

# PSYCHOLOGICAL TENSION AND ITS RELATION TO THE EDUCATIONAL ACHIEVEMENT OF VOLLEYBALL MATERIAL FOR STUDENTS OF THE COLLEGE OF PHYSICAL EDUCATION AND SPORTS SCIENCES UNIVERSITY OF BAGHDAD

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## ABSTRACT

*Psychological stress is one of the most important psychological manifestations facing the student in the present age, which is full of complexities, problems, demands and pressures of everyday life and The researcher used the descriptive approach with his analytical methods and correlative relations because he is the most appropriate method for solving the problem of research and The researcher found that the study sample in general have an above-average level of psychological tension And The researcher recommended the use of the current measure to find out the levels of psychological stress among students in other subjects to deal with students in a scientific manner.*

**Keywords:** *Psychological tension - educational achievement – volleyball.*

## INTRODUCTION

Psychological stress is one of the most important psychological manifestations facing the student in the present age, which is full of complexities, problems, demands and pressures of everyday life. It is also one of the most psychological manifestations of human behavior and the most complex of them, in addition to other concepts used in various life situations such as stress, anxiety and conflict. Students do not seek to win or fear to influence academic achievement. We may see some students who are very tense at the end of the school level, and some see it as reasonably significant

that important motivations, which can be motivated and motivated to achieve the primary goal, are high-level academic achievement. Psychological stress must be known to degree or level to assess its impact at the level of the student, and hence the importance of research in the construction and adjustment of a measure of psychological stress on the students of the fourth stage of the Faculty of Physical Education for sports science of volleyball, and to find the appropriate alternative to foreign standards and the development of levels Psychological tension is a second aspect of the importance of research, which the researcher tries to put accurate results for him to put them in the hands of

professors for the reasons of the proper dealing with the students to serve the development of academic achievement.

## MATERIALS AND METHODS:

### Research Methodology:

One of the important steps in scientific research is the process of selecting the appropriate and appropriate method to solve the research problem and achieve its objectives. Therefore, the researcher used the

descriptive approach with his analytical methods and the correlative relations as it is the most appropriate method for solving the problem of research.

### Search community and sample:

The research sample was chosen in a deliberate manner. The sample included the students of the College of Physical Education and Sports Sciences, the fourth stage in the University of Baghdad, the number of (170) students and excluded the researcher students, as shown in the table (1).

Table (1) Sample size and percentages

percentage	Number of students	School	ت
94.11	160	Students	1
5.89	10	Defenders	2
100%	170	Total	

### Means of gathering information, tools and devices used in research:

Means of gathering information:

The researcher used many scientific means to obtain the required data and facts through:

- .- Studies and research
- .International Information Network -
- .Registration Form -
- . - Special questionnaire for the purpose of determining the paragraphs of the psychological scale of the fourth stage Colleges of Physical Education and Sports Sciences Baghdad for the year 2017-2018.

:Instruments and equipment used in research

For the purpose of achieving the objectives of the research, the researcher modified the scale (psychological tension)

- .Laptop (lenovo), Chinese-made -
- .- Stopwatch to identify the time taken to answer the test paragraphs and measurements used.
- .Camera number (1) Nikon type -
- .Paper and pen-

### Field research procedures:

Tests and measurements used in research:

:Procedures for the preparation of the psychological scale

Where the scale has gone through general agency steps:

- Try to formulate paragraphs of the areas according to the definitions that have been developed for them.

Clarity of the substance of the paragraph and the difference in interpretation -

.- The paragraphs should be easy to read and simple to express

- Stay away from exile negation, double denial, because it may confuse the examined.

.Do not suggest extremism as often, always -

.- The paragraphs should achieve the objectives of the research

:Description of the Psychometric Scale

The psychological stress scale consists of (25) paragraphs divided into three dimensions (physiological field - mental field - emotional field). The alternatives of response included: (apply to me to a large extent, apply to me to a medium degree, do not apply to) Alternatives are as follows (3, 2, 1)(

:Validity of paragraphs and substitutions of the scale

Asking them to express their views and suggestions on the validity of the paragraphs of the scale and suitability of the level of the sample of the research and take their views The results of the expert opinions were evaluated using the Ka2 test to determine the significance of differences between the opinions of experts and specialists at the level of freedom 1 and the level of significance (0,05). After collecting questionnaire forms for experts and data collection, Acceptable as a statistical function The agreement of the experts on the use of the three alternatives (apply to me to a large extent), (apply to me to a medium degree), (not applicable to) corresponds to grades (1,2,3) (2).

Table (2) The opinions of the competent experts on the validity and suitability of the paragraphs of the scale Psychological resilience of the sample members

The strength of the characteristic paragraphs	Significance value		T calculated value	The upper group		The lower group		T
	P	s		P	s			
Featured	0.000	15	2.283	.6514	1.667	.4892	1.167	1
D.	0.000	15	0	15	22	1-2-3-4-5-6-7-8-9-10-12-13-14-16-17-18-19-21-22-23-24-25		
D.	0.001	11.267	1	14	1	15		
D.	0.005	8.067	2	13	2	11 · 20		

Morale below the significance level 0.05 0.05

Correction of scale:

The scale of the psychological stress scale is calculated by answering all 25 paragraphs. The scale is corrected according to three alternatives (which apply to a large degree, apply to me to a medium degree, do not apply to) 1) for the positive paragraphs and (1,2,3) for the negative subjects where the student gets the lowest score is (25) and the highest score obtained (75)

:Statistical Analysis of Psychometric Scale Articles

The statistical analysis of the paragraphs aims to reveal the psychometric characteristics of the paragraphs. Therefore, the researcher analyzed the statistical scales by means of:

A) Calculating the discriminatory power of the paragraphs:

The unique power of the paragraph is its ability to distinguish between individuals who get high marks on the scale and those with low grades.

The measure was applied to the 160 sample students and corrected the questionnaires. The two groups of 80 students were arranged in each group of the upper and lower groups after dividing the sample into two equal parts (upper and lower) The use of the t test for two independent samples in calculating the difference between the averages of the responses of the two groups (top and bottom) for each of the 25 paragraphs of the scale. All values proved to be statistically significant because all the T values of the paragraphs were greater than the T- (0.05) and degree of freedom (22) and the amount ( 1.717). This indicates that all paragraphs were of a discriminatory power. Table 3 shows that:

Featured	.000	3.952	.6686	2.584	.6752	1.551	2
Featured	.004	3.237	.5775	2.832	.7979	1.917	3
Featured	.011	2.755	.2885	2.085	.6767	1.510	4
Featured	.001	3.647	.4924	2.335	.5198	1.584	5
Featured	.000	4.212	.4525	2.251	.5195	1.415	6
Featured	.000	5.657	.6515	2.662	.4925	1.334	7
Featured	.015	2.602	.5221	2.502	.7122	1.832	8
Featured	.000	4.733	.6518	2.334	.4523	1.251	9
Featured	.000	6.078	.5145	2.584	.4925	1.332	10
Featured	.001	3.743	.5775	2.164	.6225	1.252	11
Featured	.004	3.129	.6515	2.335	.5198	1.582	12
Featured	.004	3.402	.6689	2.585	.6513	1.667	13
Featured	.002	3.421	.5149	2.414	.6689	1.584	14
Featured	.026	2.367	.6742	2.505	.8645	1.751	15
Featured	.002	3.576	.5149	2.583	.6215	1.750	16
Featured	.019	2.532	.6685	2.416	0.778	1.666	17
Featured	.001	3.761	.5222	2.500	.4522	1.750	18
Featured	.007	3.051	.6215	2.750	.8348	1.833	19
Featured	.001	3.633	.6742	2.500	.6742	1.500	20
Featured	.000	5.451	.6513	2.666	.6215	1.250	21
Featured	.000	5.887	.5149	2.416	.4522	1.250	22
Featured	.004	3.402	.6685	2.583	.6513	1.666	23
Featured	.012	2.726	.4923	2.666	.9374	1.833	24
Featured	.000	4.220	.6513	2.666	.7929	1.416	25

Table (3): Showing the values of the computational circles, the standard deviations, the calculated T value, and the characteristic force

#### B. Internal consistency of paragraphs:

The specialists in the field of psychological measurement agree on the importance of honesty in the paragraphs of the psychological scale because the validity of the scale depends mainly on the veracity of its paragraphs, the logical truth of the paragraph can be used to estimate the representation of the attribute to be measured, but the empirical honesty, Because it reveals that the paragraph measures the same concept as the total score, so Pearson correlation coefficient was

used to derive the correlation between the vertex scores and the total score of the scale, and because the force correlation is an external check that is an indicator of its accuracy when the external test is not available, Such as the best internal test in the calculation of relationship ( $r$ ), and all correlation coefficients are found to be statistically significant (0.05) as shown in Table (4)

Table (4): Shows the correlation coefficient with each paragraph of the psychological stress scale

Significance value	Coefficient correlation	of Paragraph number
0.001	0.68	1
0.009	0.74	2
0.002	0.68	3
0.007	0.59	4
0.001	0.65	5
0.003	0.69	6
0.004	0.77	7
0.013	0.59	8
0.001	0.64	9
0.000	0.76	10
0.001	0.58	11
0.001	0.68	12
0.002	0.65	13
0.000	0.70	14
0.001	0.60	15
0.001	0.65	16
0.018	0.49	17
0.001	0.55	18
0.001	0.65	19
0.000	0.66	20
0.000	0.79	21
0.000	0.78	22
0.000	0.62	23
0.000	0.70	24
0.000	0.76	25

#### Psychometric Characteristics of Psychometric Scale:

Psychometric literature has pointed to a number of psychometric characteristics that can be used as indicators of the accuracy of psychological measures. Psychologists agree that honesty, consistency and objectivity are important psychometric characteristics of psychological standards.

The researcher has achieved the indicators of honesty, stability, objectivity according to the following:

First: Validate the scale Validity:

Honesty is one of the basic characteristics in the construction of educational and psychological standards, and because it is an important characteristics to judge

the validity of the measuring instrument and its ability to measure what was put for it and measure the attribute to be measured (the researcher has verified the face validity of the scale by presenting it to a committee of specialized experts To judge the extent to which the paragraphs of the scale (\*) are represented.

Second: Stability of the scale Reliability:

Stability is one of the fundamental standard characteristics of psychological standards on the basis of honesty, because the true measure is constant and the standard may not be true. To verify the stability of the scale, the researcher used the half-split method. This method is based on the fragmentation of the test, The

number of paragraphs in the parts of the scale is unequal. The number of individual paragraphs (13) is the same as the number of paragraphs in the measurement scale. And The correlation coefficient between the individual and marital scores was calculated by using the Houst coefficient of this type of partial inequality. The coefficient of stability was 0.81. Since the coefficient of correlation of the extract is stable for half of the test only, The Spearman-Brown equation was applied to correct stability. The test stability coefficient (0.892) was an acceptable stability index.

Third: The objectivity of measurement.

The standard is objective because its vertex is formulated in a multi-test method (three substitutions) for each paragraph of the scale. It does not have any open-ended answer. The correction is not affected by the corrected objectivity.

Academic Achievement: The researcher used the statistical treatments for the fourth grade students at the College of Physical Education and Sports Sciences in Baghdad for Volleyball.

#### **Exploration Experience:**

Experimental experiment of the measure of psychological tension:

For the purpose of identifying the clarity of the instructions on the psychological stress scale, its paragraphs and alternatives, and the detection of the indeterminate paragraphs of the sample and the calculation of the time taken to answer the scale, the researcher applied the scale to (10) students from the fourth stage of the College of Physical Education and Sports Science at Baghdad University on 30/4 (2018). It is clear from this experience that the instructions and paragraphs were clear and there is no ambiguity and that the queries that I have shown are general. The length of time it took to answer was between 15-20 minutes.

#### **:Main experience**

Experimental experiment of the measure of psychological tension:

For the purpose of identifying the clarity of the instructions on the psychological stress scale, its

paragraphs and alternatives, and the detection of the indeterminate paragraphs of the sample and the calculation of the time taken to answer the scale, the researcher applied the scale to ( 10) students from the fourth stage of the College of Physical Education and Sports Science at Baghdad University on 30/4 (2018). It is clear from this experience that the instructions and paragraphs were clear and there is no ambiguity and that the questions that I have shown are general. The length of time it took to answer was between 15-20 minutes.

#### **:Statistical means**

The researcher employed the following statistical means, using the SPSS, for the purpose of processing the results obtained, based on the laws used by the scientific sources:

- descriptive statistics: (arithmetic mean, median, standard deviation, torsion, standard error, range, top and lowest grade)
- Honesty coefficients: (Discriminatory ability, internal consistency, Hust, Spearman-Brown, T)
- Stability coefficients: (alpha-cronbach), midterm fragmentation
- The mean medium
- correlation coefficient (Pearson).

#### **RESULT AND DISCUSSION:**

The researcher was able to achieve the first goal by preparing the psychological stress scale. The researcher applied the criteria under study for the purpose of achieving the other goals. Based on the data obtained by the researcher, he presents the results obtained from the standards and the level of achievement After unloading and conducting statistical treatments for them and analyzed and then discussed.

Presentation of the statistical description of the psychometric scales

The researcher presents the results of the statistical treatments of the specifications of the application sample according to the sequence of paragraphs of the information processing scale. Each of the paragraphs of the scale obtained a mean, a standard deviation, and a torsion coefficient. Table 5 shows this.

Table (5) The statistical description of the application sample is shown in the Psychometric Scale

Sprains	standard deviation	Arithmetic mean	Paragraph	Sprains	standard deviation	Arithmetic mean	Paragraph
-0.143	0.63702	2.1667	18	0.873	0.58823	1.4583	1
-0.326	0.82423	2.3750	19	0.334	0.82970	2.0833	2
0.490	0.83406	2.0000	20	-0.452	0.77903	2.4583	3
0.351	0.93250	2.0000	21	0.045	0.58823	1.7917	4
0.208	0.74089	1.8750	22	0.024	0.62409	1.9583	5
0.194	0.81650	2.1667	23	0.058	0.61237	1.8750	6
-0.604	0.80645	2.2917	24	0.365	0.85867	2.0417	7
0.068	0.94696	2.1250	25	-0.240	0.65801	2.2083	8
				0.997	0.77903	1.7917	9
				0.000	0.78019	2.0000	10
				0.444	0.73721	1.7500	11
				0.000	0.65938	2.0000	12
				-0.298	0.76139	2.1667	13
				-0.125	0.71728	2.0833	14
				0.066	0.83297	2.2083	15
				-0.244	0.70196	2.1667	16
				-0.237	0.79741	2.1250	17

Table (6) shows that all items of the psychological stress scale are distributed naturally because the splicing factor for all the vertebrae was between (+ 1). Paragraph (3) obtained the highest mean value of (2.4583) with a standard deviation (0.77903) and a spline (-0.452). Paragraph (1), which obtained the lowest value of the mean (1.4583) with a standard deviation (0.58823) with a torsion (0.873)

The researcher extracted the values of the arithmetic mean and the standard deviation of the psychological stress scale and then calculated the value of the mean mean for them in order to infer the significance of the differences between the two variables (the calculated arithmetic mean and the mean mean) by using the test t for one sample as a statistical method to achieve the second goal Psychological stress for students of the College of Physical Education and Sports Sciences University of Baghdad, the fourth phase of the academic year 2017-2018 For the purpose of calculating the form Morality was found to provide the computational mean of the test and measurements by the equation.

Total weights of alternatives

Vertebral mean \_\_\_\_\_ = X Number of paragraphs

Number of alternatives

$$1+2+3$$

The mean medium of the psychological stress scale \_\_\_\_\_ = x 25 = 50

$$3$$

In the table (6), the researcher presents the statistical description of the sample data for the psychological stress measurement and verifies the significance of the test and the identification of the sample level through the given mean.

Table (6) The statistical description of the application sample of the psychological stress scale is shown

Difference type	Value of significance	T value	Lowest score	Highest grade	The twisting	standard deviation	Arithmetic mean	Variables
moral	0.000	4.739	35.00	51.00	0.025	5.444	40.160	Psychometric Scale
50						The mean medium		

Table 6 shows the calculated mean and the standard deviation of the psychological stress test 2017 - 2018. The mean of the psychological stress index was 55.160 with a standard deviation of (5.444) and the spacing (0.025) and the highest score obtained (66) 45). The results of the t-test showed that there were statistically significant differences in the mean of the mean mean at the mean of the mean mean (0.000), which is smaller than the level of significance 0.05) as well as that the arithmetic mean is greater than the mean mean, indicating that the purpose of knowledge A stressometer is an attempt to identify what a person is going through with experience of tension as he tries to discover that the environment here is not only a cause of tension, but how the student realizes these events. For example, a student increases psychological stress by increasing the degree of achievement As it is an incentive to do so is considered an opportunity to present the performance of the school is doing the best performance for him, while we see another student be afraid and confused by mistakes or failure to perform.

Table (7) Shows the partial correlation coefficient between psychological stress and scholastic achievement

Value of significance	F value calculated	Coefficient of correlation	standard deviation	Arithmetic mean	Variables
.0010	11.401	0.776	5.444	40.160	Psychological tension
			5.648	72.255	And academic achievement
At a significance level of 0.05				Difference type	

The results showed in Table 8 in the psychological stress scores of the students of the Faculty of Physical Education and Sport Sciences, the fourth stage and the degrees of academic achievement that the differences are statistically significant since the student's concept of academic ability is strongly related to the academic achievement through the students' results for volleyball. Between the degrees of psychological stress and grades of educational achievement of volleyball material and that the efficiency of the individual to receive information not only depends on the information or alarm clock provided to him at the same moment, but also depends on all the information obtained by the individual through (1) The result of the current study may be consistent with the outcome of the goal and that the degree of psychological tension acts as a driving force to help them determine the goals they set for themselves, and their perseverance and the extent of

their determination to fail, students set themselves the highest goals, the most important to obtain a university degree and the opportunity to learn University.

**CONCLUSIONS:**

- The research sample in general has an above average level of psychological stress.,
- "- Gender with specialization" reacts in its impact on the psychological stress of students of the Faculty of Physical Education and Sports Sciences.
- The research sample in general has a very good level of academic achievement.
- There is a strong correlation between the educational achievement of volleyball and psychological tension.

**ENDORSEMENT:**

- Use the current measure to see the levels of psychological stress among students in other subjects to deal with students in a scientific manner.
- Directing institutions that deal with students' affairs to include in their plans programs that will confirm the knowledge of the degree of psychological tension and its relevance to other sciences.

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