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Students’ coping with Stress at high school level particularly at 11\textsuperscript{th} & 12\textsuperscript{th} grade

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\textbf{Abstract}

In this study, Student’s coping with Stress at High School Level Particularly at 11\textsuperscript{th} and 12\textsuperscript{th} Grade was examined. The objectives of present study were: A) to study the academic anxiety among the students, B) To analyze stress among the students. C) To understand the coping strategies adopted by the students. For this purpose, a sample of 100, 11\textsuperscript{th} and 12\textsuperscript{th} class students from government secondary schools located in Tehran was selected. For the purpose of gathering information from respondents on personal data, coping strategies, stress and academic anxiety, the Stress and coping strategy questionnaire which was consists of a series of questions about stress and coping strategies was administered to a total of 90 (90\%) students. The finding of the research showed that: the percentage of distressed secondary students was 26.1\%. The top ten rank of stressor among students were afraid of not getting place in tertiary education, examinations, too much content to be learnt, difficulty in understanding subject that have been learnt, too much homework, and school timetable was too packed. All of the stressors were related to the academic matters. While the rest of the top ten stressors were rated as causing moderate to high stress. The findings of the study indicated that 11\textsuperscript{th} and 12\textsuperscript{th} grade students coped with difficult situations in a mature manner, yet they tended to withdraw from the problems they faced in life.

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\textbf{Keywords: Stress; Coping with stress; Coping strategy; High school; Stressors}

1. \textbf{Introduction:} Stress and coping with stress are phenomena closely intertwined with human life. They relate to all minor and major events in life. Even in our day to day life, stress is the topic of many conversations, people talk about the stress of balancing home and work life, the stress of being hard pressed for time, of living in a mechanical society, dealing with a crying child, getting through traffic jam, etc. We also come across people who seek to reduce this stress by going to yoga therapies, faraway beaches and meditation sessions or with use of alcohol, drugs, etc.[Lazarus et al,1987] Though many people talk about stress in general terms, it is hard to define the term ‘stress’ in a scientific manner. In fact, the phenomenon of stress and the process of coping is a focal point in various disciplines, such as Medicine, Psychology, Management, Sociology and Anthropology. Stress and the methods of coping with it are covered in all branches of psychology, including Health, Psychology, Environmental Psychology, Developmental Psychology, Neuro-Psychology, Organizational Behavior, Clinical Psychology etc.

2. \textbf{What is stress?} Stress is the reaction of one’s body and mind to something that causes a change in the balance. Stress is a common aspect of many different emotions like anxiety, frustration, anger, worry, fear, sadness and despair. A very clear physical aspect is also involved in it. Some may experience such as a pain in the chest or in the pit of the stomach or in the form of clenching their jaws.[MyersDG,2005] Every individual experiences stress occasionally. Students in general experience stress in situations such as going to a new college, appearing for the exams, dealing with their friends/peers, when their friends were not feeling well, divorce or separation of parents, death of a relative, etc. In the academic scenario, stress has become an inevitable factor in the lives of...
students and everyone related to them. Parents of adolescents have to face the stress of helping their children deal with academic stress as well as their own stress. [Holahan & Moos, 1987]

3. Different Forms of Stress: Stress can be of two forms: positive stress (Eustress) and negative stress (Distress). Eustress is the feeling of relief. Distress is an emotion that leads towards disease. This type of distress is generally caused by an event in one’s life, for example, failure in exams, divorce, notification of debt, tax, and etc. Eustress is a positive stress set off by a positive event in one’s life. Its examples may include winning a championship, planning or attending a wedding, winning a lottery, or receiving an unexpectedly good result in an exam. Eustress allows individuals to engage in the challenges of life. [Holahan & Moos, 2001]

4. Cause of Stress: Causes of stress are known as stressors. Being physical or emotional, internally or externally generated, the stressors are classified as: A) Exogenous or external factors: they are those factors which originate from outside and individual has no control over that. For example, the death of loved ones, etc. B) Endogenous or internal factors: include strong memories of previous unpleasant experiences, which make individuals highly sensitive to such instances. They anticipate the same unpleasant events, and their fear gives rise to feelings of inferiority, inadequacy and uncertainty. C) The combination of endogenous and exogenous factors also leads to the creation of stress. [Holahan & Moos, 2000] D) System induced stress is another type of stress identified by psychologists; System refers to organizations like school, family, office and other such social structures, in which an individual functions. Life becomes tough if any of these structures are stress-inducing. [Holahan, Charles, 1982] This type of stress is highly relevant to under-developing societies in the context of changing demands in the family and workplace. One group of society which is a victim of system induced stress is the student community. The natural instincts of children to be playful and fun loving come in severe conflict with the pressure imposed by the academic overload and expectations. The academic overload in school and unrealistic parental demand and social expectations are imposing severe stress on students especially among adolescent students Most of the high school students in Iran concentrate only on academics and do not give much importance to other activities. Even the parents are convinced that these are the crucial years where the children need to concentrate only on academics in order to perform well in the marathon race of entrance examinations at the end of senior intermediate. Thus, the students are left with no choice except participating in this race, especially those students who opt for science and mathematics branches at high school levels. Other branches such as art, commerce and literature are considered to be low grade by the staff, students, parents as well as the managements of academic institutions. [Ko, SM, Kua Eh, 1999]

5. Coping style and Strategies: The word “coping” has two connotations in stress literature. It has been used to denote the way of dealing with stress or effort to master conditions of harm, threat, or challenge when a routine or automatic response is not readily available. [Park and Adler, 2003] Coping refers to mastering conditions that tax or exceed adaptive resources. [Lazarus, Arnold, 1997] Lazarus emphasized the key role of cognitive process in coping activities and the importance of coping in determination of quality and intensity of emotional reactions to stress. According to him we are constantly self-regulating our emotional reaction in various ways. We either postpone unpleasant situation, or change the threatening conditions or simply detach ourselves from unpleasant situations. Therefore, Lazarus emphasizes that the individual actively considers the situation and the unforeseen environmental conditions which manipulate the individual’s behavior. [Lazarus, 1977] Coping strategy refers to a technique of coping adopted in a specific context. Over a period of time the individual develops a specific coping style. This refers to the manner in which an individual responds to any stressful event.

6. Classification of Coping Strategies: According to Moos and Billings (1982), there are many ways to classify the coping process but the three main categories are: 1) Appraisal focused coping strategies occur when the person modifies the way they think. 2) Problem focused strategies are efforts to do something active to ease the stressful circumstances. People, who use problem focused strategies, try to deal with the cause of the problem. They do this by finding information on the problem, learning new skills to manage the problem and rearrange their lives. 3) Emotion focused strategies involve realizing pent-up emotions, distracting one-self, managing hostile feelings, meditating, using systematic relaxation procedures, etc. This involves efforts to regulate the emotional consequences of stressful or potentially stressful events. In addition to above categories, in a qualitative
perspective, there are two types of coping strategies: a) **Active coping strategies**: an individual can cope with taxing circumstances by directly approaching the cause of the conflict. b) **Avoidant coping strategies**: an individual copes with taxing circumstances by avoiding it. This strategy makes people activate a mental state that keeps them from directly addressing the event. This appears to be a psychological risk factor or marker for adverse response to stressful life events. [Holahan and Moos, 1987]

7. **Need of the study**: Secondary Education is an important stage of education from individual as well as social point of view. From the individual point of view this is the stage that determines or leads to the future planning of an individual’s life. It is the turning point where every individual has to make his career and life choices. It is also within the adolescent stage which is regarded as one of the most crucial stages of life. If the student intends to continue his education beyond this stage, and find a suitable vocation or occupation, then this stage provides him with the needed academic background. Therefore, from the individual’s point of view, this is a crucial stage. From the social point of view, the next generation youngsters are needed to build the nation and participate in its growing economy. Software and other developing sectors need sufficient trained manpower. For that learning at the intermediate stage form the basis. Secondary education plays an important role in training the youth of the country to take part in the social reconstruction and economic development. It is secondary education on which the social, economic, cultural, and technical efficiency of nation depends, since this stage marks the final stage of education for so many students. Secondary schools supply students for universities and other centers of higher learning. Hence they should be of the highest quality. [Education & Development Report] At this stage there is an increase in the number of students suffering from “masked depression” across the country apart from increased number of cases of students taking their own lives or suffering from nervous breakdown. Recognizing the alarming situations caused by exam stress and academic stress which are the most relevant topic of study in the present system of education. The student communities at the pre-university level in particular are more stressed, as this age corresponds with the end of the adolescence stage. The most important thing about adolescence is that it is the period of human life when rapid changes occur. Terms like “period of storm and stress, stormy period, terrible teens, period of transition from immaturity to maturity etc,” are used to describe this stage. This is mainly because during adolescence, individuals undergo many changes, physical, mental, emotional, social changes and it is essential to channelize these changes in proper way in order to become mature adults in the future. [Holahan & Moos, 2000] During this period, the adolescent has to face adjustment problems with one’s own self, family and society. He is exposed to a new social structure as he enters into the arena of college from school. This is so sensitive and even slight variation in adjustment influences one’s personality to great extent. Therefore an enquiry in to the reason for this is needed. We need to find out how the students at this level cope with stress? Why are they not able to adapt to the system and achieve the goals set for them? What are the reasons for students’ inability to cope with the academic anxiety at this stage of adolescence? Psychologists’ general observations indicate that high achievers have greater stress and difficulties in coping as these students suffer from fear of losing their rank and facing the disapproval of parents and society at large. Therefore it is important to know whether high achievers face greater stress and difficulty in coping compared to average students or low achievers. The change that the students experience from school system to the college system and the sudden autonomy they are given that may also become a cause of stress. In educational system, the average school student is under the control of class teacher and the school administration. The class teacher provides direction in all activities and takes care of overall performance. When the students entered in to the colleges they are not closely monitored any more so they may feel stress during the initial days as they lack direction. Students take time to inculcate the sense of autonomy and self-directed behavior. Since this transitional phase is normally stressful, there is need to enquire into the coping techniques adopted by students at this stage. Considering what is stated so far, there is a need to enquire how the student community is affected by this type of rank-induced stress. Cut-throat competition exists among the corporate college owners who set high demands on faculty, and in turn the faculty put pressure on the students to continuously achieve good marks. All these result in a kind of stress chain. Therefore there is a need to find out how far students are able to cope with the stress-chain. There is also a need to enquire in to whether the demand for continuous high performance leads to distress or Eustress.

8. **Operational definition**: 1) **Student**: students here refer to the high school students, particularly 11th and 12th grade students. 2) **Coping with learning**: Learning is a cause of stress for students as well as parents. This is a common phenomenon in some Asian countries like Japan, Korea, India and Iran. It is also known as system induced
stress. It refers to the different ways that the students have adapted to deal with academic anxiety and stress. [Park & Adler, 2003]

3) High School: This stage determines the students’ future life. At the end of this stage, the student has to face a number of entrance examinations. In order to get a seat in universities, they must get a high percentage which generally causes stress.

9. **Objective of the study:** a) to study the academic anxiety among the students. b) To analyze stress among the students. c) To understand the coping strategies adopted by the students.

10. **Research Questions:** I) how much academic anxiety/learning stress do the students at intermediate level experience? II) Are they affected by high or low levels of stress? III) What are the different types of coping strategies followed by them in order to cope with the demand for high performance?

11. **Variables:** a) **Independent Variables:** age, gender, community, socio-economic status, religion, course of the study and academic capability of the students. b) **Dependent Variables:** academic anxiety, stress and coping

12. **Research Method & Tools:** The research method in this study is the Survey method which was used to collect information and assess attitudes and characteristics of a wide range of subjects, i.e., attitude of 11th and 12th grade students on stress and coping strategies. Also stress and coping strategy questionnaire and scale are tools which were used in this study. It consists of a series of questions about stress and coping strategies for the purpose of gathering information from respondents on personal data, coping strategies, stress and academic anxiety. After preparation of questionnaire and assessing its validity and reliability, investigator requested the students to fill in the questionnaire during face-to-face session. Completion of the questionnaire was voluntary. Data was collected by guided self-administered questionnaire. The time taken by the students for filling in the questionnaire was around 15 minutes. The questionnaires were collected on the same day. [Carver, Scheier & Weintraub, 1989]

13. **Population, Sample and Sampling Methods:** The population of this study consists of 11th and 12th class students. Since the population can be quite large, therefore a sample is taken from the population, and estimates are made about the total population based on information derived from the sample. In this study a small sample of 100, 11th and 12th class students from government secondary schools located in Tehran was selected. A total of 90 (90%) students responded to the questionnaire. 50 (55.6%) were female students. The method of sampling used here was STRATIFIED SAMPLING.

14. **Data Analysis method:** In this study descriptive statistics was applied for analysis of the demographic data. For inferential statistics, data were analyzed using Statistical Package for Social Sciences (SPSS) version 12. All data collection forms were given serial numbers. Data were entered, checked for data entry errors, explored and cleaned. The researcher used alpha (α) at 0.05 and confidence interval of 95%.

15. **Finding:**

   1. Present study found that the percentage of distressed secondary students was 26.1% as shown in the following figure no-1
2. Following table no-1 shows Stressors Ranked by Mean Degree of Stress Caused as Perceived by Students.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Items</th>
<th>Degree of stress Mean [SD]</th>
<th>Rank</th>
<th>Items</th>
<th>Degree of stress Mean [SD]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Afraid of the possibility not getting place in any university</td>
<td>3.02 [1.11]</td>
<td>23</td>
<td>Negative thinking toward own-self</td>
<td>1.54 [1.24]</td>
</tr>
<tr>
<td>2</td>
<td>Getting poor marks</td>
<td>2.57 [1.01]</td>
<td>24</td>
<td>Uncertainty of what are expected from me</td>
<td>1.52 [1.06]</td>
</tr>
<tr>
<td>3</td>
<td>Lack of time to do revision</td>
<td>2.43 [1.01]</td>
<td>25</td>
<td>Lack of recognition to work done</td>
<td>1.51 [1.15]</td>
</tr>
<tr>
<td>4</td>
<td>Examination</td>
<td>2.36 [1.14]</td>
<td>26</td>
<td>Studying for the sake of family</td>
<td>1.43 [1.48]</td>
</tr>
<tr>
<td>5</td>
<td>Difficulties in understanding content that have been learnt</td>
<td>2.33 [1.07]</td>
<td>27</td>
<td>Conflict with family</td>
<td>1.41 [1.31]</td>
</tr>
<tr>
<td>6</td>
<td>Too many content to be learnt</td>
<td>2.24 [1.00]</td>
<td>28</td>
<td>Conflict with teachers</td>
<td>1.42 [1.43]</td>
</tr>
<tr>
<td>7</td>
<td>Tests are too frequent</td>
<td>2.22 [1.19]</td>
<td>29</td>
<td>Family desire to stop schooling</td>
<td>1.39 [1.61]</td>
</tr>
<tr>
<td>8</td>
<td>Competitive learning environment</td>
<td>2.06 [1.06]</td>
<td>30</td>
<td>Lack of feedback from teachers</td>
<td>1.37 [1.09]</td>
</tr>
<tr>
<td>9</td>
<td>Too many assignments given by teachers</td>
<td>2.06 [1.09]</td>
<td>31</td>
<td>Giving wrong answer in the class</td>
<td>1.36 [0.94]</td>
</tr>
<tr>
<td>10</td>
<td>Learning schedule are too packed</td>
<td>2.01 [1.10]</td>
<td>32</td>
<td>Verbal or physical abuse done by teachers</td>
<td>1.34 [1.32]</td>
</tr>
<tr>
<td>11</td>
<td>Unable to answer questions from teachers</td>
<td>2.01 [0.98]</td>
<td>33</td>
<td>Inappropriate assignments given by teachers</td>
<td>1.32 [1.09]</td>
</tr>
<tr>
<td>12</td>
<td>Feeling of incompetence</td>
<td>1.97 [1.10]</td>
<td>34</td>
<td>Lack of guidance and supervision from teachers</td>
<td>1.31 [1.13]</td>
</tr>
<tr>
<td>13</td>
<td>High self-expectation</td>
<td>1.92 [1.22]</td>
<td>35</td>
<td>Lack of free time with family and friends</td>
<td>1.26 [0.91]</td>
</tr>
<tr>
<td>14</td>
<td>Getting behind revision schedule</td>
<td>1.81 [0.96]</td>
<td>36</td>
<td>Verbal or physical abuse done by peers</td>
<td>1.26 [1.29]</td>
</tr>
<tr>
<td>15</td>
<td>Participation in class presentation</td>
<td>1.43 [0.98]</td>
<td>37</td>
<td>Verbal or physical abuse done by family</td>
<td>1.25 [1.25]</td>
</tr>
<tr>
<td>16</td>
<td>High expectation imposed by others</td>
<td>1.83 [1.11]</td>
<td>38</td>
<td>Came late to the school</td>
<td>1.24 [1.11]</td>
</tr>
<tr>
<td>17</td>
<td>Unfair assessment grading systems</td>
<td>1.82 [1.21]</td>
<td>39</td>
<td>Crowdwood classroom</td>
<td>1.12 [1.16]</td>
</tr>
<tr>
<td>18</td>
<td>Lack of motivation to learn</td>
<td>1.71 [1.08]</td>
<td>40</td>
<td>Participation in group discussions</td>
<td>1.11 [0.98]</td>
</tr>
<tr>
<td>19</td>
<td>Teachers lack of teaching skills</td>
<td>1.66 [1.13]</td>
<td>41</td>
<td>Answering friends’ questions</td>
<td>0.99 [0.87]</td>
</tr>
<tr>
<td>20</td>
<td>Interruptions by others during learning</td>
<td>1.66 [1.23]</td>
<td>42</td>
<td>Talking personal problems with peers</td>
<td>0.87 [0.93]</td>
</tr>
<tr>
<td>21</td>
<td>Insufficient reading material</td>
<td>1.59 [1.08]</td>
<td>43</td>
<td>Unwillingness to go to school</td>
<td>0.79 [1.29]</td>
</tr>
<tr>
<td>22</td>
<td>Conflict with peers</td>
<td>1.59 [1.00]</td>
<td>44</td>
<td>Family desire to continue schooling</td>
<td>0.56 [0.99]</td>
</tr>
</tbody>
</table>

1) As above table shows, the top ten rank of stressor among students were afraid of not getting place in tertiary education, examinations, too much content to be learnt, difficulty in understanding subject that have been learnt, too much homework, and school timetable was too packed. All of the stressors were
related to the academic matters. While the rest of the top ten stressors were rated as causing moderate to high stress. The academic matters as the major stressor were also reported by other. [Firth J, Saipanish R, Muhamad SBY, Kaufman DM, Day V and Mensink D]

2) The findings of the study indicated that 11th and 12th grade students coped with difficult situations in a mature manner, yet they tended to withdraw from the problems they faced in life. Gender differences were also observed, like males occasionally sought refuge in alcohol or drugs to escape from their problems and females restored to prayer and hoping for the better. Females were found to become more emotionally upset compared to males who confronted the problem and made an attempt to solve it. Effective and appropriate coping strategies may minimize the impact of encountered stressful situations on one’s wellbeing. [Park CL and Adler NE, 2003]

3) Although female students had lower stress levels than males in, they experienced more reactions than males. This study found that the top five coping strategies that frequently used by the students were religion, active coping, positive reinterpretation, planning, and use of instrumental support, however, the main coping strategy was religion. These strategies are positive coping strategies which have been reported in studies as very adaptive and hasten the recovery from distress. [Myers DG, 2005; Carver CS, Scheier MF and Weintraub JK, 1989]. It is noteworthy that, despite of positive coping strategies used by the students, the stress prevalence is still higher from the normal population. Perhaps, it will be interesting to explore on this matter further in the future studies.

17. Recommendation and suggestions:

1. School staff should make schools a safe place where there are fewer chances that students have to make difficult decisions.
2. Classrooms need to be safe havens. When students have any doubt that they can be successful doing an assignment or task, the stress response goes into motion.
3. Students need to know that the teacher is on their side and will give them many opportunities to learn.
4. Parents should encourage their children to learn respectful behavior by thinking before he or she speaks to.
5. Parents should encourage their children to participate in exercise and physical activities. Join in to model fitness.
6. Parents should help their children to learn about healthful eating. Make it a family goal: do research, shopping, and cooking in new ways.
7. The result of this study may help school staffs, teachers and counselors to understand why some students display high anxiety, fear, and depression.
8. The focus of intervention programs should be on training students to have a healthy mindset with positive coping strategies.
9. Parents and teachers should provide activities for the students which help them to enjoy their free time, including exercise, and allow them sometime to be completely unproductive for reducing stress.
10. School staffs, teachers and counselors should develop ways to improve effective communication between students and teachers, thereby improving academic and social efficiency of students. Their understanding of students' academic stress will help them to practice techniques and adopt attitudes essential to assist and mentor them to cope/deal with academic stress more effectively. Furthermore, they can also help students seek appropriate stress reduction methods to improve their academic performance.[Lazarus & Arnold, 1977]
11. Further study should be conducted on the design of a curriculum which optimizes the balance between the ‘push’ factors (bringing out the best in students, maintaining standards, etc) and inducing undue and unproductive stress.
12. Future research should be conducted by using larger sample size from other schools to validate these findings.
Acknowledgements

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