

## Academic Stress among Secondary Grade Students of Chennai (South) City

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### ABSTRACT

**Objectives:** Students particularly from secondary grade encounter several stressors owing to personal factors, peer pressure, parents and teacher influence, examination and so on. This paper is an attempt to find out such stressors related to academics. **Methods:** Survey method is used to collect the data from 111 secondary grade students using five-point Academic Stress Rating Scale. The data collected were analysed using statistical techniques like percentage, mean, SD, t test/F-value. **Results:** Around 75 percentage of students perceive to experience moderate to high level of academic stress. The Mean scores and level of academic stress of students indicate that they experience moderate level of academic stress in all the six dimensions. The independent variables like gender, age and type of family of secondary grade students have no influences on their academic stress levels. However, the only variable influencing their academic stress levels is 'number of siblings in their home'. **Conclusion:** In this section, the investigators explore the ways and means to combat academic stressors in secondary grade students as they experience moderate to high level of stress.

**Keywords:** *Stress, Stressors, Academic Stress, Secondary grade Students*

Stress is inevitable to all humans irrespective of any age, gender, caste and religion. However, the adults cope well with their stressors because of their maturity and experience. On the other hand, students facing stress will not be able to cope owing to their age group in particular and lack experience dealing with stress in general. So, it is significant for the academicians, teachers and parents to identify the stressors leading to stress. Of all the stressors causing stress in students, the stressors related to students' academic will affect them directly. Also, identifying the level of stress in students pave way to develop coping mechanisms among them. Failure in identifying and attending the stressors among students lead them to perform low in their academics. Further, if the stress is unattended for longer period, it leads to poor mental health and other health related disorders (Schneiderman, Ironson & Siegel, 2005).

Hall (1904) rightly observed that the adolescence stage as a period of "storm and stress". This statement holds true even today. Even-though, the researchers and academicians

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working in the field of stress developed many models, theories and coping mechanisms, the truth behind the Hall's statement is not invalidated even today. Researchers even today debate and research this statement in all dimensions viz. physical, cognitive, social, psychological, psycho-social, socio-cultural and medical perspectives. With modern science and technology, the stress level in students seems increasing day by day due to several factors. Surprisingly, only few students emerge from adolescence without any major stressors.

Pascoe, Hetrick and Parker (2019) reported the survey conducted by Organisation for Economic Co-operation and Development (OECD) during 2017 in 72 countries involving 5.4 lakh secondary grade students belonging to the age group of 15-16 years. The results revealed that obtaining poor grades, difficulty to write a test, anxious in taking school tests even after well preparation, tension while studying caused stress in 66 %, 59%, 55% and 37 % of students respectively.

Jain and Singhai (2018) highlighted examinations, assignments and many other activities as stressors causing academic stress in students. In addition to these stressors, parents and teachers pressurise them to obtain good grades, with teachers forcing students to participate in extracurricular activities also causes stress in students. Further, Jain and Singhai places special emphasis on academic stress owing to peer group and peer pressures to drink, smoke, cheat on test, lying and so on. Also, students get stress by constant bullying by social, peer group and parents. In the present study, the investigators identified six following stressors after the comprehensive review related to academic stress.

**Self-Inflicted/Personal Stress:** Stress happens not only from others such as parents, teachers and peer group, but it also happens from self (Ang and Huan, 2006). The stressors causing self-stress are student's high expectations in securing grades, fear of failure to fulfil parents and teachers demands, lack of concentration, interest in specific subjects, frequent illness, new responsibilities, lack of confidence, division of attention to unwanted stuffs and so on. Bisht (1987) and, Gupta and Khan (1987) defined self-inflicted stress as a stress of academic failure, academic depression, academic conflicts and academic frustrations that affects student's time and energy to attain their goals.

**Stress from Teacher:** Teachers expectation to secure reasonable grades, misunderstanding between students and teachers, teacher's biasness, daily test by teachers, punishments and poor teaching methods of teachers are some of the stressors related to teachers causing stress in students. According to a national survey, 46 percent of teachers experience stress daily at school hours and this stress in teachers got transferred to students gradually.

**Stress from Parents:** Parents influence their children to get good grades and extend enormous facilities like internet facility, computer and mobile phone for learning. These high expectations from parents makes the students to feel pressure in learning. Further, the facilities given distract the students from their studies. Also, the stressors like parental conflicts, their separation, sudden death of parent, financial problems, broken families and so on causes trouble to students which makes them to experience stress.

**Exam Stress:** The word 'exam' itself instills an alarm in every student's life. During exam time the students are depressed by academic environment including the allocation, scheduled time table and, exam timings (Busari, 2014). During exam, the students are experiencing nervousness, headache, tension, anxiety, sweating hands and, trembling. To perform well in

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the examination/test, and to finish it on time can create high level of stress in students (Busari, 2014). Students giving their X and XII standard board exams are more stressed in this regard, because of the significance of marks associated with further placement. Further, students giving competitive exams experience stress during preparation as well.

**Stress from Peer group:** It is obvious to get peer pressure during school days. The possible stressors arising out of peer pressures are bullying, lying, cheating, stealing, compelling to substance use, copying and so on. Busari, (2014) observed that the student can get misunderstand/fight with indiscipline students, conflict between classmates and competition between the fellow groups that affect their relationship. Also, Khan, Altaf and Kausar (2013) discussed that gathering with new friends or peer groups can make hesitation to talk, unhealthy competition and unfair in mutual relationships.

**Stress from Schools:** Stressors arising out of the learning environment is common that lead to academic stress in students. Stressors like poor infrastructural facilities, inadequate teachers (teacher-student ratio) in the school, lack or no extra-curricular activities, Students will get body pain due to physical stress including small place to sit, not able to see the black board due to poor ventilation (Ekpenyong, Daniel and Aribio, 2013). Also, students' feel stressed due to lack of school support for their study.

From the above academic stressors, the investigators refer academic stress as a stress causing both physical and psychological strain in 'secondary grade students' owing to self-inflicted pressure; unrealistic academic expectations/demands of teachers and parents; examinations; stressors arising out of peer pressure and; stressors from school environment.

In this present study, 'secondary grade student' refer to the students studying in IX and X standard belonging to the state (TN) and central board (CBSE) in the Chennai (South) city of Tamil Nadu state. Further their age group ranges between 14 to 16 years.

The above discussed stressors makes the students to experience academic stress. However, the effect of the stress experienced varies from student to student depending on their individual differences and the access of support system by the students. The individual differences range from the student's attitude, tolerance level to optimistic behavior of students. The support system includes counselling service from parents and schools to peer support. The individual's ability and supportive systems help the students to view /experience stress as positive for their learning and development. However, in case of pessimistic behavior and lack of external support makes the students to experience distress. This distress in students lead them to experience health related disorders that ranges from simple headache to suicidal tendency. The below section of this paper discusses the consequences of academic stress in students.

### *Consequences of Academic Stress in Students*

Pascoe et al (2019) in their review observed that academic stress in students negatively affect not only their learning, academic performance, education and employment, but also it affects their physical and mental health; quality and quantity of sleep and; with disorders causing out of substance use. Similarly, Casey, Jones, Levita, Libby and others (2010) discussed that the adolescence experiencing intense stress frequently undergo emotional disorders, suicide and death owing to accident. In an extensive review made by Pascoe and team in 2019 reported the study results that highlights the link between academic stress and: mental health, substance use, sleep, physical health, dropout rate and academic achievement.

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The students experiencing academic stress will be having poor mental health with depressed attitude and frustration. This poor mental health leads the students to involve in using substance that causes sleep disorders and physical ailments. In case of physical health, academic-related stress in students can contribute to non-communicable diseases, including metabolic syndrome, obesity and reduced insulin sensitivity, resulting from unhealthy lifestyle habits and stress system dys-regulation. Further, the students suffering from sleep and physical problems will perform poor in academics and secure lower grades and sometime discontinue schooling. All these issues are interrelated and act as a cause-effect factors to each other (Pascoe, et al., 2019)

### *Influence of Independent variables on Academic Stress*

Research results by Sagar and Singh (2017) reveals that gender has influenced students' academic stress scores. Male students experience more stress than their female counterparts. Contrary to this study, Pascoe et al (2019); Deb, Strod and Sun, (2015); Khan, et al (2013); Ekpenyong, et al (2013); Vriendt, Clays, Moreno, Bergman, Vicente-Rodriguez, Nagy and Henauw (2011); Sonali, (2016) in their review reported that females experience more academic stress than their male counterparts. Similarly, Singh and Upadhyay (2008) found that female students perceived more academic stress in comparison to their male counterpart. Further, Hussain Kumar and Husain (2008) and Razia (2016) observed that academic stress was significantly higher among the private schools' students than government school students.

Deb, Strod and Sun (2015), Ekpenyong, et al (2013) found that the variable 'age' has influenced academic stress, where the students belonging to higher secondary grades experience high level of stress than the high school students. Whereas, Khan, et al. (2013) in their review reported that the young experience at high level of stress than their older counterparts. Ekpenyong, et al (2013) exposes that academic stress was significantly higher among the nuclear family than the student from the joint family.

The investigators explored the studies conducted by Menaga and Chandrasekaran (2013); Hussain, Kumar & Husain (2008); Deb, et al. (2015); Sonali (2016); Sagar and Singh (2017) and Bartwal and Raj (2014) on academic stress of school students. Further analysis of these studies reveals that there are only few studies that explored academic stress in secondary school students. Also, the investigators found no direct studies on academic stress of secondary grade students in Chennai city. This study is an attempt in this direction exploring six stressors extensively that causes academic stress.

### *Objectives of the Study*

Based on the above discussion and review, the following objectives are framed.

1. To identify the number and percentage of secondary grade students with low, moderate and high level of academic stress.
2. To identify the mean scores and level of secondary grade students with low, moderate and high level of academic stress.
3. To find out the significant difference, if any in the academic stress of secondary grade students studying in the schools of Chennai (South) city due to variations in their gender, age, type of family and number of siblings in their home.

### *Hypothesis*

There is a significant difference in the academic stress of the secondary grade students studying in the schools of Chennai (South) due to variation in their gender, age, family type and number of siblings in their home.

## METHODOLOGY

**Method:** The study aimed to investigate the academic stress levels among secondary grade students using survey method.

### *Locale and Sample*

The study was carried out with 200 secondary grade students finally 111 students were answered properly. So, the investigator selected 111 students consisting of 57 boys and 54 girls' students, whose are IX and X standard studying from Chennai (South) city, India. The sample was selected by using simple random sampling technique. The distribution of the participants by age and gender is given below,

### *Research Tool Used*

For the purpose of study, the investigators developed Academic Stress Scale with 46 statements assessing six dimensions (Self-inflicted / Personal Stress (AS1), Stress from Teachers (AS2), Stress from Parents (AS3), Exam Stress (AS4), Stress from Peer (AS5) and Stress from School (AS6) of Academic Stress. Each statement in this scale was rated with five gradations namely strongly agree, agree, neutral, disagree and strongly disagree having the score of 5, 4, 3, 2 and 1 respectively. The reliability of the Academic Stress Scale (0.89) was established using Cronbach alpha formula. The content validity, face validity and intrinsic validity (0.78) have been established for the developed tools. The sample consisted of 111 secondary grade students studying in the schools at Chennai (South) city selected using simple random sampling technique. The data were collected from the sample by using the Academic Stress Scale.

### *Statistical techniques*

The collected data was analysed using statistical techniques like percentage, mean, SD, Mean  $\pm$ 1SD, t/F test/value by using SPSS package 22 version.

## RESULT AND DISCUSSION

To know the number and percentage of secondary grade students falling under low, moderate and high level of academic stress, Mean and SD of the academic stress scores have been calculated for each students sample wise. By using mean  $\pm$  1 SD, the academic stress scores of secondary grade students have been divided into three levels (i.e) low, moderate and high. Accordingly, the students having academic stress scores of 3.53 and above are categorized as high, 2.48 to 3.52 are moderate and 2.47 and below are categorized as low.

**Table No. 1 Number and Percentage of Secondary grade students in the Chennai (South) School with Low, Moderate and High level of Academic Stress**

Academic Stress Dimensions	Number and Percentage of Secondary grade students with Low, Moderate and High Levels of the Academic Stress		
	Low	Moderate	High
<b>Self-inflicted/ Personal Stress (AS1)</b>	20 (18)	63 (56.8)	28 (25.2)
<b>Stress from Teachers (AS2)</b>	25 (22.5)	56 (50.4)	30 (27)
<b>Stress from Parents (AS3)</b>	19 (17.1)	62 (55.8)	30 (27)
<b>Exam Stress (AS4)</b>	42 (37.8)	37 (33.3)	32 (28.8)
<b>Stress from Peer (AS5)</b>	28 (25.2)	47 (42.3)	29 (26.1)
<b>Stress from School (AS6)</b>	34 (30.6)	48 (43.2)	29 (26.1)
<b>Total Academic Stress</b>	<b>16 (14.4)</b>	<b>73 (65.7)</b>	<b>22 (19.9)</b>

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From table 1, it is observed that the majority of secondary grade students perceived to experience moderate and high level of level of AS1 (82%), AS2 (77.4%), AS3 (82.8%), AS4 (62.1%), AS5 (68.4%) and AS6 (69.3%). Of all the stressors, stress from self and parents caused moderate level of stress to the majority of students (57 % and 56 % respectively). Overall, 65.7 percent of students' experiences moderate level of academic stress and 20 percent of students undergo high level of academic stress and only 14 percent of students are with low level of academic stress.

The above findings are in agreement with the results of D'Souza (2016), where the majority of class X standard students possessed moderate and high level of Academic Stress. From the above, it is inferred that around 86 percent of the students encompass moderate to high level of academic stress. This trend indicates that there is a need to look into the stress management strategies possessed by the secondary grade students which is essential to overcome the long and short term disorders aroused due to stress.

The Mean scores and level of academic stress and its dimensions among secondary grade students are tabulated in Table 2.

**Table No 2: Mean Scores and level of Academic Stress of Secondary grade Students**

Academic Stress Dimension	Mean Score	Level
Self-inflicted/Personal Stress (AS1)	3.00	Moderate
Stress from Teachers (AS2)	3.00	Moderate
Stress from Parents (AS3)	3.06	Moderate
Exam Stress (AS4)	2.91	Low
Stress from Peer (AS5)	3.08	High
Stress from School (AS6)	2.93	Moderate
<b>Total Academic Stress</b>	<b>3.00</b>	<b>Moderate</b>

Low : Mean scores below 2.92  
 Moderate : Mean scores from 2.93 to 3.07  
 High : Mean scores above 3.08

From table 2, it can be understood that the secondary grade students experience moderate level of academic stress due to stressors caused by Self-inflicted / Personal Stress (3.00), Stress from Teachers (3.00), Stress from Parents (3.06), Stress from School (2.93) and total academic stress (3.00) as their mean scores falls between 2.93 and 3.07. Surprisingly, students experience low level of stress owing to stressors arising out of examinations, as their mean scores fall below 2.91. This may be because of the initiative and care taken by the Govt., of Tamil Nadu to give extra time during exams and reduced the maximum marks from 100 to 80.

Unfortunately, secondary grade students experience high level (M=3.08) of academic stress due to stressors from peer group. This indicates that the peer influence is dominating the students in their academics. This may also because of the students spending maximum time with their peer group and so face stress from peer group pressures.

**Table No. 3 Influence of Demographic Variable on Academic Stress of Secondary grade Student**

Demographic Variable	Academic Stress				
	Types	N	Mean	Standard Deviation	t test/F value
Gender	Male	57	3.09	0.52	1.46 <sup>@</sup>
	Female	54	2.94	0.53	
Age	14 years	38	2.98	0.55	0.40 <sup>@</sup>
	15 years	40	3.08	0.45	
	16 years	33	2.99	0.60	
Type of Family	Nuclear Family	61	2.95	0.52	1.57 <sup>@</sup>
	Joint Family	50	3.11	0.53	
Number of Siblings in their home	Single	34	2.82	0.51	4.16 <sup>**</sup>
	1 sibling	61	3.14	0.52	
	2 siblings	16	2.97	0.53	

**\*\* Significant at the level 0.01 level; <sup>@</sup> not significant at 0.05 level**

Table 3 clearly reveals that t/F values of gender (**1.46**), age (**0.40**) and types of family (**1.57**) with respect to the academic stress of secondary grade students studying in the Chennai city are not significant at 0.05 levels demonstrating the non-influence of these variables on students’ academic stress. A similar trend was observed from the results of Deb, Strod and Sun, (2015); Ekpenyong, et al (2013) where the variables gender and age, while other researchers like Bartwal and Raj (2014); Khan, et al (2013); Sonali, (2016); Vriendt, et al (2011); where the variables gender of the secondary grade students had not significantly influenced their Academic Stress.

Contrary to the above, the F value with regard to number of siblings (**F=4.16**) are significant at 0.01 levels indicating the influence of ‘age’ on the academic stress of the secondary grade students. Hence the formulated hypothesis ‘*there is a significant difference in the Academic Stress of the secondary grade students studying in the Chennai (South) schools due to variation in their gender, age, family type and number of siblings in their home*’ is accepted with respect to the variable of ‘number of sibling in their home’ only. Further, the Mean values show that the students having one sibling possess higher level of academic stress (M=3.71) than their counterparts with two siblings (M=2.99), followed by being single (M=2.82).

## CONCLUSION

Around 86 % of students’ experiences moderate and high level of academic stress, so there is a need for training them in stress management strategies. Among the various stress management strategies, emotional intelligence training can be given to the secondary grade students to keep them out of stress. Along with this training, there is a need to develop supportive system to these students. The support from peer group, teachers and parents can be extended to the secondary grade students to seek help and share their problems.

Further, the results reveal that majority of students’ experiences moderate level of academic stress owing to self and parental influence. This makes us to think to develop the intrapersonal skills in secondary grade students, which helps them to realize their abilities and increases their confidence. Teachers can assess the student’s strengths and weaknesses by providing adequate feedback. This helps the students to set realistic goals and face any

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challenges related to their academics. Also, the intrapersonal skills in students help them to evaluate themselves and motivate them to act accordingly. The stressors that arouse out of parental influence should also be taken care by sensitizing them and making them to expect what their children are capable rather than comparing with siblings and peer group. Sonali (2016) proposed that parents should understand the level of their child, and should not expect more and compare with other children. Also, conflicts between parents and financial problems should be dealt wisely by the cooperation of both the parents. However, appropriate support system should be extended from the parents' side to the students in their academics.

Further, the stressors arising from peer group has to be checked periodically to curtail the pressures from peer group like disturbances made by the peers while learning and during exam, comparisons done by student with their peer group on grading, jealousy behaviours of the peer group, unhealthy competition among the peer group and substance use by the peers. Teachers can play a significant role in curtailing stressors arising from peer pressure. Also, teachers should enhance interpersonal skills in these students so that they know to work in groups, value the importance of partnership and strengthen their relationship with the peer groups. In addition, the school management should assess the actual need of the students periodically and provide them with essential support. Further, extracurricular activities can be organized to make the students to feel relaxed.

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### **Conflict of Interest**

The author(s) declared no conflict of interest.

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