

## **The Relationship between Psychological Pressure and Creativity among Graduate Students in the University of Jordan**

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### **Abstract**

*The purpose of the study is to investigate the relationship between psychological pressure and creativity among graduate students in the University of Jordan. The sample of the study consisted of (118) male and female graduate students (77 males, 41 females). To achieve the aim of this study the researcher administrated Torrance creativity scale and psychological pressure scale. The findings of the study showed that there is a reverse relationship between psychological pressure and creativity. With regard to gender variable the findings showed that there are differences on originality domain.*

**Key Words:** Psychological Pressure, Creativity, Graduate students.

### **Introduction**

Most of countries pay education a careful interest as it is the main pillar in developing human capital. If education is an industry to develop nation's fortunes, graduate studies can be seen as the most modern types of industry as it is very important in developing humans in order to enable them from participating effectively in the social and economical development. Enrolling in graduate programs provide individuals with the opportunity for achieving the private goals and visions, when an individual steps in this field he moves to achieve hopes and aspirations. However, the nature of the study in the graduate program may be a great source of psychological pressure that may exceed the capacity of the possibility of the individual, making it a source of pressure on the physical and mental health, and affecting social life.

Moreover, it is known that psychological pressure in the practical life is unavoidable issue it hasn't all those negative effects we think of. Sometimes it gives individuals an incentive and energy to achieve all required tasks. Selye (cited in Neubury-Brich & Kamali, 2001) argued that if we considered pressure as a challenge this may lead to positive effects such as motivation and excitement. However, if those pressures exceed the individual's ability there will be no chance to face them and they may become a source of threat (Cooper, 2006; Alued, 2006). Matter of fact, not all experiences in our daily life can be seen as psychological pressures. The situation itself may not cause pressure but the way of thinking in this situation and the beliefs make it a stressed one. Many individuals may had an overwhelming reaction due to their negative thinking leading them to feel stressed and unsatisfied (Lazaurs, 1993).

Psychological pressure had become a major concern for individuals because of their possible effects on individual health and productivity and creativity at work. Creativity as the ability to see relationships and connections between aspects of various knowledge and discover the relationship and new knowledge. So, studying this issue had a great importance since it helps in detecting creative students and consequently, encourage them and enhance their creative characteristics in order to increase their creative productivity (Al-srour, 2005). Creativity is not limited to a certain group of people, it is existed among most of the people in different rates the same as intelligence.

The process of employing this creativity revolves around four main components, those are: The creative person, creative process, information processes, creative production and the context of creativity (Ageyev, 2010).

Many theories tried to study the pressures faced by people in order to explain the techniques of dealing with those pressures. The cognitive theory argued that psychological pressure happens due to the interaction between the individual and the environment as he assesses the events that caused him pain and threats (Schafer, 1992).

Meanwhile, social factors theory sees psychological pressure as a cause of the individual's interaction with the environment variables as his responses occurred in the form of fear, stress and anger (Cooper, 2006). Selye suggested a General Adaptation Syndrome containing three phases for the response to those pressures (Cohen, 1994)

1. **Alarm Stage :** Your first reaction to stress recognizes there's a danger and prepares to deal with the threat, a.k.a. the fight or flight response. During this phase the main stress hormones cortisol, adrenaline, and noradrenaline, is released to provide instant energy (Cohen, 1994).
2. **Resistance Stage:** The body shifts into this second phase with the source of stress being possibly resolved. Homeostasis begins restoring balance and a period of recovery for repair and renewal takes place.
3. **Exhaustion Stage:** At this phase, the stress has continued for some time. Your body's ability to resist is lost because its adaptation energy supply is gone. Often referred to as overload, burnout, adrenal fatigue, maladaptation or dysfunction (Cohen, 1994).

### ***Statement of Purpose***

Graduate students live a life full of appointments in the dingle day. Most of them work in public and private organizations and they suffer from psychological and physical stress since the beginning of the term till its end while they are trying to coordinate between lectures, work, home duties as well as social and academic tasks. This effect may be worse if those stresses accumulated and connected with other sources such as family conflicts, job problems or anxiety regard general health and family. It is important for those students to work seriously with patience and creativity in order to be able to discuss topic creatively. Furthermore, students in this stage must acquire creativity skills (originality, flexibility and imagination) since they are very important factors to pass this stage. Therefore, it is very important to investigate this issue through exploring the relationship between psychological pressure and creativity and their relationship with gender variables.

Ukeh, Aloh & Kwahar (2011) investigated the effects of stress and gender on students' self-esteem. (115) students ( 66 males, 49 females) stratified by level of study, ethnicity, age and gender completed standardized measures of traditional student stress scale and self esteem. Results showed neither significant differences on the main effects of stress and gender nor the interaction effect. Weber (1993) conducted a study to predict psychological pressure among Freshman College. Pressures among students were collected since they graduate from school till university. Then, indicators were evaluated in the first quarter of the academic year and after eight weeks they were evaluated again. The findings showed that students face pressures in the emotional domains as well as considerations for success in the university.

Moreover, Kausar (2010) studied the level of psychological pressure among graduate students. The sample of the study consisted of (150) master students in the scientific colleges. The findings showed that there is a positive relationship between study load of students and psychological pressure. Furthermore, the most important pressures of students were those related to academic and social adjustment domains. Weaver (2000) investigated anxiety, psychological pressure and social support among PhD students. The findings showed that the anxiety and pressure among this sample is similar to their first notes about pressure, anxiety and social support.

### ***Objectives of the study***

The purposes of this study are to:

- Investigate the correlation relationship between the level of psychological pressure and creativity among graduate students in Jordan University.
- Exploring the relationship between the level of psychological pressure and creativity among male and female students.

### ***Study Questions***

- Is there any relationship between the level of psychological pressure and creativity among graduate students at the University of Jordan?.
- Is there any relationship between the level of psychological pressure and creativity attributed to gender?.

### Definitions of the study

- **Psychological Pressure:** the total scores gained by students on the psychological pressure scale, an increase in the score indicate the increase of student's pressure.
- **Creativity:** the total scores gained by students on Torrance creativity test.
- **Graduate Students:** All students in master and PhD programs in all majors at Jordan University.

### Limitations of the study

- Human limitations: The study is administrated only on graduate students (Master, PhD) .
- Time limitations: The study is administrated on 2010/2011.
- Place Limitations: Graduate students at Jordan University only.

### Methodology

#### Study sample

The sample of the study consisted of (118) male and female students in master and PhD programs in different literature and scientific majors at Jordan University in the academic year 2010/2011. the sample was chosen randomly from the population containing (77) males and (41) females.

#### Instrument

To achieve the aims of this study the researcher administrated the following tools:

1. **Torrance creativity test:** fluency and measured by the total responses. Imagination measured by the ability to perform motor activities related to the situation and originality.
2. **Psychological Pressure scale:** consisted of two parts, the first presents many events confronted the respondent in the past year before administration, each was given a scale according to its nature. The second is a questionnaire measuring the physical symptoms of the respondent during and after feeling stressed. Those are (7) symptoms (domains) and each had (4) items. The domains are: heart symptoms, breathing, Digestive, mental, skin, immunity and metabolism. To measure the psychological pressure all values were collected in both questionnaire to obtain the total score of the respondent.

### Findings and Discussion

To answer the first question: Is there any relationship between the level of psychological pressure and creativity among graduate students in Jordan University?. The correlation coefficient was calculated between psychological pressure and creativity. Table (1) presents the results.

**Table (1) correlation coefficients between psychological pressure and sub-domains and the total score of creativity**

		Fluency	originality	Flexibility	Total score of creativity
Psychological Pressure	Pearson Coefficient	-.147	-.255	-.146	-.187
	Sig	.112	*.006	.115	*.002

Table (1) showed that the relationship between psychological pressure and creativity is a reverse relationship; this means if the pressure increases the level of creativity decreases among graduate students. This result was shown in all sub-domains and in the total score of creativity. However, there are differences on the originality domain and the total score; this indicates that graduate students are not able to create something new or unfamiliar under pressure. This may be explained by the factors of psychological pressure and problems faced by people and reduce their creativity in this case, graduate students priority is to deliver his academic tasks in time regardless their quality or the quality of presentation.

**Table (2) Means, Standard Deviations and (T) test of Psychological pressure and creativity domains according to gender.**

		Female		Male		
	T	SD	M	SD	M	Sig
Psychological Pressure	-.104	136.272	240.59	150.979	237.61	.917
Fluency	-1.806	23.922	39.73	18.536	32.00	0.00
Flexibility	-1.244	17.067	31.05	17.669	26.79	.216
Originality	.197	7.286	7.15	11.600	7.56	.844
Creativity total score	-1.324	43.792	77.59	44.905	66.03	.188

Table (2) showed that the level of psychological pressure among females and males is approximately the same however, it was higher among females. T values indicated the differences in means between males and females on creativity level showing the females are better on fluency domain than males as their means totaled (32.00) meanwhile, females were higher in 7 degrees totaling(39.73). Moreover, (t) values showed that there significant statistical differences in the favor of females. With regard to flexibility the results showed that females are better than males with a mean of (31.05). In originality, the means between males and females were close, while the total score of creativity indicated that females were higher than males. Despite this, the values showed no significant statistical differences between males and females.

**Table (3) Correlation Coefficient between psychological pressure, creativity and gender**

	Gender	Originality	Flexibility	Fluency	Creativity
Psychological pressure	Male	-.188	-.146	-.165	-.178
	Female	-.365(*)	-.204	-.146	-.210

Table (3) showed that there is no relationship between psychological pressures attributed to gender except in originality domain as studies confirmed this relationship among females.

### Conclusion

This Study aimed to investigate the relationship between psychological pressure and creativity among graduate students at the University of Jordan. The findings of the study showed that there is a reverse relationship between psychological pressure and creativity. With regard to gender variable the findings showed that there are differences on originality domain. Preparing and conducting workshops for graduate students about handling pressures in order to enhance their creativity level. This study Helping students to develop their creativity abilities through meeting his cultural, personal and financial needs in order to enable him from providing quality educational services for his community. Paying more attention to the conditions of study in the university through creating a suitable environment to enable students to accomplish more within psychological healthy atmosphere.

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