

# Impact of Diary Writing Practice on Mental Health of Adolescent Girls

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## Abstract

This study has been conducted to study the impact of diary writing on mental health of adolescent girls. A sample of 100 girls from Shri Ram Collage Muzaffernagar (U.P.), who are studying in first year of graduation, was selected from accidental sampling method. Sample was divided into two groups, 50 in experimental group and 50 in control group. Diary writing was selected as the independent variable, which was applied for 3 months where girls used to write down their thoughts and feelings; independently 30 minutes each for 5 days a week. Mental health of girls was assessed using the 'Mental Health Inventory'. Statistical analysis of the data was performed using the SPSS software (version 18) the result indicated that there was a significant difference between experimental and control group on the level of mental health of adolescent girls. The findings of this study indicate that the practice of diary writing significantly improved the level of mental health of adolescent girls.

*Key words* : Diary writing, Adolescent girls and Mental Health

World Health Organization (2013) estimated that mental and behavioral disorders account for about 12 percent of the global burden of diseases. In India the burden of mental and behavioral disorders ranged from 95 to 102 per 1000 population. According to Reddy,(2012) Burden of mental disorders seen by the world is only a tip of the iceberg; various studies have shown that the prevalence of mental disorders was high in females, elderly, disaster survivors, industrial workers, children, adolescents and those having chronic medical conditions. Thus there is a need to have better living conditions, political commitment, primary health care and women empowerment.

In the present study, the researcher has selected two important factors of human life, first is mental health. World Health Organization explained mental health as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community".(WHO 2004). Mental health is

very important because of having a direct relationship with personal-social performance and social-mental injuries (Soleimanian, 2009). Before the second half of the twentieth century, mental health was considered as the absence of mental diseases, but now it has been described in its more positive connotation, not as the absence of mental illness, but mental health is the term used to describe how well the individual is adjusted to the demand and opportunities of life. It is known as the ability to cope with one's environment and secure some degree of satisfaction from working and living accompanied by the promise of hope for the future (W.H.O.2001).

The concept of mental health is complex and comprehensive. People in good mental health are often sad, unwell, angry or unhappy, and this is part of a fully lived life for a human being. In spite of this, mental health has been often conceptualized as a purely positive affect, marked by feelings of happiness and sense of mastery over the environment (Waterman AS 1993, & Lamers SMA et al. 2011). According to a study, lack of mental health has a negative effect on insight,

expressing own existence and farewell feeling (Knapp et al., 2007). Goldenberg (1998) knows mental disorders as a set of clinical signs or a behavior often having a relationship with stress or disorder in personal performance and the lack of such signs signify mental health in a few cases (cite in Zade, 2010). Goldenberg (1998) believes that the existence of minimal mental health is a part of life. Also he believes that mental health exists with different level in a public population (cited in Knapp et al., 2007).

Independent variable for the present study is diary writing. Expressive writing is a simple, clinical technique that encourages individuals to write freely about their thoughts and feelings regarding an important stressor they are facing (Pennebaker & Beall, 1989). Diary writing is an ancient tradition, one that dates back to at least 10th century in Japan. Successful people throughout history have kept journals. Previous work indicates that writing about a stressful or emotional event for 15–20 minutes can, after several bouts of writing across time, provide both physical and psychological benefits for clinical (e.g. Depression) patients (Gidron, Y., Duncan, E., Lazar, A., et al., (2002) as well as nonclinical populations. Although some investigations find that expressive writing is beneficial, its effects are clearly not unequivocal, which highlights the importance of identifying who will benefit and who will not. Clearly, conditions exist in which expressive writing can improve physical and psychological health (Bernard, Jackson, & Jones, 2006; Halpert, Rybin, & Doros, 2010; Smyth et al., 2008), and identifying those conditions will help establish expressive writing as a consistently therapeutic strategy (Smyth & Pennebaker, 2008). Expressive writing can increase the availability of working memory resources as indicated in a study where after three 20-min writing sessions, college students who wrote about their thoughts and feelings regarding college life showed significant gains in working-

memory availability when compared with those who wrote about a trivial topic; (Kling & Boals 2001). However, another study shows that simply writing about one's worries may not be powerful enough to mitigate the socio-personal factors that are associated with math anxiety (McMullan et al. (2012).

### Objectives of the study

The objective of the present research is to study the impact of the practice of diary writing on the mental health of the adolescent girls.

### Statement of problem

Does practice of diary writing effect on mental health of adolescent girls?

### Hypothesis

1-There is no significant difference between mental health of pre mid and postconditions of experimental group.

2-There no significant difference between mental health of pre mid and postconditions of control and experimental group.

### Limitations of the Study

The study is confined to the district of Muzaffernagar of Uttar Pradesh. Only one college of district Muzaffernagar is included in the present study. The study is confined to adolescent girls only. The study is confined to graduate students only.

## METHODOLOGY

### Sample and Sampling

Total sample size of 100 students was selected from Shri Ram Group of Colleges from district Muzaffernagar from Uttar Pradesh. Accidental sampling method was used in the study. Accidental sampling is also known as convenience sampling in which a researcher includes people who are easy to reach or a targeted population or convenience population.

### Inclusive criteria

only adolescent girls of age range- 16-18 years, who are regularly attending college after successfully their 12th standard, were selected in this study.

### Tool used

Mental health battery developed by Arun Kumar Singh and AlpanaSen Gupta(2000)was used. In this battery 6 major dimensions of mental health are included-emotional stability, over-all adjustment, autonomy, security-insecurity, self-concept, and intelligence. There are total 130 itemsincluded in this battery to measure these qualities of mental health.

### Research design

In this study, experimental and control groups design was used. This design comprises of two groups, out of which one group was given the treatment and the data was gathered at the pre-condition stage before starting the intervention and post-condition after completing the intervention schedule. The control group received no treatment, over the same period of time, but underwent exactly the same tests. From this method researcher can compare pre-post test result between experimental and control groups.

### Procedure

In order to collect data, the experimental method was used. The sample of the study consisted of 100 adolescent students. Only female students of graduation first year were taken from the Shri Ram Group of Colleges. All the students were divided equally into two groups' namely experimental group and control group. Each group comprised of 50 students each. Before starting the experimentbase-line data of mental health was collected from both the groups using the Mental Health Battery. Then the experimental group was asked to write down their feelings and thoughts in their diary. It was continued for 5 days per week for a period of three months. Meanwhile, the control group was not asked to do anything. 45 days later, both the groups were assessed for mid condition dataand again after 3 months both the groups were assessed for post-condition data using the same scales. In order to statistically analyze the collected data and test the research hypothesis, the investigator applied ANOVA (analysis of variance)using SPSS software version 18.

ResultIn order to test the hypothesis, the investigator applied ANOVA (analysis of variance) through SPSS version 18 and used multiple comparison and tukeyfor result analysis.

Table-1:Data analysis of Means, Standard Deviation and std.errorof mental health of pre, mid, and post condition of experimental group.

Table-1  
Descriptive

	N	Mean	Std.Deviation	Std.Error
Pre-test	50	70.62	9.59	1.35
Mid-test	50	87.10	7.99	1.13
Post-test	50	102.72	9.11	1.28

From table -2 we can see that, the significance value of our experimental group is .000, which is below 0.01 levels. And therefore, there is a satisfactory difference in the means between the pre-mid and post condition of experimental group.

Table-2  
mental health

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	25766.413	2	12883.207	161.668	.000
Within Groups	11714.360	147	79.690		
Total	37480.773	149			

From the result so far, we know that there is statistically significant difference between the groups as a whole. Now the multiple comparison table shows which groups are different from each other.

We can see from table-3 that there is statistically significant difference between pre-test

and mid-test condition of experiment group(mean difference=-16.48, p. value is=.000)as well as between the pre-test and post-test results of experimental group(mean difference =-32.100, p value=.000,)and between mid-test and post-test condition also (mean difference= -15.62, p value is=.000) .

Table -3  
multiple comparison

(i)condition	(j)condition	Mean Difference (i-j)	Std.Error	Sig.
Pre-test of mental health	Mid-test of mental health	-16.480*	1.78	.000
Pre-test of mental health	Post-test of mental health	-32.10*	1.78	.000
Mid-test of mental health	Post-test of mental health	-15.62*	1.78	.000

\*. The mean difference is significant at the 0.05 level.

Table-4: test analysis of Means, Standard Deviation and std.errorof mental health of pre, mid and post condition of control group.

Table-4

Descriptive

	N	Mean	Std.Deviation	Std.Error
Pre-test	50	87.22	12.81	1.81
Mid-test	50	89.14	12.69	1.79
Post-test	50	89.14	13.30	1.88

From the table (5) we can see that, the significant value of experimental group is .409, which is above 0.05 levels. Which is not proven statistically satisfactory difference in the means between the pre-mid and post condition of control group.

Table-5

ANOVA					
mental health					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	137.013	2	68.507	.409	.665
Within Groups	24617.820	147	167.46		
Total	24754.83	149			

We can see from the table-6 that there is not statistically significant difference between pre-test and mid-test condition of control group(mean difference=-1.92, p. value is=.739)as well as between the pre-test and post-test results of control

group(mean difference =-2.1200, p value=.692)and between mid-test and post-test condition also (mean difference= -.20, p value is=.997)

Table-6  
Multiple comparisons

(i)condition	(j)condition	Mean Diffrence (i-j)	Std.Error	Sig.
Pre-test of mental health	Mid-test of mental health	-1.92	2.58	.739
Pre-test of mental health	Post-test of mental health	-2.12	2.58	.692
Mid-test of mental health	Post-test of mental health	.2000	2.588	.997

## DISCUSSION

There’s clear evidence from the findings that diary writing practice affects student’s mental health positively. Significant difference have been found between pre-,mid, and post conditions of the experimental group as compared to the control group,so both null hypotheses have been rejected and it can be said that diary writing is an effective technique to improve mental health of adolescent girls. These findings support previous studies where researchers have analyzed the impact of journal writing as expressive tool for different kind of psychological needs and issues, and have found that writing about traumatic, stressful or emotional events can improve both physical and

psychological health, in non-clinical and clinical population. Diary writing practice gives the chance to students to write down their feelings and thoughts independently. It helps them to understand their own thoughts and to recognize their feelings towards different life issues and aspects of their lives.

In a study conducted by Karen A. Baikie & Kay Wilhelm (2005) participants were asked to write about such events for 15–20 minutes on 3 to 5 occasions. Those who do so generally have significantly better physical and psychological outcomes compared with those who write about neutral topics. Diary writing is a good tool to observe record and heal oneself so it gives the

writer an opportunity to honestly judge oneself and accept oneself. There is an increasing evidence to support the notion that journaling or diary writing has a positive impact on physical and psychological wellbeing. The founder of journal writing as a psychological treatment, James Pennebaker (1988) said that regular journaling strengthens immune cells, called T-lymphocytes and also decreases the symptoms of asthma and rheumatoid arthritis. According to Smyth & Helm, (2003), Pennebaker, (2004) expressive writing has primarily been investigated in carefully controlled research settings, with results generalizing well across laboratories, and expressive writing appears to have great potential as a therapeutic tool in diverse clinical settings or as a means of self-help, either alone or as an adjunct to traditional therapies.

Some studies (Pennebaker et al. 1988) have also shown long-term benefits of expressive writing for emotional health outcomes, including mood/affect, psychological well-being depressive symptoms before examinations, post-traumatic intrusion and avoidance symptoms. Studies have also shown that expressive writing results have significant improvements in various biochemical markers of physical and immune functioning (Booth et al, 1997). Pennebaker (2004) believes that writing about stressful events helps the writer to come to terms with them, thus reducing the impact of these stressors on his/her physical health. Writing increases mental health from different aspects like writing about anger sadness and other painful emotions helps to release the intensity of calmer and better able to stay in the present. Writing about any problem affords writer opportunity for unexpected solutions to seemingly unsolvable problems. In addition to all these wonderful benefits, keeping diaries allows one to track patterns, trends and improvement in different dimensions of personality. When current circumstances appear insurmountable, writer will

be able to look back on previous dilemmas that had been resolved.

## CONCLUSION

It was found in this study that diary writing practice significantly effects girl's mental health. The higher mean in favor of post- test of experimental group indicates that diary writing practice significantly enhances mental health of girls as compared to control group. These findings are as according to previous research reviews as Kerner and Fitzpatrick (2007) reviewed the research of different studies done on personal writing 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 had difficulties in their past or facing at present.

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## REFERENCE

- Assessment of emotional intelligence: A review of self-report and performance-based testing. *The International Journal of Organization Analysis*, 11(3), 247-274.
- Baikie, K. A. (2003) *Rewriting Trauma: How and for Whom Does the Writing Paradigm Work?* Doctoral dissertation. Sydney: Macquarie University.
- Bandura, A., (1991) self-efficacy mechanism in physiological activation and health –promoting behavior in J. Madden (ed.) *neurobiology of learning, emotion and effect* (pp.229-270) New York: Raven
- Bernard M, Jackson C, Jones C. (2006) *Written emotional disclosure following first-episode psychosis: Effects on symptoms of post-traumatic stress disorder.* *British Journal of Clinical Psychology*; 45(3):403–415

- Boals, A. (2012). The use of meaning making in expressive writing: When meaning is beneficial. *Journal of Social and Clinical Psychology*, 31, 393–409. doi:10.1521/jscp.2012.31.4.393
- Booth, R. J., Petrie, K. J., & Pennebaker, J. W. (1997) Changes in circulating lymphocyte numbers following emotional disclosure: evidence of buffering? *Stress Medicine*, 13, 23–29.
- Gidron, Y., Duncan, E., Lazar, A., et al (2002) Effects of guided written disclosure of stressful experiences on clinic visits and symptoms in frequent clinic attenders. *Family Practice*, 19, 161–166.
- Goldberg D (1998). Prevention of mental illness. In: Jenkins R, Ustun TB, eds. *Preventing mental illness: mental health promotion in primary care*. Chichester, John Wiley:141–154.
- Halpert A, Rybin D, Doros G. (2010) Expressive writing is a promising therapeutic modality for the management of IBS: A pilot study. *American Journal of Gastroenterology*.
- Kerner, E. A., & Fitzpatrick, M. R. (2007). Integrating writing into psychotherapy practice: A matrix of change processes and structural dimensions. *Psychotherapy: Theory, Research, Practice, Training*, 44(3), 333-346
- Klein, K. & Boals, A. (2001) Expressive writing can increase working memory capacity. *Journal of Experimental Psychology: General*, 130, 520–533.
- Knapp, M, McDaid, Mossialos, E, Thornicroft, G (2007). *Mental health policy and practice across Europe*. New York. World Health organization.
- Lamers SMA, Westerhof GJ, Bohlmeijer ET, et al. Evaluating the psychometric properties of the Mental Health Continuum-Short Form (MHC-SF) *J Clin Psychol*. 2011;67:99–110.
- MacCann, C., Matthews, G., Zeidner, M., & Roberts, R. D. (2003). *Psychological*
- Pennebaker J. & Beall (1989) confession, inhibition, and disease in I. berkowitz(ed). *advances in experimental social psychology* (vol.22, pp.211-244) new York :academic press.
- Pennebaker, J. W. (2004) Theories, therapies, and taxpayers. On the complexities of the expressive writing paradigm. *Clinical Psychology: Science and Practice*, 11, 138–142.
- Pennebaker, J. W., Kiecolt-Glaser, J. K. & Glaser, R. (1988) Disclosure of traumas and immune function. *Health implications for psychotherapy*. *Journal of Consulting and Clinical Psychology*, 56, 239–245.
- Reddy Venkateshiva Bat el (2012) *Mental Health Issues and Challenges in India: A Review*: center for Community Medicine, All India Institute of Medical Sciences, New Delhi, India
- Sloan, D. M. & Marx, B. P. (2004a) A closer examination of the structured written disclosure procedure. *Journal of Consulting and Clinical Psychology*, 72, 165–175.
- Smyth JM, Hockemeyer JR, Tulloch H. Expressive writing and post-traumatic stress disorder: Effects on trauma symptoms, mood states, and cortisol reactivity. *British Journal of Health Psychology*. 2008;13(1):85–93.
- Smyth JM, Pennebaker JW. Exploring the boundary conditions of expressive writing: In search of the right recipe. *British Journal of Health Psychology*. 2008;13(1):1–7.
- Smyth, J. M. & Helm, R. (2003) Focused expressive writing as self-help for stress and trauma. *Journal of Clinical Psychology*, 59, 227–235.
- Soleimani, Hadi, (2009). "The comparison of mental health of shahed athletes and non-athlete students of Ferdowsi University, MA of physical education.
- w.h.o.2013 <http://www.searo.who.int/entity/child-adolescent/topics/adolescent-health/en/index>.
- Waterman AS. Two conceptions of happiness: contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. *J Pers Soc Psychol*. 1993;64:678–91.
- WHO (2001). *Strengthening mental health promotion*. Geneva, World Health Organization (Fact sheet, No. 220)
- World Health Organization (2004) *Promoting mental health: concepts, emerging evidence, practice (Summary Report)* Geneva.
- Zadezeinal, Sara, (2013), "the mental health in schools with promoting the self-efficiency, MA student of psychology, Ravanshenasi journal, school consultation course 8, no.30,.