



EVALUATING LEVEL AND VARIOUS STRESSORS CONTRIBUTING TO
EXAMINATION STRESS AMONG UNIVERSITY STUDENTS IN WADI AL DAWASER,
SAUDI ARABIA

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ABSTRACT

Introduction: Examinations will trigger stress and lots of tension for several students. In fact, accepted level of nervous tension possibly facilitates students to execute the best of their ability. However an excessive amount of anxiety will block thoughts, produce a negative frame of mind and result in panic and probably poor examination performance. There are several factors that contribute to examination stress which may cause irrational thinking about exams and its outcomes. **Research Problem:** Found more cheating and hysterical attacks among students in the exam halls due to intense stress. This study helps to understand the level and therefore the factors inducing examination stress among students. **Aim & Objectives:** To evaluate examination stress and its stressors among undergraduate female students. **Materials & Methods:** Present study was done on 208 university female students after institution approval and proper consent. Their examination stress levels and its factors were assessed using a self-rating questionnaire. All data were coded and analysed using SPSS version 23 with a prior set of $p < 0.05$ level. **Results:** Out of 230 students, 208 (90.4%) responded. Overall 31% of students were having very severe level and 39% of them were having severe level of examination stress. The department and English proficiency of students significantly associated with level of examination stress. In great extent, factors inducing students' exam stress were fear of failure (62.5%), high expectations of parents (50%), lack of quiet environment (60%) and too many lectures in the course (63%). The GPA in last semester, English proficiency, mother and father education were associated only with academic factors inducing examination stress. **Conclusion:** The study results indicated high levels of exam stress among the undergraduate female students, showing that there is a need for stress reduction programs from the beginning of the academic session.

KEYWORDS: Examination stress, stressors, University students.

INTRODUCTION

Stress is one among the body's natural responses to something that is threatening and in human life it represents an uneasy experience.

According to Greenberg and Baron (2000), stress is an individual, physical and emotive response against the stimulus. Hussien and Hussien (2006) outlined stress as the state by which the individual undergoes from considerable to extensive mental hypertension resulted from aspects that can't be controlled and exceeds beyond the human capacity to deal with.

Several aspects of college life have the potential to cause stress, as well as adjusting to new living surroundings, fulfilling educational necessities, and getting ready for examinations. Most of the time examination acts as unavoidable stressor in a student's life.

Almost everybody stressed before the examination. Butterflies within the abdomen and worrying thoughts are a sign of examination nervous that are most likely acquainted to all or any students, in fact, it's dead traditional to feel some stress, however an excessive amount of it will cause psychoneurotic illnesses (Mohapatra, S., et.al. - 2012).

College students experience stress at each part of curriculum additional therefore before the examination. This stress might have an effect on physiological and cognitive tasks of the scholars (Pradhan, G., and et.al. - 2014).

Exam stress is because of, studying the night before the examination, lack of time management, past performance on exams, the negative consequences of failure, how friends and other students are doing.

Students' perception of extensive course load is also reported to cause exam stress in students. Psychological factors which contribute significantly to exam stress are reported by many authors.

The present study is designed to highlight the major stressors causing examination stress and also to identify the exam stress exposed undergraduate female students at the earliest so that various stress reduction techniques and counselling services can be provided to the affected group.

SIGNIFICANCE OF THE STUDY

Stress produces determinable mental and physiological reactions within the body. Delicate stress is helpful in psychological tasks and performance however persistently high stress might cause neuropsychiatric sicknesses like anxiety and depression (Singh, R., and et.al. - 2012).

Many intelligent and hardworking students perform very poorly in the examination due to persistent examination anxiety, which interferes with their mental power and keeps them away from doing their best. The students experience a great threat because of over anxiety and low coping. And they have less knowledge to manage the examination tension.

As the examination time comes closer, many students get certain uneasy symptoms like lack of sleep and appetite, anxiety and sadness. A strange combination of factors such as family environment, parental expectations, friends, social circle and individual emotions plays a crucial role in causing stress.

A study of quite two,000 senior faculty students says worry of lower grades and ultimate job market failure are major factors in examination stress and anxiety (Blood, S. - 2015).

The psychological functions of the feminine learners were a lot of affected as compared to males. Therefore, appropriate counselling of the scholars ought to be initiated at the earliest to decrease their examination stress level (Pradhan, G., and et.al. - 2014).

The researcher aims to explore the level and factors causing examination stress. The outcome of the study will provide the basis for enhancing the general adoption

of an exam environment, reduce the symptoms of examination anxiety, and thereby, ensuring academic success.

RESEARCH PROBLEM

The number of students found with hysterical symptoms before and during the examination due to the intense level of stress. Young Saudi student Moaz Al Aafi passed away during a final exam at the high school in Medina, Okaz newspaper reported (Jan-2018). It is an example of the dangers of intense stress that students are often subjected to during final exam periods.

Arab News (Feb-2019) has discovered that a lot of cheaters are actually able students because of serious numerous schoolwork and assignments; they only can't be fazed to exert themselves additional with examination preparations, in order that they cheat.

This study was to evaluate the exam stress, its various stressors among undergraduate female students.

AIM OF THE STUDY

The present study aimed to investigate the level of exam stress and further to identify various factors inducing exam stress among undergraduate female students.

OBJECTIVES

1. To assess the socio-demographic data of the undergraduate female students.
2. To determine the level of examination stress among undergraduate female students.
3. To identify the factors inducing exam stress among college female students.
4. To get the association between level of examination stress and selected demographics.
5. To determine the association between exam stress factors and selected demographics.

METHODOLOGY

Research setting: This study was conducted in prince sattam bin Abdulaziz University girl's campus, Wadi Al Dawaser.

Study Population: Undergraduate female students.

Type of Study: It is a quantitative, descriptive, and randomized study.

Sample and sample size: 208 undergraduate female students.

Sampling technique: Random convenient sampling technique adopted.

Inclusion criteria: University female students those who were available on the time of data collection and willing to participate in the study.

Exclusion criteria: Students who were absent on the day of data collection and students who had previous exposure to study on examination stress.

Data Collection: Institute permission and oral consent obtained from the students. Then the researcher distributed the self-administered questionnaire on exam stress to every student in the Arabic language. Duration for answering for each questionnaire was approximately 20 minutes. For data collection, the socio-demographic variables and structured rating scales were used.

Data collection tool: The survey questionnaire consists of three sections.

Section-I: Demographic Variables: includes age, marital status, year of study, GPA in the last semester, proficiency in English, and parents' education.

Section-II: Rating scale to assess the level of exam stress: a structured questionnaire with 25 statements graded as sometimes, frequently, always, and was measured by numerical value 1, 2, and 3 respectively. The total score of a subject ranges from 0 to 75. The greater value indicates more exam stress.

Section-III: Rating scale on factors inducing exam stress: a structured questionnaire with 20 statements graded as mild extent, moderate extent, considerable extent, great extent and it was measured by numerical value 1, 2, 3 & 4 respectively.

Reliability of the tool: the test-retest method was used. The reliability was estimated by Karl Pearson formula. The reliability of the structured questionnaire was found to be 0.97, hence the tool was found highly reliable.

Duration of the study: 3 months (Nov 2018-Jan 2019)

Pilot study: conducted among 10 students to rectify the mistakes in the main study.

Data analysis: The data were analysed through MS-Excel and SPSS V23.0 software.

Ethical consideration: Permission was obtained from the institution. Informed oral consent was obtained from each study student. Anonymity and confidentiality of students were maintained throughout the study.

RESULTS

Analysis of the collected data was carried out based on the objectives of this study. 230 self-administered questionnaires were distributed among students. Out of which 208 returned as a completed questionnaire. The response rate of the survey questionnaire was 90.4%.

Description of demographic variables of students

The students' demographic variables included age, marital status, year of study, GPA in last semester,

proficiency in English, and parents' education were analyzed according to frequency (%).

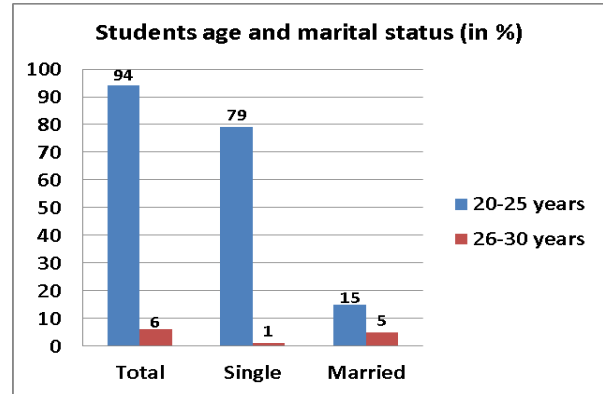


Figure 1: Percentage distribution of students' age and marital status (n=208).

(Figure 1) is regarding the percentage of the age and marital status of students. Among the 208 undergraduates, 196 (94%) were 20 – 25 years in which 165 (79%) single and 31 (15%) of them married, followed by 12 (6%) were 26-30 years in which only 1 (1%) was single and the remaining 11 (5%) of them married.

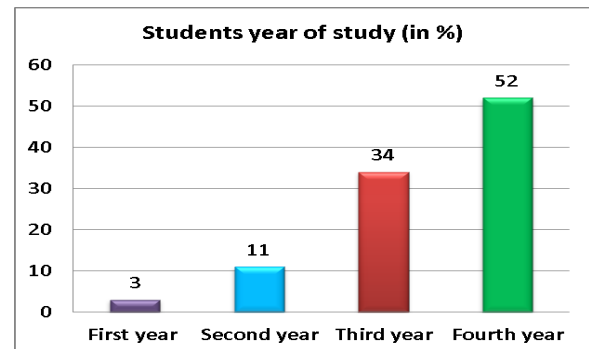


Figure 2: Percentage distribution of students' year of study (n=208).

Out of 208 respondents, 4th-year students were in high number as 108 (52%), followed by 3rd-year students as 71 (34%), 2nd-year students 23 (11%) and 1st-year students 6 (3%) respectively.

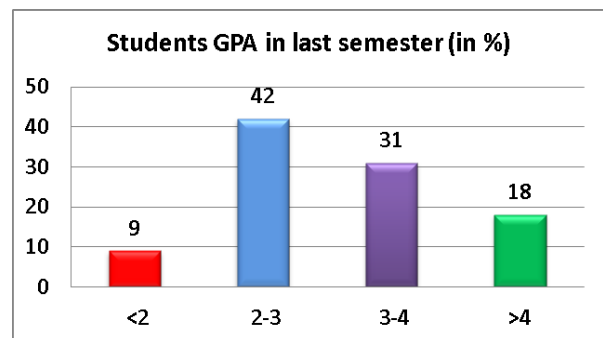


Figure 3: Percentage distribution of students' GPA in last semester (n=208).

Regarding the GPA of the score in last semester 88 (42%) of the students scored between 2 to 3, followed by 64 (31%) of them scored between 3 to 4, 38 (18%) scored above 4 and the remaining 18 (9%) students scored below 2. (Figure 3).

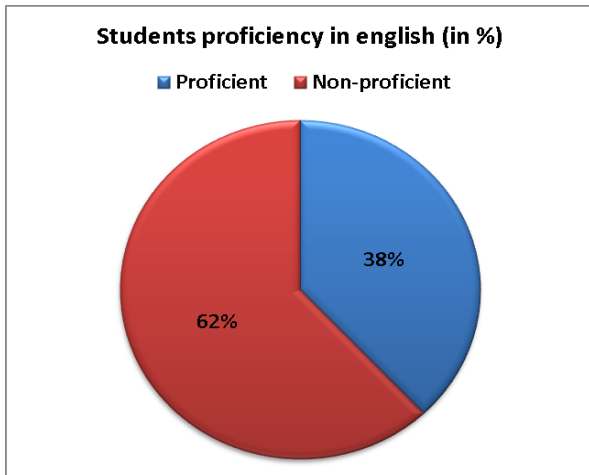


Figure 4: Percentage distribution of students' English proficiency (n=208)

The pie chart above illustrates the students' English proficiency. Majority of students 128 (62%) was non-proficient in English and the remaining 80 (38%) was proficient in English.

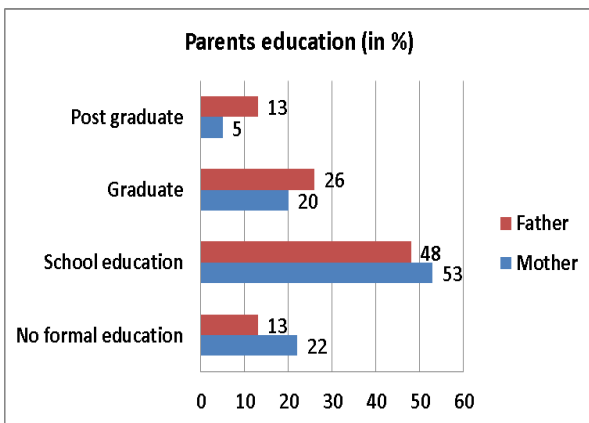


Figure 5: Percentage distribution of students' parent's education (n=208).

With regard to father's educational status, 27 (13%) were illiterate, 100 (48%) were educated up to the school level, graduates 54 (26%), and 27 (13%) were postgraduates.

With regard to mother's educational status 46 (22%) were illiterate, followed by up to school level 109 (53%), graduates 42 (20%) and 11 (5%) were postgraduates.

Description of students' examination stress level

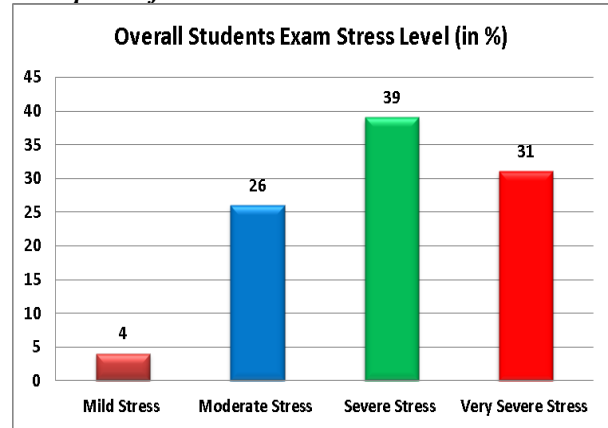


Figure 6: Distribution of students' exam stress (n=208).

The above chart shows 65 (31%) students were having a very severe level of examination stress followed by a severe level 81 (39%), 54 (26%) moderate level and 8 (4%) were having a mild level.

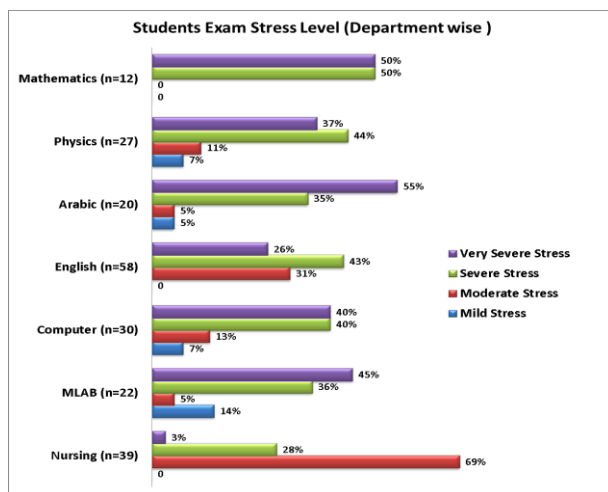


Figure 7: Percentage of students' exam stress level among various departments.

The above figure illustrates that the majority 27 (69%) of nursing students were having a moderate level of examination stress. In contrast, English department students 25 (43%) were having a severe level of examination stress.

In the MLAB department, 10 (45%) students were having a very severe level of examination stress while computer students 24 (80%) were having severe to very severe level of examination stress.

Arabic students 11 (55%), physics students 12 (44%) were having a very severe and severe level of examination stress respectively.

Students 12 (100%) from the mathematics department were having severe to very severe level of examination stress.

Table 1: Association of examination stress and selected demographic variables.

N=208

Sl. No	Demographic Variables	Examination stress		
		χ^2	df	Table value
1.	Year of study	12.071**	9	16.92
2.	Department	29.383*	18	28.87
3.	GPA in last semester	3.838**	6	12.59
4.	English proficiency	8.945*	3	7.82
5.	Mother education	9.490**	12	21.03
6.	Father education	15.162**	9	16.92

Table 1 reveals that department and English proficiency of students associated with the level of examination stress; according to the analysis, the chi-square values are ($\chi^2_{18}=29.383*>$ table value=28.87) and ($\chi^2_3=8.945*>$ table value=28.87) respectively. This indicates that the chi-square values are more than the table values. Hence, it's an insignificant at $p<0.05$ level.

The year of study and GPA in last semester is not associated with the level of examination stress; according to the analysis, the chi-square values are ($\chi^2_9=12.071**<$ table value =16.92) and ($\chi^2_6=3.838**<$ table value=12.59) respectively. This indicates that the

calculated values are less than the table values. So it's an insignificant at $p<0.05$ level.

The mother and father education is not associated with the level of examination stress; according to the analysis, the chi-square values are ($\chi^2_{12}=9.490**<$ table value =21.03) and ($\chi^2_9=15.162**<$ table value=21.03) respectively. This indicates that the chi-square values are less than the table values. So it's an insignificant at $p<0.05$ level.

Description of factors inducing exam stress

There are four main areas of stressors reported which can contribute to exam stress including academic factors, physical factors, social factors and emotional factors.

Table 2: Frequency and percentage of academic factors inducing exam stress

N=208

Sl. No	Academic Factors	Great Extent	Considerable Extent	Moderate Extent	Mild Extent
		f (%)	f (%)	f (%)	f (%)
1	Change in the methods of study from school	106 (51)	76 (36)	26 (12)	2 (1)
2	Too many units in the course	132 (63)	46 (22)	24 (12)	6 (3)
3	Too many subjects	111 (53)	63 (30)	28 (14)	6 (3)
4	Difficulty to cope with English	78 (38)	84 (40)	34 (16)	12 (6)
5	Other students performances being better than mine	48 (23)	70 (34)	60 (29)	30 (14)

The data presented in Table 2 show, the majority of the students 132 (63%) reported too many units in each course causing exam stress in great extent, followed by

111 (53%) students said too many subjects in a semester inducing exam stress in great level.

Table 3: Frequency and percentage of physical factors inducing exam stress.

N=208

Sl. No	Physical Factors	Great Extent	Considerable Extent	Moderate Extent	Mild Extent
		f (%)	f (%)	f (%)	f (%)
1	Living conditions in the hostel	66 (32)	52 (25)	36 (17)	54 (26)
2	Inadequate physical activities	101 (49)	40 (19)	33 (16)	34 (16)
3	Every day travel to college	74 (36)	35 (17)	46 (22)	53 (25)
4	Inadequate rest	107 (51)	50 (24)	28 (14)	23 (11)
5	Lack of quiet environment	124 (60)	44 (21)	21 (10)	19 (9)

The above table represents physical factors in which 124 (60%) students informed lack of quiet environment

during exam period causing stress in great extent and 107 (51%) described due to inadequate rest also inducing exam stress in great extent.

Table 4: Frequency and percentage of social factors inducing exam stress.

N=208

Sl. No	Social Factors	Great Extent	Considerable Extent	Moderate Extent	Mild Extent
		<i>f (%)</i>	<i>f (%)</i>	<i>f (%)</i>	<i>f (%)</i>
1	High expectations of parents	104 (50)	59 (28)	21 (10)	24 (12)
2	Staying away from family	78 (38)	45 (21)	29 (14)	56 (27)
3	Trouble from peers	53 (28)	55 (26)	27 (13)	73 (35)
4	Having to do household work	104 (50)	51 (25)	26 (12)	27 (13)
5	Inadequate family support	71 (34)	52 (25)	19 (9)	66 (32)

In social factors, 104 (50%) students stated two factors are causing the great extent of exam stress i.e., high expectations of parents about student's performance in exams and have to do household work after returning from college.

Table 5: Frequency and percentage of emotional factors inducing exam stress.

N=208

Sl. No	Emotional Factors	Great Extent	Considerable Extent	Moderate Extent	Mild Extent
		<i>f (%)</i>	<i>f (%)</i>	<i>f (%)</i>	<i>f (%)</i>
1	Fear of failure	130 (63)	44 (21)	27 (13)	7 (3)
2	Staying away from friends	68 (33)	57 (27)	36 (17)	47 (23)
3	Indifferent behaviour of teachers	79 (38)	55 (26)	33 (16)	41 (20)
4	Distraction by multimedia	40 (19)	29 (14)	10 (5)	129 (62)
5	Feeling that don't have time for personal hobbies and sports	107 (51)	48 (23)	30 (15)	23 (11)

In emotional factors, majority 130 (63%) students described the fear of failure in the examination is the greatest cause of exam stress, and 107 (51) said feeling no time for personal hobbies and sports also a stressor during the exam period.

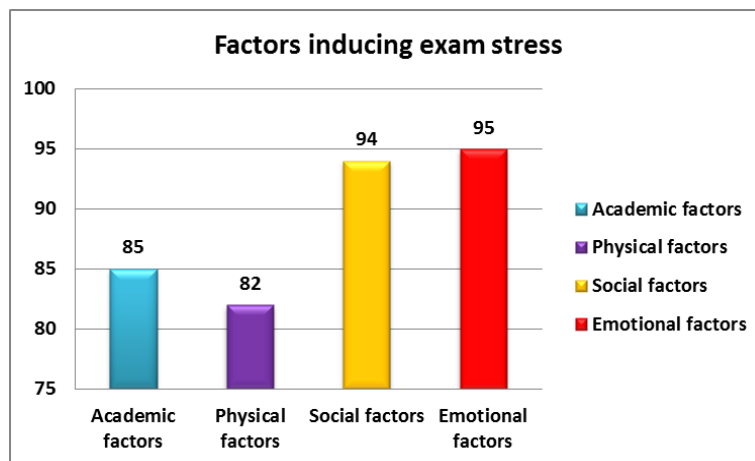


Figure 8: Highest proportion of factors inducing exam stress.

The graph shows the mean number of students with regards to factors inducing exam stress. The highest proportion of students suffers stress to a great extent due to social (94) and emotional factors (95).

Table 6: Association of factors inducing exam stress and selected demographic variables.

N=208

Sl No	Demographic Variables	Academic factors			Physical factors			Social factors			Emotional factors		
		χ^2	df	Table value	χ^2	df	Table value	χ^2	df	Table value	χ^2	df	Table value
1	Year of study	10.414**	9	16.92	11.051**	9	16.92	8.075**	9	16.92	13.375**	9	16.92
2	Department	29.630*	18	28.87	33.581*	18	28.87	31.408*	18	28.87	23.720**	18	28.87
3	GPA in last semester	19.992*	9	16.92	7.415**	9	16.92	12.665**	9	16.92	7.677**	9	16.92
4	English proficiency	33.810*	3	7.82	2.57**	3	7.82	5.002**	3	7.82	2.334**	3	7.82
5	Mother education	24.965*	12	21.03	15.962**	12	21.03	11.252**	12	21.03	11.759**	12	21.03
6	Father education	17.329*	9	16.92	9.646**	9	16.92	8.472**	9	16.92	8.873**	9	16.92

*significant at $p < .05$ level, **insignificant at $p < .05$ level

Table 6 reveals that, year of study is not associated with academic, physical, social, and emotional factors because the chi-square value of the year of study is less than the table value. So it's an insignificant at $p < 0.05$ level.

The department is associated with academic ($\chi^2_{18} = 29.63 > \text{table value} = 28.87$), physical ($\chi^2_{18} = 33.581 > \text{table value} = 28.87$), and social factors ($\chi^2_{18} = 31.408 > \text{table value} = 28.87$) at $p < 0.05$ level. But not associated with emotional factors.

The GPA in last semester is associated only with academic factors ($\chi^2_9 = 19.992 > \text{table value} = 16.92$) at $p < 0.05$ level comparing to physical, social and emotional factors.

The English proficiency is associated only with academic factors ($\chi^2_3 = 33.810 > \text{table value} = 7.82$) at $p < 0.05$ level comparing to physical, social and emotional factors at $p < 0.05$ level.

Mother education is significantly associated with academic factors ($\chi^2_{12} = 24.965 > \text{table value} = 21.03$), but not with physical, social and emotional factors at $p < 0.05$ level.

Father education is associated with academic factors ($\chi^2_9 = 17.329 > \text{table value} = 16.92$), but not with physical, social and emotional factors at $p < 0.05$ level.

DISCUSSION

Stress unremarkably portrays undesirable perception that may have a bearing on one's cognitive and physiological well-being. However, this study verified the stress and stressors that have an effect on college students during examination.

Prevalence of examination stress in this study was 70% of students were having a high level of examination-related stress. Similarly, the pre-examination anxiety (57.2+ 11.74) was significantly higher among medical college students (Sangeeta, N. - 2015).

In this study, the undergraduate students included from various departments, even though it shows high levels of stress about the examination. One of the explanations for the increased stress among college students could be the curriculum and method of study changed from school.

Students from the various department show different levels of stress but the majority of the students from each department have moderate to very severe level of exam stress. Students 100% from the maths department have severe to very severe level exam stress; because it stresses over making equations and calculations in short duration. 55% of Arabic students also have a very severe level of exam stress due to more syllabus contents.

Statistical hypothesis test was done to prove the association between students' examination stress levels and demographics. In which, department and English proficiency were significantly associated with exam stress levels. The students have difficulty in understanding the English language because their school education was in Arabic medium.

This study identified several stressors of examination stress and various reasons have been emphasized, which included fear of failure/too many lectures in the course (63%), high expectations of parents/having to do household works (50%), lack of quiet environment and all of which resulted in a worse status of physical and mental health changes. In this study, the highest proportion of students suffers exam stress to a great extent due to social and emotional factors.

The above findings supported by Luckmizankari, P. (2017) stated that high-level examination stress exists among undergraduates. Among the factors, physical cognition has a high contribution to examination stress.

The current study has shown that there is a significant association between academic factors inducing exam stress and demographics like department, GPA, English proficiency, mother and father education. These findings are relating with Sangeetha N. (2015) study which also showed that psychosocial factors were found to be strongly positively correlated with anxiety, lifestyle ($r = 0.247$) and academic factors.

CONCLUSION

The present study shows the level of examination stress among undergraduate female students due to four factors i.e., academic, physical, social and emotional. Chiefly 70% of students were having severe to very severe level of examination stress due to social and emotional factors. This highlights the need for reducing exam stress among students.

Teachers, parents, and college administrators should work together to reduce the students' exam stress and enhance their coping strategy. Stress management and time management should be taught along with first-year curricula.

RECOMMENDATIONS

- Train the academic advisors regarding stress management techniques or relaxation therapies to help students to manage with stress predominantly nearby the examination times.
- Students ought to be offered recommendation and techniques to manage with examination stress. The recommendation includes stop using an internet, exercising, relaxing, consulting a counsellor, and making a plan to do a little bit of work on daily basis to prevent procrastination.
- The introduction of stress management and time management into the first year curriculum could prove useful in combatting this problem.
- It is recommended to university administrators to provide students with academic counselling and guidance through psychologist with the intention of decrease the students stress and also for enhancing good performance.
- Further research should be done to analyse the impact of exam stress among students.

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