



## The level of flexibility of football players according to the lines of play and the degree of competition for the middle class - category U19

مستوي صفة المرونة لدي لاعبي كرة القدم حسب الخطوط ودرجة  
المنافسة لفئة الأواسط - صنف U19

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### Abstract:

This study aims to identify the level of development of flexibility among football players according to the lines and the degree of competition for the middle class - 19 age group -, In order to adopt policies that enhance the positive aspects and correct the negative aspects, It raises the morale of the players, maintains their mental health, develops their physical abilities, develops their skills, and makes changes in their behavior in order to improve their performance.

To achieve this, the researcher used the descriptive analytical method for its relevance to this study, on a random sample of 44 football players from ES Serif Club and Ahly Bordj Bou Arreraj from the first professional division, Amal Barika and Rapid Amal Bordj El Ghadeer from the Inter-ligament division - middle class U-19, who are active in the Algerian championship .

Where physical tests were applied to them: a test of bending the trunk forward from standing, a test of the flexibility of the lower limbs, opening the legs, and a test of the flexibility of the shoulders (vertical measurement). And based on these tests, it was found that there is a difference in the level of flexibility in the football players between the lines and the degree of competition.

In light of the results of the research, the researcher recommends conducting more studies and research in this field, which would increase interest in developing the quality of flexibility, which is one of the elements of physical fitness for football players.

**Keywords:** flexibility, middle class, playing lines, degree of competition.

المخلص : تهدف هذه الدراسة إلى التعرف على مستوى تطوير صفة المرونة لدى لاعبي كرة القدم حسب الخطوط ودرجة المنافسة لفئة الأواسط -صنف 19 سن-، من أجل تبني سياسات من شأنها تعزز النواحي الايجابية وتصحح النواحي السلبية، وترفع الروح المعنوية للاعبين وتحافظ على صحتهم النفسية وتنمية قدراتهم البدنية وتطوير ما لديهم من مهارات ، وإحداث تغييرات في سلوكهم من اجل الارتقاء بأدائهم . ولتحقيق ذلك استخدم الباحث المنهج التجريبي ملائمة لهذه الدراسة، على عينة عشوائية بلغ عددها 44 لاعب كرة قدم لنادي الرياضي وفاق سطيف واهلي برج بوعريج من القسم الأول المحترف وفريق أمل بربكة وأمال سريع برج الغدير من قسم ما بين الربيطات- فئة الأواسط U-19 سنة ، والذين ينشطون في البطولة الجزائرية . حيث طبق عليهم اختبارات بدنية، اختبار ثني الجذع للأمام من الوقوف، واختبار مرونة الأطراف السفلية فتح الرجلين، واختبار مرونة الكتفين (قياس عمودي). وتوصل بناء على هذه الاختبارات الى وجود اختلاف في مستوى صفة المرونة لدى لاعبي كرة القدم بين الخطوط ودرجة المنافسة. وفي ضوء ما أسفرت عنه نتائج البحث يوصى الباحث بإجراء المزيد من الدراسات والبحوث في هذا المجال التي من شأنها زيادة الاهتمام بتطوير الصف ة المرونة التي تعتبر من عناصر اللياقة البدنية للاعب كرة القدم

الكلمات الدالة: المرونة، فئة الأواسط، خطوط اللعب، درجة المنافسة.

## 1. Introduction

The achievement of high sporting results in football is associated with the harmonious development of physical abilities (WEINECK1997,253),and the good direction of the motor performance of the players during the match, Therefore, most football coaches are unanimous in the importance and necessity of a good physical preparation for the player, since the physical aspect is one of the priorities of modern football, which varies according to ages. Which takes into account the scientific data and methodological laws, especially the physiological laws of growth at each age stage, which works on mastering the motor skills of the players and the stability and stability of their performance in addition to a high degree in the development of physical attributes (persistence, strength, speed, agility and flexibility ...etc) ,Which allows dribbling and getting the ball from the opponent and making quick and sudden runs, and with different and varied movements during play as a result of the multiplicity and branching of basic skills, In addition to that, the length of time for the match and the expansion of the



playing space, which requires the player to make a great effort. It has become necessary to reach a high level in the player's possession of great flexibility capabilities due to the individual's ability to reach this level by exploiting the full extent of the body's joints, muscles and ligaments under the movement requirements, It may allow the implementation of technical movements with strength and speed, more harmonious and effective, and increase the aesthetic aspect of the movement and reduce the incidence of injuries. This has been confirmed by scholars and training experts that the development of flexibility has a direct and fundamental impact on the degree of development of all components of comprehensive physical fitness as the main pillar of motor ability (Sergei Polevsky 2009, p96) , Whereas (BATTE 1996,14) says that individual personalities in football are always important and give a contribution during the competition between the two teams . Since our study is dedicated to the U19 category, as it is a preparatory stage for the senior category, which is a preferred stage to test the player's flexibility capabilities because at this stage it is complete, Then Trying to attract coaches and those interested in this problem because it is a very important element for study and attention on the part of those in charge of sports, if we really want to train athletes and aspire to achieve high results.

From this, the researcher in this study asks, does the level of development of flexibility trait in football players differ according to the lines and the degree of competition for the middle class - class U19? , And to what extent is it possible to know this trait to expect the player's success in good performance?

## 2. Methods

The researcher used the experimental method in this study.

2.1. The study sample: The study sample was randomly selected from the Algerian professional football league teams and in the inter-league division., It consists of 44 players for the middle category of the team of Ahli Bordj Bou Arreridj and ES Setif, who are active in the first national professional division, and Rapid Amal Bordj El Ghadeer and Amal Barika, activists in the inter-league division. Where each team contains 11 players who play in an official, regular and continuous capacity, because it has been proven that the players



who play a greater number of matches have higher physical qualifications than those of the Substitution players, and therefore the results of the tests are closer to objective.

## 2.2 Research sample characteristics:

Table (01) shows the distribution of the individuals of the study sample members.

N	study sample	de championnat	Number of Players
	Bordj Bou Arreridj	first national professional division	11
02	ES Setif	first national professional division	11
03	Rapid Amal Bordj Ghadir	inter-league division	11
04	Amal Barika	inter-league division	11
Sample total			44

## 2.3 The Study Tool:

To measure the flexibility of the middle class, we used the following physical tests :

1- **Forward stump flexion test from standing:** (Muwafaq Asaad Mahmoud, 2007,39)

**The goal of the test:** Measurement of the flexibility of the spine by bending the trunk forward from standing .

**Tools:** Seat without armrest, height 50 cm, Inflexible ruler divided from zero to one hundred on the seat vertically, Where the number 50 is parallel to the surface of the ruler, and the number one hundred is parallel to the bottom edge of the seat, Wooden pointer moving on the surface of the ruler showing the test of bending the trunk forward from standing .

**The method of conducting the test:** The player stands on the bench, feet together, and toes fixed to the edge of the bench, and knees extended. The player bends his torso forward and down so that he pushes the pointer with his fingers as far as possible, and it is fixed at the last distance it reached for a period of 02 seconds.

**Recording:** The best distance from two attempts is recorded by the player



## 2- Lower extremity flexibility test - legs open: (weinek 1993,283)

The goal of the test: It is used to assess the flexibility of joint movements at the pelvic level and the elasticity of the adductor muscle (big addict)

**Tools:** Chronometer, tape measure

**The method of conducting the test:** The player is in a standing position with the legs apart (the lower extremities), the hands on the waist, the player is asked to open the legs aside as far as possible.

**Recording:** With a measuring tape, the height between the point of attachment of the two bones at the lower end of the pubis to the player and the floor is measured.

## 3- Shoulders Flexibility Test: (Qassem Hassan Hussein, 664, 1998):

**The goal of the test:** Measuring the flexibility of the upper extremities of the body.

**Tools:** A tape measure or ruler 1 meter long .

**The method of conducting the test:** Measured from a position lying on the ground with arms extended shoulder-width apart, holding the picker upright and lifting off the ground as much as possible, keeping the chin touching the ground.

**Recording:** He scores the best result from two attempts, with one minute rest between each.

## 3. Discussion

**The first axis:** the results of the trait of flexibility in the different lines of play.

Table (02) shows the results of the level of flexibility and the significance of the statistical differences at the different playing lines of ES Setif (first national professional division).

Flexibility players		Spine flexibility	Lower extremity flexibility - legs open	Shoulders Flexibility
Goalkeeper	$\bar{x}$	19.5	48	4.49
	$\Sigma$	0.50	1.41	0.06
Defense	$\bar{x}$	11.125	51.875	4.416



	$\Sigma$	4.99		4.32		1.69	
midfield	$\bar{x}$	10.16		55.33		5.337	
	$\Sigma$	5.39		0.93		1.88	
Attack	$\bar{x}$	6.83		63.16		4.65	
	$\Sigma$	5.43		3.27		0.90	
Goalkeeper-Defense	<b>T</b>	<b>3.29</b>	ttab 3.183	<b>1.50</b>	ttab 3.183	<b>0.07</b>	ttab 3.183
Goalkeeper-midfield	<b>T</b>	<b>2.96</b>	4.302	<b>4.63</b>	4.302	<b>0.78</b>	4.302
Goalkeeper- attack	<b>T</b>	<b>3.99</b>	4.302	<b>6.45</b>	4.302	<b>0.30</b>	4.302
Defense r- midfield	<b>T</b>	<b>0.24</b>	2.57	<b>1.55</b>	2.57	<b>0.67</b>	2.57
Defense - attack	<b>T</b>	<b>1.07</b>	2.57	<b>3.94</b>	2.57	<b>0.23</b>	2.57
midfield – attack	<b>T</b>	<b>0.75</b>	2.776	<b>3.99</b>	2.776	<b>0.44</b>	2.776

$\bar{x}$ : Arithmetic average     $\sigma$ : standard deviation    t : Calculated    ttab : scheduled    Statistical Significance:0.05

Through the table, we notice a difference in the values of the arithmetic averages and standard deviations of the flexibility trait in the various playing lines of the ES Setif team.

**In the level of flexibility between the goalkeeper and the defensive line players, we note the following:**

In the characteristic of the flexibility of the spine between the goalkeeper and the defensive line players, we note that the calculated **t** 3.29, which is greater than the value of the tabulated **t** 3.183, which indicates the existence of significant statistical differences at the level of significance 0.05. This is due to the fact that the goalkeeper has different movement tasks compared to the defensive line players, which makes his flexibility greater than that of the defensive players. As for the property of the flexibility of the lower limbs - opening the legs between the goalkeeper and the defensive line players, we note that the calculated **t** 1.50, which is smaller than the tabulated **t** 3.183 which indicates the existence of non-significant statistical differences at the significance level 0.05. This convergence is due to the players of both lines who have physical qualifications



(flexibility) that allow them to perform the movements. And in the characteristic of the flexibility of the shoulders between the goalkeeper and the defensive line players, we note that the calculated  $t$  is 0.07, which is smaller than the tabulated  $t$  value 3.183, which indicates the existence of non-significant statistical differences at the significance level 0.05. It is clear that there is a great convergence between the players of both lines, which means that they must use the upper limbs in the different periods of play.

**In the level of flexibility between the goalkeeper and the midfield line players, we note the following:**

in the property of the flexibility of the spine between the goalkeeper and the midfield players, we note that the calculated  $t$  2.96, which is a smaller value than the tabulated  $t$  4.302, Which indicates the existence differences of non-significant statistical at the 0.05 level. This is due to the convergence of the flexibility characteristic of the goalkeeper and the midfield players.

As for the property of flexibility of the lower limbs - open legs between the goalkeeper and the midfield players, we note that the calculated  $t$  4.63, which is greater than the tabulated  $t$  4.302, which indicates that there are significant statistical differences at the level of significance 0.05 .This difference is important and can be explained by the fact that midfield players play a variety of roles, and a great activity requires them to have great physical fitness, especially the flexibility of the lower limbs, which helps them improve their skills such as changing direction and movement. And In the characteristic of the flexibility of the shoulders between the goalkeeper and the midfield players, we note that the calculated  $t$  0.78, which is smaller than the tabulated  $t$  4.302, which indicates the existence of non-significant statistical differences at the 0.05 level. It is clear that there is a great convergence between the midfielders and the goalkeeper, which means that they have mobility and flexibility abilities that help them use the upper limbs in different periods of play.



**- In the level of flexibility between the goalkeeper and the attacking line players, we note the following:**

in the property of the flexibility of the spine between the goalkeeper and the attacking line players, we notice that the calculated  $t$  3.99, which is a value smaller than the tabulated  $t$  4.302, which indicates the existence difference of a non-significant statistical at the 0.05 level. This is due to the convergence of the flexibility characteristic of the spine of the goalkeeper and the attacking line players. As For the property of flexibility of the lower limbs - open legs between the goalkeeper and the attacking line players, we note that the calculated  $t$ -value is 6.45, which is greater than the tabulated  $t$ -value of 4.302, which indicates that there are differences significant statistically at the level of significance 0,05 . This difference is important due to the obligation to develop the strength and speed of the lower limbs of the offensive line players with maximum speed, special endurance and strength in performance. And In the shoulder flexibility property between the goalkeeper and the offensive line players, we note that the calculated  $t$  0.30, which is smaller than the scheduled  $t$  4.302, which indicates the existence differences of non-significant at the 0.05 level. It is clear that there is a convergence between the attacking players and the goalkeeper in the flexibility of the upper limbs, which means that they are distinguished by the ability to jump and advance better and balance.

**-In the level of flexibility between the defensive line and the midfield line players, we note the following:**

in the property of the flexibility of the spine between the defensive line and the midfield players, we note that the calculated  $t$  0.24, which is a value smaller than the tabulated  $t$  2.57, which indicates the presence differences of non-significant s at the 0.05 level. This is due to the fact that they have close physical fitness in the flexibility of the spine.

As For the flexibility characteristic of the lower limbs - open legs between the defensive line and the midfield players, we note that the calculated  $t$  1.55, which is smaller than the tabulated  $t$  2.57, which



indicates the presence differences of non-significant at the 0.05 level. This convergence can be explained by the fact that both lines have somewhat similar physical fitness.

And In the shoulder flexibility property between the defensive line and the field midfielders, we note that the calculated  $t$  value is 0.67 which is less than the scheduled  $t$  value 2.57 , which indicates that there are non-significant statistical differences at the 0,05 level. This convergence can be explained by the fact that the football player must develop the flexibility of the upper limbs in order to obtain a good rhythm during the motor achievement.

**- In the level of flexibility between the defensive line and the attacking line players, we note the following:**

we notice in the property of Spine flexibility  $t$  computed 1.07 , which is a value smaller than the value of the tabulated  $t$  2.57 , which indicates the existence differences of non-significant statistical at the level of 0,05 . This difference can be explained in the convergence of the characteristic of flexibility to the distance covered during the match in various forms of movement (walking, running slowly, and running very fast, speed). As for the elasticity characteristic of the lower limbs - open legs between the defensive line and the midfield players, we note that the calculated  $t$  3.94, which is greater than the tabulated  $t$  value of 2.57, which indicates that there are significant differences at the 0.05 level This difference can be explained by the number of kinetic tasks of the defensive players is greater than that of the offensive line. And in the shoulder flexibility property between the defensive line and the offensive line players, we notice that the calculated  $t$  0.23 , which is smaller than the tabulated  $t$  value of 2.57 ,which indicates that there are differences non-significant statistical at the 0.05 level. This convergence in the flexibility of the upper limbs can be explained by the targeted training of these limbs due to its importance during technical performance, especially jumping to hit the ball with the head.



**In the level of flexibility between the midfield line and the attacking line players, we note the following:**

We note in the flexibility property of Spine  $t$  computed 0.75 , which is a value smaller than the value of tabulated  $t$  0.776, which indicates the existence of non-significant differences at the 0.05 level. This difference can be explained by the convergence of the players of both lines enjoying significant physical abilities such as maximum speed, endurance, jumping ability... As For the flexibility characteristic of the lower limbs - open legs between the midfield and the offensive line players, we note that the calculated  $t$  3.99, which is greater than the tabulated  $t$  2.776, which indicates that there are significant differences at the 0.05 level . This difference can be explained by the physical abilities and the number of motor tasks of the attacking and midfield players . And the offensive line players, we notice that the calculated  $t$  value is 0.44 , which is smaller than the tabulated  $t$  2.776 , which indicates that there are differences non-significant statistical at the 0.05 level. This convergence can be explained by the fact that modern football players are distinguished by the characteristic of diversification in the playing positions, and the offensive nature while possessing the ball while adopting the position of a defender while losing the ball.

**Table (03) shows the results of the level of flexibility and the significance of the statistical differences at the different playing lines of Ahly Bordj Bou Arreridj team (first national professional division).**

Flexibility players		Spine flexibility	Lower extremity flexibility - legs open	Shoulders Flexibility
Goalkeeper	$\bar{x}$	18	51	4. 56
	$\sigma$	0.50	1	0.06
Defense	$\bar{x}$	13.125	54.5	4.83
	$\sigma$	3.91	6.72	0. 38
midfield	$\bar{x}$	10.5	43. 83	4. 655
	$\sigma$	6.77	6. 40	0. 53



attack	$\bar{x}$	10		55.98		3.82	
	$\sigma$	6.92		4.98		0.12	
Goalkeeper-Defense	t	<b>2.49</b>	ttab 3.183	<b>1</b>	ttab 3.183	<b>1.42</b>	ttab 3.183
Goalkeeper-midfield	t	<b>1.92</b>	4.302	<b>1.87</b>	4.302	<b>0.37</b>	4.302
Goalkeeper- attack	t	<b>3.29</b>	4.302	<b>1.01</b>	4.302	<b>8.22</b>	4.302
Defense r- midfield	t	<b>0.60</b>	2.57	<b>2.07</b>	2.57	<b>0.50</b>	2.57
Defense - attack	t	<b>0.70</b>	2.57	<b>0.121</b>	2.57	<b>5.05</b>	2.57
midfield - attack	t	<b>0.08</b>	2.776	<b>2.33</b>	2.776	<b>2.78</b>	2.776

$\bar{x}$ : Arithmetic average     $\sigma$ :standard deviation    t :Calculated    ttab : scheduled    Statistical Significance:0.05

from the table, we notice a difference in the values of the arithmetic means and standard deviations of the flexibility trait (Spine flexibility, flexibility of opening the legs, Shoulders Flexibility) in the different playing lines (goalkeeper, defense, midfield, attack) of the Ahly Bourg Bou Arrej team, as well as in the Student test, Which indicates that there are statistically significant differences in some and insignificant in others at the significance level of 0.05 From it, we conclude that there are differences in the flexibility trait and the different playing lines for the Ahly Bourg Bou Arrej team.

**Table (04) shows the results of the level of flexibility and the significance of the statistical differences at the different playing lines of Amal Baraka team (inter-league division).**

Flexibility players		Spine flexibility	Lower extremity flexibility - legs open	Shoulders Flexibility
Goalkeeper	$\bar{x}$	12.5	54.5	4.805
	$\sigma$	0.50	0.50	0.065
Defense	$\bar{x}$	7.875	53.00	4.445
	$\sigma$	1.55	5.17	0.59



midfield	$\bar{x}$	6.83		55.00		2.874	
	$\sigma$	1.91		4.06		0.85	
attack	$\bar{x}$	12.83		52.83		5.34	
	$\sigma$	3.39		6.91		0.18	
Goalkeeper- Defense	t	<b>5.02</b>	ttab 3.183	<b>0.57</b>	ttab 3.183	<b>1.20</b>	ttab 3.183
Goalkeeper- midfield	t	<b>4.725</b>	4.302	<b>0.20</b>	4.302	<b>4.02</b>	4.302
Goalkeeper- attack	t	<b>0.16</b>	4.302	<b>0.47</b>	4.302	<b>4.45</b>	4.302
Defense r- midfield	t	<b>0.57</b>	2.57	<b>0.57</b>	2.57	<b>2.75</b>	2.57
Defense - attack	t	<b>1.11</b>	2.57	<b>0.03</b>	2.57	<b>0.33</b>	2.57
midfield - attack	t	<b>2.67</b>	2.776	<b>0.46</b>	2.776	<b>1.946</b>	2.776

$\bar{x}$ :Arithmetic average  $\sigma$ :standard deviation t :Calculated ttab : scheduled Statistical Significance:0.05

Through the table, we notice a difference in the values of the arithmetic means and standard deviations of the elasticity flexibility trait in the different playing lines of the Amal Barika team. **In the level of flexibility between the goalkeeper and the defensive line players, we note the following:**

In the Spine flexibility, we note that the calculated **t** 5.02, which is greater than the tabulated **t** 3.183 , which indicates that there are statistically significant differences at the significance level 0.05. In the flexibility of opening the legs, we note that the calculated **t** 0.57, which is smaller than the tabulated **t** 3.183, which indicates the existence of non-significant differences at the significance level 0.05 As for the flexibility of the shoulders, we notice that the calculated **t** 0.57, which is smaller than the tabulated **t** 3.183, which indicates the existence of non-significant differences at the significance level 0.05 **In the level of flexibility between the goalkeeper and the midfield players, we note the following:**

In the Spine flexibility, we note that the calculated **t** is 4.725, which is greater than the tabulated **t** 4.302, which indicates that there are statistically significant differences at the significance level 0.05. In the flexibility of opening the legs, we note that the calculated **t** 0.20, which is smaller than the tabulated **t** 4.302, which indicates the



existence of non-significant differences at the significance level 0.05  
As for the flexibility of the shoulders, we notice that the calculated  $t$  4.02, which is smaller than the tabulated  $t$  4.302, which indicates the existence of non-significant differences at the significance level 0.05

**In the level of flexibility between the Goalkeeper- attack players, we note the following:**

In the Spine flexibility, we note that the calculated  $t$  0.16, which is smaller than the tabulated  $t$  4.302, which indicates the existence of non-statistically significant differences at the significance level 0.05.

In the flexibility of opening the legs, we note that the calculated  $t$  is 0.47, which is smaller than the tabulated  $t$  4.302, which indicates the existence of non-significant differences at the significance level 0.05

As for the flexibility of the shoulders, we notice that the calculated  $t$  4.45, which greater than the tabulated  $t$  4.302, which indicates that there are significant differences at the significance level 0.05.

**In the level of flexibility between the Defense- midfield players, we note the following:**

In the Spine flexibility, we note that the calculated  $t$  is 0.57, which is smaller than the tabulated value  $t$  2.57, which indicates the existence of non- significant differences at the significance level 0.05.

In the flexibility of opening the legs, we note that the calculated  $t$  is 0.57, which is smaller than the tabulated  $t$  2.57, which indicates the existence of non-significant differences at the significance level 0.05

As for the flexibility of the shoulders, we notice that the calculated  $t$  is 2.45 ,which smaller than the tabulated  $t$  2.57 ,which indicates the existence of non-significant differences at the significance level 0.05

**In the level of flexibility between the Defense- attack players, we note the following:**

In the Spine flexibility, we note that the calculated  $t$  1.11 ,which is smaller than the tabulated  $t$  2.57,which indicates the existence of non-statistically significant differences at the significance level 0.05

In the flexibility of opening the legs, we note that the calculated  $t$  0.03 ,which is smaller than the tabulated  $t$  2.57 ,which indicates the existence of non-significant differences at the significance level 0,05

As for the flexibility of the shoulders, we notice that the calculated  $t$  is 0.33 ,which smaller than the tabulated  $t$  2.57 ,which indicates the existence of non-significant differences at the significance level 0,05



### In the level of flexibility between the midfield - attack players, we note the following:

In the Spine flexibility, we note that the calculated  $t$  is 2,67 , which is greater than the tabulated  $t$  2,776 ,which indicates that there are statistically significant differences at the significance level 0,05. In the flexibility of opening the legs, we note that the calculated  $t$  is 0,46 ,which is smaller than the tabulated  $t$  2,776 ,which indicates the existence of non-significant differences at the significance level 0,05 As for the flexibility of the shoulders, we notice that the calculated  $t$  is 1,94 ,which smaller than the tabulated value  $t$  2,776 ,which indicates the existence of non-statistically significant differences at the significance level 0,05 From it, we conclude that there are differences in the flexibility trait and the different playing lines for the Amal Barika team (inter-league division).

**Table (05) shows the results of the level of flexibility and the significance of the statistical differences at the different playing lines of Rapid Amal Bordj El Ghadeer team (inter-league division).**

Flexibility players		Spine flexibility	Lower extremity flexibility - legs open	Shoulders Flexibility			
Goalkeeper	- x	12.5	51.5	5.52			
	$\sigma$	0.50	0.86	0.03			
Defense	- x	4.75	49.5	3.25			
	$\sigma$	3.76	3.00	0.53			
midfield	- x	6.16	49.83	2.448			
	$\sigma$	5.43	3.09	0.14			
attack	- x	7.66	53.16	3.74			
	$\sigma$	5.16	0.62	1.16			
Goalkeeper- Defense	$t$	<b>3,99</b>	ttab 3.183	<b>1,6</b>	ttab 3.183	<b>8,73</b>	ttab 3.183



Goalkeeper- midfield	t	2	4.302	4,63	4.302	1,89	4.302
Goalkeeper- attack	t	1,60	4.302	1,93	4.302	2,83	4.302
Defense r- midfield	t	0,38	2.57	0,14	2.57	0,48	2.57
Defense - attack	t	0,82	2.57	2,37	2.57	0,69	2.57
midfield - attack	t	0,34	2.776	1,83	2.776	0,73	2.776

x: Arithmetic average    σ: standard deviation    t : Calculate    **ttab : scheduled**    Statistical Significance:0.05

from the table, we notice a difference in the values of the arithmetic means and standard deviations of the flexibility trait (Spine flexibility, flexibility of opening the legs, Shoulders Flexibility) in the different playing lines (goalkeeper, defense, midfield, attack) of the Rapid Amal Bordj El Ghadeer team, as well as in the Student test, Which indicates that there are statistically significant differences in some and insignificant in others at the significance level of 0,05. From it, we conclude that there are differences in the flexibility trait and the different playing lines for the Rapid Amal Bordj El Ghadeer team (inter-league division).

Through the results obtained in the first axis and based on the statistical analysis, we conclude that there are differences in the level of flexibility in the different playing lines (guard, defense, middle, attack). This is due to the player's physical abilities, and in particular the flexibility characteristic, which varies from one player to another according to the play area in which he is active. And it's the ability to accomplish movements with the largest possible amplitude, and it must be muscular and articulated at the same time in order to obtain the best results (Pierre wullack1990, 145). Where each line of play has specific duties and tasks different from others, and certain features and specifications must be available in the player who occupies the position, and the priority of the specifications for each of them varies according to the priorities of the defensive and offensive meals and in the middle of the field, which found that the level of development of flexibility varies according to the playing lines in football. Where the playing lines are characterized by the specificity of performance, and therefore require

a special type of exercises that must be taken into account according to the duties of each line.

### The second axis: the level of flexibility according to the degree of competition.

Table (06) shows the results of the level of flexibility and the significance of the statistical differences according to the degree of competition for the players, the first professional division and inter-league division.

Flexibility players	Championship level		Spine flexibility	Lower extremity flexibility - legs open	Shoulders Flexibility
Goalkeeper	first national professional division	$\bar{x}$	18.75	49.5	4.525
		$\sigma$	0.750	1.50	0.035
	inter-league division	$\bar{x}$	12.5	53.00	5.162
		$\sigma$	5.535	1.50	0.358
Defense	first national professional division	$\bar{x}$	12.125	53.187	4.625
		$\sigma$	1.00	1.312	0.205
	inter-league division	$\bar{x}$	7.00	51.25	3.847
		$\sigma$	2.25	1.75	0.597
midfield	first national professional division	$\bar{x}$	10.33	49.58	4.997
		$\sigma$	0.17	5.75	0.343
	inter-league division	$\bar{x}$	6.495	52.415	2.661
		$\sigma$	0.335	2.585	0.213
attack	first national professional division	$\bar{x}$	8.415	59.160	4.235
		$\sigma$	1.585	4.00	0.415
	inter-league division	$\bar{x}$	10.245	52.995	4.565
		$\sigma$	2.585	0.165	0.775
<b>Flexibility according to the degree of competition</b>		<b>t</b>	<b>2.965</b>	<b>2.72</b>	<b>2.43</b>

$\bar{x}$ : Arithmetic average  $\sigma$ : standard deviation  $t$ : Calculated **ttab : scheduled** 2.086 Statistical Significance:0.05

Through the table, we notice the different values of the arithmetic averages and standard deviations of the elasticity trait according to



the degree of competition, that is, according to the level of the Championship (the first national professional division and inter-league division).

In the level of Spine flexibility between the first national professional division and inter-league division players, we note that the calculated  $t$  2.965, which is greater than the tabulated  $t$  2.086, which indicates that there are statistically significant differences at the significance level 0.05, According to the degree of competition. This difference is due to the fact that the first national professional division implements a more effective program in terms of size and intensity, in addition to the nature of the competition that is more exciting compared to the clubs that are active in the inter-league division, in addition to the pedagogical, material and human capabilities.

-In the flexibility of opening the legs, we note that the calculated  $t$  2.72, which is greater than the tabulated  $t$  2.086, which indicates that there are statistically significant differences at the significance level 0.05, According to the degree of competition. This difference is significant, but we note in general that the coaches for both divisions do not attach great importance to developing or maintaining the flexibility of playing, especially the lower extremities, and this is justified by the number of players who complain of joint injuries, the adductor muscle, the rectus femoris muscle, and the biceps thigh muscle. As for the flexibility of the shoulders, we notice that the calculated  $t$  is 2.43, which is greater than the tabulated  $t$  2.086, which indicates that there are statistically significant differences at the significance level 0.05, According to the degree of competition. These differences are due to a weakness in the range-motor abilities of the inter-league division, as well as to the absence of targeted exercises for the upper limbs and the neglect of their development. Through the results obtained and based on the statistical analysis, we conclude that there are statistically significant differences in the level of flexibility (Spine flexibility, flexibility of opening the legs, Shoulders Flexibility) according to the degree of competition (first



national professional division, inter-league division), and this is due to the level of the championship in which the player who plays Within the clubs of the first professional division, the highest level of the player who is active among the inter-league division .

Through these results, it is clear to us that the level of flexibility (spine flexibility, flexibility of opening the legs, shoulders flexibility) of football players varies according to the degree of competition (first national professional division, inter-league division) in the middle class. Where competition is considered as a positive motivating condition that allows the football player to develop the elite, where the elite is always pushing or complicating the intensity of the competition, as it is one of the motives that allow the football player to reach an honorable result and thus develop (Alderman 1990.102). Competition plays an important role in achieving sports games, where winning is the main goal that every player or team tries to achieve. It calls for effort to achieve excellence and increases motivation in it.

This result came to confirm the validity of the hypothesis that states that the level of flexibility in football players varies according to the degree of competition for the middle class - class U19-.

### **Conclusions:**

Based on the results of this study, it is possible to refer to the scientific and applied benefit that we can derive from this study, wherever it is possible to detect differences in the level of flexibility in football players according to the lines and the degree of competition for the middle class - U19-, Through physical tests, the differences in the level of flexibility (Spine flexibility, flexibility of opening the legs, Shoulders Flexibility) at the playing lines (defense, middle, attack) with the goalkeeper, which we often find as an ideal component of the player's capabilities in terms of flexibility, as well as according to the degree of competition for both Two Sections (Championship level). This difference and weakness in the flexibility of the players for both sections is due to the absence of training



programs based on scientific foundations, which negatively affects the level of football in general, and the low physical, technical and tactical level of the player in particular, as this characteristic has a link with other physical attributes. If we want to obtain a good level for the major categories, the youth group should receive more attention, and there should be basic work, because it is the duty of those concerned with the matter to take care of them and follow them physically, technically and tactically, by following modern scientific methods and methods in various training and competition periods. And this affects the level of the player's capabilities for his technical and tactical giving, while avoiding injuries that hinder his football career and resisting fatigue, and thus reaching good results in competitions. And football sports clubs need an evaluation pause between one stage and another in order to evaluate the training curriculum, as the latter is the correct scientific basis for evaluating the extent of the player's physical level during competitions, which leads the training process to its goals set.

Finally, we hope that this study will be a scientific contribution that brings addition and opens the horizons of research and study.

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