the least frequent written blogs for all male and female age groups.

One of the major differences between personal writing through blogs and personal writing through journaling is the aspect of the peer community (Baker & Moore, 2008). This peer community offers an opportunity for dialogue which is not offered through personal writing on paper. This “peer community” also gives blogging different privacy issues compared to diaries and journals which are usually for the eyes of the author, close friends, or family only. Blogs, however, are open to the community. One study found that differences in age, gender, and education did not influence network size or the experience of friends and family using blogs to enhance communication opportunities (Stefanone & Jang, 2008).

Research has shown that the therapeutic effects of personal writing using blogs were not as positive as the effects of using diaries and journals. Schmitt, Dayanim, and Matthias (2008) found through their research that adolescents experienced feelings of mastery from blogging. They also concluded that youths’ personal homepage creations were used to help communicate their expression, socialization, and intimacy. Further, communicating these things helped in the formation of the youths’ identity. However, over time a blog could become more sentimental. Baker and Moore (2007) found that bloggers were more distressed than non-bloggers and that bloggers used self-blame and venting more frequently. These self-blame and venting strategies suggested a confessional type of blog that aired the bloggers’ negative self-thoughts (Baker & Moore, 2008). There were no differences between bloggers and non-bloggers on positive re-framing. Yet a blog that was updated on a regular basis became richer and more meaningful with time. This could imply that bloggers started writing with the intention of writing for a long time (Miura & Yamashita, 2007). Another function of
the blog was to create a social interaction that could help the writer feel socially accepted (Miura & Yamashita, 2007). Further, they found that the satisfaction of being accepted by others had the strongest effect on a writer continuing a blog.

**Purpose of this study**

Past research has shown that personal writing of diaries and journals have had both positive and negative effects immediately after writing; whereas long term effects measured in days to weeks after writing in journals have been positive. E-mail use has been shown to have positive benefits when used between a clinician and patient. Finally, weblogs have had the least amount of positive effects noted. Clearly, taking part in personal writing has been shown to help a person’s health and attitude, and it can be a form of self-therapy. A lot of the past research has shown that personal writing can be therapeutic, but it has not narrowed down the ways in which personal writing is therapeutic. The purpose of this study is to find how much stress is reduced and how much anxiety is relieved from personal writing. Also, we will look at each of the mediums of writing, diaries, journals, e-mail, and weblogs to find which medium produced the most benefits for stress and anxiety.

**Hypotheses**

Hyp. 1: Personal writing in diaries and journals will reduce significantly students’ stress and anxiety.

Hyp. 2: Personal writing in diaries and journals will reduce stress and anxiety more than personal writing in e-mail.

Hyp. 3: Personal writing through weblogs will reduce stress and anxiety the least.

Hyp. 4: Personal writing in diaries and journals (paper based) will reduce more stress and anxiety than personal writing in e-mail and weblogs (computer based).
Method

Participants

There were 165 participants (mean age of 22.43 years, SD of 4.74) who filled out a survey in which they indicated whether they used one or more of these mediums for personal writing.

Survey

A survey consisting of questions about past and present writing habits of diaries, journals, e-mails, and weblogs was created specifically for this study; see the Appendix. The questions asked about the form of writing which the participant used, when he or she began writing and why, etc. Each participant was asked which medium he or she preferred, if any, and what effect the use of the mediums has had on him or her.

Procedure

The survey, which was approved by the Human Subjects Review Committee of the College of Arts and Sciences, took about 10 minutes to complete. Volunteers were sought from classes, through announcements in university hallways and on the research bulletin board. The survey was available in designated classrooms, and students were informed about the times and places. Those who indicated that they were willing to participate after reading the Informed Consent were given the survey. Some student received extra-credit from an instructor, and, for this purpose, they were given a receipt to fill out and give to the instructor for the extra-credit.

Results

Descriptions of mediums used

Of the 165 participants, only 14 participants used all four mediums. Of these, 8 were men and 6 were women; 6 were African American, 7 were Caucasian, and one did not
indicate. There were 12 participants who used diaries only. Ten of these participants were female and 2 did not say; 2 were African American, 1 Asian American, 8 Caucasian, and 1 did not say. There were 13 participants who used journaling only. Of these, 2 were male and 11 were female; 2 were African American, 1 Asian American, and 10 Caucasian American. Ten participants used e-mail only. Of these 4 were male and 6 were female; 7 were Caucasian, 2 Hispanic American, and 1 Middle Eastern American. Finally, 7 participants used weblogs only; 3 were male and 4 were female; 1 African American, 4 Caucasians, 1 Hispanic, and 1 Middle Eastern American.

Table 1

Frequency of Students Using the Four Mediums in the 165 Student Participants

<table>
<thead>
<tr>
<th>All Four Mediums</th>
<th>Men</th>
<th>Women</th>
<th>Didn’t Say</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diary Only</td>
<td></td>
<td>10</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>Journaling Only</td>
<td>2</td>
<td>11</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>E-mail Only</td>
<td>4</td>
<td>6</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Weblog Only</td>
<td>3</td>
<td>4</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Anyone Using Diary</td>
<td>17</td>
<td>29</td>
<td>2</td>
<td>48</td>
</tr>
<tr>
<td>Anyone Using Journaling</td>
<td>15</td>
<td>16</td>
<td></td>
<td>31</td>
</tr>
<tr>
<td>Anyone Using e-mail</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anyone Using weblog</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Using Any of these</td>
<td>16</td>
<td>35</td>
<td></td>
<td>51</td>
</tr>
</tbody>
</table>

The number and gender of participants who reported the mediums is shown in Table 1 and described below. There were 47 participants who used a diary as at least one of the mediums. Eleven diary users were male, 34 were female, and 2 did not say; 11 were African American, 1 was Asian, 26 were Caucasian, 3 were Hispanic, 1 was other, 1 was multi-cultural, and 4 did not indicate. Forty-one participants used journaling. Of these, 13
participants were males, 26 were females, and 2 did not say. Ten were African American, 2 were Asian American, 26 were Caucasian, and 3 did not indicate their race. Third, there were 48 participants who said they used e-mail for personal writing. Of these 17 of these participants were male, 29 were female, and 2 did not indicate their gender; 9 were African American, 1 was Asian American, 28 were Caucasian, 3 were Hispanic, 1 Middle Eastern, 1 other, and 5 did not indicate. Finally, there were 31 participants who used weblogs for personal writing. Of these 31 participants, 15 were male and 16 were female. Seven were African American, 19 were Caucasian, 2 were Hispanic, 1 was Middle Eastern, 1 indicated other, and 1 did not say.

**Hypotheses**

Correlations were calculated to test the hypotheses. None of the hypotheses were supported. Hyp. 1 indicated that personal writing in diaries and journals would significantly reduce students’ stress and anxiety. This hypothesis was not supported. Hyp. 2 suggested that personal writing in diaries and journals would reduce stress and anxiety more than personal writing in e-mail. This hypothesis also was not supported by the data collected. Hyp. 3 suggested that personal writing through weblogs would reduce stress and anxiety the least. This hypothesis was not supported by the data collected. Finally, Hyp. 4 indicated that personal writing in diaries and journals (paper based) would reduce more stress and anxiety than personal writing in e-mail and weblogs (computer based). This hypothesis too was not supported by our data.

**Further findings**

A one-way analysis of variance showed that students e-mailed much more frequently than they used the other three mediums (diary, journaling, weblog), $F_{3,160}=19.14, p<.01$. 

There was no difference in the stress reduction or anxiety relief between those who wrote e-mails and those who did not ($p > .05$); however, students used e-mails less frequently than journaling following emotional hardship, $F_{3,162} = 2.78$, $p < .05$, albeit that there were no differences in other comparisons between mediums.

When comparing participants who did not use any of these medium for personal writing to those participants who used one of more of these four mediums, no difference was found in the anxiety or the stress levels of these two groups ($p > .05$) or in what made the students anxious or stressed ($p > .05$). Further, there was no difference by gender, marital status, or race/ethnic group in their anxiety level, stress level, or what caused stress or anxiety ($p > .05$). However, students who did not write in any medium tended to be older (Mean age of 22.36, $SD = 4.27$) than those who wrote in diaries (Mean age of 20.93, $SD = 2.69$), $t_{90} = 3.54$, $p = .06$. Furthermore, diary writers started to write at a younger age than weblog users, but there were no significant differences in other age comparisons, $F_{3,162} = 3.44$, $p < .02$.

**Discussion**

It has been established that writing can be helpful for reducing students’ stress and anxiety. This study compared the efficacy of writing in a diary, journaling, blogging, and e-mailing. It had been hypothesized that the personal, paper-based strategies of writing in diaries and journaling would reduce students’ stress and anxiety and do so to a greater degree than personal, computer-based e-mailing, which, in turn, would reduce stress and anxiety more than computer-based, public blogging. These hypotheses were not supported. This could be due to several reasons. First, the sample was relatively small, and the age range was very small. (The $SD$ was 4.27 around the mean of 22.36 years.) Furthermore, the sample included only college students, many of whom may be very busy with full time jobs and full
time enrollment, so that they do not have time for personal writing. This certainly is consistent with the finding that the students who did not use any of these four mediums were older on average than those who wrote in diaries. It also may be that people choose the method which works best for them, so that each of these mediums worked equally well for the people who used them. Also mediums change and are added rapidly, and this provides more options for people to choose what would work best for them as a function of what they have access to and what they need at the moment. Thus students used e-mail most frequently, but following emotional hardship, they journalled more frequently. Further, writers who relied on the personal, paper-based strategy of diary writing started at a younger age than public, computer-based blogging.
References


Appendix

Survey
Please use a number 2 pencil and enter on the scantron your answers to the following questions about your experiences with personal writing. Use the definitions of anxiety and stress to guide your answers.

**Anxiety**: a feeling of worry, nervousness, unease, typically about an approaching event or something with an uncertain outcome.

**Stress**: state of mental or emotional strain or tension resulting from adverse or very demanding circumstances.

1. How often do you feel anxious?
   A. Never     B. Rarely    C. Monthly    D. Weekly    E. Daily    F. Multiple times per day

2. How often do you feel stressed?
   A. Never    B. Rarely    C. Monthly    D. Weekly    E. Daily    F. Multiple times per day

3. What makes you feel the most anxious?
   A. Work            B. School             C. Children              D. Friends            E. Spouse
   F. Boy/girlfriend          G. Money           H. Family         I. Other, Please indicate here:

4. What makes you feel the most stressed out?
   A. Work            B. School             C. Children              D. Friends             E. Spouse
   F. Boy/girlfriend          G. Money           H. Family         I. Other, Please indicate here:

5. Have you ever or do you still do any personal writing, such as writing diaries, journals, e-mails, or blogs?
   A. Yes     B. No

If no, please go to page 7.

If yes, please continue to the next question.

Please use the following scale to indicate how frequently you write:

A      B            C                   D              E      F                   G
Never     Rarely    Every few months     Monthly   Weekly     Daily   Multiple time per day

6. In a diary

7. In a journal

8. E-mail
9. Weblogs

Please use the following scale to rate how much anxiety relief you get from writing in each of the following mediums. If you have not written in a particular medium, mark A.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Applicable</td>
<td>None</td>
<td>Very Little</td>
<td>Less than Half</td>
<td>Half</td>
<td>More than Half</td>
<td>A lot</td>
<td>Completely</td>
</tr>
</tbody>
</table>

10. Diary
11. Journal
12. E-mail
13. Weblog

Please use the following scale to rate how much stress relief you get from writing in each of the following mediums. If you have not written in a particular medium, mark A.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Applicable</td>
<td>None</td>
<td>Very Little</td>
<td>Less than Half</td>
<td>Half</td>
<td>More than Half</td>
<td>A lot</td>
<td>Completely</td>
</tr>
</tbody>
</table>

14. Diary
15. Journal
16. E-mail
17. Weblog

If you write in:
- Diaries, please go to page ___2___
- Journals, please go to page ___3___
- E-mails, please go to page ___5___
- Weblogs, please go to page ___6___

Note: If you do personal writing in more than one medium, please fill out each of the relevant sections. They are short. Thank you!

DIARY
If you have done any personal writing in a diary, please answer the following questions.
This section begins with question 18. Please answer on the scantron.

18. How frequently do you write in your diary?
   A. Multiple times per day   B. Daily   C. Weekly   D. Monthly   E. Rarely
   F. I used to write in a diary, but don’t any more
   G. Other, Please indicate here:

19. At what age did you begin writing in a diary?
   A. 0-14   B. 15-18   C. 19-22   D. 22-35   E. 36 or older

20. What prompted you to start a diary?
   A. Tragic event   B. No one to talk to   C. Project for a class
21. Diary writing helps me:
   A. Find solutions to problems  B. Make and set goals  C. Control my emotions
   D. Remember the past  E. Forget the past  F. Pass the time
   G. Other, Please indicate here:

22. Diary writing makes me feel less anxious
   A  B  C  D  E
   Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

23. Diary writing makes me feel less stress
   A  B  C  D  E
   Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

24. If diary writing helps you feel less anxious, why?
   A. The feedback I receive from a person who reads my diary. Please indicate here who
      this is in generic terms (No names, please) ____________
   B. Putting my thoughts on paper helps me think things through
   C. Putting my thoughts and feelings on paper helps me feel less anxious
   D. I feel like I am talking to a friend
   E. Gives me something to do other than worry or think about whatever is bothering me
   F. I do not feel less stress  G. Other, Please indicate here:

25. If diary writing helps you feel less stress, why?
   A. The feedback I receive from a person who reads my diary. Please indicate here who
      this is in generic terms (No names, please) ____________
   B. Putting my thoughts on paper helps me think things through
   C. Putting my thoughts and feelings on paper helps me feel better
   D. I feel like I am talking to a friend
   E. Gives me something to do other than worry or think about whatever is bothering me
   F. I do not feel less stress  G. Other, Please indicate here:

26. After you write in your diary how do you feel?
   A. Happy  B. Calm/Relaxed  C. Relief  D. Satisfied
   E. Sad  F. Angry  G. Other, Please indicate here:

   Journal

If you have done any personal writing in a journal, please answer the following questions.

This section begins with question 27. Please answer on the scantron.

27. How frequently do you write in your journal?
   A. Multiple times per day  B. Daily  C. Weekly  D. Monthly  E. Rarely
   F. I used to write in a diary, but don’t any more
   G. Other, Please indicate here:
28. At what age did you begin writing in a journal?
   A. 0-14           B. 15-18             C. 19-22             D. 22-35            E. 36 or older

29. What prompted you to start a journal?
   A. Tragic event                 B. No one to talk to                   C. Project for a class
   D. Someone else you knew did it                   E. Other, Please indicate here:

30. Journal writing helps me:
   A. Find solutions to problems         B. Make and set goals       C. Control my emotions
   D. Remember the past                    E. Forget the past              F. Pass the time
   G. Other, Please indicate here:

31. Journal writing makes me feel less anxious
   A       B      C      D   E
   Strongly Disagree Disagree Neutral Agree  Strongly Agree

32. Journal writing makes me feel less stress
   A       B      C      D   E
   Strongly Disagree Disagree Neutral Agree Strongly Agree

33. If journal writing helps you feel less anxious, why?
   A. The feedback I receive from a person who reads my diary. Please indicate here who this is in generic terms (No names, please) ____________
   B. Putting my thoughts on paper helps me think things through
   C. Putting my thoughts and feelings on paper helps me feel less anxious
   D. I feel like I am talking to a friend
   E. Gives me something to do other than worry or think about whatever is bothering me
   F. Other, Please indicate here:
   G. I do not feel less anxious

34. If journal writing helps you feel less stress, why?
   A. The feedback I receive from a person who reads my diary. Please indicate here who this is in generic terms (No names, please) ____________
   B. Putting my thoughts on paper helps me think things through
   C. Putting my thoughts and feelings on paper helps me feel better
   D. I feel like I am talking to a friend
   E. Gives me something to do other than worry or think about whatever is bothering me
   F. I do not feel less stress             G. Other, Please indicate here:

35. After you write in your journal how do you feel?
   A. Happy                 B. Calm/Relaxed            C. Relief            D. Satisfied
   F. Sad                    F. Angry            G. Other, Please indicate here:
E-mail

If you have done any personal writing through E-mail, please answer the following questions.

This section begins with question 36. Please answer on the scantron.

36. How frequently do you write E-mail?
   A. Multiple times per day   B. Daily   C. Weekly   D. Monthly   E. Rarely
   F. I used to write in a diary, but don’t any more
   G. Other, Please indicate here:

37. At what age did you begin writing E-mail?
   A. 0-14   B. 15-18   C. 19-22   D. 22-35   E. 36 or older

38. What prompted you to start E-mail?
   A. Tragic event   B. No one to talk to   C. Project for a class
   D. Someone else you knew did it   E. Other, Please indicate here:

39. E-mailing helps me:
   A. Find solutions to problems   B. Make and set goals   C. Control my emotions
   D. Remember the past   E. Forget the past   F. Pass the time
   G. Other, Please indicate here:

40. E-mailing makes me feel less anxious
   A. Strongly Disagree   B. Disagree   C. Neutral   D. Agree   E. Strongly Agree

41. E-mailing makes me feel less stress
   A. Strongly Disagree   B. Disagree   C. Neutral   D. Agree   E. Strongly Agree

42. If E-mailing helps you feel less anxious, why?
   A. The feedback I receive from a person who reads my diary. Please indicate here who
      this is in generic terms (No names, please) ____________
   B. Putting my thoughts on paper helps me think things through
   C. Putting my thoughts and feelings on paper helps me feel less anxious
   D. I feel like I am talking to a friend
   E. Gives me something to do other than worry or think about whatever is bothering me
   F. I do not feel less stress   G. Other, Please indicate here:

43. If E-mailing helps you feel less stress, why?
   A. The feedback I receive from a person who reads my diary. Please indicate here who
      this is in generic terms (No names, please) ____________
   B. Putting my thoughts on paper helps me think things through
   C. Putting my thoughts and feelings on paper helps me feel better
   D. I feel like I am talking to a friend
   E. Gives me something to do other than worry or think about whatever is bothering me
   F. I do not feel less stress   G. Other, Please indicate here:
44. After you write an E-mail, how do you feel?  
   A. Happy  B. Calm/Relaxed  C. Relief  D. Satisfied  
   E. Sad  F. Angry  G. Other, Please indicate here:

45. How frequently do you write in your weblog?  
   A. Multiple times per day  B. Daily  C. Weekly  D. Monthly  E. Rarely  
   F. I used to write in a diary, but don’t any more  
   G. Other, Please indicate here:

46. At what age did you begin writing in a weblog?  
   A. 0-14  B. 15-18  C. 19-22  D. 22-35  E. 36 or older

47. What prompted you to start a weblog?  
   A. Tragic event  B. No one to talk to  C. Project for a class  
   D. Someone else you knew did it  E. Other

48. Blogging helps me: Check all that apply.  
   A. Find solutions to problems  B. Make and set goals  C. Control my emotions  
   D. Remember the past  E. Forget the past  F. Pass the time  
   G. Other, Please indicate here:

49. Blogging makes me feel less anxious  
   A  B  C  D  E  
   Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

50. Blogging makes me feel less stress  
   A  B  C  D  E  
   Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

51. If blogging helps you feel less anxious, why?  
   A. The feedback I receive from a person who reads my diary. Please indicate here who  
      this is in generic terms (No names, please) __________________
   B. Putting my thoughts on paper helps me think things through  
   C. Putting my thoughts and feelings on paper helps me feel less anxious  
   D. I feel like I am talking to a friend  
   E. Gives me something to do other than worry or think about whatever is bothering me  
   F. I do not feel less stress  G. Other, Please indicate here:
52. If blogging helps you feel less stress, why?
   A. The feedback I receive from a person who reads my diary. Please indicate here who this is in generic terms (No names, please) __________________
   B. Putting my thoughts on paper helps me think things through
   C. Putting my thoughts and feelings on paper helps me feel better
   D. I feel like I am talking to a friend
   E. Gives me something to do other than worry or think about whatever is bothering me
   F. I do not feel less stress                     G. Other, Please indicate here:

53. After you write in your weblog how do you feel?
   A. Happy                B. Calm/Relaxed                  C. Relief                   D. Satisfied
   E. Sad                     F. Angry                               G. Other, Please indicate here:

54. My gender is:
   A. Male     B. Female

55. My marital status is:
   A. Never married                 B. Divorced or separated                   C. Widowed
   D. Unmarried. Committed Homosexual Relationship
   E. Unmarried. Committed Heterosexual Relationship
   F. Married or remarried

56. Your racial/ethnic group membership is:
   A. African American
   B. Asian American (including Indian and Pacific Island regions)
   C. Caucasian or Euro-American
   D. Hispanic American; Latino, Latina
   E. Native American
   F. Middle Eastern
   G. Other, Please indicate here:
   H. Multiracial: Please indicate here _________________________________

Please put your scantron in the questionnaire, and answer the last question directly on the questionnaire.

57. My age is ________ years

Thank you for your participation!
If you have any comments, please write them here or let the researcher know.