

A STUDY ON SKILL OF OBSERVING OF SECONDARY SCHOOL STUDENTS IN RELATION TO THEIR ACADEMIC STRESS AND EDUCATIONAL ASPIRATIONS

*Dr. A.K.Kansal

** Mrs. Mandeep

*Former Dean Education, Guru Kashi University, Talwandi Sabo (Punjab), India

**Research Scholar, Guru Kashi University, Talwandi Sabo (Punjab), India

ABSTRACT

This paper examined the effect of Academic Stress and Educational Aspirations on Skill of Observing of Secondary School Students in Indian socio-cultural settings. The population consisted of 600 students from 10 different schools of district Shri Muktsar Sahib and Sangrur (Punjab). Cognitive Competence Test, Scale of Academic Stress and Educational Aspiration Scale were used for data collection. Descriptive statistics like mean, standard deviation, skewness and kurtosis etc. for studying the nature of data; Graphical presentations for qualitative analysis; 2x2 ANOVA, t-test were used for statistical analysis. The results showed that F-ratio for the difference in means of Scores on Skill of Observing for secondary school students with Academic Stress and Educational Aspirations were found to be significant at the 0.05 level of confidence. But the F-ratio for the difference in means of scores on Skill of Observing due to the interaction between Academic Stress and Educational Aspirations was not found to be significant even at the 0.05 level of confidence.

In this fast paced time, with the pressure of international economic competition and an increased focus on technology, parents, educators, local communities, states and National Governments are all struggling to encourage improvement in education to help our children prosper. Children are the supreme asserts of the nation. Today, the index of success and work of a child in a particular class is his academic achievement, which he acquires during his various experiences in the classroom. That is why, students' fail so often and so universally that some people are convinced that failure is an essential and inevitable aspect of the educational process. Failure often produces harmful consequences that work against the goals of education. The students receiving repeated and consistent evidence of failure show stress and frustration. Peace and stress free life for today's students appear to be a miracle. The student is caught in dynamic technological whirlpool and seems to be precariously poised on the brink of disaster. Adolescents are full of

dreams, ideas, ambitions, achievements and promises and on the other hand they face problems, disillusionments, frustrations, breakdowns and stress.

COGNITIVE SKILLS

A skill is the total response pattern, resulting out of S-R units and S-R chains welded into a single response pattern. The skills are presumed to be hierarchical response patterns. A skill has three characteristics.

- ❖ It represents a chain of motor responses.
- ❖ It involves co-ordination of hand and eye moments.
- ❖ It requires the organization of chains into complex responses patterns.

Characteristics of human intellectual functioning such as thinking, planning, knowing, relating, creating, problem solving, have been traditionally labeled as cognitive skills.

A number of studies have examined the long-term retention of every day cognitive skills, when the skills are no longer being used. Skills that have not been highly practiced appear to be lost fairly rapidly once they are no longer used. Highly practiced skills are retained very well; skill at algebra that is being used in calculus course is retained for life even though the more tenuously learned skill at calculus is rapidly lost with disuse (**Bahrick and Hall, 1991**).

SKILL OF OBSERVING

Observing is the fundamental science process skill. The ability to make good observations is also essential to the development of the other science process skills: communicating, classifying, measuring, inferring, and predicting. The simplest observations, made using only the senses, are qualitative observations. Observation is something we often do instinctively. Observation is more than simply noticing something. It involves perception (becoming aware of something by means of the senses) and the recognition of the subject's importance or significance.

Observation is essential in science. Scientists use observation to collect and record data, which enables them to construct and then test hypotheses and theories. Scientists observe in many ways – with their own senses or with tools such as microscopes, scanners or transmitters to extend their vision or hearing. These tools allow for more precise and accurate observations.

Observation skill is a central science process skill and can be used as a teaching/learning strategy in science classrooms to enhance students' scientific attitude and learning. Observation skill is critical for gaining command on other science process skills. It helps in widening the conceptual understanding by children of things around them and also in promoting their natural curiosity.

ACADEMIC STRESS

The term stress, which has become a part of our everyday vocabulary, originated in physical sciences and means a force exerted upon a person, who resists the force/pressure in his effort to maintain his original state and in the process suffers some degree of discomfort

Stress originally a concept of the physical sciences has come into common usage in the biological and human science to describe a state in which the vital functioning of the organism is threatened. Stress may lead to disordered behaviors, anxiety or other emotional disturbance (**Korchin, 1963**).

According to **Sahni (1982)**, stress is the wear and tear of life, caused by an exercise demand on the body system to cope. Stress is any stimulus from the environment, which demands some extra adjustment effort or survival effort from the body.

Now, the most commonly accepted definition of stress is that **stress is a condition or feeling experienced when a person perceives that demands exceed the personal and social resources the individual is able to mobilize.**

Academic stress is a mental distress with respect to some anticipated frustration associated with academic failure or even an awareness of the possibility of such failure (**Gupta, 1987**). In the context of school, academic stress means a pervasive sense of urgency to learn all those things, which are related or prescribed by the school. Stress makes a significant contribution to the prediction of subsequent school performance and acts as a negative predictor of academic performance in school children (**Endler et al., 1994**). Life of present day students is quite stressful. According to **Bector (1995)**, a student is caught in a dynamic technological whirlpool and seems to be precariously poised on the brink of disaster.

The academic stress faced by students these days is perhaps higher than ever before. They are faced with a new situation when they reach school or college and must then struggle to keep up with their new environment. Many students begin to feel worthless. They measure themselves only is athletic or academic success. This can distort their perception of reality and cause them to blow things out of proportion. The change in attitude may not even be noticeable to close friends because students who begin to feel overwhelmed and hopeless tend to hide their feelings by immersing themselves in work, because they do not want to seem weak. (**Corey, 2004**).

EDUCATIONAL ASPIRATIONS

It is a known fact that we are living in an age which is known for a high level of aspirations. People aspire more and more in every walk of life. Parents are keen that their children should achieve the highest marks in their school subjects. The word Aspire refers to the ambition or desire a want, which has yet not

been fulfilled and a man still works for it. **Webster's Encyclopedic Unbridged Dictionary of English Language (1976)** defines aspirations as a strong desire for realization (as of ambition, idea or accomplishment).

Educational aspirations are the degree to which an individual sets his educational goals realistically in relation to his physical and mental attributes and in accordance with environment. But the educational goals, which an individual sets for his own self, differ from one individual to another due to certain factors, which play a significant role in shaping the level of educational aspirations of students.

The Encyclopedia of Educational Research (1982) defines level of educational aspirations as the standards of educational goals realistically in relation to his physical and mental attributes and in accordance with his environment. Educational aspirations set the level of striving and this is highly individual development.

SIGNIFICANCE OF THE STUDY

In this competitive world, skill of Observing is the base of the success of a child. Academic Stress and Educational Aspirations are such major factors which affect Skill of Observing very much. The present investigation has put forth a multidimensional representation of Skill of Observing (A Scientific Cognitive Skill), Academic Stress and Educational Aspirations.

Although direct or indirect evidence for the links of these dimensions with each other is available in the past literature, but that does not exist in an integrated form. The available results are on one or the other dimensions in different cultural settings. Investigators with regard to Indian socio-cultural settings have not reported much work in this area. The observations of review of literature and the theoretical framework of these issues led to design the present investigation.

DELIMITATIONS OF THE STUDY

- The sample was limited to 600 students of Shri Muktsar Sahib and Sangrur district of Punjab.
- The study was delimited to only grade IX students.
- The study was delimited to Academic stress which was studied at three levels- High, Average and Low.
- The study was delimited to Skill of Observing (A Cognitive Skills in Science).
- The study was delimited to Educational Aspirations which was studied at three levels – High, Average and Low.

OBJECTIVES OF THE STUDY

- To study the effect of Academic Stress on scores of Skill of Observing for secondary school students.
- To study the effect of Educational Aspirations on scores of Skill of Observing for secondary school students.

- To study the interaction effect between Academic Stress and Educational Aspirations on scores of Skill of Observing for secondary school students.

HYPOTHESES OF THE STUDY

Ho.1: Secondary school students having High, Average and Low Academic Stress will not be significantly different on scores of skill of Observing.

Ho.2: Secondary school students having High, Average and Low Educational Aspirations will not be significantly different on scores of skill of Observing.

Ho.3: There will be no significant interaction effect of Academic Stress and Educational Aspirations on scores of skill of Observing.

DESIGN OF THE STUDY

In the present study, the **Descriptive Exploratory Method** of research has been employed. This research study was non-experimental because it dealt with the relationship between non-manipulated variable in a natural, rather than artificial setting. Descriptive Exploratory research involves events that have already existed and may be related to a present condition. In the present investigation, Academic Stress and Educational Aspirations were two independent variables. Skill of Observing was dependent variable. All the independent variables were studied at three levels each viz; High, Average and Low.

TOOLS USED

- ❖ **Cognitive Competence Test Battery on Cognitive Skills in Science:** This test was developed and validated by **Kaur, K. (2008)**. For the present study, the Tests of Cognitive Competence Test Battery were translated in Punjabi medium by language experts and related experienced teachers. The Reliability Coefficient for the Tests of Cognitive Competence Test Battery in Punjabi medium was found to be 0.82, 0.86, 0.85 and 0.90 for Physics, Chemistry, Biology and Environmental Sciences Test respectively. The content validity of the Cognitive Competence Test Battery was determined by relating the tasks to the instructional objectives.
- ❖ **Scale of Stress:** Scale of Academic Stress developed and standardized by **Bisht, A.R. (1987)** (From Bisht Battery of Scales of Stress). Dependability, Stability and Consistency (Split-Half) coefficients of this scale were 0.87, 0.82 and 0.88 respectively.
- ❖ **Educational Aspiration Scale (E.A.S.):** This Scale was prepared and validated by the investigator herself. It was a self explanatory scale. There was no time limit; however, it took about 25 minutes to administer the whole. The final draft of scale of Educational Aspirations included a total number of 30 items. Reliability of the scale was calculated by test-retest method and was found to be 0.73. As the items had been prepared on the basis of the operational definition of educational

aspirations and as the test appears to measure educational aspirations, it is reasonable to claim that the test has face validity as well as content validity.

SAMPLE

The school sample was drawn from the schools of District Shri Muktsar Sahib and Sangrur in Punjab. By random sampling ten schools were selected. The principals of these schools were approached. All the ten principals welcomed the idea and promised to co-operate very enthusiastically. The total process of study lasted about two months. Hence, there were some dropouts in the sample because of absence at one or the other stage. These students were therefore dropped at the time of analysis. The final sample was of 600 students on which the analysis was done.

COLLECTION OF DATA

After the selection of the sample, a schedule was fixed to collect information from the students' of ten schools with the help of the respective class teachers. Instructions for each test were given at the top of each questionnaire and the investigator herself explained the instructions in clear terms and simple language for each test. The subjects were assured that the information revealed by them would be kept confidential, since it was being collected for the purpose of research only. The tools were administered one by one. Each tool was administered on a separate day. All the tools were scored according to their respective keys.

STATISTICAL TECHNIQUES

- Descriptive Statistics like Mean, Standard Deviation, Skewness, and Kurtosis etc. were used to study the nature of data.
- Graphical presentations were also done to analyse data qualitatively, wherever necessary.
- 2x2 ANOVA was used for analysis and interpretation of data.
- Each significant F-ratio was followed by t-test.

RESULTS AND ANALYSIS

Both descriptive and inferential analyses were done on the scores of Skill of Observing.

Table 1

Mean Standard Deviation, Skewness and Kurtosis on Scores of Skill of Observing with Academic stress and Educational Aspirations

Variable	Group	N	M	SD	Sk	Ku
Academic Stress	High	200	33.23	3.99	0.294	-0.389
	Average	200	33.98	3.68	0.301	-0.343
	Low	200	34.75	3.01	0.315	-0.298
Educational Aspirations	High	200	34.89	3.29	0.327	-0.303
	Average	200	34.05	3.57	0.302	-0.349
	Low	200	33.09	3.94	0.354	-0.376

Table 1 indicated that the mean Scores of secondary school students with Low Academic Stress were highest among the mean scores of secondary school students with High and Average Academic Stress. The **Standard Deviation (SD)** indicated that Scores on Skill of Observing for Secondary school students with High Academic Stress had yielded the most diversity. **Skewness (Sk)** indicated that the distribution for Scores on Skill of Observing for Secondary school students with High, Average and Low Academic Stress was positively skewed. **Kurtosis (Ku)** indicated that the distribution for Scores on Skill of Observing for Secondary school students with High, Average and Low Academic Stress were Leptokurtic but more so, in case of High Academic Stress.

Table 1 indicated that the mean Scores of Secondary school students with High Educational Aspirations were highest among the mean scores of Secondary school students with Average and Low Educational Aspirations. The **Standard Deviation (SD)** indicated that Scores on Skill of Observing for Secondary school students with Low Educational Aspirations had yielded the most diversity. **Skewness (Sk)** indicated that the distribution for Scores on Skill of Observing for Secondary school students with High, Average and Low Educational Aspirations was positively skewed. **Kurtosis (Ku)** indicated that the distribution for Scores on Skill of Observing for Secondary school students with High, Average and Low Educational Aspirations were Leptokurtic but more so, in case of Low Educational Aspirations.

Table 2

Sum of Squares, Mean Sum of Squares and F-ratio on Scores of Skill of Observing for secondary school students in relation to Academic Stress and Educational Aspirations

Source of variation	Sum of Squares(S.S.)	Degree of Freedom (d.f.)	Mean Sum of Squares(M.S.)	F-Value
• Main Effects:				
A: Academic Stress	1079.8	2	539.9	3.69*
B: Educational Aspirations	1184.9	2	592.45	4.05*
• Two Order Interactions: A×B	1243.7	4	310.93	2.13
Error: Within Variables	86439.8	591	146.26	
Total		599		

** Significant at 0.01 level of confidence

*Significant at 0.05 level of confidence

• **Academic Stress (A)**

Table 2 shows that the F-ratio for the difference in means of Scores on Skill of Observing for secondary school students with High, Average and Low Academic Stress, was found to be significant at the 0.05 level of confidence. The null hypothesis H_0 which stated that *secondary school students having High, Average and Low Academic Stress will not be significantly different on scores of Skill of Observing* was rejected at the specified level. To ascertain which group of secondary school students was significantly

different from each other, t-test was applied for various combination groups and corresponding t-ratios have been presented in the following **Table 3**.

Table 3

Means, SD's and t-ratios for difference in scores of Skill of Observing for High, Average and Low Levels of Academic Stress

Academic Stress (A)	High Level (A1)	Average Level (A2)	Low Level (A3)
N	200	200	200
M	33.23	33.98	34.75
S.D.(σ)	3.99	3.68	3.01
High Level (A1)	-	1.97*	4.34**
Average Level (A2)	-	-	2.26*
Low Level (A3)	-	-	-

** Significant at 0.01 level of confidence

*Significant at 0.05 level of confidence

In **Table 3**, the mean achievement of secondary school students with Average Academic Stress (M=33.98) was higher on Scores of Skill of Observing than their counterparts with High Academic Stress (M=33.23). The mean achievement of secondary school students with Low Academic Stress (M=34.75) was higher on Scores of Skill of Observing than their counterparts with High Academic Stress (M=33.23). The mean achievement of secondary school students with Low Academic Stress (M=34.75) was higher on Scores of Skill of Observing than their counterparts with Average Academic Stress (M=33.98).

• Educational Aspirations (B)

Table 2 shows that the F-ratio for the difference in means of Scores on Skill of Observing for secondary school students with High, Average and Low Educational Aspirations, was found to be significant at the 0.05 level of confidence. The null hypothesis H_02 which stated that *secondary school students having High, Average and Low Educational Aspirations will not be significantly different on scores of Skill of Observing* was rejected at the specified level. To ascertain which group of secondary school students was significantly different from each other, t-test was applied for various combination groups and corresponding t-ratios have been presented in the following **Table 4**.

Table 4

Means, SD's and t-ratios for difference in Scores of Skill of Observing for High, Average and Low Levels of Educational Aspirations

Educational Aspirations (B)	High Level (B1)	Average Level (B2)	Low Level (B3)
N	200	200	200
M	34.89	34.05	33.09

S.D.(σ)	3.29	3.57	3.94
High Level (B1)	-	2.47*	5.00**
Average Level (B2)	-	-	2.52*
Low Level (B3)	-	-	-

** Significant at 0.01 level of confidence

*Significant at 0.05 level of confidence

In **Table 4**, the mean achievement of secondary school students with High Educational Aspirations (M=34.89) was higher on Scores of Skill of Observing than their counterparts with Average Educational Aspirations (M=34.05). The mean achievement of secondary school students with High Educational Aspirations (M=34.89) was higher on Scores of Skill of Observing than their counterparts with Low Educational Aspirations (M=33.09). The mean achievement of secondary school students with Average Educational Aspirations (M=34.05) was higher on Scores of Skill of Observing than their counterparts with Low Educational Aspirations (M=33.09).

• **Academic Stress \times Educational Aspirations (A \times B)**

Table 2 shows that the F-ratio for the difference in means of scores on Skill of Observing for secondary school students due to the interaction between Academic Stress and Educational Aspirations, was not found to be significant even at the 0.05 level of confidence. The difference if observed may be ascribed to chance factors only. The null hypothesis H_{03} which stated that *there will be no significant interaction effect of Academic Stress and Educational Aspirations on scores of Skill of Observing for secondary school students* was not rejected at the specified level. It may be concluded that **Academic Stress and Educational Aspirations did not yield different mean scores on Skill of Observing for secondary school students.**

DISCUSSION OF RESULTS

Both descriptive and inferential analyses were done on scores of Skill of Observing (A Scientific Cognitive Skills). The results revealed the differences in achievement scores of Skill of Observing in relation to Academic Stress and Educational Aspirations. Corresponding hypotheses H_{01} and H_{02} were rejected.

Academic Stress was the main factor found to have association with achievement scores of students. The findings of the present investigation led to a conclusion that secondary school students with High, Average and Low Academic Stress were significantly different on scores of Skill of Observing. Therefore hypothesis H_{01} was rejected. These results were found consistent with the findings of **Silva (1996)**,

Torsheim; Aaroe & Wold (2003), Kauts and Sharma (2009), Sharma; Wavare; Deshpande; Nigam and Chandorkar (2011) and Sharma, G. and Pandey, D.(2017).

Lack of family time, lack of support of teachers, friends and family, over-scheduling, not enough sleep, poor diet, noise pollution, lack of preparation may be the main factors for such results. Stressed out and negligent parents, high expectations in academic or other performances, abused or deprived childhood, growing up tensions and demand for familial responsibility may also be the main causes of childhood and teen Academic stress. However, stress induced fears and anxiety in children, adversely affect children's performances at various levels.

Educational Aspirations was the main factor found to be associated with achievement scores of students. The findings of the present research work led to conclude that secondary school students having High, Average and Low Educational Aspirations were significantly different on scores of Skill of Observing. The results of present study were found consistent with the findings of **Singh and Gantes (1996), McCormick (1997), Rojewski (1999), Meinster and Karen (2001), Marjoribanks (2003), Howley (2006), Khattab, N.(2015) and McCulloch, A.(2016)**. Therefore H_02 was rejected.

Differences in Parental Ambitions, Social Expectations, Peer Pressure, Culture, Social Value, Competition, Group Cohesiveness, Gender, and Socio-Economic Background may be the main factors for the rejection of these hypotheses. It may be mentioned that Parents always expect more and more from the first born and therefore the level of aspirations may be higher for first born than that of those born later. Society expects more and more from some people than others. It is generally assumed that one who is successful in a particular area may also be successful in other area if he wishes. Culture traditions are important factors for setting the goal better and rich cultural background helps the child in fulfilling high expectations.

EDUCATIONAL IMPLICATIONS OF THE STUDY

All research studies lead to some conclusions which help various sections of educational system to understand various issues. The results of present investigation have following implications.

Educational Planners may construct a flexible curriculum for Science to decrease the Academic Stress of Students. They may revise the syllabus of Science time to time for increasing Educational Aspirations of students.

Educational Administrators should establish good environment to learn different Scientific Cognitive Skills. They should provide well qualified teachers, co-curricular activities and different mediums of study in the school.

The teacher may assess different Scientific Cognitive Skill of the students. He may create the interest of the students in Science. Methods of teaching may be improved.

Parents should be made aware of the results of present investigation and may be encouraged to improve their interaction with children by devoting more time to children, by taking personal interests in

their studies and by answering their questions with patience and having more of verbal communication with them by emotional and varied experiences and by conversing with them regarding different things around them.

Students may build a balance between their Educational Aspirations and Occupational Aspirations. The feeling of a healthy competition with siblings and peers in the hope of showing better than others may be built.

Today's students are the future of the society. With the help of the results of present study, a rapport may be built between teacher & student, teacher & parents and parents & their children. Each one may understand the aspirations of others. Academic Stress may be reduced with co-operation of each other.

Scientists should be made aware of the results of present investigation and they may develop new teaching methods for reducing the stress of students and creating their interests in Science. They may construct special puzzles of scientific recreations.

SUGGESTIONS FOR FURTHER RESEARCH

- The present study was conducted on secondary school students. A study may be replicated on lower or higher levels e.g. Primary, Upper Primary, Secondary and Higher Secondary levels.
- The study may be replicated on a large sample to authenticate the findings of the present investigation.
- The study may be conducted on the students studying in the schools affiliated to C.B.S.E. or any other school boards.
- The study may be extended to special group children.
- The present study was conducted on the Skill of Observing. A study may be replicated on other Cognitive Skills.
- The independent and dependent variables together only explained a small portion of the variances in learning outcomes and engagement activities. This relationship suggests that there might be other variables e.g. Attitude towards Science, School Environment, Family Environment, Parent-Child interactions, Teacher-Taught relationships etc. that have significant effects on learning and engagement that were not included in the study.

REFERENCES

- Bahrnick, H.P. and Hall, L.K. (1991).** Lifetime maintenance of high school mathematics content. *Journal of experimental psychology*, 120 (2).
- Bisht, A.R. (1987).** *Bisht Battery of stress scales*. Agra: National Psychological Corporation.
- Bector, R. (1995).** Academic stress and its Correlation: A comparative study of government and public school children. *An unpublished master's dissertation in science (Home Science) in child development*, Chandigarh: Panjab University.
- Corey, J. (2004).** The mismeasure of coping by checklist. *Journal of Personality*, 64, 959-991.

- Endler et al. (1994).** State-trait coping, State-trait anxiety and academic performance. *Journal of personality and Individual differences*, 16 (5), 663-670.
- Gupta, A. (1987).** A study of the effects of trait anxiety psychological stress and intelligence on state anxiety and performance. *Indian dissertation abstracts*, 34 (2).
- Howley, C.W.(2006).** Remote Possibilities: Rural Children's Educational Aspirations. *Peabody Journal of Education*, 81(2), 62-80.
- Kaur, K. (2008).** Parental involvement and teacher-taught relationships on cognitive skills and stress of adolescents. *Doctoral Thesis*. Panjab University, Chandigarh.
- Kauts, A. and Sharma, N. (2009).** Effect of Yoga on Academic Performance in relation to Stress. *International Journal of Yoga*, 2(1), 39-43.
- Khattab, N. (2015).** Students' aspirations, expectations and school achievement: What really matters? *British Educational Research Journal*, 41(5), 731-748.
- Korchin, S.J. (1963).** Anxiety and verbal learning. *Journal of Abnormal and Social Psychology*, pp.234-240.
- Marjoribanks K. (2003).** Learning Environments, Family Contexts, Educational Aspirations and Attainments: A Moderation-Mediation Model Extended. *Learning Environments Research*, 6(3), 247-265.
- McCormick, A.C. (1997).** Changes in Educational Aspirations after high school: The role of postsecondary attendance and context. *Paper presented at the annual meeting of the Association for the Study of Higher Education (ASHE)*, pp.1-37.
- McCulloch,A. (2016).** Educational Aspirations Trajectories in England. *British Journal of Educational Studies*. <http://dx.doi.org/10.1080/00071005>.
- Meinster, M.O. and Karen, C.R. (2001).** Longitudinal Influences of Educational Aspirations and Romantic Relationships on Adolescent women's Vocational Interests. *Journal of Vocational Behavior*, 58 (3), 313-327.
- Rojewski, J.W. (1999).** Occupational and Educational Aspirations and attainment of young adults with and without learning disabilities 2 years after high school completion. *Journal of Learning Disabilities*, 32, 533-552.
- Sahni, G. (1982).** Effectiveness of Yogic techniques in the management of Anxiety. *Journal of Personality and Clinical Studies*, 5 (1), 51-55.

- Sharma, G. & Pandey, D. (2017).** Anxiety, Depression and Stress in relation to academic achievement among higher secondary school students. *The International Journal of Indian Psychology*, 4(2).
- Sharma, B.; Wavare, R.; Deshpande, A.; Nigam, R. and Chandorkar, R. (2011).** A Study of Academic Stress and its effect on vital parameters in final year medical students at SAIMS Medical College, Indore, Madhya Pradesh. *Biomedical Research*, 22(3), 361-365.
- Silva, S.B. (1996).** The stress of life hand books of stress: Theoretical and Clinical Aspects. The Tree Press: New York, pp.38-41.
- Singh, K. and Gantes, V.M.H. (1996).** The relation of English language proficiency to educational aspirations of Mexican- American eighth graders. *The Journal of Early Adolescence*, 16(3), 253-273.
- The Encyclopedia of Educational Research (1982).** Edited by Harold E. Mitzel, John Hardin Best and Willam Rabinowitz.
- Torsheim, T.; Aaroe, L.E. and Wold, B. (2003).** School-related Stress, Social Support and Distress: Prospective analysis of reciprocal and multilevel relationships. *Scandinavian Journal of Psychology*, 44, 153-159.
- Webster's Encyclopedic Unbridged Dictionary of English Language (1976).** G and C Merriam Company Publishes Springfield, Massachusetts, U.S.A.

