
EXAMINATION OF STRESS AS A SOURCE OF DEPRESSION IN HIGH SCHOOL STUDENTS BELONGING TO PRIVATE SCHOOLS OF KARACHI

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ABSTRACT

Examination stress is a natural phenomenon. It prepares one for a fight or flight response to any adverse situation. Stress can be beneficial if it is experienced for a short time and to a certain extent but if it is intense and experienced for a long time or constant basis it can cause serious emotional-behavioral disorders like depression. The study aimed to explore the relationship between examination stress and depression. For this purpose, a survey was conducted in which data was collected from 144 students belonging to private high schools in Karachi through a simple random sampling technique. Further, data was analyzed through the use of MS Excel. Both descriptive and inferential statistics were done. T-test, ANOVA and linear regression tests were run on data to make inferences. The result showed a moderate correlation between examination stress and depression. Moreover, a positive linear regression was found between the variables which means depression is predicted by examination stress. Further, results showed no significant difference between mean scores of depressions among students based on their age, grade and number of formative exams per term given by students. However, there was difference in mean

scores of examination stress among students based on their grade and number of formatives per term given by the students. This research will be beneficial for curriculum planners, teachers, school administrators, policy designers, parents, students and future researchers to understand relation between examination stress and depression and how examination stress can have adverse effect like depression on students if not handled properly.

KEYWORDS

Examination Stress, Depression, High School Students

INTRODUCTION

Stress and depression go hand in hand. In academic institutions, every student has to face stress. Evaluation is a part of every curriculum (Subhalakshmi & Sujatha, 2016) which consists of a loop of exams starting from the primary school level. Exams can create tiresome and exert stress on students belonging to any academic level (Subhalakshmi & Sujatha, 2016). Stress to a certain level or short term is natural and beneficial it works as a fight or flight response (Mubarak, Tariq & Tariq, 2022.) but if it is taken to an extreme or if it is not for a short time then it can have adverse effects (Ali, 2022; Albadawy, Bashir, Bashir, Cumber & Mohammed, 2019; Joels, Oitzl, Roozendaal, Schwabe & Wolf, 2012; Subhalakshmi & Sujatha, 2016, Cooper, 2021). It is important to provide proper treatment in the form of extracurricular activities, relaxation and counseling to the stressed pupils to overcome this condition (Singh, 2012) Otherwise, it can cause certain disorders like depression (Ali, 2022; Joels, Krugers, Oitzl & Wiegert, 2006).

Depression is a mood disorder that makes an individual feel demotivated, sad and helpless (Cooper, 2021) stomach upset (Albadawy, Bashir, Bashir, Cumber & Mohammed, 2019) disturbs the pattern of sleep, etc. (Bedewy & Gabriel, 2015). Depression is not common in very young children but it is prominent in high school or college-going students (Ahmer, Baig, Ibbad & Shahid, 2022; Colarossi, 2022). According to WHO (2017), 8.7% of students between the ages of 15-19 years suffer from depression. Some associated risk behaviors that are common in adolescent students are feeling of hopelessness, binge eating, trouble sleeping, sadness, loss of interest in activities, feelings of demotivation, isolation, or even substance abuse, etc. (Agliati, Cavioni, Grazzani, Ornaghi & Pepe, 2021) which are clear symptoms of depression (Chen, Qiu, Ren & Zhai, 2021).

Moreover, according to Shahid (2020), Seventy percent of Pakistani students face psychological issues like stress or depression due to tough competition, ongoing exams, less physical activities, lack of guidance, and high expectations to get high grades. Hassan (2023), reported similar figures which were published by Journal of

Pakistan Medical Association. Moreover, in many well-reputed institutions, there are cases of suicide by students because of academic pressure, examination stress and depression (Ahmad, 2018; Hassan, 2023; Jusaki, 2019 & Masood, 2019). Examination stress is a condition associated with assessments in which a student feels worried, tense, nervous and anxious (Ali, 2022). It can make students feel anxious and make them feel irritated, overwhelmed, impact their capability to memorize things and forget, loss their control, disturb sleep patterns in short make them depressed (Simic & Manenica, 2012). Major sources of stress in adolescents is examination stress and school work (Smyth, 1995).

Ahmer *etal.* (2022), found high prevalence of depression and anxiety in high school students from private schools of Karachi, Pakistan. Further, depression was found in high school students belonging to Haryana, India (Aggrawal, Kumar, Kumar, Jha, Nirala, & Singh, 2017). Also, according to Abelson, *etal.* (2023), 60% of adolescent in American high schools and colleges are facing mental health issues like stress, suicidal ideation, anxiety and depression. Moreover, in a survey it was found that three quarters of students from high school level reported moderate or severe psychological distress (Abrams, 2022). According to Colarossi (2022) in last eight years the mental health of high school pupils has declined with 135% increase in rate of depression from 2013 to 2021.

LITERATURE REVIEW

Hussein, Mahmud and Syed (2007) conducted a study in private and community-based schools of Karachi. The study revealed a high prevalence of emotional and behavioural problems in school going students which was higher as compare to other countries. Another resembling result were found by Hamdani Huma, Javed, Rahman, Nizami, Minhas, and Warraitch (2021), when they conducted a survey on higher secondary school students belonging to public schools of Kallar Syedan, Rawalpindi. They identified prevalence of psycho-social distress in every 1 out of 4 students. According to Aamer, Haider, Imran, Kamal, Mustafa and Rasool (2021) 48% Pakistani students suffer from behavioural-emotional distress and disorders like depression and anxiety. Most critical point is that one out of every five depressed students showed their preference to end their life rather than to stay in this condition and 8% had suicidal tendencies.

There could be many reasons behind increasing rate of depression cases in students. In last few decades the practices in education system has changed a lot, this transformation can be noticed on many levels like classroom, school, resources, school culture and education system level (Winstead, 2022). Practices like traditional teaching methods has changed to modern teaching pedagogies, classic classroom settings to digital classroom and from annual exam system to continuous loop of

marked formative exam system (Groves, Ian Hard, Kemmis & Wilkinson, 2014). These transformations have put a positive impact on education system and students but along with that there is a noticeable increase in mental, social and physiological issues rising in student especially adolescents (CDC, 2021 ; Colarossi, 2022) who have to face many challenges like the continuous loop of academic stress, competitive environment and getting high grades in exams especially board exams and further, admission tests to get admission in well reputed colleges and universities (Hassan, 2019).

In literature there are many variables that had been related to examination stress and depression. A lot of studies have shown a significant difference in perseverance of depression based on gender of the students. Female having more stress and vulnerability of having depression as compare to male students (Ahmer, Baig, Ibbad & Shahid, 2022; Bakshi, Goel, Kumar, Sandal, Singh & Sharma, 2017; Deepti, Kaur & Lal, 2014; Eman, Dogar, Khalid & Haider, 2012 ;Brown, Bifulco, Harris & Bridge, 1986).

Bedewy and Gabriel (2015) conducted a study in which they found many reasons responsible for prevalence of depression in students like frequency of examination, overloaded curriculum, unrealistic expectations of parents. Further, lack of recreational activities, overburdened curriculum and continuous exams, fear of failure, lack of sleep, sense of competition, high parental expectations and inability to maintain study- life balance were found in medical students from Lahore (Ashraf, Hussain, Khan, Muzafar, Sajid & Tahir, 2015). In 2008, Mamdou, Nasir and Rab found that underling reasons of depression in students can be academic stress, filing an exam, negative life events, death of parents or other burden. Moreover, it was found that students living in hostels had more level of depression as compare to their classmates who were day scholar (Kuruppuarachchi, Wijerathne & Williams, 2002). Ahmer, Baig, Ibbad and Shahid (2022) found that students from private schools had less depression cases as compare to student belonging to public or community based schools. Further, they found that students with stay back home moms were less disposed to depression as compare to their classmates. Similar results were found by Lodha , Murari, Maata, Negi Sahu & Pal, 2016). Another study showed that symptoms of depression were low in students who had maore than 5 friends and those who had less friends had a higher rate of depression symptoms (Andersson, Breitholtz, Larsson & Melin, 1991). Further, students who had a parent with history of depression was more prone to get depression as compare to others(Ahmer, Baig, Ibbad & Shahid, 2022; Daryanavard, Hosseinpoor, Madani, Mahmoodi, Nourooziyan & Rahimi, 2011).

Some studies have been done in Pakistan in past years which showed a positive

relation between examination stress and depression, (Ahmer *etal*, 2022; Ali, 2022; Mubarak, Tariq & Tariq, 2022; Aamer *etal*, 2021; Akhtar, 2021; Hamdani *etal*, 2021; Shahzad & Zia, 2019; Ashraf, 2015; Eman *etal*, 2012). Mamdou, Nasir & Rab, 2008) but most of them are related to medical students or on university level students. This research is focused on high school students mean students belonging to grade 9th till 12th who have to face many formal as well as board exams. In America and many other countries high school means grade 9th to 12th (Cambridge dictionary, n.d.) in some countries like Pakistan the grade 9th and 10th are called secondary level and grade 11th and 12th are higher secondary level (UNESCO, 2010).

This study can help in understanding the relation between examination stress and depression. Further, findings of this research will help to fill the gap in our local context. It will provide an evidence that by controlling examination stress and providing more relaxation activities students can decrease the chances to be a victim of depression which is increasing worldwide.

RESEARCH OBJECTIVES

1. To investigate the difference in level of depression between female and male high school students.
2. To investigate the difference in level of examination stress between female and male high school students.
3. To explore the difference in the level of depression among high school students based on number of formatives in each term.
4. To explore the difference in the level of examination stress among high school students based on number of formatives in each term.
5. To find the difference in the level of depression among high school students based on their grade.
6. To find the difference in the level of examination stress among high school students based on their grade.
7. To investigate if examination stress predicts depression in high school students.

RESEARCH HYPOTHESES

1. H₀: There is no significant difference in level of depression between female and male high school students.
H₁: There is a significant difference in level of depression between female and male high school students.
2. H₀: There is no significant difference in level of examination stress between female and male high school students.
H₁: There is a significant difference in level of examination stress between female and male high school students.
3. H₀: There is no significant difference in the level of depression among high school

students based on number of formatives in each term.

H₁: There is a significant difference in the level of depression among high school students based on number of formatives in each term.

4. H₀: There is no significant difference in the level of examination stress among high school students based on number of formatives in each term.

H₁: There is a significant difference in the level of examination stress among high school students based on number of formatives in each term.

5. H₀: There is no significant difference in the level of depression among high school students based on their grade.

H₁: There is a significant difference in the level of depression among high school students based on their grade.

6. H₀: There is no significant difference in the level of examination stress among high school students based on their grade.

H₁: There is a significant difference in the level of examination stress among high school students based on their grade.

7. H₀: There will be no significant prediction of depression by examination stress.

H₁: There will be a significant prediction of depression by examination stress.

RESEARCH METHODOLOGY

The present study was a quantitative expedition to investigate the relation of examination stress on depression among high school students. For this purpose, a survey was conducted in which data was collected from 144 students belonging to different schools and colleges of Karachi through simple random sampling technique. Data was collected with the help of a questionnaire. It had two sections. Section one consisted of demographic variables of respondents like age, gender, grade, type of accommodation, no of formatives/exams per term and family structure. Section two was comprised of a 5- point Likert scale consisting of 12 items.

Items designed for this purpose were based on two main variables examination stress and depression. These items were selected from a standardized test designed and used by Lovibond and Szabo (2022). The indicators of depression were Devaluation of life, Anhedonia, Self-deprecation, hopelessness, dysphoria and lack of interest. The indicators of examination stress were difficulty relaxing, agitation, irritability, over-reactive and nervousness. Validity was confirmed by the opinion of experts in this field. For finding the internal consistency of the questionnaire pilot study was done and reliability was measured through the coefficient of Cronbach alpha. Table 1 shows the details of the reliability test.

Table 1: Reliability of the Scale

Cronbach's Alpha	No. of Items
0.82	12

Table 1 shows the reliability of the scale. For obtaining data a 5-point Likert scale consisting of 12 items were selected from Depression, Anxiety Stress Scale developed by Lovibond and Szabo (2022). The purpose was to find the relationship between examination stress and depression in high school students. To find reliability of this questionnaire Cronbach Alpha test was administered. Pilot study was also done with a sample of 19 students only. The reliability index found was 0.82, which shows good reliability and scale was statistically significant.

DATA ANALYSIS

After collection of all the questionnaires, data was keyed in for analysis through the use of MS Excel for statistical analysis. Different types of tests both descriptive and inferential were administered for finding the results. The descriptive statistics consisted of frequencies, percentages, means, and standard deviation. Also inferential statistics like independent sample t-test, one-way ANOVA were used to find difference on bases of gender and other demographic variables respectively. Further, test of linear regression was done to find the impact of exam stress on depression. The following tables presents the detailed description of data analysis.

Table 2: Distribution and percentage of respondents according to demographic information

Variables	Demographic	Frequency	Percent
Gender	Male	52	36
	Female	92	64
	Total	144	100
Age	14-15	71	49
	16-17	14	10
	18-above	59	41
	Total	144	100
Grade	Ninth	41	28
	Tenth	37	26
	First year	33	23
	Second year	33	23
	Total	144	100
No. of Formatives Per Term	Three	88	61
	Two	23	16
Once	33		23
Total	144		100

Table 2 presents the frequencies and percentage of selected sample on bases of demographic characteristics (gender, age, no. of formative tests per term, type of

accommodation and family structure). The analysis of data showed that 92 female and 52 male students participated in the study. Most of the respondents were aged between 14-15 years. On bases of grade most of students were from ninth grade. Most students had 3 formative tests per term.

Table 3: Descriptive Statistics Mean and Standard Deviations of Depression

Statements	M	SD
Before / During Exams.....		
I felt that life was in terrible	2.87	0.11
I did not enjoy anything	2.83	0.12
I felt like I was no good	2.86	0.11
There was nothing nice I could look forward to	2.74	0.10
I could not stop feeling sad	2.70	0.11
I did not feel excited about anything	2.91	0.12

Table 3 shows the mean scores of items related to indicators of depression in student measured by the researcher. The highest mean value among these items was ($M=2.91$, $SD=0.12$). It means most of students believed that before or during exams they don't feel excited about anything. Among these items, lowest mean score obtained was ($M=2.70$, $SD=0.11$) which stated that before or during exams, *I could not stop feeling sad*.

Table 4: Descriptive Statistics Mean and Standard Deviations of Examination Stress

Statements	M	SD
Before/ During exams		
I found it difficult to relax	3.20	0.12
I got upset about little things	2.91	0.11
I got annoyed when people interrupted me	3.12	0.12
I found myself over-reacting to situations	2.97	0.11
I was easily annoyed	2.85	0.11
I felt tense and uptight	3.03	0.11

Table 4 presents the mean scores of items related to examination stress. In above table the highest mean obtained was ($M=3.20$, $SD=0.12$) which was scored on the statement during/before exams, *I found it difficult to relax*. It showed that majority of students do not feel comfortable and relaxed before and during exams. The lowest mean observed was ($M=2.85$, $SD=0.11$) which was related to getting easily annoyed on small matters during/before exams.

Hypotheses Testing

Hypothesis no 1

H_0 : There is no significant difference in the level of depression between female and

male high school students.

H₁: There is a significant difference in the level of depression between female and male high school students.

Table 5: An Independent Sample t-test for Difference in Level of Depression in Students Based on their Gender

Variables	Male	Female	F-value	t-value	df	p-value
Mean	17.35	17.06				
SD	5.13	4.96				
N	52	92				
F-test			1.07		71	0.3
t-test				0.32	142	0.7

Statistics of Table 5 shows the results of F-test conducted to test the equality of variances between level of depression in male and female student. The t-test was also used to test the difference in means of level of depression between two genders.

The results show there is no significance difference in variance between male and female student's level of depression ($F(1, 71) = 1.07$, $p = 0.3$), which means that the assumption of equal variances is met. Similarly, the t-test results show that there is no significant difference in means of level of depression between male and female students ($t(142) = 0.32$, $p = 0.7$).

Hypothesis no 2

H₀: There is no significant difference in level of examination stress between female and male high school students.

H₁: There is a significant difference in level of examination stress between female and male high school students.

Table 6: An Independent Sample t-test for Difference in Level of Examination Stress in Students Based on their Gender

Variables	Male	Female	F-value	t-value	df	p-value
Mean	17.78	18.25				
SD	5.9	5.59				
N	52	92				
F-test			1.12		71	0.32
t-test				-0.46	142	0.64

Statistics of Table 6 shows the results of F-test conducted to test the equality of variances between level of examination stress in male and female student. The t-test was also used to test the difference in means of level of examination stress between two genders.

The results show there is no significance difference in variance between male and female student's level of examination stress ($F(71) = 112, p = 0.32$), which means that the assumption of equal variances is met. Similarly, the t-test results show that there is no significant difference in means of level of examination stress between male and female students ($t(142) = -0.46, p = 0.64$).

Hypothesis no 3

H_0 : There is no significant difference in the level of depression among high school students based on number of formatives in each term.

H_1 : There is a significant difference in the level of depression among high school students based on number of formatives in each term.

Table 7: One Way ANOVA on Level of Depression of Students Based on Number of Formatives in Each Term

	SS	df	MS	F	p-value
Between Groups	132.82	2	66.41	2.71	0.07
Within Groups	3449.17	141	24.46		
Total	3582	143			

Table 7 shows that one-way ANOVA was used to explore the difference among the mean scores of levels of depression based on number of formatives in each term (only once, two and three). There was a no significant difference in level of depression scores among groups, $F(2, 141) = 2.71, p = 0.07, \eta^2 = 0.03$. The effect size is very small, indicating that only 3% of the variance in level of depression could be explained by the number of formatives in each term.

Hypothesis no 4

H_0 : There is no significant difference in the level of examination stress among high school students based on the number of formatives in each term.

H_1 : There is a significant difference in the level of examination stress among high school students based on the number of formatives in each term.

Table 8: One-Way ANOVA on Level of Examination Stress of Students Based on the Number of Formatives in Each Term

	SS	df	MS	F	p-value
Between Groups	198.1	2	99.05	3.15	0.046
Within Groups	4438.9	141	31.5		
Total	4637	143			

Table 8 shows that one-way ANOVA was used to explore the difference among the mean scores of level of examination stress based on number of formatives in each term

(only once, two and three). There was a statistically significant difference in level of stress scores among groups, $F(2, 141) = 3.15$, $p = 0.046$, $\eta^2 = 0.042$. The effect size is small, indicating that only 4% of the variance in level of stress could be explained by the number of formatives in each term.

A Post Hoc analysis was conducted using Bonferroni correction and it was found that stress level does not vary among groups having one and two formatives per term. However, it was found that students giving three exams per term ($M = 20.21$, $SD = 5.24$) had a significantly higher stress level scores than stress level scores of students giving one formative ($M = 17.35$, $SD = 6.43$). The results suggest that stress level varies among groups of students who are giving formative exams once and three times per term.

Hypothesis no 5

H_0 : There is no significant difference in the level of depression among high school students based on their grade.

H_1 : There is a significant difference in the level of depression among high school students based on their grade.

Table 9: One Way ANOVA on Level of Depression of Students Based on their Grade

	SS	df	MS	F	P-value
Between Groups	113.23	3	37.75	1.53	0.21
Within Groups	3512.2	142	24.73		
Total	3625.5	145			

Table 9 shows that one-way ANOVA was used to explore the difference among the mean scores of the level of depression based on the grades of the students.

There was no significant difference in the level of depression mean scores among groups, $F(3, 142) = 1.53$, $p = 0.21$, $\eta^2 = 0.03$. The effect size is very small, indicating that only 3% of the variance in the level of depression could be explained by the number of formatives in each term.

Hypothesis no 6

H_0 : There is no significant difference in the level of examination stress among high school students based on their grades.

H_1 : There is a significant difference in the level of examination stress among high school students based on their grades.

Table 10: One-Way ANOVA on Level of Examination Stress of Students Based on their Grade

	SS	df	MS	F	P-value
Between Groups	340.80	3	113.6	3.72	0.013
Within Groups	4332.95	142	30.51		
Total	4673.75	145			

Table 10 shows that one-way ANOVA was used to explore the difference among the mean scores of level of examination stress based on their grade level (9th, 10th, 11th and 12th). There was a statistically significant difference in level of stress scores among groups, $F(3, 142) = 3.72$, $p = 0.013$, $\eta^2 = 0.07$. The effect size is medium, indicating that only 7% of the variance in level of stress could be explained by the grade level of the students.

A Post Hoc analysis was conducted using Bonferroni correction and it was found that stress level does not vary among groups 9th and 10th. However, it was found that students from second year ($M = 20.18$, $SD = 5.73$) had a significantly higher stress level scores than stress level scores of students from first year ($M = 15.8$, $SD = 4.17$). The results suggest that stress level varies among groups of students based on their grade level.

Hypothesis 7

H_0 : There will be no significant prediction of depression by examination stress.

H_1 : There will be a significant prediction of depression by examination stress.

Table 11: Regression Coefficient of Examination Stress on Depression

Variable	B	β	SE
Constant	6.41***		1.03
Exam Stress	0.59***	0.68	0.054
R^2	0.46		

Note $N = 144$

*** $p < 0.05$

Table no 11 shows the impact of examination stress on depression among high school students. The R^2 value of 0.46 reveals that the predictor variable explained 46% variance in the outcome variable with $F(1, 142) = 120$, $p < .000$. The findings reveal that examination stress positively predicted depression ($\beta = 0.68$, $p < 0.05$) which means when examination stress increases in student's depression also increases.

DISCUSSION

In Pakistan, the goal of high school student is to achieve good grades in exams so that they can get admission in a well reputed college/ university with scholarships or secure

reserved seats. Unfortunately, there is lack of quality universities due to which there is tough competition among students. This compels students to work hard. Along with this frequent exam in schools and board exams makes students stay under continuous exam stress (Smyth, 1995). Some level of stress is natural and good for performance but if its intensity is too high and it's not for a short time then it can become a problem (Ali, 2022; Albadawy, Bashir, Bashir, Cumber & Mohammed, 2019; Joels, Oitzl, Roozendaal, Schwabe & Wolf, 2012; Subhalakshmi & Sujatha, 2016; Cooper, 2021)). Students may experience issues like stomach aches, disturb sleep patterns or lack of sleep, low self-esteem, feeling of sadness, lack interest in activities they previously enjoyed etc. (Simic & Manenica, 2012) these can lead to serious disorders like depression (Chen, Qiu, Ren & Zhai, 2021).

The present study was aimed to find relation between examination stress and level of depression among high school students. In Pakistan high school consist of grade 9th and 10th but in this research grade 9th till 12th are taken as high school just like American education system. The reason for selection of this age group was that grade 9th till 12th students have to face school a series of continuous formatives and board exams. This built a lot of pressure on them especially when they know that they have to score good grades. Previous researches have shown that stress and depression rate in children is very high in Pakistan (Ashraf, Hussain, Khan, Muzafar, Sajid & Tahir, 2015; Mamdou, Nasir & Rab, 2008).).

In this study, the researcher designed seven hypotheses. For the analysis of data, inferential statistics like independent sample t-tests, and one-way ANOVA were used to find differences on basis of gender and other demographic variables respectively. Further, the test of linear regression was done to find the impact of exam stress on depression.

Results of the first hypothesis which was designed to find differences in the level of depression between female and male high school students showed no significant difference in variance between male and female student's levels of depression. This result is male and female students scored the same on the depression scale and showed the same level of depression. my findings were contrary to many previous studies in which females showed a higher ratio of depression as compared to male students (Ahmer, Baig, Ibbad & Shahid, 2022; Bakshi, Goel, Kumar, Sandal, Singh & Sharma, 2017; Deepti, Kaur & Lal, 2014; Eman, Dogar, Khalid & Haider, 2012; Brown, Bifulco, Harris & Bridge, 1986). Further, significant difference in variance between male and female students' levels of examination stress which means boys and girls showed the same ratio of examination stress. The result of ANOVA test showed no significant difference in level of depression scores among students reported that they have three, two and only once formative exams per term which shows that the

frequency of exams did not had a sound effect on depression. However, the examination stress was found to be greater in students who were giving three formatives per term as compare to those who were giving one exam per term. This shows that frequency of exams is related to the cultivation of stress in students. these results are similar to many previous researches (Ashraf, Hussain, Khan, Muzafar, Sajid & Tahir, 2015; Mamdou, Nasir & Rab, 2008).

Moreover, it was explored that there is no significant difference in level of depression mean scores among high school students based on their grade. Students from grade ninth, tenth, first year and second year had same level of depression. However, the mean scores of examination stress among grade first year and second year had a significant difference in mean scores. Students from second year had a significantly higher stress level scores than stress level scores of students from first year.

Further, linear regression was performed to find if examination stress has significantly predicted depression. Results showed a positive relation and the results confirm that examination stress significantly predicted depression which means when examination stress increases in student's depression also increases and vice versa. These results were similar to previous studies in which examination stress and depression were found to be positively related (Ali, 2022; Albadawy, etal. 2019; Aggrawal et al, 2017; Joels etal, 2012; Simic & Manenica, 2012; Subhalakshmi & Sujatha, 2016, Cooper, 2021)

There are many reasons which can create stress in students and it can cause adverse effects in form of emotional-behavior disorder like depression. The present study was aimed to find relationship of examination stress and depression. Further, the difference between students' depression and examination stress level was also computed on bases of their gender, grade, age and number of formative exams they have per term. The study was significant as most of the studies conducted in pakistan on this topic are related to medical students. There is no study related to this topic on high school level.

The results of the study showed that students had no significant difference in depression on based of their demographic variables which are very different to some previous studies. The reason might be because they were conducted on medical students however in this study a sample of high school students was chosen. However, a significant difference was found in mean scores of students from grade 12th and 11th. Also, students who had to give three formative exams were found to have more examination stress as compare to those who were having exam only once per term. Another important finding was that examination stress do predict depression in high school students. This research can help teachers, school administration, parents, policy makers, curriculum designers, students and other researchers to enhance their

knowledge related to this topic and understand how much examination stress can effect students if it is constant and accompany other issues like parents' high expectations, overloaded curriculum, tough competition etc.

RECOMMENDATIONS

Schools and parents should offer relaxation activities to our students and more extra curriculum activities should be provided by the school. curriculum designers should design curriculum in a way that it should not be too lengthy or overloaded for students. Teachers should encourage children to express their emotions and take failures as an experience. Parents should not place too much pressure on their kids and motivate them in such a way that they know that their parents love them regardless of whatever happens. Researchers should work more in this field as the ratio of depression cases in children is increasing on a rapid rate.

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