

ORIGINAL ARTICLE:
**SOCIO-DEMOGRAPHIC FACTORS RELATIONSHIP WITH
PSYCHOLOGICAL DISTRESS OF UNDERGRADUATE UNIVERSITY
STUDENTS OF PAKISTAN**

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ABSTRACT

OBJECTIVE

To investigate the relationship of socio-demographic variables (gender, peer group size) with psychological distress in undergraduate students of university.

STUDY DESIGN

Cross-sectional study

PLACE AND DURATION OF STUDY

The study was conducted at university of Karachi, Pakistan from June to Aug 2022.

METHOD

A total of 300 with age ranged between years 19 to 27 (21.10 ± 1.77). The Demographic Information form and Kessler psychological distress scale K10 was used to collect data.

RESULTS

The results showed significant gender difference was observed in the levels of psychological distress of university students; female scored higher. Further, students with three or more friends had lower level of psychological distress in comparison with students with no friends.

CONCLUSION

It can be concluded that gender and peer group size has significant impact on the psychological distress experienced by students. Male gender and having more than three friends was linked with lower level of psychological distress.

KEYWORDS

Psychological distress, University students, Peer group size (number of friends)

INTRODUCTION

Mental health as well as physical health of an individual gets affected by the way a person process their feelings and thoughts. Individual surroundings, socialization and relationships has deep impact on individual mental health. In case of mental health problems psychological distress as well as emotional distress is experienced by a person¹. Psychological distress is perceived incapacity of individual to handle social demands effectively and efficiently².

Various studies have identified various risk factors that lead to psychological distress in students of university including study pressure, being female, excessive technology use, limited availability and access to higher education by minority group students³. In Egypt 60.8% students reported depression and 64.3% reported anxiety⁴. Around 31% of undergraduate university students in Saudia Arabia had reported psychological distress⁵. Undergraduate learning is crucial time in the student's academic journey where they deal with various educational and social challenges for better future⁶. A study suggests that medical students in Pakistan reported 72% anxiety⁷. Similarly final year private medical students' stress, anxiety, depression was higher when compare with government medical students⁸. In Sialkot university 84.4 % students reported stress, 75% depression and 88.4% anxiety⁹.

Female medical students of Nigeria reported more psychological distress as compare to male students but no gender difference was reported in psychological distress levels¹⁰. However, male student's depression score was more in comparison to female counterparts ¹¹. Female students (23.6%) experienced more psychological distress in comparison to male students (21.94%) however this difference was not statistically significant¹². In the rural community of Bangladesh among older women

the occurrence of psychological distress was high. Further, various socio-demographic factors like low literacy, residing in non-urban areas and unemployment lead to greater incidents of psychological distress¹³.

A study found that socio-demographic factors (age, gender), social factors (social support and loneliness) and psychological factors (perceived threat and representation of illness) were related with depression and anxiety. Moreover, psychological health of women, younger adult and people from underprivileged areas was found to be poor. Likewise age effect was enhanced due to loneliness, deprivation and representation of illness; gender had an impact on loneliness, perceived threat, social support and representation of disease¹⁴.

In the university student's depression, anxiety and stress frequency was 75%, 88.4% and 84.4% respectively¹⁵. Overall occurrence of depression in Pakistan university students was around 42.66%¹⁶. This research was conducted to link demographic variable i.e. gender and peer size with psychological distress among undergraduate students, as limited data on the topic is available in Pakistani context. The study hypothesized that

- Female students will score higher on psychological distress as compare with male students
- Students with larger peer size will report lesser psychological distress in comparison with students with no friends

METHOD

Procedure

All the ethical considerations were taken into account, the participants were assured about the confidentiality, anonymity and the right to withdraw from the research at any time. All the agreed participants were provided the final testing material to fill in. The data was collected in a group setting averaging 20 participants in a group, and it took 15 minutes to complete the testing protocol. All students were debriefed at the end of the study.

Participants

The co-relational included 300 undergraduate students from universities of Karachi having age between 19 to 27 years, studying in regular degree/course programs, having no prior psychological and psychiatric history.

Instruments

For data collection consent form, demographic sheet and Kessler Psychological Distress Scale (K10)¹⁷ was employed. K10 contains 10 items to measure psychological distress symptoms. It contains questions gauging anxiety and depressive symptoms experienced in past 30 days. Each statement was scored on 5 point likert scale. Cut off scores of different levels of psychological distress are as follows: 10 to 15 (low); 16 to 21 (moderate); 22 to 29 (High); 30 to 50 (severe)¹⁸.

RESULTS

The study sample had an age range of 19 to 24 years, with a mean of 21.29 years ($SD=\pm 1.65$). Participants in this research predominantly had nuclear family system (56%). Furthermore, most of the participants were having ages between 19 to 21 (54%).

Table 1

Table 1

Demographic information of participants (N=300)

Groups	N	Mean	SD	Max	Min	%
Gender		1.44	.497	2	1	
Male	168					55.8%

Female	132				43.9%
Birth order		2.01	.858	4	1
First	99				32.9%
Middle	110				36.5%
Last	81				26.9%
Only born	10				3.3%
Marital status		1.04	.204	2	1
Single	287				95.3%
Married	13				4.3%
Family system		1.30	.465	3	1
Nuclear	212				70.4%
Joint	87				28.9%
Education		2.47	1.077	84	1
First year	78				25.9%
Second year	60				19.9%
Third year	104				34.6%
Fourth year	58				19.3%
No of friends in university		2.55	.624	3	1

No one	21	7.0%
One to three	93	30.9%
More than three	185	61.8%

Table 2

Descriptive Statistics and Univariate Normality of Variables

Variables	Items	α	Mean	Standard error mean	Standard of deviation	Kurtosis	Skewness
Psychological distress	10	.87	27.78	.51	8.85	-.610	.150

Table 2 showed the descriptive statistics and normality of study variables. Skewness value in above table showed that data distribution was normal as score lies between +1 and -1

Table 3

Frequency of students Psychological Distress scores with respect to Gender

	Frequency	Gender	Frequency
Low	22	Female	6
		Male	16
Moderate	61	Female	29

		Male	32
High	91	Female	39
		Male	51
Very high	135	Female	80
		Male	55

Table 3 indicated around 225 students were at higher risk of having psychopathology/mental disorder (119 female and 106 male).

Table 4

Gender difference with respect to psychological distress of university students (N=300)

Variable	Female		Male		<i>t</i> (275.14)	<i>p</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Psychological Distress	29.12	8.55	26.07	8.96	2.98	.003*	0.34

Table 4 showed significant gender influence in students' psychological distress, $t(275.14) = 2.98$, $P < .05$. Cohen's *d* value was 0.34, suggesting medium effect. Female student ($M = 29.12$, $SD = 8.55$) scored higher than male students ($M = 26.07$, $SD = 8.96$).

Table 5

Mean, Standard Deviation And One Way Analysis Of Variance of Psychological Distress in No Friend, One Or Three Friends Or More Than Three Friends Groups.

Variable	No friend	One to three friends	More than three friends	$F(2, 297)$	η^2	Post Hoc
	$M(SD)$	$M(SD)$	$M(SD)$			
Psychological Distress	32.38(10.68)	27.72(9.19)	27.29(8.34)	3.162(2,297)	0.02	1>2>3

Table 5 indicated that students' psychological distress was significantly affected by students university peer group size, $F(2, 297) = 3.162$, $\eta^2 = 0.02$, $p < .05$. The value of η^2 is 0.02 which showed small size effect. Post hoc comparison among students with no friends ($M = 32.38$, $SD = 10.68$) and more than three friends ($M = 27.78$, $SD = 8.34$) indicated significant mean difference in psychological distress levels; students with no friends had scored higher on psychological distress.

DISCUSSION

To explore relationship of socio-demographic factors with psychological distress of undergraduate university students this study was conducted. Results indicated that psychological distress is elevated in female student with respect to male university students. This finding is supported by previous researches also. Table 3 showed that around 80 female students were in very high psychological distress range where as male students were more in low, moderate and high level of psychological distress ranges. Incidences of psychological problems are more prevalent in females as compare with males. This could be because of exposure of risk factors like inequality, violence and discrimination based on gender¹⁹. Or it may be due to the stressors related to academics, work overload, interpersonal conflicts and hurdles in social contacts for enjoyment²⁰.

Similarly results suggested that students having more than three friends scored significantly lower than students who had no friend on psychological distress scale. It means that having significant peer circle served as buffer against psychological distress in university students. Stress buffer hypothesis also suggest that social support tend to have significant negative impact on psychological symptoms²¹. Research covering 53 countries in healthy adolescents suggested inverse association between psychological distress and peer support ²². A study indicated that adolescents having greater peer support had better health related quality of life ²³. Individual's strong belonging sense and social support promotes better wellbeing and mental health overall²⁴.

CONCLUSION

Conclusion can be drawn that gender has significant relationship with the psychological distress where female students reported increased psychological distress levels. Further, peer circle size or number of friends has significant effect on psychological distress of students. Psychological distress level was lower in students having three or more friends as compare with students who had no friends.

CONFLICT OF INTEREST

None

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DISCLOSURE

None

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