

**Prevalence of exam anxiety among students in
Nineveh medical college**

انتشار قلق الامتحان بين طلبة كلية طب نينوى

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Abstract

Background: Exam Anxiety is a major factor that has a negative effect in performance of students reflected by fear, frequency, loss of concentration, sweating, & loss of appetite. These symptoms have a direct impact on the scientific performance and clinical practice of the students .The psychological factors which contribute significantly in exam anxiety are negative and irrational thinking about exam, outcomes of exam, and feeling of no control over exam situation . Many authors reported that higher anxiety level in the student community is considered as important indicators for poor mental health .Students in extreme stress and tension during the exam need serious attention, otherwise inability to cope successfully with the enormous stress of education and may lead to a cascade of consequences at both personal and professional levels. Thus this study was carried out to see the prevalence of exam anxiety among medical students.The study aims to achieve the following objectives:

- 1- Prevalence of exam anxiety among medical students college
- 2- The difference between male& female in exam anxiety level in general
- 3-The difference between male& female in exam anxiety level in each class
- 4- The difference in exam anxiety level between smoker & non-smoker students in general
- 5-The difference in exam anxiety level between smoker & non-smoker students in each class

Methods:The study conducted at 15th of march up to the 1st April 2018. About 75% of medical students were participating in this study. Exam anxiety scores measured by using Sarson anxiety rating scale which contain 38 item .Information sheets include age,gender, class, and smoking.The study results indicate that there is high percentage of students in Nineveh medical college suffer from exam anxiety overall classes. There is prevalence of exam anxiety among female than male in a whole sample particularly in classes :first, third, fifth and sixth .The study revealed that no relation between exam anxiety and smoking in sample as a whole and in each class. The study recommended the following: Providing psychiatric counseling clinics to diagnose cases of exam anxiety .Providing necessary psychological support to students to ease the anxiety exam. Encourage future studies to discover the cause of these cases

Key words: exam anxiety , medical college ,Sarason anxiety scale, smoking.

الملخص

خلفية البحث: يعتبر قلق الامتحان من العوامل الرئيسية التي لها تأثير سلبي على الطلبة ويمكن ان يتضح ذلك بمظاهر الخوف وفقدان التركيز والتعرق وفقدان الشهية. هذه الأعراض لها تأثير مباشر على الأداء العلمي النظري والتدريب العملي للطلاب .وتسهم العوامل النفسية بشكل كبير في قلق الامتحان وينعكس ذلك من خلال التفكير السلبي وغير العقلاني حول الامتحان ونتائج الامتحان والشعور بعدم السيطرة على وضع الامتحان. ويشير العديد من الباحثين الى أن ارتفاع مستوى القلق في مجتمع الطلبة يعتبر مؤشرا هاما لاختلال مستوى الصحة النفسية.على هذا يحتاج الطلاب الذين يعانون من التوتر الشديد خلال الامتحان إلى اهتمام جاد ،وفي خلاف ذلك قد يؤدي إلى نتائج سلبية على المستويين الشخصي والمهني. وهكذا تم اجراء هذه الدراسة لمعرفة مدى انتشار القلق الامتحاني بين طلبة كلية الطب .هدفت الدراسة الى تحقيق الأهداف التالية:

١- انتشار قلق الامتحان بين طلاب كلية الطب

٢- الفرق بين الذكور والإناث في مستوى القلق في الامتحان بشكل عام

٣- الفرق بين الذكور والإناث في مستوى القلق في الامتحان في كل صف

٤- الفرق في مستوى القلق بين الطلاب المدخنين وغير المدخنين بشكل عام

٥- الفرق في مستوى القلق بين الطلاب المدخنين وغير المدخنين في كل صف

الطريقة: أجريت الدراسة في ١٥ مارس حتى ١ أبريل ٢٠١٨. شارك حوالي ٧٥ ٪ من طلبة كلية الطب في هذه الدراسة. تم استخدام مقياس سارسون لقياس قلق الامتحان قياس قلق و يحتوي على ٣٨ بنداً. كما اشتمل الاستبيان على استمارة معلومات خاصة بعمر الطالب، جنسه ومرحلته الدراسية و فيما اذا كان يدخل ام لا . اشارت نتائج الدراسة إلى أن هناك نسبة عالية من طلبة كلية طب نينوى يعانون من القلق الامتحاني. هناك انتشار لقلق الامتحان لدى الاناث أكثر من الذكور على صعيد العينة ككل و ينتشر بشكل اكبر في مراحل الاول، الثالث، الخامس والسادس لصالح الاناث كما وجد أنه لا توجد علاقة بين قلق الامتحان والتدخين في العينة ككل وفي كل مرحلة مرحلة. خرجت الدراسة بالعديد من التوصيات منها: - توفير عيادات استشارية نفسية لتشخيص حالات القلق الامتحاني. تقديم الدعم النفسي اللازم للطلاب لتخفيف القلق المصاحب للامتحان. تشجيع الدراسات المستقبلية لاكتشاف سبب هذه الحالات ، والتدخلات الارشادية والعلاجية التي تساعد الطلاب على التعامل مع الإجهاد النفسي المصاحب للموقف الامتحاني.

Introduction

Anxiety has accompanied human since the beginning of creation up to day. The extent of the feeling of anxiety or the number of stimuli varies according to human live

complexity and speed of change in scientific development .so there is no doubt that life in this format is not free of tension and distress and anxiety

Exam anxiety is considered as type of psychological anxiety of the students and used to be varied in severity according to the study stage and the student's confidence and the degree of his knowledge of public life and the environment in which he grew up (Putwainetal. 2010)

Therefore, exam anxiety is a frightening source for the students and cause many problems such as inability to answer and forgets the exam material and confusion in the expression when he wants to answer questions It also causes stress and fatigue ,inferiority of the student, where he sees himself as a lack of confidence and lack of academic efficiency and postponement of the examinations when it time comes (Rajeh 1995).

(Derakshan& Eysenck 2009) indicate that individuals who suffer from this anxiety often have an unqualified response to the exam and are characterized by fear when facing the exams and that the exam causes them a stressful position of discomfort and feeling of failure and the desire to escape the exam (Derakshan& Eysenck 2009)

Importance of the Research

Youth in any society is considered to be a basic source for its advancement, and achievement of its goals. They are the honest mirror that reflects the reality of that society (AL-Shibani 1973)

University students are the educated young people who are the aware leaders and they have the responsibility to build and change the society (Al-Akayish 2000)

From here; we find that the low examination anxiety positively affects both the abilities of students and the level of academic achievement, and their responses are appropriate to their duties in the test position .They will be attentive and capable of achievement and success. Accordingly, the anxiety of the test is one of the most important variables associated with a significant determination of the student's future and his role in the society (Al Essawi 1975)

Many studies have confirmed that exam anxiety is a real problem facing many students .it is a negative impact in academic performance or achievement .it consider as a source of insomnia not only for students, but may also have an impact on family ,school, college and even the whole society. Shuaib(1987),Srivastava&etal(1980)Cherry(2012)

(Saresson) tried to explain why university students with high exam anxiety failed to test IQ and found that these students blamed themselves for their poor performance, while this did not appear to students with a low test anxiety (Al-Tawab1992)

Al-Tayeb, 1988, refers to Esperinger 1980 as saying: "The individuals who suffer from a high degree of exam anxiety are aware of the positions as being at risk of being in the exam and are often tense and in a highly emotional state. In addition, their autonomy is in a negative state, and this distracts their attention and focus during the exam (Al-Tayeb 1988)

Johnson &Gronlund, (2009) Found that individuals' performances on a task showed a decrease in accuracy due to exam anxiety with low or average working memory capacity, but did not significantly decrease for individuals with high working memory (Johnson &Gronlund 2009)

Putwainetal, (2010), indicate that a low academic self-concept was associated with higher worry and tension about their abilities to do well on a test (Putwain2010)

Where individuals who do not have an exam anxiety are happy in their response to exam performance because the degree of anxiety of the examiner is influenced by many factors, such as IQ , social support, the level of achievement, the level of study, the method of study and the readiness of the exam(Fahmi 1975)

Thus, the importance of the current research can be clarified by following:

- 1 - The need to identify the concept of exam anxiety among students in university stage
- 2 - The need to identify the causes of the exam anxiety and how to overcome it
- 3 - Reduce the anxiety of the exam through the preparation of a program for students based on training and awareness of their abilities
4. Reducing students' anxiety can create students' insight and awareness in order to achieve the best results in exams

Aims of the research: The research aims at:

- 1- Prevalence of exam anxiety among medical students college
- 2- The difference between male& female in exam anxiety level in general
- 3-The difference between male& female in exam anxiety level in each class
- 4- The difference in exam anxiety level between smoker & non-smoker students in general
- 5-The difference in exam anxiety level between smoker & non-smoker students in each class

Scope of the research

The present research is determined by the students of the college of Medicine \ for all classes(first-sixth) \ Nineveh University for the academic year 2017-2018

Definitions of exam anxiety

Exam anxiety has been defined by many researchers, and will remind some of them, as follows:

Spielberger(1980)define exam anxiety as: "personality trait." in a specific position consists of discomfort and emotion in situation associated with exam ;If the degree of it increased, the performance will be poor and the response well be not balanced(Al-Shorbagy& Daniel2001)

Dusik (1980) define exam anxiety as: "unpleasant feeling, or an emotional state with certain physiological and behavioral features that emotional state exists in the individual in the official examinations and other evaluation positions. (Marzuk1991)

Sarason (1979)A willingness to express self-centeredness leads to a response to conflicting responses when the individual is confronted with the attitudes of the calendar only (Turki 1981)

Al-Jalali (1986) defines the exam's concern as: "The student's state of feeling of tension and uneasiness as a result of being forced into the cognitive and emotional aspects, accompanied by certain physiological and psychological symptoms that may appear on him or her when facing exam situations, Experience of test situations (Shuaib 1987)

Al-Akhras and Mohammed (1985) defined exam anxiety: a state of anxiety that affects the person before and during the performance of the psychological or psychological test or during an interview (Abda1989)

Al-Kafafi and Salam (2000) defined the exam anxiety as: an unpleasant emotional experience felt by the individual when he is exposed to a threatening or frightening situation or when he is in a position of conflict or frustration "

(Al-Shorbagy & Daniel 2001)

It is clear from the previous definitions that exam anxiety is a special form of general anxiety, which the student lives in the examination situation and is characterized as:

- * Emotional state of the pressures resulting from the positions of the calendar.
- * An awareness of assessment situations as being threatened to the individual.

And accompanied by:

- * Mental discomfort and expectation of punishment.
- * Desire to escape from the situation.
- * Fear and greatness.
- * Physical and physiological reactions.
- * Disturbance in the cognitive aspects

The Procedural definition of exam anxiety:

The degree to which the student obtains his response to paragraphs at scale of exam anxiety used in the current study

The Theoretical background

First: A look at the exam anxiety

Exam anxiety is a combination of physiological over-arousal, tension and somatic symptoms, along with worry, dread, fear of failure, that occur before or during test situations. (Zeidner1998) It is a physiological condition in which people experience extreme stress, anxiety, and discomfort during and/or before taking a test. This anxiety creates significant barriers to learning and performance. Research suggests that high levels of emotional distress have a direct correlation to reduced academic performance and higher overall student drop-out rates. Test anxiety can have broader consequences, negatively affecting a student's social, emotional and behavioural development, as well as their feelings about themselves and school. (Salend2012).

exam anxiety is prevalent amongst the student populations of the world. It has been studied formally since the early 1950s beginning with researchers George Mandler and Seymour Sarason (Mandler & Sarason 1952). It can be labeled as anticipatory anxiety, situational anxiety. Some anxiety is normal and often helpful to stay mentally and physically alert. When one experiences too much anxiety, however, it can result in emotional or physical distress, difficulty concentrating, and emotional worry. Inferior performance arises not because of intellectual problems or poor academic preparation, but because testing situations create a sense of threat for those experiencing test anxiety; anxiety resulting from the sense of threat then disrupts attention and memory function (Sarason et al. 1995). Researchers suggest that between 25 and 40 percent of students experience test anxiety and highly test-anxious students score about 12 percentile points below their low anxiety peers. (Cassidy & Johnson 2001).

Signs and symptoms

Researchers believe that feelings of anxiety arise to prepare a person for threats. anxiety symptoms are distributed along a continuum and different symptom levels of anxiety

predict outcomes. Responses consist of increased heart rate, stress hormone secretion, restlessness, vigilance, and fear of a potentially dangerous environment. Anxiety prepares the body physically, cognitively, and behaviourally to detect and deal with threats to survival. As a result, a person's body begins to hyperventilate to allow more oxygen to enter the bloodstream, divert blood to muscles, and sweat to cool the skin. (DePhilet al. 2011) In individuals, the degree to which an anxiety response is developed is based on the probability of bad things happening in the environment and the individual's ability to cope with them. In the case of test taking, this might be a failing exam grade that prevents the student from being accepted to a post-secondary institution.. (Putwain etal.2010)

Symptoms of test anxiety can range from moderate to severe. "Students who exhibit moderate symptoms are still able to perform relatively well on exams. Other students with severe anxiety will often experience panic attacks." (Cherry 2012). But for some people the symptoms are difficult or impossible to handle, making it impossible to focus on tests.

Exam anxiety consists of:

- **Physiological overarousal** –include headaches, stomach aches, nausea, diarrhea, excessive sweating, shortness of breath, light-headedness or fainting, rapid heartbeat and dry mouth. Test anxiety can also lead to panic attacks, in which the student may have a sudden intense fear, difficulty breathing, and extreme discomfort.
- **Worry**– maladaptive cognitions. This includes catastrophic expectations of gloom and doom, fear of failure, random thoughts, and feelings of inadequacy, self-condemnation, negative self-talk, frustration and comparing oneself unfavorably to others.
- **Cognitive/Behavioral** – poor concentration, "going blank" or "freezing," confusion, and poor organization. The inability to concentrate leads to impaired performance on tests. Fidgeting during or outright avoidance of the test. Students often report "blinking out" even though they have studied sufficiently for the test.
- **Emotional** – low self-esteem, anger, and a feeling of hopelessness. (Cherry 2012)

Causes

causes of exam anxiety may include fear of failure, procrastination, and previous poor test performance.(Aada 2012) As well, characteristics of the test environment such as: nature of the task, difficulty, atmosphere, time constraints, examiner characteristics, mode of administration and physical setting can affect the level of anxiousness felt by the student (Salend2012).

Exam anxiety is known to develop into a vicious cycle. After experiencing test anxiety on one test, the student may become so fearful of it happening again they become more anxious and upset than they would normally, or even than they experienced on the previous test. If the cycle continues without acknowledgement, or the student seeking help, the student may begin to feel helpless in the situation.(Cherry 2012)

Theories that explained the anxiety of the exam

1- George Mandler and Seymour Sarason (1952), developed the theory that anxiety present in testing situations is an important determinate of test performance. Individuals that become highly anxious during tests typically perform more poorly on tests than low-test anxious persons, especially when tests are given under stressful evaluative conditions such as a post-secondary exam. The feelings of forgetfulness, or drawing a "blank" are

developed because of anxiety-produced interference between relevant responses and irrelevant responses generated from the person's anxious state. The difference in performance of a high-anxious test taker compared to a low-anxious test taker is largely due to the difference in their ability to focus on the tasks required (Mandler & Sarason 1952). A low-anxious test taker is able to focus greater attention on the tasks required of them while taking the test, while a high-anxious test taker is focused on their internal self, and the anxiety they are feeling. Anxious test takers do not perform adequately on the test as their attention is divided between themselves and the test. Therefore, they are unable to focus their full attention on the test (Putwain et al. 2010)

2- Liebert and Morris (1967) analyzed the structure of exam anxiety on two distinct factors: *Cognitive exam Anxiety* and *Emotionality*

Emotionality means that the individual shows high levels of several different symptoms related to test anxiety that can be seen through physiological responses. There is evidence that emotionality is a distinct part of test anxiety; however, it can be seen that when an individual displays high emotionality it means that it is mostly associated with declining performance, but only when the individual is also experiencing high levels of worry.

The other factor is **Cognitive Test Anxiety**. It is mostly composed of the individual's cognitive reactions to situations where they are being evaluated, in the times prior to, during, and after those tasks. (Cassidy & Johnson 2001).

Anxiety reactions can be generalized from previous experiences to testing situations. Feelings of inadequacy, helplessness, anticipations of punishment or loss of status and esteem manifest anxiety responses. (Mandler & Sarason 1952).

3- Attentional theories

The attentional control theory assumes that anxiety primarily affects attentional control, which is a key function of the central executive. Attentional control is the balance between the two attentional systems, the *goal-directed system*, influenced by the individual's goals, and the *stimulus-driven system*, influenced by salient stimuli. According to the attentional control theory, anxiety disrupts the balance between these two systems. (Derakshan & Eysenck 2009).

4- Theory of Psychoanalysis

Freud sees anxiety as a result of internal conflict between the components of human personality and the contradiction between the idealistic tendencies and the realistic tendencies between what man desires and what he is at the same time (Rajeh 1995). It is primarily the fear of the individual's conscience when he is motivated to express an instinctive instinct or contrary to moral standards.

Freud points out that the state of danger that causes anxiety is the human feeling of excessive alertness and his belief that he is incapable of responding appropriately and says that the state of danger consists of the individual's assessment of his power relative to the amount of danger (Schultz & Hall 1988).

Second- Previous studies

1-(Mahmoud's study 1992): the study aimed at identifying the level of examination anxiety among students and then indicating the extent of the anxiety at different stages of the study. The sample included 179 male students randomly selected and then applied a measure of the trend towards examinations. The study reached several results including the absence of differences between High school and university students (Haddad 2001).

2- (AlTawab's study 1992) aimed at studying the anxiety of the exam, intelligence and academic level and their relation to the academic achievement of the university students of both sexes with a sample of 180 students. The study reached a number of results, including the presence of a major impact on the level of the academic level, that the degree of exam anxiety varies according to the level of study, and the results of the study, However, these differences did not reach the statistical significance except for the differences between the first and fourth stages are statistically significant at 0.05 (Al-Tawab 1992)

3- Mazi's study (1969) the purpose of the study is to investigate the relationship between anxiety and achievement exam. The study consisted of 96 students divided by IQ scores into four groups. The American College Scale was used to measure IQ and the anxiety measure was measured by the test anxiety scale. The results showed that the performance of high anxiety students was higher than the low-anxiety students in the high IQ group, and vice versa for the student group (Dokem 1996)

4- (Spielberger's study 1980) this study aimed to find out the difference between males and females in the examination anxiety, where they found that females were higher than males at the level of exam anxiety, ranging from 3 to 5 degrees on the test anxiety scale, on a sample of 300 students from colleges and secondary schools. It was also found that the average scores obtained by males for the total degree of exam anxiety among secondary school students were higher than the average score obtained by male students in colleges (Al-Tayeb 1988)

5- (Al-Tayeb' study 1988) aimed at finding out the difference between the students of Tanta University, the study included 100 male students and 100 female students from each of the faculties of medicine, pharmacy, education and agriculture. Exam anxiety was measured by the test anxiety scale. The results of the exam showed an increase in the average exam anxiety among females in each college for males in the same college (Al-Tayeb 1988)

6- (Kumari & Jain study 2014) the purpose of the study is to investigate the relationship between perceived examination stress and anxiety among students of science, arts and commerce. In addition, explore the difference between perceived examination stress and anxiety among students of undergraduate and postgraduate level. A total sample of 90 college students was selected by using Stratified random sampling technique. A questionnaire was developed by the researcher to assess examination stress and anxiety among college students. The result shows correlation between examination stress and anxiety of college students. On comparing the stress and anxiety among students of different streams, the students of Arts were found having highest stress and anxiety during examination followed by commerce students. There was no significant difference found in the stress and anxiety level of undergraduate and postgraduate students (Kumari & Jain 2014)

7- (Hashmat et al. 2008) the aim of this study is to assess examination related anxiety among final professional medical students by VAS (Visual Analogue Scale) and to determine the factors contributing to exam anxiety among final professional medical students. A cross-sectional study using structured self-administered questionnaire was carried out over four weeks in Dow Medical College in Pakistan using a sample size of 120 students. The study indicates a moderate level of exam anxiety based on a Visual Analogue Scale in students of a medical college and also highlights factors such as extensive course load, lack of exercise and long duration of exams which contribute to Exam Anxiety (Hashmat et al. 2008).

8- (Mohamadia et al 2014) this study set out to explore the relationship between test anxiety and self-actualization as well as test score. The role of gender in the participants' level of test anxiety was also taken into consideration. two classes of BA students studying non-English majors in the University of Tehran were select to participate in this study. The questionnaire of test anxiety developed by Carver and Scheier (1991), and the Self-Actualization Index (SAI) by Jones and Crandall (1986) were administered The results revealed a significant negative relationship between test anxiety and self-actualization($R = -0.67$). The findings of independent-samples t-test also indicated that neither males nor females tend to experience a higher level of anxiety in exam settings.(Mohamadia et al. 2014)

9- (Stöber's study 2004) a study with 162 students (75 male, 87 female) examined how students cope with anxiety and uncertainty in the run-up to important exams. Results showed that overall test anxiety was related to seeking social support. When dimensions of test anxiety were inspected individually while controlling for interdimensional overlap, however, results showed a specific pattern of relationships: (a) worry was related to task-orientation and preparation and inversely related to cognitive avoidance, (b) emotionality was related to task-orientation and preparation and seeking social support, and (c) interference was related to avoidance and inversely related to task-orientation and preparation, whereas (d) lack of confidence was related to avoidance only. Although some gender differences emerged. (Stöber2004)

Research methodology and procedures

Research Population and sample

The research utilized a cross sectional survey. It's applied on students of Nineveh College of medicine with total number 589 as shown in the figure (1)

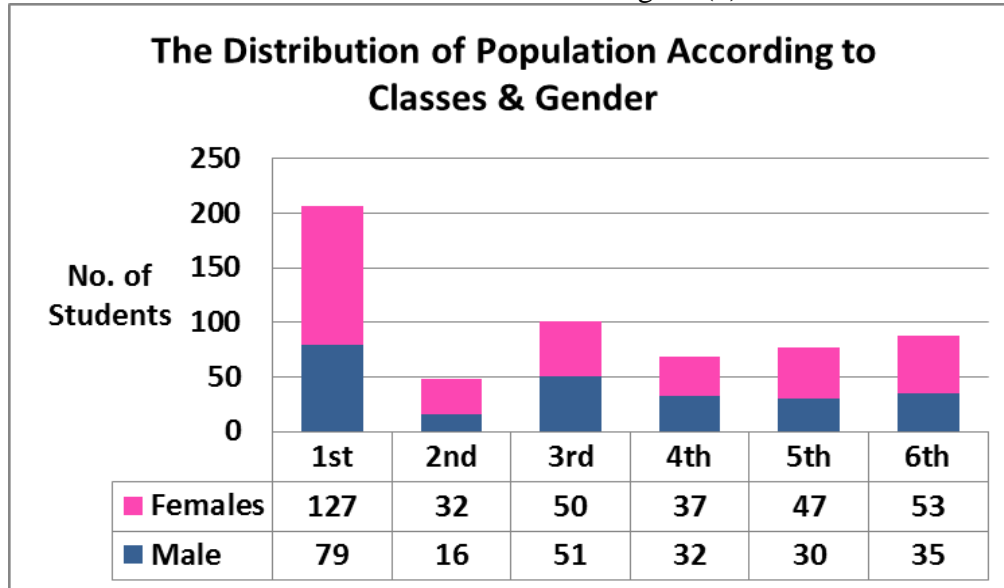


Figure (1) *the distribution of population according to classes & gender*

The sample of the research was (438) by (75%) student of Nineveh college of medicine as shown in Figure (2),(3)

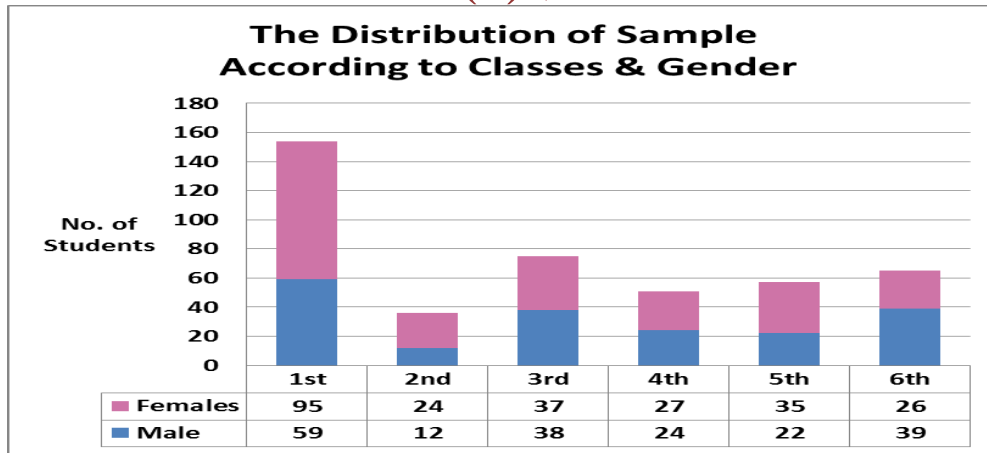


Figure (2) the distribution of sample according to classes & gender

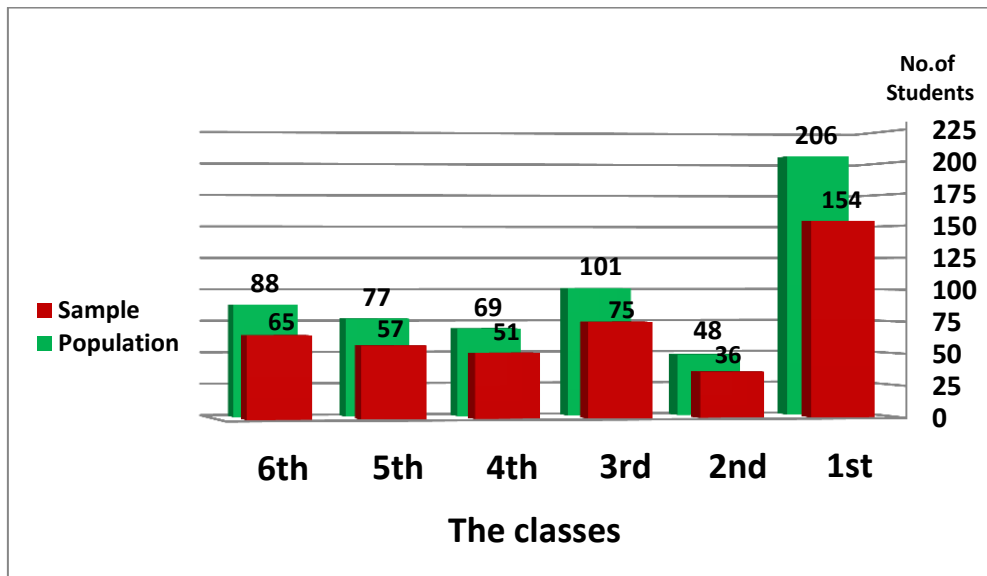


Figure (3) the ratio of sample to population

Research Tool

Exam anxiety scores were measured by using Sarason anxiety rating scale which contain 38 item (Sarason ,1980),Attached with information chart include questions related to age, gender, class, and smoking.The total score of the scale ranges from (38- 152) on the basis that the estimate from (1) to (4)

-Scale Category

A score of 75 or below ranks is a normal exam anxiety range.

A score of 76 to 104 ranks in the medium range of exam anxiety.

Any score 105 and above signifies sever anxiety and this requires follow-up and treatment (Sarason ,1980)

Validity

The researchers extracted the face validity of the scale by asking a group of specialists in the field of education and psychology(Appendix1)to judge the face validity (Roussan1999).They confirmed the possibility of using the scale after taking some notes regarding the method of applying the scale.

Reliability

Reliability was calculated by retesting the scale (T-retest), on the sample of 25 student with a time interval of two weeks(Roussan1999). The reliability coefficient was (0.811)

Practical application:

The research was carried out during the period from 15th of March up to the 1st April 2018. The permission was obtained from the dean of the college before application .Also verbal consent taken from students before distributing the questionnaire. Thequestionnaire distributed among students after explaining the purpose of the study

The final sample after excluded the incomplete forms was 407 by (70%) . Figure (4) the ratio of sample to population. Statistical analysis was done upon this sample

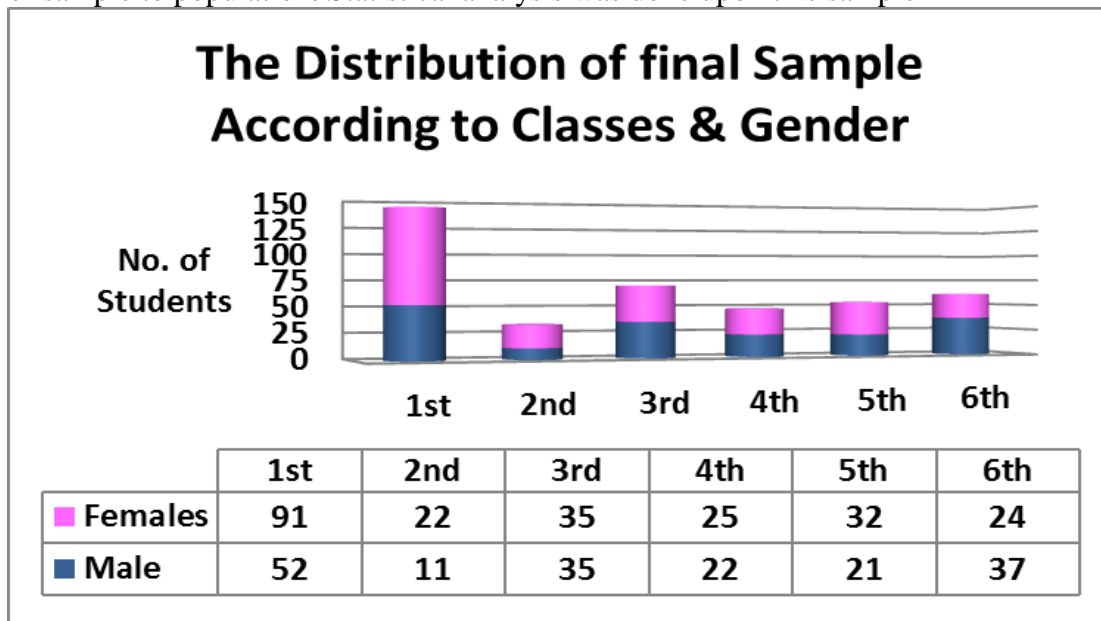
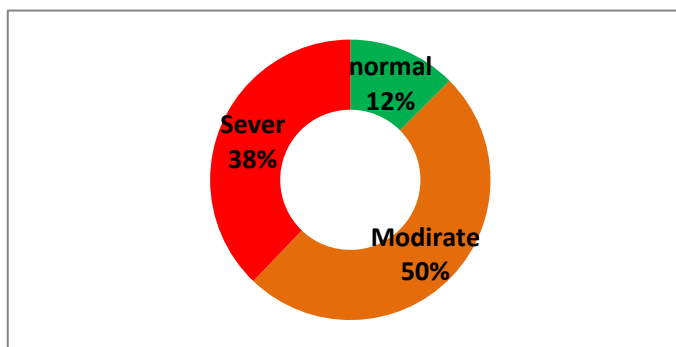


Figure (4) *the distribution of final sample according to classes &gender*

Statistical methods: The following statistical methods were used,AlphaKronbach, Z Test , Chi square (χ^2)as goodness of fit and for independence

Results: View and discuss

First: Prevalence of exam anxiety among medical students college, the result shown that there is high moderate level (50%)of sample(figure5), by mean(98.9) of exam anxiety among students in Nineveh medical collegewith a standard error of (0.96).By using the Z-test, the calculated Z value was (8.771). So the difference was statistically significant atp <0.05 as shown in (table 1)



The percent of the sample

Figure (5): *anxiety in*

Table (1) *Prevalence of exam anxiety among medical students college*

MEAN	SE	P
98.92	0.96	<0.05

This indicates that the university's medical students have a high moderate level of exam anxiety. The researchers attribute this to many causes: it can refer to the stresses of study, or the reason may be; that many students have negative study habits, so that they take the study seriously before the exam only a few, the accumulation of study subjects represented such a heavy burden on them, and then feel anxious, and fearful of examinations. And may be due to the nature of the study of medicine as it is a scientific study and not literary and has been considered by the student more difficult than other specialties. This result agree with the findings of the study of (Adaa 2012), (Putwain & Best 2011), (Zeidner 1998)

Second: The difference between male & female in exam anxiety level in general the results shown that there is high prevalence of exam anxiety among female than male in a whole sample, the arithmetic mean of male was (98.7) with a standard error of (0.994) while the arithmetic mean of female was (101.208) with the standard error of (1.194) and when tested using Z test, the calculated Z value was (2.760). So the difference was statistically significant at $p < 0.05$ as shown in (table 2)

Table (2) the *difference between male & female in exam anxiety level in a whole sample*

GENDER	No.	MEAN	SE	P
MALE	178	95.91	1.538	$p < 0.05$
FEMALE	229	101.208	1.195	

Many studies have demonstrated the existence of gender differences in exam anxiety, and may be the cause of differences in the nature and characteristics of gender. This is confirmed by Linda Eakel (1965): "Gender differences in the phenomenon of anxiety are difficult to prove, and it is generally agreed that girls are more likely than boys to admit anxiety, and males are expected to behave like men in the sense that they act with courage." (AL-Taieb 1988) This means that females are more willing to respond (yes) to exam anxiety measures, while males are less responsive and have difficulty recognizing anxiety, because they see it as weakening and reducing their gender.

This finding is consistent with many studies, such as Spielberg (1980) (AL-Taieb 1988), Couch (1983), (Horn & Dollinger, 1989) And the study of Marzouk (1991)

It is clear from the above that females are the highest level of examination anxiety about the level of males. These results explain that when females are forced to face exam situations, they try to protect themselves from these self-threatening situations through negative adjustment, accompanied by emotional and physiological manifestations.

Third: The difference between male & female in exam anxiety level in each class To identify the nature of the differences in exam anxiety in relation to gender in each class, the results shown that degree of exam anxiety varies according to the level of study according to gender and there is prevalence of exam anxiety among female in each class rather than male except the second and fourth classes, but these differences did not

reach the degree of statistical significance except for the differences in the third class only, it is statistically significant by using Z test at $p < 0.05$ as shown in (table 3)

Table (3) the differences in exam anxiety in relation to gender in each class

Class	No. Male	Mean Male	SE Male	No. Female	Mean Female	SE Female	Calculate Z
1 st	52	98.8	2.48	91	102.59	1.80	0.607
2 nd	11	99.2	3.55	22	89.3	4.53	1.44
3 rd	35	100.6	2.63	35	104.7	1.34	2.912
4 th	22	99.9	4.48	25	94.9	3.91	0.847
5 th	21	104.9	5.02	32	113.3	2.64	1.608
6 th	37	81.8	3.65	24	92.7	4.06	1.951

Some studies confirmed that the examination anxiety is not affected by the educational stage nor the level of education, it is a general phenomenon in all students (Marzuk 1991). The researchers agree with this view. However, they can explain the results of this study: that the sense of anxiety of the exam may increase as the student progresses in his studying till the final stage (the sixth according to medical study) and through this stage, the student has acquired the psychological security from his training in the hospital and absence of theoretical exams

Fourth: The difference in exam anxiety level between smoker & non-smoker students in general

The results show that the number of non-smokers is clearly lower than the students who are smoking in the sample as a whole as shown in Figure (6)

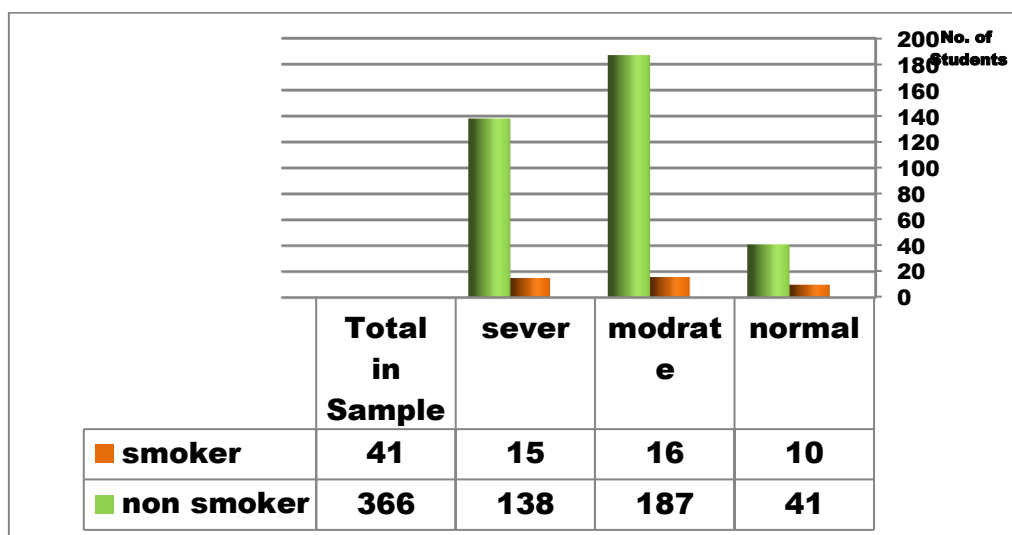


Figure (6) *the relation between smoking and anxiety*

When testing these results using Chi square test, the value of (χ^2) was (0.0449), which is statistically not significant difference of (0.05)

This result can be explained by the fact that the students of the medical college are aware of the harmful effects of smoking and for this reason they do not resort to smoking in order to overcome their fear and anxiety about the exam.

Fifth :The difference in exam anxiety level between smoker & non-smoker in each class According to the fifth goal of study ,the results also shown that there is no correlation between smoking and anxiety during exams as shown in table in (4).This confirms the previous results of the fourth goal finding

Table (4) the relation between smoking and exam anxiety in each class

Class	Smoker	No. Male	No. Female	Ratio Smoker: Non Smoker
	Non smoker			
1 st	5	47	91	1 : 10 for Males
	47			
2 nd	3	8	22	1 : 3 for Males
	8			
3 rd	12	23	35	1:2 for Male
	23			
4 th	1	21	25	1:21 for Male
	21			
5 th	0	21	32	Non
	21			
6 th	16	21	21	1 : 2 for Males 1 : 7 for Females
	21			

Conclusions:

The study concluded that there is high percentage of students in Nineveh medical college suffer from exam anxiety overall classes. there is prevalence of exam anxiety among female than male in a whole sample and particularly in classes :first, third, fifth and sixth .The study revealed that no relation between exam anxiety and smoking in sample as a whole and in each class

Suggestions:

- 1- Investigative the reasons for the high anxiety of the exam among university students
- 2 - Conduct a study to find the relationship between the exam anxiety and some variables such as - the achievement, the degree of intelligence, the economic and social level of parents
- 3 –Conduct a study to compare the anxiety of the exam between university students and students of secondary school
- 4- Conduct a study to compare the exam anxiety between the first stage and the final stage of the university students

Recommendation:

- 1- Providing psychiatric counseling clinics, to diagnose and treatment cases of exam anxiety
- 2-Provide psychological support to students to avoid anxiety during the exam

- 3- Encourage future studies to discover the cause of these
- 4- Pay attention to the teaching staff so they can better communicate with their students
- 5- Use of memorization skills in addition to other cognitive skills in anxiety reduction programs, to increase student self-confidence and thus reduce anxiety and improve academic achievement
- 6- Continuing training on the relaxation process as breathing exercises and imagining.
- 7- Encourage the students to placing the fruitful time, and maintain the appropriate study habits that help the psychological stability and try to overcome the bad school habits

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Appendix (1) Committee of experts in education and psychology of the scale of exam anxiety

No	Title	Name	University	College
1	Prof.	ElhamAljammass	University of Nineveh	Medicine
2	Prof	Dr. Osama HamedMuhammed	University of Mosul	Education
3	Asst.prof.	Dr.AhmedMuhammedNoury	University of Mosul	Basic Education
4	Asst.prof.	Dr.SamirYounis	University of Mosul	Education
5	Asst.prof.	Dr. SabehaYasermakfoof	University of Mosul	Education
6	Asst.prof.	Dr. Fadhela Arafat	University of Mosul	Education
7	Asst.prof.	Dr. Anwar Al-Azawy	University of Mosul	Basic Education
8	Asst.prof.	Dr.AliSulayman Hassan	University of Mosul	Education