DEPRESSION AS A PREDICTOR OF ACADEMIC PERFORMANCE IN MALE AND FEMALE UNIVERSITY STUDENTS

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ABSTRACT

OBJECTIVE

The purpose of the present research is to examine the predictive relationship of depression and academic performance, and difference in the level of academic performance and depression among male and female university students.

STUDY DESIGN

Cross Sectional study

PLACE AND DURATION OF STUDY

The research was performed in Karachi, Pakistan from July to December, 2012.

SUBJECTS & METHODS

The research was consisted of 331 participants, 166 females and 165 males between age ranges from 19-30 years (Mean = 21.70, SD = 2.700). The data was collected from different universities of Karachi, Pakistan through purposive sampling technique. Center for Epidemiological Studies Scale for Depression and demographic form was administered and for academic performance CGPA of last completed exams were noted.

RESULTS

The finding of the current research indicates that Depression is significantly negatively correlated with academic performance ($R^2 = .222$, $F (329, 1) = 17.061$, $p < .05$). Male score significantly higher on the variable of depression [$t (329) = 2.033$, $P < .05$] and they found to have lower academic performance than female [$t (329) = -4.972$, $P < .05$].

CONCLUSION

It is concluded that depression is significantly negatively correlated with academic performance. It's also found that there is a difference in the level of depression and academic performance in male and female university students. This research provides us an important understanding about the students' level of depression and academic performance and we can provide key implications to cure depression and to maintain the adequate level of academic performance in university students.

KEY WORDS:

Depression, academic performance, gender differences and male and female university students

INTRODUCTION

Depression is the one of major psychiatric disorder in all over the world the lifetime occurrence of depression is 16.2% and annual occurrence of depression is 6.6 % in general population[1]. There is also high prevalence of depression in university student[2]. The estimated prevalence rate of depression is 10% in graduate university students[3] however, among first year university students 7% of men and 14% of women have major depressive disorder[4].

Depression greatly affects the academic performance and health of university students. Depressive individuals have low academic achievement[6-7] and have frequent academic failure[8]. Previous research depicted that depressive symptoms is associated with poor academic performance[9-10].

Researches suggest gender differences in depression; female are more likely to experience depressive disorder as compare with male[11] There is a significant difference of academic performance in male and female university students[14] Female students have higher level of academic achievement than male students[16,18].

In Pakistan, literature is available on prevalence of depression in medical university students in respect to gender difference but researches conducted in other universities are scarce. Therefore, present research is aimed to investigate the predictive relationship of depression and academic performance in male and female university students. There are three main objectives of present research a) to investigate the predictive relationship of depression and academic performance in male and female university students, b) to examine the difference of depression in male and female university students and c) to see the difference of academic performance in male and female university students.

SUBJECTS AND METHOD

SAMPLE

The present research contained 331 university students (male = 165 and female = 166) from different universities of

Karachi, Pakistan. Their qualification ranged from BS to PhD through purposive sampling technique. The participants' age ranged from 19-30 years. The mean age is 21.70 and Standard Deviation is 2.700.

INSTRUMENTS

Demographic information form was used through record variables like age, gender, birth order, education, family structure, address etc. While Cumulative Grade Point Average (CGPA) of last exam was used as measure of academic achievement.

Centre of Epidemiologic Studies Depression Scale

Depression was assessed with Centre of Epidemiologic Studies Depression Scale (CES-D) [19]. This 20-Items scale contains four main dimensions that are negative emotions, positive emotions, physical complaints and interpersonal relationships. Total score ranges from 0-60. A score of 16 or above indicates presence of depression. The Scale has excellent internal consistency, the Cronbach's alpha reliability coefficient is ranged from 0.84 to 0.85 and the reliability in White society is 0.90.

PROCEDURE

Brief introduction of research and researcher were given to participants. They were also informed that their provided information would remain confidential and they have right to withdraw from research at anytime. Demographic information form and Centre of Epidemiologic Studies Depression Scale were administered. The data were analyzed by using SPSS (version- 18). Descriptive statistics, Linear regression analysis and t-test was computed.

RESULTS

The demographic details of the sample are provided in table 1. The results of the current research showed that depression predicted academic performance (R^2 = .222, F = 17.061, p < 0.05), depression explained 22% variance in academic performance of university students (see table 2 & 3). Male university students have higher level of depression than female university, t (329) = 2.033, P< 0.05 while female university students had higher level of academic performance than male university students, t (329) = -4.792, P< 0.05 (see table 4).

Table 1

Demographic Characteristics of sample

Variables	Category	Frequency	Percentage
Gender	Male	166	50.2
	Female	165	49.8
Family status	Joint	102	30.8
	Nuclear	229	69.2
Socioeconomic Status	Middle	109	32.9
	Upper Middle	135	40.8
	Upper	087	26.3
Age	Mean	Std. Deviation	
	21.70	2.700	

Table 2
Summary of Linear Regression Analysis with Depression as predictor of academic performance in university students

Variables	Category	Frequency	Percentage
Gender	Male	166	50.2
	Female	165	49.8
Family status	Joint	102	30.8
	Nuclear	229	69.2
Socioeconomic Status	Middle	109	32.9
	Upper Middle	135	40.8
	Upper	087	26.3
Age	Mean	Std. Deviation	
	21.70	2.700	

Table 3
Coefficients summary of Linear Regression Analysis with Depression as predictor of academic performance in university students

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	3.090	.063		49.200	.000
Depression	-.012	.003	-.222	-4.130	.000

Table 4
Summary of gender wise comparison in the level of depression and academic performance in university students

Variable	Groups	N	M	SD	t	df	Sig
Depression	Male	166	20.37	8.012	2.033	329	.043**
	Female	165	18.43	9.331			
Academic Performance	Male	166	2.727	.4826	-4.972	329	.000***
	Female	165	2.890	.4431			

DISCUSSION

In present research depression explained 22% variance in academic performance of male and female university students. Depression is significantly predicted academic performance. It is consistent with number of pervious finding[6-8]. Due to depression, students face difficulty in academic activities like required ability to sustain attention and good concentration level to fulfill educational task including home work assignment, presentations etc. Research indicated that depressive symptoms have negative association with academic performance[8].

In this research results showed significant difference of depression and academic performance in male and female university students and these finding are harmonious with earlier research finding[1-16, 20-21]. The reason behind this phenomenon is may be that male student spend more time with friends, concentrate less on studies than females. Researchers found that female student have good academic performance in academics and educational career[22]. An other reason

may be that fewer numbers of females reach university education; this proportion may be more focused for higher academic performance already (before entering the university) hence causes gender differences in academic performance.

Further, the mean difference of male and female university student reflect that male university students has higher level of depression as compare with female university students.

CONCLUSION

Depression influences the academic performance of university students. There is also a significant difference in depression and academic performance of male and female university students. This research is a door way for teachers , university administration, parents, advisors and curriculum makers in recognizing the risk factors of depressive disorders and for the promotion of techniques like counseling services, psychotherapeutic interventions and psychotropic medication (if required) in the prevention of depressive disorder in university students. Counselors and educational psychologist should develop strategies for enhancement of academic performance in university students and prevention of depressive symptomatology.

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