# PREVALENCE AND ASSOCIATED RISK FACTORS OF STRESS AMONG THE UNDERGRADUATE UNIVERSITY STUDENTS IN KHYBER PAKHTUNKHWA PROVINCE PAKISTAN

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**Abstract**

In the present study the prevalence and its associated risk factors of stress are investigated among undergraduate students of Khyber Pakhtunkhwa universities. For this purpose, the cluster random sampling method is used. All universities in the Khyber Pakhtunkhwa are considered as clusters, from which seven universities are randomly selected. In the second stage, faculties are selected from selected clusters (universities). Then, from the given faculties' students are identified, and a structure questionnaire is distributed among them. Total of 863 comprising 543 male and 320 female undergraduate students returned the questionnaires. The data entered to Minitab version 19 for descriptive and inferential analysis. In  descriptive  analysis,  the number of students having various levels of stress and factors responsible for producingstress among undergraduate university students are presented. In order to assess the significant risk factors of the prevalence of stress among undergraduate students' ordinal logistic regression model is used. The reason behind using this model is as that response variable is categorical, that is, various levels of stress. The levels of stress have an order from no stress to potentially dangerous stress. The fitted ordinal logistic model alsoshows that too many examination/assessments, lack of financial support, poor time management, lack of adequate physical activities and love relationship are significantly($P<0.05$) related to the response variable which is log odds of the prevalence of stress.

**Keywords:** stress, logistic regression, too many examination/assessments, lack of financial support, poor time management, lack of adequate physical activities and love relationship.

## Introduction

Stress as an unavoidable part of life, generally effects a wide range of groups of different populations. According to the World Health Organization (WHO), stress is recognized as a global health issue. Millions of people worldwide experience stress-related disorders, which can have significant impacts on mental and physical health
[1, 2]. Theprevalence of stress can vary from country to country. It is influenced by cultural, social, and economic factors. Major factors that contribute to stress are urbanization,technology, political and economic instability, and changes in lifestyle and work patterns [3]. In the present competitive age, it is reported that young generation are found to be more prone to stress, particularly students at Higher education institutions (HEIs) [4]. HEIs play vital role in the development of education all over the world, andits performance based on the academic achievement of the students [3,5].

Students must get higher education and better skills in order to compete the current prevailing dynamic industrial environment [6]. In such environment, academic achievement of students is associated with domestic issues, physical activities, low
income, academic demands, changes in cultural and social aspect, and adjustment to new environment [3,7]. There was higher incidence of mental health problems such asstress, anxiety and depressions reported among undergraduate students than the general population [2]. Stress seems to be very common in undergraduate students` life becausecollege students need to ensure their academic survival and prepare themselves for thefurther career. In short, prevalence of stress is one of the major factors associated withacademic performance of the students [3].

Stress is the psychological and physical state that results when the resources of the individual are not sufficient to cope with the demands and pressure of the situation. Insimple words, stress is anything that poses a challenge or a threat to our well-being. It has been defined as a process in which environmental demands exceed the adaptive capacity of an organism resulting in psychological and biological changes that may place persons at risk for disease [1].

Learning and memory can be affected by stress. Although an optimal level of stress canenhance learning and memory ability [8]. But higher level of stress affects mental healthof persons which then lead to various psychological disorders. One of such disorders isdepression which is prevalent worldwide [9]. Depression can have detrimental effects on university students, leading to a range of negative consequences. Academically, it often results in decreased motivation, impaired concentration, and reduced engagement,leading to declining grades and even academic withdrawal [10]. Socially, depression can lead to isolation and strained relationships, as individuals might struggle to participate in social activities or maintain connections. In short it can hinder personal development, reduce students' self-esteem, badly affect students' academic achievement and exacerbate existing mental health challenges [9].

The increasing gravity and frequency of psychological health concerns, coupled with a surge in mental health issues, are troubling developments on college campuses. Astonishingly, up to 60% of university students are compelled to abandon their studies due to the incapacitating effects of depression, anxiety and maladjustment [3].

Moreover, stress has been linked to increased suicidal cases, drug and alcohol abuse among students. Suicide rates among the undergraduate university students are three times higher than they were in 1950, as reported by American College Health Association Statistics (ACHAS) published in Psychology Today [1,11].

Prevalence of stress is a universally increasing problem and affecting more than 61% of the undergraduate university students and expected to reach 75% in the next one decade [3, 11]. As undergraduate university students have the potential to become the future leaders of their cities, nations, and global societies. Indeed, different psychiatric and psychological researches conducted in multiple developing and developed countries across the past few decades have shown that prevalence of stress is higher among the undergraduate university students compare with the general population [2]. In a large international survey of 14,000 students across 19 universities in 8 countries, 35% of students met the diagnostic criteria for at least one common mental health condition [12]. University

students report higher levels of depression than the 12.9% reported in the general population and age matched peers [13]. In addition, according to two French studies, 15% of students had suicidal thoughts, while 3% had a suicidal tendency. It seems that suicidal thoughts are more prevalent, during the past 12 months, in students than other young people [14,15,16].

Studies conducted in both developed and developing countries have reported different levels of stress among undergraduate students. For instance, Asif et al. [8] conducted a study in GC women university of Sialkot, Pakistan, reported 84.4% of stress. Qazi [3] carried out a survey among undergraduate students in Peshawar, Pakistan, concluded 83% of stress. In recently Haq et al. [6] carried out a survey in Khyber Pakhtunkhwa province, claimed 67.67% of stress. Abdulghani et al. [15] reported prevalence stress rate of 57% in King Abdul Aziz university. Kalaithasan et al. [1] found 62.2% prevalence of stress in Public University of Malaysia. Khero et al. [17] resulted 31.1% of students' stress in Tehran university of Medical Science, Iran. Hamdan et al. [18] stated 57.5% of stress in Debre Birhan Governmental and non-governmental health science colleges, Ethiopia. Whereas the prevalence in Canada was found 19.1% by Bashir et al. [19] in Canadian Memorial Chiropractic College. Akram et al. [20] claimed 66% of stress in Sheffield Hallam University, United Kingdom (UK) respectively.

## Risk Factors of Stress

A risk factor of stress among students is something that increases the chances of getting stress of a student experiencing stress. The more risk factors to a person have the higher chances of occurrence of the stress. Following are some of main risk factors of stress among the undergraduate university students [15]. Academic workload is a major cause of developing stress in students. The academic demands placed on students, especially when there is a high volume of exams and assessments, excessive number of hours of study, lack of balance, procrastination etc. can lead to heightened levels of stress. The risk of stress increases with low physical activity. Proper exercise helps reduce the production of stress hormones [21,22]. Poor living conditions can play a major role in the moods and general well-being of students. When students live in conditions which are sub-standard and it is difficult for them to afford some basic amenities, like tuition and educational expenses, basic needs and living expenses etc. They can easily become depressed and obviously this affects all aspects of their lives, especially their studies [5,15]. poor time management can results inefficiencies and reduced productivity, scheduling conflicts, Lack of rest and self-care etc. [16,23]. Without effective time management, students may find themselves with too many tasks to complete in a short amount of time. This can lead to feelings of overwhelm and anxiety as they try to juggle multiple responsibilities simultaneously [19]. While love relationship can bring joy and fulfillment, they can also be a source of stress and contribute to increased stress levels for undergraduate university students [24].

Symptoms of stress fall into three general categories: physical or emotional behavior and mental. Physical symptoms may include fatigue, gastrointestinal problems, hypertension, headaches, heart issues including palpitations, muscle tension, and sleep disturbances [3]. In emotional symptoms students might experience increased irritability, anxiety, or exhibiting more nervous, along with feelings of overwhelm or hopelessness, changes in appetite, improper use of drug and alcohol, harsh treatment of others and neglecting responsibilities [4]. Mental symptoms can entail difficulties in concentration, memory recall, decision-making, being pessimistic or seeing only the negative side, racing thoughts and isolation, potentially leading to lowered academic performance. Recognizing and addressing these symptoms is vital to ensure students' overall well-being and academic success [18]. Prevalence of stress is a universally increasing problem and affecting more than 61% of the undergraduate university students and expected to reach 75% in the next one decade. As undergraduate university students have the potential to become the future leaders of their cities, nations, and global societies. These increased stress loads come with some dire consequences. Suicide rates amongst college-aged students are three times higher than they were in 1950 [3,11]. Unfortunately, despite of these significance problems there is so limited work on students stress

especially undergraduate university students in Pakistan. It is important to identify the prevalence, and risk factors of stress among undergraduate university students, which not only affect their health but also their academic achievements at different points of time in their study period.

The present study aims to assess the prevalence and risk factors associated with stress among the undergraduate university students in Khyber Pakhtunkhwa (KP) province, Pakistan.

## Materials and Methods

The data was collected through two stage cluster random sampling procedure which is one of the well-known sampling techniques. In cluster sampling population is divided into subgroups or clusters and then sample clusters are selected by simple random sampling. In two stage cluster sampling techniques, again samples are selected from the selected clusters. In this study, firstly the universities of Khyber Pakhtunkhwa were considered as clusters. Then we selected 7 clusters randomly from all 33 clusters which are University of Peshawar (UOP), Islamia College Peshawar (ICP), Hazara University (HU), University of Malakand (UOM), University of Swat (UOS), University of Engineering and Technology Peshawar (UETP)  and Abdul Wali Khan University of Mardan (AKUM). In next stage, we considered all the faculties as sub clusters within each selected cluster. Then, randomly selected one sub cluster from each selected cluster for data collection such as social sciences from University of Peshawar, natural sciences from Islamia college university Peshawar and biological and health sciences from Hazara University. Similarly, sciences from University of Malakand, electrical and computer engineering from University of Engineering and Technology, religious and legal studies from Swat University and Arts & Humanities from Abdul Wali Khan University. Then, from the given faculties, students were identified, and a structure questionnaire distributed among them. Total of 863 consisting 543 male and 320 female undergraduate students returned the questionnaires. The data entered to Minitab version 19 for descriptive and inferential analysis. In descriptive analysis, the number of students having various levels of stress and factors responsible for generating stress among undergraduate university students are presented.

For the data collection a structured questionnaire consisting of 3 sections was used. Section "A" of the questioner consists the demographic details of the undergraduate students.  In section "B" the stress level of the participant is assessed by "Work Stress Scale" (WSS), recommended by the American institute of stress. In this section, 8 questions were added which rated using a 5-points Likert scale ranging from 1=Never, 2= rarely, 3=Sometimes, 4= Often and 5= very Often. Then the response is converted to WSS score which range from 0 to 40 points. Participants who scored less than 15 were considered as free of stress or healthy, while those who got more than 15 points were defined as stressed.  Further, the stress is categories from low stress to potentially dangerous using the WSS scale. The score 16 to 20 considered low stress level, 21 to 25 revealed moderate stress level, 26 to 30 showed sever stress, and 31 to 40 score indicate potentially dangerous level of stress [24,33].

Section "C" consists associated risk factors of stress among post graduate students. These risk factors were obtained from previously published articles.

## Ordinal Logistic Regression

The categorical variables are not always binary, but it can take more than two values, for example, the smoking intensity of an individual is (0 =never, 1= rarely, 2 = often, 3 = some time, 4=always. In this situation, if the categories have some ordered then it is known as ordinal variables. For modeling of such response variable, the ordinal logistic regression model is used [48,49]. The Proportional odd model is one of the types of ordinal logistic model, which is also called cumulative logit model, which is as under,

$$logit(p_1) = log\left(\frac{p_1}{1-p_1}\right) = \beta_{0k} + \beta_1 x_1, \qquad (3.4)$$

$$logit(p_1 + p_2) = log\left(\frac{p_1+p_2}{1-p_1-p_2}\right) = \beta_{0k} + \beta_1 x_1 + \beta_2 x_2, \qquad (3.5)$$

$$logit(p_1 + p_2 + p_3) = log\left(\frac{p_1+p_2+p_3}{1-p_1-p_2-p_3}\right) = \beta_{0k} + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3, (3.6)$$

$$logit(p_1 + p_2 + p_3 + \cdots + p_i) = log\left(\frac{p_1+p_2+p_3+,\ldots,+p_i}{1-p_1-p_2-p_3-,\ldots,-p_i}\right), = \beta_{0k} + \beta_1 x_1 +$$
$$\beta_2 x_2 +, \ldots, +\beta_p x_p, \qquad (3.7)$$

where,

$\beta_0$ is the intercept, $\beta_1, \beta_2, \beta_3, \beta_4 \ldots, \beta_p$ are the coefficients of the ordinal logistic regression model, $x_1, x_2, x_3, x_4, \ldots, x_p$ are the explanatory variables and the response variable is the log of odd ratio or simply logit of $p_i$.

In the present study, we assessed the factors which associated with the prevalence of stress among undergraduate students of Khyber Pakhtunkhwa universities. We use the ordinal logistic regression model because the dependent variable is ordinal. The dependent variable, that is, prevalence of stress has five categories: no stress, low stress, moderate stress, higher stress, potentially dangerous stress. Moreover, the predictors variable are: many exams, financial support, lack of physical activity, poor time management, love relationship, low grade in examination, lack of social activity, many group activities, uncomfortable environment, personal injury/illness and low self- esteem. Statistical software Minitab version 19 is used for analysis of data [48].

**Results And Discussion**

Cluster sampling method is used for selection of representative sample from the population. For this purpose, universities are considered as clusters. As the procedure of cluster random sampling suggest, we selected seven cluster, that is universities, from all clusters though simple random sampling. Then from each cluster, faculties are selected by simple random sampling. Total of 980 questionnaires distributed among various faculties. Total of 863 consisting 543 male and 320 female undergraduate students returned the questionnaires. Data is entered to Minitab version 19 for further analysis. After analysis, prevalence of stress in selected students is found to be 85.1%. In this prevalence only moderate stress level, severe stress level and potentially dangerous stress level are considered. The mild stress category is not included in stress prevalent statistics.

Table 1 shows distribution of respondents from the different areas of Malakand division according to age. The table shows that total numbers of respondent were 863. The maximum respondent belong from the age group 21-22 years i.e. 38.16%, up to 20 years shows 23.87%, 23-24 represents 23.36%, and 2.34% from above 25 years.

**Table 1:** Distribution According to Age

| Age | Frequency | Percent (%) |
|-----|-----------|-------------|
| Up to 20 years | 234 | 23.87 |
| 21-22 years | 374 | 38.16 |
| 23-24 years | 229 | 23.36 |
| Above 25 years | 23 | 2.34 |
| No Response | 117 | 11.93 |
| Total | 980 | 100.00 |

Table 2 shows distribution according to gender. The table shows male respondents are 543(62.92) and female are 320(37.08).

**Table 2:** Distribution According to Gender

| Gender | Frequency | Percent (%) |
|--------|-----------|-------------|
| Male | 543 | 62.92 |
| Female | 320 | 37.08 |

| Total | 863 | 100 |
|-------|-----|-----|

Figure 1 represents stress levels among undergraduate university students in Khyber Pakhtunkhwa province, Pakistan. The Figure shows that 28 (14.90%) of the undergraduate students have no stress. Further, 234 (15.11%) of the participant have low stress level. These two categories are considered as stress free categories because low stress level has not negative effect on daily routine and health of the person. The Table 4.3 and figure 1 further show that 464 (53.77%) undergraduate students have moderate level of stress, 120 (13.90%) undergraduate students have severe level of stress, 17 (1.96%) undergraduate students are suffering from potentially dangerous level of stress. These three categories have negative effect on the performance and health of individuals.

Table 3 shows frequency table of factors responsible for producing stress among undergraduate university students in Khyber Pakhtunkhwa province, Pakistan. Accordingly, 730 (84.58%) of the undergraduate students have heavy burden of examination and assessment while 133 (15.42%) of them have not face such burden. Moreover, the Table present that 526 (60.95%) of undergraduate students having poor skill of time management, while, 337 (39.05) have good skills of time management. According to the Table 495 (57.36%) undergraduate students have lack of adequate physical activities, while 368 (42.64%) undergraduate students have active in physical activities. The Table further shows that students who have lack of proper financial support from their family are 461(53,42%), while 402 (46.58%) of the undergraduate students have not facing such problem, that is, they are properly supported by their family. Finally, the Table presented that 463 (53.65%) of undergraduate students fall in love, while 400 (46.36) have no such love relationship.
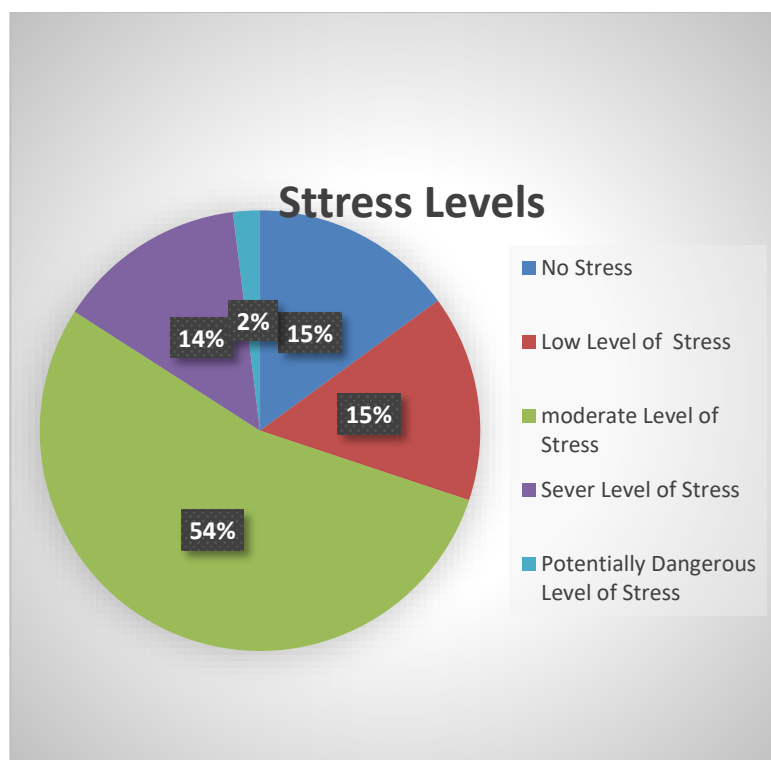


**Figure 1:** Stress Levels among Students

**Table 3:** Factors Responsible for Generating Stress Among Undergraduate University Students in Khyber Pakhtunkhwa Province, Pakistan.

|  | Group | Frequency | percent |
|--|-------|-----------|---------|
| Too many exams or assessments | Yes | 730 | 84.58 |
|  | No | 133 | 15.42 |
| Poor time management | Yes | 526 | 60.95 |

| | | | |
|---|---|---|---|
| | No | 337 | 39.05 |
| Lack of adequate physical activities | Yes | 495 | 57.36 |
| | No | 368 | 42.64 |
| Lack of proper financial support | Yes | 461 | 53.42 |
| | No | 402 | 46.58 |
| Love relationship | Yes | 463 | 53.65 |
| | N o | 400 | 46.34 |

Table 4 shows strong association among too many exams/assessments, lack of financial support, poor time management, lack of physical activity and love relationship with prevalence of stress. These coefficients are negative indicating negative relationship of log odd of no stress vs stress. Thus, too many exams/assessments, lack of financial support, poor time management lack of physical activity and love relationship increases the log odd of healthy vs stress decreased, therefore, the higher code 5 (Potentially dangerous stress), 4 (sever stress), 3(moderate stress), 2 (low stress) are more likely to occur as these risk factors increases.

**Table 4:** Result of Ordinal Logistic Model

| | Co-efficient | Std. Error | P value | Lower Bound | Upper Bound |
|---|---|---|---|---|---|
| [Stress levels = 1] | 2.70312 | 0.322188 | .000 | | |
| [Stress levels = 2] | 0.0697867 | 0.266489 | 0.793 | | |
| [Stress levels = 3] | 2.68400 | 0.284291 | .000 | | |
| [Stress levels = 4] | 4.80833 | 0.353155 | .000 | | |
| Too many exams/assessments | -0.530866 | 0.185431 | 0.004 | 0.41 | 0.85 |
| Lack of proper financial support | -0.572624 | 0.139458 | 0.000 | 0.43 | 0.74 |
| Poor time management | -0.365158 | 0.141419 | 0.010 | 0.53 | 0.92 |
| Lack of adequate physical activities | -0.380376 | 0.135308 | 0.005 | 0.52 | 0.89 |
| Love relationship | -0.372200 | 0.134465 | 0.006 | 1.11 | 1.89 |

**Discussion**

This study reveals that the incidence of stress among undergraduate university students in Khyber Pakhtunkhwa province, Pakistan is 85.1%. Almost similar trends of stress among undergraduate university students are seen in other studies conducted in Khyber Pakhtunkhwa, Pakistan. For examples, Asif et al. [8] conducted a study in GC women university of Sialkot. They claimed that the prevalence of stress was 84.4%. moreover, Qazi [3] carried out a survey among undergraduate students in Peshawar. His study reveals that the prevalence of stress is 83%. Recently, Haq et al. [6] reported that prevalence of stress is 67.67% among the undergraduate students of university of Malakand, Dir Lower, Khyber Pakhtunkhwa. These figures are different, the reason might be the study of Haq et al [6]. were conducted in limited area, that is, only one universities of Khyber Pakhtunkhwa, while the present study is conducted in 7 universities of Khyber Pakhtunkhwa.
The present study found that female had more prevalence of stress than male i.e 48.15% in male and 63.1% in females respectively. This result is comparable to the result of Abbas et al. [52]. Abdulghani et al. [15] in Saudi Arabia and Mofatteh [53] in Egypt also found more prevalence of stress in female undergraduate students as compare to male undergraduate students.

**Academic Workload**

Academic workload is a major cause of developing stress in students. The academic demands placed on students, especially when there is a high volume of exams and assessments, excessive number of hours of study, lack of balance, procrastination etc. can lead to heightened levels of stress among students [21]. World Health Organization (WHO) and international Labor Standard (ILO) reported

that academic field is a highly stressful occupation [19]. Some medical experts now speculate that perhaps as much 70 to 85 percent of all diseases and illnesses are stress associated [23].

Consistent with previous findings, academic issues are thought to be the most prevalent source of stress for undergraduate university students [26]. For example, World Health Organization (WHO) reported that, excessive amount of stress in undergraduate university students is the main cause of ill health all over the world and estimates that over 300 million suffer from stress due to academic workload.

In the current study we found a strong association of academic workload with stress among the undergraduate university students in KP province, Pakistan. Haq et al. [6] and Qazi [3] also found strong association of academic workload with stress among the undergraduate university students in KP province, Pakistan. Similarly, in Egypt, Mofatteh [53] in United Kingdom, and Abdulghani et al. [15] in Saudi Arabia also showed a strong association of academic workload with stress among the undergraduate university students.

## Financial Stress

Financial stress is a significant concern for many students, particularly in higher education. Lack of proper financial support can have a considerable impact on students' well-being, academic performance and overall university experience. The high cost of tuition and other educational expenses can lead to financial burden and anxiety for students. Beyond tuition, students also have to cover living expenses such as rent, food, transportation, and textbooks [6]. Financial challenges in meeting these basic needs can lead to stress and affect the quality of life for students. Many students may need to work part-time or even full-time jobs to support themselves while studying. Balancing work responsibilities with academic commitments can be overwhelming and increase stress levels. Financial stress may distract students from their studies and impact their academic performance. Worries about money can make it difficult for students to concentrate on their coursework and hinder their ability to excel academically [11].

The present study revealed an association of stress score with financial problems among undergraduate university students in KP province, Pakistan. This finding was similar with that of Qazi [3] and Haq et al. [6] in Khyber Pakhtunkhwa, Pakistan. Joo et al. [54], Rois et al. [7], Trombitas [55] and Wharton [56] also found that financial stress has been associated with academic failure and health issues.

## Lack of Physical Activity

Stress due to lack of physical activity is a prevalent concern in modern society. The absence of regular physical activity can lead to various stress-related issues. Physical activity stimulates the release of endorphins, which are natural mood elevators and stress reducers [18]. Without regular exercise, students may experience lower levels of these feel-good hormones, leading to increased stress and decreased overall well-being. Lack of physical activity can negatively impact sleep quality. Poor sleep can heighten stress levels and affect students' ability to focus, retain information, and manage daily challenges effectively [23]. Regular exercise has been linked to better mental health outcomes, including reduced symptoms of anxiety and depression. The absence of physical activity may lead to poorer mental health and heightened stress levels [24].

This present study revealed that lack of physical activity is one of the associated risk factors of stress among undergraduate university students. This finding is consistent with the study of Asif et al. [8] and Haq et al. [6] in Khyber Pakhtunkhwa, Pakistan. Emon, et al. [2] in Bangladesh, Zaid et al. [57] also found that globally 61% of the undergraduate university students were suffer from high level of stress due to lack of physical activity.

## Poor Time Management

Time management is the process of planning and organizing how one allocates their time to different activities and tasks. Students' stress due to poor time management is a common issue in academic

settings. Ineffective time management can lead to various stress-related challenges. Inadequate time management can result in students feeling overwhelmed with academic tasks, such as assignments, projects, and exam preparation. This pressure to meet deadlines and manage coursework can lead to heightened stress levels [1, 25]. Poor time management often leads to procrastination, where students delay important tasks until the last minute. Procrastination can increase stress as students may find themselves rushing to complete assignments or studying intensively before exams [22]. Poor time management may lead to reduced productivity and inefficiency in completing tasks. This can leave students feeling frustrated and anxious about their ability to meet academic demands. Time management play vital role in productivity and mainlining stress in individual. Moreover, the students who can manage their time effectively can get academic success which is their ultimate goal. The present study suggested the significant relationship of time management and stress level [27].

The current study showed significant association of stress among the undergraduate university students with poor time manage. This result is similar with the study of Kalaithasan et al. [1], Haq et al. [6] and Zaid et al. [57]. They found significant association of poor time management with stress level among the undergraduate university students.

## Love Relationship

While love relationship can bring joy and fulfillment, they can also be a source of stress and contribute to increased stress levels for undergraduate university students. Maintaining a love relationship alongside academic responsibilities, extracurricular activities and social commitments requires effective time management. Balancing the demands of relationship with other obligations can create time-related stress, especially when students feel overwhelmed by competing priorities [18, 27].

As our study Kalaithasan et al. [1], Emon et al. [2] and Saipanish [16] also claimed in their study that, love relationship is a significant source of stress among undergraduate university students.

## Conclusion

The main objectives of the current study are to identify the risk factors that are related to the prevalence of stress in undergraduate students at Khyber Pakhtunkhwa universities and to model the prevalence of stress with the given predictors (risk factors).

Custer random sampling method is used to identify the students from all universities of Khyber Pakhtunkhwa. After identification of students, structure questionnaire is distributed among them. Total of 863 students fill the questionnaires and returned to the researchers. The stress level is assessed by "Work Stress Scale" (WSS), recommended by the American institute of stress.

Because the response variable or the outcome variable is ordinal in nature i.e. no stress, low stress, moderate stress, sever stress, and potentially dangerous stress, the ordinal logistic regression model is utilized for the study. Finally, the analysis shows that the main causes of stress incidence are lack of financial support, lack of physical activity, poor time management and love relationships.

The results of our study may be useful in Pakistan in developing better public health policies and prevention plans. It is suggested that stress awareness be increased. In educational institutions, it is important to spread awareness of the causes, risk factors, and stress management techniques. By choosing more participants (>863) from the research area and incorporating additional risk factors, the study may be extended.

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