

# Can Writing Autobiographical Essays Lessen Suicidal Thinking?

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*To assess if autobiographical writing would lessen suicidal thinking, improve mood, or reduce health center visits, 49 undergraduates were randomly assigned to write about profound topics (e.g., highly stressful, traumatic, or guilty experiences) or trivial topics (e.g., objectively describing their bedroom or dorm room) for 15 minutes per day on 4 days during a 2-week period. Both groups completed pre-test, post-test, and 6-week follow-up measures of suicidal thinking and mood, and self-reported health-center visits at pre-test and follow-up. No significant differences were found between groups on suicidality or mood. However, the profound group reported a reduction in the number of health center visits from pre-test to follow-up that approached statistical significance ( $p = .06$ ). Consistent with past research, writing about profound topics appeared to benefit physical health; however, the benefits did not extend to mental health, at least in terms of mood or suicidal thinking.*

**Keywords** suicide, autobiographical writing, health

In the past 10 years, several researchers have studied the effects of writing on health and mood. A writing paradigm developed by Pennebaker asks participants to write about profound topics (e.g., something “extremely traumatic or stressful or about which you feel guilty,” Pennebaker, Hughes, & O’Heeron, 1987) or trivial topics (e.g., “exactly what you plan to do this afternoon as soon as the experiment is over,” Pennebaker et al., 1987). Some of the topics that have been chosen by

participants in the profound condition include incest and rape, eating disorders, death of a close friend or family member, and sexuality or intimacy concerns (Pennebaker & Beall, 1986; Greenberg & Stone, 1992). When given general instructions to write about traumatic events, people reveal very difficult life events and meaningful thoughts and feelings.

Autobiographical writing about difficult or traumatic events is associated with physical health benefits. As compared to

those who wrote about trivial topics, participants who wrote about profound topics have healthier blood chemical levels (Francis & Pennebaker, 1992; Pennebaker, Kiecolt-Glaser, & Glaser, 1988), lower blood pressure (Pennebaker & Beall, 1986), reduced visits to a health clinic (Pennebaker et al., 1988, Pennebaker & Beall, 1986), and fewer health problems (Pennebaker & Beall, 1986). On several different kinds of physical health measures, then, autobiographical writing is helpful.

Autobiographical writing about difficult or traumatic events is associated with psychological health benefits as well. After writing about profound topics, more than about trivial topics, individuals had fewer absences from work (Francis & Pennebaker, 1992), more likelihood of re-employment after being laid off work (Spera, Buhrfeind, & Pennebaker, 1994), and a better chance of maintaining their grades in college (Pennebaker, Colder, & Sharp, 1990). Thus, writing about profound topics is beneficial both physically and psychologically.

However, not all projects have reported the dramatic effects found by Pennebaker and colleagues. Greenberg and Stone (1992) failed to replicate these findings overall, although in subsequent analyses participants who wrote about experiences rated by judges as subjectively severe, as compared to experiences rated by judges as subjectively mild, had health benefits. Thus, physical and psychological benefits of writing projects may be helpful for some people (especially if they write about experiences they rate as severe), but not others, or helpful in some situations, but not others.

No one has studied whether the benefits of these types of projects extend to a lessening of suicidal thoughts, which was the present purpose. Suicidal thinking has been conceptualized along a continuum from completed suicide to attempted suicide to suicidal gesture to suicidal threat to

suicidal ideation to subintentional death (e.g., not wearing a seatbelt) (Garrison, Lewinsohn, Marsteller, Langhinrichsen, & Lann, 1991). Thus reducing suicidal thoughts could lead to less risk of actually committing suicide.

Further, suicidal thinking has been linked to suicidal behavior. Indeed, many researchers envision suicidality as a continuum from no suicidal thoughts or actions, to mild thoughts, to moderate thoughts, to severe thoughts that are accompanied by suicide attempts, to completed suicide (Fremouw, Perczel, & Ellis, 1990). Therefore, reducing suicidal thinking might have the effect of lessening the likelihood that someone will commit suicide.

We expected participants who wrote about profound topics to have improved mood and lessened suicidal thinking at the post-testing and at follow-up. Also, consistent with past research on health benefits, we expected that participants who wrote about profound topics, as compared to those who wrote about trivial topics, would have a reduction in health-center visits.

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## METHOD

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### Participants

Initially, participants were 62 undergraduates (52 women, 10 men), who ranged in age from 18 to 51 years ( $M = 23.02$ ,  $SD = 7.09$ ) enrolled in a beginning psychology class at a Southeastern university. In ethnic background, 42 participants were Caucasian (68%), 16 were African American (26%), and 4 (7%) were Asian. Of the participants, 53 were single (86%), 8 were married (13%), and 1 was divorced (2%). By post-testing, 13 of the participants (12 women, 1 man) failed to complete post-test measures, which left 49 participants; 24 were in the profound condition and 25 were in the trivial condition. By

follow-up testing, 4 additional participants failed to complete follow-up measures, which left 45 of the 49 participants (92% of those who completed post-testing, 79% overall).

### Measures

*A Demographic Form* asked participants to develop a four-digit code to use throughout the study, which they put on this form. In addition to standard demographic questions, participants were asked how many times they had gone to the University health clinic or the family doctor during the Fall semester, excluding routine check-ups.

*The Multiple Affect Adjective Check List-Revised* (MAACL-R; Zuckerman & Lubin, 1985) is a 132-adjective check list. Participants check all of the adjectives that describe how they "generally feel" (e.g., energetic, gloomy, thoughtful). The five basic subscales are Anxiety, Depression, Hostility, Positive Affect, and Sensation Seeking. The MAACL-R also has two summary subscales: Dysphoria, which is the total of Anxiety, Depression, and Hostility; and PASS, a total of positive affect and sensation-seeking. The internal reliabilities for the subscales are reported to be moderate ( $\alpha = .80$  or higher) for 70% of the coefficients (Lubin et al., 1986). Positive Affect, Dysphoria, and PASS have the highest internal reliabilities, whereas Sensation Seeking has the lowest internal reliabilities (Lubin et al., 1986). The MAACL-R is reported to have good discriminant validity: 72% of depressed patients could be discriminated from schizophrenics, other patients, and normals, and 82% of normals could be distinguished from schizophrenics, other patients, and depressives (Zuckerman & Lubin, 1985).

*Suicide Ideation Scale* (SIS; Rudd, 1989) is a 10-item, five-point Likert scale about the severity and intensity of suicidal

ideation (e.g., "I feel life just isn't worth living"). Responses range from 1 ("Never or none of the time") to 5 ("Always or a great many times"). Therefore, total scores range from 1 to 50; higher scores indicate more suicide ideation. The SIS is moderately internally consistent ( $\alpha = .86$ , item-total correlations = .49 to .78) (Rudd, 1989). Construct validity is evident by its high correlations with both depression and helplessness. Discriminant validity is evident by the fact that participants who had a past suicide attempt had higher SIS mean scores than did those who did not (Rudd, 1989).

*Reasons for Living Inventory* (RFL; Linehan, Goodstein, Nielsen, & Chiles, 1983) is 48 reasons for not killing yourself that participants rate on how important each one is to them personally (e.g., "I care enough about myself to live"). Participants rate each item on a six-point Likert scale that ranges from 1 ("Not at all important") to 6 ("Extremely important"). The six subscales of the RFL are Survival and Coping Beliefs, Responsibility to Family, Child Concerns, Fear of Suicide, Fear of Social Disapproval, and Moral Objections. The measure is scored by dividing the total score by the number of items for each subscale, so that scores range from 1 to 6, with higher scores indicating greater reasons for living. Reliability for the scale is moderate to strong ( $\alpha$ s = .72 to .92 for each subscale) (Linehan et al., 1983; Osman et al., 1993). Evidence of validity is that some of the subscales differentiate suicidal from nonsuicidal individuals (Linehan et al., 1983), and suicide ideators from parasuicidal individuals (Osman et al., 1993).

*Suicide Ideation Questionnaire* (SIQ; Reynolds, 1987) is 30 statements that participants rate according to how often they have thought about each (e.g., "I thought that life was not worth living"). Participants rate each item on a 7-point scale from 0 ("I have never had this thought") to 6 ("Almost every day"), so that scores range

between 0 and 180; a high score indicates more ideation. There are three factors on the scale: wishes and plans of suicide, the response and aspects of other people toward suicide, and morbid ideation. Reliability for young adults on the SIQ is strong ( $\alpha = .96$ , item-total correlations = .72 to .76) (Reynolds, 1987). Evidence of validity is its positive correlations with adult depression, hopelessness, anxiety, and its negative correlations with self-esteem (Reynolds, 1987).

*Essay Evaluation Form*, which is widely used in other writing studies (e.g., Greenberg & Stone, 1992; Pennebaker & Beall, 1986; Pennebaker et al., 1987), asks participants to rate nine items on a seven-point Likert scale from 1 ("Not at all") to 7 ("A great deal"). Participants rate how much their essay was: (a) personal, (b) meaningful, (c) severe, and (d) revealing of their emotions; and how much they: (e) wanted to talk to other people about their essay, (f) actually talked, and (g) held back from talking, to other people. An additional item added for the present study asked both groups to assess the overall value of the experiment. Participants in the profound group were also asked how much their topic was still affecting their lives.

*Follow-up Form* was mailed to the participants 6 weeks from the last day that they completed their last writing. This form asked how many times they had gone to the University health center during the Spring semester for visits other than routine check-ups. Also, on a seven-point Likert scale from 1 ("Not at all") to 7 ("A great deal"), participants rated how much they had thought about the experiment since it had ended, how much they had discussed the experiment with other people, and the overall value of the experiment.

### Procedure

Participants were recruited through a Psychology departmental bulletin board

that invited volunteers for a project that involved writing about personal experiences. Participants were told that the project would require 4 days of their time for approximately 30 minutes to 1 hour each day over a 2-week time period. The four meetings were scheduled on Monday-Wednesdays or Tuesday-Thursdays, paralleling a typical class schedule. All participants received extra credit for each day of their participation in the study and also extra credit for returning the follow-up questionnaires.

At the first meeting (pre-test), participants in small groups were again informed that the purpose of the project was to understand if autobiographical writing had an impact on thinking and mood. Then, consenting participants completed the demographic form and the MAACL-R. Then the experimenter escorted a randomly selected half of the group to a second room. To insure anonymity, participants were given guidelines to devise a personal code, and given a blank sheet of paper on which to write this code. They were informed that their code would be stored in a private desk drawer in a locked office, and that no one would look up their code unless they revealed in their writing that they were suicidal or homicidal. Then, an experimenter read the writing instructions aloud.

For the profound condition, the writing instructions were the identical each day, and were as follows:

During today's writing session, I would like you to write about an event that you have experienced which has been highly stressful, traumatic, or about which you have felt very guilty. The event should be one which you have not widely discussed with other people.

For the trivial condition, the writing instructions were different each day. The four topics included describing "your bedroom or dorm room in detail," "what you

ate for lunch or for dinner,” “what you have done since you woke up this morning,” and “what you plan to do after the experiment is over.” An example of one of the trivial writing instructions was:

During today's writing session, I want you to describe in detail what you have done since you woke up this morning. It is important that you describe things exactly as they occurred. Do not mention your own emotions, feelings, or opinions. Your description should be as objective as possible.

Participants then wrote for the next 15 minutes and essays were collected. Participants were reminded to attend their next scheduled meeting.

At the second and third meetings, the writing instructions were read for each group, but no questionnaires administered. At the fourth meeting (post-testing), writing instructions were again read to each group. When they had completed their writing assignment, participants completed the essay evaluation form and, in the following order, the MAACL-R, SIS, RFL, and the SIQ.

Then, each participant was debriefed individually. Participants were informed that other studies have found that participants who wrote about personal topics sometimes experienced an improved mood after writing. The experimenter reiterated that the experimenter was unsure whether this study would reveal these results; this information would be known after all of the data were analyzed. The experimenter wrote participants' comments about the study, and asked if they needed to talk to anyone about anything they had written in their essays. One participant requested, and received, phone numbers for campus psychological clinics. The participants wrote their names and addresses on a sheet of paper, so that the six week follow-up questionnaires could be mailed to them. Participants were also asked if they would like a

one page summary of the results and if so their addresses were recorded by the experimenter, separately from their data.

Participants were run in small groups during the 1997 spring semester; and the follow-up questionnaires were mailed 6 weeks later. The follow-up mailings thanked them for their time, and also requested that they complete the questionnaires as soon as possible. Follow-up measures were the same as those at post-test, with the omission of the essay evaluation form, and the addition of the follow-up questionnaire. Also, to insure that they would receive extra credit for the last phase of the study, an unsigned extra credit slip was included. Participants were asked to bring the questionnaires to the psychology department so that they could get the signature needed for the extra credit.

## RESULTS

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At post-testing, ANOVAs indicated that, compared to participants in the trivial group, participants in the profound group reported that their essays were significantly more personal,  $F(1,47) = 18.23, p = .001$ ; more meaningful,  $F(1,47) = 48.95, p = .001$ ; and more revealing of their emotions,  $F(1,47) = 53.44, p = .001$ . Further, compared to the trivial group, those in the profound group reported that they wanted to talk to other people about their essays,  $F(1,47) = 11.31, p = .002$ ; talked to other people about their essays,  $F(1,47) = 9.14, p = .004$ ; and, had held back from talking to others about their essays,  $F(1,47) = 43.06, p = .001$ . Finally, compared to the trivial group, the profound group described their essays as relatively more severe,  $F(1,47) = 28.43, p = .001$ ; and rated the experiment to be of more overall value,  $F(1,47) = 6.15, p = .02$  (see Table 1). Thus, manipulation checks indicated that the writing instructions made a great difference in what people wrote.

# Autobiographical Writing

**TABLE 1. Means and Standard Deviations for SIS, RFL, SIQ, and Follow-up Form**

Time period	Condition				Significance
	Profound		Trivial		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
<i>SIS</i>					
Post-test	11.58	2.74	11.36	2.77	ns
Follow-up	12.23	3.7	11.26	3.73	ns
<i>RFL</i>					
Post-test	4.62	.62	4.58	.62	ns
Follow-up	4.39	.58	4.58	.66	ns
<i>SIQ</i>					
Post-test	11.36	9.94	13.72	15.45	ns
Follow-up	12.86	17.16	10.48	12.83	ns
<i>Follow-up Form</i>					
Thought about experiment	2.10	1.14	2.09	.79	ns
Discussed the experiment	1.76	.94	1.78	.67	ns
Overall value of experiment	2.70	1.42	3.13	1.52	ns

Note Ratings for the Follow-up Form ranged from 1 to 7; a rating of 1 indicates "Not at all" and a rating of 7 indicates "A great deal."

There were 103 essays on profound topics. The topics included school problems and stresses (18%), guilt (15%), daily stresses (11%), parents and family problems (9%), boyfriend/girlfriend problems (7%), worries about the future (7%), deaths of family members and friends (7%), problems with friends (6%), mental and physical abuse (6%), car accidents (5%), being sexually unfaithful (4%), moral dilemmas (4%), health problems and concerns (4%), anorexia/bulimia (3%), financial problems (3%), pregnancy and abortion (2%), verbal threats (2%), sexual identity concerns (2%), molestation (1%), and panic attacks (1%). Many of the essays were classified into two categories; therefore, the total percentage exceeds 100%.

Over the four meetings, 11 participants in the trivial condition dropped out, and 6 participants in the profound condition dropped out. A  $\chi^2$  test report indicated that

this difference in proportions was not statistically significant.

No significant differences occurred between either group at pre-test, post-test, or follow-up on the MAACL-R. Also, no significant differences occurred between groups at pre-test, post-test, or follow-up on the three suicidal measures (see Table 2).

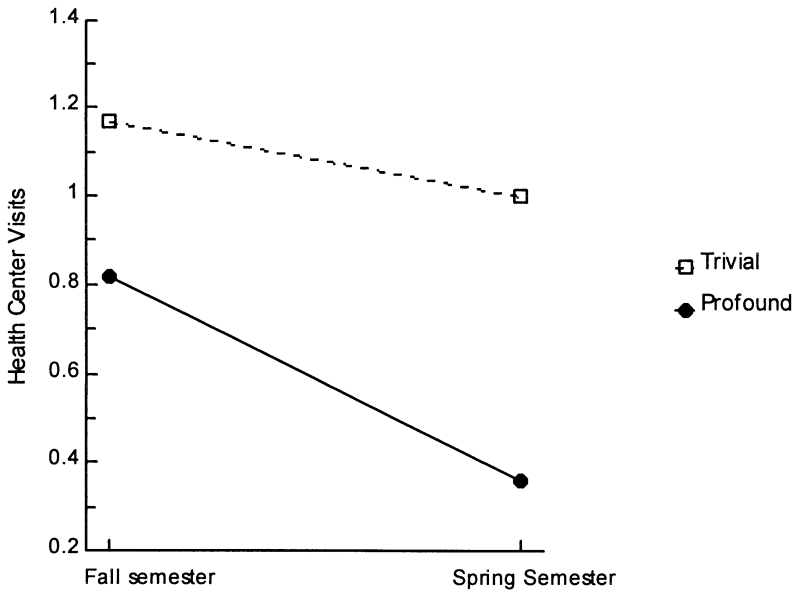
The total SIS scores collapsed across post-test and follow-up for both groups ( $M = 11.6$ ,  $SD = 3.22$ ) were similar to reported scores for other college students ( $M = 12.04$ ,  $SD = 3.73$ ) (Rudd, 1989). The total RFL scores collapsed across post-test and follow-up for both groups ( $M = 4.55$ ,  $SD = .63$ ) were similar to reported scores for other college students ( $M = 4.31$ ,  $SD = .51$ ) (Neyra, Range, & Goggin, 1990). However, the total SIQ scores across post-test and follow-up for both groups ( $M = 12.09$ ,  $SD = 13.94$ ) were somewhat lower and less variable than were those that have been reported for adolescents ( $M = 17.79$ ,  $SD = 26.78$ ) (Reynolds, 1987).

At follow-up, an one-way ANCOVA on health visits, with pre-test health visits as the covariate, indicated that the covariate made a significant adjustment, and the

**TABLE 2. Means and Standard Deviations for Essay Ratings**

Items	Condition			
	Profound n = 24		Trivial n = 25	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Personal	5.88	1.68	3.64	1.96
Meaningful	5.92	1.32	3.32	1.28
Revealing of emotions	5.46	1.28	2.44	1.58
Wanted to talk to others	4.25	1.89	2.64	1.50
Have talked to others	4.08	2.04	2.44	1.76
Held back from talking to others	4.96	1.55	2.00	1.61
Severity	4.79	1.61	2.00	1.61
Still affecting your life	5.00	2.02	-	-

Note Ratings ranged from 1 to 7; a rating of 1 indicates not at all and a rating of 7 indicates a great deal.



**FIGURE 1.** Mean health center visits for pre-test (before writing) and follow-up (6 weeks after writing). The means and standard deviations at pre-test for the trivial condition were slightly higher ( $M = 1.17$ ,  $SD = 1.41$ ) than for the profound condition ( $M = .82$ ,  $SD = 1.00$ ). The means and standard deviations at follow-up for the trivial condition were higher ( $M = 1.00$ ,  $SD = 1.17$ ) than for the profound condition ( $M = .36$ ,  $SD = .79$ ).

main effect approached statistical significance,  $F(1,44) = 3.715$ ,  $p = .06$ . As depicted in Figure 1, writing about profound topics tended to reduce the number of reported non-routine health visits (pre-test  $M = .82$ ,  $SD = 1.00$ ; post-test  $M = .36$ ,  $SD = .79$ ), as opposed to writing about trivial topics (pre-test  $M = 1.17$ ,  $SD = 1.41$ ; post-test  $M = 1.00$ ,  $SD = 1.17$ ). At follow-up, there were no differences between groups on how much they had thought about the experiment, how much they had discussed the experiment with other people, and how much they rated the overall value of the experiment.

#### DISCUSSION

Can writing autobiographical essays lessen suicidal thinking? Present results suggest that the answer is no, but writing autobio-

graphical essays does have a tendency to lessen non-routine health center visits. These results are consistent with those of Pennebaker and colleagues in demonstrating the positive physical health benefits of expressing personally meaningful material (Greenberg & Stone, 1992; Greenberg, Wortman, & Stone, 1996; Pennebaker et al., 1988). The unique contribution of the present study was in showing that physical health benefits did not extend to mental-health benefits, at least in terms of mood or suicidal thinking.

In the present study, health visits declined in both groups from Fall to Spring semester. These results contrast with those of Pennebaker et al. (1988), in which health center visits increased for trivial participants from Fall to Spring, but declined for profound participants. Present results also contrast with Pennebaker and

Beall (1986), in which health center visits remained the same for participants who wrote about the facts and the emotions surrounding a profound event, but increased for all other participants. In addition to the overall decline, the present decline was more dramatic for profound participants (a little less than one visit per participant on average declining to about one-third of a visit per participant on average) than trivial participants (a little more than one visit per participant on average declining to exactly one visit on average). Note, in the present study, there was a large variability in the number of health visits, so the statistical significance was only .06. Regional variations, for example southeast versus southwest, may explain the differences among these studies, or some of the small variations in the writing procedure may have produced more positive health benefits in the present design.

In contrast to other writing paradigm studies (Greenberg & Stone, 1992; Greenberg et al., 1996), present participants reported no post-test mood changes as a consequence of writing. However, not all writing studies have reported mood changes (Pennebaker & Beall, 1986; Pennebaker et al., 1988; Petrie, Booth, Pennebaker, Davison & Thomas, 1995). Transient mood may be less impacted by writing than other dependent measures such as health visits. Establishing a good rapport between experimenter and participants is very important when using an experimental design that involves writing on four different occasions and completing a follow-up questionnaire by mail (Pennebaker, 1994). In the present paradigm, good rapport may have mitigated any brief negative mood that could have resulted from writing about profound topics.

Unexpectedly, there were no significant differences on any of the suicidal measures on post-test and/or follow-up. Though autobiographical writing may not have lessened suicidality, it is also possible that

design flaws may have minimized potential benefits. One flaw was that participants were not screened for previous traumatic experiences, so it was unknown if any had ever attempted suicide or had suicidal thoughts, though none of the participants' writings revealed any past suicidal thinking or behavior. Indeed, suicidal ideas in the measures were actually lower than in other studies (Reynolds, 1987). In future studies, researchers could screen participants for past suicidal thinking and behavior in order to assess the change on the suicidal measures. We recommend a research project with the present design conducted with a population known to have suicidal ideation. A second flaw was that the follow-up measures were not precisely matched to the writing instructions. Following Pennebaker's (1994) suggestion that writing should match the experimenter's outcome measure, participants in future studies of suicide should be asked to write about their own suicidal experiences, rather than about profound topics in general.

A third limitation of the present design was the absence of validation of the reporting of the health center visits. Other writing studies have assessed the number of health center visits from each participant's actual record at the university health center (Greenberg & Stone, 1992; Pennebaker et al., 1990), which is a more objective measure.

A fourth limitation was that several procedural elements varied from previous writing paradigm studies. First, the participants wrote in classrooms in the psychology department, rather than in a private room. Second, participants wrote in a group with participants in the same condition, rather than an individual or mixed setting. These relatively less private conditions may have influenced the results because the participants could have been inhibited in what they revealed, or they could have talked to other participants in the room after the writing, but before com-

pleting the MAACL. Third, the participants did not personally place their essays in a box, as Pennebaker (1994) suggests, where they were able to see that it was confidential, but instead handed their essays to the experimenter who placed them in a secure box.

Despite these deviations in methodology, two pieces of evidence indicate that the participants' writings were as severe as were the writings in past studies. First, topics chosen by present participants were comparable to those in other writing studies (e.g., Greenberg & Stone, 1992). Second, the profound group rated their essays as more personal, more revealing of their emotions, and more severe than did the trivial group. These results suggest that the writing paradigm was as effective as it was in past studies.

Autobiographical writing about non-specific traumatic topics has been shown to

have physical and psychological benefits, and the present study is yet another example of the physical health benefits for college students. Further research needs to focus more on specific traumatic experiences. For example, Greenberg et al. (1996) selected women participants who had experienced a previous trauma, a design that was a good step in assessing the effectiveness of writing about particular traumatic experiences. In the future, we recommend asking people to write about their life situation, feelings, thoughts, and so forth, when they were suicidal, then assessing their suicidal thoughts, mood, and health benefits (if any). Such a design on a college campus, where a health center is typically centrally located and easily accessible, would be a more specific test of a clinical intervention for potentially suicidal individuals.

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