The Dynamic rhythm and its relation with the physical specificities and the physiological abilities of soccer players

الإيقاع الحيوي وعلاقته بالخصائص البدنية والقدرات الفيزيولوجية لدى لاعبي كرة القدم

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Abstract

The exploitation in the dynamic rhythm in the training and competition is considered somehow few but the known completion requirements are physical preparation (general and specific), appropriate management, good coach, availability of equipments and tools, all these integrate to form the pillars of championship. In the other hand, dynamic rhythm plays a very important role in the sport training where the athlete is, during the different day's periods, subject to more than a rhythm that effect its physical and physiological abilities and that influence in turn on the maximum performance the athlete could perform. This has led to ask the following question: are there meaningful statistical differences according to different monthly dynamic rhythms in the physical characteristics and physiological abilities for the soccer player?

The researcher has reached a number of conclusion and among the most important:

There are meaningful statistical differences depending on the monthly dynamic rhythm in the explosive strength and in the anaerobic capacities of the soccer player especially in the vertical jump test of stability contrary to the horizontal jump test of which we have conclude to the inexistence of meaningful statistical

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differences. There no meaningful statistical differences in speed capacity in soccer players contrary to the monthly dynamic rhythm.
Key words: Dynamic rhythm, Physical capacities, Physiological abilities

الملخص

يعد الاستثمار في الإيقاع الحيوي لعملية التدريب والمنافسات قليلة نسبيا. إلاّ أن متطلبات الإنجاز المعروفة هي الإعداد البدني بشقيه العام والخاص، بالإضافة إلى الإدارة الناجحة، والمدرب الكفء، وتوفر الأدوات والأجهزة كل هذه العوامل تتكامل لتشكل أركان البطولة.

كما أن الإيقاع الحيوي يلعب دورا هاما في مجال التدريب الرياضي، حيث يخضع الرياضي لفترات مختلفة في اليوم إلى أكثر من إيقاع والذي يؤثر على قدراته البدنية والفيزيولوجية وهذه الأخيرة تؤثر بدورها على أقصى أداء يمكن أن ينجزه هذا الرياضي.

ومن هنا يمكن طرح التساؤل التالي: هل هناك فروق ذات دلالة إحصائية باختلاف الإيقاع الحيوي الشهري في الخصائص البدنية والقدرات الفيزيولوجية لدى لاعبي كرة القدم ؟

من هذا المنطلق توصلنا في بحثنا هذا إلى عدة استنتاجات من بينها:

توجد فروق ذات دلالة إحصائية باختلاف الإيقاع الحيوي الشهري في صفة القوة الانفجارية والقدرة اللاهوائية لدى لاعبي كرة القدم، خاصة في اختبار الوثب العمودي من الثبات، عكس ذلك توصلنا في اختبار الوثب الأفقي إلى عدم وجود فروق ذات دلالة إحصائية.

بينما وجدنا في صفة السرعة انه لا توجد فروق ذات دلالة إحصائية لدى لاعبي كرة القدم باختلاف الإيقاع الجوي الشهري.

الكلمات الدالة : الإيقاع الحيوي , القدرات البدنية , القدرات الفيزيولوجية.

- Introduction

Dynamic rhythm and its exploitation in the training operation and competition is somehow considered few but the known requirements for completion are the physical preparation (general and specific), the successful management, the good coach and the availability of equipments and tools which all integrates to constitute the pillars of the

championship. The dynamic rhythm plays also a very important role in the sport training where the individual athlete is during the day subject to more than a rhythm which impacts on its physical and physiological abilities which in turn impacts on the maximum performance the athlete could perform[1] Ali El Bik and Sabri Omar agree that the determination of the athlete's dynamic rhythm type of style helps to determine the more appropriate moments in which the athlete different abilities in its best conditions whether that be in training units or competition [2] The dynamic rhythm organization is not limited to one day but is organized on a weekly , monthly, yearly but even on a multi years basis. The athlete cannot work on a constant efficiency for a period be it a long or short one. Every coach has to work on a dynamic rhythm specific to every athlete when planning training. This is considered motivating when athletes know beforehand this system and work with it so they can organize their own training according to the dynamic rhythm specific to every athlete and this will assure them the speed of adaptation to work and reach the highest level in the shortest time possible. When planning training, one has to take into account, the type of training courses. It is known that humans are by nature subject to dynamic rhythm i.e. its mental, physiological and psychological situation cannot be on a single pace during 24 hours and also the intermediate course that matches its time period with the type of the person's monthly dynamic rhythm. Abou El Ala considers the intermediate course "a distinctive block to build up the grand course that is the season"**.**And it is usually made up of a number of small courses (weekly), whose number ranges between 2 and 6. The monthly dynamic rhythm wave lasts approximately 23 days knowing that training rules state that the training dose time should fit the goals to achieve. All this , should not prevent to search for confirmed elements not dealt with by coaches when they put their training elements' methods. For this, there must be for each athlete its own training methods with its different heavy loads that fit its personal capabilities with different rhythmic curves (physical, emotional and mental).There is a fourth course, recently discovered, that has been added to the three and it is the intuitive course and that lasts 38 days[3]. On the other hand, the basic physical variables (such as muscle strength, endurance and speed) are affected which in turn bears on the individual's general abilities to

perform various sporting activities. In light of all that preceded, the importance of determining the rhythmic patterns of athlete becomes clear which differ between vital rhythms (daily, weekly, monthly, and yearly and multi years) and to examine the extent to which different dynamic rhythms affect the athlete's physiological and physical abilities in order to know the appropriate timing to train and compete, time in which the players' different abilities are at their best so their performance will be at its peak and realizing the best sport level possible. Among the most telling examples regarding the effect dynamic rhythm has on sport competition is boxing. For example, after Floyd Patterson (the great heavyweight boxer) defeated his opponent Johansson on July 20th 1960 in New York, it turned out, that on that day, Johansson's physical and emotional rhythm was at its lowest while Patterson's dynamic rhythm was at its at the most positive level. Despite all this, sport critics commentators prognosticated Johansson's win over Patterson but Patterson won. The critical day for the three rhythms could of the extremely dangerous especially for the boxers. On March 24th 1960, Benny Paret (also known as the kid and who defeated his opponent before by KO) was defeated by his opponent Emile Griffith. He lost consciousness, never recovered and died 10 days after that. Upon analyzing his rhythm, it turned out he was in his critical day regarding the physical, emotional and mental sides[4].

Due to the lack of researches regarding this problem, our research problem will be under the following question: are there differences of statistical significance according to the monthly dynamic rhythm in the physical specificities and physiological abilities for the soccer players?

The research goals and importance

This research is about a theoretical and applied study whose importance is manifested in the effect dynamic rhythm has on the physical specificities and physiological abilities for the soccer players and also on the importance to study the athlete's dynamic rhythm in a manner to serve the training operation and also how to develop the physical and physiological abilities through dynamic rhythm. This study aims also to investigate:

- Dynamic rhythm effect on the study's physical characteristics.
- Dynamic rhythm effect on the study's physiological abilities.

-Identifying how important monthly dynamic rhythm is and its relationship with physical specificities and physiological abilities of the soccer player.

-Identifying monthly dynamic rhythm importance in the sport field as one variable that should be taken into account when planning training.

Previous and similar studies

1- Hamoudat's study (2004) titled "Dynamic rhythm effect on some physical, emotional and mental variables for sport education faculty students aged between 18 and 22 years"

This study aimed at identifying the differences in physical, emotional and physiological capabilities with sequential measurements according to the dynamic rhythm curves different days (birthday, summit day, starting line day, bottom fall day, return to the starting line day).The sample was that of 24 faculty of sport education students and the researcher concluded that there are no differences with significant significance between the dynamic rhythm phases in the physical speed abilities ,the explosive power, the muscular endurance characterized by speed, the stretching of respiratory circular system. He recommended the need to take into consideration the dynamic rhythm courses in the spreading of degree of endurance for training so the high intensity and size during the summit day, and low intensity will be in starting line day[5].

Terminology

- Conventional definition

The amount of change occurring in the body as a result of the influence of the external environment such as light, darkness and the geographical specificities such as atmospheric pressure, temperature, humidity, the elevation above and under sea level and internal impact such as the difference in the way body hormones work and the difference in the work of some power source and the repercussion on the general capabilities of the person[6] Dynamic rhythm is a word made up of two Greek words : bio and it means life and rhythm which means the periodic repetition .It is the science that studies the biological courses of the nature

of all living things as the word dynamic rhythm means the system or tool that predict human behavior[7].

Physical characteristics

Ability held by the athlete that enables his physiological system and parts of his body to perform its functions with efficiency and effectiveness to fulfill physical and kinetic activity requirements of special nature.[8]

Physiological abilities

It is those intern body abilities and the different chemical changes inside the body after a given physical effort .It is considered among the most important task the athlete has to develop through training methods and it is measured through tests and exams .It is also linked to the cardiovascular and respiratory systems in addition to metabolic processes. For the soccer players the most important are aerobic and anaerobic capacities that form an integral part of each other allow the player to play a game in all its stages.

Methodology

We have adopted for this study the descriptive method since it is relevant to the subject we have treated .This method hinges on collecting data to test hypothesis and answering the questions related to the current situation of the research sample individuals.

The research sample

The sample has been chosen through the purposive method represented by senior players of "Nejm Erriadhi" in the regional division of Chlef Wilaya for the season**.** Their number was 10 which represent 75 % of the sampled research community and this is considered as a true representation.

We have relied on a number of tools to perform tests and they are : a registration test form, a chronometer , a whistle , a four (04) meters wall , dishes, a decameter ribbon.

The physical tests

-speed test: running 30 meters from halt

Test's goal : testing the player's transition speed

Tools used :running track with a starting and a finish line, a chronometer, a bar- channeller

Work method: the player is at the starting line adopting a running stand up position, upon hearing the whistle, he runs at full speed until he crosses the finish line.

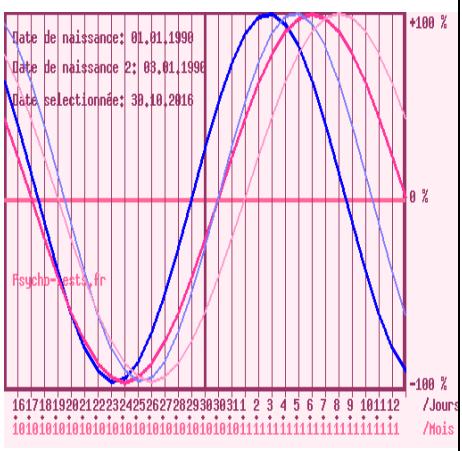
Thirty (30) meters test level

Table n°2 –Thirty (30) meters level tests

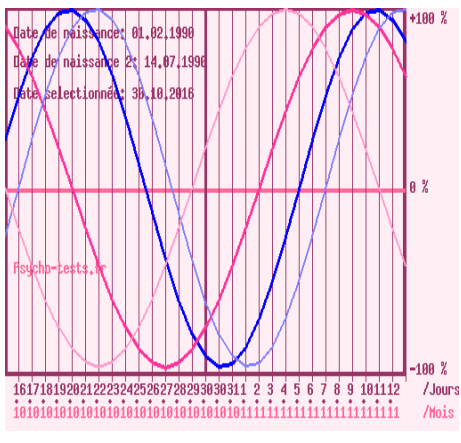
Estimate	Time
Weak	3 “or more
Average	From 2.9 to 3 “
Excellent	Less than 2.9 “

Table n°2 –Biorhythm results of the players

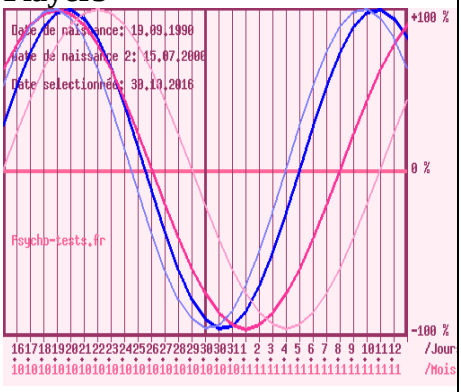
Player1



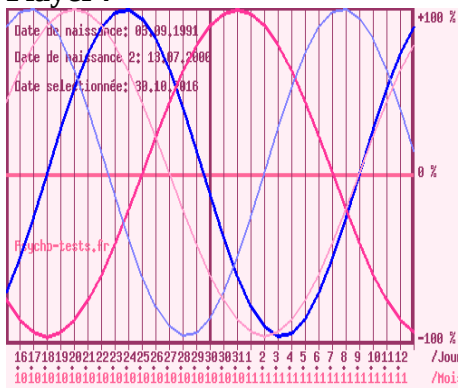
Player2



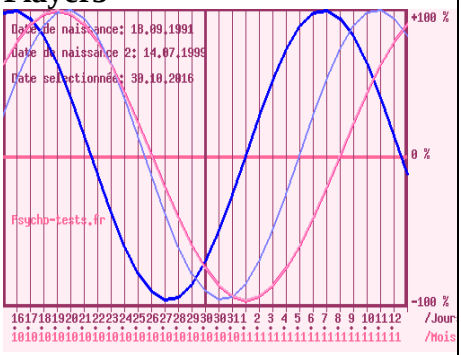
Player3



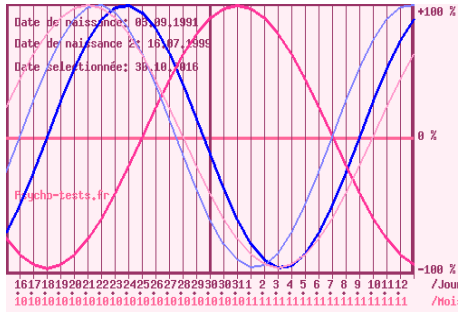
Player4



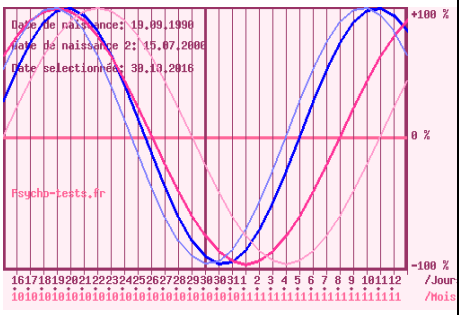
Player5



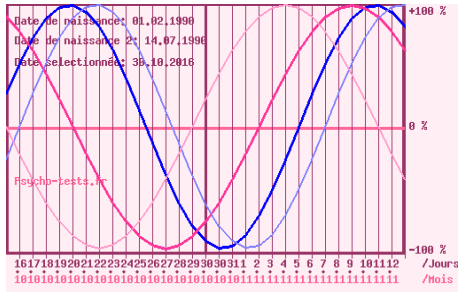
Player6

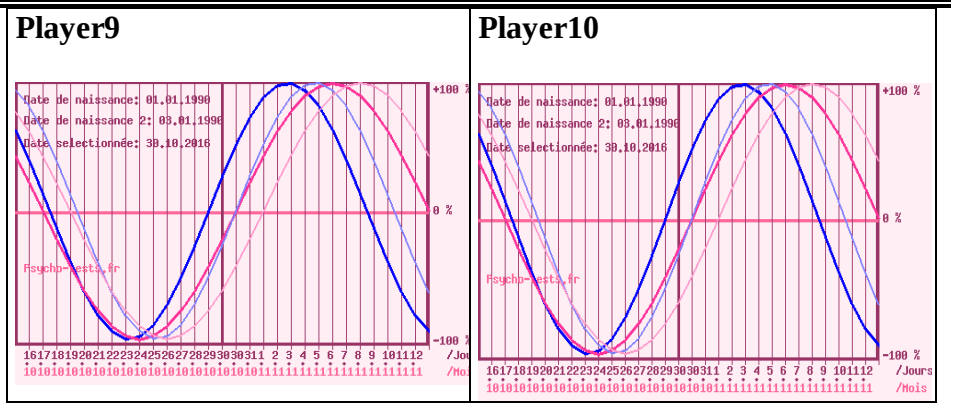


Player7



Player8





Strength test: we adopted the vertical jump test from stillness, long jump test stillness and the anaerobic capacity test

Results'presentation and analysis

Presentation and analysis of the thirty (30) meters test to the first hypothesis and that says:

"There are differences of statistical significance to the monthly dynamic rhythm for the soccer players in the speed test"

Table n° 3-Comparison between first and second test for the 30 meters speed test

Speed test	Arithmetic average	Standard deviation	Sample	T Calculated	T Scheduled	Degree of freedom	Level of significance	Statistical significance
First test	4.404	0.205	10	2.073	2.26	09	0. 05	not significant
Second test	4.371	0.180						

According to the table 2 results, it is clear that the arithmetic average in the first test is 404.4 and the standard deviation is 205.0 while

arithmetic average for the second test is 371.4 and standard deviation 180.0 and after calculating "T"at the degree of freedom 09 and level of significance 05.0 we found it is equal to 2.07.Comparing with "T" scheduled which equal 26.2,we found that "T" calculated is smaller than "T" scheduled which means the results are not statistically significant and that proves there are no differences with statistic significance.

Results 'presentation and analysis for the vertical jump test from stillness

For the second hypothesis and that says: "there are differences with statistical significance according to the monthly dynamic rhythm for soccer players in the explosive work test" :

Vertical jump test	Arithmetic average	Standard deviation	Sample	T Calculated	T Scheduled	Degree of freedom	Level of significance	Statistical significance
First test	42.60	0.20	10	3.14	2.26	09	0.05	Statistically significant
Second test	44.90	0.18						

Table n° 4- Comparison between first and second test for the vertical jump test from stillness

According to the table 06 results, it is clear the arithmetic average in the first test is 42.60 and the standard deviation is 0.20 while the arithmetic average for the second test was 44.90 and the standard deviation 0.18 and after calculating "T" at the degree of freedom 09 and level of significance 0.05 , we found that it equals 3.14 and comparatively with "T" scheduled which equals 2.26 we found that "T" calculated is greater that "T" scheduled and this means the results are of statistically significant which in turn shows the existence of differences with statistical significance.

Results 'presentation and analysis for the vertical jump from stillness test

Following the second hypothesis that says: "there are differences with statistical significance according to the monthly dynamic rhythm for soccer players in the explosive strength"

Horizontal jump test	Arithmetic average	Standard deviation	Sample	T Calculated	T Scheduled	Degree of freedom	Level of significance	Statistical significance
First test	1.97	0.081	10	1.33	2.26	09	0.05	Non Statistically significant
Second test	1.99	0.070						

Table n°5-Comparison between first and second test for the horizontal jump test from stillness

According to the results from table n°4, it is clear the arithmetic average in the first test was determined at 1.98 and standard deviation at 0.081 while the arithmetic average for the second test was at 1.99 and standard deviation at 0.07 and after calculating "T" at degree of freedom 09 and level of significance 0.05 we found it equals 1.33.When comparing with " T" scheduled which equals 2.26 we found that " T" calculated is smaller than "T" scheduled and this means the results are not statistically significant and this in turn shows inexistence of differences of statistically significant.

Results 'presentation and analysis of the anaerobic capacities for vertical jump from stillness test

The third hypothesis that says:"there are statistically significant differences according to the monthly dynamic rhythm for the soccer players in the anaerobic capacities "

Anaerobic capacities for horizontal jump	Arithmetic average	Standard deviation	Sample	T Calculated	T Scheduled	Degree of freedom	Level of significance	Statistical significance
First test	1037.73	124.465	10	3.03	2.26	09	0.05	Statistically significant
Second test	1065.53	128.830						

Table n°6-Comparison between first and second test for the anaerobic capacities for the horizontal jump from stillness

According table 5 results, it is clear that the arithmetic average for the anaerobic capacities for the first test is 1037.73 and the standard deviation is 124.465 while the arithmetic average for the anaerobic capacities for the second test was 1065.53 and the standard deviation 128.830 and after calculating "T" at the degree of freedom 09 and the level of significance 0.05 we found it equals 3.03 and comparing with "T" scheduled which equals 2.26 we found that "T" calculated is greater than "T" scheduled and this means that results are of statistical significance and shows the existence of statistically significant differences.

Results' presentation and analysis for the anaerobic capacities for the vertical jump from stillness related to the third hypothesis
"There are statistically significant differences according the different monthly dynamic rhythm for the soccer players in the anaerobic capacities"

Anaerobic capacities for vertical jump	Arithmetic average	Standard deviation	Sample	T Calculated	T Scheduled	Degree of freedom	Level of significance	Statistical significance
First test	223.69	21.638	10	1.22	2.26	09	0.05	Non Statistically significant
Second test	224.20	21.047						

Table n° 7- Comparison between first and second test for the anaerobic capacities for the vertical jump from stillness

According to table 6 results , it is clear that the arithmetic average for the anaerobic capacities in the first test reached 223.69 with a 21.638 standard deviation .The arithmetic average for the anaerobic capacities in the second test was 224.40 and a 21.047 standard deviation. After calculating "T" at the degree of freedom 09 and level of significance 0.05,we found it equals to 1.22 and when comparing with "T " scheduled which equals 2.26 we found that " T" calculated is smaller than " T" scheduled and this means the results are statistically significant and this shows there are no statistically significant differences.

Results interpretation and discussion

1-2 Interpretation of the first partial hypothesis: this hypothesis starts from a belief that there are statistically significant differences according to the monthly dynamic rhythm for soccer players in the speed test. According to table 5, the value of " T" calculated equals 073.2 and it is smaller than "T" scheduled which equals 26.2, it is not significant at 05.0 level and that proves there are no statistically significant differences between the first and second averages. This, maybe, is due to the sport level and bodily capacities .When it comes to training and bodily preparation, and following our observations, they all have almost the same training units. Speed in the other hand, and due to its physiological nature is one of the most complex component synthetically and it is influenced by the heredity factor in terms of muscle fiber synthesis and the ability of the nervous system to transmit rapid nerve signals. Following this , sport training does not have a big influence on speed development) and all this proves the inexistence of statistically significant differences .The results we have come to match the results that " ***Korkis*** " study in 2004 and that was titled "Influence of monthly course phases in some elements of physical fitness".This study's goal was to identify the detection of menstrual period in some characteristics of physical fitness (30 meters speed, and explosive strength).The descriptive approach was used and the sample was that of ten (10) female students from the department of physical education and sports and among the most important results is that there was no change in the first , second and third stages of the menstrual cycle on the explosive strength of the arms and the transitional speed (30 meters run).

Through our 30 meters speed run explanation in table 05 (and which did not show any existence of statistically significant differences at the level of significance 05.0)we can say that the first hypothesis which stated that there were statistically significant differences according to the monthly dynamic rhythm in the speed description has not been confirmed

2.2- Interpretation of the second partial hypothesis: this hypothesis says that there are statistically significant differences according to the changes in the dynamic rhythm for soccer players in the explosive strength. The results obtained after statistical processing in table 06 show for the vertical jump test that value " T" calculated reached 14.3 and it is greater than "T" scheduled which equals 26.2.It is significant at 05.0 level and that indicates there are statistically significant differences between the first and second averages. This is due to the coach interest in muscle work and the fact that players know these kinds of tests and also the coach's follow up to know his players' level through performance and that we felt during its implementation and this in turn proves the existence of statistically significant differences. The results we have come to match those that Saadi's study titled "Dynamic rhythm relation with the physical and mental period at the performance on the parallel device for girls " has come to. The study aimed at determining the two dynamic rhythm courses (physical and mental) for the gymnastics young women national team and also the knowledge of the difference of level of performance in the two dynamic rhythm courses (physical and mental) in the highest and lowest level. It concluded at the existence of difference of significance between the top and bottom stages in the psychological rhythm in the physical test and also the slow and high level of performance and also at the emotional response level. The study emphasized that the biological processes be it on the level of the cell, the tissue, the members or the vital devices and even the living organism happens in a wavy way that is showed in the follow up of intensity (rise) or weakness (drop) in activities in a continuous rhythm. While the results produced by table n°7 statistical processing and regarding the horizontal jump from stillness and that relate to the same hypothesis, we find that value " T" calculated is at 33.1 and it is smaller than value "T" scheduled which is at 26.2 thus it is not significant at level 05.0. All this proves there no statistically significant differences between first and second test averages contrary to the vertical

jump from stillness .This, maybe , is due to the players misunderstanding of the test , the precipitation in performance , the test difficulty , group handling and the psychological and physical state that was not fit to perform the test. These results match what the ***"Korkis"*** ‘s study titled "Influence of monthly course phases in some elements of physical fitness". This study's goal was to identify the detection of menstrual period in some characteristics of physical fitness. Its results showed that there are no changes in the menstrual period on the feet's explosive strength. Through our explanation of table 06 vertical jump test and that proved the existence of statistically significant differences at the 05.0 level indication while when explaining and discussion of table 06 vertical jump test and that did not show the existence of statistically significant differences at the 05.0 level indication we can say that the second hypothesis stating " there are statistically significant differences according to the monthly dynamic rhythm in the explosive strength " has been confirmed thanks to the vertical jump test. This is consistent with Johnson and Nelson's definition of kinetic ability that says it is the innate readiness and kinetic level the player acquires and that shows the basic kinetic skills (running/jumping/climbing/partition/crawling, etc…) and that the muscular strength (strength X speed) is one of the component of the kinetic ability. He speaks also about the necessity to use general exercises to improve strength which in turn lead through lying or prostration to apply pressure on the back bone and joints and avoiding the gravity factor in increasing resistance[9].

Results explanation for the third partial hypothesis

This hypothesis was built on the assumption that there are differences of statistical significance according to the monthly dynamic rhythm for the soccer players in the anaerobic capacity and that was studied in both the vertical and horizontal jump test from stillness as it is shown in the 08 and 09 table. We realized starting from table 08 related to the vertical jump test that value "T" calculated reached 3.03 which is greater than value " T" scheduled estimated at 2.26.It is significant at 0.05 level and that shows there are differences of statistical significance between the averages of the anaerobic capacity for the first and second test and this is due to the coach's concentration on this test and that has made players in full readiness to perform it .There is also the players'

good physical fitness that resulted from the coach's good implementation of the test and also the results .The results we came to matched Omar Chokri Omar and Mohamed Ahmed Hafsaoui's study titled :" Proposed training program to develop anaerobic capacities and its effects on the anaerobic and physiologic pulse for volley ball beginners (under 18)" .Among the most important results were the improvement of the absolute and relative anaerobic capacities for the experimental persons sampled compared to the control sample and also the anaerobic training has led to impact the rate at which the ***pirofic*** acid spread. For the results regarding table 09 statistical processing (related to the anaerobic capacity for the horizontal jump from stillness and that is related to the same third partial hypothesis) which showed that value "T" calculated is at 22.1 and it is smaller than value "T" scheduled fixed at 26.2 it is non significant at level 05.0.That is reading there are no statistically significant differences between the averages of the first and second test according to the test results that were below level. That is due, maybe, to the exhaustion or the player's emotional psychology following the training session and the performed tests which made the players somehow loosen up after the test. It is also due to the lack of programming of strength improvement exercises which fits the nature of basic movements, the players capacities and readiness, the muscular and structural system specificities, the non use of its body weight and parts or the small resistances in performing organized exercises to improve the anaerobic capacities. Starting from our explanation of table 08 results related to the anaerobic capacities for the vertical jump test (which results stated the existence statistically significant differences at the 05.0 level indication while table 09 results related to the anaerobic capacities for the vertical jump test stated that there are no statistically significant differences at the 05.0 level indication) we can affirm that the third hypothesis that stated there are statistically significant differences according to the monthly dynamic rhythmic in the anaerobic capacity has been confirmed thanks to the anaerobic capacity related to the vertical jump test.In the other hand , Abou El Ala Ahmed Abdelfattah explains that "the training continuation increases with it the anaerobic lactic work and lessens the lactic acid concentration in blood when performing standardized physical load as a consequence of economy in effort and increase in the ability to get rid of the lactic acid[9] Starting from the results obtained in physical tests, we

observe the existence of effect for the difference in monthly dynamic rhythm in the explosive strength and the anaerobic capacity contrary to speed.

After the study we have undertaken and exposing, analyzing and discussing the results obtained and related to the hypothesis included in our memoir that treated the problematic pertaining to the physical characteristics and the physiological capacities for the soccer players from different monthly dynamic rhythm, we have concluded that there are statistically significant differences according to the monthly dynamic rhythm in the explosive strength and anaerobic capacities for the soccer players especially in the vertical jump from stillness contrary to the horizontal jump test that does not show statistically significant differences ..We have also, following what preceded, concluded that there no statistically significant differences in the speed test for soccer player according to the monthly dynamic rhythm[10].

Suggestions:

In light of what the researcher has come to as results and among the study's goals, he suggests what follow:

1-knowledge of players' dynamic rhythm effect by the coach helps increase sport achievement.

2-teaching of the dynamic rhythm course in the sport and physical education faculties, organizing training sessions to benefit in teaching and training

3-recording of periods for each player contribute to player selection during competitions.

4-confirming the biomechanics role in determining the physical dynamic rhythm importance on the basis that biomechanics gives clear and concrete digital values that confirm and show players' development.

5-performing studies on bigger samples and on other kinetic skills either in soccer or other collective or individual sports.

6-performing similar studies to discover the dynamic rhythm effect in its mentally and intuitive cycle for soccer players.

7-performing of supplementary researches and studies that work on combining mental perception and courses related to the physical, mental and emotive dynamic rhythm to develop some basic skills for soccer.

8-performing other studies to know the dynamic rhythm effect on the functional parts of the body and some physiological variables for soccer players.

Conclusion

In order to develop soccer, researchers ,experts and specialists have decided to take advantage of physical dynamic rhythm courses in their training organization and also invest efforts and time to be able to have advanced results in training and performance considering that dynamic rhythm could lead to performance improvement .Starting from this and our own scientific curiosity, we started investigating the dynamic rhythm subject and its relation with the physical specificities and physiological abilities in soccer players in the happening of differences in the physical requirements and skills for soccer players .Physical condition being one of the most important instrument that contribute to the game's improvement, it is not possible to play with a good level at the game's time without fitness that works at improving performance. The physiological capabilities are considered one of the principal bases in soccer and the way actual coaches evaluate depends basically on the individual evaluation without seeking objective evaluation represented by physical test and standardized measurements and also studying the dynamic rhythm for each player which makes knowledge of player fitness beforehand The standard levels by researcher could give to coaches a strong support to find out the level of their players.The research sample was that of 10 players from "Nejm Erriadhi" (Chlef) on whom physical tests were performed In light of the results and statistical analysis , we have concluded that there significant and random differences between the physical tests according to the monthly dynamic rhythm. We can also confirm that according to the monthly dynamic rhythm results for the players in that period that it was at its peak for the first test and at the bottom for the second test. The vertical and horizontal jump tests recorded improved results and the same could be said for the anaerobic capacities .In the other hand, the group did not achieve statistical satisfactory results in some physical characteristics and physiological capacities according to the monthly dynamic rhythm. In the speed test, the researcher indicates, through the results, we reached that there are significant differences.

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