Effect of academic stress on the mental health among college and university students.

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Abstract

The present study aims to investigate the effect of academic stress on the mental health of college and university students. Students (N=70) between the ages 15-23 years including male students (n=35) and female students (n=35) were included in the study. The sample for the present research was recruited from University of Wah, International Islamic university, Islamabad, SKANS institute of Accountancy and Fauji Foundation School and College, Gujjar khan. Between group correlational research design was used in the present study. Non-probability convenient sampling technique was used to collect the sample for the study. Educational stress scale for adolescents, ESSA (Sun et al., 2011) and Centre for Epidemiological studies-Depression scale, CES-D (Liu & Radloff, 1977) were administered on participants to collect data. Results analyzed using Pearson product moment correlation showed that no notable association exists among academic stress and mental health of college and university students. Furthermore, the results of independent sample t-test showed that females have greater level of academic stress in contrast with males while there exists no gender difference among male and female students in experiencing mental health. The present research will provide useful information for teachers and parents to identify the effects of academic workload in causing stress and mental health problems among students.

Keywords: Mental health, Academic stress, Correlational research, Non-probability convenient sampling, Independent sample t-test.
1. INTRODUCTION

A student is a learner or someone who attends an educational institution. The time duration at which an individual gains academic knowledge to build a positive and hopeful future is pleasurable experience for many but with pleasure there comes many problems too. Academic stress can be a stress which mostly occurs due to extra work of a person as compared to his/her capacities or capabilities during an academic performance. Different scholars defined academic stress differently and as follows: Jha (2004) has described academic stress as the one of the product of physical or mental struggle for regulating requirement or testing where the learner will gain from the command in the given field. Diane (2005) proclaimed that the low attainment incentive is due to high academic stress.

Aldwin & Greenberger (1987) has noticed that the most common origin of stress for the students are academic problems. The majority of the disturbing inconveniences such as exam, assignments, projects, career selection, future plans, etc are due to the academic stressors (Schafer, 1996). Greenberg (1981), Lesko & Summerfield (1989), Aldwin & Greenberger (1987), Clark & Rieker (1986), Linn & Zeppa (1984) has stated in their research that the anxiety related to the academic affair results in poor health, depression and poor academic performance.

According to previous studies of developed countries such as of (Anderman, 2002; Ang & Huan (2006b), Bjorkman (2007b), Field, Diego, & Sanders (2001) Kouzma & Kennedy (2000) noticed the academic stress is of high level and different problems such as depression, suicidal ideation, anxiety among the secondary school students. An Australian study, Kouzma & Kennedy (2004), have proclaimed that the academic stress experienced by the final year high school students like exams, projects, assignments and the result, which are followed by the future plans, choice of career and the expectation of the others as well as the expectations of the oneself to excel in the field chosen. The Putwain (2007) research on students has distressed some theoretical and technical issues. In his analysis of the writings, Putwain, (2007) Putwain, (2007) has recognized in the research of academic stress 3 types of indemnity can be found: first, the accuracy of the vocabulary which was used was insufficient. Many researchers used ‘Stress’, ‘worry’ and ‘anxiety’ exchangeable so one can be used instead of the other. Also the ‘academic stress’ and ‘examination stress’ domains are very comprehensible. Second, the meaning of the word “stress” remain ambiguous in the writings, some uses it to the condition of the outer situation and others as the personal experience of discomfort. Third, in the researchs there was uncertainty about the amount of academic stress and whether the academic stress was and outcome or an origin.

Alike research into common stress, there was found two ways of learning or describing the academic stress. Various studies such as Burnett & Fanshawe (1997), Kohn & Frazer (1986), Kouzma & Kennedy (2004) have noticed the incidents of life which are stressful and are related to the studies which can be failure in academics, more workload, etc.
Nevertheless, even though these studies have focused and searched some of the prime stressors contributing massively but they fail to examine the accurate level of stress level which a student usually encounter this might be because of the disregarding of the assessment activity and the manage potentials of a person (Lazarus & Folkman, 1984).

Students’ academic stress is connected to various elements such as gender, ethnicity and socioeconomic status. As compared to the males, Jones & Hattie (1991b) & Xie, (2007), Zhao & Yuan (2006b) has noticed that females usually report increased academic stress. Jones & Hattie (1991b) noted that this is because females consider academic or school performance as the extreme major and hence they panic more when they fail to fulfill the scholastic requirement.

Coney & West (1979) and Jones & Hattie (1991b) have reported that the students with Asian background from ethnic minority category are more prone to get stressed by the academic learning as compared to the other. Coney & West, (1979), Moshe (1992), Li, Feng, Mei, & Yao (2007) have found outrageous educational load is discovered to be encountered by the students who belong to socially deprived environment. Li (2007) with the sample of 538 Chinese junior high school students have discovered that the less family earning was related to the amount of academic load. Moshe (1992) in another study noted that the students with low-social economic status families and Arab communities as compared to their Jewish and upper-class counterparts are likely to encounter more academic stress.

Jones & Hattie (1991b), Li, et al. (2007), Zhao & Yuan (2006b) have found that the additional scholastic tension is usually encountered by the students in high school years. Li, et al. (2007), Zhao & Yuan (2006b) have discovered in china both senior and junior secondary school division students those who are in final year (grade 9 & 12) as compared to non-final year student are likely to experience more load the fact associated to this is that in the end of the final years the students will be facing two most important exams i.e., the intermediate examination and university entrance tests.

The normal organization and functioning of a mind which results in the condition of a person is referred to as mental health. The mental health is a combination of a five types of heaths i.e., physical, emotional, moral, spiritual and social. From the total health of a person the main component is the mental health. Various professors have defined mental health as follows: Crow and Crow (1951) defined mental health as the state which deals with the human well being so that he/she can prevail on all the areas of human relations. Chauhan (1987) explained mental health as a condition of a person which allows the most growth of the bodily, mental or emotional level with which he can present his maximal to his plans and the aims of life. Among the children and adolescents the most public health concern is the mental health problems. About 20% of the children and adolescents experience suffering of a mental disorder to some extent and around 50% of the adult mental disorders are found among adolescents according to the rising epidemiological data. (Belfer, 2008; WHO, 2005b).

Ingram & Luxton (2005); McMahon, Grant, Compas, Thurm, & Ey, (2003) have discovered among the children and adolescent the stress is found to be a supreme contributor to the
growth and route of psychopathology, whereas in young students Dodds & Lin (1992); Brown, Teufel, Birch, & Kancherla (2006); Huan, See, Ang, & Har, (2008); Tang & Westwood(2007); Millar & Gallagher (1996) have found the prime origin of stress are educational affairs. Lee, Wong, Chow, & McBride-Chang (2006); Anderman (2002); Field, et al. (2001); Lee & Larson (2000); Liu & Tein (2005); Chen & Lu (2009b) have discovered usually there are many elements associated with the education have been originated to be related with the depression and behavioral issues (such as suicidal behavior)

Ang and colleagues (2006b) with the sample of 1108 secondary school students in Singapore has discovered that both the depression and suicidal ideation have remarkable relation with the academic stress from the projection of self and the closed ones. Bjorkman (2007b) with the US sample of grade 6 till 8 students have discovered that the academic stress is bleakly correlated with the academic position and assistance from parents, teacher and peers but is favourable associated awith the internal (depression, anxiety) and external (hyperactivity, aggression) conduct. Academic stress and mental health was noticed to have a powerful correlation.

In spite of the fact that the association among the academic stressors and adolescents mental health is understood and has also been facilitated by the research but numerous noteworthy questions endure unanswered. Mainly in developing countries there is a visible absence of research on the stress endured by the students. Also many noted associations are found to be two dimensioned in the universe and the strands are ambiguous which make attribute or ordinary there associations. E.g.: some psychosocial elements, such as low economic status may effect in both embossed academic stress and mental health issues (such as anxiety), and when the psychosocial element is controlled the association may or may not exist among the academic stress and psychological problem. Additionally, many studies only focused on the academic stress with unfavorable consequences (depression) and very few have explored the association of academic stress amid the favorable outcomes (happiness)

The researches on the correlation of academic stress such as of Johnson & Hall (1988); Van der Doef & Maes (1999), may provide the evidence for the mental health enhancement indistinguishable to the Job Demand-Control-Support (JDCS) model amid employed persons the notable reaction on the level of academic stress is by the substandard association with parents, teachers and peers also by heavy study workload. Previous research of the European countries like Meijer (2007) and Putwain (2009) originated that the load to attain, terror of nonsuccess and broad span of cognitive and academic elements are related to academic stress. Lin (2002) and Zhang, Zhang, Jin, Han, & Ye (2009) has discovered that the Chinese parents and teachers are concerned about the newly became apparent elements in modern years such as video gaming and internet use which are possibly injurious to students achievement and mental health

Ang & Huan (2006a); Ang & Huan (2006b); Bjorkman (2007b); Liu & Tein (2005) report that forgoing studies distinctly stipulate notable association notwithstanding of the cultural diversity amid academic
related elements load or academic stress and mental health issues in adolescent populace. Hence, it is hypothesized that even when the other factors are taken into account there would be a favorable association amid the high academic stress, mental health and the occurrence of the behavioral problems foregoing studies were mainly attentive on mental health which is unfavorable (e.g., depression and suicidal behavior) and many didn’t have noticed the mental health which is favorable (e.g., happiness). Therefore the experienced happiness was incorporated along with the depression, suicidal actions (planning, dreaming, etc.) and substance use (smoking, drugs, etc.) in the outcome measured.

An increasing observation to the favorable measures of happiness i.e., encountered happiness level even though the research on the child and adolescent mental health has been looking for the unfavorable measures (i.e., psychological disorders). Schiffrin and Nelson (2010) in a recent study among college students has found that the several measures of happiness has an alter association with the experienced life stress. Chen & Lu (2009) in a different studies have discovered that the Chinese students in Taiwan to whom different facilities such as sufficient teacher aid and who are pleased with school circumstances and also achieve higher academic grades as compared to the ones who have dwindle facilities and grades, were having the notable lofty levels of happiness even though there is an absence of undeviating proof. As educational content is the prime source of overall stress amid adolescents the outcomes proposes that the students’ happiness is influenced enormously by the element ‘educational stress’. Nevertheless, the positive psychology is required to gives extra verification on gap and should be compared with the negative. Also it is required to explore the associations in more profundity and in dissimilar context.

The studies stated above all conclude with our study that academic stress has a negative relationship with mental health of students. From the research one can clearly see that a daily life of students is influenced extensively by the academic stress. They must cope with academic stress in any way possible as to not damage their mental and emotional health. The damages done by academic stress are usually unrecognized and continue to be a rising issue.

Many similar researches are conducted in Pakistan too. The academic pressure on the students in Pakistani society is relatively higher as the expectation of parents from their children to bloom in every area possible especially in education. Stress and sleep disorders in medical students are found to be importantly caused by the academic stressors (Waqas, khan, sharif, khalid, & Ali; 2015) The disturbed sleep patterns was exalted in Pakistani medical students as compared to the non-medical equivalents (Anjum, Bajwa & Saeed; 2014). Kausar (2010) have found the academic workload is having a favorable association with the perceived amount of stress. The aftermath of the literature of Sohail (2013) indicates that the substandard academic performance is related with the higher level of stress encountered by the students.

2. METHODOLOGY
2.1. Instruments:
2.1.1. Academic stress scale:

The revised 16-item academic/educational stress by Sun, Dunne, Hou, & Xu (2011) was used to measure academic stress of students. The participants were instructed to
rate the frequency with which their attitudes and feelings towards the academic stress using a 5 point Likert scale where 5 shows strongly agree, and 1 coincides with strongly disagree. The interior stability reliability was evaluated using Cronbach’s alpha. Robinson, Shaver, & Wrightsman (1991) have found a Cronbach’s alpha of .70 or higher or an average interitem correlation of .30 or higher indicate acceptable reliability.

2.1.2. Mental health measures:

Liu’s (1999) and Radloff’s (1977) Depression Scale is a 20-item self-report instrument for depressive symptoms. Items were rated using a 4-point scale from rarely or none of the time (less than 1 day) to most or all of the time (5 to 7 days) during the past week and were scored either 0 to 3 or 3 to 0, with a total range of 0 to 60, where higher scores indicate greater frequency and number of symptoms. The scale has four different factors to test: depressive affect, somatic symptoms, positive effect, and interpersonal relations.

2.2. Procedure:

Krishan (2013) defined academic stress as the mental distress associated with the academic failure or even unawareness to the possibility of any this kind of failure with respect to some anticipated frustration. WHO (2005c) has defined mental health as a health state in which a person is aware of his/her abilities and is also able to manage the stressors of life and he/she can work more effectively and is also benefited to the society. Students (N=70) between the ages 15-23 years including male students (n=35) and female students (n=35) were included in the study. The sample for the present research was recruited from University of Wah, International Islamic university, Islamabad, SKANS institute of Accountancy and Fauji Foundation School and College, Gujjar khan. Between group correlational research design was used in the present study. The sample was gathered for this study through non-probability convenient sampling technique. The purpose of the research was communicated briefly. The brief explanation of the details regarding the research was given to the participants and they were guided and requested to fill up the scale with their accurate responses. To avoid the possible effect of social desirability the confidentiality of the participants was assured. Each statement was made clear and understandable and the the subjects were requested to choose the response which was appropriate and applicable to their own self. All the queries of the participants were satisfied. At the end for analyzing the data the SPSS (statistical program for social sciences) was used.

3. RESULTS AND DISCUSSION

Results were analyzed using descriptive data, Pearson product moment and independent sample t-test in SPSS software. The results are described in tables as follows:

Table 1: Differences in Academic Stress and Mental Health among Males and Females (N=70)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Males (n=35)</th>
<th>Females (n=35)</th>
<th>t</th>
<th>P</th>
<th>95% CI</th>
<th>Cohn’s d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Stress</td>
<td>52.25</td>
<td>11.70</td>
<td>56.82</td>
<td>8.67</td>
<td>-1.85</td>
<td>.06</td>
</tr>
<tr>
<td>Mental Health</td>
<td>45.28</td>
<td>7.42</td>
<td>45.22</td>
<td>6.50</td>
<td>.03</td>
<td>.97</td>
</tr>
</tbody>
</table>

Note. CI=Confidence Interval; LL=Lower Limit; UL=Upper Limit, M=Mean, SD=Standard Deviation, t=t-value, p=level of significance<.01
From the result of table 1, the outcomes of independent sample t-test displays that the Mean score of academic stress in male is 52.257, SD= 11.703 and in female is 56.828, SD= 8.672. The mean score of mental health in male is 45.285, SD=7.422 and in female is 45.228, SD=6.503.

Table 2: Descriptive statistics of the studied variables (N=70)

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>S</th>
<th>K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Stress</td>
<td>16</td>
<td>54.54</td>
<td>10.48</td>
<td>.115</td>
<td>-.76</td>
</tr>
<tr>
<td>Mental Health</td>
<td>20</td>
<td>45.25</td>
<td>6.92</td>
<td>-.39</td>
<td>.10</td>
</tr>
</tbody>
</table>

*N=no. of items, M=mean, SD= standard deviation, S=Skewness, K= kurtosis.

From the table 2 it can be noticed that the mean score of the academic stress is 54.5429, SD is 10.48074, skewness is 0.115 & kurtosis is -0.761. Whereas the mean score of mental health of students is 45.2571, SD is 6.92755, skewness is -0.395, kurtosis is 0.102.

Table 3: Correlation and Cronbach alpha of the studied variables.

<table>
<thead>
<tr>
<th>Sr. #</th>
<th>Variables</th>
<th>A</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Stress</td>
<td>.83</td>
<td>1</td>
<td>.23</td>
</tr>
<tr>
<td>2</td>
<td>Mental Health</td>
<td>.53</td>
<td>.23</td>
<td>1</td>
</tr>
</tbody>
</table>

From the results of table 3 correlation showed that the α of academic stress is .830 and mental health is .530. And the correlation is 1 and .233.

Results analyzed using Pearson product moment correlation showed that no notable association exists among academic stress and mental health of college and university students. Deb, Strodl & Sun (2015) have also reported that there no significant difference was found and the students who were and who were not incriminated in the extracurricular activities. The reason for this finding can be either there was lack of active involvement or the involvement was not for the enough time periods and also further investigation is required. So we can conclude that active coping strategies were used by the participants because of which the no significant relation was found in the present study. Furthermore, the results of independent sample t-test showed that females have greater level of academic stress as compared to males, Dhall, Kumari (2015) also reported in their study that, the academic stress among the males and female adolescents were found to have significance difference. As compared to males equivalents, female were found to have more academic stress and in the experience of mental health there was found no gender difference. Jones & Hattie, (1991b); Xie (2007); Zhao & Yuan (2006b) noted that as compared to males the females usually report more academic stress. According to Jones & Hattie (1991b) one reason for this is that females are more likely to regard school performance as very important, and therefore they worry more about academic failure.

4. CONCLUSION AND IMPLICATION

From the above results we can conclude that the academic stress put negative impact on the mental health of the students regardless of the age level and the gender so at least an hour a day is necessary for the students for their good mental health. As sound mind resides in a sound body so the students should be involved in the physical and extracurricular relaxing activities so that the stress level is reduced. The findings of the study will help parents and teachers in cognizance the child psychology so that they donot overload them with work and anticipate beyond their capabilities. The school should develop a frame and shape educational programs to provide chance to enhance skills in curricular as well as extracurricular activities. Also the importance of different vocations should
be highlighted instead of forcing to choose any particular position.

5. LIMITATIONS

Following were the limitations noted: firstly, the data was collected by self-reporting and self-reported data cannot be independently verified because the responses are based on participant’s thoughts and feelings through interviews, focus group or questionnaires also self-reported data may contain several potential sources of biasness. Secondly, the sample was collected through convenient sampling technique instead of randomly choosing. So the representativeness of the sample is questioned. So these limitations should be considered in further studies.

6. ACKNOWLEDGEMENT

I’m grateful to the all people who have supported this work. My deep gratitude goes to my HOD, Dr. Samina Rashid for her boundless contribution. From beginning till the end of the research she always supported and stood with me through thick and thin and helped me in research and study. She not only guides me in this project but also gives valuable advices for my future research career and helps me develop a positive attitude. I also thank my lecturer, Miss Asnea Tariq for her precious details for this project. I thank all the participants and their families for their kind cooperation.

7. REFERENCES


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