

## Recreational Sports Activities Programs and their Contribution to reduce Anxiety and Stress among Teachers under Quarantine Circumstances-

### A field study on the municipality level of Ain Oussara, Wilaya of Djelfa–

Nadour aissa<sup>1</sup>

Messahli seghir<sup>2</sup>

a.nadour@univ-setif2.dz s.messahli@univ-setif2.dz

1,2 Sports Physical Sciences and Public Health laboratory (SAPSSP)

Mohamed Lamine Dabbaghine Setif 2 , Algeria

Receipt date: 13/10/2020; Acceptance date: 02/01/2021; Publishing Date: 31/08/2021

**Abstract.** This study aims at recognizing the extent of sports activities programs contribution, to reducing acute anxiety and stress among teachers in the light of quarantine circumstances against corona pandemic.

Hence, this study was conducted on a purposive sample which included 150 teachers (males and females).

To achieve the goals of the study, a descriptive method was used through distributing questionnaire forms on the participants.

The percentage and the  $\chi^2$  test were adopted to analyze and interpret the results.

The main results that were concluded are: sports activities programs of recreational nature have effective contribution to reducing acute anxiety and stress among teachers, especially in this phase we are going through (corona pandemic).

**Keywords** .sports, recreation, anxiety, stress, corona.

**ملخص.** تهدف هذه الدراسة إلى معرفة مدى مساهمة برامج الأنشطة الرياضية ذات الطابع الترويحي في التخفيف من حدة (القلق، التوتر) لدى الأساتذة في ظل ظروف الحجر المنزلي ضد جائحة كورونا، حيث أجريت الدراسة على عينة قصدية وشملت ( 150 ) أساتذ وأستاذة ، ولتحقيق أهداف الدراسة استخدم المنهج الوصفي من خلال توزيع استمارات الاستبيان على أفراد العينة، وتحليل وتفسير النتائج تم الاعتماد على النسبة المئوية واختبار كا<sup>2</sup>. ومن أهم النتائج التي تم الوصول إليها وهي: لبرامج الأنشطة الرياضية ذات الطابع الترويحي مساهمة فعالة في التقليل من حدة القلق والتوتر لدى الأساتذة وخاصة في هذه المرحلة التي نمر بها (جائحة كورونا). **الكلمات المفتاحية.** الرياضة، الترويحي، القلق، التوتر، كورونا.

## 1.Introduction

Unexpectedly, the world found itself in quarantine with the terrible spread of the Corona virus (COVID-19). The epidemic made the people subjected to quarantine as the primary alternative and the only choice. People were not used to it in their usual lives, especially they were not familiar to stay at home for long periods and detain themselves even with the appearance of slight symptoms such as coughing, headache, slight fever according to World Health Organization slogan “protect yourself and others from covid-19 (World Health Organization, 2019). The situation today forces us to be prudent and precautious, and all individuals of society must be more aware than ever, as this epidemic is one of the most dangerous epidemics that humankind encountered. (Bahri, 2020).

This virus appeared for the first time in the Chinese city Wuhan at the beginning of December 2019, in which the World Health Organization declared the spread of the virus and emergency state on 30 January. This virus is known to be associated with the family of viruses that cause severe acute syndrome (SARS) and some common flue. It is also known as the virus of severe acute psychological syndrome Corona 2 (Attab, 2020).It belongs to the family of the Corona virus 2019. One of the most important characteristics of this virus is non-microscopic and characterizes with rapid transition feature from one person to another. The affected person does not show any symptoms until after 15 days, causing increase in the number of deaths and infected cases day after day.

According to the World Health Organization report, the number of infected people around the world in April 2020 has reached over two millions and two hundred thousand person and more than 150 thousand death cases (World Health Organization, 2020). This is what made scholars and researchers especially specialized doctors in epidemiology confused and under severe pressure to identify the nature and the composition of this virus, and how to give the exact diagnosis to it. This in turn made the majority of people under great pressure, troubled psychological state and great fear due to high prevalence of this virus, especially among youth and women.

What made things more dangerous on the citizens psychological state is the amplification of media to the false and confusing information, in addition to not utilizing the official national and international websites to get the right information. It is what the World Health Organization attracted attention to through minimize following the false news about covid-19 that caused permanent stress and anxiety as mental pressures, added to the pressure of total or partial quarantine according to the degree of the virus prevalence, the tight restrictions imposed on communication and the ability of many people to work, employment, livelihood, income and personal debts (Pierce, and al; 2020). This may result in economic collapse and increases in the risk of having psychological and mental health problems, and worsening health disparities. As there are harmful effects on people concerning the mental health and more harmful effects on people already suffer from psychological disorder (Moreno, and al; 2020).

Although, it is hard for people to endure these imposed procedures for longer periods, it is a natural feeling. Stress and psychological pressure feelings related to it does not mean in any case that you cannot do your job and that you are weak (World Health Organization, 2020). It is necessary for individuals and societies, despite the diversity of psychological pressures that they are suffering from and the diversity of health systems in all around the world, to coexist

with this epidemic through beneficial coping. It is also necessary to follow the World Health Organization instructions by changing bad lifestyle habits and some behaviors that can contribute to reduce the prevalence of covid-19 between individuals. In addition to relaxation during work time and between the shifts, eating sufficient healthy food and practicing physical activity and sports. (World Health Organization, 2020).

Regarding the specialization of the researchers in the field of sports, the two researchers will try to present an important element that helps the individual to enhance his mental health and relieve him of the pressures that accompany him during the period of home quarantine. This element is based on practicing sports activities generally and entertaining activities in specific, the severe ones and the less severe due to its great role in guiding, caring for individuals and improving their psychological-emotional state comparing to individuals of different gender and age categories that are not engaged in sports activity (Qin, and al; 2020). And that's because of his targeted guiding programs that meet the needs of society categories and express their feelings. This type of approach gives depth and originality, especially at our current stage, as working in various entertaining sports provides a good environment for them to improve their mental health in a good manner (Belaidouni, 2019). This type of activity gained considerable attention from individuals due to their high level of awareness about its importance and benefits, especially in the psychological field; Al Hamahmi (1988) defines entertaining sports activities as “a kind of entertainment that includes many sports programs that are practised by individuals, whether individually or collectively, and are also more practised by the youth” (Cherit, 2019). Abdessalem also defines it as “a set of entertaining sports activities subjectively chosen by individual, it may be organized or not, practised anywhere (homes, stadiums, halls)”, its main objective is exploiting leisure time, pursuit happiness, have fun, relax and eliminate different kind of stress such as psychological stress (As cited in Belaidouni, and al, 2016).

### **1.1 Literature review**

In this regard, the two researchers believe that there are many studies and researches in the field of sports proved that practicing sports with its different kinds and activities plays a great role in helping the individual to develop his different abilities, especially those psychological ones, to face different pressures; among which we mention:

- The study of Hussein Bilale and RamyAzdin in 2018 under the title of: “The extent of practice physical activity reflection in relieving anxiety for teenagers”. The study aimed to recognize the extent of practicing physical activity reflection in relieving anxiety among teenagers. Hence, the two researchers used the descriptive analytical approach for its appropriateness with the nature of the study and its objectives. The sample included 120 students divided into practitioners and non-practitioners, using anxiety as the measurement, containing 53 questions. The results showed that sports activity has a positive role in helping the teenager to overcome his anxiety.
- The study of Yasmine Tahir and Roubali Mohamed in 2018 under the title: “The role of physical and sports education to reducing psychological pressure among students who are attending the middle school exam”, the study aimed to identify the role of physical and sports education to reducing the psychological pressure for students who are attending the middle school exam, and the psychological states for teenagers in middle school. The two researchers used the descriptive approach on random sample of 170 students; male and female, and another

sample of 15 teachers (male and female) of the same phase. They used questionnaire as a tool for data collection. Through the results of the study, the researchers deduced that the degree of psychological pressure among the students is generally high, especially in the final year. As the practice of physical and sports education influences the degree of psychological pressure through its sessions. In addition, the sport teacher has an effective role to reducing the psychological pressure for the students.

- The study of Mohamed Atiye El Makrouh in 2013 under the title: "The practiced activities in free time and its relationships with the psychological equilibrium among high school students in Tripoli". The study aimed to clarify how important the practice of recreational sports activities is to achieve the psychological balance for individuals, it also works on reducing neurological tension caused by exhaustion. The two researchers used the descriptive approach on random sample of 90 teenage individuals; the questionnaire was used as a tool for data collection. The results of the study showed that the practice of recreational sports activities in free time for a teenager leads to reducing stress and anxiety, and lessen depression. It also grants the practitioner the tendency to superiority and makes him more compatible.

These studies have been in agreement with our study on several points, including:

In terms of the common objective, which is the role of sports activities in general to dealing with various psychological problems, including anxiety and stress. As for the sample of the study, it differed so that most of the previous studies used students from the three phases as participants. While our study included a group of teachers, and with regard to the study variables, both our study and previous studies participated in the same variables, namely sports activities and their impact on the psychological pressures (stress, anxiety, and depression). In terms of method and tools, almost all studies used The descriptive method and questionnaire as a tool for collecting information and data, including our current study, in which the descriptive method as well as the questionnaire on the axis of anxiety and stress were used. But with regard to the results, most of the previous studies confirmed that the practice of sports activities of all kinds has a positive impact on various psychological aspects of individuals.

By reviewing the agreements and differences between previous studies, we note that our current study is consistent with the previous studies regarding its main subject and general objective. However, it differs from them in a range of aspects, including: this study includes linking a research problem to contemporary variables (sports, quarantine conditions and corona pandemic), as well as with the circumstances in which our study was completed, which are special and exceptional (covi19 corona pandemic). Thus, we have encountered difficulties, especially in communicating with the participants due to social distancing.

From the previous presentation, it is clear that our study addressed a multifaceted scientific gap by tackling an important topic: the practice of sports activities in general and recreational sports activities in particular and their contribution to reducing stress and anxiety among teachers under these conditions (corona pandemic).

In the light of the above, our research topic was about the importance and the necessity to activate sports activities programs of recreational nature under quarantine circumstances against corona pandemic to reduce acute anxiety and stress.

We can therefore ask the general question of the topic of our research as follows:

---

## **Do sports activities programs of recreational nature contribute to reduce acute anxiety and stress among teachers under quarantine circumstances against corona pandemic?**

### **1.2. Partial questions.**

- Do sports activities programs of recreational nature contribute to reduce acute anxiety among teachers in light of quarantine circumstances against corona pandemic?
- Do sports activities programs of recreational nature contribute to reduce acute stress among teachers in light of quarantine circumstances against corona pandemic?

### **1.3. General hypothesis.**

- Sports activities programs of recreational nature contribute to reduce acute anxiety and stress among teachers in light of quarantine circumstances against corona pandemic.

### **1.4. Partial hypotheses.**

- 1- Sports activities programs of recreational nature contribute to reduce acute anxiety among teachers in light of quarantine circumstances against corona pandemic.
- 2- Sports activities programs of recreational nature contribute to reduce acute stress among teachers in light of quarantine circumstances against corona pandemic.

### **1.5. The objectives of the research.**

The main research study can be summarized as follows:

- Knowing the extent of sports activities programs of recreational nature contribution to reinforcing the psychological health of an individual in confronting the various pressures.
- Revealing the effectiveness of sports activities programs of recreational nature to reducing acute anxiety for teachers in light of the circumstances (corona pandemic).
- Revealing the contribution of sports activities programs of recreational nature to reducing the phenomenon of stress among teachers in light of the circumstances (corona pandemic).

### **1.6. The identification of concepts and terms.**

#### **1.6.1. Sports activity of recreational nature.**

##### **1.6.1.1. The terminological definition.**

Kacem Hassan Hussein defined it as a field for education in general and physical education in specific. It is an effective element in individual development and preparation through supplying him with experiences and motor skills lead to guide his physical, psychological, social and moral growth. In addition to positive guidance for self and society service (Zamouri, 2012, p263).

##### **1.6.1.2. The operational definition.**

It is all the constructive and acceptable activities, socially and ideologically, that are performed in the free time, and chosen according to the individual will in order to acquire many personal values and achieve satisfaction, pleasure and happiness from participation itself and not for external motives like material and moral gain.

#### **1.6.2. Anxiety.**

##### **1.6.2.1. The terminological definition.**

It is a state of extreme vague fear that humans experience and causes great chagrin, tightness and pain. Anxiety means annoyance in which the anxious person always predicts evil, seems pessimistic, nervous and disturbed. Likewise, he loses confidence in his self, looks hesitant, helpless in investigating things, loses the ability to focus (Othman, 2009, p18).

### **1.6.2.2.The operational definition.**

Anxiety is a state of mood that individual faces due to external pressures, resulting intense feeling of fear and shortness of breath.

### **1.6.3. Stress.**

#### **1.6.3.1.Terminological definition.**

The scholar "Seeley" suggested this naming for the first time in 1936. He stated that stress is a psychological state, widespread in our age in which stimuli abound due to economic, social, environmental and nutritional pressures. It is an effort adapted with the body by external violations such as car accident or surgery or illness or weather variability or the intention of revenge or psychological temper like sadness, anger and happiness (Metwali, 1995, p125).

#### **1.6.3.2.Operational definition.**

The individual is in due to the pressures that he is exposed to in life, causing a state of stress in psychological condition.

### **1.6.4.Corona epidemic (Covid-19).**

Corona epidemic is one of the dangerous epidemics that the world has ever known. It is a virus of a new dynasty, never has been identified by humans before. It targets the respiratory system of humans, attacks and destroys the cells, and impedes its function. The replication of the virus inside the cells leads to its death and weakens the immune system as well, which loses the body the endurance ability, hence leading to death. The virus mostly affects the elderly people because their immune is vulnerable(World Health Organization.2020).

## **2. The field study procedures.**

### **2.1. The used method.**

To solve the existed problem, the descriptive method has been used due to the adequacy of this method with the nature of the study, through revealing the extent of sports activities programs of recreational nature contribution to reducing acute anxiety and stress among teachers in light of quarantine against corona pandemic. Hence, this method depends on studying the phenomenon as it is in reality and is interested in describing it accurately, as clarifies its characteristics through collecting data and interpreting it, then presents the results on its light.

### **2.2. The Research Community.**

Our research community represents in teachers of elementary education, within pedagogical schools of elementary education in Ain Oussara municipality- Djelfa province.

### **2.3. The research sample.**

The primary research sample is meant to be the set of elements that represent the original research community an honest representation. The primary study included 150 teachers of elementary education (males and females), in which they were selected in nonrandom manner (purposively), distributed on 12 elementary schools in Ain Oussara municipality- Djelfa province. (All the elementary schools in Ain Oussara municipality).

### **2.4. Search fields.**

**2.4.1.Spatial and human field.**Given the participants are teachers of elementary education, they are distributed on pedagogical institutions (elementary schools) in Ain Oussara municipality- Djelfa province. They numbered 150 teacher (males and females).

**2.4.2.Temporal field.** The study tool was applied in the period from 23 august 2020, the researchers joined the teachers in the period of signing the entrance records of the school year 2020-2021, with commitment to practices and preventive measures.

## 2.5. Research tools

After studying our current topic, looking at previous studies and topics related to our subject, exploring the opinion of specialized sample in methods, we deduced that the best tool to collect data is questionnaire that is defined as:

It is a tool of information, data and facts collection tools. One of the characteristics of this tool is its contribution in data collection from the samples with less time and effort.

After that, we prepared a questionnaire for teachers according to the following:

The questionnaire consists of two axes:

**The first axis.** special for anxiety that consists of seven statements.

**The second axis.** special for stress that consists of seven statements.

The responses related to the questionnaire paragraphs that was distributed are: (yes, no).

## 2.6. Scientific conditions of the tool (psychometric characteristics).

### 2.1. Honesty.

The honesty of the tool means being sure that it measures what it was meant to measure.

The questionnaire also includes all the elements that concern the analysis regarding the clarity of its paragraphs and vocabulary in order to be understandable for all the users.

#### 2.1.2.The arbitrators' honesty (apparent honesty).

Considering that the honesty of the content is one of the most common types of honesty when used in political and social sciences. We adopted this questionnaire in order to infer the credibility of the tool study by consulting the opinions of university arbitrators. They are four teachers specialized in physical and sports education, in addition to three teachers specialized in psychology.

The used equation in calculating the honesty of the questionnaire is Lawsches' equation (Adriana & Bertia, 2013).

CVR: is the ratio of the content honesty.

$N_1$ : is the number of the arbitrators who consider the items are relevant to the subject studied.

$N_2$ : is the number of the arbitrators who consider that the items are irrelevant with the subject studied.

After taking into consideration the observations of the arbitrators concerning the delete of sentences that are unsuitable to measure the axes of the study subject, which are four sentences in the anxiety axis, and 02 sentences in the psychological axis. We concluded 14 sentences after they were 20 sentences in the initial version. After tackling statistically the responses of the arbitrators' sample on the questionnaire in its last version, it has been reached an equal honesty value to (0.78) concerning the anxiety axis, and (0.76) concerning the psychological stress axis. The total value amounted to (0.73). Considering that all the values

are more than (0.60), it can be said that the items of the questionnaire are honest to measure what were established to measure.

**2.7. The stability calculation for the index (internal coherence).**

Stability is what produces proximate results or the same results, since it is applied more than once in similar conditions. Stability has been verified through the Cronbach's Coefficient Alpha, and the following table shows the Cronbach's Coefficient Alpha to measure the questionnaire stability.

**Table (1) represents the Cronbach's Alpha stability for each questionnaire axes (anxiety and stress).**

title The field	The number of paragraphs	Cronbach's Coefficient Alpha
axis Anxiety	7	0.854
Stress axis	7	0.766
The total of the questionnaire axes anxiety and stress	14	0.824

**Source: based on SPSS outputs**

We note from Table 1 that the Cronbach's Coefficient Alpha of all the questionnaire axes ranges between (0.854) and (0.766), which is high value. Cronbach's Coefficient Alpha for all axes reached (0.824) which proves that the stability value is high and indicates that the search tool is highly stable, making us fully confident that our questionnaire is correct and appropriate for the study and the hypotheses testing.

It should be noted that the Cronbach's Coefficient Alpha reached (1.0). When it approaches (1), it signifies the existence of high stability, and when it approaches (0), it signifies the absence of stability.

**2.8. Field application procedure.**

After adjusting the tool (questionnaire) regarding its final form, the researchers conducted the practical part of the study, where we distributed the questionnaire on sample of (150) teachers (male and female) in order to express their opinions about the content of the questionnaire on 23 August by delivering it to the interviewees.

**2.9. Means and statistical methods.**

- The SPSS program.
- The Cronbach's Coefficient Alpha: We used it to calculate the stability of the study tool.
- Percentage: We use it to find out the percentage of the sample responses.
- Chi<sup>2</sup> test: The two researchers used it to find out the statistical significance of the questionnaire's responses.

**3. Presentation, interpretation and discussion of the results.**

**3.1. To validate the hypothesis, we conducted a statistical analysis using the percentage and the Chi<sup>2</sup> test. The results were as described in the table.**

-The sports activities programs of recreational nature contribute to reducing acute anxiety of teachers in the light of quarantine circumstances against corona pandemic.



**Table 2: represents the statistical results concerning the first hypothesis, especially the contribution of recreational sports activities programs to alleviating anxiety**

The expressions	The answers	The Percentage %	The answers	The Percentage %	Chi <sup>2</sup> Calculated	Chi <sup>2</sup> tabulated	Degree of freedom	Significance level
01	Yes	85	No	15	14.002	3.841	01	0.05
02	Yes	22	No	78	19.882	3.841	01	0.05
03	Yes	60	No	40	50.54	3.841	01	0.05
04	Yes	13	No	77	17.40	3.841	01	0.05
05	Yes	85	No	15	32.65	3.841	01	0.05
06	Yes	87	No	13	17.75	3.841	01	0.05
07	Yes	89	No	11	12.576	3.841	01	0.05

**Source: Based on SPSS outputs**

We note from the answers of the first question that 85% of the total sample sees that when sports activities of recreational nature are practised, their mood improves, while 15% answered the opposite. These differences in results confirms the chi<sup>2</sup>test, which had the calculated value (14.002). It is greater than the tabulate value (3.841) which means that there are differences in the results statistically significant.

Concerning the second question, 22% of the total sample considered that when sports activities of recreational nature are practised, they had a feeling of fear. Meanwhile, 78% answered the opposite, and these differences in results were confirmed in the chi<sup>2</sup>test, which the calculated value was (17.989). It was greater than the tabulated value (3.841). It means that there are differences in the results statistically significant.

For the third question, 60% of the total sample said that when they were engaged in sports activities of recreational nature, they were more focused and less distracted, while 40% said the opposite, and this confirmed the differences in results of chi<sup>2</sup> test that the calculated value was (50.54) and was greater than the tabulated value (3.841). It means that there are differences in the results statistically significant.

Regarding the fourth question, 77% of the total sample believed that when they were engaged in sports activities of recreational nature for long periods, they were optimistic and relaxed, however 13% believed the opposite, and this confirmed the differences in results of

chi<sup>2</sup>test that the calculated value was (17.40). It was greater than the tabulated value (3.841). That means there are differences in the results statistically significant.

For the fifth question, 85% of the sample considered that sports activities of recreational nature help them to eliminate disorders and negative thoughts. Whereas, 15% believe the opposite; and this is confirmed by the differences in results of chi<sup>2</sup>test which the calculated value was (32.35), greater than the tabulated value (3.841). That means there are differences in the results statistically significant.

Answering the sixth question, 87% of the total sample believe that sports activities of recreational nature are the best means to dispose of the phenomenon of anxiety, whereas, 13% believe the opposite, and this confirms the differences in results of chi<sup>2</sup>test that the calculated value was (17.75), greater than the tabulated value (3.841). This means that there are differences in the results statistically significant.

Concerning the seventh question, 89% of the total sample said that their exercise of sports activities of recreational nature helps them to get rid of anger that they experience during house quarantine. Eleven per cent answered the opposite, and this confirms the differences in results of chi<sup>2</sup>test that the calculated value was (12.576) and was greater than the tabulated value (3.841). That means there are differences in the results statistically significant.

### **3.1.2. Discussion of the first hypothesis.**

After reading the analytical answers of the participants, we found that recreational sports activities programs contributed significantly to reducing the teachers' anxiety under the conditions of home quarantine against the Corona pandemic. This type of activity greatly assists the individual to improve his mood when exercising, because this is one of the basics of recreation for the atmosphere of pleasure and joy that it creates according to the theory of recreation. Teachers may have many periods of fear because of the news about the Corona pandemic (deaths and infected people). These activities help to get out of this situation by filling their free time with positive acts. We also found that these activities work to help individuals reduce the dispersion of their ideas and support their concentration during home quarantine. Moreover, we found through the answers of the teachers that spending a great time practicing these activities make them feel comfortable and optimistic. This was confirmed by theories of recreation. It is considered the task of recreation, which is to provide happiness and comfort to the individual. The teachers also consider that these activities are the best way to help them get rid of negative thoughts, disorders, anxiety and anger. we can consider these points as positive indicators supporting our idea that these activities work to help individuals reduce anxiety and is not only a way to waste time, escape, give up duties and outcast actions in society, but have several dimensions including psychological, social and others, and that is why we must correct our view of it. With regard to previous studies, most of the studies employed in our study were consistent with our findings, and therefore our first hypothesis answering the first question regarding the extent to which recreational sports activities programs contribute to reducing the anxiety of teachers under the conditions of home quarantine against corona pandemics have been achieved after the systematic scientific study that is followed in ours. Thus, it has been proven the status and the role of recreational sports activities to reducing the manifestations of anxiety among teachers under the psychological pressures caused by the Corona pandemic.

### 3.2. The discussion of the results on light of the second hypothesis.

Sports activities programs of recreational nature contribute to lessening acute stress among teachers in the light of quarantine circumstances against corona pandemic.

**Table 03: Represents the statistical results that relate to the second hypothesis, especially the contribution of recreational sports programs to reducing tension**

The expressions	The answers	The Percentage %	The answers	The Percentage %	Chi <sup>2</sup> calculated	Chi <sup>2</sup> tabulated	Degree of freedom	Significance level
01	Yes	86	No	14	19.122	3.841	01	0.05
02	Yes	90	No	10	33.987	3.841	01	0.05
03	Yes	91	No	09	44.11	3.841	01	0.05
04	Yes	85	No	15	16.34	3.841	01	0.05
05	Yes	75	No	25	37.76	3.841	01	0.05
06	Yes	10	No	90	29.78	3.841	01	0.05
07	Yes	88	No	12	09.04	3.841	01	0.05

**Source: Based on SPSS outputs**

The answers are shown in the table and the figure above.

In the first question, 86% of the total sample believe that practicing sports activities of recreational nature helps them to reduce the state of stress that encounters them. While, 14% answered the opposite. These differences in results were confirmed in the chi<sup>2</sup> test, which had the calculated value (19.122) that is greater than the tabulated value (3.841). This means there are differences in results statistically significant.

In the second question, 90% of the total sample see that practicing recreational sports activities grants them happiness and enjoyment. Whereas, 10% believe the opposite. These differences in results were confirmed in the chi<sup>2</sup> test, which had the calculated value (33.987), greater than the tabulated value (3.841). It means that there are differences in results statistically significant.

About the third question, 91% of the total sample see that recreational sports activities aid them to acquire self-satisfaction. On the other hand, 09% see the opposite of this. These differences in results were confirmed in the chi<sup>2</sup> test, which had the calculated value (44.11), greater than the tabulated value (3.841). It means that there are differences in results statistically significant.

For the fourth question, 85% of the total sample see that sports activities of recreational nature help them to acquire self-confidence. Whereas 15% see the opposite, and this is confirmed by the differences in results of chi<sup>2</sup>test which the calculated value was (16.34), greater than the tabulated value (3.841). This means the existence of differences in results that are statistically significant.

Concerning the fifth question, 75% of the total sample believe that there are strong relationship between practicing recreational sports activities and their psychological health. On the other hand, 25% believe the opposite. This is confirmed by the differences in results of

chi<sup>2</sup> test which the calculated value was (37.76), greater than the tabulated value (3.841). It means that there are differences in results statistically significant.

About the sixth question, 10% of the total sample see that sports activities of recreational nature ruin their mood and do not make them feel comfortable and luxurious. Whereas, 90% see the opposite. These differences in results were confirmed in the chi<sup>2</sup> test, which had the calculated value (29.78), greater than the tabulated value (43.31). This means there are differences in results statistically significant.

Concerning the seventh question, 88% of the total sample believe that sports activities of recreational nature provide them psychological comfort and tranquility. However, 12% see the opposite, these differences in results were confirmed in the chi<sup>2</sup> test, which had the calculated value (9.04), greater than the tabulated value (3.841). It means there are differences in results that are statistically significant.

### **3.2.1. Discussion of the second hypothesis results**

After an analytical reading of the answers provided by the participants, we found that the programs of recreational sports activities have contributed significantly to reducing stress among teachers under the conditions of the home quarantine against the Corona pandemic. Through these processes, we have concluded some points such as: teachers believe that the best way to help them reduce their stress is those activities and that the practice of this type of activities brings them great pleasure and happiness of (86%), they also achieved self-satisfaction. This is confirmed by most recent studies where sports, especially recreational ones, are important means for the individual to maintain his physical and psychological health, as well as to turn the various pressures that he faces into positive feelings. It was also clear that these activities do not only reduce pressures but also contribute to enhancing self-confidence of the individual. This was confirmed by the study of the specialists David Rocco and Joseph Santrouk in their book "Adolescence", in which they conclude the ability of recreational team sports to support a sense of belonging as well as help to enrich a sense of self-confidence (Al Watan, 2017).

On the other hand, the answers of the participants confirm that there is a close relationship between their psychological health and comfort and sports activities of a recreational nature, which means that this type of activities is not intended to entertain and eliminate the leisure time only, but also has psychological dimensions. This is confirmed by Islam Fathi in his topic about the benefits of psychological sports (2018). He stated that sports work on the secretion of natural opiates (adrenaline and endorphins), which in turn are responsible for promoting feelings of happiness and satisfaction, and also getting rid of frustration and reducing stress. These findings are consistent with previous studies that have been relied on, and therefore we have concluded in the end to prove the validity of the second hypothesis, which is an answer to the second question concerning the contribution of recreational sports activities programs to reducing the stress among teachers under the conditions of home quarantine against the Corona pandemic. This emphasizes the importance of exploiting this type of sports activity in the life of teachers to face various psychological pressures, including the phenomenon of stress resulting from the measures of home quarantine against Covid 19.

**Deduction.**

Through our humble study entitled “The sports activities programs of recreational nature and its contribution to reducing acute anxiety and stress among teachers in light of quarantine circumstances against corona pandemic”. It was clear for us through the deduced findings how important these activities are for the teachers and its contribution to reducing their anxiety and stress in the light of quarantine circumstances against corona pandemic. The most important results are the following:

1. Sports activities programs of recreational nature contribute to reducing acute anxiety among teachers in the light of quarantine circumstances against corona pandemic.
2. Sports activities programs of recreational nature contribute to reducing acute stress among teachers in the light of quarantine circumstances against corona pandemic.

**4. Conclusion.**

The practice of sports activities became inevitable and important necessity in every individual life in the society. Especially those activities of recreational nature; one of its essential features is being practiced without rules and laws. Further, the individual chooses it by a self-motive. This type is one of the important activities that has direct relationship with human health in general and with psychological health in specific, because it primary works on achieving a set of goals such as occupation of mind, particularly in the free time (quarantine) and keeping the mind away from life pressures, leading to avoid the various negative thoughts. Moreover, it helps the individual to reduce the stress hormone in the body, stimulate endorphin production, keep the individual away from depression, increase the feeling of optimism and relaxation...etc.

It was confirmed by most recent studies, stating that recreational sports activities have a positive impact on psychological health of the individual to a large degree. Hence, our study was conducted to highlight how many the sports activities programs of recreational nature contribute to reducing acute anxiety and stress among teachers in the light of these circumstances (corona pandemic). Thus, according to the deduced findings, this type of activities has a great efficiency to reduce acute anxiety and stress among teachers. Rateb also confirms that one of practicing sports activities benefits is the disposal of health risks and depression or the pressure stimulators. (Rateb, 2004, p104). This was also pointed out by SobhiKablan citing from (Sherman 1994), in which he give a great importance to physical sports activity and its role to reduce psychological pressure, particularly those aerobic exercises such as walking; it reduces sadness and stress.

**Recommendations and suggestions.**

1. Attention should be given to exercising sports activities of recreational nature for the various categories.
2. Promote awareness and correct the view of all society categories towards sports activities in general and recreational sports in specific.
3. Find ways and means to exercise sports activities of recreational nature everywhere and under any circumstances (such as corona pandemic condition and quarantine).
4. The family should provide a dedicated place to exercise entertaining sports activities at home.

5. Raise the level of interest in sports activities of recreational nature through family encouragement.
6. Shed the light on sports activities programs of recreational nature for the great important it has on health in general and psychological health in specific, especially during these circumstances (corona pandemic).
7. Develop programs for recreational sports activities dedicated to teachers.
8. Increase interest with model and mentoring programs dedicated to sports activities practice.
9. Propagation of cultural awareness to the recreational sports activities role to reducing and disposing psychological pressures, anxiety and stress.
10. Enlighten the teachers with more information to enhance their abilities to face the various pressures like anxiety and stress.
11. Supporting scientific studies on sports activities of recreational nature.

## References

- AttabYounes. (2020). Public health prevention measures against the Corona epidemic (COVID-19). *Journal of Legal and Social Sciences*, 5(2), 336-357.[In Arabic]
- Bahri Saber. (2020). *Suggestions and instructions that would enhance psychological health and manage the crisis of Corona virus*. Democratic Arab Center, Germany, Berlin.  
[https://democraticac.de/?p=65480&fbclid=IwAR2j\\_nO0XhyZsf9xxogeyNYxCbbNRRwNKSjy-2v-VqbaZqEqv-f0Ks5feq8](https://democraticac.de/?p=65480&fbclid=IwAR2j_nO0XhyZsf9xxogeyNYxCbbNRRwNKSjy-2v-VqbaZqEqv-f0Ks5feq8). Access date:01/04/ 2020.[In Arabic]
- Ben seffiaLahcen, Muhammad Al-Hassan Al-Mamoun (2019). The reality of trends toward recreational physical activity under the influence of psychological and social factors and cultural variables. *Journal of sport science technology and physical activities*, 16 (3), 01-17. .[In Arabic]
- Islam Fethi (2018), Psychological sports benefits, Mawdoo3,.20-09-2020.[In Arabic]  
[https://mawdoo3.com/%D9%81%D9%88%D8%A7%D8%A6%D8%AF\\_%D8%A7%D9%D8%B1%D9%8A%D8%A7%D8%B6%D8%A9\\_%D8%A7%D9%84%D9%86%D9%81%D8%B3%D9%8A%D8%A9](https://mawdoo3.com/%D9%81%D9%88%D8%A7%D8%A6%D8%AF_%D8%A7%D9%D8%B1%D9%8A%D8%A7%D8%B6%D8%A9_%D8%A7%D9%84%D9%86%D9%81%D8%B3%D9%8A%D8%A9). Access date:20/09/ 2020
- Mohamed Atiye Al Makrouch (2013), The practiced activities in the free time and its relationship with psychological equilibrium among high school students, Tripoli, Human sciences magazine,.n/a(1), 203-224. .[In Arabic]
- Mokhtar Metwali (1995), *psychology*, 1<sup>st</sup> Ed, Mossoul, Saudi Arabia: Ministry of knowledge. .[In Arabic]
- Moreno, C., Wykes, T., Galderisi, S., Nordentoft, M., Crossley, N., Jones, N., and al. (2020). How mental health care should change as a consequence of the COVID-19 pandemic. *The Lancet Psychiatry*, 7 (9), 813-824.<https://www.thelancet.com/action/showPdf?pii=S2215-0366%2820%2930307-2>
- Mustafa Belaidouni. Hussein bin Zaidan. Mohamed Bouaziz. (2019). The effectiveness of a proposed physical advertising program to improve some physiological variables (body mass index -resting heart beat) in older persons. *Journal of sport science technology and physical activities*. 16 (2), 301–318. .[In Arabic]

- Oussama Kamel Ratib (2004), *The science of psychological sports*, 2<sup>st</sup> Ed, Jordan, Oman, Dar Wirak for publication and distribution. [In Arabic]
- Pierce, M., Hope, H., Ford, T., Hatch, S., Hotopf, M., John, A., and al. (2020). Mental health before and during the COVID-19 pandemic: a longitudinal probability sample survey of the UK population. *The Lancet Psychiatry*, 7 (10), 883-893.
- <https://www.thelancet.com/action/showPdf?pii=S2215-0366%2820%2930308-4>.
- Psychological positive impacts of practicing sports reduce psychological pressure*, 2017, Al-Watan. <https://www.al-watan.com/news-details/id/59057>. Access date:04/01/ 2017
- Qin, F., Song, Y., P Nassis, G., Zhao, L., Dong, Y., Zhao, C., et al. (2020). *Physical Activity, Screen Time, and Emotional Well-Being during the 2019 Novel Coronavirus Outbreak in China*. *International Journal of Environmental Research and Public Health*, 17 (14).
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7399902>.
- Ramy Azdin & Hussein Bilal (2014), *To how extent practicing physical and sports activities reflects to reducing acute anxiety among teenagers*, knowledge magazine.9 (16),. 25-36. Published in 05-12-2014. [In Arabic]
- Sayed Othman Farouk (2009), *anxiety and managing psychological pressure*, 1st Ed, Cairo, Egypt: Dar Elfikr Alarabi. [In Arabic]
- World Health Organization.corona. (2020). [https://www.who.int/csr/disease/coronavirus\\_infections/ar/](https://www.who.int/csr/disease/coronavirus_infections/ar/). Access date:04/04/ 2020
- Zamouri Belcasm (2011), *Barriers that influence the participation of workers in recreational sports activities during the free time*, Human sciences and society magazine, 1(4), 261-277. Published in 12-03-2012. [In Arabic]
- Ziani Mohamed, Tahir Yasmine (2018), *The role of educational and physical sports in reducing psychological pressure among the student attending the middle school exam*, Magazine of r.s.e.p.s, 26(1), 19-27. Published in 16-04-2019. [In Arabic]

#### قائمة المراجع:

- إسلام فتحي (2018)، فوائد الرياضة النفسية، الموضوع، تاريخ الزيارة 20-09-2020
- [https://mawdoo3.com/%D9%81%D9%88%D8%A7%D8%A6%D8%AF\\_%D8%A7%D9%84%D8%B1%D9%8A%D8%A7%D8%B6%D8%A9\\_%D8%A7%D9%84%D9%86%D9%81%D8%B3%D9%8A%D8%A9](https://mawdoo3.com/%D9%81%D9%88%D8%A7%D8%A6%D8%AF_%D8%A7%D9%84%D8%B1%D9%8A%D8%A7%D8%B6%D8%A9_%D8%A7%D9%84%D9%86%D9%81%D8%B3%D9%8A%D8%A9). Access date:20/09/ 2020
- أسامة كامل راتب(2004)، علم النفس الرياضي، ط2، عمان، الأردن، دار وراق لنشر والتوزيع
- تأثيرات نفسية ايجابية لممارسة الرياضة تقلص الضغط النفسي، 2017، الوطن.
- <https://www.al-watan.com/news-details/id/59057>. Access date:04/01/ 2017
- بحري صابر . (2020). مقترحات وارشادات من شأنها تعزيز الصحة النفسية وإدارة أزمة فيروس كورونا ، المركز العربي الديمقراطي، ألمانيا، برلين.
- [https://democraticac.de/?p=65480&fbclid=IwAR2j\\_nO0XhyZsf9xxogeyNYxCbbNRRwNKSjy-2v-VqbaZqEqv-f0Ks5feq8](https://democraticac.de/?p=65480&fbclid=IwAR2j_nO0XhyZsf9xxogeyNYxCbbNRRwNKSjy-2v-VqbaZqEqv-f0Ks5feq8).Access date:01/04/ 2020

- بن صافية لحسن، و الاخرون. (2019). واقع الاتجاهات نحو ممارسة النشاط البدني الرياضي الترويحي تحت تأثير العوامل النفسية والاجتماعية والمتغيرات الثقافية. مجلة العلوم التكنولوجية للنشاطات البدنية والرياضية، 16 (2) مكرر، ص ص 01-17.
- بلعيدوني مصطفى، بن زايد حسين. (2016). أثر برنامج ترويحي رياضي مقترح لتحسين بعض الصفات البدنية لكبار السن (50-65). مجلة العلوم والتكنولوجية للنشاطات البدنية والرياضية، 13 (3)، ص ص 281-300.
- بلقاسم، زموري. (2011). العوائق المؤثرة على مشاركة العمال في الأنشطة الرياضية الترويحية خلال اوقات الفراغ. مجلة علوم الانسان والمجتمع، 1 (4)، ص ص 261-277. استرجعت في (12-03-2012)
- رامي عز الدين، و بلال حسين. (2014). مدى انعكاس ممارسة النشاط البدني الرياضي في التخفيف من حدة القلق لدى المراهقين. مجلة معارف، 9 (16)، ص ص 25-36. استرجعت في (05-12-2014).
- زياني محمد، و طهير ياسمين. (2018). دور التربية البدنية والرياضية في التقليل من الضغط النفسي لدى التلاميذ المقبلين على شهادة المتوسط. مجلة r.s.e.p.s، 26 (1)، ص ص 19-27. استرجعت في (16-04-2019).
- عطاب يونس. (2020). تدابير الوقاية الصحية العمومية من وباء كورونا (كوفيد-19). مجلة لعلوم القانونية والاجتماعية، 5 (2)، ص ص 336-357.
- فاروق، السيد عثمان. (2009). القلق وادارة الضغوط النفسية. ط 1. القاهرة، مصر: دار الفكر العربي.
- محمد عطية المقروش، (2013)، الأنشطة الممارسة في وقت الفراغ وعلاقتها بالتوافق النفسي لدى طلاب المرحلة الثانوية بطرابلس، مجلة العلوم الإنسانية، بدون رقم مجلد (1)، ص ص 203-224
- مختار، متولي. (1995). علم النفس. ط 1. الموصل، السعودية: وزارة المعارف.