

## Level of Study Induced Anxiety among Undergraduate Students Before and After Examination

Hira Irfan, Sidra Manzoor\* and Mehwish Niaz

\*Department of Physical Therapy, CMH Medical College, Pakistan.

Received July 03, 2020; Revised July 25, 2020; Accepted July 27, 2020

### ABSTRACT

**Objective:** The objective of the research was to determine the study Induced Anxiety Level among different Undergraduate University Students pre and post examination.

**Design:** The research design was an observational study design (with two-point readings)

**Place and duration:** Different departments (DPT, BSCS, BBA, Media Studies) of University of South Asia were selected for the research for four months.

**Methods:** Three hundred and forty-three students were selected from four departments of the university using random sampling cluster procedure. Westside test anxiety scale was used to determine the level of study-induced anxiety before and after the examination. Results were added on the IBM SPSSV 21 sheet and applied the data was analyzed in mean, standard deviation, frequency, percentage, and ANOVA.

**Results:** 86.1% of students were not taking any kind of antidepressants. Mean anxiety level in male was  $2.943 \pm$  (SD 0.8), in female mean value were  $3.670 \pm$  (SD 0.8). Among all the students Doctor of physical therapy DPT students had high pre-examination anxiety level and the mean was  $\pm 4.309$  (SD 0.8). although other departments have low to moderately high anxiety levels. Pre-examination Anxiety level was specifically high among the female students mean value was  $\pm 3.670$  (SD 2.4) while in male student's anxiety level mean was comfortably low  $\pm 2.943$  (SD 0.8).

**Conclusion:** According to this study, high anxiety levels give a major impact on academic performance. Female and health sciences students showed high anxiety levels. The present study was conducted on the single university level which suggests that regular assessment of anxiety must be done in the institution and counseling services as the intervention of anxiety can be made available to students.

**Keywords:** Study induced anxiety, Undergraduate university students, Before the examination, After examination

### RATIONALE

As there was very little work done on anxiety level difference among different departments in university students so this study will contribute to the literature.

### INTRODUCTION

Study induced anxiety is a multidimensional phenomenon which combined afraid of failure, an absence of confidence, worry and low morale [1]. A little stress is necessary to make the student's task-oriented but excessive stress may affect the student's academic goals. According to the previous studies, a large number of students experience study anxiety due to excessive stress near the examination [2,3]. It is considered as one of the major issues among students because it causes low performance and demotivation. Therefore, this study is conducted to evaluate the persistence of study-induced

anxiety among Undergraduate students of the University of South Asia before the examination and after the examination. Various research in the US and Canada outlined that student pursuing medical course experience more stress than common population but there is not any past experiment which was done on comparing the depression among different department of private sectors. Study anxiety is associated

**Corresponding author:** Sidra Manzoor, Department of Physical Therapy, CMH medical college, Pakistan, Tel: 03040720890, E-mail: sidramanzoor76@gmail.com

**Citation:** Irfan H, Manzoor S & Niaz M. (2022) Level of Study Induced Anxiety among Undergraduate Students Before and After Examination. J Psychiatry Psychol Res, 5(3): 330-334.

**Copyright:** ©2022 Irfan H, Manzoor S & Niaz M. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

with low-grade points [4]. Female students are more susceptible to anxiety [5]. It gives the multiple factors which influence future achievements and academic goals. American Psychiatric Association (2000) suggested that person who is suffering from text anxiety may apply for adaptation under Americans with disabilities University students, especially junior semesters are a group which particularly prone to stress and anxiety [6,7]. They are away from home for the first time, keeping the high level of academic goals and make an adjustment into the new atmosphere. Goals for high grades are not the single reason for anxiety; other reasons for anxiety include the difficult presentation, tough assignments, and uncomfortable environment [8,9]. Determination of anxiety level among university students often examined by researchers in which they focus on chronic anxiety in the lives of university students [10]. They found that first-year students score higher than other students this research was conducted to determine the anxiety among different departments of the university. Mental health had shown a great variety among many characteristics in common population of students [11]. There are many benefits of understanding mental health problems among students especially for the academic success Different departments have different levels of anxiety which they experienced in their student life. The need to begin this study is justified. For this research, anxiety is defined as experiences which reduced the quality of academic goals among undergraduate students.

## OBJECTIVE

The objective of my research was to determine the study induced anxiety level among undergraduate university students before and after the examination.

## METHODOLOGY

### Study Design

The research design was an observational study design (with two-point readings).

### Setting

Different departments (DPT, BSCS, BBA, Media Studies) of the University of South Asia were selected for the research.

### Duration of Study

Four months.

### Sample Size

Estimated size of the total population of the university was approximately 2500, 95% level of confidence was present, 5% confidence interval (margin of error) was present at the time of research. The sample size was 343 which was calculated through an online website.

## Sampling Technique

Sample size was 343 which divided into four (groups) clusters and then selected the students by simple random technique among the different clusters.

## Inclusion criteria

Those students who were present in the class on the day of data collection

- Undergraduate students;
- Age was between 18-25 years

## Exclusion criteria

- Postgraduate students;
- Those who were taking any kind of anti-depressants;
- Students with known causes of depression and anxiety.

## DATA COLLECTION PROCEDURE

Selected random clusters of different department students including physiotherapy in the University of South Asia. The departments which were included media studies, management sciences (BBA), health sciences (DPT) and computer sciences (BSCS) Those students who filled the consent form were eligible to participate in the study. Collection of data was started before one week of examination and after one week of the examination. Students were requested to complete the self-reported questionnaire after that calculated the total score of the questionnaire and divide the total score with 10 points.

## Test anxiety score

- 1.0 - 1.9 Low test anxiety
- 2.0 - 2.5 Average test anxiety
- 2.5 - 2.9 Normal test anxiety
- 3.0 - 3.4 Moderately high (some items rated 4=high)
- 3.5 - 3.9 High test anxiety (half or more of the items rated 4=high)
- 4.0 - 5.0 Extremely high anxiety (items rated 4=high and 5=extreme)

## OUTCOME MEASURE TOOLS WITH VALIDITY AND RELIABILITY

### Westside Test Anxiety Scale

West Side Text Anxiety Scale was a valid and reliable tool for the measurement of anxiety disorder. The scale was brief and easily administered. It was free of cost and easily available for the students. The items of the scale easily cover the self-analyzed anxiety which impairs the performance. Validity and reliability. An alpha value of reliability was 0.89 by using Cronbach's.

### Statistical Analysis

Data was collected by the self-administered questionnaire and entered on the IBM SPSS V 21 sheet while analyzed by the

mean, standard deviation, frequency, percentage, and ANOVA.

**Variables**

**Independent variables:** Age, Gender, Examination

**Dependent variable:** Anxiety

50% DPT and BBA students were 25.1 % who participate in the research 24.9% of students of BSCS and Media studies which take participate in the research. 28.7% students of 4<sup>th</sup> semester, 84.7% of students had the GPA 2.6 and more than that, 86.1% of students were not taking antidepressants (**Table 1**).

**RESULTS**

According to the results 98.5% students, age was between 18-25 years an equal number of male 50% and female students

**Table 1.** Socio demographic data.

Variables		Percentage %	Variables
Age	18 years or less	5	1.5%
	21-25 years	329	98.5%
Gender	Male	167	50.0%
	Female	167	50.0%
Department	DPT	84	25.1%
	BSCS	83	24.9%
	BBA	84	25.1%
	Media Studies	83	24.9%
Semesters	First	4	1.2%
	Second	27	8.1%
	Third	48	14.4%
	Fourth	96	28.7%
	Fifth	66	19.8%
	Sixth	35	10.5%
	Seventh	28	8.4%
	Eighth	26	7.8%
	Ninth	2	0.6%
	Tenth	2	0.6%
GPA	2.5 or less	51	15.3%
	2.6 or more	283	84.7%
Use of antidepressants	Yes	13	3.9%
	No	321	86.1%
Total		334	100.0%

Mean anxiety level in male was 2.943± (SD 0.8), in female mean value were 3.670± (SD 0.8), F value was 12.927 and the signs were 0.00 in pre-examination anxiety levels According

to the results the female students had high anxiety levels than male students (**Table 2**).

Mean anxiety level in male was  $1.956 \pm (SD 0.6)$ , in female mean value were  $2.113 \pm (SD 0.7)$ , F value was 4.382 and the signs were 0.037 in post-examination anxiety levels

Significant showed that there was no difference in the post-examination anxiety level (**Table 3**).

**Table 2.** Pre-examination anxiety level among gender.

Gender	Mean	SD	F	P-value
Male	2.943	0.8	12.927	0.00
Female	3.670	2.4		

**Table 3.** Post examination anxiety level among gender.

Gender	Mean	SD	F	P-value
Male	1.956	0.6	4.382	0.037
Female	2.113	0.7		

DPT students showed mean value  $4.309 \pm (SD 0.8)$ , BSCS students mean value  $3.484 \pm (SD 3.3)$ , BBA students mean value  $2.814 \pm (SD 0.6)$ , MEDIA STUDIES students mean value  $2.613 \pm (SD 0.5)$ , F value was 15.75 and significant was 0.00 in pre-examination anxiety level.

According to the results, the DPT students showed a high anxiety level than the other departments of the university (**Table 4**).

**Table 4.** Pre-examination anxiety level among different departments.

Department	Mean	SD	F	P-value
DPT	4.309	0.8	15.75	0.00
BSCS	3.484	3.3		
BBA	2.814	0.6		
MEDIA STUDIES	2.613	0.5		

DPT students showed mean value  $2.064 \pm (SD 0.8)$ , BSCS students mean value  $2.086 \pm (SD 0.5)$ , BBA students mean value  $2.22 \pm (SD 0.5)$ , MEDIA STUDIES students mean value

$1.76 (SD 0.6)$ , F value was 7.020 and significant was 0.00 in post-examination anxiety level (**Table 5**).

**Table 5.** Post examination anxiety level among different departments.

Department	Mean	SD	F	P-value
DPT	2.064	0.8	7.020	0.00
BSCS	2.086	0.5		
BBA	2.22	0.5		
MEDIA STUDIES	1.76	0.6		

According to the result, the post-examination anxiety level was almost equal.

**DISCUSSION**

The current study outlined high anxiety levels among female students as compared to male students. A previous study by

Erdem also revealed that female students had high anxiety levels than male students [12]. Also revealed the same results. female often show more anxiety symptoms as compared to the male [13]. In this study, results showed that stress for scoring high, fear of failure and lack of concentration for exams cause high anxiety levels. Worrying about the exams

cannot be regarded as high scores, in fact, it only raises the anxiety levels. Another possible reason for high anxiety levels among females was due to narrow mind attitude of people in Pakistan where lack of freedom for the female to participate in other activities to relax their mind High level of study induced anxiety may be due to fear of failure, disappointment and lack of facilities. According to my study results, there were high anxiety levels among DPT as compared to other department students. Medical student life can be very stressful. Normal to a high level of test anxiety were outlined in previous studies [14] other than that end of the semester time just before the examination students showed psychological issue which also raised the anxiety level (Med Educ, 1991) also stated the similar results [15,9]. This research revealed the different levels of study induced anxiety among the students of the different department at the University of South Asia. Literature support that medical students had a high anxiety level due to academic stress. DPT department showed high anxiety levels while other departments had low to moderately high anxiety. Physiological factors showed the variation among students which may affect the results. The environment of the university also affects the anxiety level of the student's high anxiety levels directly lowers the academic performance of the students and research also support this. Hembree stated in 1997 that the test anxiety caused poor education in a meta-analysis of 562. Richard and Davis also revealed the same results about the high anxiety and low academic performance [16]. Guardians and friends can help the students by keeping them motivated to perform well without getting the stress. Different types of training can be given to the students to minimize their anxiety level by providing them problem-solving ways in their education life.

## CONCLUSION

According to the present study, the conclusion is that anxiety is one of the major issues in student academic life specifically for female and science students. It mainly gave a negative impact on academic performance. Although the majority of male students have low anxiety levels many of them have a high level of anxiety.

## REFERENCES

1. Bayati A, Beigi M, Salehi M (2009) Depression prevalence and related factors in Iranian students. *Pak J Biol Sci* 12: 1371-1375.
2. Chapell MS, Blanding ZB, Silverstein ME, Takahashi M, Newman B, et al. (2005) Test anxiety and academic performance in undergraduate and graduate students. *J Educ Psychol* 97: 268.
3. Ross SE, Niebling BC, Heckert TM (1999) Sources of stress among college students. *Soc Psychol* 61: 841-846.
4. Finely R (2014) Survey monkey. United States 1999.
5. Dugas MJ, Gagnon F, Ladouceur R, Freeston MH (1998) Generalized anxiety disorder: A preliminary test of a conceptual model. *Behav Res Ther* 36: 215-226.
6. Mikolajczyk RT, Maxwell AE, El Ansari W, Naydenova V, Stock C, et al. (2008) Prevalence of depressive symptoms in university students from Germany, Denmark, Poland, and Bulgaria. *Soc Psychiatr Psychiatr Epidemiol* 43: 105-112.
7. Saravanan C, Kingston R, Gin M (2014) Is test anxiety a problem among medical students: A cross-sectional study on outcome of test anxiety among medical students? *IJPS* 6: 24.
8. Bozionelos N (2001) Computer anxiety: Relationship with computer experience and prevalence. *Comput Hum Behav* 17: 213-224.
9. Eisenberg D, Gollust SE, Golberstein E, Hefner JL (2007) Prevalence and correlates of depression, anxiety and suicidality among university students. *Am J Orthopsychiatr* 77: 534-542.
10. Khan MS, Mahmood S, Badshah A, Ali SU, Jamal Y (2006) Prevalence of depression, anxiety and their associated factors among medical students in Karachi, Pakistan. *J Pak Med Assoc* 56: 583.
11. Chen L, Wang L, Qiu XH, Yang XX, Qiao ZX (2013) Depression among Chinese university students: Prevalence and socio-demographic correlates. *PLoS One* 8: e58379.
12. Erdem E (2007) Study of the relationship between test anxiety and the epistemological and problem-solving beliefs of students on a general chemistry course. *World Appl Sci J* 2: 750-758.
13. Côté SM, Boivin M, Liu X, Nagin DS, Zoccolillo M, Tremblay RE (2009) Depression and anxiety symptoms: Onset, developmental course, and risk factors during early childhood. *J Child Psychol Psychiatr* 50: 1201-1208.
14. Ashcraft MH (2002) Math anxiety: Personal, educational and cognitive consequences. *Curr Dir Psychol Sci* 11: 181-185.
15. Heather L, April L (2009) The relationship between test anxiety and academic performance. Missouri Western State University, Egypt.
16. Khan MS, Mahmood S, Badshah A, Ali SU, Jamal Y (2006) Prevalence of depression, anxiety and their associated factors among medical students in Karachi, Pakistan. *J Pak Med Assoc* 56: 583.