

## **Poor academic performance as predictor of depression among university students**

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**Abstract:** Present study was conducted to investigate the relationship between Academic performance and Depression among university students. It was hypothesized that poor academic performance is the predictor of depression among university students. Sample of 100 students (50 males and 50 females) was selected from university. Depression Anxiety Stress Scale was used for the measurement. Linear regression was performed to test the hypothesis. Additional analysis was conducted to check the gender difference in Depression. Present study approved the hypothesis that poor Cumulative Grade Point Average (C.G.P.A) lead students to develop depression. Results also revealed that there is significant difference among gender on the basis of depression.

**Keywords:** Academic performance, Gender Differences, Depression and Students

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### **1. Introduction**

Now a day's depression becomes a common but serious illness that can affect men and women differently. It may affect an individual's ability to perform daily activities. People suffering from depression may lose their interest to perform different activities even the things they do normally in their routine. They may lack energy, have difficulty sleeping or sleep more than usual. Some people feel irritable, and some find it hard to concentrate. Students have a lot of problems and pressure related to their studies, these things cause them to distant themselves from others and engage them in solving their study related problems, these contradictions lead them to suffer from Depression and it affect their educational career. Present study was designed to investigate Gender differences and relationship of academic performance with depression (Stanley,2011).

#### **1.2 Depression**

Depression is a common mental disorder that presents with depressed mood, loss of interest or pleasure, decreased energy, feelings of guilt or low.

Self-worth, disturbed sleep or appetite, and poor concentration are the symptoms of depression. (WHO; 2012). While depression is the leading cause of disability for both males and females, the burden of depression is 50% higher for females than males (WHO; 2008).

#### **1.3 Gender**

According to the Publication Manual of the American Psychological Association, "Gender is cultural and this term is used to identify men and women as 2 different social groups. Sex is biological; use it when the biological distinction is predominant." When asked about symptoms of depression, women are more likely to admit to such features than men, a difference usually put down to women being more open and men being more likely to use denial. Similarly, women are more prepared to seek help than men for their depression. A variety of biological, social, and psychological explanations for women's increased vulnerability to depression also has been evaluated. Research examining hormonal influences has received more attention than biological factors but both have produced inconclusive results and presently do not appear to account for the gender difference in rates (cf. reviews by McGrath et al., 1990; Rice et al., 1984; Kornstein, 1997).

#### **Academic performance**

An academic performance is how well someone performs during their academics. This means, how well they did with school and all the activities that along with it. Workplace is critical for these individuals; this relationship has not been adequately investigated. Academic performance can be described as actions related to the work done colleges and universities, in terms of achievement or results, focused especially in work which involves studying and reasoning, but also in practical or technical skills. Academic achievement is obvious to

career development processes. In one's life, academic choices, barriers, or opportunities occur early and frequently, and they have a persistent and lasting influence on career development (Leong, 2008). If an individual could not achieve their best in education will have problems to get good opportunities for future, this thinking would lead a person towards mental disturbance (Wallin, et.al., 2018).

## **2. Review of Literature**

### **2.1 Depression and Academic Performance; Theoretical Background**

Depression is a common disorder that affects an individual's ability to perform their life activities. It also affects student's performance in their schools, colleges and universities. Academic performance can be defined as correspondent to personnel performance, with students who belongs to a unique set of personalities whose ability to perform can be measured on criteria applied by an observer and by self-report. Though the occurrence of depression for this group is high. Many factors affect academic achievement, one of them is depression. Depression has a high prevalence and relationship with both memory and academic achievement.

Depression includes a number of symptoms, such as sleep and eating problems, lack of self-care, , anxiety and poor interest in everyday activities. For university students, depression is associated with poor academic performances, drop-out, insecure relationship, suicidal ideation and attempts, poor work performance, substance abuse, acute infectious illnesses and poor physical and mental health in general. Moreover, depression in this early period can result in negative consequences during adult life through its impacts on career prospects and social relationships (Ngin, Pal, Tuot, et al. 2017).

Frojd.et.al (2008) conducted a study on "relationship between depressed mood and academic performance" (performance measured in terms of GPA (grade point average) in U.S. This Study finding indicated that students who report feeling depressed do not perform as well academically as non-depressed students can. Moreover, the degree of GPA impact increases with the severity of reported depression. Students reporting either depressed feelings "most or all of the time" – or symptoms consistent with major depression suffer GPA reductions of 0.06 to 0.84 grade points.

Another study was conducted by Hysenbegasi, Hass and Rowland during 2005 on the topic of "relationship between depression and academic performance of undergraduate students". the results of study indicate that the Diagnosed depression was associated with a 0.49 point, or half a letter grade, decrease in student GPA, Depressed students reported a pattern of increasing interference of depression symptoms with academic performance.

A study was conducted to examine the differences between low and high achieving students in their psychological problems i.e. depression, anxiety, and stress. Sample of 120 undergraduate students were involved in this study. The Depression Anxiety Stress Scale (DASS) was used to measure the level of depression, anxiety, and stress among students. The findings of this study revealed that there were significant differences between low and high achieving students in their psychological problems (Dzulkifli.M & Yasin, 2009).

Depression, stress, and anxiety are among the psychological problems that are common among students. According to Porter (1990) up to 60% of university students left university without finishing their degrees; the majority of these students leave within the first two years due to inability to manage these psychological conditions, especially to cope with stress. Steinberg, Darling and Dornbusch (1994) mentioned that 50% of university students who consulted mental health service complained of difficulties in study, anxiety, tension, and depression. They reported that these conditions contributed to poor grades in courses.

Anson, Bernstein&Hobfoll (1984) which could lead to difficulties in concentration, lack of motivation and interest, poor attendance, and physical health such as headache and fatigability. These conditions will affect students' academic achievement.

### **2.2 Depression and Gender; Theoretical Background**

With respect to the study on Evaluating the Relationship between Gender, Age, Depression and Academic Performance among Adolescents by Busari (2012) the purpose of the study was to investigate the relationship between age, depression and academic performance. The study was carried out among 1200 students (600 male and 600 female) in the age range 15-19 years. The instrument used for data collection was the Beck depression Inventory (21 item BDI). The analysis of data used correlation coefficient and t-test. The results showed that 26.5% of the boys and 30.7% of the girls were depressed and that depression and academic performance were significantly correlated,  $r = -0.24, p \leq 0.000$ . Also, based on results of the present study, age and academic performance were significantly correlated ( $r = 0.25, p \leq 0.000$ ). In addition there was significant difference of academic performance between male and female, ( $t(1) = -5.51, p = 0.000$ ).

Mary Kay O'Neil & William J. Lancee (1985) conducted a study on Sex differences in depressed university students and in this study author select Depressed males and females from a consecutive sample of students attending a university psychiatric service ( $N=183$ ) and a sample from the general student population ( $n=55$ ) were compared to determine why more females (ratio 2:1) seek help for depression. It was found that this sex difference was due neither to differential prevalence of depression nor to differences in symptom expression or social behavior, but rather to contrasting attitudes toward emotional problems and psychiatric help. Women recognize physical concomitants of depression as indicative of emotional problems and more readily accept the need for psychiatric help. Men appear not to connect physical symptoms with emotional difficulties.

### 2.3 Objectives

The objective of the present study was to assess the relationship between Gender and Academic performance with Depression among University students.

### 2.4 Hypothesis

Following hypotheses were formulated for present study:

- Poor academic performance will be predictor of depression among university students.
- There is significant Gender difference in the level of Depression.

## 3. Methods

### 3.1 Sample

The present study consisted on the population from university of Gujrat. Random sampling was used to select Sample of 100 students from university of Gujrat of B. Sc (2nd and 8<sup>th</sup>) semester. 50 of them were male and other 50 were female.

### 3.2 Depression Anxiety Stress Scale

The DASS is a set of three self-report scales designed to measure the negative emotional states of depression, anxiety and stress. The DASS was constructed not merely as another set of scales to measure conventionally defined emotional states, but to further the process of defining, understanding, and measuring the ubiquitous and clinically significant emotional states usually described as depression, anxiety and stress. The DASS should thus meet the requirements of both researchers and scientist-professional clinicians. DASS scales contain 14 items of depression, divided into subscales of 2-5 items with similar content. The Depression scale assesses dysphoria, hopelessness, devaluation of life, self-deprecation, and lack of interest/involvement, anhedonia, and inertia (Lovibond & Lovibond, 1993). 14 items were separated from the whole scale to measure depression.

## 4. Results

**Table 4.1:** Simple linear regression to predict depression among university students ( $N=100$ )

Variables	Predictors	B	R	R <sup>2</sup>	F
Depression	AP	0.153*	.275*	.075*	2.59*

Note: \* $p \leq 0.05$ , \*\* $p \leq 0.01$ , AP = Academic performance

Table 4.1 indicated that poor academic performance was appeared as significant predictor of depression among university students and significantly contributed to depression with  $F=2.59$  ( $p < 0.05$ ) with variance of 75%.

**Table 4.2:** Differences in depression with relation to gender of students ( $N=100$ )

variables	Male		Female		T	P	95% CI		Cohen's d
	n = 50		n = 50				UL	LL	
	M	SD	M	SD					
Gender	12.24	5.32	14.4	6.32	-1.89	0.05*	4.46	0.14	0.37

$M=Mean$ ,  $SD=Standard$  deviation,  $CI=Confidence$  interval,  $LL=Lower$  limit,  $UL=Upper$  limit,  $p \leq 0.05$ \*,  $p \leq 0.01$ \*\*

Table 4.2 indicated the gender difference with relation to depression among university students. Results indicated that female students showed more depression than male students with mean value of ( $M=14.4$ ,  $p\leq 0.05$ ) while in males ( $M=12.24$ ,  $p\leq 0.05$ ). Furthermore, value of Cohen's  $d$  (3%) illustrated the medium effect of variable.

## 5. Discussion

The present study was conducted to explore the predictive relationship between Poor academic performance and Depression among students of University of Gujrat, Pakistan. Present findings have been discussed in this paper on the basis of previous experiential evidences;

### 5.1. Poor Academic performance and Depression:

Results of the current study have showed poor academic performance as a significant predictor of depression in adults (**Table: 4.1**). Results are consistent with the previous research outcomes which showed that there is a strong positive relationship between poor academic performance and depression, Students with lower the self-reported grade point average (GPA) were more commonly depressed (Frojd.et.al, 2008). Findings of the research by Wallin, et.al. (2018) suggest that poor academic performance predicts depression in adulthood, which correlates with the results of present study.

### 5.2. Gender Differences and Depression:

Results of the present study have also showed Gender difference in the level of depression in adults; female are more prone to depression as compare to male (**Table:4.2**). For the justification of results here are following reasons which have been studied by different researchers: women face many problems in their life. They are more sensitive towards different emotional problems, some experiences related to depression are unique to women, including post-partum changes, infertility, and hormonal fluctuations throughout the course of life that's because they are more accepted toward depression symptoms. It is more than "feeling down" because of a recent loss or family, work or financial stresses; it occurs when these feelings become more intense and persist to the point that they affect daily functioning, in short biological, cultural, and experiential factors that may underlie sex differences in the phenomenology depression (Altemus, Sarvaiya & Epperson, 2014). Furthermore outcomes of different studies also depict that gender difference exist in the level of depression. According to Zafar and Murtaza (2018) the level of depression is seen higher in female as compare to male, these results are also consistent with the current study.

## Conclusion

In the light of current findings, it is concluded that Poor academic performance plays a significant role in determining depression in students. While facing the problems regarding academics, the students, having lot of burden will be more prone to depression, so it is suggested that if one will be work hard for achievement, automatically will have satisfactory life if succeeded.

## Recommendations

It is implied from current study that poor academic achievement has a potential to influence the mental abilities of student. In order to overcome this phenomenon this study suggest some recommendations for universities as follows;

It is recommended here to train teachers before and during services about how they well involve students in studies, so that they could get good grades.

More learning material and better environment should be provided to institutions which are supportive for students to enhance their attitude towards education.

The practice of expanding knowledge by making connections with individuals of similar interests may be used in an effort to engage learners in meaningful ways; hence Social networking is a fundamental route to enhance student academic engagement.

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