



Adolescents Stress and Its Effects on Their Academic Performance Among School Going Children

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ABSTRACT

A study to assess the stress and its effects on their academic performance among adolescents in selected schools, Puducherry. A descriptive study was conducted and the objective of the study were to assess the level of stress and to identify common factors leading to stress among adolescents, to identify the association between demographic variables and stress, to find out the impact of stress on their academic performance, to prepare a module to reduce the stress level among adolescents. With assumption "Adolescent students will have stress" and the investigator proceeded on with the study. The study was conducted at various Government Higher Secondary Schools in and around Puducherry. Convenience sampling technique was used to obtain sample. The sample comprised of 500 adolescent students from eighth, ninth and tenth standard (boys and girls) of Government Higher Secondary Schools during the study period. The tool which was used for the study was Modified adolescent adjustment scale. The major findings of the study are many of the students were girls 69.6% (348). Majority of parents were unskilled workers 96.0% (480). 80.0% (400) student's parent income was above 2000 per month. 50.6% (253) of the student belongs rural area and 49.4% (247) were belongs to urban area. The overall stress score among adolescent school children was 58.63%. 56.0% (280) had moderate level of stress. The adolescent students had more stress score in school and teacher related than other aspects of stress i.e., 72.88% and 62.50% respectively.

The overall stress score among adolescent school children was 58.63%. 56.0% (280) had moderate level of stress. The adolescent students had more stress score in school and teacher related than other aspects of stress i.e., 72.88% and 62.50% respectively.

Correlation between stress and academic performance showed significant, negative correlation. Correlation between stress and academic performance 1, 2, and 3 (three consecutive test marks) showed the r value of -0.22, -0.34 and 0.42 respectively ($P=0.001$). This study revealed that the student who was under stress had a low performance in academic activities and this lead to stress related problems. Since, the nurses holding pivotal role in the health-care delivery system, it is needless to say that they can actively take part in alleviating stress of school children that will facilitate them to bring academic performance and to avoid stress related problems.

KEYWORDS : Stress, Factors leading to stress, Academic Performance.

INTRODUCTION

People started living with maximum facilities, with minimum strain. So life is too mechanical and people are subjected to a high degree of stress that predisposes them to many problems.

Adolescents as an age group usually tend to be subsumed under the categories of either youth or children.

Adolescents are generally perceived as a homogeneous group, yet they can be stratified on the basis of gender, caste, class, geographical location (urban/rural) and religion. They also include a whole gamut of categories school and non-school going, drop-outs, sexually-exploited children, working adolescent, both paid and unpaid, unmarried adolescents as well as married males and females with experience of motherhood and fatherhood.

One of the main developmental tasks of adolescence is the formation of identity. The identity encompasses physical appearance, feelings about self and sexuality, cognition and the ability to communicate efficiently, social status, value system, relationship with others and independence.

BACKGROUND OF THE STUDY

Adolescence has frequently been called "the tumultuous teens". As defined by the World Health Organization, adolescence is the period between 10 and 19 years. These are the formative as well as impressionable years when the maximum amount of physical, psychological and behavioral changes take place. Adolescence is the transition from a "child" into an "adult". The "child" explores new ideas, widens his/her horizons and finally assumes greater responsibility and individual identity.

Despite the multitude of factors which can influence the development of adolescents, their mental well-being is crucial. Adolescents must learn how to cope with psychological stress, handle peer pressure, deal with their emotions, resolve conflicts, build bridges with friends and family, develop self-confidence, safeguard themselves from high pressure marketing strategies, particularly of the alcohol industry, as well as cope with other stresses like academic competition and a hankering for material gains. However, rarely are these sensitive issues addressed in schools and within families.

Hall's Theory: Adolescence as Storm and Stress

This is probably the earliest formal theory of adolescence. Hall (1904) saw adolescence as a time of 'storm and stress' (or Sturm and Drang) and there is some evidence suggesting that emotional reactions are more intense and volatile during adolescence compared with other periods of life (see Gross, 2005). However, a more important indicator of storm and stress is mental disorder.

Statement of the Problem

A study to assess stress among adolescents and its effects on their academic performance in selected schools, Puducherry.

Objectives:

1. To assess the level of stress among adolescent school-children.
2. To find out the impact of stress on their academic performance.
3. To identify the association between demographic variables and stress.
4. To know the relationship between demographic variables and academic performance.

Hypotheses:

- H₁:** There is significant relationship between stress and academic performance among adolescent school children.
- H₂:** There is a significant impact of demographic variables on the academic performance of adolescence school children

METHODOLOGY

A descriptive and exploratory design was selected. The independent variables used for the study and stress of adolescent students. The dependent variable was academic performance of the adolescent students. The setting selected for this study was Government higher secondary schools of Puducherry.

The sample consists of 500 adolescent students between the age group between 13 to 17 years, studying from eighth to tenth standard at selected Government Higher Secondary School, Puducherry. Simple random and convenience sampling technique was followed to select the sample. The tool developed for the study are questionnaire for demographic data, questionnaire to assess the level of stress that is adolescent adjustment scale.

For this scale, adjustment is defined by the authors as the individual's orientation towards his parents, peers, school and himself in terms of the satisfaction he derives from his interactional relationship with significant other and himself. This scale measures the adjustment of self towards home school, peers, teachers and general matters. It is a scale developed by the Thurstone's method of equal appearing intervals using 190 judges.

This scale consists of 40 items: home (9), School (8), teacher (8), peers (8) and general (7). For each area of adjustment a separate score is obtained. The total of 5 scores gives the score of total adjustment. In each subscale the sign should be used while adding the sum at the end. High positive scores indicate high adjustment and high negative scores indicate mild or mal-adjustment. In this study, for the purpose of accuracy the scores.

RESULTS AND DISCUSSION

A descriptive study on the assessment factor leading to stress among adolescence and its effects on their academic performance Majority of students were in the age group of below 13- 15 years i.e., 65.0% (325). Gender of students were girls i.e., 69.6% (348). 154 (30.8%) students, 37.2% (186) students and 32.0% (160) students were belongs to eighth, ninth and tenth standard respectively. 80.0% (400) of students parents income were unskilled workers. About 80.0% (400) students parents income were > Rs.2000/month. 50.6% (253) students belonged to rural area and 49.4% (247) students to urban area.

Frequency and percentage of Level of stress N=500

Level of stress	Frequency (f)	%
Low	170	34.0%
Moderate	280	56.0%
High	50	10.0%
Total	500	100%

34% of adolescent schoolchildren are low of stress score, 56.0% of them having moderate stress score and only 10% of them having high stress score level. Out of 500 students, 34.0% (170) students were in low stress level, 56.0% (280) students were in moderate stress level and, 10.0% (50) students were in high stress. This shows majority of students had moderate level of stress.

Overall stress score

Stress	No. of items	Mean ± SD	Percentage with 95% Confidence interval
Overall stress score	40	23.45 ± 3.77	58.63% (54.2%-62.3%)

Association between demographic variables and academic performance N=500

Demographic variables	Level of Academic Performance						Total	Pearson Chi square test
	Inadequate		Moderate		Adequate			
	N	%	N	%	N	%		
Age	Below 15 yrs	171	52.6%	123	37.8%	31	9.5%	χ ² =14.73 P=0.001*** significant
	15 yrs & above	61	34.8%	94	53.7%	20	11.4%	
Sex	Male	72	47.1%	61	39.9%	20	13.1%	χ ² =2.43 P=0.29 not significant
	Female	160	46.1%	156	45.0%	31	8.9%	
Std	8thStd	75	48.7%	68	44.2%	11	7.1%	χ ² =5.39 P=0.25 not significant
	9thStd	88	47.3%	73	39.2%	25	13.4%	
	10 th Std	69	43.1%	76	47.5%	15	9.4%	
Occupation	Skilled	6	30.0%	13	65.0%	1	5.0%	χ ² =4.13 P=0.14 not significant
	Unskilled	226	47.1%	204	42.5%	50	10.4%	
Income	Below (Rs.2000/M)	83	50.9%	68	41.7%	12	7.4%	χ ² =3.13 P=0.21 not significant
	Above (Rs.2000/M)	149	44.2%	149	44.2%	39	11.6%	
Place of Residence	Rural	123	48.6%	113	44.7%	17	6.7%	χ ² =6.81 P=0.03* not significant
	Urban	109	44.1%	104	42.1%	34	13.8%	

DF=2, *significant at P≤ 0.05 ** highly significant at p≤0.01 ***very high significant at P≤0.001

An average adolescent schoolchildren are having 58.63% of stress score. 95% confidence interval shows, if the study will be conducted anywhere among adolescent schoolchildren, their stress score will lie between 54.2% to 62.3%. The average stress among adolescent students were 58.63%.

Correlation between Stress score and Academic performance score 1

Correlation Between	Mean score Mean ±SD	Karl Pearson correlation coefficient	Interpretation
Stress score	42.23 ± 5.40	r = - 0.22 P=0.001***	Significant ,fair ,negative correlation between stress score and academic performance score1 It means adolescent schoolchildren stress score decreases their academic performance score increase fairly
Academic Performance score1	227.40 ± 80.05		

r=-0.22, *significant at P≤ 0.05 ** highly significant at p≤0.01 ***very high significant at P≤0.001

Correlation between stress and academic performance shows significant, negative correlation between stress and academic performance, that is when adolescent school children's stress decreases their academic performances increases fairly. Correlation between stress and academic performance 1, 2, and 3 (3 consecutive test mark) showed the r value of -0.22, -0.34 and 0.42 respectively (P=0.001). Hence the hypothesis was accepted (H₁ -There is significant relationship between stress and academic performance).

This Hypothesis also supported by the study conducted by Poonam R. Malik and Shanti Balda (2006) in this study he explain about the relationship between stress and academic achievement.

Poonam R. Malik and Shanti Balda (2006), Any relationship exists between psychological stress and academic achievement of high IQ adolescent academic achievement was assessed on the bases of average of marks obtained in last three examinations. In this study academic achievement was found to be negatively and significantly correlated with mental stress. The conclusion of this study is as follows: A person under stress needs to fight the stress in order to survive. Adolescents minds are full of apprehensions are not free to use their energy and ability in achieving. There foremost priority is to nullify the effects of stress over their mind and they have to spend major part of their energy in this task. Hence a lot of highly intelligent children who are under mental stress give poor performance in academic.

Age of children and Place of residence of children are closely associated with their level of academic performance which is significant at 0.01% and 0.3% level respectively. Hence the hypothesis was accepted in selected demographic variables such as age, and place of residence. (H_2 -There is significant impact of demographic variables on the academic performance). This Hypotheses is rejected in selected demographic variables such as sex, standard, parents occupation and income. i.e there is no significant impact of sex, standard, parents occupation and income on the academic performance.

CONCLUSION

This study revealed that the student who was under stress had a low performance in academic activities and this lead to stress related problems. Moderate level of stress is eustress which is challenging and it is essential for school going student to perform well in academic, but when analyzed the factors for stress it shows that the student were highly sensitive to stress. If the adolescent are handled properly by the teachers and parent it paves a way to come out from stress happily. Since, the nurses holding pivotal role in the health-care delivery system, it is needless to say that they can actively take part in alleviating stress of school children that will facilitate them to bring academic performance and to avoid stress related problems.

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