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Investigating the Sports Competitive Anxiety: A Comparative Study

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Abstract

The research aims to identify the levels of sports competition anxiety among the players, (the research sample), at the Faculty of Physical Education and Sports at Al-Aqsa University in Palestine, and the students of Faculty of Physical Education and Sports Science at Hashemite University in Jordan. The researchers used the descriptive methodology following surveying process because of its convenience to the study. The sample was chosen deliberately and the number of players reached (216). One of the most important recommendations is maintaining psychological compatibility and mental and physical relaxation for the athletes, because of its significant effect on the cognitive outcome and performance level.

Keywords: *Competition anxiety – athletics*

Introduction

Anxiety is considered one of the influential emotions that strongly affects the sports field in general, and competitive sports field in particular as it is classified as one of the most important psychological phenomena that affect performance of athletes. It may affect them positively to exert more effort or in negative way that hinders performance and lowers its level. Therefore, athletes must be guided how to control the anxiety they feel in order not to affect the adequacy of their performance.

Fawzy (2003), points out that anxiety largely affects players activity positively or negatively when confronting situations of psychological stress and tension, so that athletes need psychological skills training programs and performance development during general psychological preparation.

Alaawi (2009), Yassin (2008) and Luis (2005) divided sports competition anxiety into:

- Competitive trait anxiety: it refers to perceiving athletic competitive situations as an external threat and to respond to it with feelings of anticipation, fear and tension.
- Competitive state anxiety: it is divided into:

1- Pre-competition anxiety: it appears in the days preceding the players' participation in

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- the competition. The trainer should take into account the individual differences of players.
- 2- Competition anxiety: it is an initial anxiety that occurs before the actual participation in the competition, and it varies according to the system and time of the athlete.
 - 3- Direct anxiety with competition environment: it is a natural phenomenon that any athlete may feel, and it mainly aims to move from negative waiting state to actual practice state. It also contributes greatly to preparing athletes to exert more effort.
 - 4- Anxiety during competition: it may increase or decrease the level of performance according to the emotion of the player.
 - 5- Post-competition anxiety: this means the state of the player after the end of the sports competition and the associated experiences of victory, defeat, good performance or bad performance and his willingness to participate in the next competition.

Everyone seeks to reach with his personality to the identified aims that others may approve. However, he probably could not balance between the requirements of the external world and his specific needs. (Marchant, D. B., 2010)

Al-Maayra (2002), Goodwin, C. J. (2009), state that athletes suffer psychological stress, tension and anxiety which become pressing situations and big menaces, and mostly cause clear unbalance between athletes' willingness and abilities and requirements of competitive environment, so that the degree of anxiety increases strongly and affects their psychological and physical functions, and this is called competition anxiety which is considered as one of the main centerpiece of the physical abilities in sports. The rise or reduction of competition anxiety may extend from a player to include the whole team performance.

In the light of this negative influence of anxiety on athletes in the sport competition, the researchers decided to conduct a comparative study on the extent of anxiety that befalls the students of Faculty of Physical Education at Hashemite University in Jordan and the students of Faculty of Physical Education and Sports at Al-Aqsa University in Palestine concerning applying the practical aspects in courses of athletics after Corona pandemic during the second academic term 2021-2022.

Statement of the Problem

Most psychologists agree that athletes suffer different degrees of psychological states such as anxiety associated with sports competitions. The cognitive and physical anxieties represent two important dimensions of competitive state anxiety because they affect athletes' performance differently, and it is noted that the superiority in any sports game depends to a large extent on the level of psychological harmony and mental and physical relaxation of athletes. Therefore, this study attempts to reveal the level of sports competition anxiety among the sample of the research.

Anxiety is considered one of the emotions that have a special importance in sports field in general, and in the competitive sports field in particular, and it is one of the most important psychological phenomena that affects the performance of athletes, and this effect may be positive so that it motivates them to exert more effort, or may be negative so that it reduces the level of performance. (Bäumler, G., 2009)

The researchers believe that the sports competitive anxiety plays a pivotal role in the field of sports competition, because it is recorded that athletes complain about their feelings of different degrees of anxiety that negatively affects their level of performance. While some

players adapt themselves and control the anxiety they feel, others could not control their anxiety, so that their performance level is negatively affected during the competition.

Hence, the researchers observed that the sports competitive anxiety has significant effect on players, and very often this effect is negative. In respect to this negative effect of anxiety, the researchers decided to carry out a study that investigates the level of sports competition anxiety among a sample of athletes to find out the sources and causes of anxiety related to the sports competitions among the sample investigated, and consequently guide and help them to avoid those sources and causes and to control their feelings of anxiety.

Significance of the Study

The current study is significant as it attempts to uncover the level of sports competition anxiety among the sample of this study, and also it attempts to help athletes avoid the sources and causes of anxiety and enable them to exert more effort in order to improve their performance during sports competitions.

Objectives of the Study

The study aims to achieve the following objectives:

1. to identify the levels of sports competition anxiety among the athletes, (sample of the study), during sports competitions.
2. to identify the effect of sports competition anxiety among the sample of the study.
3. to discover the statistically differences in estimates of the sample of the study according to the study variables?

Research Questions

This study attempts to answer the following questions:

1. to what extent sports competition anxiety does affect the level of athletes' performance?
2. what kind of sports competition anxiety the athletes may feel or suffer, i.e. is it positive or negative?
3. are there statistically differences in estimates of the sample of the study according to the study variables?

Terms of the Study

Competitive Anxiety as Trait: the athletes incline to interpret the competitive situations as threat and react to it with fears and tension.

Trait of Sports Competitive Anxiety: the athletes incline to recognize the large numbers of competitive situations as strong threats and react by abnormal anxiety, and it differs according to the individual differences among players. (Ratib, 2000)

Competitive State Anxiety: it is emotional state that occurs during competitions. It happens as a reaction of threatening competitive circumstances and it is characterized by rousing the nervous system. It changes from competition to another according to the threat perceived by the athletes in every situation. (Alaawi, 2009)

Review of Literature

- 1) The study of Amani Abdulla Ali Fadhllallah (2015), aimed at identifying the competitive trait anxiety in the sports field. She used the descriptive methodology. The sample of the study was chosen deliberately and included (50) male students and (50) female students. The study showed that there were not differences in competitive trait anxiety attributed to the variables of the study, which indicates that players of all ages or levels are in dire need of psychological preparation and guidance that help them overcome pressures of training and competition, in addition to the fact that they have not yet reached the degree that enables them to control their psychological state and directing it correctly.
- 2) The study of Jäber (2009), which aimed to identify competitive state anxiety among football players in Palestine according to the variables of attack and defense, excellent degree, first degree. The study sample consisted of (2010) players from major and minor league in football. The study used the descriptive methodology to collect the data. The researcher used the list of sports competition state anxiety from Martins design in its Arabic version. The findings showed that the dimension of self-confidence lied first, then cognitive anxiety, then physical anxiety, and there were no statistical differences attributed to centers of attack and defense or to variables of excellent or first degree.
- 3) The study of Dhergham Jasem Al-Naimi (2001), which it aimed to identify the trait and state of anxiety among the girl's clubs players in (football, volleyball and basketball), and comparing the psychological aspects in these games which are considered a real evidence to anticipate the result of the game, because the state of anxiety involves three dimensions; cognitive, physical and self-confidence. The study was conducted on girl's clubs for team games (football, volleyball and basketball). The total of players reached (120) distributed on the clubs of (Wasit Kirkook, Najaf, Dyala, Basra and Karbalaa). The researcher used interview and questionnaire as tools to measure the state and trait of anxiety. The scientific terms of the questionnaire were confirmed by a group of experts and specialists. It concluded that the degree of competitive trait anxiety among female basketball players was higher compared to other teams, and the degree of competitive state anxiety among female football players was higher compared to other teams. The researcher recommended the necessity to use the measurement of competitive anxiety as trait and state among female players of team activities for the sake of recognizing the provocative situations the female players face in competitions and consequently to guide them towards different competitive situations.
- 4) The study of Sedqi Noor Eddin and Mostafa Kazim (1998), it aimed to test the criterion of multi-dimension competitive anxiety in the students of UAE University, and to identify the differences among dimension of competitive anxiety (cognitive, physical and self-confidence) among the students of UAE University.

The research sample consisted of (200) male and female students from UAE University, which was tested in random way. The tool of the research depended on the criterion of multi-dimensions competitive anxiety prepared by Martins and et. al. (1990). The researchers concluded that:

- increase of cognitive and physical anxiety level among the students.
- trueness and validity of use of criterion of multi dimensions competitive anxiety in sports field in universities of UAE.

The researchers recommended the importance of use of criterion of multi-dimensions competitive anxiety in university sports field to direct the students more effectively towards

sports practice situations.

- 5) The study of Alan Qader Rasol (1999); it aimed at identifying the effect of levels of competitive anxiety on performance of some essential skills in football and identifying the levels of performance of some essential skills in football during playing in the team's stadium and in the competitor's stadium. The study sample consisted of the players of (16) teams of minor league clubs who participated in the championship of Iraqi league in football in sports season (1998-1999).
- 6) The study of Albinson and Detrio (2003), entitled "Psychological Factors that Affect Psychological Adaptation to Sports Injuries", which aimed at identifying the relationships between before and after injuries in some psychological factors such as stress, mood, commitment, feeling of satisfaction and social support. It consisted of (84) football players among them (19) injured. The study used a group of psychological criteria in periods (after a day from injury, after four days, a week, two weeks, and finally 28 days after injury). The results showed that there was negative relationship between pressures and mood, and the highest relationships appeared after two weeks and 28 days.
- 7) The study of (Causo, 1990), which indicated that reaction of anxiety varies in level between high, medium and low, and it varies in direction between positive and negative. The increase of anxiety level is seen as one of the main factors that determine the level of athletes' performance. That is, the level of performance depends on the players' interpretation to intensity of perceptible and physical syndromes associated with competitive anxiety which are regarded as stimulating or frustrating factor for performance level.
- 8) Ratib (2001) believes that anxiety occurs as a result of the negative expectation of the athletes. It appears through the weak capability of the athlete to refocus and pay attention. He argues that athletics include many skills and activities where the basic movements of the human being form the basis of these activities. Thus, these movements and skills were subjugated to rules and laws that made them a way of competition athletes.

Scope of the Study

- Human field
- Time field: second semester of academic year 2021-2022
- Spatial field

Research Methodology

The researcher used the descriptive methodology following the surveying process as it is convenient to the study.

Community and Sample of the Study

Table (1): Distributing the Study Sample According to Gender Variable.

Gender	Frequency	percentage
Male	151	69.9
Female	65	30.1
Total	216	100

Table (2): Distributing the Study Sample According to University Variable.

Type of university	Frequency	percentage
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Hashemite	84	38.9
Al-Aqsa	132	61.1
Total	216	100

Table (3): Distributing the Study Sample According to Level Variable.

Level	Frequency	percentage
1	43	19.9
2	60	27.8
3	45	20.8
4	68	31.5
Total	216	100

Table (4): Distributing the Study Sample According to Specialization Variable.

Specialization	frequency	percentage
Sports training	84	38.9
Sports qualification	4	1.9
Sports education	128	59.3
Total	216	100

Table (5): Distributing the Study Sample According to Accumulative Average Variable.

Accumulative average	Frequency	percentage
Excellent	20	9.3
Very good	111	51.4
Good	79	36.6
Accepted	6	2.8
Total	216	100

Table (6): distributing the study sample according to athletics practitioner variable.

Athletics practitioner	Frequency	percentage
Nothing	140	64.8
Scholastic	11	5.1
Academic	45	20.8
Club	14	6.5
National	6	2.8
Total	216	100

Table (7): Distributing the Study Sample According to Course Variable.

Course	frequency	percentage
Athletics 1	77	35.6
Selected sports specialization athletics (a) individual	56	25.9
Management and training athletics	7	3.2
Selected sports specialization athletics (b) individual	13	6
Athletics 2	63	29.2
Total	216	100

Table (8): Distributing the Study Sample According to Disease Variable.

Disease	Frequency	percentage
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Yes	23	10.6
No	193	89.4
Total	216	100

Questionnaire Validity

1) Validity of examiners

The questionnaire was first presented to a group of specialized examiners to verify the appropriateness of paragraphs to the purpose of the research, and according to the examiners, the researchers revised some paragraphs, added some paragraphs and some others were omitted. Thus the questionnaire consisted of (48) paragraphs divided into (3) fields.

2) Validity of internal consistency of the questionnaire

The questionnaire was carried out on an exploratory sample of (20) individuals to verify the validity of the internal consistency of the questionnaire as follows:

- correlation coefficients were calculated through the Pearson correlation coefficient between the degree of each paragraph of the questionnaire and the total degree of the field to which it belongs, as it is shown in the following table.

Table (9): Pearson Correlation Coefficient between the Score of Each Paragraph and the Total Degree of the Field.

First field			Second field			Third field		
1	0.807	0.01	1	0.464	0.05	1	0.724	0.01
2	0.861	0.01	2	0.880	0.01	2	0.724	0.01
3	0.868	0.01	3	0.897	0.01	3	0.648	0.01
4	0.823	0.01	4	0.828	0.01	4	0.729	0.01
5	0.881	0.01	5	0.896	0.01	5	0.923	0.01
6	0.835	0.01	6	0.810	0.01	6	0.804	0.01
7	0.888	0.01	7	0.810	0.01	7	0.828	0.01
8	0.781	0.01	8	0.474	0.05	8	0.884	0.01
9	0.870	0.01	9	0.884	0.01	9	0.837	0.01
10	0.884	0.01	10	0.850	0.01	10	0.835	0.01
11	0.798	0.01	11	0.704	0.01	11	0.878	0.01
12	0.833	0.01	12	0.788	0.01	12	0.781	0.01
13	0.498	0.05	13	0.649	0.01			
14	0.578	0.01	14	0.727	0.01			
15	0.729	0.01	15	0.794	0.01			
16	0.823	0.01	16	0.758	0.01			
17	0.804	0.01	17	0.698	0.01			
18	0.424	0.01						
19	0.758	0.01						

Tabular (R) Value (Freedom Degrees=18) at Significance Level 0.05=0.444, and at Significance Level 0.01=0.561.

It is clear from the previous table that the correlation coefficients of all items of the questionnaire ranged between (0.464-0.923) , and that they correlate with the total degree of

the field to which they belong in a statistically significant manner at the level of significance (0.05,0.01) which indicates the validity of the internal consistency.

- Pearson correlation coefficient was calculated between the total degree for each field of the questionnaire and the total degree of the questionnaire as shown in the following table.

Table (10): Pearson Correlation Coefficient between the Total Degree of the Field and the Total Degree of the Questionnaire.

No.	Questionnaire fields	Number of paragraphs	Correlation coefficient	significance level
1	Anxiety of pre-registration of athletics material	12	0.884	0.01
2	Anxiety while registration of athletics material.	17	0.828	0.01
3	Exam side	19	0.837	0.01

It is clear from the previous table that all fields of the questionnaire are statistically associated with the total degree of the questionnaire which also indicates the validity of the internal consistency of the questionnaire.

Stability of the Questionnaire

1- Half-partitioned method:

The paragraphs of the criterion were divided into two parts; paragraphs of odd numbers and paragraphs of even numbers, and Spearman's calculation was used for paragraphs of even numbers while Gutman's calculation was used for paragraphs of odd numbers as shown in the following table:

(Table 11): Stability Coefficient by Half-Partitioned Method.

No.	The hub	Number of paragraphs	stability coefficient
1	Anxiety of pre-registration of athletics material	12	0.893
2	Anxiety while registration of athletics material.	17	0.871
3	Exam side	19	0.881
	Total degree	48	0.887

The previous table shows that all the values of the stability coefficient by half-partitioned method ranged between (0.871-0.893) which indicates that the questionnaire is characterized by high stability.

2- Cronbach alpha method

The stability coefficient of the questionnaire was calculated by using Cronbach alpha method as shown in the following table:

(Table 12): Stability Coefficient by Cornbach's Alpha Method.

No	The hub	Number of paragraphs	Cronbach's alpha coefficient
1	Anxiety of pre-registration of athletics material	12	0.864
2	Anxiety while registration of athletics material.	17	0.895
3	Exam side	19	0.890
	Total	48	0.873

It is clear from the previous table that Cornbach alpha coefficient of the total degree is equal to (0.873) which is a high stability coefficient, and that all Cornbach alpha coefficient for fields ranged

between (0.864-0.895), and these values indicate that the questionnaire has a high degree of stability.

Statistical Treatments Used in the Study

The statistical package for social sciences (SPSS) program was used to unpack and treat the data as follows

a- The Statistical Treatments Used to Verify the Validity and Stability of Tools

- Spearman Brown correlation coefficient: to calculate stability using half-partitioned method of even numbers paragraphs.
- Gutman correlation coefficient: to calculate stability using half-partitioned method of odd numbers paragraphs.
- Cronbach alpha coefficient: to find out stability of the questionnaire.
- Pearson correlation coefficient: to verify the validity of internal consistency of the questionnaire.

B-The Statistical Treatments Used in Answering the Questions and Verifying the Hypotheses of the Study

- the arithmetic mean, criterion deviation and relative weight: to reveal the results of the study.
- the T-test: to detect the significant differences between the means of degrees of two independent samples.
- One way anova analysis of variance: to detect the significance of differences between the means of degrees of more than two independent samples.

Criterion adopted in the study:

To determine the criterion adopted in the study, the length of the cells was determined in the triple criterion through calculating the range between the degrees of the criterion ($5-1=4$) and then dividing it on the largest value in the criterion to obtain the cell length which is (0.8054) then this value was added to the lowest value in the criterion (the beginning of the criterion which is an integer '1') in order to determine the upper limit of this cell, and thus the length of the cell became as follows:

Range = $5-1=4$ (highest value – lowest value)

Range length = $4 \div 5 = 1.80$ (the range / number of degrees).

The number 1.80 was added to the lowest degree in the criterion which is integer (1) in order to set the highest limit.

Table (13): The Criterion Adopted in the Study.

No.	Availability degree	Relative weight	Cell length (criterion degree)
1	Very few	20 % - 36 %	1.00 – 1.80
2	Few	Greater than 36% - 52%	1.81 _ 2.60
3	Medium	Greater than 52% - 68%	2.61 _ 3.40
4	Great	Greater than 68% - 84%	3.41 _ 4.20
5	Very great	Greater than 84% - 100%	4.21 _ 5

In order to explain the results of the study and judge the level of response, the arrangement of the arithmetic means were adopted at the level of fields for the tool as a whole and the level of paragraphs in each field, and the degree of availability was determined according to the criterion adopted in the study.

To answer this question, the researchers used the arithmetic mean, criterion deviation, relative weight and the arrangement of the sample's responses to the questionnaire fields as illustrated in the following table:

Table (14): Arithmetic Mean, Criterion Deviation, Relative Weight and Arrangement of Questionnaire Fields.

no.	Fields	Arithmetic mean	Criterion deviation	Relative weight	Arrangement
1	Anxiety of pre-registration of athletics material	2.59	0.73	51.78	3
2	Anxiety while registration of athletics material.	2.87	0.81	57.44	1
3	Exam side	2.71	0.92	54.12	2
	Total degree of fields	2.74	0.73	54.71	

By studying the paragraphs of each field separately, it became clear that:

Regarding the First Field

In order to answer this question, the researchers used the calculation value of arithmetic mean, criterion deviation, relative weight and paragraphs arrangement of this field as shown in the following table:

Table (15): Arithmetic Mean, Criterion Deviation, Relative Weight and Paragraphs Arrangement of First Field.

no.	Questionnaire paragraphs	Arithmetic mean	Criterion deviation	Relative weight	Arrangement
1	I have anxiety about exercising in general.	1.85	1.08	37.04	1
2	I am concerned about practicing athletics in general.	1.99	1.10	39.81	11
3	My colleague told me about the difficulty of athletics.	2.60	1.21	52.04	7
4	I watched colleagues' lectures, but I couldn't do them.	1.90	1.11	37.96	12
5	Athletics require very high fitness.	4.13	0.97	82.69	2
6	I am concerned that it is not clear who the course teacher is.	2.34	1.37	46.76	10
7	I worry about being overweight because it has an impact on my performance and success in the subject.	2.91	1.51	58.24	4
8	I worry about being thin because it has an impact on my performance and success in the subject.	2.38	1.45	47.69	9
9	I hesitate to download the course because it is outside the halls and in the cold and heat of the outdoor playgrounds.	2.45	1.36	48.98	8
10	Concern about the lack of track and event venues	3.03	1.41	60.65	3
11	I'm worried that I won't be able to get myself into shape so I can achieve high grades in the course	2.71	1.33	54.17	6
12	I'm worried that I won't be able to get myself into shape so I can achieve high grades in the course.	2.77	1.32	55.37	5

Regarding the Second Field

In order to answer this question, the researchers used the calculation value of arithmetic mean,

criterion deviation, relative weight and paragraphs arrangement of this field as shown in the following table:

Table (16): Arithmetic Mean, Criterion Deviation, Relative Weight and Paragraphs Arrangement of Second Field.

no.	Questionnaire paragraphs	Arithmetic mean	Criterion deviation	Relative weight	Arrangement
1	Concerned about lack of skills training.	2.81	1.23	56.11	11
2	I worry if I miss lectures.	3.77	1.22	75.46	1
3	I worry about not concentrating during the lecture.	3.24	1.34	64.81	2
4	I get anxious because of the fear of applying skills well.	2.95	1.33	59.07	6
5	I worry about not being able or having enough time to train in skills.	3.03	1.26	60.65	5
6	I worry about not achieving my ambition in athletics.	3.13	1.29	62.69	4
7	I am concerned about familiarity with the technical and legal aspects of athletics.	2.85	1.20	57.04	10
8	I am worried about achieving high grades in the course.	3.24	1.37	64.72	3
9	I worry about a deficit related to mastering skills.	2.88	1.27	57.50	9
10	I get anxious due to the fear of injury when performing skills.	2.90	1.27	58.06	8
11	I get anxious due to the fear of injury when performing skills.	2.91	1.25	58.24	7
12	I have anxiety about throwing events in athletics.	2.45	1.26	49.07	15
13	I get anxious about jumping events in athletics.	2.38	1.31	47.59	16
14	I'm worried about relay and hurdles events in track and field.	2.23	1.22	44.63	17
15	I am worried about not understanding the movement and its application if the teacher asks me to apply or explain.	2.63	1.21	52.59	14
16	I am concerned about not understanding the theoretical material and the ranking of players in competitions.	2.70	1.25	53.98	13
17	I'm worried about drawing the track and the rest of the competition field and determining measurements on it	2.71	1.23	54.26	12

Regarding the Third Field

In order to answer this question, the researchers used the calculation value of arithmetic mean,

criterion deviation, relative weight and paragraphs arrangement of this field as shown in the following table:

Table (17): Arithmetic Mean, Criterion Deviation, Relative Weight and Paragraphs Arrangement of Third Field.

no.	Questionnaire paragraphs	Arithmetic mean	Criterion deviation	Relative weight	Arrangement
1	I feel anxious while performing athletics.	2.25	1.15	44.91	19
2	While taking the exam, I feel anxious and confused.	2.93	1.33	58.61	18
3	I am worried about what grade I will get in athletics	3.22	1.33	64.44	17
4	I feel like I almost freeze when I take the exam	2.42	1.34	48.33	16
5	I feel worried that if I fail the first time I perform, I will fail the second time	2.55	1.31	50.93	15
6	The more effort I put in, the more anxiety I get.	2.13	1.26	42.69	14
7	Thinking about poor performance affects my concentration.	3.21	1.32	64.17	13
8	I ask everyone to be silent when taking the exam because talking worries me and distracts me from focusing.	2.92	1.46	58.33	12
9	The voice of colleagues and the teacher worries me and can make me lose focus.	2.81	1.43	56.11	11
10	Even if I am well prepared for the exam, I feel stressed, anxious, and nervous when taking the exam	2.74	1.36	54.72	10
11	Even if I am well prepared for the exam, I feel stressed, anxious, and nervous when taking the exam.	2.76	1.37	55.28	9
12	I feel extremely anxious and anxious before taking the exam.	2.77	1.31	55.46	8
13	If you are confused or anxious, ask the teacher to delay or postpone the exam.	2.26	1.20	45.19	7
14	I feel several body and muscle pains while taking the exam, even if I have never felt them before	2.41	1.28	48.24	6
15	I get worried if I find myself thinking poorly for an exam.	2.56	1.29	51.20	5
16	My anxiety increases if I hear my heart beating fast before starting the exam.	2.69	1.38	53.70	4
17	I try to prevent myself from worrying after the exam about the performance I did during the exam.	3.35	1.40	66.94	3
18	If I was well prepared, I would feel very anxious and nervous about my colleague and taking the exam.	2.44	1.30	48.89	2
19	I worry a lot after the exam for fear of achieving a low grade or failing	3.00	1.40	60.09	1

The results of the answer of the second question which states (are there statistically differences in the estimates of the study sample according to the gender variable?)

In order to answer this question, the researchers tested the validity of the hypothesis associated with the question which states that there are no statistically significant differences in the

estimates of the study sample according to the gender variable, and to test the validity of the hypothesis, the (T-test) was used for the differences between the averages of degrees of two independent samples as shown in the following table:

Table (18): T- Test to Detect Differences Between the Averages of Responses of the Study Sample According to Gender Variable.

Fields	variable	number	Arithmetic mean	Criterion deviation	(T) value	significance level
Anxiety of pre-registration of athletics material	Males	151	2.52	0.67	2.214	Statistically significant at 0.05
	females	65	2.76	0.83		
Anxiety while registration of athletics material.	Males	151	2.83	0.75	1.13	Not statistically significant
	females	65	2.97	0.92		
Exam side	Males	151	2.57	0.85	3.334	Statistically significant at 0.05
	females	65	3.02	1.00		
Total degree of questionnaire	Males	151	2.65	0.67	2.648	Statistically significant at 0.01
	females	65	2.93	0.84		

Tabular (T) Value ($n = 214$) at Significance Level 0.05 = 1.96 and at Significance Level 0.01 = 2.57.

It is clear from the previous table that there are statistically significant differences between the averages of estimates of the two groups of gender in the total degree of the questionnaire which means that the sample members differ in their view to reality and they have convergent estimates about the questionnaire.

The results of the answer of the third question which states (are there statistically differences in the estimates of the study sample according to the university variable?)

In order to answer this question, the researchers tested the validity of the hypothesis associated with the question which states that there are no statistically significant differences in the estimates of the study sample according to the university variable, and to test the validity of the hypothesis, the (T-test) was used for the differences between the averages of degrees of two independent samples as shown in the following table:

Table (19): T- Test to Detect Differences between the Averages of Responses of the Study Sample According to University Variable.

Fields	Variable	number	Arithmetic mean	Criterion deviation	(T) value	Significance level
Anxiety of pre-registration of athletics material	Hashemite	84	2.55	0.69	0.712	statistically insignificant
	Al-Aqsa	132	2.62	0.75		
Anxiety while registration of athletics material.	Hashemite	84	2.90	0.80	0.425	statistically significant
	Al-Aqsa	132	2.85	0.81		
Exam side	Hashemite	84	2.64	0.92	0.864	Not statistically insignificant
	Al-Aqsa	132	2.75	0.92		
Total degree of questionnaire	Hashemite	84	2.71	0.72	0.438	statistically insignificant
	Al-Aqsa	132	2.75	0.74		

Tabular (T) Value ($n = 214$) at Significance Level 0.05 = 1.96 and at Significance Level 0.01 = 2.57.

It is clear from the previous table that there are no statistically significant differences between

the averages of estimates of the two groups of university in the total degree of the questionnaire which means that the sample members do not differ in their view to reality and they have convergent estimates about the questionnaire.

The results of the answer of the question which states (are there statistically differences in the estimates of the study sample according to the diseases variable?)

In order to answer this question, the researchers tested the validity of the hypothesis associated with the question which states that there are no statistically significant differences in the estimates of the study sample according to the diseases variable, and to test the validity of the hypothesis, the (T-test) was used for the differences between the averages of degrees of two independent samples as shown in the following table:

Table (20): T- Test to Detect Differences between the Averages of Responses of the Study Sample According to Diseases Variable.

Fields	Variable	number	Arithmetic mean	Criterion deviation	(T)value	Significance level
Anxiety of pre-registration of athletics material	Yes	23	2.82	0.61	1.629	statistically insignificant
	No	193	2.56	0.74		
Anxiety while registration of athletics material.	Yes	23	3.02	0.80	0.933	statistically insignificant
	No	193	2.85	0.81		
Exam side	Yes	23	2.75	0.91	0.245	statistically insignificant
	No	193	2.70	0.93		
Total degree of questionnaire	Yes	23	2.86	0.73	0.89	statistically insignificant
	No	193	2.72	0.73		

Tabular (T) Value (= 214) at Significance Level 0.05 = 1.96 and at Significance Level 0.01 = 2.57

It is clear from the previous table that there are no statistically significant differences between the averages of estimates of the two groups of diseases in the total degree of the questionnaire which means that the sample members do not differ in their view to reality and they have convergent estimates about the questionnaire.

The results of the answer of the question which states (are there statistically differences in the estimates of the study sample according to the academic level variable?)

In order to answer this question, the researchers tested the validity of the hypothesis associated with the question which states that there are no statistically significant differences in the estimates of the study sample according to the academic level variable, and to test the validity of the hypothesis, one way anova analysis was used to detect the significance of differences as illustrated in the following table:

Table (21): Source of Contrast, Sum of Squares, Degrees of Freedom, Average of Squares, (F)

Value and Significance Level According to Academic Level Variable.

Fields	Source of contrast	Sum of squares	Degrees of freedom	Average of squares	(F)value	Significance level
Anxiety of pre-registration of athletics material	Among groups	4.3	3	1.447	2.785 0.042	statistically significant at 0.05
	Inside groups	110.1	212	0.519		
	total	114.5	215			
Anxiety while registration of athletics material.	Among groups	1.6	3	0.527	0.807 0.491	statistically insignificant
	Inside groups	138.5	212	0.653		
	total	140.1	215			
Exam side	Among groups	1.3	3	0.428	0.499 0.683	statistically insignificant
	Inside groups	181.9	212	0.858		
	total	183.2	215			
Total degree of fields	Among groups	0.8	3	0.28	0.517 0.671	statistically insignificant
	Inside groups	114.6	212	0.541		
	total	115.4	215			

It is clear from the previous table that value of (F) in the total degree is equal to (0.517) and it is not indicative to the level of significance (0,05), which means that there are no statistically significant differences between the averages of the estimates of the academic level groups of the sample individuals.

The results of the answer of the question which states (are there statistically significant differences in the estimates of the study sample according to the specialization variable?)

In order to answer this question, the researchers tested the validity of the hypothesis associated with the question which states that there are no statistically significant differences in the estimates of the study sample according to the specialization variable, and to test the validity of the hypothesis, one way anova analysis was used to detect the significance of differences as illustrated in the following table:

Table (22): Source of Contrast, Sum of Squares, Degrees of Freedom, Average of Squares, (F) Value and Significance Level According to Specialization Variable.

Fields	Source of contrast	Sum of squares	Degrees of freedom	Average of squares	(F)value	Significance level
Anxiety of pre-registration of athletics material	Among groups	0.82	2	0.408	0.765 0.467	statistically insignificant
	Inside groups	113.66	213	0.534		
	Total	114.47	215			
Anxiety while registration of athletics material.	Among groups	0.52	2	0.262	0.4 0.671	statistically insignificant
	Inside groups	139.54	213	0.655		
	Total	140.06	215			
Exam side	Among groups	0.87	2	0.435	0.508 0.602	statistically insignificant
	Inside groups	182.31	213	0.856		
	total	183.18	215			
Total degree of fields	Among groups	0.29	2	0.144	0.266 0.767	statistically insignificant
	Inside groups	115.16	213	0.541		
	total	115.44	215			

It is clear from the previous table that value of (F) in the total degree is equal to (0.767) and it

is not indicative to the level of significance (0,05), which means that there are no statistically significant differences between the averages of the estimates of the specialization groups of the sample individuals.

The results of the answer of the question which states (are there statistically significant differences in the estimates of the study sample according to the accumulative average variable?)

In order to answer this question, the researchers tested the validity of the hypothesis associated with the question which states that there are no statistically significant differences in the estimates of the study sample according to the accumulative average variable, and to test the validity of the hypothesis, one way anova analysis was used to detect the significance of differences as illustrated in the following table:

Table (23): Source of Contrast, Sum of Squares, Degrees of Freedom, Average of Squares, (F) Value and Significance Level According to the Accumulative Average Variable.

Fields	Source of contrast	Sum of squares	Degrees of freedom	Average of squares	(F)value	Significance level
Anxiety of pre-registration of athletics material	Among groups	215	3	1.265	2.422 0.067	statistically insignificant
	Inside groups	110.68	212	0.522		
	total	114.47	215			
Anxiety while registration of athletics material.	Among groups	3.89	3	1.295	2.016 0.113	statistically insignificant
	Inside groups	136.18	212	0.642		
	total	140.06	215			
Exam side	Among groups	5.45	3	1.816	2.166 0.093	statistically insignificant
	Inside groups	177.73	212	0.838		
	total	183.18	215			
Total degree of fields	Among groups	3.65	3	1.218	2.309 0.077	statistically insignificant
	Inside groups	111.79	212	0.527		
	total	115.44	215			

It is clear from the previous table that value of (F) in the total degree is equal to (2.309) and it is not indicative to the level of significance (0,05), which means that there are no statistically significant differences between the averages of the estimates of the accumulative average groups of the sample individuals.

The results of the answer of the question which states (are there statistically significant differences in the estimates of the study sample according to practicing athletics variable?)

In order to answer this question, the researchers tested the validity of the hypothesis associated with the question which states that there are no statistically significant differences in the estimates of the study sample according to practicing athletics variable, and to test the validity of the hypothesis, one way anova analysis was used to detect the significance of differences as illustrated in the following table:

Table (24): Source of Contrast, Sum of Squares, Degrees of Freedom, Average of Squares, (F) Value and Significance Level According to Practicing Athletics Variable.

Fields	Source of contrast	Sum of squares	Degrees of freedom	Average of squares	(F)value	Significance level
Anxiety of pre-registration of athletics material	Among groups	2.00	4	0.5	0.938 0.443	statistically insignificant
	Inside groups	112.47	211	0.533		
	Total	114.47	215			
Anxiety while registration of athletics material.	Among groups	4.18	4	1.046	1.624 0.169	statistically insignificant
	Inside groups	135.88	211	0.644		
	Total	140.06	215			
Exam side	Among groups	6.00	4	1.499	1.785 0.133	statistically insignificant
	Inside groups	177.19	211	0.84		
	Total	183.1	215			
Total degree of fields	Among groups	2.96	4	0.741	1.39 0.239	statistically insignificant
	Inside groups	112.48	211	0.533		
	Total	115.44	215			

It is clear from the previous table that value of (F) in the total degree is equal to (1.39) and it is not indicative to the level of significance (0,05), which means that there are no statistically significant differences between the averages of the estimates of practicing athletics groups of the sample individuals.

The results of the answer of the question which states (are there statistically significant differences in the estimates of the study sample according to the course level variable?)

In order to answer this question, the researchers tested the validity of the hypothesis associated with the question which states that there are no statistically significant differences in the estimates of the study sample according to the course level variable, and to test the validity of the hypothesis, one way anova analysis was used to detect the significance of differences as illustrated in the following table:

Table (25): Source of Contrast, Sum of Squares, Degrees of Freedom, Average of Squares, (F) Value and Significance Level According to the Course Level Variable.

Fields	Source of contrast	Sum of squares	Degrees of freedom	Average of squares	(F)value	Significance level
Anxiety of pre-registration of athletics material	Among groups	5.17	4	1.292	2.493 0.044	statistically insignificant
	Inside groups	109.31	211	0.518		
	Total	114.47	215			
Anxiety while registration of athletics material.	Among groups	2.55	4	0.637	0.977 0.421	statistically insignificant
	Inside groups	137.51	211	0.652		
	Total	140.06	215			
Exam side	Among groups	1.90	4	0.475	0.553 0.697	statistically insignificant
	Inside groups	181.28	211	0.859		
	Total	183.18	215			
Total degree of fields	Among groups	2.06	4	0.514	0.956 0.433	statistically insignificant
	Inside groups	113.39	211	0.537		
	Total	115.44	215			

It is clear from the previous table that value of (F) in the total degree is equal to (0.956) and it is not indicative to the level of significance (0,05), which means that there are no statistically significant differences between the averages of the estimates of course level groups of the sample individuals.

Recommendations

In light of the research results, the researcher recommends the following:

- Maintaining psychological compatibility and mental and physical relaxation for athletes, because of its significant impact on the cognitive outcome and the level of performance.

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