

# Relationship of Life Events and Psychiatric Symptoms among Adolescents

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## Abstract

**Background:** There is a relationship between life events and the psychiatric symptoms. Depressive feelings and anxious thoughts are common in this perspective with significant gender difference.

**Objective:** To correlate between life events and psychiatric symptoms among adolescents and explore if they are gender related.

**Study design, settings and duration:** Cross sectional study conducted in Government and private schools and colleges of Gujranwala from January to March, 2014.

**Subjects and Methods:** One hundred and fifty male and female students of both public and private sector school and colleges of Gujranwala region were enrolled using purposive sampling technique. The translated and validated version of Negative Life Events Scale (including components of Friends, Money, Course, Teachers, Parents, Students, Relatives, Health, Academics and Course Interest) and the Four Dimensional Symptoms Questionnaire (consist of four set of symptoms including depression, distress, somatisation and anxiety) were used for data collection.

**Results:** Out of 150 participants, 75 were females and 80 males with a mean age of 16 years (SD 5.02). Female participants had more depressive feelings and were more anxious as compared to males; moreover, the females were less experienced in negative life events as compared to males. Negative life events were significantly associated with psychiatric symptoms.

**Conclusion:** Negative life events were directly related to depression and anxiety feelings and were associated with somatisation and distress.

**Key words:** Depression, anxiety, negative life events, adolescents, daily hassles, gender differences.

## Introduction

Depression is common in Pakistan. Depressive people have feelings of dejection, hopelessness, and boundless guilt. As a disorder, depression has high rates of relapse and chronicity<sup>1,2</sup> and it affects people of all ages but is twice more common in women as in men.<sup>3</sup> In adolescents, females are more prone to develop psychiatric symptoms as they experience more negative life events in their life like conflicts with peers and interpersonal relations.<sup>4</sup>

Anxiety is an emotion which prepares someone for a threatening situation and latent danger<sup>5</sup> and often

anxiety disorder may precede or increase the risk for developing depression.<sup>6,7</sup> According to Diagnostic and Statistical Manual for Mental Disorders (DSM), depression, anxiety, distress and somatisation are four dimensions of psychiatric symptoms. Somatisation reflects distress arising from bodily sensation and is also called somatic illness.<sup>8</sup>

A study conducted on the relationship between negative life events and distress among the college students showed that negative life events increased the distress and reduced life satisfaction.<sup>9</sup> For the development of the psychiatric symptoms, negative life events have been found as a reliable risk factor in both females and males.<sup>10</sup>

Often, an alternative term used by common men for stressful life events is 'daily hassles' which encompass feelings like irritating, frustrating, and distressing. Researchers have reported that minor everyday events or daily hassles when compared with major life events, accounted for most variance in the symptoms of psychiatric disorders.<sup>11</sup>

The present research was conducted to study the relationship of negative life events on psychiatric symptoms.

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Received: 21 May 2014, Accepted: 16 May 2016,

Published: 20 June 2016

### Authors Contribution

SM has done the conceptualization of project. N did data collection and literature search. Statistical analysis, writing, drafting and revision of the manuscript was done by SM and N.

**Table 1: Alpha reliabilities and correlation among variables.**

| Variables   | $\alpha$ | 1 | 2     | 3     | 4     | 5   | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    |
|-------------|----------|---|-------|-------|-------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.Somati    | .78      | - | .58** | .57** | .37** | .08 | .25** | .25** | .79** | .27** | .15   | .33** | .31** | .24** | .25** | .70** |
| 2.Distress  | .79      | - | -     | .68** | .59** | .14 | .29** | .30*  | .48** | .20*  | .11   | .22** | .30** | .35** | .24** | .76** |
| 3.Anxiety   | .79      | - | -     | -     | .53** | .11 | .29** | .17*  | .48** | .15   | .06   | .17*  | .23** | .37** | .23** | .69** |
| 4.Dep.      | .75      | - | -     | -     | -     | .15 | .09   | .14   | .37** | .12   | .12   | .09   | .19*  | .19*  | .33** | .55** |
| 5.Friends   | .80      | - | -     | -     | -     | -   | .16*  | .35** | .03   | .18*  | .35** | .14   | .18*  | .18*  | .25** | .41** |
| 6.Money     | .85      | - | -     | -     | -     | -   | -     | .28** | .17*  | .26** | .17*  | .33** | .26** | .29** | .18*  | .52** |
| 7.Course    | .77      | - | -     | -     | -     | -   | -     | .25** | .20*  | .23** | .36** | .21** | .53** | .24** | .59** |       |
| 8.Teacher   | .75      | - | -     | -     | -     | -   | -     | -     | .21** | .10   | .23** | .22** | .29** | .23** | .60** |       |
| 9.Parents   | .81      | - | -     | -     | -     | -   | -     | -     | -     | .23** | .10   | .13   | .13   | .19*  | .42** |       |
| 10.Student  | .81      | - | -     | -     | -     | -   | -     | -     | -     | -     | .23** | .18*  | .09   | .28** | .43** |       |
| 11.Relative | .88      | - | -     | -     | -     | -   | -     | -     | -     | -     | -     | .20*  | .19*  | .21** | .55** |       |
| 12.Health   | .68      | - | -     | -     | -     | -   | -     | -     | -     | -     | -     | -     | .30** | .16*  | .49** |       |
| 13.Acad.    | .75      | - | -     | -     | -     | -   | -     | -     | -     | -     | -     | -     | -     | .30** | .57** |       |
| 14.Co. Int. | .50      | - | -     | -     | -     | -   | -     | -     | -     | -     | -     | -     | -     | -     | .46** |       |
| 15. Total   | .89      | - | -     | -     | -     | -   | -     | -     | -     | -     | -     | -     | -     | -     | -     |       |

Note: \* $p < .05$ , \*\* $p < .01$

## Subjects and Methods

Using purposive sampling, 150 adolescent male and female students were enrolled. Around 50% (75) students were enrolled from public and private sector schools and remaining 50% from colleges of Gujranwala region. Among school's, 38 students were from Govt. and 37 from private schools and the same was for colleges.

Psychiatric symptoms were measured using Four Dimensional Symptoms Questionnaire<sup>12</sup> developed for adolescents by Terluin, (1996). The questionnaire was translated in Urdu and reliability and validity was evaluated. Questionnaire was likert type self-reported measure, consisting on 50 questions related to the psychiatric symptoms. There are four subscales in it which four different psychiatric symptoms i.e. depression, distress, somatisation and anxiety are measured. The subscale were found internally consistent as  $\alpha = .75$ , .79, .79 and .78 respectively.

Second questionnaire used in this study was Negative Life Events Scale.<sup>13</sup> This is a self-reporting Likert type scale with 57 items, while we selected and adopted 37 items which were relevant to Pakistani culture. The scale consisted of stressful events and hassles related to family, interpersonal, academic and health related aspects. The 6 point response categories ranged from 0 = not occur, 1 = occur but not disturbed, 2 = occur and disturbed a little, 3 = occur and disturbed somewhat, 4 = occur and disturbed a lot, 5 = occur and extremely disturbed. There are 15 subscales in it, but only 10 subscales; Friends, Money, Course, Teachers, Parents, Students, Relatives, Health, Academics and Course Interest were used in this study. For the present study, the alpha reliability of subscales were  $\alpha = .80$ , .85, .77, .75, .81, .81, .88, .68, .75, and .50 respectively.

The participants were briefed about the purpose of the study and an informed consent was obtained from them. They were asked to fill the questionnaires themselves and confidentiality of the data was ensured.

Results were analyzed using the SPSS 20. To see the relationship among variables, the Pearson Product Moment correlation was used and for the prediction purpose, regression analysis was applied. Independent sample  $t$ -test was competed to explore the gender differences between the variables.

The permission for data collection was granted by Department of Psychology, University of Sargodha, Sargodha.

## Results

Out of 150 adolescents, there were 80 males (53%) and 75 females (49.3%) in age range of 13 to 19 years. There was direct relationship between all subscales of Four Dimensional Symptoms Questionnaire and Negative Life Events Scale, and all the subscales of both the scales showed high internal consistency. Negative life events correlated and predicted the psychiatric symptoms (Table-1). According to the current findings, the negative life events regarding teachers show highly significant effect on Somatisation, Distress, Anxiety, and Depression. The friends' component of negative life events found to have no-significant impact on psychiatric symptoms including somatization, Distress, Anxiety, and Depression. Results further show that the subscale of Money is significant predictor of anxiety but have no significant impact on other psychiatric symptoms. Furthermore, the negative life events related to Course was found to be significant positive predictor of depression, stress and somatization whereas, have no significant impact on Anxiety. Results further state that negative events related to parents have no significant impact on psychiatric symptoms. Life events associated with the relatives and health issues significantly predict somatization but have no significant impact on Distress, Anxiety and Depression among adolescents. Academics have significant impact on Anxiety but have no significant impact on Distress, Depression and Somatization (Table-2).

**Table 2: Impact of negative life events on psychiatric symptoms (N = 150).**

| Variables    | Somatization |            |       | Distress |            |      | Anxiety |            |      | Depression |            |      |
|--------------|--------------|------------|-------|----------|------------|------|---------|------------|------|------------|------------|------|
|              | B            | $\Delta^2$ | F     | B        | $\Delta^2$ | F    | B       | $\Delta^2$ | F    | B          | $\Delta^2$ | F    |
| Friends      | .026         |            |       | .061     |            |      | .096    |            |      | .060       |            |      |
| Money        | .096         |            |       | .225     |            |      | .228*   |            |      | -.019      |            |      |
| Course       | .010         |            |       | .082     |            |      | -.166   |            |      | -.016      |            |      |
| Teachers     | 2.48***      |            |       | 1.50***  |            |      | 1.30*** |            |      | .625***    |            |      |
| Parents      | -.009        | .659       | 29.83 | .094     | .287       | 6.99 | -.002   | .288       | 7.04 | .006       | .165       | 3.95 |
| Students     | -.061        |            |       | -.098    |            |      | -.094   |            |      | .015       |            |      |
| Relatives    | .146*        |            |       | .035     |            |      | .039    |            |      | -.037      |            |      |
| Health       | .170*        |            |       | .224     |            |      | .062    |            |      | .068       |            |      |
| Academics    | -.117        |            |       | .201     |            |      | .365**  |            |      | .011       |            |      |
| Course – In. | .136         |            |       | .243     |            |      | .185    |            |      | .435**     |            |      |

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

**Table 3: Gender Differences in psychiatric symptoms and negative life events (N = 150).**

| Scales               |                 | Gender | N  | Mean  | SD   | t     | P    | d's  |
|----------------------|-----------------|--------|----|-------|------|-------|------|------|
| Psychiatric symptoms | Somatization    | Female | 70 | 10.28 | 6.74 | 1.68  | .092 | 0.13 |
|                      |                 | Male   | 80 | 8.70  | 4.52 |       |      |      |
|                      | Distress        | Female | 70 | 15.19 | 8.13 | 2.36  | .020 | 0.19 |
|                      |                 | Male   | 80 | 12.42 | 6.10 |       |      |      |
|                      | Anxiety         | Female | 70 | 8.68  | 6.40 | 3.12  | .002 | 0.24 |
|                      |                 | Male   | 80 | 5.78  | 4.86 |       |      |      |
| Life events          | Depression      | Female | 70 | 3.58  | 3.95 | 1.87  | .063 | 0.15 |
|                      |                 | Male   | 80 | 2.53  | 2.82 |       |      |      |
|                      | Friends         | Female | 70 | 3.34  | 4.72 | -2.22 | .028 | 0.18 |
|                      |                 | Male   | 80 | 4.89  | 3.82 |       |      |      |
|                      | Money           | Female | 70 | 2.76  | 4.62 | -.491 | .624 | 0.04 |
|                      |                 | Male   | 80 | 3.09  | 3.67 |       |      |      |
|                      | Course          | Female | 70 | 5.99  | 5.65 | .031  | .976 | 0.25 |
|                      |                 | Male   | 80 | 5.96  | 4.68 |       |      |      |
|                      | Teachers        | Female | 70 | 1.69  | 2.05 | 1.89  | .062 | 0.15 |
|                      |                 | Male   | 80 | 1.16  | 1.30 |       |      |      |
|                      | Parents         | Female | 70 | 1.65  | 3.32 | -.328 | .743 | 0.02 |
|                      |                 | Male   | 80 | 1.82  | 2.90 |       |      |      |
|                      | Students        | Female | 70 | 2.64  | 3.44 | -2.28 | .024 | 0.19 |
|                      |                 | Male   | 80 | 4.00  | 3.86 |       |      |      |
|                      | Relatives       | Female | 70 | 4.20  | 5.45 | -1.02 | .919 | 0.01 |
|                      |                 | Male   | 80 | 4.29  | 4.94 |       |      |      |
|                      | Health          | Female | 70 | 4.66  | 4.15 | -.453 | .651 | 0.03 |
|                      |                 | Male   | 80 | 4.96  | 3.89 |       |      |      |
|                      | Academics       | Female | 70 | 5.11  | 4.34 | 1.55  | .120 | 0.01 |
|                      |                 | Male   | 80 | 4.09  | 3.59 |       |      |      |
|                      | Course Interest | Female | 70 | 1.41  | 2.17 | -.420 | .675 | 0.03 |
|                      |                 | Male   | 80 | 1.54  | 1.70 |       |      |      |

Note: d's = effect size

Gender differences were significant as females were found to be more distressed and anxious as compare to male students. Females experienced more depressive and somatization symptoms as compare to males though the results were non-significant but mean differences are indicating the difference. Results further indicate that males experience more negative life events as compared to females (Table-3).

## Discussion

The present study was conducted to explore the relationship between the Negative Life Events and the

Psychiatric Symptoms, specially, the depressive and anxious feelings. Previous researches had revealed that the negative life events most often predict the depression and linked to anxiety feelings.<sup>3</sup> As depression is the main issue of our society and every person experienced it time to time. Moreover, extreme worry and anxiety also account for these perspectives.

In previous studies, it has been proved that individuals suffering from the depressive situations can also developed the anxious feelings due to daily hassles or life events while, gender differences were also significant.<sup>6</sup> Same is the finding of this study i.e. Gender differences are significant while predicting the depressive

and anxious thoughts linked to negative life events. Meanwhile significant relationship among the negative life events and the psychiatric symptoms is also an important finding of the study.

Our findings further revealed the significant and non-significant effect of various Negative Life Events on Psychiatric Symptoms. Different life events have different effects on psychiatric symptoms. Negative events related to friends, money, course, relatives, health, academics and course Interest had non-significant effect on Somatization, Anxiety, Depression and Distress. While only Negative Life Events related to the teachers has more significant effect on Somatization, Distress, Anxiety, and Depression. Previous studies revealed that the negative life events are not only factors which may predict the psychiatric symptoms.<sup>9</sup>

As previous studies revealed that the life events and daily hassles are responsible in predicting the major psychiatric symptoms as depression and anxiety.<sup>1,7</sup> It's also proven in present study that the negative life events are highly associated with the psychiatric symptoms. Any negative life events can drive an individual to the depressive and anxious feelings, which can lead him/ her to psychiatric disorders mainly depressive mood, etc.

Another aim of the study was to explore gender difference in experiencing negative life events and psychiatric symptoms. It was evident from previous researches that there was significant difference among males and females in depression and anxiety feelings.<sup>3,10</sup> The outcomes of this research also confirm significant gender differences in anxiety feelings, the females were found to be more anxious rather than males. The findings further revealed mean differences which indicate females as more depressive rather than males, though these differences were not significant (Table 3).

**Conflict of interest:** None declared.

## References

1. Stice E, Presnell K, Bearman S K. Relation of early menarche to depression, eating disorders, substance abuse, and comorbid psychopathology among adolescent girls. *Dev Psychol* 2001; 37: 608–19.
2. Goodyer I M, Herbert J, Tamplin A, Altham PME. Recent life events, cortisol, dehydroepiandrosterone and the onset of major depression in high-risk adolescents. *Brit J Psychiat* 2000; 177: 499–504.
3. Brown H, Douglas. Principles of language learning and teaching. Pearson education, Inc. 2007.
4. Kessler RC. The epidemiology of psychiatry comorbidity. In Tsuang M, Tohen M, Zahner G. (Eds.) *Textbook of psychiatric epidemiology*. NewYork, Wiley 1995: 179 – 97.
5. Bittner A, Katz JL, Antonini A, Wright CE, Margouleff C, Gorman JM, et al. Cerebral glucose metabolism in women with panic disorder. *Am J Psychiat* 1998; 155: 1178- 83.
6. Stein MB, Feutsch M, MullerN. Hofler M, Lieb R, Wittchen H-U. Social anxiety disorder and the risk of depression. A prospective community study of adolescents and young adults. *Arch Gen Psychiat* 2001; 58: 251- 6.
7. Wittchen H-U, Kessler RC, Pfister H, Lieb M. Why do people with anxiety disorder become depressed? A prospective longitudinal community study. *Acta Psychiat Scand* 2000; 102: 14- 23.
8. Derogatis LR. Symptom Checklist-90-Revised. in *Handbook of psychiatric measures*. Am Psychiat Assoc 2000: 81-4.
9. Marum G, Clench-Aas J, Nes RB, Raanaas RK. The relationship between negative life events, psychological distress and life satisfaction: A population based study. *Qual Life Res* 2014; 23(2): 601-11.
10. Hammen C. Social stress and women's risk for recurrent depression. *Archives of Women's Health* 2003; 6: 9–13.
11. Lazarus RS, DeLongis A, Folkman S, Gruen R. Stress and adaptational outcomes: The problem of confounded measures. *Am Psychol* 1985; 40: 770-9.
12. Terluin B. De Vierdimensionale Klachtenlijst (4DKL). Een vragenlijst voor het meten van distress, depressie, angst en somatisatie [The Four-Dimensional Symptom Questionnaire (4DSQ). A questionnaire to measure distress, depression, anxiety, and somatization]. *Huisarts en Wetenschap* 1996; 39: 538-47.