A Study of Academic Achievement of Senior Secondary School Students in Relation to their Anxiety and School Environment

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ABSTRACT: In the present study an attempt is made by the investigator to study relationship of Academic Achievement of senior secondary school students in relation to anxiety and school environment of District Faridabad. 100 secondary school students from two private schools were drawn by employing simple random techniques. The value of the sample was assessed using standardized test. The objective of the study was to study the relationship between academic achievement and anxiety of senior secondary school students. And find out the relationship between academic achievement and school environment of senior secondary school students. The obtained data were quantitatively analyzed by using descriptive and inferential statistics. The study revealed that there is significant relationship between academic achievement and anxiety of senior secondary school students at 0.01 and 0.05 levels of significant and there is significant relationship between academic achievement and school environment of senior secondary school students at 0.01 and 0.05 levels of significant.

Keywords: Academic Achievement, Anxiety, School Environment and Adolescent boys and girls.

I. INTRODUCTION

Every child is a creature of the culture of his community or society. His personality to a great extent is a product of the cultural influences that his society brings to bear upon him. Famous American educational sociologist, George Payne said that the development of human personality or modification of human behaviour, which is the main aim of education, can be understood better if one knows the sociological forces that have their pressure on human individuals. The external examination has dominated the entire educational process at the school level in the country due to its potential of creating impact on the society as a whole. The quality of education is directly linked with the quality of evaluation. In the present society, achievement in term of marks in the board examination plays a significant role in deciding one's future study and employment. Nevertheless, the progress of the nation depends upon the intellectual capacity of its citizens. So, it is necessary to identify the talents in our children and to provide suitable environment, which will enable them to develop their potentialities in the direction of higher achievement.

Student achievement in school is related to students' background factors, school organizational features, teachers' professional characteristics, school climate etc. These categories are related to each other, as well as to student achievement reflecting interdependencies among social factors. The general correlation of the organization of a school with academic performance can be partitioned into factors of school size, class size, normative cohesion of the staff, and teachers' sense of control in school affairs. Academic achievement expectations have created so much fear among the students that they are not able to utilize their basic potential. They are to only concentrate on their academic performance. Daily academic environment and many academic tasks pose serious threats for students' personal well being. When there is stress, which students cannot cope with, the teacher must try to remove him/her from it at least for some time. However, only preventive excessive stress is not enough. Ultimately the student has to learn to deal with stressors of many kinds that will be inevitable in his life. It is only gradually that students learn to cope with stress. "Education is a process in which and by which knowledge, character and behaviour of the young are shaped and molded" Education is a conducive process which develops child's individuality in all aspects — physical, mental, emotional & social. With this all round development he becomes a responsible, dynamic, resourceful. The National Policy on Education (1986) [10], Programme of Action (1992) & the Secondary Education Commission (1952-53) have rightly stressed the significant role of teachers in the improvement of the
educational system & the development & growth of students [11]. This study was an attempt to find the academic achievement of senior secondary school students in relation to their anxiety and school environment. For conducting this study the following objectives were framed:

A. Objectives of the Study
- To study the relationship between academic achievement and anxiety of senior secondary school students.
- To study the relationship between academic achievement and anxiety of boys of senior secondary schools.
- To find the relationship between academic achievement and anxiety of girls of senior secondary schools.
- To find the relationship between academic achievement and school environment of senior secondary school students.
- To find the relationship between academic achievement and school environment of boys of senior secondary schools.
- To find the relationship between academic achievement and school environment of girls of senior secondary schools.

B. Hypotheses of the study
For achieving these objectives null hypotheses were formulated as:
- There is no significant relationship between academic achievement and anxiety of senior secondary school students.
- There is no significant relationship between academic achievement and anxiety of boys of senior secondary schools.
- There is no significant relationship between academic achievement and anxiety of girls of senior secondary schools.
- There is no significant relationship between academic achievement and school environment of senior secondary school students.
- There is no significant relationship between academic achievement and school environment of boys of senior secondary schools.
- There is no significant relationship between academic achievement and school environment of girls of senior secondary schools.

C. Justification of the Problem
Achievement is the end product of all educational endeavors (Balsubramaniyan, 1997) [1]. The main concern of all educational efforts is concentrated on student's achievement. The concept of achievement has been explored in the cognitive, affective and psychomotor aspects of human behavior. Modern age is the age of cut throat competition, which results in tensions and mental illness. In the present era, the educational scene is fast changing. Curriculum and co-curricular offerings have tremendously expanded, gripping the students in the adjustment problems. Feeling of insecurity, various types of conflicts, bad company and low achievement create emotional tensions and stress among the students. Due to incompetency in facing challenges and coping with the stress, the students are taking to drug addiction and even the suicidal note is increasing. All these factors necessitate a more formal, systematic and intensive process of investigation with the problem to improve the performance of students in different spheres, to introduce an atmosphere conducive for intellectual growth and to minimize the stress among students. School plays an important role in molding the personality of children because a significant part of a child’s life spent in school between the ages of 6 and 18 years. Hence he continues the process of liking and disliking, conforming and rebelling, acquiring a conception of the world and himself. Hence, there is a need to study the relationship between under achievement in science and the school environment. Taking into consideration the above observation, the investigator thought it necessary to look into academic achievement of senior secondary school students in relation to their anxiety and school environment.

II. MATERIAL AND METHODS
In the present investigation academic achievement of senior secondary school students in relation to their anxiety and school environment was conducted by the investigator.

A. Methodology
Keeping in mind the nature of the present research, the researcher has been used Descriptive Survey Method to conduct this study.

B. Tools & Techniques
Various devices are used for collecting new unknown data required for the study of any problem for each and every type of research. The following two tools will be used by investigator to conduct this study. They are:
- Sinha's Comprehensive Anxiety Test (SCAT) of A.K.P. Sinha
- School Environment Inventory (SEI) of Dr. Karuna Shankar Mishra

C. Sample of the Study
In the present study, the investigator has adopted randomization technique. The sample consisted of 100 students from senior secondary schools of district Faridabad.
Fig. 1. Distribution of Sample.

The sample was taken from two Private Schools namely S. D. Public Sr. Sec. School and Anupam Public School affiliated to Board of School Education (BSEH), from city Faridabad (Haryana). A random selection of 100 adolescent students, 50 adolescents’ students from each school, of age group 13-16 years of Class IX were selected for the present study. From these 100 students, 50 students were Adolescent Boys and 50 students were Adolescents Girls.

D. Statistical Technique Used
Following techniques were employed for testing the research hypotheses: Mean, Pearson product moment correlation.

III. ANALYSIS AND INTERPRETATION

The important findings that have emerged out after analysis and interpretation of data are given below:

A. Correlation between academic achievement and anxiety of senior secondary school students
To test the hypothesis that there is no significant relationship between academic achievement and anxiety of senior secondary school students, Pearson's Product Moment Correlation was computed between the scores of achievement and anxiety of senior secondary school students as per the details given below:

Table 1: Correlation between academic achievement and anxiety of senior secondary school students.

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>R</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Achievement</td>
<td>100</td>
<td>-0.64</td>
<td>Significant at 0.01 level</td>
</tr>
<tr>
<td>Anxiety</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is depicted from the Table 1 that correlation between academic achievement and anxiety of senior secondary school students -0.64. Since obtained 'r' is much higher than the tabulated values. Hence hypothesis -1, "There is no significant relationship between academic achievement and anxiety of senior secondary school students" is rejected. Thus it can be reframed as Academic Achievement and Anxiety of senior secondary school students are related significantly. Thus it can be interpreted that Academic Achievement and Anxiety of senior secondary school students are negatively correlated with each other. The result is supported by El-Anzi, Freih Owayed (2005) and Sumetha, G. (2006) [5, 15].

B. Correlation between academic achievement and anxiety of boys of senior secondary school
To test the hypothesis that there is no significant relationship between academic achievement and anxiety of boys of senior secondary schools, Pearson’s Product Moment Correlation was computed between the scores of achievement and anxiety of boys of senior secondary schools as per the details given in Table 2.
Table 2: Correlation between academic achievement and anxiety of boys of senior secondary schools.

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>R</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Achievement</td>
<td>50</td>
<td>-0.56</td>
<td>Significant at 0.01 level</td>
</tr>
<tr>
<td>Anxiety</td>
<td>50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is depicted from the table 2 that correlation between academic achievement and anxiety of boys of senior secondary schools -0.56. Since obtained ‘r’ is much higher that the tabulated values. Hence hypothesis-II, "There is no significant relationship between academic achievement and anxiety of boys of senior secondary schools" is rejected. Thus it can be reframed as Academic Achievement and Anxiety of senior secondary school boys related significantly. Thus it can be interpreted that Academic Achievement and Anxiety of senior secondary school boys are negatively correlated with each other. The result is supported by Khatoon and Mahmood (2010) and Pantel (2008) [8, 13].

C. Correlation between academic achievement and anxiety of girls of senior secondary school

To test the hypothesis that there is no significant relationship between academic achievement and anxiety of girls of senior secondary schools, Pearson’s Product Moment Correlation was computed between the scores of achievement and anxiety of girls of senior secondary schools as per the details given below:

Table 3: Correlation between academic achievement and anxiety of girls of senior secondary schools.

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>R</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Achievement</td>
<td>50</td>
<td>-0.70</td>
<td>Significant at 0.01 level</td>
</tr>
<tr>
<td>Anxiety</td>
<td>50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is depicted from the Table 3 that correlation between academic achievement and anxiety of girls of senior secondary schools - 0.70. Since obtained ‘r’ is much higher that the tabulated values. Hence hypothesis -III, "There is no significant relationship between academic achievement and anxiety of girls of senior secondary schools” is rejected. Thus it can be reframed as Academic Achievement and Anxiety of senior secondary school boys related significantly. So it is concluded that there is significant negative correlation between academic achievement and anxiety of girls of senior secondary schools. The result is supported by Barnes (2005) and Hemamalini (2011) [2,6].

D. Correlation between academic achievement and school environment of senior secondary school students

To test the hypothesis that there is no significant relationship between academic achievement and school environment of senior secondary school students, Pearson’s product moment correlation was computed between the scores of achievement and school environment senior secondary school students as per the details given below:

Table 4: Correlation between academic achievement and school environment of senior secondary school students.

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>R</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Achievement</td>
<td>100</td>
<td>0.760</td>
<td>Significant at 0.01 level</td>
</tr>
<tr>
<td>School Environment</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is depicted from the Table 4 that correlation between academic achievement and school environment of senior secondary school students is 0.76. Since obtained ‘r’ is much higher that the tabulated values. Hence hypothesis-IV, "There is no significant relationship between academic achievement and school environment of senior secondary school students” is rejected. Thus it can be reframed as Academic Achievement and School Environment of senior secondary school students related significantly. So it is concluded that there is significant positive correlation between academic achievement and school environment of senior secondary school students. The result is supported by and Blum (2005) and Megan (2002) [3,9].

E. Correlation between academic achievement and school environment of boys of senior secondary schools

To test the hypothesis that there is no significant relationship between academic achievement and school environment of boys of senior secondary schools, Pearson's product moment correlation was computed between the scores of achievement and school environment of boys senior secondary schools as per the details given below:
Table 5: Correlation between academic achievement and school environment of boys of senior secondary schools.

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>R</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Achievement</td>
<td>50</td>
<td>0.72</td>
<td>Significant at 0.01 level</td>
</tr>
<tr>
<td>School Environment</td>
<td>50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is depicted from the Table 5 that correlation between academic achievement and school environment of boys of senior secondary schools is 0.72. Since obtained 'r' is much higher that the tabulated values. Hence hypothesis -V, "There is no significant relationship between academic achievement and school environment of boys of senior secondary schools" is rejected.

Thus it can be reframed as Academic Achievement and School Environment of senior secondary school students related significantly. So it is concluded that there is significant positive correlation between academic achievement and school environment of boys of senior secondary school students. The result is supported by Dahie and Ali Abdi Mohamed (2017) and Oselumese, Omoike, & Andrew (2016) [4, 12].

F. Correlation between academic achievement and school environment of girls of senior secondary schools

To test the hypothesis that there is no significant relationship between academic achievement and school environment of girls of senior secondary schools, Pearson's product moment correlation was computed between the scores of achievement and school environment of girls senior secondary schools as per the details given below:

Table 6: Correlation between academic achievement and school environment of girls of senior secondary schools.

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>R</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Achievement</td>
<td>50</td>
<td>0.79</td>
<td>Significant at 0.01 level</td>
</tr>
<tr>
<td>School Environment</td>
<td>50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is depicted from the Table 6 that correlation between academic achievement and school environment of girls of senior secondary schools is 0.79. Since obtained 'r' is much higher that the tabulated values. Hence hypothesis -VI, "There is no significant relationship between academic achievement and school environment of girls of senior secondary schools" is rejected.

Thus it can be reframed as Academic Achievement and School Environment of girls of senior secondary school related significantly. So it is concluded that there is significant positive correlation between academic achievement and school environment of girls of senior secondary schools. The result is supported by Korir and Kipkemboi (2014) and Suleman and Hussain (2014) [7,14].

IV. EDUCATIONAL IMPLICATIONS

The analysis and interpretation of data clearly revealed that the students in general are under high level of academic stress. The school environment is also not up to the mark. On a number of dimensions they are not matching the desires and needs of adolescents resulting in distress among them. Some of the important facts are being given below to enhance the academic achievement secondary school students. Schools provide an important social context to adolescents. Here they spend a greater part of their waking time on learning about curriculum components. They develop friendship and learn much other social behavior in the school campus. But as the findings reveal that there is too much mismatch between desires/inclinations of the adolescents and provisions at school. Adolescents look for freedom, identity, autonomy and connectivity, but as per the findings our schools are high at rejecting school climate. A significant number of students also showed high level of control in their schools. Schools are emphasizing strict discipline and conformity which does not suit adolescents' psychology leading to high level of academic stress among many adolescents, as revealed by the study. In essence, these are the features that might be said to characterize scientific thinking and are cognitive in nature. Schools play an important role in developing interest and scientific attitude in students. A healthy emotional climate makes the child released, co-operative, happy and motivated to study and to conform to rules. It implies that the classroom climate up to much extent is making adolescent students tense, nervous, irritable, quarrelsome, disinterested in study and prone to troublesome behaviour. National curriculum framework (2005) suggested various measures to make curriculum slim and children friendly. But as the finding reveals that a vast majority of students were under moderate or high degree of academic stress. It
needs to implement the suggestions immediately and whole heartedly. It shows the need of distress free curricula, which includes model curriculum for 21st century, diversification of curriculum, freedom in time table, choosing of optional, marking schemes etc. Development of syllabi, text books and teaching learning resources could be carried out in a decentralized and participatory manner taking into consideration of students need and requirement. The classroom is a complex social system, in which teachers engage in as many as 1,000 exchanges with students each day. A good teacher responds to the needs of children and their learning. But as the findings of the study reveals a number of teachers showing autocratic attitude in the classrooms, are a little caring, helpful and stimulating. Teachers showed an average level of acceptance.

REFERENCES


