Research Paper

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Appraising The Stress Level of 8th Grade Students

Home Science

KEYWORDS : student stress, private school, government school.

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ABSTRACT

Students of this generation face unparalleled pressure and challenges with society's current emphasis on academic perfection. Present study was undertaken to examine the level of stress among the selected sample of 8th grade students and analyse its institution specific differences (private and government). Also the study examines the influence of the independent variables namely gender and age on the stress level and its interaction effect on the same. Institution based cross sectional research design was adopted, where in six schools (three private and three government) were identified through multistage cluster sampling and all the 8th standard students of the identified schools constitute the sample. Thus a total of 528 students were selected out of which 355 were taken from a private school and the remaining 173 from a government school. Questionnaire to elicit the general background of the selected children and checklist to assess the perceived stress level of school children was constructed and administered to the sample. Results indicated that the magnitude of stress was significantly higher among the government school students, whereas private school students were remarkably better in terms of their level of stress. The findings support the idea that all students must be tailored with stress coping mechanism for their high level of stress with special focus on government school students so that their approach to deal with stress can be changed.

INTRODUCTION

Early adolescence is considered a tumultuous developmental period due to the psychological, social, and physical changes that adolescents experience as they go through puberty and increase their independent living skills. The transition to high school requires them to interact with a new and larger peer group and manage greater academic and societal expectations (Steinberg, 2001).

Students in their teens are the ones who are going through the transitional phase, which is an intermediate of childhood and adulthood. During the teen years, a lot of biological, physical, mental and emotional changes are happening, as well as the changes in responsibility and role. In order to stabilize these changes the students are always confronted with problems and conflicts. For some students who are not capable of dealing with it, the changes will create stress and tension in them. If it is not dealt within the early stages, they may experience mental problems later (Newman, 2005).

In addition to the age normative influences students of this generation face unparalleled pressure and challenges with society's current emphasis on academic perfection. One of the most pressing challenges for students in recent times has been dealing with stress rooted in classroom expectations and onerous workloads (Panandiker, 2012). A certain amount of stress is normal and not always bad. Sometimes stress can push a child on to greater achievement. Unfortunately, children are becoming highly stressed at younger and younger ages today. Stress varies from child to child, and how much stress one can easily handle varies, too (Youngs, 1995).

Scope of the study

High school years should be a great experience, but many demands and rapid changes can make them one of the most stressful times of life. Hence this study got its root that the children of this age should be well understood by the educationists and policy makers on their perception of stress, in such a way that these students could be helped in promoting their stress management strategies and get a cooperative family and school environment. Also the study wants to examine the influence of independent variables gender, age and the type of school on their perception of stress.

Broad objective

To assess the perceived stress level of the 8th grade school children

Specific objectives

- To study the influence of the type of school on the stress level of the selected school children
- To study the influence of the student age and gender on the stress level of the selected school children

METHODOLOGY

Research Design

Institution based cross sectional design was adopted for the study.

A. Selection of the Area and Sample

Sampling for the present study was carried out in two stages namely a) selection of schools b) selection of respondents.

Selection of schools

Initially as a part of the research, 12 schools (both private and government) in and around Coimbatore with a radius of 5-15 kilometers were shortlisted from the four zones (3 schools in each zone). The criteria for the selection of schools were

- The schools should be 5-15 kilometers from the heart of the Coimbatore city.
- The schools should follow the Samacheer pattern syllabus of Tamilnadu government.
- The schools should be a higher secondary school.

The schools selected by cluster sampling had an equal representation of private and government schools. Out of these 12 schools, six schools extended their willingness and cooperation. Hence all these six schools were selected for the data collection which comprised of 3 private and 3 government schools.

Selection of respondents

The study was conducted as a preliminary study of assessing the stress levels of high school students in order to design a need based, individually tailored stress inoculation training programme in the long run. Eleven to fourteen years of age is considered to be the right time to inoculate every school child against the dreadful disease called "Stress". As the Indian educational system compels every child to undergo public exams at 10th and 12th standard for which the preparation starts during their 9th standard itself, the stress coping and its management strategies should be learnt before stepping onto the 9th grade. Hence the present study had its focus on the 8th grade students as these adolescents will be facing gung ho public exams shortly.

Therefore, the respondents for the present study comprised of the all 8th standard school children from all of the six schools selected in Stage II, accounting to 355 private school children (N_1) and 173 government school children N_2 (Total school children N= 528).

B. Construction of the tools

The present study called for the development of the following tools.

i) Questionnaire to elicit the general background of the selected children
ii) Checklist to assess the perceived stress level of school children.

This checklist had a total of 75 items. The mode of response to each of the item is in the form of a forced choice (i.e.) either 'yes' or 'no', indicating complete agreement or disagreement with the proposed statement respectively. For scoring, one mark to be provided for the response indicating the presence of stress and zero for its absence. The checklist gives the total stress score based on which the levels of stress in children are divided into low-below 25, moderate-between 25 and 50, and high-between 51 and 75.

The reliability of the tool constructed to assess the level of stress was between 0.74 and 0.83, which makes the constructed checklist fairly reliable.

C. Collection and analysis of data

Adequate data was collected from the entire population sample of all the identified six schools through the check list formulated for its purpose. The data thus collected was statistically analysed to meet out the objectives of the study, using percentages, chi-square test and two way ANOVA.

D. Result and Discussion

The study findings of the study are discussed as below.

General Background of the respondents

The different demographic characteristics of the students considered for the present study were age, gender and type of family.

As only the 8th standard students were engrossed for the study 55.3 per cent of them were in their thirteenth year, 40.9 per cent in their 14th year and only 2.8 per cent of them in their 12th year. In sum, the percentage of boys enrolled was higher than girls in both private schools 177 vs. 178 and government schools 109 vs 64. With the advent of urbanization and modernisation younger generation are turning away from the joint family form, which is also evident from the present finding. The ratio of belonging to nuclear family against joint family is 7:3.

Categorization of the selected respondents based on their stress level

Education perhaps is the most important institution upon which the future of a child depends. Children of today are facing severe stress which they find very hard to cope up with. The Table I project the categorization of the selected lot of students based on the stress level in relation to the type of school (private or government) they are enrolled into.

TABLE-I
STRESS LEVEL OF THE SELECTED CHILDREN WITH INSTITUTION SPECIFIC DIFFERENCES

		School				TOTAL	
	Government		Private		No.	%	
	No.	%	No.	%			
Stress Level	LOW (<=25)	0	0	65	18.3	65	12.3
	MODERATE (26-50)	139	80.3	229	64.5	368	69.7
	HIGH (51-75)	34	19.7	61	17.2	95	18.0
TOTAL		173	100.0	355	100.0	528	100.0
Chi-Square		36.258 **					

- The categorization of the respondents as per their level of stress, as low, moderate and high with reference to the type of school was statistically tested by computing chi-square. And it was found that 80.3 per cent of the government school students against 64.5 per cent of private schools students of a total of 69.7 per cent are moderately stressed.
- None of the government school children perceived themselves to be under low stress whereas 65 children (18.3%) of private school fall into this category.
- 19.7 per cent of the government school children suffer from severe stress against 17.2 per cent of the private school children.

These observations evidently prove that the enormity of stress among the selected middle school children was found to be high predominantly among government school students (χ^2: 36.258, df-2 and $p < .01$). Thus it can be said that the school environment and the family situation of government school might be contributing towards enhanced stress among them. Similar results were also obtained by Bohannon (2000), who investigated the impact of school related stressor on public school students and found significant correlations among them.

The statistics of the present study in relation to the overall percentage of 69.7 categorised under moderate level of stress indicates that at any point of time these children may step into the next critical category of severe stress.

As the leading motive of private schools is to prepare their students for professional courses, it was expected that the stress appraisal among these students could be high. But the present study has got a different conclusion. This might be because the students at the government school belong to poor income group where economic privation experienced by lower-class families is associated with anxiety, depression, and irritability. With those qualities may come a tendency on the part of parents to be punitive, inconsistent, authoritarian, and generally non supportive of their children. The strain of poverty may also promote the use of disciplinary approaches that take less time and effort than approaches such as reasoning and negotiating. Spanking and forms of physical punishment are quick; they may relieve frustration and they don't demand much thinking in the midst of multiple worries and stress (McLoyd, 1990). One of the key points of private education is individual attention. Students who attend private schools can be more academically challenged, exposed to clearer value systems, given greater access to teachers, and may simply feel safer than local public school options.

Influence of independent variables on the stress level of the respondents

This study also seeks to examine the relationship between the independent variables namely age and gender of the school students with the type of school as a fixed factor. The findings are presented as follows

Interaction between the student gender and the type of school on the stress mean score

Interaction between the student age and the type of school on the stress mean score

a. Interaction between the student gender and the type of school on the stress mean score

Sapna (2010) highlights that girls tend to face more stress at their preadolescent and adolescent stage. Previous nationwide studies have shown that girls are more likely to deal with stress than boys are, and also seek help more often than boys. Boys usually ignore stress and find a distraction to keep their mind off the situations. At Croatan (Skiba, 2011), these studies have been proven wrong. Random Croatan students took a survey on what they are stressed about and the data proved that boys are actually more stressed then girls are. This could be one of the reasons for the increased stress seen among girls at this age than boys. This has necessitated the need to find out if there is any significant difference between male and female school students as reflected in their perceived stress level.

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TABLE-II
INTERACTION BETWEEN THE STUDENT GENDER AND TYPE OF SCHOOL ON THE STRESS MEAN SCORE

		Stress Level						TOTAL		
		Group								
		Government			Private			Mean	S.D	No.
		Mean	S.D	No.	Mean	S.D	No.			
Student Gender	Male	44.54	7.02	109	39.90	13.42	177	41.67	11.62	286
	Female	45.16	8.46	64	34.24	11.46	178	37.12	11.77	242
TOTAL		44.77	7.57	173	37.06	12.78	355	39.59	11.89	528
Analysis of Variance for Stress Level										

Source of variation	Df	F	Sig.
Between Gender (Students)	1	21.923	**
Between schools	1	48.283	**
Interaction Gender vs School	1	8.852	**

According to Bason (1998), there are many ways in which gender shapes the classroom experience of students, starting with what boys and girls bring to school and the curriculum materials they encounter there. While analysing the influence of gender on the stress mean score of the students of government school an augmented score of 45.16 is procured by the female sample against the male represents who had scored 44.54, proving that the girls of government school are more stressed that their counterpart. Certain previous researches are also found to be consistent with the present finding Gadzella and Baloglue (2001) found that female students experience stress during changes in their life. Sinha (2003) found that there is a significant difference between the stress experienced by male and female students and the research by Mates and Alison (1992) showed that female students experience more stress when faced with problems compared to the male students.

In contrast, it is observed that private school boys obtained a mean score 39.90 which is more than their counterpart mean score of 34.24, and thus making it clear that the female students of private school are less stressed than the boys there. However analysing the overall mean score of both the institutions put together, it is found that boys reported higher level of stress with a mean score of 41.67 compared to girls who obtained a mean score 37.12. Thus it can be concluded that the overall mean stress score of girls got decreased due to the lesser contribution of scores from private girl students.

A two-way ANOVA was conducted to determine if there is a significant difference between the gender and the stress mean score, between the type of school and the stress mean score, and interaction between gender and the type of school on stress mean score. The descriptive statistics of ANOVA has shown that

- The value of F= 21.923, with df= 1 and p<0.01 shows that the gender could influence the stress perception of students.
- The value of F= 48.283 with df= 1 and p<0.01) shows that the type of school whether private or government could influence the stress perception among the students.
- There is evidence of a significant interaction effect between the gender and the type of school (F= 8.852 of df= 1, p<0.01) on the stress appraisal score.

b) Interaction between student age and type of school on the stress mean score

The empirical findings in this study also provides a new understanding of significant difference between the student age and the stress mean score, between the type of school and the stress mean score and its interaction effect, which is projected in the table III.

TABLE-III
INTERACTION BETWEEN STUDENT AGE AND TYPE OF SCHOOL

		Stress Level						TOTAL		
		School								
		Government			Private			Mean	S.D	No.
		Mean	S.D	No.	Mean	S.D	No.			
Student Age	12 years	42.90	3.11	10	45.20	5.50	5	43.67	4.01	15
	13 years	44.05	7.72	130	38.40	12.75	162	40.91	11.15	292
	14 years	48.15	7.08	33	35.70	12.78	188	37.56	12.88	221
TOTAL		44.77	7.57	173	37.06	12.78	355	39.59	11.89	528
ANOVA for Stress Level										

Source of variation	Df	F	Sig.
Between Student Age	2	6.604	**
Between Schools	1	42.849	**
Interaction Age vs School	2	4.916	**

A two-way ANOVA was conducted to determine if there is a significant difference between the student age and the stress mean score, between the type of school and the stress mean score, and interaction between age and the type of school on stress mean score. The descriptive statistics of ANOVA has shown that

- The value of F= 6.604 with df= 2 and p<0.01 being significant at 1% level shows that the age could remarkably influence the stress perception of students.
- The value of F= 42.849 with df= 1and p<0.01) shows that the type of school whether private or government could influence the perception among the students.
- There is evidence of a significant interaction effect between the age and the type of school (F= 4.916 of df= 2, p<.01) on the stress appraisal of these respondents.

One cross sectional research conducted by Sbaraini and Schermann (2007), among 883 children, concluded that the stress rate is high at the age of 4, 7, 8, 12, 13 and 15. Though the present study has studied children from 12 to 14 years the finding is found to be consistent with the study of Sbaraini and Schermann. Looking at the table, it is evident that the stress mean score is very high among the students in their 12th year (43.67) though only 15 students fall under this age followed by students of age 13 (40.91) and then the students in their 14 year come into line. This finding clearly depicts that the perception of stress decreases as age increases, however it is very sure that these children after their 14th year are going to face actual stress.

The table also gives an interesting reading by analysing the mean scores between the private and government school in relation to age. The government school students register an increase in the stress mean score with decrease in age, whereas their counterpart is in right contrast. This finding once again makes the fact evident that the government school children's responsibility heaps up every day, whereas the private school children do get their responsibilities and commitments shared among their parents, teachers and the society as a whole.

Conclusion:

The results of the study emphasise the fact that, contradictory to the common belief that only adults suffer from stress and stress related problems, children from a very young age itself suffer from tension and stress of different types at varying levels. It's concluded from the study that the government school children in total are more stressed than the private school students. However the stress level of the private school student cannot be ignored. Also the gender and the age are influencing the stress level of the identified children remarkably. Hence, it is recommended that further research on the causes of stress, needs immediate attention. So also the measures to overcome

this condition needs further probe.

Recommendation:
This research has thrown up many recommendations in need of further investigation. Some of these are

All Children should be individually focused with need based healthy stress management approach to manage the unavoidable stresses in their lives.

Awareness-raising is needed for parents, teachers and professionals to take joint action to relieve the suffering caused by stress in many of these children.

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