

A STUDY TO ASSESS DIFFERENCES IN STRESS LEVELS BETWEEN HOSTELLER AND NON-HOSTELLER UNDERGRADUATE STUDENTS

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DOI: <https://doi.org/10.5281/zenodo.18782695>

Keywords

Stress, Undergraduate Students, Stress Levels, Hosteller, Non-hosteller

Article History

Received: 27 December 2025

Accepted: 11 February 2026

Published: 26 February 2026

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Abstract

Background: Stress among university students has appeared as a critical concern in recent year due to its damaging impact on mental health and academic performance. Undergraduate students significantly experience stress and stress affect students' academic achievement. The prevalence of stress among undergraduate students is from 20.9% to 94.5%.

Objective: To explore the differences in stress levels between hosteller and non-hosteller undergraduate students of PUMHSW.

Material & Methods: A Comparative Cross-sectional study was conducted among 280 Undergraduate students 140 were hosteller while 140 were non-hosteller at Peoples University of Medical and Health Science in Nawabshah. Students aged between 18-22 years who consented to participate were included and having any previous psychiatric history or history of drug abuse were excluded. Data were collected using a short version Depression, Anxiety and Stress Scale (DASS-21) and analyzed using SPSS version 25. Frequencies, percentages, and Pearson correlation were applied to determine the associations.

Results: The mean age of participants was 21.48 ± 1.67 years. The majority of the participants 82.50%, were belongs to middle class. Among the participants 140 (50.0%) was hosteller and 140(50.0%) participants was non-hosteller. Accommodation status were significantly associated with stress levels (p-value .034). The majority of the participants had extremely severe stress 125(44.6%), whereas severe stress 68(24.3%), normal stress 44(15.7%), moderate stress 32(11.4%), and mild stress 11(3.9%).

Conclusion: The findings revealed that the majority of the participants experienced varying levels of stress, ranging from normal to extremely severe, non-hosteller experienced higher levels of stress compared to hosteller. Awareness sessions and positive relationships with family and friends can significantly reduce stress levels.

INTRODUCTION

With the fast changes in the world and increasing demands, life has become more

stressful for everyone and people experience stress in different ways for example, students face stress from workload and assignments, mothers

worry about the future of their children, and employees and leaders deals with many responsibilities. Even an individual person may encounter different kinds of stress and because of this, the present time is often called the age of stress. The world health organization has described stress as the health epidemic of the 21st century. Stress is a complicated event that decrease productivity and quality of life and cause mental health disorders and chronic health conditions, therefore Stress had damaging effects on a person`s well-being and caused many problem e.g., weak immune system, sleep problems, mental disorders and heart disease. There are two type of stress e.g., Eustress and Distress, and eustress is also known as positive stress in which stress motivates the person while distress is the opposite of Eustress, which is a very common type of stress because it is related to feeling of worry, anxiety. Stress among undergraduate students has become an important concern in higher education because it causes negative effects on their heath and academic performance while stress can also serve as a motivating force. Sources of stress of undergraduate students can be academic assignments and workloads, lack of student`s knowledge and professional skills, clinical environments, and personal issues.

Hostel life can be stressful, Living in hostel is an important phase for female students pursuing higher education as it offers opportunities for growth and independence but this phase is also challenging phase for students and bring several psychosocial challenges because the hostel environment can affect student`s mental health and hosteller students face many issues like poor hygiene, strict rules, unhealthy food, and bad habits that lead to tress and adjustment difficulties. Living arrangements can play an important role in a student`s mental health and well-being, as students living away from home may experience social isolation, homesickness and difficulties to adjusting a new living environment, while on the other hand students who living at home with their families have emotional support and encouragement from their families, which can help to enhance academic performance and reduce stress level.

A study was carried out at SGT University to study the stress, wellbeing and sleep disturbance among hosteller and non-hosteller students and

the results indicates that stress among hosteller is high as compared to non-hostellers.

A cross-sectional survey was carried out at Khulna University results revealed that academic stress was highly prevalent, with 82.0% of students reporting excessive academic pressure from assignments. Another descriptive cross-sectional study was conducted at john`s college, Agra, data was collected from 160 undergraduate students and the result revealed that 103(64.4%) of students experienced moderate stress, 34(21.3%) reported high perceived stress, and 23(14.4%) had low stress. A cross-sectional study was conducted among 196 undergraduate students aged 18-30 years from public and private universities in Karachi and result revealed that stress was reported in 20.9% of students, stress as mild in 15.3% and moderate in 5.1%.

Stress is a common and familiar psychological problem among undergraduate university students and negatively affect their wellbeing and mental health also overall academic performance. University student often experience stress due to examinations, academic workload and financial issues and social adjustment. Accommodation status, e.g. living in hostel or at home influence level of stress due to differences in living environment, social support and daily routines. Although several studies have assessed stress among university students but there is limited literature comparing stress levels between hosteller and non-hosteller undergraduate students. Therefore this study is designed to assess the difference in stress levels between hosteller and non-hosteller undergraduate students using DASS-21 scale. The findings of this study may help educational institutions and healthcare professionals to develop strategies for stress management and improve student mental health. Therefore, the aimed of the study is to assess and compare the stress levels between hosteller and non-hosteller undergraduate students at PUMHSW. The study was based on the hypothesis that there is a significant relationship existed between accommodation status and stress level.

MATERIAL & METHODS

This study is Comparative Cross-sectional study. The study was conducted at PUMHSW, New

campus. Data collection was over two month's period of time from 17 November to 17 January 2026 after the approval of Institutional Review Board (IRB). Sample size was 280 calculated by using Yamane formula. $N=n/(1+n \cdot e^2)$, n: The required sample size, N: The total size of the population, e: The desired margin of error 5%, Confidence level 95. A Purposive Non-probability Sampling technique was used to select participants.

The inclusion criteria included all hosteller and non-hosteller students who are the Undergraduate students of PUMHSW and enrolled in Allied Health programs (Pharm-D, DPT, Nursing and public health), aged between 18-22 years and those who give consent and willing to participate in study, and exclusion criteria included those who have any previous psychiatric history or history of any drug abuse and not willing to participate were excluded from the study. Data were collected using a short version Depression, Anxiety and Stress Scale (DASS-21).

Depression Anxiety Stress Scale-21 (DASS-21) were used for the assessment of stress. DASS-21 is a self-report scale developed Lovibond and Lovibond (1995). DASS-21 items of which 7 items helps in measuring stress level. DASS-21 is a reliable and valid tool to measure depression, anxiety and stress. DASS-21 subscale have good internal consistency and reliability while Cronbach's alpha coefficients were acceptable for depression ($\alpha=0.91$), anxiety ($\alpha=0.87$), and stress subscale ($\alpha=0.89$). The collected data was analyzed by using statistical package for social science (SPSS), version 25. Descriptive statistics such as mean, frequency, percentage and standard deviation was used for summarize demographic variables and stress levels. Pearson correlation was used to determine the relationship between accommodation status and stress score. A confidence level of 95% was used for the study and $P<0.05$ was considered statically significant.

RESULTS

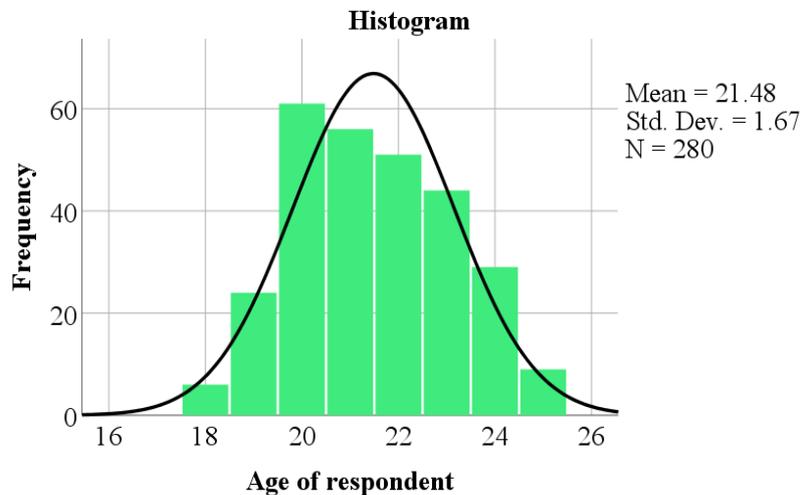


Figure 1: Age of respondents

Table 1: Religion of respondents

Religion	Frequency	Percent%
Muslim	256	91.4%
Hindu	24	8.6%
Total	280	100.0%

Table 2: Ethnicity of respondents

Ethnicity	Frequency	Percent %
Sindhi	184	65.7%
Punjabi	36	12.9%
Baloch	20	7.1%
Paktoon	2	7%
Muhajir	30	10.7%
Other	8	2.9%
Total	280	100.0%

Table 3: Marital status of respondents

Marital status	Frequency	Percent %
Single	270	96.4%
Married	10	3.6%
Total	280	100.0%

Table 4: Economic status of respondents

Economic status	Frequency	Percent%
Poor class	9	3.2%
Middle class	231	82.5%
High class	40	14.3%
Total	280	100.0%

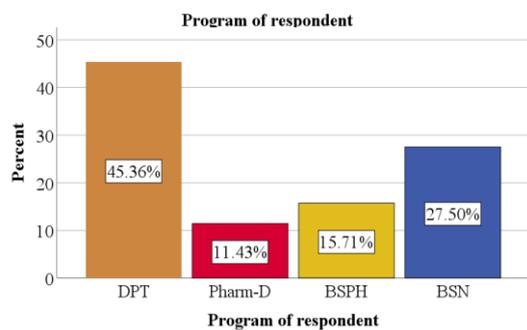


Figure 2: Program of respondents

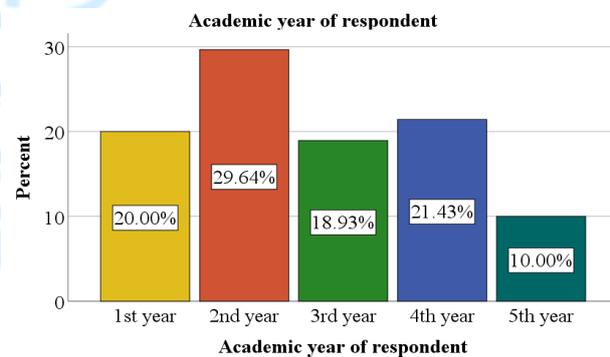


Figure 3: Academic year of respondents

Table 5: Accommodation status of respondents

Accommodation status	Frequency	Percent (%)
Hosteller	140	50.0%
Non-Hosteller	140	50.0%
Total	280	100.0%

Table 6: Relationship in Stress Levels between Hosteller and Non-Hosteller

Stress categories	DESCRIPTIVE STATISTICS						
	Frequency	Percentage	Mean	Median	Mode	SE	SD
Normal	44	15.7%					
Mild	11	3.9%					
Moderate	32	11.4%					

Severe	68	24.3%	3.78	4.00	5	.086	1.446
Extremely severe	125	44.6%					
Total	280	100.0%					
INFERENCE STATISTICS							
Hypothesis	r	p-value	Hypothesis Supported				
H ₁	.127	.034	yes				

Table 7: Depression Anxiety Stress (DASS-21) questions

Questions	Never	Sometimes	Often	Almost always
I found it hard to wind down.	81(28.9%)	158(56.4%)	29(10.4)	12(4.3%)
I found it difficult to relax.	58(20.7%)	118(42.1%)	79(28.2%)	25(8.9%)
I felt that I was using a lot of nervous energy.	54(19.3%)	105(37.5%)	83(29.6%)	38(13.6%)
I found myself getting agitated.	68(24.3%)	123(43.9%)	64(22.9%)	25(8.9%)
I tended to over-react to situations.	68(24.3%)	109(38.9%)	68(24.3%)	35(12.5%)
I felt that i was rather touchy.	106(37.9%)	111(39.6%)	41(14.6%)	22(7.9%)
I was intolerant of anything that kept me from getting on with what I was doing.	64(22.9%)	131(46.8%)	51(18.6%)	33(11.8%)

DISCUSSION:

Regarding the demographical finding of this study, the mean age of the study participants (figure-1) was shown 21.48 years ±1.67, which is similar to previous studies that indicate most undergraduate nursing students are under 25 years of age. Table-1 shows that the majority of the participants 256 (91.4%) was Muslims and 24(8.6%) participants were of Hindu religion. Similar findings have been reported in earlier Pakistani study conducted among university students that 99.2% of the students were Muslims remaining 0.8% were from other religions. Table-2 the majority of the participants were sandhi 184 (65.7%), Punjabi 36 (12.9%), Baloch 20 (7.1%), and Paktoon 2 (7%), Muhajir 30(10.7%) and 8 (2.9%) participants belonged to other ethnic groups. Table-3 shows that most participants were single 270 (96.4%), while 10(3.6%) were married. Table-4 shows that the majority of the participants 82.50%, were belongs to middle class, 14.29 % high class and remaining 3.21% were belongs to poor class. Figure-2 shows that the majority of respondents were from the DPT program (45.36%), followed by BSN (27.50%), BSPH (15.71%) and pharm-

D (11.43%) related findings was reported in previous study that a high prevalence of stress among medical students needed attention as it may impair the learning ability that may ultimately affect the quality of patient care they provide after graduation. Figure-3 shows the academic year distribution of respondents. The majority of participants were from the 2nd academic year (26.64%), 4th year (21.43%), 1st year (20.00%), 3rd year (18.93%) and 5th year (10.00%). Table 5 shows that the 140 (50.0%) was hosteller and 140(50.0%) participants was non-hosteller.

Regarding the assessment of stress levels finding of this study Table-6 showed that the majority of the participants had extremely sever stress 125(44.6%), whereas severe stress 68(24.3%), normal stress 44(15.7%), moderate stress 32(11.4%), and mild stress 11(3.9%). These findings indicate a high prevalence of stress among hosteller and non-hosteller. This aligns with previous findings suggesting that the prevalence of stress was uniformly high in both home and hostel medical students. The mean of stress score is 3.78 ± 1.446 and a standard error (SE) of .086, median is 4.00 and mode is 5. The

hypothesis H1 was tested using a correlation analysis. The result showed Pearson correlation (r) of .127 and p -value .034 the relationship is considered statically significant, hypothesis (H1) was supported. Table 7 shows the response of hosteller and non-hosteller students to the depression anxiety stress (DASS-21) questions. The sometimes category was the most frequent response, generally ranging between 37% and 56%.

CONCLUSION

Stress among undergraduate students has become a significant concern due to its harmful effect on their health and academic performance. Stress is a negative emotional, cognitive, behavioral process occurs when a person tries to adjust and deal with stressors and it disrupts the normal person's physical or mental wellbeing. This study was conducted to assess stress levels between hosteller and non-hosteller undergraduate students and to determine the relationship between stress and demographic variables. The findings revealed that the majority of the participants experienced varying levels of stress, ranging from normal to extremely severe, non-hosteller experienced higher levels of stress compared to hosteller, and it indicate that stress is a common psychological issue between hosteller and non-hosteller students.

In conclusion, stress was found to be alarmingly high in both hosteller and non-hosteller students. University students need to have good mental health for their academic performance, their life and their future. Encourage students to involve in regular physical exercise, maintain good nutrition, positive relationships with family and friends, ensure adequate sleep, and participate in extracurricular activities can significantly reduce stress levels. By managing these factors universities can create a supportive learning environment that promotes hosteller and non-hosteller undergraduate students overall mental health and wellbeing.

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