

Stress and achievement motivation of higher secondary students

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ABSTRACT

School and examinations are inevitable aspects of children in today's world, in which academic stress and achievement motivation are ubiquitous problems. To measure this, 200 Higher Secondary students were selected from two Government higher secondary schools, Coimbatore. The results revealed that majority of the sample (55%) experienced low levels of stress. 14% of the sample experienced Very High stress. Achievement Motivation was low and very low in majority (53%) of the sample. The correlation between stress and achievement motivation was not statistically significant. The male and female students significantly differ in their stress levels. A statistically significant difference in stress was found between the Tamil and English medium students. The mean difference in achievement motivation of the sample with regard to gender was statistically significant, with regard to medium of instruction, it was not statistically significant.

Keywords: *Stress, Achievement Motivation, Study Habits, Tamil medium and English medium.*

Higher secondary school education is a very important turning point in the academic life of an individual (Waghacharve, Chavan, Dhumale and Gore, 2013). There is a highly competitive educational system that stresses the acquisition of knowledge at all costs by the students. Students have to take many highly competitive centralized, high-stake examinations, such as the NEET, JEE, etc. (Yildirim, Ergene and Munir, 2007).

In today's highly competitive world, students face various academic problems including exam stress, disinterest in attending classes and inability to understand the subject. Examination stress is the feeling of anxiety or apprehension over one's performance in the exams. It can lead to students being unable to perform to the best of their abilities in exams (Ghatol, 2017). There is often a lot of pressure that comes along with pursuing a degree and one's education. There is studying, homework, tests, labs, reading, and quizzes. There is the stress of doing all of the work, balancing the time and finding time for extra-curricular activities (Prabhu, 2015).

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Received: January 4, 2020; Revision Received: February 12, 2020; Accepted: February 25, 2020

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Academic Stress is an important factor accounting for variation in academic achievement. Stress makes a significant contribution to the prediction of subsequent student performance and act as a negative predictor of academic performance of student (Prabhu, 2015). Academic stress has been seen tightening its grip on students as they have to compete at every step of their life in the fastmoving world. Academic problems like disinterest in attending classes, exam stress, comparing academic ability with other students, inability to understand the subject and trying to meet parents' expectations. Academic stress is seen to be higher in adolescents as it leads to low self-esteem (Sathiyavathi and Malathi, 2018).

Achievement in education implies one's knowledge, understanding and skills in a specified subject or group of subjects. It is also believed as the progress made by students, after a particular period of training imparted by teachers in the school, college and training colleges (Mishra and Danga, 2005). Academic achievement is of paramount importance particularly in the present socio-economic and cultural contexts. Obviously in the school/ college/ professional college, great emphasis is placed on achievement right from the beginning of formal education.

Academic achievement of an individual is an outcome of his mental and physical potential; besides the experiences he has gained in the process of exploration and learning. Academic achievement is considered as a key to judge one's potentialities and capacities (Rao and Reddy, 2015). Today, lack of interest in learning and motivation in students is important in difficulties for educational system that offer a low level of quality for learning. The amount of the students' motivation even interferes with social development (Bengtsson and Ohlsson, 2010). Achievement motivation plays an important role in predicting students' future success or failure. Therefore, it is crucial to put special emphasis on forming high level of students' need for achievement (Kolodziej, 2010).

Need for The Study

The world is rapidly changing and the modern society expects everyone to be a higher achiever. Academic achievement is one of the determinants of success in the life. Further, a number of changes are made in the curriculum, text books used and pedagogy at different points of time and so, students are put into lot of pressure to adapt to the constant changes, which in turn, creates stress on them (Rao and Reddy, 2015). When students perform under stress, they tend to ignore their attitude and health, with the result, they become a source of nuisance to others in the school. Considering the importance of stress and academic achievement of students, and the important role they play in the future success of students, and taking into account that stress varies from person to person, the present study was designed and implemented.

REVIEW OF LITERATURE

Alam and Halder (2018) explored the difference in academic stress and academic performance with respect to their gender and estimated the relation between them among the XI students of Bengali medium higher secondary schools in Malda District, West Bengal. The study found that there is a significant difference in academic stress and also revealed that there is a significant difference in academic performance due to the gender of the students of class XI. The study explored negative correlation between academic stress and academic performance of the students.

Brar (2018) investigated the relationship of Academic achievement motivation in relation to the Anxiety level of 200 adolescent students studying in different schools of Ludhiana district

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of Panjab, India. The findings revealed significant difference in Academic achievement motivation and anxiety level with respect to gender but no significant difference was found in relation to locale variation. There was also a significant negative relationship between Academic achievement motivation and anxiety level of adolescents.

Karaman (2016) compared the locus of control, academic stress, life satisfaction, and achievement motivation across 307 international (n=66) and domestic (n=241) undergraduate students in the U.S. The data were collected during the fall 2015 semester at a Hispanic Serving Institution in South Texas utilizing the Smith Achievement Motivation Scale (Smith, Balkin, Karaman, & Arora, 2016), the Internal-External Scale (Rotter, 1966), the Student-life Stress Inventory-Revised (Gadzella & Masten, 2005), and the Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985). The results indicated a statistically significant difference between domestic and international students in achievement motivation. Locus of control, academic stress, and life satisfaction significantly explained 18% of the variance in achievement motivation. However, comparison of the fit of the model from domestic and international students revealed no statistically significant differences between the groups.

METHODOLOGY

The methodology of the study on, “Stress and Achievement Motivation of Higher Secondary students” includes the following:

Objectives

1. To assess the levels of stress and achievement motivation of the selected higher secondary students.
2. To measure the impact of stress on achievement motivation of the sample.
3. To find out if the levels of stress and achievement motivation of the sample differ with regard to their gender and medium of instruction.

Hypotheses

1. The level of stress of the selected higher secondary students will be proportionately High.
2. The level of achievement motivation of the sample will be proportionately High.
3. The levels of stress and achievement motivation of the selected higher secondary students will significantly differ for the male and female students.
4. The levels of stress and achievement motivation of the selected higher secondary students will significantly differ for the Tamil medium and English medium students.
5. There will be a significant relationship between stress and achievement motivation of the selected higher secondary students.

Sample

Using Purposive Sampling, 200 Higher Secondary students (100 male and 100 female) in the age range of 17 years were selected from Kuniamuthur and Ondipudur Government higher secondary schools, Coimbatore.

Tools

Personal Data Sheet was used to collect the relevant background information of the higher secondary students. **Students Stress Scale** by Dr. Zaki Akhtar (2011) consisting of 51 questions to be responded using 5-point Likert scale, Always, Often, Sometimes, Rarely and Never was used to assess the level of stress. **Achievement Motivation Scale** by Prof.

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Pratibha Deo and Sr. Asha Mohan (2011) consisting of 50 statements to be answered with Always, Frequently, Sometimes, Rarely and Never was also used.

Procedure

After obtaining permission from the Principals of the two schools and establishing rapport with 256 higher secondary students, the investigator administered the Personal Data Sheet, Students Stress Scale and Achievement Motivation Scale individually. Out of the 256 students, only 200 (100 males and 100 females) students, whose responses to all the questionnaires were complete, were selected as the sample.

Analysis of Data

The results were statistically analysed using mean, standard deviation, Pearson's correlation coefficient and one-way ANOVA.

RESULTS AND DISCUSSION

Table I: Level Of Stress Of The Entire Sample (N=200)

Level of Stress	Frequency	Percentage
Very High	28	14
High	21	11
Moderate	39	20
Low	23	11
Very Low	89	44

Percentages are rounded off

It is displeasing to note that 14% of the sample has very high stress. Such a condition may lead to total emotional and physical exhaustion in the students. This suggests that these students are in need of some professional help to overcome their stress and solve the problems causing stress. It is observed that 11% of the sample have high stress. They often feel confused, forgetful and seem to apparently have pessimistic thoughts. Therefore, the hypothesis, "The level of stress of the selected higher secondary students will be proportionately High" is accepted. 20% of the sample has moderate stress. 11% of the sample and 44% of the sample experience low stress levels. There is nothing serious that is disturbing these students and they seem to have a relaxed state of mind with very less tension.

Table II: Level of Achievement Motivation of The Entire Sample (N=200)

Level of Achievement Motivation	Frequency	Percentage
Very Highly Motivated	0	0
Highly Motivated	0	0
Above Average	24	12
Average Motivation	27	14
Below Average	43	21
Low Motivation	65	33
Lowest Motivation	41	20

Percentages are rounded off

It is displeasing to note that none of the samples have either very high or high achievement motivation. The level of aspiration and the effort that these students put in for their studies and other goals seem to be very less. They seem to lack competence related behaviour. Therefore, the hypothesis, "The level of achievement motivation of the sample will be

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proportionately High” stands rejected. Above Average achievement motivation is found in 12% of the sample. Their motivations to study and keep the information in memory seem to be moderate. 14% of the sample have average achievement motivation and 21 % of the sample had below average achievement motivation. They seem to have very less motivation and skills to study. They often feel forgetful and are also not able to allocate time properly for their subjects. Low and very low achievement motivation is observed in altogether 53% of the sample. These students do not have the desire to obtain excellent results and do not seem to strive much for accomplishing their goals.

Table III: Relationship Between Stress And Achievement Motivation of The Sample

Variables	Mean Scores	Standard Deviation	R Value
Stress	154.29	24.94	0.112 Ns
Achievement Motivation	125.78	21.85	

NS= Not Significant

The table shows that the correlation between stress and achievement motivation is found to be positive, but since the obtained r value is 0.112, the relationship is not significant and is weak. The mean stress and mean achievement motivation scores indicate Low stress and Low achievement motivation of the sample. Hence, the hypothesis, “There will be a significant relationship between stress and achievement motivation of the selected higher secondary students” is rejected.

Table IV: Mean Difference In Stress of The Male And Female Sample

Gender	N	Mean Scores	Standard Deviation	F - Value	P - Value	Significant
Male	100	159.56	24.2955	9.27932	0.00263	0.05 Level
Female	100	149.03	24.5897			

The above table clearly shows that the male and female students significantly differ in their stress levels. The mean stress of the male sample is moderate while that of the females is very low. The male students have serious trouble in concentrating in their studies and seem to anticipate something worse to happen. Their apprehension seems to be very high and they seem to worry a lot over unwanted issues. They need immediate psychological help to reduce their stress. The female students do not seem to worry much and maintain a calm and relaxed state of mind. The mean difference as calculated through ANOVA (F=9.27932) is statistically significant at 0.05 level, indicating that there exists a significant gender difference in the experience of stress in the sample of this study. Therefore, the hypothesis, “The levels of stress will significantly differ for the male and female students” is accepted.

Table V: Mean Difference in Stress of The Tamil Medium And English Medium Students

Medium	N	Mean Scores	Standard Deviation	F - Value	P- Value	Significant
Tamil Medium	100	148.07	24.8682	13.21826	0.00035	0.05 Level
English Medium	100	160.52	23.5417			

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The above table clearly shows that there is a statistically significant difference between the Tamil and English medium students in their experience of stress. The English medium students are found to have slightly higher stress level as against the Tamil medium students. These students have limited vocabulary and language proficiency; they also have the pressure of preparing and performing well in the examination. The obtained F value, 13.21826 is statistically significant at 0.05 level and so, the hypothesis, “The levels of stress of the selected higher secondary students will significantly differ for the Tamil medium and English medium students” is accepted.

Table VI: Mean Difference in Achievement Motivation of The Male and Female Sample

Gender	N	Mean Scores	Standard Deviation	F - Value	P - Value	Significant
Male	100	121.64	21.0188	7.4294	0.00699	0.05 Level
Female	100	129.93	21.9827			

It is displeasing to note that the mean achievement motivation of the males (M=121.64) is Low and that of the females (M=129.93) is Below Average. It is very disheartening to note that, at this crucial stage in academic life, their motivation to study and excel in their class seem to be lacking. Their ability to complete study related tasks and continuously put in hard work is also pathetic. The two groups of students seem to be apparently having poor academic skills. Neither do these students have the readiness to study nor do they have high energy levels for their academic pursuits. The mean difference is found to be statistically significant (F=7.4294) at 0.05 level, indicating that achievement motivation significantly differs for the sample with regard to their gender. This helps us to accept the hypothesis, “The level of achievement motivation of the selected higher secondary students will significantly differ for the male and female students”.

Table VII: Mean Difference in Achievement Motivation of The Tamil Medium And English Medium Sample

Medium	N	Mean Scores	Standard Deviation	F - Value	P - Value	Significant
Tamil Medium	100	126.63	22.7395	0.29804	0.58573	Not Significant
English Medium	100	124.94	21.005			

The mean difference in achievement motivation of the Tamil and English medium students is presented in the above table. It is clearly noted that the medium of instruction has not been influential in bringing about changes in achievement motivation. Though there is little variation in the mean scores of the two groups, this difference is not statistically significant as the obtained F value is 0.29804.

MAJOR FINDINGS AND CONCLUSION

1. Majority of the sample (55%) experienced low levels of stress. Very High stress was found in 14% of the sample and 11% of the sample experienced high stress. 20% of the sample has moderate stress.
2. Achievement Motivation was low and very low in majority (53%) of the sample. Above Average achievement motivation was found in 12% of the sample.

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3. The correlation between stress and achievement motivation was found to be positive, but the relationship is not statistically significant and is weak.
4. The male and female students significantly differ in their stress levels. The female students do not seem to worry much and maintain a calm and relaxed state of mind.
5. There is a statistically significant difference between the Tamil and English medium students in their experience of stress. The English medium students are found to have slightly higher stress level as against the Tamil medium students.
6. It is displeasing to note that the mean achievement motivation of the males (M=121.64) is Low and that of the females (M=129.93) is Below Average. The mean difference is found to be statistically significant (F=7.4294) at 0.05 level.
7. Though there is little variation in the mean difference in achievement motivation of the Tamil and English medium students, this difference is not statistically significant as the obtained F value is 0.29804.

Limitations of The Study

1. Data is collected from only two Government higher secondary schools in Coimbatore and hence, the generalization of the results of the present study is limited to these two schools only.
2. Sample size is also very limited considering the whole large population of students.
3. The data collection process took a very long duration since the authorities of many higher secondary schools were reluctant to give permission.
4. Only descriptive study was carried out. Intervention programme could have been given to the sample.
5. Some more psychological variables could have been included, as it is only a descriptive study.

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Acknowledgements

The author appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author declared no conflict of interests.

How to cite this article: R Masilamani & U L Bhuvaneshwari (2020). Stress and achievement motivation of higher secondary students. *International Journal of Indian Psychology*, 8(1), 291-298. DIP:18.01.036/20200801, DOI:10.25215/0801.036