

Assessment of Exam-related Anxiety among the Students of the High Healthy Vocations Institute at Medical City

Sameer Allawi Khalaf¹, Meaad Kareem Halboos²

¹Assistant Lecturer, Adult Nursing-College of Nursing/University of Tikrit,

²Psychiatric Mental Health Nursing, High Healthy Vocations Institute/Ministry of Health

Abstract

The purpose of this study was to assess levels of anxiety among the Students of the High Healthy Vocations Institute, to find out relationship between students' anxiety levels and some socio-demographic characteristics such as (age, residency, marital status and department) of the Students of the High Healthy Vocations Institute. The period of the study was from April 2nd, 2019 to June 2nd, 2019). To meet the study objectives a questionnaire was constructed. This questionnaire consisted of two parts: the first part includes four demographic characteristics: age, residency, marital status, and department; the second part concerning with the test anxiety scale. The scale measures the most important symptoms that characterize the test anxiety. Data were analyzed by applying: descriptive statistical analysis: frequencies and percentages and distribution; and inferential analysis: Correlation Coefficient, Chi-square. The findings of the study revealed that assessment of exam-related anxiety among the Students of the High Healthy Vocations Institute is moderately to severe level of anxiety. There was a significant relationship between severity of anxiety and age of the students. The present study recommends encouraging the students to learn some coping strategies and stress managements by attending training and relaxation sessions. Advice to regular recreational programs that include trips to reduce stress and to help them to prevent and lessen the stress associated with every-day life events stress.

Keywords: Exam-Related Anxiety; High Healthy Students; Contributing Factors.

Introduction

Anxiety is an unpleasant state characterized by feelings of tension and apprehension, worrisome thoughts and the activation of the autonomic nervous system when an individual faces evaluative achievement demanding situations⁽¹⁾. Fear of exams and test situations is widespread and appears to become more prevalent and test anxiety has a negative detrimental effect on test performance⁽²⁾. If an examination particularly affects the person's carrier selection and future opportunities, it may be stressful. Exam anxiety prevalence has been

reported as 10-41% in school aged children. Researchers have estimated test anxiety prevalence rates of between 15-20% for college students⁽³⁾. Exam anxiety is primarily a concern over negative evaluation, so defined as a subtype of social phobia in DSM diagnostic system. Many studies have reported an association between exam anxiety and anxiety disorders⁽⁴⁻⁵⁾. Psychological factors which contribute significantly to exam anxiety are negative and irrational thinking about exams, outcomes of exams and feelings of no control over exam situation (e.g., going blank during exam) are reported by many authors⁽⁶⁾. Higher anxiety levels in the student community are considered as important indicators for poor mental health⁽⁷⁾. The potential negative effects of emotional distress on students include impairment of functioning in classroom performance and clinical practice, stress-induced disorders and deteriorating performance⁽⁸⁾. Students in extreme stress need serious attention, otherwise inability to cope successfully with

Corresponding Author:

Sameer Allawi Khalaf

Assistant lecturer, Adult Nursing-College of Nursing/
University of Tikrit

e-mail: samiralqaisy@yahoo.com

the enormous stress of education may lead to a cascade of consequences at both personal and professional⁽⁹⁾. Moreover, studies suggest that test anxiety comprises of many negative effects such as low enthusiasm, poor performance, negative self-evaluation viewpoints and low concentration⁽¹⁰⁻¹¹⁾. Researches on examination anxiety have the notion that examination anxiety prepares threats for higher institution students. Anxiety symptoms are distributed along a continuum and different symptom levels of anxiety and predict outcomes. Responses consisted of increase heart rate, stress hormone secretion, restlessness, vigilance and fear of potential dangerous environments. Anxiety prepares the body for physical, cognitive and behavioral instincts to detect and deal with threats to students examination survival and then result to students, beginning to be hyperventilate to allow more oxygen to enter into the blood-stream, divert blood to muscles and sweat to cool the skin⁽¹²⁾. Posited that the difference between generalized anxiety disorders and examination anxiety. He explained that general anxiety disorders are characterized by trait anxiety that results to students experiencing higher levels of stresses across a wide range of situations. Contrarily, students that are prone to examination anxiety have a state of anxiety that results to higher levels of nervousness that are specific to examinations. The symptoms of examination anxiety range from moderate to severe anxiety. Students who exhibit moderate symptoms are able to perform relatively well on examinations. On the other hand, students with severe anxiety experience panic⁽¹³⁾; the common physical symptoms include: headache, upset stomach, feeling of fear, feeling of dread, shortness of breath, sweating, pacing or fidgeting, crying, racing thoughts and blanking out. Lyness explained that during the state of excitement or stress, the body releases adrenaline⁽¹⁴⁾. Adrenaline is known to cause physical symptoms that accompany examination anxiety such as increased heart beat-rate, sweating and rapid-breathing. In many cases, adrenaline is good; it is helpful when dealing with stressful situations, ensuring alertness and preparation. But to some students, the symptoms are difficult or impossible to handle, making them impossible to focus on examinations. The topic of test anxiety has prospered, in part, due to the increasing personal importance of test situations for people in modern society, making tests and their long-term consequences significant educational, social, and clinical problems for many. Since test results in most academic and occupational settings have important practical implications for a person's goals and future career, test anxiety is frequently reported

to be a meaningful factor impacting upon test scores. This study aims to (1) assess levels of anxiety among the students of the High Healthy Vocations Institute; (2) find out relationship between students' anxiety levels and some sociodemographic characteristics such as (age, residency, marital status and department) of these students.

Method

A descriptive analytical design study is applied to assess the anxiety among the students of the high healthy vocation institute at Medical City. The period of the study was from April 2nd, 2019 to June 2nd, 2019. The study included a probability (Stratified random) sample of 70 students. To meet the study objectives a questionnaire was constructed. This questionnaire consisted of two parts: the first part includes the demographic characteristics of age, residency, marital status, and department; the second part concerning the Sarason test anxiety Scale⁽¹⁶⁾ of 38 item self-report scale that assesses all symptoms of test anxiety. The scale encompasses four domains, each item of scale was rated (1= never, 2= rarely, 3= sometimes, 4= always). By applying the descriptive data analysis of Quartiles which determine the cut-off-points for the levels of anxiety which are Mild (38-103), moderate (104-115), (severe (116-148). Reliability of the questionnaire was determined through pilot study and validity determined through a panel of experts consists of (11) experts. Data were analyzed by applying descriptive statistical (frequencies, percentages) and inferential statistical (Correlation Coefficient and Chi-square) through the SPSS (Statistical package for Social Sciences) version 21.0.

Results

Table 1: Participants' sociodemographic characteristics

| Year | Age | |
|--------------|-----------|---------------|
| | Frequency | Percent |
| ≤ 9 | 19 | 12.2% |
| 20-24 | 37 | 23.7% |
| 25-29 | 7 | 4.5% |
| 30-34 | 2 | 1.3% |
| 35-39 | 2 | 1.3% |
| ≥40 | 3 | 1.9% |
| Total | 70 | 100.0% |

| Residency | | |
|-----------------|-----------|---------------|
| Baghdad | 60 | 38.5% |
| Outside Baghdad | 10 | 6.4% |
| Total | 70 | 100.0% |
| Marital Status | | |
| Unmarried | 60 | 38.5% |
| Married | 10 | 6.4% |
| Total | 70 | 100.0% |

| Department | | |
|----------------|-----------|---------------|
| Nursing | 40 | 25.6% |
| Midwifery | 15 | 9.6% |
| Anesthesiology | 10 | 6.4% |
| Emergency | 5 | 3.2% |
| Total | 70 | 100.0% |

Most of the study sample 23.7% are of age 20-24-years, the highest percentage (38.5%) live in Baghdad, more than half (38.5%) are single, and the highest percentage (25.6%) are from the nursing students.

Table 2. Participants' levels of anxiety

| Total No. | Levels of Anxiety | | | | | | | |
|-----------|-------------------|-------|----------|-------|--------|-------|-------|--------|
| | Mild | | Moderate | | Severe | | Total | |
| | F | % | F | % | f | % | F | % |
| | 35 | 22.4% | 16 | 10.3% | 19 | 12.2% | 70 | 100.0% |

There is different severity of Anxiety the students inflicted with; 22.4% have mild level; 10.3% have moderate level and 12.2% with severe level of Anxiety.

Table 3. Distribution of the sample according to the levels of Anxiety

| | | Levels of Anxiety | | | | Total | |
|-----|--------------|-------------------|----------|--------------|--------------|--------------|---------------|
| | | Mild | Moderate | Severe | | | |
| Age | ≤ 19 | F | 11 | 4 | 4 | 19 | |
| | | % | 15.7% | 5.7% | 5.7% | 27.1% | |
| | 20-24 | F | 18 | 6 | 13 | 37 | |
| | | % | 25.7% | 8.6% | 18.6% | 52.9% | |
| | 25-29 | F | 3 | 3 | 1 | 7 | |
| | | % | 4.3% | 4.3% | 1.4% | 10.0% | |
| | 30-34 | F | 2 | 0 | 0 | 2 | |
| | | % | 2.9% | 0.0% | 0.0% | 2.9% | |
| | 35-39 | F | 1 | 1 | 0 | 2 | |
| | | % | 1.4% | 1.4% | 0.0% | 2.9% | |
| | ≥ 40 | F | 0 | 2 | 1 | 3 | |
| | | % | 0.0% | 2.9% | 1.4% | 4.3% | |
| | Total | | F | 35 | 16 | 19 | 70 |
| | | | % | 50.0% | 22.9% | 27.1% | 100.0% |

Less than a fifth (18.6%) of the age group 20-24 have severe level of Anxiety while just 1.4% of age groups 35-39 have mild level of Anxiety.

Table 4. Levels of Anxiety according to residency of the students participated

| | | | Levels of Anxiety | | | Total |
|--------------|-------------|----------|-------------------|--------------|--------------|---------------|
| | | | Mild | Moderate | Severe | |
| Residency | Baghdad | F | 32 | 14 | 14 | 60 |
| | | % | 45.7% | 20.0% | 20.0% | 85.7% |
| | Out Baghdad | F | 3 | 2 | 5 | 10 |
| | | % | 4.3% | 2.9% | 7.1% | 14.3% |
| Total | | F | 35 | 16 | 19 | 70 |
| | | % | 50.0% | 22.9% | 27.1% | 100.0% |

A fifth (20.0%) of the students who live in Baghdad have severe level of Anxiety while just 4.3% of students are living outside Baghdad have mild level of Anxiety.

Table 5. Participants’ levels of Anxiety according to the marital status

| | | | Levels of Anxiety | | | Total |
|----------------|-----------|----------|-------------------|--------------|--------------|---------------|
| | | | Mild | Moderate | Severe | |
| Marital Status | Unmarried | F | 32 | 14 | 14 | 60 |
| | | % | 45.7% | 20.0% | 20.0% | 85.7% |
| | Married | F | 3 | 2 | 5 | 10 |
| | | % | 4.3% | 2.9% | 7.1% | 14.3% |
| Total | | F | 35 | 16 | 19 | 70 |
| | | % | 50.0% | 22.9% | 27.1% | 100.0% |

A fifth (20.0%) of the students group unmarried has severe level of Anxiety while just 4.3% of the married students have mild level of Anxiety.

Discussion

The most important consequence of this study is that the results of table (2) show that the students have different levels of anxiety. This result is supported by Clark and her colleagues (2000) found that the majority of subjects had high levels of test anxiety, as can be inferred from the results of the present study, the high and moderate levels of anxiety are higher than those of studies cited above. This difference may be due to several factors that have an impact on anxiety, such as different course contents, educational environment, test conditions, types of test questions and other factors⁽¹⁷⁾.

The results show that the students are young and being around eighteen years old and of mid- aged and being around forty years old and have different levels of anxiety table (3). In addition, the age groups of (20-24) have more levels of anxiety (52.9%). This result is supported by McDonald (2001); Showed that fear of failing a test increased with age in American and Australian students, in studies that use specific test

anxiety scales, anxiety levels typically increase with age, found that test anxiety levels increase through in younger and middle-aged students⁽¹⁸⁾.

The study indicates that the students living in the City of Baghdad have more levels of anxiety 85.7% than the students living in the outside Baghdad table (4). This might be due to the long way those students need to reach to the institute everyday, but the other students live in places around the institute.

Regarding the marital status, this study shows that 85.7% of unmarried female students have more levels of anxiety Table (5). This is supported by Amuda and colleagues investigated the relationship between marital status and test anxiety, academic performance of undergraduate students in the USA, the result showed that the single students more anxiety than married students. This means that marital status influences students’ academic achievement and those that are married tend to do better than the single students⁽¹⁹⁾.

Conclusion

The results of present study indicated that most of the students jointed in the study are of age twentieth

and twenty-four; about half of them live in Baghdad; more than half are unmarried; and most of them are of the nursing department students. The study indicates that high percentage of those students have anxiety in different levels; about a quarter of them are with mild level, less than the quarter are with moderate level, and a twelve of the sample have severe level of anxiety. The study describes statistically significant association between age and severity of anxiety.

Recommendations:

The researchers recommend the following:

1. The teachers should acknowledge the existence of test anxiety on the part of students and should take initiatives for its effective reduction. They should identify individuals with signs of stress and anxiety and should apply appropriate strategies to help them counteract these feelings.
2. Teachers should initiate discussions in the class about the feelings of anxiety and should take measures to reduce the sense of competition among them.
3. There should be some specific teachers training courses on managing test anxiety in order to make teachers aware of this complex issue and, hence, alleviate it.
4. Students should seek counselling before doing tests so as to increase their confidence.
5. Building on 2 above, group counselling sessions may be more beneficial. Such sessions enable students to share their personal experiences and copes strategies with others so that they know that they are not alone.

Conflict of Interest: The researchers report no conflict of interest.

Funding: This study did not receive any funding from any agency.

Ethical Clearance: A permission to conduct this study was obtained from the ethical committee in the College of Nursing, University of Tikrit.

References

1. Keogh E, French CC. Test anxiety, evaluative stress, and susceptibility to distraction from threat. *European Journal of Personality* [Internet]. 2001 Mar [cited 2019 Jul 27];15(2):123–41.
2. Bateson M, Brilot B, Nettle D. Anxiety: An evolutionary approach. *The Canadian Journal of Psychiatry*, [Internet]. 2011 Dec [cited 2019 Jul 27];56(12):707–15.
3. Driscoll R. Westside test anxiety scale. 2004; Retrieved January, 20, 2008.
4. Schlenger WE, Caddell JM, Ebert L, Jordan BK, Rourke KM, Wilson D, et al. Psychological reactions to terrorist attacks: Findings from the national study of Americans' reactions to September 11. *JAMA (Journal of the American Medical Association)* [Internet]. 2002 Aug 7 [cited 2019 Jul 27];288(5):581–8.
5. Harris HL, Coy DR. Helping students cope with test anxiety. 202; ERIC Counseling and Student Services Clearing House.
6. Hill KT, Wigfield A. Test anxiety: A major educational problem and what can be done about it. *Elementary School Journal* [Internet]. 1984 Sep [cited 2019 Jul 27];85(1):105–26.
7. Acharya S. Factors affecting stress among Indian dental students. *Journal of Dental Education* [Internet]. 2003 Oct [cited 2019 Jul 27];67(10):1140–8.
8. Aktekin M, Karaman T, Senol YY, Erdem S, Erenengin H, Akaydin M. Anxiety, depression and stressful life events among medical students: a prospective study in Antalya, Turkey. *Medical Education* [Internet]. 2001 Jan [cited 2019 Jul 27];35(1):12–7.
9. Fuad MD, Nasir Al-Zurfi BM, Qader MA, Abu Bakar MF, Elnajeh M, Abdullah MR. Prevalence and Risk Factors of Stress, Anxiety and Depression among Medical Students of a Private Medical University in Malaysia. *Education in Medicine Journal* [Internet]. 2015 Jun [cited 2019 Jul 27];7(2):e52–9.
10. Fuad MD, Nasir Al-Zurfi BM, Qader MA, Abu Bakar MF, Elnajeh M, Abdullah MR. Prevalence and Risk Factors of Stress, Anxiety and Depression among Medical Students of a Private Medical University in Malaysia. *Education in Medicine Journal* [Internet]. 2015 Jun [cited 2019 Jul 27];7(2):e52–9.
11. Freling TH, Forbes LP. An examination of brand personality through methodological triangulation. *Journal of Brand Management* [Internet]. 2005 Nov [cited 2019 Jul 27];13(2):148–62.

12. Cassady JC. Test anxiety: Contemporary theories and implications for learning. In Cassady J C (Ed.), *Anxiety in schools: The causes, consequences, and solutions for academic anxieties* (pp. 7-26). New York, NY: Peter Lang
13. Cassady JC, Johnson RE. Cognitive test anxiety and academic performance. *Contemporary Educational Psychology* [Internet]. 2002 Apr [cited 2019 Jul 27];27(2):270–95.
14. Cherry K. Causes of test anxiety, 2012; causes.htm—Retrieved 21st November 2018.
15. Lyness D. Test Anxiety. 2012; The Nemours Foundation: Retrieved 4 April 2018.
16. Marks AD, Sobanski DJ, Hine DW. Do dispositional rumination and/or mindfulness moderate the relationship between life hassles and psychological dysfunction in adolescents? *Australian & New Zealand Journal of Psychiatry* [Internet]. 2010 Sep [cited 2019 Jul 27];44(9):831–8.
17. Sarason IG. The test anxiety scale: Concept and research. 1978; In C. D. Spielberger, & I. G. Sarason (Eds.), *Stress and Anxiety* (Vol. 5, 193-216).
18. Clark JM, Fox PA, Shneider HG. Test anxiety and performance in a college course. *Psychol Red*, 2000; 82, 203-8.
19. Silver RSE, Alison EA, McIntosh DN, Poulin M, Rivas G. Nationwide longitudinal study of psychological responses to September 11. *JAMA (Journal of the American Medical Association)* [Internet]. 2002 Sep 11 [cited 2019 Jul 27];288(10):1235–44.
20. McDonald AS. The Prevalence and Effects of Test Anxiety in School Children. *Educational Psychology* [Internet]. 2001 Mar [cited 2019 Jul 27];21(1):89–101.
21. Amuda B, Bulus A, Joseph H. Marital status and age as predictors of academic performance of students of Colleges of Education in the North-Eastern Nigeria. *American Journal of Educational Research*, 2016; 4(12): 896-902. doi: 10.12691/education-4-12-7.