www.ignited.in

Academic Stress, Family Environment and Music at Adolescent Stage

Mr. Rupesh Kumar*

Research Scholar, Department of Design and Fine Arts, Panjab University, Chandigarh

DOI: 10.29070/15/57866

Abstract – The relationship between music and reduction in other forms of stress, especially academic stress among adolescents, remains unclear by many types of research on the stress levels. The present study was descriptive in nature. For the current study, the survey method was used. The difference in Academic stress and Family environment of music and non-music students were studied. The data was also used to find out the relationship between academic stress and family environment variables. The purpose of this research is to see the relationship between family environment and academic stress among music and non-music students. In the present study, the sample was comprised of 100 students including 50 boys (25 music students and 25 non-music students) and 50 girls (25 music students and 25 non-music students) of government schools of Chandigarh. In order to see the Academic stress and family environment of XI class adolescents of Chandigarh. For analyzing the data correlation and t-test was used. The results revealed there is a negative correlation between Academic stress and Family Environment. So it can be said that the family environment has a significant relationship with academic stress. On the other hand, there is a significant difference between music and non-music students as well as among boys and girls at the stage of an adolescent on the variable Academic stress.

Keywords: Academic Stress, Family Environment, Adolescents, Music Students, Non-Music Students, Boys, Girls.

-----X-----X------X

INTRODUCTION

Adolescence is a time of rapid biological change, personal development, social interactions, social expectations, and peer influence. This is the time when students feel stress. They are very stressful in this period of age, which affects all aspects of life. Adolescence has been defined in a number of ways from different points of view, as a period of physical development, a chronological age span or a sociological phenomenon. The term adolescence which comes from "grow into maturity" in this sense, is a process rather than a period, a process of achieving the desirable growth, attitudes, beliefs and methods for effective participation in society as the emerging adult and the psychology of the adolescent who is no longer a child, but not yet an adult, is important in the study of human behaviour (Devdas, Rajammal & Java, 1984).

Academic stress means education related stresses it can be in every situation otherwise feel stress. Academic stress is the main sources of stress faced by young people. Some students often feel high academic burden fewer contentment related their scholastic achievement. And had a high outer saddle

to study, and may suffer more educational stress. Whereas the family environment is an environment which involves the circumstances and social climate conditions within families.

Music is recognized as a basic and unique way of knowing and also as a way of enhancing the development of other, related to help students function more effectively in the broad world of music through interaction with a variety of music from all times and cultures.

ACADEMIC STRESS

Academic stress is one of the important stresses among adolescents and is a cause for great concern for the educationists worldwide. According to Gupta and Khan (1987), academic stress essentially relates to mental distress associated with some anticipated frustration on account of academic failure or even a realization of the possibility of such a failure. Academic stress is a type of stress that arises due to academic factors such as heavy school schedule, unrealistic expectation and demands of parents and teachers, low academic performance, poor study

habits and not having enough time to deal with school's multiple priorities (Bancriee, 2011).

Academic stress does not necessarily begin in college. The nervous breakdowns, panic attacks, burnouts and depressions are also common among many young students. The situation does not remain the same for everybody, and everyone does not experience the same feelings or gloomy thoughts when they are under stress. At this point of time, apart from dealing with the physical and socioemotional changes, the adolescents have to fulfil the expectation their of parents, build their career and complete school, in which they might fail and thereby have a negative impact on himself. The family is considered to be the first school for the child and is a source of expectations whereby the parents' play a vital role in their children's academic achievements.

FAMILY ENVIRONMENT

Family as a primary institution has survived through ages but has changed drastically over the years in its structure, functions and characteristics, especially in India. This change in Indian family set-up can be attributed to economic factors (industrialization, urbanization, mobility) or cultural factors (growth of democratic ideals, a decline of religious orthodoxy etc.)

Adolescents express themselves better when their parents were warm and more involved in their children's lives. A warm cohesive family with a low level of interpersonal conflicts does a better job of meeting children's physical and psychological needs than families characterized by high levels of conflict and disengagement from each other.

Family environment influences adolescent's psychological adjustment to a large extent (Jewell & Stark, 2003. Since each family is made up of different individuals in a different setting, each family environment is unique. The environments can differ in many ways.

Newman and Newman (1981) defined family environment is the first and perhaps the most enduring context of personality development of the child.

The family is a primary socialization unit and is, therefore, considered to be a very important factor influencing the development of a child (Ozcinar, 2006).

BACKGROUND OF THE STUDY

The term academic stress has come into wide use in behaviour study only within the past two decades. But in this relatively short time, it has all but pre-tempted a field previously shared by a number of other concepts like anxiety, frustration, conflicts etc. Literature on academic stress is extensive and some findings have shown that music with stress in college students and have found beneficial emotional responses, such as decreased levels of stress, associated with the music conditions, which involved listening to music as opposed to sitting in silence (Bryant & Shimmins, 2003; Hirokawa & Ohira, 2003; Gadzella, 2006; & Labbé et al., 2007). But Giomi and Eugenia (2004) who studied the effects of three years of piano instruction based on a sample of 117 fourthgrade children attending public schools in Montreal found that piano instruction had a positive effect on children's self-esteem and school music marks but did not affect their academic achievement in subject's like math and language. In contradictory results Rastogi and Silver (2014) revealed that music was not found to be associated with decreased stress in academic settings; it is possible that it might be distracting in the study environment. Instead, they found that time spent listening to music was associated with higher levels of stress in high school students.

Deo (2004) and Harsha (2017) found that male students had encountered maximum stress. The literature on academic stress showed that girls usually score higher on the level of academic frustration then boys (Gadzella, 2006; & Kaur & Sharma, 2014). On the other hand, Sonali (2016) finding revealed that no significant difference exists in the academic stress of students in relation to gender.

Many researchers have attributed positive school and academic outcomes (in education and music) to parental involvement and a positive educational family environment.

Zdzinski (2001), Barnes, DeFreitas and Grego (2015) revealed that there is a consensus that a positive home environment is related to musical success at elementary levels. Baratha (1997) found that girls are better adjusted in a home environment than boys. While Harsha (2017) who conducted a study on the family environment and academic stress among adolescents revealed that there is no gender difference in the variable family environment. Aydin and Oztutuncu (2001), Rao (2008) explored that negative relationship showed adolescents having high academic stress will have the poor family environment and vice-versa. Whereas Pappattu and Vanitha (2017) concluded that there doesn't exist any relationship between family environment factors and achievement in a subject like science skills among secondary school students.

The current study is designed to know the relationships between academic stress and family environment because it can be said people of all ages are affected by stress and anxiety. Stress can exist when working at a fast pace, doing difficult problems, or listening to someone shout at you. Academic stress is inevitable in any educational institution. In optimal limits, it mobilizes the

potentialities of the students to perform more effectively. However, increasing amounts of academic stress for prolonged periods may create over-whelming frustration and anxiety in the students which may in turn adversely affect their morale, academic achievement, mental health, study habits social competence and family environment. Family environment is a complex of the social and cultural condition, the combination of external and extrinsic physical conditions that affects and influences on the growth and development of the members of the family group which includes parents and their children.

AIMS OF THE STUDY

The following are the objectives of the study:

- To study the correlation between Academic stress and Family environment of adolescents of government senior secondary school.
- 2. To study the Academic stress between music and non-music students of government senior secondary school.
- 3. To study the Family environment between music and non-music students of government senior secondary school.
- To study the Academic stress of adolescent boys and girls of government senior secondary school.
- 5. To study the Family environment of adolescent boys and girls of government senior secondary school.

HYPOTHESES

For the purpose of the present study following hypotheses have been formulated

- There will be no correlation between Academic stress and Family environment of adolescents of government senior secondary school.
- 2. There will be no significant difference in Academic stress of music and non-music students of government senior secondary school.
- There will be no significant difference in the Family environment of music and non-music students of government senior secondary school.
- 4. There will be no significant difference in Academic stress of adolescent boys and girls of government senior secondary school.

 There will be no significant difference in the Family environment of adolescent boys and girls of government senior secondary school.

METHOD AND PROCEDURE

The present study was descriptive in nature. For the current study, the survey method was used. The difference in Academic stress and Family environment of music and non-music students were studied. The data was also used to find out the relationship between academic stress and family environment variables. Standardized tools were used for data collection of the sample, but the present study was delimited to the 100 adolescents of Govt. Senior Secondary Schools of Chandigarh.

The population of the study consisted of all the govt. senior secondary schools of Chandigarh with music subject. The sample was selected randomly. The present study sample consists of 100 students from Govt. schools of Chandigarh. 50 boys (25 music students and 25 non-music students) and 50 girls (25 music students and 25 non-music students) are included in the sample. In the present study Battery of stress scales, Bisht (1987) and Family environment scale by Vohra (1997) were used. Data collection was made by using a standardized scale. Prior permission of the principals was taken from the government senior secondary schools to conduct the study. After taking permission from the school principal class XI teachers were approached and the strength of each class was considered. Sample school was selected randomly and the students were approached and taken for the data collection. Data were collected from 100 students out of which 50 boys and 50 girls, with music and non-music background.

ANALYSIS AND INTERPRETATION OF THE RESULTS

Table No-1

Mean, Median, Standard Deviation, Skewness and Kurtosis on the variable of Academic Stress and Family Environment

	Academic Stress	Family Environment
N	100	100
Mean	223.40	62.5300
Median	218.00	64.0000
Std. Deviation	25.511	11.605
Skewness	0.506	-0.516
Std. Error of Skewness	0.241	0.241
Kurtosis	-0.734	-0.521
Std. Error of Kurtosis	0.478	0.478

Hypothesis 1 "There will be no correlation between Academic stress and Family environment of adolescents of government senior secondary school".

Table No-2

The coefficient of Correlation for Academic Stress and Family Environment of adolescents

Variable	N	Coefficient of Correlation	Level of Significance
Academic Stress	100	-0.809**	0.01 level of Significance
Family Environment			

^{**} Correlation is significant at the 0.01 level (2-tailed).

Table no 2 is showing the relationship between academic stress and family environment (total sample) is significant and negative in nature. Negative relationship showed adolescents having high academic stress will have the poor family environment and vice-versa. The findings of the present study are supported by Aydin and Oztutuncu (2001), Rao (2008). Auerbach and Grambling (1998) argue that stress can leads to serious problems if it is not managed effectively. Moreover, when a person is exposed to chronic stress, she or he is likely to experience both physical illness and mental illness. In the present study, academic stress was found to be negatively correlated with a family environment. So the null hypothesis, "There will be no correlation between Academic stress and Family environment of adolescents of government senior secondary school" is rejected. Thus it may be inferred that parental involvement, communication, time spent, awareness and emotional support with children could be the cause of this significant relationship between academic stress and family environment among adolescents.

Hypothesis 2 "There will be no significant difference in Academic stress of music and non-music students of government senior secondary school".

Hypothesis 3 "There will be no significant difference in the Family environment of music and non-music adolescents of government senior secondary school".

Table No 3

Academic Stress and Family Environment of Music and Non-Music Students

	Group	N	Mean	Std. Deviation	Std. Error Mean	t-ratio
	Music	50	204.30	11.54627	1.63289	11.310**
Academic Stress	Non-music	50	242.50	20.90723	2.95673	Significant
Family Environment	Music	50	70.28	6.66713		8.962**
	Non-music	50	54.78	10.25251	1.44992	Significant

^{**} t-test significant at the 0.01 level (2-tailed).

Table 3 shows the score of a music student's on the variable is 204.30 whereas for non-music student's it is 242.50. The score of a music student's on the variable Family environment is 70.28 whereas for non-music student's it is 54.78. The t-ratio for differences between the means is significant at 0.01 level of significance. Hence the null hypothesis "There will be no significant difference in Academic stress of music and non-music students of government senior secondary school" and "There will be no significant difference in the Family environment of music and non-music adolescents of government senior secondary school" are rejected. Alternately it can be said that non-music students have more academic stress and poor family environment than music students. So it can be said music helps students in decreasing stress. Results of the study also supported by Zdzinski (2001) Bryant and Shimmins (2003), Hirokawa and Ohira, (2003), Gadzella (2006) and Labbé et al., (2007).

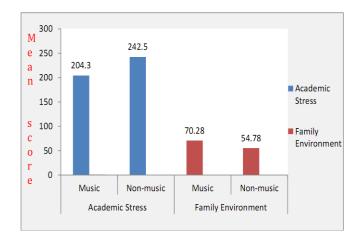


Figure 1: Showing difference in mean scores of Academic Stress and Family Environment of Music and Non-Music students

It is apparent from figure 1 which indicates that music students differ significantly than non-music students

in their academic stress as well as in the family environment.

Hypothesis 4 "There will be no significant difference in Academic stress of adolescent's boys and girls of government senior secondary school".

Hypothesis 5 "There will be no significant difference in the Family environment of adolescent boys and girls of government senior secondary school".

Academic Stress and Family Environment of Boys and Girls

Table No. 4

	Gender	N	Mean	Std. Deviation	Std. Error Mean	t-ratio
Academic Stress	Boys	50	230.78	27.02175	3.82145	3.008**
	Girls	50	216.02	21.76262	3.07770	Significant
Family Environment	Boys	50	60.8600	11.35694	1.60611	1.447
	Girls	50	64.2000	11.72473	1.65813	Not Significant

^{**} t-test significant at the 0.01 level (2-tailed).

Table 4 shows the mean score of adolescent boys on the variable academic stress is 230.78 whereas adolescent girls score is 216.02. The t-ratio for differences between the means is significant at 0.01 level of significance. Hence the null hypothesis "There will be no significant difference in Academic stress of adolescents boys and girls of government senior secondary school" is rejected. Alternately it can be said that boys have more academic stress than girls. The results are supported by Deo (2004) and Harsha (2017) who found a significant difference between the scores of adolescent boys and girls regarding academic stress. The mean difference boys and girls, boys showed the comparatively increased level of academic stress than girls. While the mean score of boys on the variable family environment is 60.86 and for girls, it is 64.20. The t-ratio for differences between the means is not significant. Hence the null hypothesis "There will be no significant difference in the Family environment of adolescents boys and girls of government senior secondary school" is accepted. So it can be said adolescent's boys and girls have no difference in their family environment. The results are also supported by Harsha (2017) who found that there is no gender difference in the variable family environment.

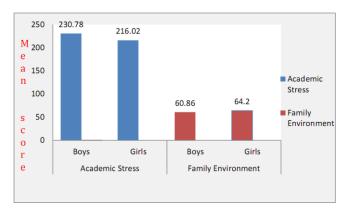


Figure 2: Showing difference in mean scores of Academic Stress and Family Environment of Boys and Girls adolescent

It is apparent from figure 2 which indicates that adolescent boys have more academic stress than adolescent girls. This finding is opposite to the result of Gadzella (2006), Kaur and Shrama (2014) who revealed that girls exhibited a higher level of academic frustration then boys. This shows that boys differ significantly than girls in their academic stress. Whereas on the variable family environment both adolescent boys and girls have the healthy family environment. In other words, this shows that boys and girls do not differ significantly in their family environment

RESULTS AND CONCLUSION

At last, it can be inferred from the results of the study that there can be a significant relationship between family environment and academic stress. The results as supported by Aydin and Oztutuncu (2001) and Rao (2008). The family plays a most important role in academic stress. In a study, it was found that Indian children from non-disrupted families have higher academic stress than children from disrupted families (Sonali, 2016). Which means adolescent's having poor family environment will have high academic stress and vice-versa. And also non-music students have more academic stress than music students.

REFERENCES

Auerbach, M.S., & Grambling S.E.,(1998). Stress Management Psychological Foundations U.S. A: Prentice- Hall, Inc.

Aydin, B., & Oztutuncu, F. (2001). Examination of adolescents' negative thoughts, depressive mood and family environment. *Adolescence*, 56(141), pp. 77-83. Retrieved May 2 2013, from http:// www.nebi.Nlm.nih.gov/pubmed / 11407637

Banerjee, S. (2011). Effect of various counseling strategies on academic stress of secondary level students. Unpublished Ph.D. thesis. Panjab University, Chandigarh.

- Baratha (1997). Home adjustment of adolescents. Indian Psychological Review, NCERT, New Delhi, 31, pp. 159-161.
- Barnes, V. G., DeFreitas, A. & Grego, J. (2015). Parental involvement and home environment in music: Current and former students from selected community music programs in Brazil and the United States. *International Journal of Music Education*, 34 (2), pp. 208 218.
- Bisht (1987). *Bisht Battery of stress scale*. National Psychological Corporation, Old Kachere Ghat, Agra.
- Bryant-Jones, M., Shimmins, K., & Vega, J. (2003).

 Increasing Math Achievement through use of
 Music (Unpublished Master's Thesis), St.
 Xavier University: Chicago, IL.
- Deo, A. K. (2004). Type a behaviour pattern and stress among twelfth standard students. *Indian Educational Abstracts, 4*(2). Retrieved on August 14, 2018, from http://shodhganga.inflibnet.ac.in/bitstream/10 603/39984/8/08_chapter%202.pdf?qt1m4dc=
- Devdas, P., Rajammal & Jaya, N. (1984). *A Textbook on Child Development*. McMillan Publishers, India, New Delhi, 147.
- Gadzella, B. M. (2006). Stress Differences Among University Female Students. *American Journal of Psychology Research*, 2(2). Retrieved on May 10, 2017 from http://ashadalikhan.blogspot.in/2012/08/comp arative-study-of-academic-stress.html
- Giomi, C., & Eugenia (2004). Effects of three years of piano instruction on children's academic achievement, school performance and self-esteem. *Psychology-of-Music.* 32 (2), pp. 139-152
- Gupta, K., & Khan, B. N. (1987). Anxiety level as factor in concept formation. *Psychological Reports*, *31*(3), pp. 187-192.
- Harsha P. P. (2017). Family Environment and Academic Stress as Predictors of Depression in Adolescents (M. Phill Dissertation, Sikkim University, India) retrieved on September 20, 2017 from http://14.139.206.50:8080/jspui/bitstream/1/5 505/1/Harsha%20P.P%20-Psychology.pdf
- Hirokawa, E., & Ohira, H. (2003). The effects of music listening after a stressful task on immune functions, neuroendocrine responses, and emotional states in college students. *Journal of Music Therapy, 40*(3), pp. 189–211.

- Jewell, J.D., & Stark, K.D. 2003. Comparing the family environments of adolescents with conduct disorder or depression. *Journal of Child Fam Stud 12*, pp. 77-89.
- Kaur, S. & Sharma, V. (2014). Depression among adolescents in relation to their academic stress. *Indian Journal of Applied Research* 4(5), pp. 183-185.
- Labbé, E., Schmidt, N., Babin, J., & Pharr, M. (2007).Coping with Stress: The Effectiveness of Different Types of Music. *Applied Psychophysiology and Biofeedback, 32*(3-4), pp. 163– 168.doi:10.1007/s10484-007-9043-9
- Newman, B. M., & Newman, P. R. (1981). *Understanding adulthood.* New York: Holt Rinehart and Winston.
- Ozcinar, Z. 2006. The instructional communicative qualification of parents with students. *Cypriot J. Edu. Sci., 1,* pp. 24-30
- Pappattu., J. & Vanitha., J. (2017). A study on family environment and its effect on academic achievement in science among secondary school students. *International Journal of Research Granthaalayah*, *5*(6), pp. 428-436.
- Rao, A. S. (2008). Academic stress and adolescent distress: The experiences of 12th standard students in Chennai, India (Ph.D. dissertation, Graduate College University of Arizona). Retrieved August 23, 2017 from http://arizona.openrepository.eom/arizona/bitstrea m/10150/194424/1/azuetd 2943 sipl m.pdf
- Rastogi, R. & Silver, E. (2014). Association of Music with Stress, Test Anxiety, and Test Grades among High School Students. *Journal of Young Investigators*, 26 (5), pp. 32-38.
- Sonali, S. (2016). Impact of Academic Stress among Adolescents in Relation to Gender, Class and Type of School Organization. *International Journal of Applied Research* 2(8), pp. 317-322.
- Vohra, S. (1997). Family Environment Scale. New Delhi: M/s PSY-COM Services.
- Zdzinski, S. F. (2001). Relationships among parental involvement, selected student attributes, and learning outcomes in instrumental music. *Journal of Research in Music Education*, 44(1), pp. 34-38.