

# Evaluation Study of the Physical Condition of Sports Sciences Faculty Students at the Arab American University During the COVID-19 Pandemic

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This study aims at identifying the physical condition of Sports Sciences Faculty students at the Arab American University. To achieve study objectives, the researchers used the descriptive methodology and the physical condition description test designed by Allawi (1998). Data was collected using a questionnaire with a reliability factor of 0.89, which surveyed the sample of the study consisting of 97 students from the Faculty of Sports Sciences at the Arab American University; this sample represents 23.5% of study population. The researchers used the Cronbach Alpha equation to measure the study's reliability factor scale, t-tests for two independent groups (Independent -t -test), and the One-way ANOVA test. Results of the study showed that the physical condition of students of the Faculty of Sports Sciences at the Arab American University is intermediate, and that there are statistically significant differences at the level of  $\alpha \leq 0.05$  for fitness elements of agility and flexibility in favour of female students. However, there are no statistically significant differences at the level of  $\alpha \leq 0.05$  for fitness elements of muscle strength, endurance and speed among students of the Faculty of Sports Sciences at the Arab American University. Moreover, there are no statistically significant differences at the level of  $\alpha \leq 0.05$  in the overall degree of physical condition nor in any of the fitness elements due to the study year variable. Researchers recommend teachers to acquaint their students with descriptions of their physical condition for its importance in improving their physical, motor and skill performance.

**Key words:** *COVID-19, E-Learning, Physical Status, Arab American university*

## **Introduction and importance of the study**

The corona pandemic has broken out in most countries of the world, forcing all educational institutions to shift from face-to face education, which enables the physical closeness and accordingly increase the chances of contagion, to e-learning or distance learning; and forcing 5.1 billion children and young people in 188 countries around the world to stay at home after the closure of schools and higher education institutions (Khlaif, Salha, Affouneh 2020).

Distance learning or e-learning has been talked about for long time, and the need to integrate it into the educational process has been debated prior to the Corona pandemic. Coombs & Rold, 2001; Grigsby, 2001; Cox et al, 2004, stressed the importance of e-learning considering it a necessity for various educational institutions to keep up with the huge educational transition currently taking place. Jones et al, 2005: 45 stated that 90% of American universities provide their programs via e-learning systems. Al-Far (2000: 295) stated that many Arab and foreign educational institutions have set up educational sites to help their students to increase their educational achievements, such as the University of Washington, California, Phoenix, India, Rogers, Athens, Western, and the Arab E-University. According to the Center for Educational Technologies at Sultan Qaboos University, it reports that the university started using e-learning since 2001, whereas, Egyptian universities started using it since 2005. Hantuli (2016:5) stated that the Palestinian Ministry of Higher Education has been using it since 2014, however, it was used by the Palestinian universities since 2009-2010. Nowadays, it has become an alternative and an urgent necessity in order to continue education amidst the current conditions which impose physical distancing.

Faculties of Physical Education and their departments are among the Palestinian educational institutions that use e-learning systems to proceed in the educational process and brief students on their courses and on the technical, tactical and legal aspects of practical courses that require to be applied practically by students; in addition, it provides them with immediate feedback from the lecturers.

Since the success of the educational process and the achievement of its objectives is one of the most crucial axes in building the educational system, the preparation of physical education faculties' students, from my perspective as a teacher of physical education, has become one of the cores of the interests of many countries of the world. In this regard, students' physical condition and its tests play an important role in the process of correct preparation of physical education faculties' students because these tests provide an indication on fitness elements through which the fitness can be developed. Fitness is the basis through which the required skills in physical education faculties' curriculum and their respective sports events could be built.

Therefore, preparation of students of physical education faculties and developing their level of fitness in addition to building skill and scientific level during their years of study can merely

be done through paying attention to the curriculum accurately according to various formulas and means which seek to correlate between physical qualities and the physical education faculties curricula to ensure raising student's level of fitness and maintain it during the four years through the faculty's curricula.

There is no doubt that one of the most important elements of success is the development of fitness during the various stages of learning. For Hassanein, (1982:62) fitness is the basis for ability of practising different sports; it is the basis for personal fitness, achieving progress in basic skills and play plans, without which the possibility of achieving these dimensions becomes difficult if not impossible.

The importance of the study came from the extent of correlation between the development of the fitness level for physical education faculties' students and possession of physical fitness basics, since those students are future's teachers who will carry the slogan of change and elevation of the school sports' reality through possession of fitness elements through which physical educational curriculum are applied scientifically and correctly. These sport skills cannot be applied correctly if the teacher of physical education does not have good and distinct levels of fitness to be a good model for student during all study stages.

### **Problem of Study and its Questions:**

The physical fitness and physical condition of students in the field of physical education is important in learning all motor skills and applying them easily during different practical courses. It also demonstrates the ability of the body to perform its vital functions efficiently and effectively. In light of the Corona pandemic (Covid-19) and the distance teaching of all practical and theoretical courses for relatively a long period of time, after a partial return to the face- to- face education especially in practical courses, the researchers noticed that many of the outstanding students showed a regress in their physical and skill performance in light of the continuous pandemic. These observations prompted them to conduct the current study whose problem seeks to answer the following questions:

1. What is the degree of physical condition among students of Sports Sciences Faculty at the Arab American University during the Covid-19 pandemic?
2. Are there any statistically significant differences in the degree of the physical condition of students of the Faculty of Sports Sciences at the Arab American University during the Covid-19 pandemic which are attributed to a gender variable?
3. Are there any statistically significant differences in the degree of physical condition of students of the Faculty of Sports Sciences at the Arab American University during the Covid-19 pandemic which are attributed to the variable of the study year?

### **Objectives of the Study:**

The current study seeks to identify:

1. The degree of physical condition of Sports Sciences Faculty's students at the Arab American University during the Covid-19 pandemic.
2. Differences in the degree of physical condition of Sports Sciences Faculty's students at the Arab American University during the Covid-19 pandemic which are attributed to a gender variable.
3. Differences in the degree of physical condition of Sports Sciences Faculty's students at the Arab American University during the Covid-19 pandemic which are attributed to 'study year' variable.

### **Study limitations**

During the study, the researchers adhered to the following limitations:

1. Human limitation: The sample was limited to students of the Faculty of Sports Sciences at the Arab American University
2. Spatial Limit: Arab American University.
3. Time limit: This study was conducted in the first semester of the academic year (2020-2021) during the period (November 1 - February 25)

### **Study terms:**

- Physical condition: A description for some physical qualities that can collectively form the most important elements of fitness (strength, endurance, speed, agility, and flexibility). (Allawi, 1998: 20)
- Electronic Learning: facilitating learning using computers and internet webs (Wallace, 2007: 28)
- The new Corona pandemic (COVID-19): a widespread virus species known to cause diseases ranging from common colds to more severe diseases, such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). The new coronavirus (NCoV) is a new strain of the virus that has not been detected in humans (<https://www.who.int/en/health-topics/coronavirus>).

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## Previous studies

- Sahu(2020) conducted a study aimed at finding out the impact of the closure of universities due to covid-19 on education and the mental health of students and faculty members. Results of the study showed that universities should abide by instructions to slow the spread of the virus; students and staff should receive information regularly through e-mail; the health and safety of students and staff must be at the top priority; consultation services must be available to support students' mental health; authorities must also take responsibility for ensuring food and housing for international students, and faculty members should give more attention to technology to make students' learning experiences rich and effective.
- Ashley et.al (2020) conducted a study to identify the effect of wearing a face mask during exercising, where the sample of the study consisted of 23 players. The results of the study showed that the heart rate and voltage RPE for players who wore the mask reached 128 n/d and 12.7 respectively, while the players who did not wear the mask had a heart rate of 124 n/d and RPE 10.8 which means that the face mask significantly raises the heart rate and increases the burden on the heart.
- Kazim (2018) carried out a study entitled "Description of the physical condition and its relation to the performance of certain physical and motor characteristics and abilities of students" which aimed at identifying the physical condition of fourth year students in the Faculty of Physical Education and Sports Sciences of the University of Babylon, where the sample of the study consisted of 50 students. Results of the study showed that there is a statistically significant relationship between the description of the physical condition and the physical and motor performance of the study sample.
- Tayeb (2019) conducted a study aimed at identifying the nature of the relationship between physical condition (muscle strength, endurance, speed, flexibility, agility) and the mental state of football players, where the sample of the study consisted of 44 players. The researcher used the descriptive method since it is suitable for the nature of the study. The results indicated that the higher the physical condition of the amateur player, the higher his/her mental state, and that the high physical condition is one of the most important contributing factors to the improvement of the mental state of the amateur football player. The study recommended the need for regular and continuous evaluation of the physical condition.
- The Hayali and others (2008) study aimed to evaluate some elements of fitness for students of the second stage at the physical education branch at the Faculty of Teachers, where the sample of the study consisted of 30 and students of both genders. The researcher used training methodology because it is suitable for nature of the study. The most important

results indicated that there were no statistically significant differences in the 60m run test attributable to the sex variable.

- Mahdi (2019) conducted a study aimed at identifying the relationship between the physical condition and motivation for sportive achievement, where the sample of the study consisted of 20 players and employed the descriptive methodology for its suitability and the nature of the study. The results indicated the existence of a statistically significant correlation between muscle strength, endurance, speed and sportive achievement motivation for football players.

### Sample study:

The study was conducted on a sample of 97 physical education students in the Faculty of Sports Sciences at the Arab American University selected randomly- a stratified sample, where the sample of the study represents approximately 23.5% of the study population of 412 students. Table (1) shows the distribution of study sample members according to gender and study year.

Table (1): Distribution of study sample members according to gender and study year. (N=97).

Independent variables	Levels of variable	frequency	percentage%
Gender	male	59	60.8
	female	38	39.2
	Total	97	%100
Study year	first	25	25.8
	second	19	19.6
	third	33	34
	fourth	20	20.6
	Total	97	%100

### Reliability factor:

To check the reliability factor of the physical condition description scale, the Cronbach Alpha equation was used, with the total reliability factor of physical condition measure of 0.89. The reliability factor values of fitness elements ranged between 0.75-0.82, which are good for the purposes of the study, and table 2 shows this.

Table No (2): Reliability factors for Cronbach alpha scale

No	Elements of physical fitness	Number of phrases	Cronbach alpha
1	Muscle strength	6	0.75
2	Endurance	6	0.78
3	Speed	6	0.76
4	Flexibility	6	0.82
5	Agility	6	0.79
	Total degree of physical condition	30	0.89

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### **Study variables:**

#### a) Independent variables:

- Gender which has two levels: (male, female).
- The study years has four levels: (first, second, third, fourth).

#### b) Dependent variables:

Dependent variables are the degrees of study population responses to the phrases on fitness elements in Mohamed Hassan Allawi (1998)'s physical condition description scale.

The dimensions measured by the scale are:

- Muscle strength: High scores in this dimension indicate excellent muscle strength, strong body, and appearance of muscles in the body
- Endurance: The high grades in this dimension indicate the absence of fatigue after a long physical exertion and the quick return to the normal condition after performing a violent physical effort.
- Speed: High scores in this dimension indicate speed in running, and mastery of movements and sport activities that require speed.
- Flexibility: High scores in this dimension indicate the ability to perform movements that require a high degree of body flexibility and a sense of satisfaction in terms of body flexibility.
- Agility: high scores in this dimension indicate the mastery of movements that require high agility in addition to high ability of changing body positions when performing certain motor skills.

The scale consists of 30 paragraphs or phrases where each of the five dimensions is measured by 6 phrases; half in the direction of the dimension and the other half is in the opposite direction of the dimension. Examinees should respond to scale phrases using a five-degree rating scale (very high, high, intermediate, low, and very low)

### **Statistical processing:**

To answer the study's questions, the Statistical Package for the Social Sciences (SPSS) was used through calculating the following:

- means and standard deviations.

- The independent (T- test) to determine the differences in physical condition degrees according to gender variable.
- One way ANOVA analysis to determine the differences in physical condition degrees according to the study year variable.

## Results of the study

First: The results pertaining to the first question: ‘What is the degree of physical condition of Sciences Faculty students at the Arab American University during the Covid-19 pandemic’?

To answer this question, means and standard deviations were used for each phrase, each physical element, and total degree of physical condition. Table (3) shows the summary of the results on this question. To interpret the results, the study relied on means and five-degree Likert scale as follows: less than 1.80 indicates a very low degree, 1.81-2.60 indicates a low degree, 2.61-3.40 indicates an intermediate degree, 3.41-4.20 indicates a high degree, and above 4.21 indicates a very high degree.

### 1. Muscle strength:

Table 3: means, standard deviations, and degrees of muscle strength for Sports Sciences Faculty students at the Arab American university during the Covid-19 pandemic (n= 97)

No in scale	phrases	Response *average	Standard deviation	degree
1	I feel weakness in some of my muscles	3.38	1.29	intermediate
6	I can carry heavy stuff easily	3.15	1.07	intermediate
11	My body isn't strong enough	3.60	1.23	High
16	Most of my colleagues describe me as physically strong	3.22	1.17	intermediate
21	My body muscles don't appear clearly.	3.27	1.12	intermediate
26	I feel strength in most of my muscles	3.35	1.04	intermediate
Total degree for muscle strength		3.33	0.78	intermediate

- the highest response degree is 5.

The results of table (3) indicate that the degree of muscle strength for students of the Faculty of Sports Sciences at the Arab American University was high for phrase 11 with an average response rate of 3.60, while the degree was intermediate for all the remaining phrases with the

average response ranging from 3.15 to 3.38. The total degree of muscle strength for Sports Sciences faculty students at the Arab American University during the Covid-19 pandemic was intermediate with an average response of 3.33.

## 2. Endurance element:

Table 4: means, standard deviations, and degrees of endurance for Sports Sciences Faculty students at the Arab American university during the Covid-19 pandemic (n= 97)

No in scale	Phrases	Response *average	Standard deviation	degree
2	I can get back to normal quickly after a violent physical effort	3.13	1.11	intermediate
7	I feel tired quickly when I exert physical effort for a long time	3.33	1.14	intermediate
12	I can exert a violent physical effort without stopping to catch my breath	2.77	1.11	intermediate
17	I can't endure continuous physical performance without a long break.	3.12	1.20	intermediate
22	Some of my colleagues describe me as not getting too tired during some sports activities	3.08	1.17	intermediate
27	I need a long time to get my breath back after a violent physical effort	<b>3.06</b>	1.07	intermediate
Total degree for endurance		3.08	0.43	intermediate

the highest response degree is 5.

The results of table (4) indicate that the degree of endurance for students of the Faculty of Sports Sciences at the Arab American University was intermediate for all phrases with average response rate ranges between 2.77-3.33. The total degree of endurance for Sports Sciences faculty students at the Arab American University during the Covid-19 pandemic was intermediate with an average response of 3.08.

### 3. Speed element:

Table 5: means, standard deviations, and degrees of speed for Sports Sciences Faculty students at the Arab American university during the Covid-19 pandemic (n= 97)

No in scale	Phrases	Response *average	Standard deviation	degree
3	Most of my colleagues are faster than me during running	3.38	1.25	intermediate
8	I'm good at movements which require speed	3.46	1.08	High
13	I need to develop my fast-running capacities	3.29	1.12	intermediate
18	I have good abilities in activities that require quick performance.	3.43	1.04	High
23	I can't perform some movements that require speed.	3.37	1.27	intermediate
28	I'm faster than most of my colleagues in running	<b>3.26</b>	1.12	intermediate
Total degree for speed		3.37	0.61	intermediate

the highest response degree is 5.

The results of table (5) indicate that the degree of speed for students of the Faculty of Sports Sciences at the Arab American University was high for 8.18 with an average response of 3.46-3.43 respectively. Whereas all other phrases scored an intermediate degree ranged between 3.26-3.38. The total degree of speed for Sports Sciences faculty students at the Arab American University during the Covid-19 pandemic was intermediate with an average of 3.37

#### 4. Flexibility:

Table 6: means, standard deviations, and degrees of flexibility for Sports Sciences Faculty students at the Arab American university during the Covid-19 pandemic (n= 97)

No in scale	Phrases	Response *average	Standard deviation	degree
4	I can perform movements that require a great degree of body flexibility well	3.30	1.01	intermediate
9	My body flexibility doesn't enable me to perform most of the movements well.	3.31	1.18	intermediate
14	Some of my colleagues describe me as having a good physical flexibility	3.15	1.24	intermediate
19	I feel that my body isn't flexible enough.	3.33	1.12	intermediate
24	I feel good in terms of my body's flexibility.	3.27	1.19	intermediate
29	I can't easily perform movements that require a high degree of body flexibility.	<b>3.29</b>	0.99	intermediate
Total degree for flexibility		3.27	0.82	intermediate

the highest response degree is 5.

The results of table (6) indicate that the degree of flexibility for students of the Faculty of Sports Sciences at the Arab American University was intermediate for all phrases with average response between 3.15 and 3.33. The total degree of flexibility for Sports Sciences faculty students at the Arab American University during the Covid-19 pandemic was intermediate with an average of 3.27.

### 5. Agility element:

Table 7: means, standard deviations, and degrees of agility for Sports Sciences Faculty students at the Arab American university during the Covid-19 pandemic (n= 97)

No in scale	Phrases	Response *average	Standard deviation	degree
5	I can't easily perform movements that require agility	3.40	1.30	intermediate
10	I can easily change my body position when performing some motor skills	3.21	1.21	intermediate
15	I'm weak in performing movements that require agility.	3.55	1.22	High
20	Most of my colleagues describe me as good at movements that require a great degree of agility	3.18	1.13	intermediate
25	I can't easily change my body directions when performing some motor skills.	3.54	1.23	High
30	I can easily perform movements that require agility.	3.24	1.03	intermediate
Total degree for agility		3.35	0.92	intermediate

the highest response degree is (5).

The results of table (7) indicate that the degree of agility for students of the Faculty of Sports Sciences at the Arab American University was high for phrases 15,25 with average response of 3.55 and 3.5) respectively. Whereas all other phrases scored an intermediate degree ranged between 3.18-3.40. The total degree of agility for Sports Sciences faculty students at the Arab American University, in light of the Covid-19 pandemic was intermediate with an average response of 3.35.

## 6. Summary of the results of the first question:

Table (8) means, standard deviations, ranking of fitness elements and the overall degree of physical condition for Sports Sciences faculty students at the Arab American University during the Covid-19 pandemic (n= 97)

no	Elements of physical fitness	Response *average	Standard deviation	Degree	ranking
1	Muscle strength	3.33	0.78	intermediate	3
2	Endurance	3.08	0.43	intermediate	5
3	Speed	3.37	0.61	intermediate	1
4	Flexibility	3.27	0.82	intermediate	4
5	Agility	3.35	0.92	intermediate	2
Total degree for physical condition		3.28	0.58	intermediate	

the highest response degree is (5).

The results in table (8) indicate that the overall degree of physical condition of the Sports Sciences faculty students at the Arab American University during the Covid-19 pandemic was intermediate with an average response rate of 3.28. Degrees were intermediate for all fitness elements with response averages between 3.08-3.37, whereas, 'speed' scored the highest response average of 3.37, and 'endurance' scored the lowest response average of 3.08.

Researchers attributed the highest rank scored by the 'speed element' to the fact that speed is one of the basic elements of fitness which is associated with other fitness elements. It is the basis for endurance, flexibility and agility. This fact was pointed out by Habil(1993, P82), who argued that speed is known as the ability of a person to achieve work in the least possible time. Speed depends on the safety of the nervous system, muscle fibers and genetic factors. Since the overall degree of physical condition was intermediate, the element of speed was affected the most compared to the rest of the elements, as a result of suspension of practical courses due to closure because of the COVID-19 pandemic.

The researchers attribute occupying the fifth place by 'endurance' to the lack of fitness for Sport Sciences Faculty students due to the irregular practical classes as a result of the COVID-19 pandemic, which negatively affected the level of their performance. Mukhtar (1988, 64) confirmed this point arguing that endurance is the ability of the body to resist fatigue when performing a strong effort for a long time. For Khirbat, (1995. p. 31) endurance is the ability to achieve significant results in strength over a long period without apparent fatigue.

**Second: The results pertaining to the second question:** ‘Are there any statistically significant differences in the degree of physical condition of students of the Faculty of Sports Sciences at the Arab American University during the Covid-19 pandemic which are attributed to the gender variable?’

To answer the question, a T test was applied on two independent groups whose results are shown in the following table.

Table 9: results of the T-test, of two independent groups, for significance differences in the degree of physical condition for Sports Sciences faculty students at the Arab American University under the Covid-19 pandemic due to the gender variable (n= 97).

Gender Physical fitness elements	Male N=59		Female N=38		T value	*Level of significance
	mean	deviation	mean	deviation		
Muscle strength	3.23	0.86	3.47	0.61	1.489-	0.140
Endurance	3.12	0.43	3.03	0.42	0.992	0.324
Speed	3.32	0.65	3.43	0.53	0.888-	0.378
Flexibility	3.14	0.91	3.48	0.58	2.041-	*0.044
Agility	3.15	0.95	3.65	0.77	2.729-	*0.008
Total degree of physical condition	3.19	0.62	3.41	0.46	1.841-	0.069

\* significance level ( $\alpha \leq 0.05$ ) .

The results of table (9) show statistically significant differences at the level of  $\alpha \leq 0.05$  in flexibility and agility for Sports Sciences faculty students at the Arab American University during the Covid-19 pandemic between male students and female students which was in favour of females; however, there are no statistically significant differences between them in the overall degree of physical condition and fitness elements of strength, endurance and speed. The researchers attribute the reason for differences in flexibility and agility to the fact that the muscle mass in female students’ bodies is lower than that in male students’ bodies. This was confirmed by Mufti Hammad 1996, stating that muscle mass is the dominant component of males compared to females; this reduces the motor range of males’ body joints. Thus, flexibility is defined as the ability of a person to perform movements with a large motor range; accordingly, the measure of flexibility is the maximum extent of range or the ability to move. On the other hand, agility is a fitness element that can be acquired through the various and different daily house-hold work done by female students. This point was raised by Salama (2001. p. 200) who stated that agility indicates the ability to perform a dynamic duty characterised by diversity, difference, and multiplicity, accurately, smoothly within sound timing.

**Third: The results of the third question:** ‘Are there any statistically significant differences in the degree of physical condition of students of Sports Sciences faculty at the Arab American University during the Covid-19 pandemic which are attributed to the variable of the study year?’

To answer this question, one way ANOVA analysis was used. results are shown in table (10).

Table (10): Means and standard deviations of physical condition degree for Sports Sciences faculty students at the Arab American University during Covid-19 pandemic according to the study year variable (n=97)

Study year Physical fitness elements	First N=25		second N=19		Third N=33		fourth N=20	
	mean	deviation	mean	deviation	mean	deviation	mean	deviation
Muscle strength	3.13	0.66	3.14	0.72	3.62	0.87	3.25	0.67
Endurance	3.12	0.44	3.17	0.30	3.04	0.44	3.01	0.48
Speed	3.30	0.48	3.49	0.69	3.46	0.63	3.15	0.59
Flexibility	3.22	0.63	3.21	0.96	3.40	0.92	3.17	0.69
Agility	3.23	0.60	3.21	1.07	3.61	0.98	3.22	0.94
Total degree	3.20	0.33	3.24	0.63	3.44	0.69	3.16	0.54

Table 11: Results of ANOVA analysis for significance differences in the degree of physical condition of Sports Sciences Faculty students at the Arab American University during the Covid-19 pandemic depending on the variable of the school year (n= 97)

Aspects	Source of variance	Sum of deviation square	Degrees of freedom	Mean square value	(f) Value	* Level of significance
Muscle strength	Between groups	4.613	3	1.538	2.677	0.052
	Within groups	53.413	93	0.574		
	Total	58.025	96			
Endurance	Between groups	0.368	3	0.123	0.668	0.574
	Within groups	17.083	93	0.184		
	Total	17.451	96			
Speed	Between groups	1.624	3	0.541	1.487	0.223
	Within groups	33.856	93	0.364		
	Total	35.480	96			
Flexibility	Between groups	0.931	3	0.310	0.157	0.713
	Within groups	63.127	93	0.679		
	Total	64.058	96			
Agility	Between groups	3.305	3	1.102	1.323	0.272
	Within groups	76.632	93	0.833		
	Total	79.937	96			
Total degree of physical condition	Between groups	1.291	3	0.430	1.302	0.279
	Within groups	30.405	93	0.330		
	Total	31.696	96			

\* significance level ( $\alpha \leq 0.05$ )

The results of table (11) show that there are no statistically significant differences at the level of significance ( $\alpha \leq 0.05$ ) in the total degree of physical condition and all fitness elements for Sports Sciences faculty students at the Arab American University during the Covid-19 pandemic due to the variable of the study year.

The researchers attribute this to closure which was imposed on educational institutions including the Arab American university after COVID-19 swept over most of the Palestinian areas, accordingly, there was a transition from face-to-face learning into e-learning. This closure led to the suspension of the Faculty of Sports Sciences students' practical sessions for the various levels of study, resulting in regression in their physical and skill performance. The level of physical condition is linked to the type and nature of the specialised activity performed, whereas the level of skill in any sport activity is linked to the development of the specific physical and functional requirements of the activity.

### **Conclusions**

1. The overall degree of physical condition including muscle strength, speed, endurance, flexibility, agility, scored an intermediate level among students of the Faculty of Sports Sciences.
2. There are statistically significant differences in flexibility and agility among students of the Faculty of Sports Sciences at the Arab American University in favor of female students.
3. There are no statistically significant differences in muscle strength, endurance, and speed among students of the Faculty of Sports Sciences at the Arab American University
4. There are no statistically significant differences in the total degree of physical condition and for all the fitness elements among the students of the Faculty of Sports Sciences in the Arab American University due to the study year variable.

### **Recommendations**

1. Conducting a regular physical evaluation for sports science faculty students to reveal their real level of fitness.
2. Teachers should acquaint their students with their physical condition in order to improve their physical and skill performance.

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