A Study of Anxiety of Adolescents in Relation to their Stream, Type of College and Academic Achievement

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ABSTRACT
The objective of the present study was to investigate A study of anxiety of adolescents in relation to their stream, type of college and academic achievement. For this purpose 284 adolescents has been taken from aided and self financed college related to science and commerce streams through purposive sampling between the age range of 17 to 18 years. Self-made Anxiety scale for adolescent was used to find out the anxiety among adolescents. Students result is considered to determine the academic achievement. To analyze and interpret the data, mean, SD, t-test and Pearson product correlation coefficient were used. The findings revealed that there is no significant difference was found between aided and self-financed college adolescents in relation to their anxiety. While a significant difference was found between aided and self-financed college adolescents in relation to their academic achievement. Finding also shows a significant difference was found between science and commerce stream adolescents in relation to their anxiety. While a significant difference was found between science and commerce stream adolescents in relation to their academic achievement. A negative correlation was found between anxiety and academic achievement of adolescents.

Keywords: Anxiety, Academic Achievement, Adolescents. Type of college and Stream.

Introduction
Education provides the opportunity for growth and development. Secondary education acts as a link between primary education and university education. Anxiety plays an important role at secondary level of education because this is the threshold of future education. Anxiety is one of the most studied topics in psychology. First, let us understand the meaning of anxiety. Apprehension, tension, or uneasiness characterized by fear, dread, or uncertainty about something the source of which is largely unknown or unrecognized by the individual may be called as anxiety. It may consist in persistent apprehensions of future events as well as in generalized emotional reactions to any choice point or decision. It is one of the psychophysiology difficulties (Callahan, 2001). It is found that all anxiety disorders are defined by the dual characteristics of excessive emotional fear and physiologic hyper arousals.

The root meaning of the word anxiety is to 'vex or trouble' in either presence or absence of psychological stresses, anxiety can create feelings of fear, worry uneasiness and dread. Anxiety is defined as a psychological disorder that is characterized by nervousness; it is "apprehensive uneasiness of mind" which can be projected as an illness in the near future. (Anxiety in Merriam-Webster dictionary). Academic achievement plays a significant role in the life of an individual. In educational life academic achievement is highly valued. The parents and teachers expect the highest level of achievement from the students. Academic performance can typify a variety of learning outcomes such as knowledge, understanding, attitude, intelligence, skill and application. On the basis of the achievement, the child is graded and evaluated as high achiever or low achiever. High academic achievement tends to help both in improving the personality of the students and also their recognition by parents, peers, teachers, neighbours and society at large. It boosts their morale and develops feeling in them that they are useful in the family, school and society. Good, C. V (1973) defines "Academic achievement as the knowledge attained or skills developed in school subjects usually determined by test scores or by marks assigned by teachers or by both." The academic achievement is considered with quality and quantity of learning attained in subject of study or group of subjects. This is a body of knowledge understanding of skill acquired in specified in a specific subject. It refers to amount of information and technique developed.

Need and significance of the study:
Education plays a major role in achieving the diversified goals of development by inculcating social, economical, political, technological, cultural competence of people. Effective development of any nation requires that its children should receive appropriate education as appropriate education provides various techniques for integrating man, material and resources for it. It also brings about effective development and to produce efficient and future-ready citizens. The role of educational institutions can hardly be under estimated. For practical purposes, the beginning of adolescence remains closely associated with the
beginning of puberty although it is no longer synonymous with it. It is however difficult to determine its ending since it merges into early adulthood.

The present situation is an era of competition in which every individual is trying to go ahead of another keeping in view the intensity of competition. Adolescence is the most important period of human life. The child experiences a number of changes in this transitional period. The adolescent has to change his old habits of childhood in home, school and society. So adolescents need guidance in the development of healthy social relations and for this purpose. Keeping these points in mind the present study was undertaken; in educational institution, more stress is given to the academic achievement of the students however, various other outcomes are also expected. Thus, the expectation for high level of performance puts a lot of pressure on parents, teachers, administrators, students and as a whole educational system itself. Everybody involves in the educational system. Therefore, tries to maximise the quantity and quality of their output. So, the significance of academic achievement has increased in the present socio-economic and educational scenario. Anxiety is a common cause of poor academic performance during examination among students. This anxiety is often exhibited as psychological, physiological and behavioural abnormalities during examination. It contributes to poor academic achievement. Academic achievement is the end product of all educational endeavours from initial stages of school education to higher level of education.

Review of related literature:
Alam, M.M., (2001), found negative relationship between anxiety and academic achievement. Anzi, E & Owayed, F., (2005), were found negative relationship between academic achievement and anxiety. Singh, S. & Thukral, P., (2009), the results indicate that there exists a negative and significant relationship between anxiety and achievement. Vitasari.P. et.al (2010) found a significant correlation of high level anxiety and low academic performance. Farooqi, Y. N. et al., (2012), significant negative relationship was found between test anxiety and academic performance of medical students. Mokashi, M.V.,(2012), a significant negative relationship between anxiety and academic achievement of children was reported. Nadeem, M., Ali, A., Maqbool, S. & Zaidi, S.U., (2012), the result shows that when anxiety increases, academic achievement decreases both in male and female students. Aloka, P. J. O & Ndunge, N. F., (2014), were find out that, there was a correlation between anxiety levels and academic achievement, and that high anxiety levels had a negative impact on the quality of academic results recorded by students. Das. S. K., (2014) it was found that there is a negative and significant relationship between academic anxiety and academic achievement.

Objectives of the Study
1. To study anxiety and academic achievement of aided and self financed college adolescents.
2. To study the anxiety and academic achievement of science and commerce stream adolescents.
3. To study relationship between anxiety and academic achievement of adolescents.

Hypotheses of the Study
1. There is no significant difference between aided and self financed college adolescents in relation to their anxiety
2. There is no significant difference between aided and self financed college adolescents in relation to their academic achievement.
3. There is no significant difference between science and commerce stream adolescents in relation to their anxiety.
4. There is no significant difference between science and commerce stream adolescents in relation to their academic achievement.
5. There is no relationship between anxiety and academic achievement of adolescents.

Delimitation of the study
- The proposed study delimited only 4 districts i.e. Lucknow, Kanpur, Sitapur & Lakhimpur of central UP.
- The study delimited to 284 students aged 17 -18 years only.
- The proposed study delimited for aided and self financed college only.
- The proposed study delimited only for science and commerce stream students.

Sample and sampling method
The researcher has used the purposive sampling method to select the districts and colleges from where the data was collected. This study was conducted on 284 adolescents of aided and self financed college from science and commerce stream between the age range of 17 to 18 years.
Tool used for data collection
In this present study self made anxiety scale for adolescent used for data collection which is developed by the researcher. The scale has been adapted in Hindi language. Coefficient of reliability for this scale was determined by Kuder-Richardson 20 formula. The reliability of scale is measured. The items of scale are systematically organized and logical. Subject experts found that items have face and content validity

Statistical techniques used
To analyze and interpret the data following Statistical techniques were used.
1. Mean, SD, Standard error of mean for all groups was calculated.
2. Student-test (t-test) was applied to check the difference between two means obtained from the groups, Pearson product correlation coefficient also used.

Analysis and Interpretation of Data
The data collected on the basis of anxiety and academic achievement of adolescent students and their scores are systematically analyzed with help of suitable statistical techniques in order to find out the answers to the questions raised in this present study. The results are being presented in the following tables.

Hypothesis: 1 - There is no significant difference between aided and self-financed college adolescents in relation to their anxiety.

Table : 1
Showing the comparison between aided and self financed college adolescents in relation to their anxiety

<table>
<thead>
<tr>
<th>Types of college</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>t-value (df=282)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aided</td>
<td>156</td>
<td>16.17</td>
<td>6.304</td>
<td>1.528</td>
<td>Not Significant at 0.05 level</td>
</tr>
<tr>
<td>Self Finance</td>
<td>128</td>
<td>15.07</td>
<td>5.837</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table : 1 shows the mean score of aided college adolescents is 16.17, while the mean score of self financed college adolescents is 15.07, whereas their standard deviations are 6.304 and 5.837 respectively. The t-value between two means is 1.528. Which is less than the tabulated value 1.96 at 0.05 level of significance and 282 degree of freedom. There is no significant difference between aided and self-financed college adolescents in relation to their anxiety. Thus the null hypothesis is accepted. Since the mean score of aided college adolescents is higher than self finance college adolescents and hence, it can be said that aided college adolescents seems to be more anxious than that of self finance college adolescents. Aided college atmosphere is quite strict which leads to anxiety in children. The present study shows anxiety of aided college students is higher than that of self financed college students. Anxiety of aided college students is higher due to strict environment.

Hypothesis: 2 - There is no significant difference between aided and self-financed college adolescents in relation to their academic achievement.

Table : 2
Showing the comparison between aided and self-financed college adolescents in relation to their academic achievement

<table>
<thead>
<tr>
<th>Types of college</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>t-value (df=282)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aided</td>
<td>156</td>
<td>66.309</td>
<td>8.7665</td>
<td>2.952</td>
<td>Significant at 0.05 level</td>
</tr>
<tr>
<td>Self Finance</td>
<td>128</td>
<td>63.318</td>
<td>8.2694</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table : 2 shows the mean score of aided college adolescents is 66.309, while the mean score of self financed college adolescents is 63.318, whereas their standard deviations are 8.7665 and 8.2694 respectively. The t-value between two means is 2.952. Which is greater than the tabulated value 1.96 at 0.05 level of significance and 282 degree of freedom. There is significant difference between aided and self financed college adolescents in relation to their academic achievement. Thus the null hypothesis is rejected. Since the mean score of aided college adolescents is higher than self finance college adolescents and hence, it can be said that aided college adolescents seem to be better than that of self finance college adolescents in their academic achievement. Present study shows academic achievements of aided college students is significantly higher than that of self financed colleges.

Hypothesis: 3 - There is no significant difference between science and commerce stream adolescents in relation to their anxiety.
Table 3
Showing the comparison between science and commerce stream adolescents in relation to their anxiety

<table>
<thead>
<tr>
<th>Stream</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>t-value (df=282)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science</td>
<td>120</td>
<td>16.56</td>
<td>6.322</td>
<td>2.070</td>
<td>Significant at 0.05 level</td>
</tr>
<tr>
<td>Commerce</td>
<td>164</td>
<td>15.03</td>
<td>5.890</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3 shows the mean score of science stream adolescents is 16.56, while the mean score of commerce stream adolescents is 15.03, whereas their standard deviations are 6.322 and 5.890 respectively. The t-value between two means is 2.070 which is greater than the tabulated value 1.96 at 0.05 level of significance and 282 degree of freedom. There is significant difference between science and commerce stream adolescents in relation to their anxiety. Thus the null hypothesis is rejected. Since the mean score of science stream adolescents is higher than commerce stream adolescents and hence, it can be said that science stream adolescents seem to be more anxious than commerce stream adolescents.

**Hypothesis:** 4- There is no significant difference between science and commerce stream adolescents in relation to their academic achievement.

Table 4
Showing the comparison between science and commerce stream adolescents in relation to their academic achievement.

<table>
<thead>
<tr>
<th>Streams</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>t-value (df=282)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science</td>
<td>120</td>
<td>67.129</td>
<td>8.3738</td>
<td>3.700</td>
<td>Significant at 0.05 level</td>
</tr>
<tr>
<td>Commerce</td>
<td>164</td>
<td>63.375</td>
<td>8.5462</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4 Shows the mean score of science stream adolescents is 67.129, while the mean score of commerce stream adolescents is 63.375, whereas their standard deviations are 8.3738 and 8.5462 respectively. The t-value between two means is 3.700 which is greater than the tabulated value 1.96 at 0.05 level of significance and 282 degree of freedom. There is significant difference between science and commerce stream adolescents in relation to their academic achievement. Thus the null hypothesis is rejected. Since the mean score of science stream adolescents is higher than commerce stream adolescents and hence, it can be said that science stream adolescents seem to be better than commerce stream adolescents in academic achievement. Science stream college adolescents are higher academic achievers than commerce stream adolescents.

**Hypothesis:** 5- There is no significant difference between anxiety and academic achievement of adolescents.

Table 5
Showing the relationship between anxiety and academic achievement of adolescents

<table>
<thead>
<tr>
<th>Variable 1</th>
<th>Variable 2</th>
<th>Correlation coefficient (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>Academic Achievement</td>
<td>-.106</td>
</tr>
</tbody>
</table>

Table 5 shows a negative correlation between the anxiety and academic achievement of adolescents. Negative correlation indicates that, as anxiety increases, academic achievement of adolescents decreases. This result shows negligible negative correlation between anxiety and academic achievement. This is because anxiety affects achievement and reduces the power of attention and concentration.

**FINDINGS OF THE STUDY:**

**Hypothesis:** 1 - There is no significant difference between aided and self-financed college adolescents in relation to their anxiety.

The mean score of aided college adolescents is higher than the self financed college adolescents which show aided college adolescents are more anxious than self financed college adolescents. There is no significant difference found between aided and self financed college adolescents in relation to their anxiety. Thus the null hypothesis is accepted.

**Hypothesis:** 2 - There is no significant difference between aided and self-financed college adolescents in relation to their academic achievement.

The mean score of aided college adolescents is higher than the self financed college adolescents which show the academic achievement of aided adolescents is higher than the self financed college...
adolescents. There is significant difference found between aided and self financed college adolescents in relation to their academic achievement. Thus the null hypothesis is rejected.

**Hypothesis: 3** - There is no significant difference between science and commerce stream adolescents in relation to their anxiety.

The mean score of science stream adolescents is higher than the commerce stream adolescents which show science stream adolescents are more anxious than the commerce stream adolescents. There is significant difference between science and commerce stream adolescents in relation to their anxiety. Thus the null hypothesis is rejected.

**Hypothesis: 4** - There is no significant difference between science and commerce stream adolescents in relation to their academic achievement.

The mean score of science stream adolescents is higher than the commerce stream adolescents which show the academic achievement of science stream adolescents is higher than the commerce stream adolescents. There is significant difference found between science and commerce stream adolescents in relation to their academic achievement. Thus the null hypothesis is rejected.

**Hypothesis: 5** - There is no significant difference between anxiety and academic achievement of adolescents.

A negative correlation found between anxiety and academic achievement of adolescents. Negative correlation indicates that anxiety increases, academic achievement of adolescents decreases. This result shows negligible negative correlation between anxiety and academic achievement of adolescents.

**Educational Implication** As we know high level of anxiety is responsible for low academic achievement. In this study the researcher has found negative correlation between anxiety and academic achievement which indicates that anxiety increases academic achievement of adolescent decreases. Moderate level of anxiety is necessary and essential for students in order for them to achieve high standards in their education but high level of anxiety has an adverse effect on achievements and overall personality of the students.

1. Teachers should create stress free environment that allows students to concentrate on their studies. The teacher is a person who can give proper guidance to their students for better achievement in every aspect of life.
2. Parents need to know their role in the education of their children so that they do not put the blame entirely on teachers when their children do not perform well in school. Precautions should be taken when it comes to parental encouragement since unreasonably high demand and too much pressurization for good performance by some parents on their children may cause anxiety and fear of failure which may affect the child’s academic performance negatively.
3. Educational administrators should create a stress free environment that allows adolescents to concentrate on their goals rather than being distracted by anxiety. The adolescents with higher anxiety must be identified and treated in order to improve their academic achievement and for timely and effective specific counselling and therapeutic interventions for adolescents.

**CONCLUSION OF THE STUDY:**
- It can be concluded that the anxiety of aided college adolescents more than the self financed college adolescents.
- Academic achievement of aided college adolescents more than the self financed adolescents.
- The anxiety of science stream adolescents more than the commerce stream adolescents.
- Academic achievement of science stream adolescents more than the commerce stream adolescents.
- A negative correlation found between anxiety and academic achievement of adolescents. Negative correlation indicates that as anxiety increases, academic achievement of adolescent’s decreases. This result shows negligible negative correlation between anxiety and academic achievement.

**REFERENCE**


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