The Impact of Exercise on the Rate of Self-esteem and Motivation on the College of Education Students’ Achievement during Covid 19 Pandemic

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Abstract
Undoubtedly, and according to what many studies have proven about the relation between sport practice and physical, mental and mental activity, and according to the health and psychological repercussions caused by the Corona virus pandemic, the importance of sports activity for students was as necessity, accordingly, the study aimed to identify the impact of students’ practice of physical activity on the level of cognitive achievement. Self-esteem and motivation to learn To achieve the goal of the study, the descriptive approach and the quasi-experimental approach were used by applying a measure of the level of cognitive achievement and motivation to learn and self-esteem on the 190 male and female students regularly practicing sports, compared to 170 male and female students who do not regularly engage in sports activity from the students of the College of Education at Kuwait University.

The results of the study proved that there is a significant effect of the practice of sports activity on the total score of the scale for students in addition to an effect on the increase in the average score of the scale. The researcher recommended A channel specialized in sports activities for students and the creation of advertising campaigns for social media to encourage students to practice sports.

Key-words: Physical Activity, Quasi-experimental Approach, Rate of Self-esteem.

1. Introduction

Regular sports practice helps to form a healthy individual in all physical, mental and psychological aspects, and give them skills that help in the process of adapting to society and acquiring capabilities. The study conducted by the Max Plan Institute indicated that sports practice helps in regeneration of brain cells, and sports practice helps in developing the cognitive level and
achieving Psychological and social stability, which has a direct impact on the rate of achievement, self-confidence, and motivation. (Sarbot & Abdel hakeem, 2017).

The subject of self-esteem is one of the important topics in all fields related to the human being, especially since the individual’s self-evaluation is of great value in the struggle for achievement and excellence. (Ben Saady, 2016). Through all of this, it can be said that sports activity in educational institutions has an important role in influencing academic achievement, which “aims to reach information about students’ abilities. To contribute to achieving professional success, psychological and physical comfort, and mental and physical health. (Araby & Al morrby, 2015).

West Butcher (1990) defined physical education as the educational process that aims to improve human performance through an intermediary, namely, physical activities and exercises to achieve this. Mentality and fitness through physical activity. (Muslim, Awali and Belabbasi, 2019).

The level of achievement is related to the level of self-esteem, and the subject of self-esteem is an essential topic for many psychological and social studies because it is the basis for guiding the personality in the various stages of the individual’s chronological life. Our self, as psychological studies have confirmed that psychological functions are synergistic to achieve human adaptation in general, and then social adaptation and, consequently, academic compatibility. (Lakhdar, 2015).

It is known that the level of ambition is the results of the interaction of two elements, namely, the individual’s awareness of himself and his ability to confront himself by making himself a subject and an object at the same time, and the second is his ability to act and implement his goals so that he feels his self-esteem and fulfillment of it, as well as the cultural environment of the individual. To link between the level of ambition on the one hand and academic achievement as a study (Juweida, 2015) and (Salem, Qumail and Al-Khalifa, 2012) and (Al-Sadiq, 2016) on the other hand, given that the desire to achieve the highest academic level in a particular field in which the student specializes is linked Positive correlation with the level of ambition owned by that student, who is considered the nation's hope and future. (Bani Hany & Ahmed, 2019).

2. Study Problem

Many studies have indicated that exercising affects self-confidence, self-esteem, and a sense of competence and control. When individuals have positive motives towards themselves, the level of self-esteem rises, in addition to the relationship between physical activity and self-esteem, and that sports activity creates many opportunities to raise the level of self-esteem. (Zayed, 2011) & (Dorak, 2011) & (Zayed, 2013) & (Mashabeh & Mokadem, 2021).
From the perspective of the relationship between self-esteem and its impact on high motivation and its impact on the level of achievement, this study sheds light on the importance of investing that relationship in raising the level of students’ achievement at the university level.

The main study question can be formulated in What is the impact of exercise on the rate of self-esteem and motivation and their impact on the achievement of undergraduate students?

3. Literature Review

1- Concept, History, Importance and Characteristics of Sports Practice

Sports practice in its modern forms, its regulations, and its rules based on a basis, its various types is a field of modern education as a strong and effective element in preparing a good citizen, by providing him with various skills and fast fitness experiences, which enable him to adapt with society and make able to lay a foundation stone for life and also help him keep pace with his age. Sports practice also makes the human mind active, and gives the body health and strength, and makes it able to work and increase production. (Mokadem & Mesbah, 2021).

Since sports physical activity is a means of achieving and acquiring skills, so needs and behaviors can be achieved and modified through various sports activities, play and recreation, the goal of sports physical activity is to serve the individual’s psychological and social condition to a large extent, contrary to what many think that the goal of physical activity The athlete is limited to taming the bodies and strengthening the muscles automatically and independently. (Nour Eldin, 2009).

2- The relationship between Physical Activity and Mental and Cognitive Activity

Sports practice has an impact on the mental abilities of the individual, and from here it plays an important role in academic achievement. Sports practice gives the mind great energy and focus, and thus positively affects the academic achievement. Exercises affect the mental abilities of the student and thus the academic achievement rate. (AL-Araby & Al-merraby, 2015)

The study (Mohammed, 2012) indicated that sports performance varies with different degrees of sports practice, and that individuals who excel in sports have special mental and cognitive characteristics that distinguish them from their peers. Mental and intellectual skills, level of motivation, perseverance, ability to focus and attention, in addition to emotional and social stability through the ability to self-control and achieve emotional stability, leadership, self-sufficiency,
personal compatibility, tendency towards courage and perseverance, and they are less vulnerable to psychological disorders that non-practitioners of sports are exposed to.

3- The Concept of Self-esteem and Self-confidence

Self-confidence is “the individual’s ability to respond harmoniously to the stimuli that confront him, and his awareness of others’ acceptance of him and his self-acceptance to a high degree.” Thus, it can be said that self-confidence undoubtedly includes the cognitive aspect and the behavioral aspect. The cognitive aspect is the individual’s awareness of his competence, capabilities and knowledge of skills. The behavioral aspect is crystallized in translating these positive beliefs about the self into behavioral actions and kinetic manifestations that reflect the extent of the individual’s self-confidence through his ability to deal effectively, compatibility and harmony with the life situations in which he lives.

That is, self-confidence begins with positive beliefs about oneself, followed by self-satisfaction and acceptance, so that this belief and this satisfaction crystallize into visible actions and behavioral movements that reflect the individual's confidence in themselves. (Ali, 2009).

As for self-esteem, it refers to the individual’s assessment of themselves with the mental, social, emotional, moral and physical characteristics that are reflected in self-confidence and feelings towards it, and evaluation of its importance and expectations of it.

Several studies have revealed the relationship between physical activity and the level of self-esteem, as these studies indicated that there are reciprocal effects between self-esteem and the practice of sports activity, and that sports activity creates opportunities to raise the level of self-esteem, considering its positive impact on health, social and psychological aspects of the individual and its impact on improving mood and thus forming Positive self-concept, increase self-efficacy, and reduce the negative effects of life stresses and strains (Zayed, 2013).

4- Explanation of the Motivation for Achievement

Academic achievement is the acquired knowledge and developed skill in a particular subject of study, determined by test scores and teachers’ grades, or both, and it is the amount of educational goals the learner has achieved in a particular study as a result of passing through experiences and educational situations. (Kadhim, 2011).
Achievement occurs as a result of several cognitive processes such as perception, attention, focus and memory. The student’s intelligence is affected by his social, economic and psychological conditions, such as the motivation for achievement, which expresses the state in which the student lives and works to provoke and activate behavior and direct him towards a specific goal.

The term motivation refers to the set of internal and external circumstances that move the individual with the aim of restoring balance and his tendency to reach a specific goal, and this goal may be the satisfaction of internal needs or external desires.

The study (Aqoni and Hadi, 2020) indicated that there is a relationship between motivation and academic achievement. There are several factors that affect the growth of motivation to achieve, including the style of care and support for learning, personal and psychological factors, and there is a relationship between academic achievement and excellence, which some express with high achievement resulting from a higher motivation to learn affected the psychological and social conditions of the student and his mental abilities and cognitive skills.

5- The Concept of Study Achievement and its Relationship to Motivation and Self-esteem

The study of (Al-Hamwi and Ahmed, 2010) & (Al-Dawaideh & Al-Maghouwi, 2020), (Al-Harahsheh, 2012), (Al-Atta, 2014) & (Abdulaziz, 2019). indicated that there is a relationship between achievement and self-concept in a reciprocal form, that is, those who have a high and positive level of self-concept are the most accomplished, as this is related to their positive view of themselves and confidence in their capabilities, preparations and abilities, their sense of ability to succeed and overcome. Obstacles, and high achievement with a sense of success, superiority and social status also enhances the positive self-concept.

6- The Effect of Sports Activity on the Achievement Level of Students

The study of (Ayesh and Muhammad, 2012) indicated that there is an impact of the physical education lesson on the level of academic achievement, as well as the study (Zawawi, 2019). The practice of sports is integrated with other educational materials, as there are many theories of academic achievement that refer to this relationship, including the physiological theories that link the process of Achievement and the physiological changes that accompany the assimilation of perceptions from the outside world. Proponents of this theory believe that intelligent people and those
with high academic achievement abilities have more brain activity than ordinary ones as a result of the secretion of adrenaline.

The integrative theory of cognitive achievement indicates the importance of integrating factors of heredity, environment, intelligence and motivation, and then some consider this theory to be one of the most explanatory theories.

Inclusive of the relationship between sports activity and motivation to learn and the level of academic achievement.

7- Practicing Physical Activity for Students During the Corona Virus Pandemic

The educational framework requires a specific method of implementation and each method requires appropriate organizational steps, and thus the organizational form chosen by the teacher depends on the educational goals as well as on the content of the lesson, the level of students and living conditions (the Corona pandemic) (Mohamed, 2021).

Maintaining a healthy lifestyle has become one of the great challenges facing people amid the current Corona virus pandemic, along with the challenge of maintaining the strength of the immune system so that it can do its work efficiently and protect the person from the severity of the symptoms of Covid-19 in the event of infection.

In the current situation of the great spread of the pandemic around the world, physical activity has taken special importance; It enhances immune function, reduces inflammation and thus can reduce the severity of infection and the severity of COVID-19 symptoms. It also helps improve common chronic diseases, which are closely related to COVID-19 symptoms. On the other hand, sports and motor tasks are considered one of the best ways to calm stress and anxiety, which contributes to obtaining better physical health that defies diseases. Physical activity restores cortisol (the stress hormone) to its normal levels, which reflects positively on the psychological and physical state, and thus the efficiency of the body's immune system. (Zabeer, 2021).

4. Methods

Sampling of Participants

The study population consisted of 5,700 male and female students in the College of Education, Kuwait University. Accordingly, a sample of 360 was identified, including 140 female students and 219 male students.
They were divided into two groups, a group that exercises and participates in sports activity on a regular basis, and another that does not participate or practice sports regularly, in order to apply a scale prepared by the researcher to measure the level of motivation for learning, self-esteem and achievement to identify the existence of a relationship and the impact of practicing sports activity on the level of self-evaluation and motivation for learning and cognitive achievement.

**Data Collection**

The current study used the descriptive approach in presenting the theoretical framework for the study variables.

The quasi-experimental approach: It is the method that studies a current phenomenon with changes in one or more factors and monitoring the results of this change. (Ehsan Khalil Al-Agha, Hassan Mahmoud Al-Ustad, 2002).

The experimental design with two groups (experimental group and control group) was followed; With the application of the scale prepared by the researcher to the two groups; To examine the extent to which there is an impact of the practice of sports activity for students of the College of Education in the period of the Corona pandemic on the level of achievement, motivation to learn and self-esteem.

**The Main Tools Employed by the Researcher Are:**

A triple scale to measure the level of cognitive achievement based on the last estimate or overall average score, the student’s self-assessment level, and the motivation to learn.

**The Study Steps Proceeded According to the Following**

1. A review of educational and theoretical literature and previous studies related to cognitive achievement, self-evaluation, and motivation to learn.
2. Preparing a list of terms measuring the level of self-esteem and motivation to learn through previous studies related to them, and presenting them to the arbitrators to reach the necessary final picture.
3. Preparing and constructing the scale in its final form after arbitration.
4. Applying the test to an exploratory sample to measure its validity and reliability.
5. Selecting the research sample and applying the experiment.
6. Conducting the test to measure the extent of the effect and the relationship between the variables.

7. Retesting after a period of time has passed since the scale has been implemented; To measure the extent of retention of the mentioned level.

8. Monitoring the grades of male and female students in the scale.

9. Formulation of recommendations and proposals in light of the dimensions and variables of the study.

5. Data Analysis

A measure of self-esteem and motivation for learning and the achievement level of male and female students was conducted for the study sample of regular practitioners of sports activity in the period of the Corona pandemic and non-practitioners regularly in order to measure the differences for 360 male and female students and by comparing the average grades, the results of the study related to the level of achievement and motivation to learn and self-esteem were reached.

To answer the research question that states: What is the impact of exercise on the rate of self-esteem and motivation and their impact on the achievement of undergraduate students? The arithmetic means and standard deviations were calculated with a T-test for the two study samples.

Assumptions:
- The null hypothesis: that the average scores of the self-esteem scale, cognitive achievement and motivation to learn are less than or equal between those who regularly exercise and non-practitioners.
- The alternative hypothesis: that the average scores of the measure of self-esteem, cognitive achievement, and motivation to learn are higher among those who regularly engage in sports activity than among non-practitioners.

6. Finding

<table>
<thead>
<tr>
<th>Paired Samples Statistics</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale scores for students practicing sports</td>
<td>26.18</td>
<td>170</td>
<td>1.769</td>
<td>.136</td>
</tr>
<tr>
<td>Scale scores for students who do not practice sports</td>
<td>20.68</td>
<td>170</td>
<td>2.359</td>
<td>.181</td>
</tr>
</tbody>
</table>
It is clear from the data of Table No. (1) that the average scores of the scale of the level of self-esteem and motivation to learn and cognitive achievement for male and female students, the study sample from the College of Education, Kuwait University who practice sports during the Corona pandemic, amounted to 26.18 with a standard deviation (1.769), which is higher than the average scores of the scale of the level of self-esteem and motivation for learning and cognitive achievement for male and female students, the study sample from the College of Education, Kuwait University, who did not practice sports activity during the Corona pandemic, which amounted to (20.68) with a standard deviation (a.359), and let us know that if the difference is statistically significant We review the following t-test results:

<table>
<thead>
<tr>
<th>Paired Samples Correlations</th>
<th>N</th>
<th>Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1 Scale scores for students practicing sports and non-participant</td>
<td>170</td>
<td>.014</td>
<td>.861</td>
</tr>
</tbody>
</table>

Table (2) There is a positive correlation, but without statistical significance, between the scale of sports activity practitioners and non-practitioners during the Corona pandemic among students of the College of Education, Kuwait University for the study sample.

<table>
<thead>
<tr>
<th>Paired Samples Test</th>
<th>Paired Differences</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Deviation</td>
<td>Std. Error Mean</td>
<td>95% Confidence Interval of the Difference</td>
<td>Lower</td>
</tr>
<tr>
<td>Scale scores for students practicing and non-practicing</td>
<td>5.494</td>
<td>2.930</td>
<td>.225</td>
<td>5.051</td>
</tr>
</tbody>
</table>

Table (3) T-test for the average scores of the self-esteem scale and motivation for learning and achievement for the practicing and non-practicing students for the study sample.

The value of (T) reached 24.452 and we note that the significance here is (0.000) which is less than (0.05), as there are statistically significant differences in favor of the practitioners of sports activity, which has a higher average, and therefore we reject the null hypothesis and accept the
alternative hypothesis where the practice of sports activity affects the level of appreciation Self-motivation for learning and cognitive achievement of students.

Table (4): The average of total score for cognitive achievement, the level of self-esteem and motivation to learn for students who practice sports regularly (26.17) with a standard deviation (1.729) between the sample scores and a variance (2.991) and a range of 7 degrees as a difference between students, while the average total score for cognitive achievement and the level of self-esteem and motivation to learn For students who do not practice sports regularly (20.68) with a standard deviation of (2.359) and variance (5.567) and a range of 11 degrees as the difference between the students’ scores.

Table (5) Scale scores for students practicing sports.

The total number of students who practice sports reached 190 male and female students out of the study sample which amounted to 360 male and female students with a percentage of (52.8%), and 13.1% of the students had a degree of (27) and 9.2% of the students with a degree of (28) and 8.3% of
the students with a degree of (28) and 8.3% of the students (25), 7.8% with a score of (26), and 6.7% with a score (24).

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>3</td>
<td>.8</td>
<td>1.8</td>
</tr>
<tr>
<td>16</td>
<td>3</td>
<td>.8</td>
<td>1.8</td>
</tr>
<tr>
<td>17</td>
<td>9</td>
<td>2.5</td>
<td>8.8</td>
</tr>
<tr>
<td>18</td>
<td>15</td>
<td>4.2</td>
<td>8.8</td>
</tr>
<tr>
<td>19</td>
<td>21</td>
<td>5.8</td>
<td>12.4</td>
</tr>
<tr>
<td>20</td>
<td>28</td>
<td>7.8</td>
<td>16.5</td>
</tr>
<tr>
<td>21</td>
<td>31</td>
<td>8.6</td>
<td>18.2</td>
</tr>
<tr>
<td>22</td>
<td>23</td>
<td>6.4</td>
<td>13.5</td>
</tr>
<tr>
<td>23</td>
<td>22</td>
<td>6.1</td>
<td>12.9</td>
</tr>
<tr>
<td>24</td>
<td>3</td>
<td>.8</td>
<td>1.8</td>
</tr>
<tr>
<td>25</td>
<td>6</td>
<td>1.7</td>
<td>3.5</td>
</tr>
<tr>
<td>26</td>
<td>6</td>
<td>1.7</td>
<td>3.5</td>
</tr>
<tr>
<td>Total</td>
<td>170</td>
<td>47.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td>System</td>
<td>190</td>
<td>52.8</td>
</tr>
<tr>
<td>Total</td>
<td>360</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table (6) Scale scores for students who do not practice sports.

The total number of students who do not exercise regularly was 170 male and female students from the study sample, which amounted to 360 male and female students with a percentage of (47.2%), and 8.6% of the students had a degree of (21) and 7.8% of the students with a degree of (20) and 6.4% of the students with a degree of (20) and 6.4% (22) and 6.1% with a score of (23) and 5.8% with a score of (19).

7. Discussion

Several studies, including the study of (Mokadam, 2021) and (Al-Kashef, 2013) indicated that there is an effect of sports practice in enhancing the level of self-confidence. The study (Bin Youssef, 2008) also linked the motivation to learn and the level of academic achievement. The study of (Kniwa, 2009) confirmed that the practice of physical education and sports affects the mental, psychological and social formation of students, especially in the final departments of pre-university education, and (Saghir, 2008) emphasized the existence of a role for physical and sports activity in developing the life skills of university students, and the above is consistent with the study (Mohammed, 2012).
Which emphasized the relationship of sports activity to the mental and cognitive processes of students, as confirmed by the study (Al-Dawaida and Al-Mathoudhi, 2020) between the level of self-esteem and the quality of students’ academic achievement. The study of (Ayesh and Muhammad, 2013) confirmed the existence of an effect of the physical education lesson on academic achievement.

From the above, the hypothesis of the study was that there was an effect of sports activity on the level of self-esteem and motivation to learn and cognitive achievement, and this was what was reached from the students’ results and grades in the scale designed by the researcher to measure the level of cognitive achievement among students who practice sports and non-practitioners, as well as the level of self-esteem and motivation to learn in the number 30 aspect. It was noted that the average grades of male and female students practicing sports are higher than non-practitioners, although there was a general decrease in the percentage of practicing sports during the Corona pandemic, despite what UNESCO and the World Health Organization called for the need to maintain sports activity because of its positive impact on immunity and achieving stability. Psychological conditions, despite the home quarantine conditions and the negative psychological pressures and symptoms that they can cause, which may affect the level of cognitive achievement of students.

By conducting a (T) test, the study concluded that there is a significant impact of the practice of sports activity on the students’ scores on the scale of self-esteem and motivation to learn and cognitive achievement. It was also found that there is a higher average for students’ results with a lower standard deviation among sports practitioners than non-practitioners. It also showed a higher overall performance level shown in higher scores among students who practice sports than non-practicing students appeared in the results of statistical frequencies.

8. Recommendations

The researcher recommends enhancing students’ practice of sports activity despite the precautionary measures and the necessities of distance education by increasing the students’ sports excellence degrees.

The researcher recommends creating an independent channel for students to practice sports activity from a distance and adding features to students who follow it.

The researcher recommends an advertising campaign through social media to encourage students to practice sports.

The researcher recommends adding degrees to the practice of sports activity for the basic subjects.
The researcher recommends conducting more studies and scientific research to confirm the impact of cognitive and mental sports practice.

References


Salem, Hebat Allah, Qambil, Kebshour and Caliph Amra Harun (2012). The relationship of achievement motivation with the subject of control, level of ambition and academic achievement among students of higher education institutions in Sudan. Khartoum.


Aqouni, Asmaa and Bahadi, Munir (2020). The effect of motivation on academic achievement and enhancing students’ learning ability, Al-Hikma Journal for Philosophical Studies, Volume 8, Issue One.

Al-Hamawi, Mona (2010). Academic achievement and its relationship to self-concept, a field study on a sample of fifth grade students, the second cycle of basic education, the official Damascus governorate, Damascus University Journal, Volume 26 Supplement 2010.


Ayesh, Amal Rashid & Mohamed, and Wedad Youssef (2012). The effect of the physical education lesson on the academic achievement of the fourth scientific students, Al-Fath magazine, No. 51.

Zawawi, Bilal (2019). The effect of the physical education and sports class on the academic achievement of secondary school students, a field study of some secondary schools in the city of Warqa, Master's thesis, Kasdi Merbah University of Ouargla.


Pasha, Salah Abdel Samee (2013). The interactive relationship between the level of self-confidence and the level of achievement and their impact on academic achievement in light of gender and specialization among students of the Faculty of Specific Education, Mansoura University, Journal of Specific Education Research, Mansoura University, No. 30 April.


Ben Youssef, Amal (2008). The relationship between learning strategies and motivation to learn and their impact on academic achievement, Master's thesis, Faculty of Humanities and Social Sciences, University of Algiers.
