Role of Socio-economic Status in Academic Stress of Senior Secondary Students

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Abstract

Socio-economic status is a construct that reflects one's access to collectively desired resources, material goods, money, power, occupation, healthcare, leisure time, or educational opportunities which is also related to the academic stress of students. Main objective of the present study was to find out the difference between academic stresses of students belonging to different socio-economic status. A sample of 200 students studying in 6 senior secondary schools of Samastipur (Bihar, India) was selected through simple random sampling method. Personal datasheet of students was used to determine their socio-economic status and self-developed Academic Stress Questionnaire (ASQ) was used for the data collection. The result revealed that students belonging to low socio-economic status have higher level of academic stress as compared to the students belonging to high socio-economic status, especially boys. However Girls belonging to different socioeconomic status didn't exhibit any significant difference in their academic stress. The findings also revealed that personal inadequacy and inadequate study facilities causes more academic stress among students belonging to low socio-economic status. In the case of boys belonging to low socio-economic status, inadequate study facilities causes more academic stress while in the case of girls belonging to low socio-economic status, personal inadequacy causes more academic stress. It was concluded that socio-economic status has a significant impact on the academic stress as low socio-economic status and its correlates, such as lower education, poverty, and poor health, ultimately affect our society as a whole. So it is recommended through this study that government should take serious initiatives to provide jobs and raise the socio-economic status of people throughout the country.

Keywords: Academic stress, Socio-economic status, Senior secondary students, Girls, Boys

1. Introduction

Education plays a major role in developing a set of skills for acquiring jobs, as well as for cultivating specific qualities that stratify people with higher and lower social-economic background. Inequities in wealth distribution, resource distribution, and quality of life are increasing in India and globally. Socio-economic background has a unique and distinct relationship with the progress and level of education among Indians. It may be surprising but the fact is that there is no agreed definition of SES because the construct SES necessarily entails political ideologies about existing and desired social structures. For the last three decades or so, some scholars have defined SES as equivalent to simple, measurable things such as annual income. Others think race or ethnicity should be included. Some believe health status should be part of an SES measure since SES and health are so highly correlated and clearly cause each other, while few assign SES to the labor force. In sum, the definition of SES revolves around the issue of quantifying social inequality. The SES of a child is most commonly determined by combining parents' educational level, occupational status, and income level (William H. J 2002) [11]. According to American Psychological Association (APA) [1], socioeconomic status is commonly conceptualized as the social standing or class of an individual or group, and it is often measured as a combination of education, income and occupation. Socioeconomic status (SES) is often measured as a combination of education, income, and occupation. It is commonly conceptualized as the social standing or class of an individual or group. When viewed through a social class lens, privilege, power, and control are emphasized.

Academic stress is the most important sources of stress among young students that has negative as well as positive impact on their development. It is mental and emotional pressure, tension, or stress that occurs due to the demands of school or college life. Students at senior secondary level face many academic demands. In the competitive world of today adolescents face a life full of stress. They usually have high academic burden, low satisfaction regarding their academic performance, and high expectations and thus they may suffer from more academic stress and most of the time it is associated with the socio-economic status of the family. Research indicates that children from low-SES households and communities develop academic skills more slowly compared to children from higher SES groups (Morgan, Farkas, Hillemeier, and Maczuga, 2009) [9]. Low socio-economic status (SES) and its correlates, such as lower education, poverty, and poor health, ultimately affect our society as a whole.

1.1 Operational definitions of the key terms
1. Socio-economic status

Socioeconomic status is defined as a measure of one's combined economic and social status that focuses on the three common measures education, income, and occupation. It includes mothers' education, fathers' education, mothers' occupation, fathers' occupation, mothers' income, fathers' income, number of dependents, siblings, annual family income etc. on the basis of which people are classified into different classes. In the present study students are classified into two groups i.e. high-SES and low-SES on the basis of their total family income and position of their parents in the society.

2. Academic stress

Academic stress is defined as the anxiety and stress that comes from schooling and education which impose extra academic workload upon students beyond their capacities and capabilities like- over expectation of parents, teacher, inadequate study facilities at school or home, wrong teaching method, lack of supportive environment etc.
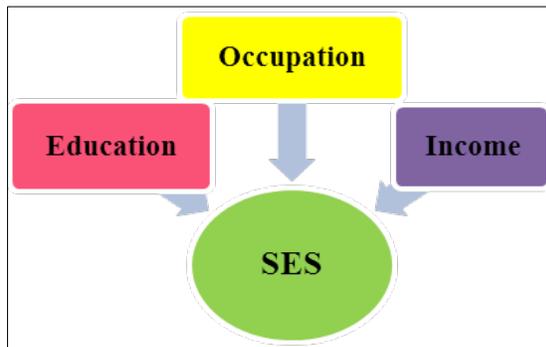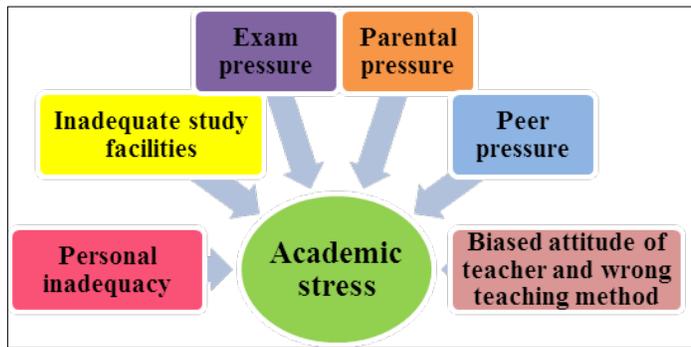

Fig 1

Fig 2

3. Literature review

Baharudin and Luster (1998) [2] conducted a study on "Factors Related to the Quality of the Home Environment and Children's Achievement" using data from the National Longitudinal Survey of Youth (NLSY), the study focused on 898 mothers and their 6 to 8 year-old children. Mothers with higher family incomes, fewer children, and higher marital quality provided more supportive home environments. In addition, age and gender of the children were significantly related to the quality of the children's home environments. Additional analyses indicated that the quality of the home environment that mothers of both ethnic groups provided was related to their children's achievement.

Seyfried, S. F. (1998) [10] conducted a study on "Academic achievement of African American preadolescents: The influence of teacher perception" and found that low SES students have been found to score about ten percent lower on the National Assessment of Educational Programs than higher SES students. Two indirect effects on grade point average were found. The first indirect effect was negative: gender predicted academic ability, which predicted teacher perceptions of social skills, which predicted grade point average. The second indirect effect was positive and it was from ability to teacher perceptions to grade point average.

Battle and Lewis (2002) [4] conducted a study on "The Increasing Significance of Class: The Relative Effects of Race and Socioeconomic Status on Academic Achievement" and found that lower SES children have slower and lower academic achievement as compared to those students who belong to higher SES families.

Eamon (2005) [5] conducted a study on "Social-demographic, school, neighborhood and parenting influences on academic achievement of Lalino young adolescents" and showed that low SES prevents access to resources and leads to additional stress and conflicts at home that affects student's academic achievements. Barry (2006) supported the findings of Eamon's study and reported that SES had greater impact on student's test scores.

Barry, J. (2006) [3] conducted a study on "The effect of socio-economic status on academic achievement" and found that socioeconomic status had the greatest impact on test scores in relation to the other variables of his study.

Finkelstein et.al (2007) [6] conducted a study on "Socioeconomic Differences in Adolescent Stress: The Role of Psychological Resources" and found that adolescents from families with lower parent education are less optimistic than teens from more educated families. This pessimism may be a mechanism through which lower SES increases stress in adolescence.

Khan et.al (2013) [8] aimed "To Study the Relationship of Academic stress and Socio-economic status among ix Standard Students of Raipur city." and found that there is positive but low relationship between Academic Stress and SES of English and Hindi medium students. The difference in the level of Academic Stress of English and Hindi medium students is found to be insignificant whereas the difference in level of Academic Stress of Boys and Girls of both English and Hindi medium schools is found to be significant.

Khaliq et.al (2016) [7] conducted a study on "Socioeconomic Status and Students' Achievement Score at Secondary Level: A Correlational Study". A sample of 320 male students for this study was taken through multistage cluster random sampling technique from the public secondary schools of the district Faisalabad. The result revealed that there is a moderate positive relationship found between parental income and students' achievement score, parental educational level and students' achievement score, and parental occupation and students' achievement score.

1.2 Significance of the study

The socio-economic status (SES) of family is generally related to academic stress that results in good or bad educational outcome as the available resources are associated with it. Children's initial reading competence is correlated with the home literacy environment, number of books owned, and parent distress. Parents from low-SES communities may be unable to afford resources such as books, computers, or tutors to create this positive literacy environment as a result students become stressed due to inadequate study facilities. Socio-economic status is found to be one of the important variables in educational researches and many researches has conducted on this variable but very few researches has conducted on academic stress associated with socio-economic status, so there is a need of such a study. The findings of present study are very important in determining that whether any significant difference exists between the academic stress of students

belonging to high SES and low SES. The finding will also helpful in exploring that is there any significant impact of socio-economic stress on academic stress of students or not.

2. Objective
1. To find out the difference in the academic stress of students belonging to different socio-economic status.
2. To find out the difference in the academic stress of boys belonging to different socio-economic status.
3. To find out the difference in the academic stress of girls belonging to different socio-economic status.

2.1 Hypothesis
1. There is no significant difference exists between the academic stresses of students belonging to different socio-economic status.
2. There is no significant difference exists between the academic stresses of boys belonging to different socio-economic status.
3. There is no significant difference exists between the academic stresses of girls belonging to different socio-economic status.

2.2 Delimitations of the Study
The current study was delimited to-
1. 200 11th and 12th class students (boys= 100 and girls= 100) studying in 6 private senior secondary schools affiliated to Central Board of Secondary Education, New Delhi of Samastipur (Bihar, India).
2. Self-developed Academic Stress Questionnaire (ASQ).
3. Students' personal datasheet containing informations like parental monthly income, educational level and occupation etc.

3. Methodology
As the investigation was descriptive hence survey method was followed for the present study. Participants were selected through simple random sampling method from 6 different private senior secondary schools of Samastipur.

3.1 Participants
The present study involved 200 senior secondary school students (boys= 100 and girls=100) belonging to different socio-economic status. Sample was selected by simple random sampling method form 6 different senior secondary private schools of Samastipur. These schools represent a range of educational quality, as well as a range of socioeconomic strata.

3.2 Research design
The present study is descriptive hence survey method of research was followed for this study and quantitative approach was adopted to find the difference in academic stress of students belonging to different socio-economic status. The Research design was as follows-
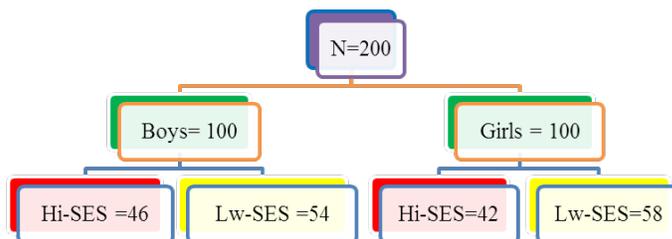

Fig 3: Research design of the study.

3.3 Research tool
1. Personal datasheet was used for determining Socio-economic status of students that contain informations regarding mothers' education, fathers' education, mothers' occupation, fathers' occupation, mothers' income, fathers' income, no. of dependents, siblings, annual family income etc. and
2. Self-developed Academic Stress Questionnaire (ASQ) was used to measure academic stress of the students. It is a 30 items questionnaire used to assess the academic stress of senior secondary school students. The ASQ has items related to six dimensions namely- Personal inadequacy, Inadequate study facilities, Examination pressure, Peer pressure, Parental pressure and, Biased attitude of teacher and wrong teaching method.

Table 1: Validity and reliability of the instrument

Validity	Concurrent validity	0.88
	Face validity	Through Expert opinion
Reliability	Teat- retest	0.82
	Split half	0.86

3.4 Scoring system
All the items are negatively worded. High score of the students on Academic Stress Questionnaire (ASQ) indicates presence of higher level of stress. The scoring system is as follows-

Table 2: Scoring pattern of the instrument

Options	Score	Maximum score
Never	1	$1 \times 30 = 30$
Rarely	2	$2 \times 30 = 60$
Some times	3	$3 \times 30 = 90$
Always	4	$4 \times 30 = 120$

3.5 Statistical analysis
Mean, standard deviation and students 't' test were used for the analysis of data, interpretation of the result and drawing conclusion.

4. Results and discussion
Table 3 and Fig 4 show data on difference of academic stress of students belonging to high and low socio-economic status (SES). Students belonging to low-SES have academic stress mean score 76.78 and students belonging to high-SES have academic stress mean score 70.90. The obtained t-value (2.05**) is found to be significant as compared to the table value which indicates that there is significant difference exist between the two groups at p= 0.05 level. It is quite clear that students belonging to low-SES have more academic stress than their counterparts belonging to high-SES so hypothesis one is rejected.

Table 3: Shows difference in the academic stress of students belonging to different SES.

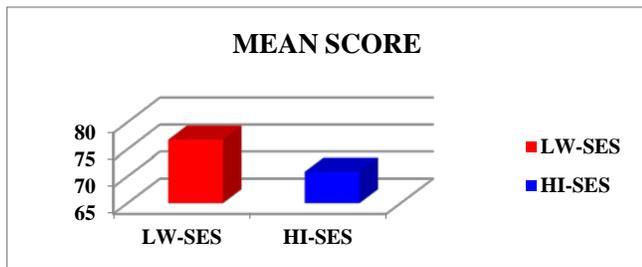| Group	SES	N=200	M	SD	t-value	Level of significance
Students	Low	112	76.78	19.95	2.05	S**
	High	88	70.90	20.35		

Fig 4: Shows difference in the academic stress mean score of students belonging to different SES.

Table 4 shows dimension wise data on difference of academic stress of students belonging to high and low socio-economic status. On the dimension personal inadequacy the students belonging to low-SES have academic stress mean score 71.37 and students belonging to high-SES have academic stress mean score 58. The t-value (1.81678**) is found to be significant as compared to the table value for this dimension. Similarly on the dimension inadequate study facilities the students belonging to low-SES have academic stress mean score 80.58 and the students belonging to high-SES have academic stress mean score 62.8. The t-value (1.71996**) is found to be significant as compared to the table value. Students belonging to low-SES vary significantly on two dimensions namely-personal inadequacy and inadequate study facilities except remaining four dimensions (peer pressure, examination pressure, parental pressure, biased attitude of teacher and wrong teaching method). It is quite clear that personal inadequacy and inadequate study facilities causes more academic stress in students belonging to low-SES as compared to their counterparts belonging to high-SES.

Table 4: Shows dimension wise difference in the academic stress of students belonging to different SES.

Dimensions	Groups	N	M	SD	t- value	Level of significance
Personal inadequacy	Low	16	71.37	19.82	1.81678	S**
	High	13	58	19.57		
Peer pressure	Low	14	71.71	22.07	0.41995	NS
	High	13	68.46	17.73		
Inadequate study facilities	Low	34	80.58	21.87	1.71996	S**
	High	05	62.8	19.12		
Examination pressure	Low	19	83.31	12.36	1.55733	NS
	High	21	75.23	19.29		
Parental pressure	Low	13	72.84	15.66	0.48883	NS
	High	23	69.56	21.08		
Biased attitude of teacher and wrong teaching method.	Low	16	74	23.13	-1.39736	NS
	High	13	84.76	17.01		

Fig 5shows diagrammatical representation of dimension wise data on difference of academic stress mean score of students belonging to high and low socio-economic status. It is quite clear from the graph that on the dimensions personal inadequacy and inadequate study facilities students belonging to low-SES differ significantly to their counterparts.
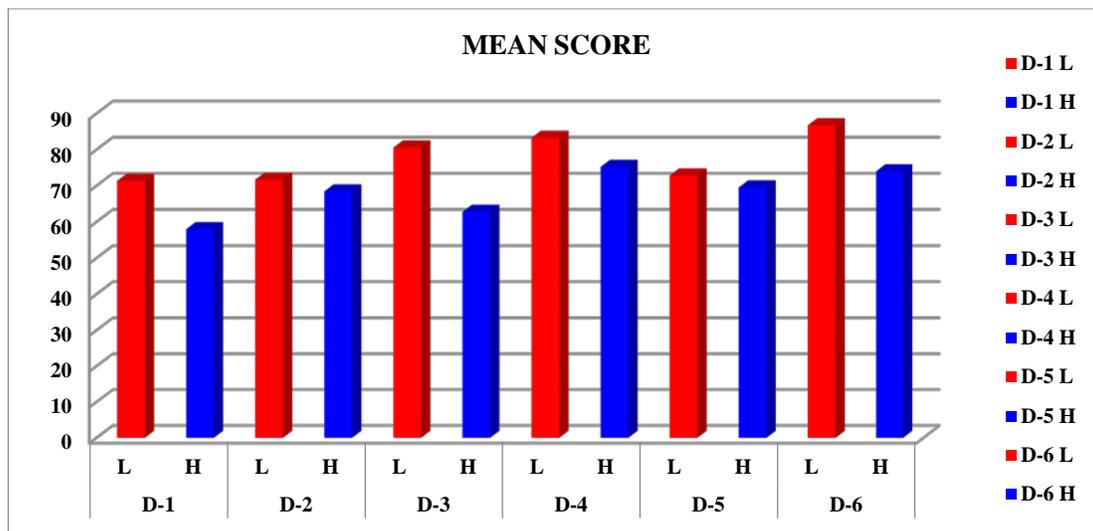

Fig 5: Shows dimension wise difference in the academic stress of students belonging to different SES.

Table 5 shows data on difference of academic stress of boys belonging to high and low socio-economic status. Boys belonging to low-SES have academic stress mean score 78.40 and that of the high-SES have academic stress mean score 71.08. The obtained t-value (1.83607[**]) is found to be significant as compared to the table value which indicates that there is significant difference exist between the two groups at p=0.05 level. It is quite clear from the table 5 that boys belonging to low-SES have more academic stress than their counterparts so hypothesis two is rejected.

Table 5: Shows difference in the academic stress of boys belonging to different SES.

Group	SES	N=100	M	SD	t-value	Level of significance
Boys	Low	54	78.40	18.87	1.83607	S**
	High	46	71.08	20.98		

Table 6 shows data on difference of academic stress of girls belonging to high and low socio-economic status. Girls belonging to low-SES have academic stress mean score 75.27 and that of the high-SES have academic stress mean score 70.71. The obtained t-value (1.09716) is not found significant as compared to the table value. It is quite clear from table 6 that there is no significant difference exists between the academic stress mean score of two groups at p= 0.05 level so hypothesis three is accepted.

Table 6: Shows difference in the academic stress of girls belonging to different SES.

Group	SES	N=100	M	SD	t-value	Level of significance
Girls	Low	58	75.27	20.96	1.09716	NS
	High	42	70.71	19.88		

Fig 6Shows diagrammatical representation of difference in the academic stress mean score of boys belonging to different SES (High and Low) and girls belonging to different SES (High and Low). It is clear from the Fig 6 that boys belonging to low-SES have higher level of academic stress (significant) as compared to their counterparts. Although girls belonging to low-SES have more academic stress as compared to their counterparts bur the difference is not significant.
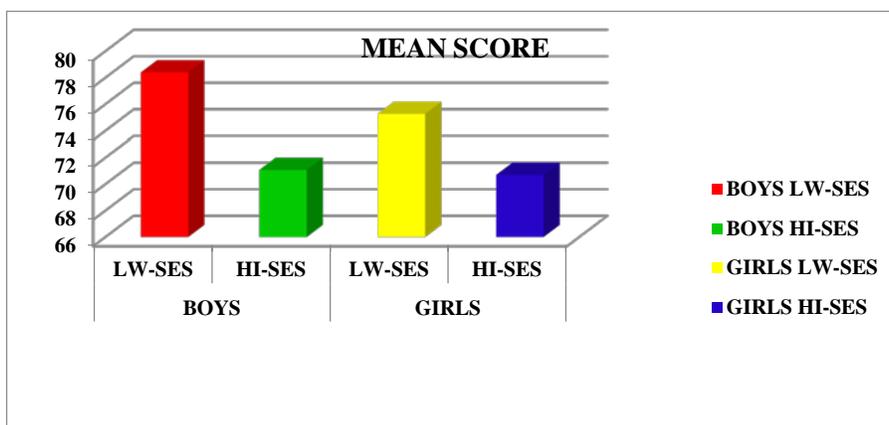

Fig 6: Shows difference in the academic stress mean score of boys belonging to different SES and girls belonging to different SES.

Table7 shows dimension wise data on difference of academic stress of boys belonging to high and low socio-economic status. On the dimension inadequate study facilities the students belonging to low-SES have academic stress mean score 85.5 and the students belonging to high-SES have academic stress mean score 42.5. The t-value (2.717) is found to be significant as compared to the table value. Boys belonging to low-SES vary significantly on only one dimension namely- inadequate study facilities except remaining five dimensions (personal inadequacy, peer pressure, examination pressure, parental pressure, biased attitude of teacher and wrong teaching method). It is quite clear that inadequate study facilities causes more academic stress in boys belonging to low-SES as compared to their counterparts belonging to high-SES.

Table 7: Shows dimension wise difference in the academic stress of boys belonging to different SES.

Dimensions	SES	N	M	SD	t- value	Level of significance
Personal inadequacy	Low	09	75.55	18.32	1.07878	NS
	High	08	65.12	21.55		
Peer pressure	Low	06	72.16	19.75	-0.2239	NS
	High	06	74.66	18.91		
Inadequate study facilities	Low	16	85.5	21.66	2.717	S**
	High	02	42.5	9.19		

Examination pressure	Low	08	85.87	11.92	1.46442	NS
	High	11	73.27	21.99		
Parental pressure	Low	08	73.37	14.33	0.32912	NS
	High	12	70.5	21.64		
Biased attitude of teacher and wrong teaching method.	Low	07	68.42	19.63	-1.196	NS
	High	07	80.57	18.32		

Table 8 shows dimension wise data on difference of academic stress of girls belonging to high and low socio-economic status. On the dimension personal inadequacy the students belonging to low-SES have academic stress mean score 66 and the students belonging to high-SES have academic stress mean score 46.6. The t-value (1.86938) is found to be significant as compared to the table value. Girls belonging to low-SES vary significantly on only one dimension namely- personal inadequacy except remaining five dimensions (inadequate study facilities, peer pressure, examination pressure, parental pressure, biased attitude of teacher and wrong teaching method). It is quite clear that personal inadequacy causes more academic stress in girls belonging to low-SES as compared to their counterparts belonging to high-SES.

Table 8: Shows dimension wise difference in the academic stress of girls belonging to different SES.

Dimensions	SES	N	M	SD	t- value	Level of significance
Personal inadequacy	Low	07	66	21.80	1.86938	S**
	High	05	46.6	8.50		
Peer pressure	Low	08	71.37	25.02	0.74419	NS
	High	07	63.14	16.09		
Inadequate study facilities	Low	18	76.22	21.71	-0.00867	NS
	High	03	76.33	1.52		
Examination pressure	Low	11	81.45	12.91	0.6251	NS
	High	10	77.4	16.72		
Parental pressure	Low	05	72	19.36	0.30682	NS
	High	11	68.54	21.44		
Biased attitude of teacher and wrong teaching method.	Low	09	78.33	25.81	-0.96024	NS
	High	06	89.66	15.42		

Fig 7shows diagrammatical representation of dimension wise data on difference of academic stress mean score of boys belonging to high and low socio-economic status and girls belonging to high and low socio-economic status. It is quite clear from the graph that on the dimensions inadequate study facilities (D-3) boys belonging to low-SES differ significantly to their counterparts while on the dimension personal inadequacy (D-1) girls belonging to low-SES differ significantly to their counterparts.
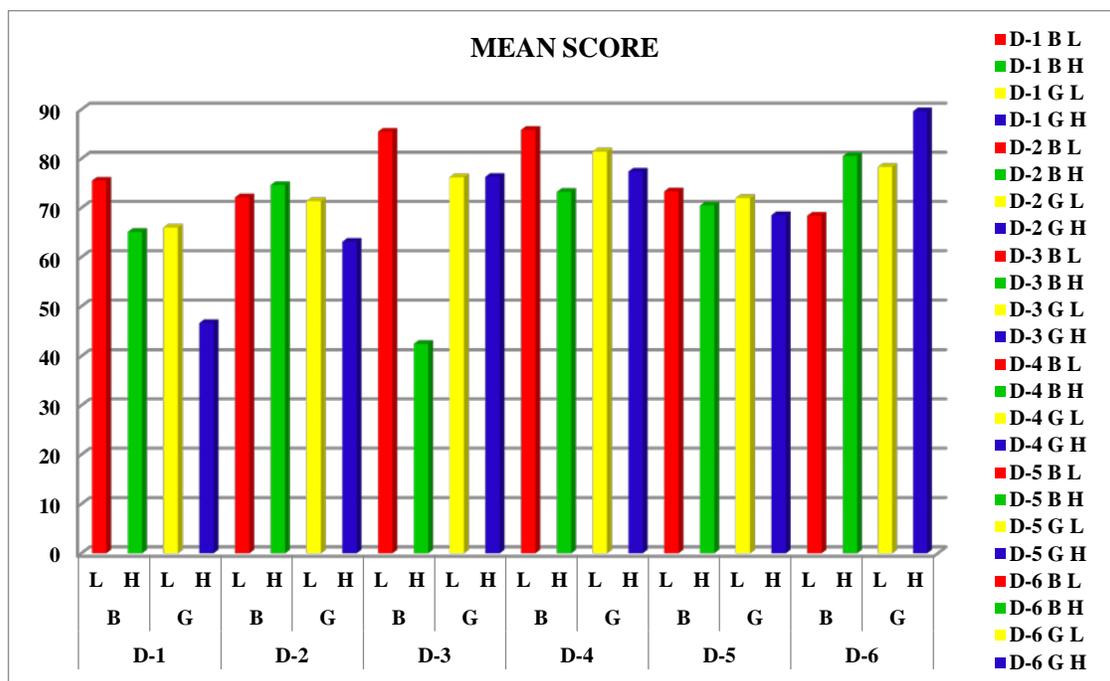

Fig7: Shows dimension wise difference in the academic stress of boys belonging to different SES and girls belonging to different SES.

5. Findings

1. Hypothesis one was; there is no significant difference exists between the academic stresses of students belonging to different socio-economic status, but the finding is; students belonging to low-SES have comparatively higher academic stress than their counterparts.
2. Hypothesis two was; there is no significant difference exists between the academic stresses of boys belonging to different socio-economic status, but the finding is; boys belonging to low-SES have comparatively higher academic stress than their counterparts.
3. Hypothesis two was; there is no significant difference exists between the academic stresses of girls belonging to different socio-economic status and the finding reveals also; girls belonging to low-SES didn't vary significantly in their academic stress than their counterparts.

6. Conclusion

On the basis of above findings it can be concluded that socio-economic status has an impact upon the academic stress of senior secondary students. Students belonging to low socio-economic status have higher level of academic stress as compared to the students belonging to high socio-economic status especially boys. However Girls belonging to different socioeconomic status didn't exhibit any significant difference in their academic stress. The findings also revealed that personal inadequacy and inadequate study facilities causes more academic stress among students belonging to low socio-economic status. In the case of boys inadequate study facilities causes more academic stress while in the case of girls, personal inadequacy causes more academic stress. It is obvious from the present study that socio-economic status has a significant impact on the academic stress as low socio-economic status and its correlates, such as lower education, poverty, and poor health, ultimately affect our society as a whole. Therefore it is recommended through this study that government should take serious initiatives to provide jobs and raise the socio-economic status of people throughout the country.

6.1 Educational implication

Similar studies should be conducted with the urban and rural students, secondary students, and students at tertiary level belonging to different socioeconomic status. Researches should also be conducted to explore that is there any relationship exists between academic stress and socio-economic status of students at secondary and tertiary level.

7. Acknowledgements

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