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The relationship of some physical measurements with the Repeated Sprint Ability (RSA) in soccer players U19.

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Abstract:

This research aims to find out the relationship between some anthropometric measurements andtheRepeated Sprint Ability (RSA) for soccer players U19, where the researchers used the descriptive method in the correlational method for its suitability to research. We searched on a sample of 19 players and they were selected by the intentional method, and anthropometric measurements (measuring height, weight, thigh circumference, leg length) and the RSA test (06 × [2 × 20 meters] + 20 "rest) were applied as tools. For research, the statistical treatment was done using the Spss program, and the results revealed that there is a correlationbetween the selected anthropometric measurements and theRepeated Sprint Ability (RSA).

Keywords: anthropometric measurements ;Repeated Sprint Ability (RSA) ؛ football.

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Introductionand problematic of the research:

The great competition in the field of sports is a definitive proof of the new dimension that sport has taken in our time. And we can't mention the term sport without mentioning soccer that has recently gone from just a game in which two teams compete into an industry with all the meaning of the word, Today, organized sports training plays a major role in the development of all aspects, especially young players, who are the building blocks of their physiological, anthropometric and psychological genes that can be used, developed and brought to the sport's top(Hamzawi & And Others, 2021, p. 461).

And given the interest of science in sports and the pursuit of higher levels in the sports field scientists and experts in this field worked to study everything related to achievement and improve it. The science of biomechanics, measurement, evaluation and other sciences related to the sports field had an impact in determining the performance requirements for any sport in terms of physical capabilities, skills and physical measurements, which are considered among the priorities that lead the athlete to a high level of physical fitness because the athlete who does not have the appropriate physical measurements and specifications for the type of activity he practices He will be exposed to biomechanical, physiological and movement problems; It forces him to exert more effort and time than the player who has the measurements that qualify him to achieve the required achievement(Suleiman Hassan, 1983, p. 33).

Accordingly, the football game is one of the widespread team games due to the ease of its practice. Reaching high levels in this game requires a lot of time and effort by specialists and coaches to choose players who have anthropometric physical characteristics as well as talent(Zaki, 2004, p. 24); She points out(Mimouni, 2005, p. 30)That morphological data can control the process of preparing athletes to higher levels, since the majority of athletes cannot reach the pinnacle of excellence even by using the finest sports technologies.So The interest in anthropometric measurements related to the physical characteristics of soccer players is an issue of great importance, as the structural composition of the body plays amajor and essential role in sports performance, and the importance of physical measurements appears in that it is often used as a basis for success or failure in a specific activity, and this is confirmed by the studies of Koller et al. 1997, Bouchard et al. 1993, and Niktiuk 1989, where their length and shortness affect the mechanical specifications of skillful performance, and this was indicated by each of according (Sheikh & Derbal, 2019, p. 433), Given the nature of football, the player must carry out many different movements during matches, and many of these movements are of a quick and sudden nature, as well as the struggle to take possession of the Ball from the opponent, and the ability to repeat the fast running (Repeated Sprint Ability) is one of these characteristics that contribute In resolving victory and success in interviews, which have an effective reflexive effect on the development of motor and skill performance to a large extent, it is also worth noting that the maximum aerobic speed (MAS) is considered the physiological cradle that allows the player to perform other movements such as changing direction and running fast (sprint), for the role The main goal of the latter is in the football match, where the (Sprint) represents 01 to 11% of the total distance traveled, depending on the distance covered(Dellal, 2008, p. 41); In addition to that(Gregory, 2011, p. 53); Count 10% of the sprint back and forth, He also added in this context. And (Dellal, 2008, p. 57); Some statistics about the frequency of quick

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running movements during the match, according to the playing position, are as follows: central defender 18 quick runs, average field 24 quick runs, attacker 27 quick runs, fullback 31 quick runs. This makes it imperative that the team that wins is the one that can switch from defensive positions to offensive ones and vice versa, as quickly as possible and in the least possible time. This links the physiological and anthropometric measurements as a complementary factor to the rest of the characteristics that the player possesses. Where it should be noted that each type of activity has special physical indicators and determinants that must be characterized by the athlete in order to be suitable for the requirements of that sports specialization, and just as within the same specialization there are special physical characteristics The body measurements of the attacking player are different from those of the defending player, so they require certain physical patterns that are appropriate for each position of the game, and therefore each position has functional and physical requirements, which are considered among the distinctive duties of the players compared to others. In general, high-level football players, and this is shown by watching competitions such as the World Championships, where we see that the physical and functional level of the players is very high, and this level is evident in continuing and continuing to make efforts until the end of the match, and this work and level is not just a coincidence, but rather achieved thanks to continuing Training and relying on scientific foundations, such as relying on the evaluation and measurement process to know the degree of development or otherwise(Aurélien & Bolliet, 2012), From this standpoint, we conclude that the morpho-functional indicators have a major role in influencing the training and development of football. By tracking and observing the performance of the players in conjunction with the competition and training, of course, we find the competition full of successive situations of running quickly and repeatedly, as the performance of the players for a number of offensive and defensive shifts lacked dynamic vitality and speed in performance, and this shows the players' limitations in repeating fast running, especially in pairing between attacks. Counter and defensive coverage, and thus their inability to respond optimally to the demands of the game by providing a high level of fast running in particular which is often considered as determining the outcome of the match Also, physical measurements are a subject that is lacking in most sports, especially football, which the coach must take into account during his evaluation and selection of players, and thus initiates our imagination to study the relationship of the physical index with the Repeated Sprint Ability(RSA) and after examining the theoretical background and cognitive theories that are also touched upon For such research problems, If there is a significant correlation between the two variables of the research, and based on what was previously mentioned, we ask the general question of the research, which is as follows: Is there a correlation between some anthropometric measurements of the Repeated Sprint Ability (RSA) of football players under 19 year?

Based on the aforementioned theories, we aim to ask the following partial questions:

- Is there a statistically significant correlation between height index and the Repeated Sprint Ability (RSA) for U19 soccer players?
- Is there a statistically significant correlation between weight index and the Repeated Sprint Ability (RSA) for U19 soccer players?
- Is there a correlation between some lower extremity indicators (thigh circumference, leg length) and Repeated Sprint Ability (RSA) for U19 soccer players?

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1.Hypotheses of the research:

1.1 The general hypothesis of the research: There is a correlation between some anthropometric measurements and the Repeated Sprint Ability (RSA) in soccer players under 19 years old.

1.2 Partial hypotheses:

- There is a statistically significant correlation between the height index and theRepeated Sprint Ability(RSA) for soccer players under 19 years old.
- There is a statistically significant correlation between the weight index and the Repeated Sprint Ability (RSA) for soccer players under 19 years old.
- There is a correlation between some indicators of the lower extremities (thigh circumference, leg length) and the Repeated Sprint Ability(RSA) in soccer players under 19 years old.

2.Aim of the research: Our research aims to:

- To identify the nature of the relationship between the height index and the Repeated Sprint Ability.
- To identify the nature of the relationship between the weight index and the Repeated Sprint Ability.
- To identify the nature of the relationship between some selected lower extremity indices andthe Repeated Sprint Abilityfor U19 soccer players.

3.Importance of the research:

- Knowing the importance of anthropometric measurements and their relationship to Repeated Sprint Ability and their role in achieving the correlation between the exerted effort and the motor output.
- Ensure the nature of the relationship between some anthropometric measurements and the Repeated Sprint Ability.
- Demonstrate to coaches the role of anthropometric measurements in measuring and predicting sports performance.

4.Defining search concepts and terms:

4.1 body measurements: knows her(Al-Janebi , 2019, p. 155); It is a set of measurements that represent different body dimensions (body measurements totals), which have a clear impact in the field of specialized sports activities.

***Procedurally:** It is a science concerned with the study of human body measurements, which include length, weight, circumferences, widths, and different body widths, and the exploitation of the results of these measurements in classification and comparison. For changes in the body in terms of external appearance.

4.2 The Repeated Sprint Ability (RSA): According to both (Almansda) and (Comtois), it is the player's preparations to maintain 90-100% of the peak speed obtained when running a single fast, by performing successive accelerations (rapid running) interspersed with short rest breaks(Almansba, 2013).

***Procedurally:** It is the maximum level of readiness in which the player is able to perform a quick run repetition of repeated numbers of times.

5.Previous and similar studies:

5.1 study(Dardouri Wajdi & And Others, 2014)Titled: **The relationship between repeated sprint performance and aerobic and anaerobic fitness**;This study aimed firstlyto examine

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the relationship between sprint performance indicators, anaerobic speed reserve (ASR), aerobic and anaerobic fitness, and secondly to determine the best predictor of sprinting ability among these parameters. The study was conducted on a sample of 29 players. The 30-meter sprint test was used. Where we calculated the maximum anaerobic velocity. Vertical and horizontal jumps, multi-stage 20m shuttle run test, and repeated sprint test (10 x 15m shuttle run). ASR was calculated as the difference between the MAS reached in the blood lactate sampling performed 3 min after the RSA protocol. There was no significant association between repeated sprinting. Significant associations were found between blood lactate concentration, The analyzes showed that ASR was the only significant predictor of TT and PT, explaining 47% and 50% of the covariance, respectively. Our findings are of particular interest to coaches and fitness instructors in order to predict sprint performance frequency using ASR that can easily identify the upper performance limits supported by the aerobic and anaerobic capacity of an athlete participating in multi-race team sports.

5.2study(Franck Brocherie & And Others, 2014)Titled:**Relationships between anthropometric measures and athletic performance, with special reference to repeated-sprint ability, in the Qatar national soccer team;** The aim of this study was to identify potential relationships between anthropometric parameters and athletic performance with special consideration for sprint ability (RSA). 16 players from the Qatar male national football team conducted a series of physical and physical tests including counter jump without (CMJ) and with free arms (CMJ), 20m sprint, RSA (6 x 35m with 10 seconds rest) and test field, Significant relationships occurred between the muscle-to-bone ratio and multiple regression analyzes indicated that mid-thigh muscle cross-sectional area, fat index, maximum sprinting speed and CMJ were the strongest predictors. They found that in the Qatar National Football Team, players' traits related to strength and RSA were associated with higher muscular appearance and lower obesity. This supports the importance of explosive power to soccer players and the greater importance of neuromuscular traits that define RSA.

Applied side:

1.The methodological methods used:

1.1 Exploratory Study: The two researchers conducted the exploratory experiment by applying selected anthropometric measurements and the (RSA) test on 06 players who were outside the main sample.

1.2The research Approach: According to the research problem and its objectives, the descriptive approach was used in the manner of correlations due to its suitability to the nature of this research; Correlational studies are used to determine to what extent changes in one factor agree with changes in another factor(Ben Youssef & Abbach , 2022, p. 303).

1.3 Fields of the research:

1.3.1 Space field: The municipal stadium of the Ogla 5 of August.

1.3.2 Human field: Najm Al-Ogla Football Club players for under 19.

1.3.3 Time field: The study was conducted during the months of May and June 2022.

1.4 Research community and sample : The research community consists of soccer players under 19 years old for the clubs of the Second Regional League, Annaba ; The players of Najm Al-Ogla Football Club for less than 19 years were selected as a sample for the study in a deliberate manner, and they numbered 25 players.

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Table 01 : Characterization of the study sample

Variants	Unit Measurement	SMA	SD	The Mediator	Coefficient The twist
Height	Cm	175.23	0.49	175	2.16
Weight	Kg	62.34	6.73	62.00	1.11
Age	Number	18.20	0.57	18.00	0.84
Age of training	Number	4.16	0.81	4.00	2.21

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It is clear from Table 01 that the values of the twist coefficient are confined between (3+) and (3-), and this indicates that the research sample is homogeneous.

1.5 search tools: In order to obtain data from the research sample, we used many means, which were represented in some devices and tools, in addition to the information and data registration formAmong the most important anthropometric measurements that were used in our research are:body weight; Height; Thigh circumference; leg length(Mostafa & Salah, 2009, pp. 90-93)**.**

*** Test Repeated Sprint Ability:**

- Its goal: to calculate the sprint repeat index. / Ability to change direction. / Fatigue index.

- Experimental protocol: warm up /The starting line is 0.5 meters from the starting line. Implementation of a standard preliminary test, round-trip speed test, as follows: 01 (20 meters round trip + 20 meters return) + 20" The rest of the result of this initial test is standardized during the RSA 6×40m test. After completing the standard speed test*, the athlete rests for 5 minutes. The tester runs at maximum speed for a distance of 20 meters, touches the line with his foot, then returns to the starting line as quickly as possible back and forth (change direction 180°), then takes a negative rest for 20 seconds, then repeats it 06 times, meaning 6 times 40 meters. Where the speed of movement executed is calculated in seconds and also parts of a hundred (1/100), that is, a timer or a Cellules photoelectriques device must be provided in order to properly adjust the running speed and increase the accuracy rate(Tiago Cetolin & And Others, 2018)**.**

***Note:** If the time for the first stage - back and forth of the ability test, repeat the sprint 06 (2 x 20 meters) + 20 seconds' rest. 2.5% greater than the time recorded in the standard initial test, the tester stops performing the test, and the return is after taking 05 minutes of rest(Rampinini Ermanno & And Others, 2007).

1.6 The scientific foundations of the test:

1.6.1 Stability: Stability is measured statistically by calculating the correlation coefficient between the scores obtained by individuals the first time and the results of the test the second time.The researchers applied physical measurements and a physical test to a sample of 06 players, by conducting the first measurement on 05/07/2022; And return it on 05/16/2022 on the same sample and under the same conditions. Which was later excluded from the main study sample.

1.6.2Validity: In order to ensure the validity of the measurements and the test, the researchers calculated the self-truth calculating the square root of the stability coefficient.

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Table 02 : Shows the scientific parameters of the physical test and the measurements used in the research.

Measurement / Test	Stability coefficient	Self-Validity	Sample volume	DF N-1	Significance level
Test RSA	0.834	0.913	06	05	0.05
height indicator	0.903	0.950			
Weight indicator	0.914	0.956			
Thigh circumference	0.934	0.966			
Leg length	0.942	0.970			

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1.7 Statistical processing techniques used in the research: The following statistical methods were used: Depending on the statistical package program SPSS version 23, by calculating: Pearson correlation coefficient; SMA; and standard deviation, torsion modulus.

2. Analyzing and discussing the results:

2.1Presentation and analysis of results:

2.1.1 Display the values of the mean and standard deviation of the RSA test and the anthropometric measurements (height ; weight ; thigh circumference ; leg length).

Table 03 : Shows the values of the mean and standard deviation of the RSA test and the anthropometric measurements (height ; weight ; thigh circumference ; leg length)

Test / Measurement	SMA	Standard deviation
RSA Test	5.42	0.26
height indicator	18.20	0.57
Weight indicator	62.34	6.73
Thigh circumference	0.4311	1.753
Leg length	0.783	3.298

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2.1.2 Presentation and analysis of the results of the first hypothesis : There is a statistically significant correlation between height and the Repeated sprint Ability of U19 soccer players.

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Table 04 : shows the correlational statistical results of the height and repeat sprint ability (RSA) test.

Test Measurement	rCalculated	Sig Significance	Level of significance	Sample volume	df n-2
Height indicator	-0.401	0.002	0.05	19	17
RSA Test					

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Through the above table, it is clear that the value of (r) calculated between the measurement of the height index and the test of the Repeated Sprint Ability was (-0.401) at the level of significance (0.05) (α) and at the degree of freedom (df) (17), and this means that there is Medium inverse correlation This is confirmed by the significance index (Sig) (0.002), which is less than the significance level 0.05, and from it we conclude that there is a significant inverse correlation between height and the Repeated Sprint Ability (RSA).

2.1.3 Presentation and analysis of the results of the second hypothesis : There is a statistically significant correlation between the weight index and the Repeated sprint Ability for U19 soccer players.

Table 05 : Correlational statistical results for weight and repeat sprint ability (RSA) test.

Test Measurement	rCalculated	Sig Significance	Level of significance	Sample volume	df n-2
Weight indicator	0.317	0.003	0.05	19	17
RSA Test					

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Through Table No. 05: It is clear that the value of (r) calculated between measuring the weight index and testing the Repeated Sprint Ability was (0.317) at the level of significance (0.05) (α) and at the degree of freedom (df) (17), and from it there is a direct correlation Average This confirms the significance index (Sig) (0.003), which is less than the significance level 0.05, and from it we conclude that there is a significant correlation between the weight index and the characteristic of the Repeated Sprint Ability (RSA).

2.1.4Presentation and analysis of the results of the third hypothesis : There is a statistically significant correlation between some indicators of the lower extremities and the Repeated Sprint Ability U19.

Table 06 : Correlational statistical results of thigh circumference and sprint repeat ability (RSA) test.

Test Measurement	r Calculated	Sig Significance	Level of significance	Sample volume	df n-2
the thigh circumference index	0.414	0.002	0.05	19	17
RSA Test					

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Through Table No. 06: It is clear that the value of (r) calculated between the measurement of the thigh circumference index and the test of the Repeated Sprint Ability was (0.414) at the level of significance (0.05) (α) and at the degree of freedom (df) (17), and from it there is a correlation Average direct This is confirmed by the (Sig) index (0.002), which is less than the level of 0.05, and from it we conclude that there is a significant correlation between the thigh circumference index and the characteristic of the Repeated Sprint Ability (RSA).

Table : 07shows the correlative statistical results of measuring leg length andRepeated Sprint Ability test.

Test Measurement	rCalculated	Sig Significance	Level of significance	Sample volume	df n-2
Leg length index	-0.662	0.000	0.05	19	17
RSA Test					

author, 2022, page,09

Through Table No. 07: It is clear that the value of (r) calculated between the measurement of the leg length index and the Repeated Sprint Ability amounted to (-0.662) at the level of significance (0.05) (α) and the degree of freedom (df) (17), and from it there is a correlation Inverse, and this confirms the significance index (Sig) (0.000), which is less than the significance level 0.05, and from it we conclude that there is a significant correlation between the leg length index and the characteristic of the Repeated Sprint Ability (RSA).

3. Discussing the results under the hypotheses:

3.1 First hypothesis: There is a correlation between the height indicator and the repeated sprint ability, and in order to confirm the validity of this hypothesis and in the light of the results that were presented and through statistical treatment and calculating the correlation coefficient estimated at -0.401, it means that there is a medium inverse correlation between the measurement of height and the (RSA) test (06 x [2 x 20 meters] + 20" rest), that is, the greater the height, the less time achieved in the RSA test, and accordingly the hypothesis that indicates that there is a correlation between the height index and the repeated sprintabilityfor soccer players under 19 years old have come true.On this basis, the researchers indicate that the size, shape, and physical build of the athlete represents the decisive factor for achievement and athletic excellence, and based on some differences between the players in the characteristic of frequent fast running, especially the difference in the way of running, which affects the repetition of high-speed running groups through the compatibility between the length step and step frequency where it refers(Hussein & Shaker, 2000); The relationship between the length and frequency of the step is one of the important foundations on which the athlete depends to gain his speed, and it is not permissible to increase one of them at the expense of the other, which results in a decrease in the speed of the sprint. Thus, the stride length is obtained by increasing the length of the body. It is also not hidden from us when we link fast running to heredity, as he adds that 65% of athletic achievement (speed) depends on the genetic factor(Khawaja & Al-Bashtawy , 2010, p. 345), In order not to neglect the characteristic of speed, we point out that in order to develop the repeated sprint ability, the characteristic of self-speed (in its raw form) must be developed, given that it helps to recruit the largest number of muscle fibers at the same time, and to create an intramuscular compatibility between these muscle fibers As for the repetition of this speed, it is related to

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the efficiency of the cells in reshaping the energy reservoir in the shortest possible time(Vienot & Hisler, 2015); Thus, the development of the repeated sprint ability is linked to the development of speed at its maximum range (Speed peak), and this is all due to the training methods, according to the researchers, and this is an influential factor that cannot be ignored due to its effectiveness in the field. Based on these anthropometric indicators (height, weight... it is possible to predict the results that the player will achieve).

3.2 The second hypothesis: There is a correlation between the weight index andthe repeated sprint ability, and in order to confirm the validity of this hypothesis and in the light of the results that were presented and through statistical treatment and calculating the correlation coefficient estimated at 0.317, which means that there is a moderate direct correlation between weight measurement and the (RSA) test (06 x [2 x 20 meters] + 20" rest), that is, the greater the weight, the more the recorded time, and the hypothesis that indicates the existence of a correlation between the weight index and the characteristic of the repeated sprint ability for football players under 19 years of agehas been verified. The researchers point out that the individual's running speed increases significantly with puberty, reaching its maximum, thanks to the development of the muscular system in conjunction with a certain level of Vo2max, as physical measurements are among the individual characteristics of the player that are related to achieving a high athletic level. We should not fail to note that fast running is related to body weight, muscle viscosity, and formative characteristics such as limb length and joint flexibility, according to(Qassem & Kmash , 2012, p. 81), In line with what has been mentioned, the player who is characterized by fast fibers is better than the player who has slow fibers, regardless of body weight, unless the body weight is excessive, as it inevitably impedes movement. The idea of the foot depends on aerobic and anaerobic work, and therefore we may find players in the same team. They are characterized by speed and others are characterized by endurance.Also, players who have a relative increase in weight lack the ability to repeat the speed, due to the excess weight due to the accumulation of fat in the body, and this represents a burden that requires the player to have great strength to move it, and the fatty tissues inside the muscles do not contract, but rather cause internal friction in the muscle and impede contraction. Muscular and for running at a fast kinetic speed, players with a medium body who are characterized by a thin muscular pattern are preferred based on the body mass index(Zaki, 2004), From another angle, of course, where we find that training with the aim of improving aerobic continuity occurs what is called the phenomenon of turning white muscle fibers that improve speed into red muscle fibers for continuity work, and this hinders the development of therepeated sprint ability.Note that football requires a lot of acceleration, more fast running, and more explosive movements.We also point out in this regard that the repeated sprint ability is affected by anaerobic metabolism According (Spencer & And Others, 2005), as well as neuromuscular components(Girard & And others , 2011), What is worth mentioning is that what explains the relationship between the repetition of fast running and weight is that the lower the weight, the greater the ability to repeat maximum or close to maximum speeds, and this depends on(Damian & And Others, 2014), Where the nature of the bodies and the percentage of fat and muscles differ according to the type of specialized sports activity. The nature of the sports performance of some sports activities may require an increase in body mass, including muscle and fat tissue. These differences in body composition are due to individual differences between individuals in height, weight, body style, bone lengths and distribution. Body weight according(Casuca & Dalouche, 2010).

3.3 The third hypothesis:There is a correlation between some indicators of the lower extremities (thigh circumference; leg length) andthe repeated sprint ability, and in order to confirm the validity of this hypothesis and in the light of the results that were presented and through statistical treatment and calculating the correlation coefficient between the thigh circumference index and the RSA estimated at 0.414 It indicates a positive relationship

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between thigh circumference and RSA, that is, the greater the thigh circumference, the longer the time; between the leg length index and the RSA of -0.662; This means that there is an inverse correlation between the leg length measurement and the RSA, i.e. the larger the running step, the lower the achieved time.The researchers indicate that the percentage of muscle mass in the thigh negatively affects the time achieved, and the researchers attribute this to the fact that the longest muscle fiber can shorten during its contraction twice as much as the shortest length muscle fiber can in the same period of time, and this means that muscles with long fibers are characterized by the speed of muscle contraction. It is larger than the muscle with short fibers, and this is confirmed by it(Al-Basati, 2001); In the same context, with regard to the leg length index, the researchers also mention that the effect of leg length is direct on fast running (RSA);And while another confirms(Ibrahim , 2014)That physical measurements are of great importance as a necessary indicator to know the extent of their relationship to physical characteristics, so body measurements and indicators affect the success and efficiency of performance. In addition, speed is associated with activities with a rapid motor frequency along the stride, as in the sprint.He adds(Abul Ela & Sayed , 2003); further where the length of the step is related to the length and strength of the leg. It is known that the length of the leg is part of the lower limb. Study also highlights(Franck Brocherie & And Others, 2014). that qualified anthropometric indicators of muscle percentage or lack of fat would be useful for maximizing the football player's RSA. It should also be noted that the method of training also has a significant impact on the characteristic of frequent rapid running. For example, when we find the team training with intermittent strength or plyometric training, this reflects positively on the thigh muscles, which leads to improving their strength, and this is what helps to develop the characteristic of fast running, and this is what Study agrees(Schmitz, 2013), Accordingly, it can be concluded that the training works to repeat groups of running at a maximum speed or close to the maximum. We also mention with regard to the leg and foot and their relationship to the step frequency, where we find that "the frequency and length of the steps plays a big role for the player as it gives the final result of the player's acceleration. (Hussein & Shaker, 2000)From another angle, we find that an increase in the length of the leg and foot leads to an increase in the absorption of shocks resulting from friction with the ground during running, and thus reflects positively on the player's speed. There is no doubt that the availability of these indicators and characteristics of the players, as it can give them a greater opportunity to absorb the skills of the game, and become one of the pillars that must be available to reach the players to the high level.

4. Conclusions and suggestions: After analyzing the results of the research and enriching the study cognitively and theoretically, and conducting physical measurements as well as the (RSA) test (06 x [2 x 20 meters] + 20" rest) to measure therepeated sprint ability, we conclude that there is an inverse correlation between the height index and the frequent fast run for the players Football players under 19 years old, meaning that the greater the height, the shorter the performance time, and also there is a direct correlation between weight and the frequency of fast running for football players under 19 years old, meaning that the higher the weight, the longer the player’s recording time with it.In addition to that there is a correlation Between some indicators of the lower extremities (thigh circumference; leg length) and the repeated sprint ability. And based on our study of the subject of the research and previous studies and the analysis of the results of our study, we refer to some suggestions and topics that we think could be topics for future studies, which we summarize in the following points:

- Carrying out other similar research on better-level teams and in other disciplines.
- Diversifying the conduct of other physical indicators and measurements, studying them and linking them to other physical characteristics as well.
- Considering the role of the training programs in improving the physical measurements, which showed a correlation with the repeated sprint ability.

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- Be guided by physical measurements that have a significant correlation with physical characteristics.
- Interest in anthropometric measurements due to its role in knowing the physical development and morphological growth of players.
- Directing and empowering the coaches and supervisors of the teams on how to conduct
  the physical measurements of the players.

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