

the reality of physical attributes development among football and handball players from
the perspective of coaches

واقع تطور الصفات البدنية لدى لاعبي كرة القدم وكرة اليد من وجهة نظر المدربين

HAMICHE ZAKARIA ¹, MOHAMED KABOUYA ²

¹1Mohamed Boudiaf University M'sila Algeria, zakaria.hamich@univ-msila.dz

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Abstract:

The study aimed to identify the reality of physical attributes development among football and handball players from the perspective of coaches. The researcher adopted the descriptive approach because it suits the nature of the study. The research community included sports teams that are active in the province of M'sila. The study sample is represented by some of the coaches of the aforementioned sports teams. The researcher selected the sample randomly to achieve the study's objective and used a set of tools, most notably the questionnaire. The researcher found that there is a significant lack of using modern training methods for the development of physical attributes.

Keywords: physical attributes, modern sports training, football, handball.

الملخص:

هدفت الدراسة إلى التعرف على واقع تطور الصفات البدنية لدى لاعبي كرة القدم وكرة اليد من وجهة نظر المدربين. اعتمد الباحث المنهج الوصفي لأنه يتناسب مع طبيعة الدراسة. شمل مجتمع البحث فرق رياضية نشطة في محافظة المسيلة. يمثل عينة الدراسة بعض مدربي الفرق الرياضية المذكورة. اختارت الباحثة العينة بشكل عشوائي لتحقيق هدف الدراسة واستخدمت مجموعة من الأدوات أبرزها الاستبانة. ووجدت الباحثة أن هناك نقصًا كبيرًا في استخدام أساليب التدريب الحديثة لتنمية السمات البدنية.
الكلمات المفتاحية: الصفات البدنية ، التدريب الرياضي الحديث ، كرة القدم ، كرة اليد.

1. Introduction and the problem of the study

1.1. Problem of the study

The important aspect in physical preparation is to be able to know how you manage your physical strength by ball-including exercises. The integration of the ball into physical work allowed for acquiring technical, tactical, and physical abilities for the player. Furthermore, in order to control Trainers and sports professionals develop new training methods to improve the player's return. **(Bouaicha Abd el Aziz, Nasser Mohammed, 2021, p.253)**. the coach must adapt to the players' and clubs' footballing and tactical cultures.

Football and handball players in the current period need a lot of physical and technical requirements that differ from other physical activities and respond to the form of performance and specify that characterize football and handball players to face the abilities of competitors with the same physical and skill qualities, making most teams in developed countries concerning football and handball at a single level in physical, technical, and tactical performance that ensures the good performance of the game different positions **(Abdelfettah, Abou Al-Ala, 2003 p. 26)**.

Those who follow the Algerian national championship in all its categories notice the physical weakness of the Algerian player compared to the European championship **(Cherif Moataz Billah, 2021, p. 218)**.

Through tracing many local interviews of both football and handball clubs, we have witnessed a clear lack of physical performance, which has a negative impact on the skill performance of players in general. We, therefore, prepared a questionnaire for a group of football and handball coaches. Most of these data prompted us to ask the following question:

General question

- What is the reality of physical attributes development in the light of modern sports training among football and handball players?

Partial questions:

- Do coaches rely on modern scientific rules in the development of physical attributes?
- Is there an impediment to coaches' reliance on modern training methods?

2. General framework of the stud

2.1. Study objectives

- To know whether coaches rely on a modern scientific rule to develop physical attributes.
- To find out whether there are obstacles that hinder coaches' reliance on modern training methods.

2.2. Study terms:

Physical attributes: Dr. Bastouti Ahmed Abbas Saleh argues that the term "physical attributes" is translated by many sports physical education specialists into many terms: physical traits, motor traits, motor abilities, and physiology. All these terms mean a single concept that consists of the following qualities: (endurance - strength - speed - flexibility - agility). (**Bastouti Ahmed Abbas Saleh, p. 241**).

2.3. Modern Sports Training:

Linguistic definition: according to Collins dictionary, training is the process of learning the skills that you need for a particular job or activity. The verb is to train and the past participial is trained. In sports, training is physical exercise that you

do regularly in order to keep fit or to prepare for an activity such as a race. (Collins dictionary, 2021).

Terminological definition: It is a structured pedagogical process to balance the requirements of practiced sports activity and the player's potential and abilities to reach the highest levels of sports activity (Al-Bashtawi, Al-Khawaja: 2005, p. 102).

Procedural definition: It is a set of training units consisting of exercises representing the physical preparation integrated using appropriate training methods.

Football:

Procedural definition: It is a collective game that involves 11 players per team. It has 10 players and one goalkeeper. It is the most popular game in the world.

Handball:

Procedural definition: It is a collective sport where two teams meet over the field. Each team consists of 16 players (14 players + 2 goalkeepers). A maximum of seven players (06 players + a goalkeeper) are allowed to be on the field while the others are substitutes. The aim of the game is to score the most goals against the other team. The kick-off takes place from the center of the field after the referee blows the launch whistle. The time of the match is set at 60 minutes; 30 minutes for each half concerning seniors, both males and females, and varies according to each age group.

3. Field procedures:

3.1. Research community:

It was defined by both researchers Saadaoui Faissal and Briki Taher that “it is also all the individuals, events, or things that are in question” (Saadaoui Faissal, Briki Taher 2022, p. 121).

The study community is represented by active coaches in the city of M’sila concerning football and handball, estimated at 30 coaches of 15 teams. Most of them are football-specific.

3.2. Study Sample:

It is “the study community from which field data are collected, which is considered part of the whole. Hence, it is a certain proportion of the members of the original community, and then the results of the study are circulated to the whole community (Zerouati Rachid: 2002, p. 191). The sample study consisted of coaches active at the state level of M’sila, in particular the city of M’sila.

3.3. Sample selection:

We selected the research sample intentionally because it allows the experiment to be conducted under appropriate conditions.

3.4. Procedural adjustment of study variables:

Before starting this field study, we must adjust the variables so that we can control and isolate the extraneous variables to reach results that enable us to analyze, interpret, and make sure that the hypotheses are achieved in reality. The adjustment is as follows:

The independent variable: It is the variable whose value and status change in terms of its inclusion as a primary or secondary priority in the organization leads to the desired change by influencing the values of relevant variables. Hence, the independent variable of this study is the reality of using modern sports training.

The dependent variable: A variable whose value depends on the effect of relevant variables values. Whenever a change or adjustment occurs to the independent variable by adopting new policies or strategies, the results will appear on the values of the dependent variable. Therefore, the dependent variable is the development of the physical attributes among football and handball players under the age of 19.

3.5. Data collection tools:

The first step we have taken in our study is to provide tools of information Transfer that help to distribute the aspects of research, namely to gather information from different references to learn about the theoretical aspect through which the researcher seeks to reveal the truth and unravel the problem put forward. Concerning the applied aspect, the researcher agreed with the study sample on a date when questionnaire questions will be answered. The researcher developed a range of tools, including:

Sources and references: reviewing previous research helps to increase the researcher's understanding of the problem under study and also leads to developing the results of the study in a historical framework by tracking the most important aspects of the problem.

Pilot study.

Observation.

Questionnaire: The questionnaire is defined as: "A series of methodologically synthesized questions on a particular subject and then placed in a form sent to the persons concerned in order to obtain the answers contained therein." The questionnaire contains different types of questions:

- **Closed questionnaire:** The answer is often limited to yes or no. It may also include a range of multiple choices where the interviewee must choose the correct answer.
- **Half-open questionnaire:** This type of questionnaire contains a set of questions; the first half of which is closed, answered by yes or no and the other half is open where the interviewee is entitled to give his own opinion.

3.6. Approached used:

When we speak as researchers of the scientific approach to study any particular phenomenon, we should point out that the process of choosing between different scientific approaches to study phenomena and the techniques used in science is not a random selection process, but is subject to certain conditions and criteria that relate primarily to the nature of phenomena and their causal relationships, as well as how these phenomena relate to different sciences and approaches. According to Ali Chetta, the approach is "the means or way of achieving accurate scientific findings, as well as the set of general rules guiding the researcher to the truth". Based on the foregoing, the appropriate descriptive approach has been selected for this study, which is the most important scientific approach used in human sciences in all its dimensions, including psychological, educational, social, and sporting. According to the researcher Ikhlas Mohammed

Abd al-Hafid, "the descriptive approach is concerned with collecting precise scientific descriptions or specifications of different phenomena, describing and interpreting the current situation, identifying common practices, and learning about individuals' and groups' performance, beliefs, attitudes, as well as studying public relations between different phenomena. (**Ikhlas Mohammed Abd al-Hafid, 2002, p. 48**).

Based on the above, the descriptive approach was chosen, as it is concerned with and interprets what exists, and it is the most used approach in the humanities because it focuses on classifying, arranging, and expressing information quantitatively and qualitatively (**Kermish Abdel Malek, 2021, p. 498**).

3.7. Psychometric characteristics:

Questionnaire validity: The validity of the questionnaire means that the test actually measures the ability or phenomenon it is designed to measure. Validity is one of the most important factors of any scale or test as it is a condition for determining the reliability of the test.

We distributed 04 forms to 04 coaches on 08/01/2022 and then redistributed them to the same coaches on 13/01/2022. In both cases, we found the same observations on the way to ask questions.

3.8. Study design and statistical treatment:

The researcher can determine the most important statistical methods appropriate to the nature of the study, including access to the interpretation of all results with the statistically necessary significance for each statistical test applied (**Wali Abdel Nour, 2021, p. 498**).

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After the theoretical study, including gathering information, sources, and references, we conducted a pilot study that had many goals previously mentioned. Moreover, after reviewing and identifying the sample of the study, we distributed the questionnaire forms. We then collected them all (four forms), each containing 13 questions, unloaded and sorted out questions. This process was done by calculating the number of frequencies of the answers for each question, after which the percentages are calculated in the following way:

$\% = \text{Number of frequencies} * 100 / \text{overall total of the sample}$

$\% = \text{Percentage}$

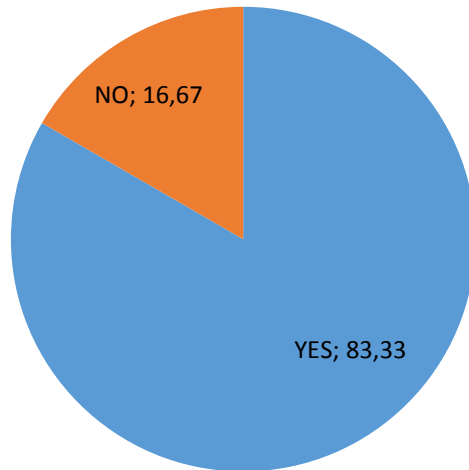
4. Presentation and analysis of results:

First axis: Do coaches rely on modern scientific rules in the development of physical attributes?

Table (01): The way of selecting modern training methods for the development of physical attributes

Answer	Frequency	Percentage
Yes	25	83.33%
No	5	16.67%
Total	30	100%

Figure (01): shows the diversification in the selection of modern training methods for the development of physical attributes



From the results obtained from the table and the chart, we note that the largest percentage, estimated at 83.33%, answered with No, which explains that there is no diversification in the training methods. The remaining percentage, estimated at 16.67%, confirmed that diversification is done in the training methods.

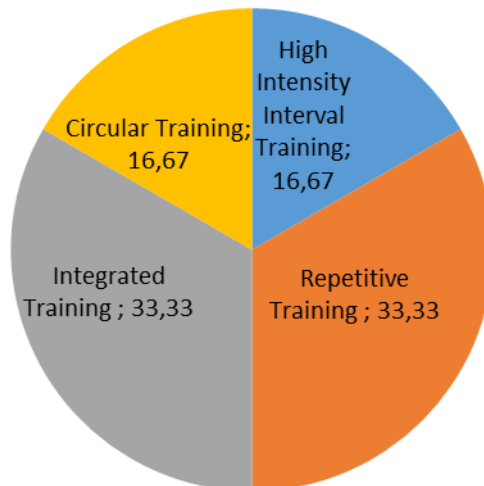
Through the results obtained, we conclude that most coaches do not diversify the modern training methods because of their lack of control over known training methods.

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Table (02): shows the appropriate training methods for the development of basal physical attributes

Answer	Frequency	Percentage
High Intensity Interval Training	5	16.67%
Repetitive Training	10	33.33%
Integrated Training	10	33.33%
Circular Training	5	16.67%
Total	20	100%

Figure (02): shows the training methods used to strengthen the physical qualities of teaching football skills



From the results obtained from the table and the chart, we note that the largest percentage, estimated at 33.33%, replied that it uses repetitive training. The estimated ratio of 16.67% replied that it uses high-intensity interval training, and for the remaining 33.33% relied on integrated training.

Through the results obtained, we conclude that the majority of coaches rely on a valid way to develop the physical attributes, which in turn develop the motor skills of the integrative relationship between physical qualities and skills' qualities.

Second axis: There is an impediment to coaches' reliance on modern training methods.

Table (03): shows the training methods used by coaches according to their control over each method

Answer	Frequency	Percentage
High Intensity Interval Training	5	16.67%
Repetitive Training	5	16.67%
Integrated Training	12	40%
Circular Training	8	26.68%
Total	30	100%

According to the results obtained from the table and chart, we note that the largest percentage, estimated at 40%, answered that it uses integrated training. Moreover, the estimated ratio of 16.67% replied that it uses the high-intensity interval training. Concerning the circular training, 26.66% answered

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that they rely on it. For the remaining group, it replied that it relies on repetitive training by 16.67%.

We conclude from the results that the majority of coaches rely on a valid method to build physical attributes, which in turn develop motor skills of the integrative relationship between physical qualities and skill’s qualities.

Figure (03): represents the training methods used by the coaches according to their control over each method

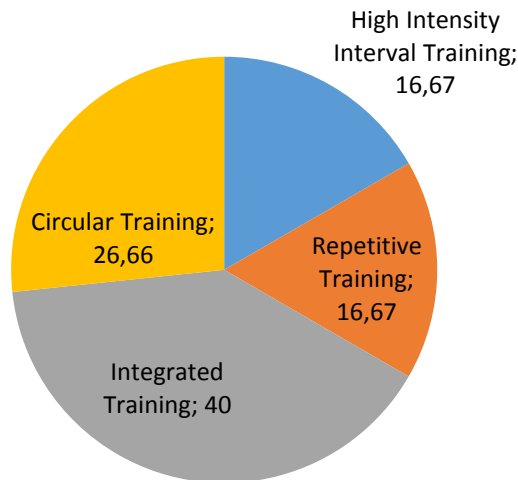
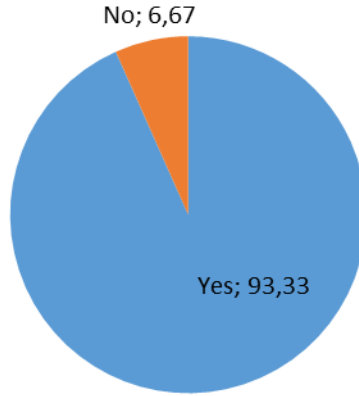


Table (04): demonstrates coaches’ reliance on modern technological methods

Answer	Frequency	Percentage
Yes	28	93.33%
No	2	6.67%
Total	30	100%

Figure (04): demonstrates coaches' reliance on modern technological methods



Through the results of the table shown, we note that 7.33% of the coaches' answers were positive in terms of reliance on modern technological methods for the development of physical traits.

The remaining 97.33% asserted that it does not use modern technological means due, *inter alia*, to the lack of such equipment, and at the same time coaches are unable to control the use of such equipment.

5. Conclusions and suggestions:

Opinions differ and conflict concerning the development of physical attributes from the point of view of coaches in general and the athlete of football and handball in particular, since the lack of material means and capabilities has led to a clear and grave lack of applying sports training objectives. There is also the factor of a lack of formation regarding the use of modern technological means. All these data were confirmed by the validity of the study's hypotheses, as follows:

- There is no scientific rule on which coaches rely to develop physical attributes.
- There are obstacles to coaches' dependence on modern frameworks for the development of physical attributes.

Suggestions:

Given the data we got from this research, we had to come up with some special suggestions:

1. Provide modern tools and equipment for coaches to adopt as a means of reaching sports achievement.
2. Take into account the provision of specialized formative courses for sports training and modern technological means.
3. Long-term planning for overall reliance on academics in sports training.

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