



Stress, Mental Imagery and Suicidal Ideation among Adolescents

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Abstract: The present study titled “Stress, Mental Imagery and Suicidal Ideation among Adolescents” was undertaken with an objective to study the relation between stress, mental imagery and suicidal ideation. 21st century is known as the era of stress and competition. Youth and adolescents are under its radar in the present time. This is affecting them in a very adverse manner which is hampering their thought process and increasing the risk of suicide among them.

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Five hypotheses were formulated for verification- (1) There will be significant difference in suicidal ideation between male and female. (2) There will be significant gender difference in the level of stress among adolescents. (3) Significant gender difference will be found among adolescents on mental imagery. (4) There will be negative correlation between high level of stress and mental imagery. (5) Stress and suicidal ideation will be positively correlated. A sample of 100 adolescents (50 male and 50 female) were selected through Incidental-Cum-Purposive Sampling Method. The data was collected from class 9th students of Acharya Sudarshan Patna Central School. Lakshmi and Narain Stress Scale (SS), Sisodia and Bhatnagar Suicidal Ideation Scale (SIS) and Rajamanickam Mental Imagery Questionnaire (MIQ) were used for data collection. Mean, SD, t-ratio and coefficient of correlation were computed for the result interpretation. There was no significant difference found in suicidal ideation among male and female. No significant gender difference was observed among adolescents in mental imagery. A significant gender difference was observed in the level of stress among adolescents. A positive correlation occurred between stress and mental imagery which is not significant indicating towards the occurrence of chance factor. And a significant positive correlation was found between stress and suicidal ideation among adolescents.

Keywords : Suicidal Ideation, Mental Imagery, Stress.

Introduction :

Stress is a term that is applied to various psychological and physiological pressures experienced or felt by people throughout their lives. It is mental, physical and emotional reactions that an individual experiences as a result of demand on his/her life. In the present era, stress has become more attention catching in the case of adolescents/youths. They are getting distressed by increased workload and pressure and eventually their cognitive, behavioral part of life is getting affected. When a student is unable to compete or starts lagging behind, he/she starts imagining himself/herself being called a failure in life. These negative images may worsen the situation and may lead to suicidal thoughts and when the case worsens he/she may make an attempt to end his/her life or may even commit suicide.

Objectives:

The objectives of the study are

1. To study the relationship among stress, mental imagery and suicidal ideation among adolescents.
2. To study the difference of suicidal ideation and mental imagery across gender.
3. To find out the effect of stress on mental imagery.
4. To ascertain the relationship between stress and suicidal ideation.

Hypotheses :

On the basis of the objectives of the present study, following hypotheses were formulated:

1. There will be significant difference in suicidal ideation between men and women.
2. Significant gender difference will be found among adolescents on mental imagery.
3. There will be significant difference in the level of stress between male and female adolescents.
4. There will be negative correlation between high level of stress and mental imagery.
5. Stress and suicidal ideation will be positively correlated.

Method of study:

Sample: 100 adolescents (50 males and 5 females) from Acharya Sudarshan Patna Central School, Patna, of age ranging from 12 to 16 years served as samples in the present study. The sample was selected by incidental-cum-purposive sampling method.

Tools: The following research tools were used for data collection:

1. Stress Scale (SS) developed by Lakshmi & Narain (2014)
2. Suicidal Ideation Scale (SIS) developed by Sisodia and Bhatnagar (2011)
3. Mental Imagery Questionnaire (MIQ) developed by M. Rajamanickam.

Procedure of data collection: The Principal of Acharya Sudarshan Patna Central School, Patna was contacted and explained the purpose of the study. After receiving the permission the questionnaires were explained to the students and they were requested to fill them honestly. After the students completed filling all the 3 questionnaires they were thanked for their support.

The collection of data was completed in 2 days.

Result and interpretation: The mean, SD, t-ratio, co-efficient of correlation were computed and graphic representation was also done for analysis of the data.

Hypothesis No-1- There will be significant gender difference in suicidal ideation between men and women.

The results are shown in Table no.1.

Table No.1
(N=100)

Table showing N, raw score of suicidal ideation, means, SD, t-ratio and level of significance

	N	Raw score of suicidal ideation	Mean	SD	t-ratio	Level of significance
Male	50	2605	52.1	12.00	1.11	Not significant at 0.05 level of confidence
Female	50	2463	49.26	13.57		

df=98; 0.05=1.98; 0.01=2.63

Coleman in (1981) in his reports found that men are three times more likely to commit suicide than women but women make more suicide attempts than men. On the basis of the results of previous studies and on observation hypothesis no.1 "there will be a significant difference in suicidal ideation between men and women" was formulated.

In table no.1, the mean value of the obtained score of males in suicidal ideation is 52.1 and of females is 49.26 which is lower in comparison to males. On the basis of mean it can be interpreted that females have low suicidal ideation than males.

SD value of male is 12 and of female it is 13.57. Both SD value are quite less to their mean. Hence, it can be interpreted that there is less variation in the response of the respondents. So the findings are quite dependable.

Further to test whether mean difference is significant or not t-test was applied. The t-ratio is 1.11 (df= 98) which is not significant even at 0.05 level of confidence as the table value at 0.05 level of confidence is 1.98. Not significant t-value indicates that there is no significant difference between males and females on suicidal ideation. Thus it does not support the hypothesis no.1 that "there will be significant gender difference in suicidal ideation between men and women."

Lin, Zin, Znac and Sandler (2005) found stress to be significantly related to suicidal ideation as well as suicidal attempts. So the previous study emphasizes on stress and does not support that gender is one of the factors in suicidal ideation.

A graphical representation is given in fig.1 of suicidal ideation between male and female.

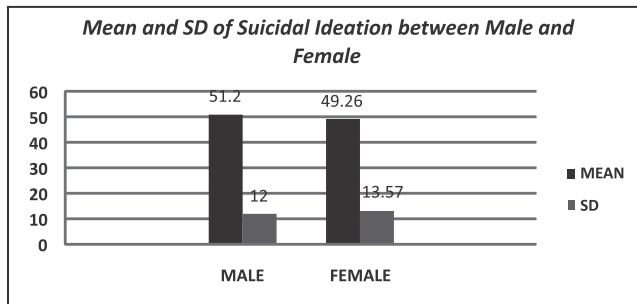


Fig. 1.

Hypothesis No. 2- Significant gender difference will be found among adolescents on mental imagery.

The results are shown in table no.2.

Table No.2
(N=100)

Table showing N, raw score of mental imagery, means, SD, t-ratio and level of significance

	N	Raw score of mental imagery	Mean	SD	t-ratio	Level of significance
Male	50	16117	322.34	63.37	0.91	Not significant at 0.05 level of confidence
Female	50	16692	333.84	62.90		

df=98; 0.05=1.98; 0.01=2.63

Women and men experience different types of social pressure. Women are expected to take responsible action. So females while taking any action imagine beforehand about the consequences. A mental image is formed about how others will take her actions. The males do not feel such pressure. Hence, they imagine less about the consequences. On this basis it was hypothesized that "significant gender difference will be found among adolescents in mental imagery."

The interpretation of the results of hypothesis no.2 is done on the basis of the results presented in table no. 2. The mean value of the obtained score of 50 male sample is 322.34 and of 50 female sample is 333.84, which is higher in comparison to males. On the basis of mean it can be interpreted that females show higher mental imagery than males which supports the idea behind the formation of the hypothesis.

SD value of male is 63.37 and of female it is 62.90. Both SD values are quite less to their mean. Hence, it can be interpreted that there is less variation in the response of the respondents. So, the responses are quite dependable.

Further to test whether mean difference is significant or not t-test was applied. The t-value is 0.91 (df= 98) which is not significant even at 0.05 level of confidence as the table value at 0.05 level of confidences is 1.98. Not significant t-value indicates that there is no significant gender difference among adolescents in mental imagery. Hence, hypothesis no. 2 "significant gender difference will be found among adolescents in mental imagery" has not been proved.

Crynoswski, et.al (2000) on the basis of their study have also concluded that significant difference will be found in the kind of mental imagery between males and females. Thus, formulation of hypothesis no.2 is in consistency to the previous study. But the findings of the present study does not support hypothesis 2.

The results of Table no. 2 is presented graphically in the following figure no. 2

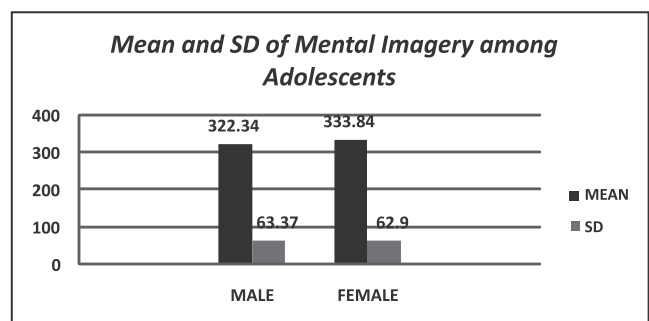


Fig. 2.

Hypothesis No. 3. There will be significant gender difference in the level of stress among adolescents.

The results are shown in table no. 3

Table No. 3
(N = 100)

Table showing N, raw score of stress, means, SD, t-ratio and level of significance

	N	Raw score	Mean	SD	t-ratio	Level of significance
Male	50	692	13.84	6.60	2.01	Significant at 0.05 level of confidence
Female	50	568	11.36	6.40		

df=98; 0.05=1.98; 0.01=2.63

Gender difference has been found in the personality of the individuals. In general males are more open and reactionary. They immediately react to anything that disturbs them. They show aggressive behaviour and make use of negative stress management techniques. This is not so with females. They are expected to be calm and cool as the social structure does not accept or allow such reactions from females. Due to this they try to suppress their feelings and reactions which gradually increases their stress. As a result difference in the type and level of stress among males and females will be found. Keeping all these observations in mind, it was hypothesized that “there will be significant gender difference in the level of stress among adolescents.”

In table no.3 mean value of the obtained score of males is 13.84 and of females is 11.36 which is lower in women in comparison with men. This shows that level of stress in females is less in comparison to males.

SD value of male is 6.60 and of female it is 6.40. Both SD values are quite less to their mean. Hence, it can be interpreted that there is less variation in the response of the respondents. So the responses are quite dependable.

T-ratio is 2.01 (df= 98) which is significant at 0.05 level of confidence as the table value at 0.05 level of confidence is 1.98. Significant t-value indicates that there is a significant difference in males and females in stress level which supports hypothesis no. 3.

The findings of the study conducted by Rohit Verma, Yatan Pal Singh, Balhare, and Chandra Shekhar

Gupta concluded that men and women tend to react differently to stress both psychologically and biologically. Thus previous finding also supports the present finding.

The means and SD of scores of stress of male and female are graphically presented in figure no.3.

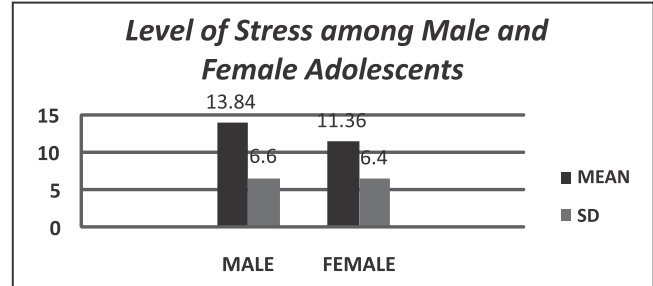


Fig. 3.

Hypothesis No. 4. There will be negative correlation between high level of stress and mental imagery.

The results are shown in table no.4

Table No. 4
(N=09)

Table showing N, raw score of high level of stress and mental imagery of male and female, coefficient of correlation and level of significance

	N	Raw score	r	Level of significance
Stress	09	222	0.037	Not significant at 0.05 level of confidence
Mental imagery		2085		

df=7; 0.05=0.666; 0.01=0.798

Hypothesis no. 4 “there will be negative correlation between high level of stress and mental imagery” was formulated with an idea that when a person is under high stress, he or she is unable to reason or figure out the things rationally. In other words the person goes blank and his cognitive process gets hampered. This affects a person’s ability to imagine a situation and power of imagery suffers. So in the condition of high level of stress, there will be very less or no mental imagery.

According to the manual of Stress Scale a male having 22 and above score and a female having 25 and above score will fall in the category of high level of stress. Only 09 out of 100 samples showed high level of stress. Hence, analysis of hypothesis no.4 was done on the basis of these 09 samples only.

To test whether stress and mental imagery are correlated or not coefficient of correlation by Assumed Mean Method was calculated. The obtained r -value is 0.037 ($df=7$) which indicates a positive correlation between mental imagery and stress. Further significance of difference was checked on $df=7$. The obtained r -value (0.037) was not significant even at 0.05 level of confidence, as the table value at 0.05 level of confidence is 0.666 which is greater than the obtained r -value (0.037). Thus there is no significant positive correlation between stress and mental imagery among adolescents.

As there is a positive correlation between high level of stress and mental imagery, so on this basis it can be interpreted that the hypothesis no. 4 could not be proved. But not significant correlation indicates that positive correlation has occurred due to chance factor. The small size of the sample may be one of the causes of this finding/result.

Hypothesis No. 5. Stress and suicidal ideation will be positively correlated.

The results are shown in table no. 5

Table No. 5
(N = 100)

Table showing, raw score of stress and suicidal ideation of male and female, coefficient of correlation and level of significance

	Raw score	r	Level of significance
Stress	1260	0.483	Significant at 0.01 level of confidence
Suicidal ideation	5068		

$df=98$; $0.05=0.195$; $0.01=0.254$

When a person is under stress he/she is more prone to take a situation in negative way. Besides this adolescents are not matured enough to handle a stressful situation efficiently so they get impulsive. They tend to form negative images of a situation and when the degree of this negativity increases suicidal ideations occur. With this view hypothesis no. 5 “stress and suicidal ideation will be positively correlated” was formulated.

To test whether stress and suicidal ideation are positively correlated or not Assumed Mean Method of correlation was used. The obtained r -value is 0.483 ($df=98$) which means that stress and suicidal ideation are positively correlated. The r -value was found to be significant at 0.01 level of confidence as r value at 0.01

level is 0.254. Therefore, there is a positive significant correlation between stress and suicidal ideation among adolescents. Hence, hypothesis no. 5 “stress and suicidal ideation will be positively correlated” is proved.

Conclusion :

On the basis of the results of the present study following **conclusions** have been drawn:

1. Gender difference has played no significant role in determining suicidal ideation and stress among adolescents. Though males were higher on suicidal ideation and stress than females but this difference was not significant even at 0.05 level.
2. Stress and suicidal ideation had significant positive correlation. The higher is the stress the more will be the occurrence of suicidal thoughts.
3. Significant gender difference was found between males and females in the level of stress.
4. Significant positive correlation was found between males and females in mental imagery.
5. Positive correlation exists between mental imagery and stress. The study was started with an idea that if a person is under stress, they will lack imagery because there will be a mental block. But the conclusion was just the opposite. When a person is stressed, he is in a position to imagine more about the outcomes and coping strategies.
6. Students of class 9th of Acharya Sudarshan Patna Central School had moderate level of stress due to friendly, caring and stress free environment of the school.

Suggestions :

Following **suggestions** can be given to the students for developing positive mental imagery, minimization of suicidal ideation and stress:

1. Schools should conduct counselling sessions and seminars on regular basis related to stress, academics and other adolescent related problems.
2. Schools should focus on providing holistic development of the students and attempts should be made to build confidence and inner strength in students.

3. Awareness programmes regarding stress and suicide should be frequently conducted.
4. Students should be taught about the repercussions of suicide and also different coping skills of stress.
5. The adolescents need an environment where they can share their problems. So care should be taken to build-up such environment both at homes as well as schools.
6. Adolescents must understand that negative imagery and emotional issues can spoil their life.
7. Social and family support can reduce stress and suicidal attempts.

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