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STRESS LEVEL OF 8TH GRADE STUDENTS - INSTITUTION SPECIFIC DIFFERENCES

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ABSTRACT

Adolescence is suggestive of some ancient period of storm and stress. Students of our generation face unparalleled pressure and challenges with society's current emphasis on academic perfection. Stress manifests from the change in an individual's thinking and their way of life style. Students in their teens are the ones who are going through the transitional phase, which is an intermediate of childhood and adulthood. Present study was undertaken to examine the perceived level of stress among specific institutional differences and also to see relationship between the two independent variables (gender and age). For that purpose 528 students of class 8th were selected randomly from two different schools out of which 355 were taken from private and the remaining 173 were taken from government school. Questionnaire to elicit the general background of the selected children and checklist to assess the stress level of school children was used. Results indicated that magnitude of stress was significantly higher among the government school students where as private school students were significantly better in terms of their level of stress. However, significant relationships between schools were found. For both the group of students interaction between the student gender and the type of school were found that private school boys are more stressed than their counterpart. Significant relationships between student age and type of school were found for the both groups of students and for each type of school. This could be prominent that private schools student are less stress than counterpart. All students must be counselled for their high level of stress with special focus on Government school students so that their approach to deal with stress can be changed.

Key words: perceived stress, private and government, age, gender

Introduction

Stress is the inability to cope with a perceived or imagined threat to one's mental, physical, emotional and spiritual well-being which results in a series of physiological responses and adaptations (Seaward, 2006).

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 independent living skills. The transition to high school requires them to interact with a new and larger peer group and manage greater academic expectations (Steinberg, 2001).

G. Stanley Hall, a monumental figure in the field of child and adolescent development, described adolescence as suggestive of some ancient period of "storm and stress." Hall's recapitulation theory of human development predicted storm and stress to be the norm of adolescence, rather than an exception, because each

individual has to go through the major evolutionary stages, with the period of adolescence recapitulating the time from savagery to civilization (Salkind, 2007).

Students of our 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).

During the adolescent period children may be particularly vulnerable to stress, especially when exacerbated by the use of ineffective coping strategies,

which may ultimately result in mental health problems (Compas, Orosan, and Grant, 1993; Edgar, Arlett, & Groves, 2003). Stress has been explained from a variety of frameworks, including medical, psychological, and environmental models (McNamara, 2000). The medical model defines stress as an individual's state of distress in response to an environmental factor that threatens homeostasis. Increased heart rate, elevated blood pressure, and the presence of hormones and neurotransmitters within the body are associated as physiological responses to stress (Goldstein & Kopin, 2007).

Stress manifests from the change in an individual's thinking and their way of life style. Today individuals have changed in their perceptions and the way they interpret their life. 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).

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 their eight grade should know how to promote the stress management strategies and get a cooperative family and school environment and also to find out whether independent variables and schools has any influence on stress.

With this objective, this research teams up to design for 8th grade school children.

Objective of the study

@ Understanding the prevalence of stress and stress among 8th standard students and analysing the institutional specific differences with regard to age and gender.

Methodology

The study will be conducted as follows

A. Selection of the Area and Sample

Sampling is the process of selecting units (e.g. people, organizations) from a population of interest so that by studying the sample we may fairly generalize our results back to the population from which they were chosen (Trochim, 2006). Sampling for the present study was carried out in two stages namely a) selection of schools b) selection of respondents.

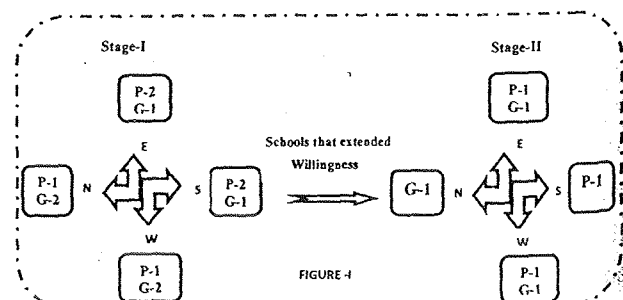
a) Selection of schools

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 comprised of institution specific differences. Out of these 12 schools, six schools extended their willingness and cooperation to be a part of the research. Hence all these six schools were selected for the data collection which comprised of 3 private and 3 government schools.

Selection of Schools



b) Selection of respondents

The respondents for the present study comprised of the school children from all of the six schools selected in Stage II. 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 this study adopted the random purposive sampling technique by means of which all the 8th standard students enrolled in the six identified schools formed the sample accounting to 355 private school children (N₁) and 173 government school children N₂ (Total school children N= 528).

Ethical consideration

As a matter of ethics, the respondents were informed about the research through a simple and clear consent form. The research participants were given the freedom to make an informed decision of whether to participate in the research. However all the children with whom the investigator requested for their consent cooperated.

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

According to Kothari (2009), questionnaire consists of a number of questions printed or typed in a definite order on a form or set of forms. The investigator used the questionnaire as a tool for the collection of the general and personal profile of the children with relevance to age, sex, type of family, and the family background/ profile.

ii) Checklist to assess the stress level of school children.

As locally suitable relevant scales for assessing the level of stress in children of this particular age were not available, an appropriate, situation based checklist was developed after review of literature and in consultation with experts. The check list was carefully formulated in such a way that it gives two important measures relevant to the study pursued perceived stress level of the selected 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 the items numbered 54, 62, 64, 72, 73 the response 'yes' is indicative of no stress and 'no' for the presence of stress. For the remaining items, 'yes' provides clue for the presence of stress and 'no' for its absence. 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, moderate, and high. The Table I present the classification of the stress levels of the school children with regard to the total scored.

Table - i
Grading the levels of stress among children

| Level of stress | Range of scores |
|-----------------|-----------------|
| Low | 0-25 |
| Moderate | 25-50 |
| High | 51-75 |

C. Conduct of the study

Phase – I – Establishing rapport

Before launching the study efforts had been made to establish rapport with the administrative personnel of all the 6 schools, the teachers working in these schools and the school children.

Phase – II – Collection of data

Adequate data was collected from the entire population sample of all the identified six schools through the tool selected for the purpose of identifying the stress levels of high school children. The data thus collected was statistically analysed to meet out the objective of the study.

D. Analysis of the data

The collected data was consolidated and analysed statistically using chi-square test, two way ANOVA and the percentages were used wherever needed.

Findings of the study

The study was undertaken to study the Perceived Stress level of Government and Private school children

A. General Background of the respondents

Demographic profile is essentially an exercise in making generalisations about groups of people. As with all such generalisations many individuals within these groups may not confirm to the profile-demographic information. It can be as aggregate and probabilistic information about groups, not about specific individuals and are more often culturally based.

In the present study socio-demographic data refers to the data that draws information on the social and statistical profile of the population selected. The different demographic characteristics of the students considered for the present study were age, gender and type of family.

The students in the age range of 12-15 years were selected for the present study. A majority of the students were 13 years of age.

The ratio of boys (54.2%) was higher than girls (45.8%) in both private and government schools.

In India, the family is the most important institution that has survived through the ages. The joint family has always been the preferred family type in the Indian culture. With the advent of urbanization and modernisation younger generation are turning away from the joint family form.

It can be noted that majority of the students (70.6%) from both government and private hailed from nuclear families.

B. Categorization of the selected respondents based on their stress level with reference to the type of school

Education perhaps is the most important edifice upon which the future of a child depends. Children of today are facing severe stress which they find very hard to cope up with. While the school and home environment is entirely different in government and private schools. Private school students have maintained much better standards and quality of education along with quality environment for students compared to their counterpart.

Table-II

Stress Level 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 ** | | | | | |

From the results given in the table, it appeared that the enormity of stress among the selected middle school children (8th std) was found to be high predominantly among government school students.

The difference in the stress level with reference to the school was also statistically tested by computing **chi-square** (36.258) which was also found to be significant at 1 per cent level. 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.

Appraising The Stress Level

It can be observed in the above table, that majority of the children in the government and private schools had moderate level of stress. It also has to be noted that none of the student from government school has low level of stress.

As the private schools prepare the 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 hardship 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.

C. Influence of independent variables on the stress level of the respondents

This study also seeks to examine the relationship between the variables of age and gender of the school students of two different type of management (private and government) as a fixed factor. It has become necessary to examine the extent to which age affects the stress level of school students. Another variable considered in this study is gender and how this quality affects their dispositions and perception towards stress.

- a) Interaction between the student gender and the type of school
- b) Interaction between student age and type of school

a) Interaction between the student gender and the type of school

Sapna (2010) highlight that girls tend to face more stress at their preadolescent and adolescent stage. Many of them may be at the beginning of puberty, which normally occurs earlier than boys. During this phase, many physiological and emotional changes begin to occur that can generate stress. 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 stress level.

Table-III

Interaction Between The Student Gender and Type of School

| | | Stress Level | | | | | | TOTAL | | |
|----------------|--------|--------------|------|-----|---------|-------|-----|-------|-------|-----|
| | | Group | | | | | | Mean | S.D | No. |
| | | Government | | | Private | | | | | |
| Student Gender | | Mean | S.D | No. | Mean | S.D | No. | | | |
| 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 | Sum of Squares | Df | Mean Square | F | Sig. |
|------------------------------|----------------|-----|-------------|--------|------|
| Between Gender (Students) | 2710.607 | 1 | 2710.607 | 21.923 | ** |
| Between schools | 5969.918 | 1 | 5969.918 | 48.283 | ** |
| Interaction Gender vs School | 1094.509 | 1 | 1094.509 | 8.852 | ** |
| Error | 64788.959 | 524 | 123.643 | | |
| Total | 74563.992 | 527 | | | |

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. The resulting picture is that wherein government school girls mean score (45.16) are more stressed than boys mean score (44.54). Previous researches also show that female students experience more stress compared to the male students. 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 mean score (39.90) are more stressed than their counterpart mean score (34.24). However analysing 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 it got decrease due to the lesser contribution scores from private girls students.

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

- The (F= 21.923 of Df= 1, p<.01) being significant at 1% level shows that the gender could influence the stress perception of students.
- The (F= 48.283 of Df= 1, p<.01) shows that the type of whether private or government could influence the perception among the students.

- There is evidence of a significant interaction effect between the gender and the type of school ($F=8.852$ of $Df=1, p<.01$).
- b) Interaction between student age and type of school on stress mean score

Table-IV

Interaction Between Student Age and Type of School

| | | Stress Level | | | | | | TOTAL | | |
|-------------|----------|--------------|------|-----|---------|-------|-----|-------|-------|-----|
| | | School | | | | | | Mean | S.D | No. |
| | | Government | | | Private | | | | | |
| | | 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 | Sum Squares | of | Df | Mean Square | F | Sig. |
|---------------------------|-------------|----|-----|-------------|--------|------|
| Between Student Age | 1675.257 | | 2 | 837.628 | 6.604 | ** |
| Between Schools | 5434.664 | | 1 | 5434.664 | 42.849 | ** |
| Interaction Age vs School | 1247.072 | | 2 | 623.536 | 4.916 | ** |
| Error | 66207.000 | | 522 | 126.833 | | |
| Total | 74563.992 | | 527 | | | |

The purpose of this research is to verify the result of previous researches similar results were obtained in a study done in Brazil by C. R. Sbaraini and L. B. Schermann (2007). According to the study, of the total sample of 883 children studied, 27.2% of children over 10 years and 18.2% of 14 year old children showed a significantly higher prevalence of stress (Sbaraini.et.al, 2007).

The study further reveals that the stress rate is high at the age of 4, 7, 8, 12, 13 and 15, (100%). Also more than 97% of the children above 10 years showed above average stress. More number of children with severe stress was observed at the age of 14 whereas the majority of the children between 13 to 15 showed moderate or severe level of stress than any other age groups (Sapna, 2010). In Table IV it can be observed that in the government schools in their 14 years mean score (48.15) have indicated more stress. On the other hand, in the

private schools 12 years mean score (43.67) have reported more stress.

Age difference could be attributed between government schools mean score (44.77) and private schools mean score (37.06). This could be prominent that private schools student are less stressed than their counterpart.

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 stress mean score. The descriptive statistics of ANOVA has shown that

- The ($F=6.604$ of $Df=2, p<.01$) being significant at 1% level shows that the age could influence the stress perception of students.
- The ($F=42.849$ of $Df=1, p<.01$) shows that the type of 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 $Df=2, p<.01$).

Conclusion:

It's concluded 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.

Recommendation:

Our increasing knowledge about the importance and impact of stress on young children should be put to good use in reducing stress factors for young children and in assisting children to increase coping strategies and providing training programmes.

Should have special focus on tailoring and need based healthy approach to both government and private schools separately to manage the unavoidable stresses in their lives.

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