

Proposal of Standardized Levels for Certain Physical Attributes for the Selection of Young Talents in Middle-Distance Running for the U16 Category

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Abstract:

This study aimed to propose standardized levels for certain physical requirements that form the basis for selecting young talents in middle-distance running for the U16 category. To achieve this, the study was conducted on a sample of 23 runners representing four clubs from the Chlef Athletics Association. The researchers employed the descriptive-comparative method due to its suitability for the study's objectives. This was done through physical tests measuring speed, endurance, and muscular strength of the lower limbs. After data collection and statistical analysis, the study's results showed that the arithmetic means of the physical tests ranged between "acceptable" and "good."

KEY WORDS: Standardized levels; Physical attributes; Selection; Young talents; Middle-distance runners; U16 category.

المخلص:

هدفت الدراسة إلى اقتراح مستويات معيارية لبعض المتطلبات البدنية التي يتم على أسسها إنتقاء المواهب الشابة في جري المسافات المتوسطة U16 ، ولتحقيق ذلك أجريت الدراسة على عينة مكونة من 23 عداء يمثلون 4 أندية لرابطة الشلف لألعاب القوى، واستخدمنا المنهج الوصفي المقارن لملائمته للدراسة عن طريق اختبارات السرعة، التحمل، القوة لعضلية للأطراف السفلية، وبعد جمع البيانات ثم تحليلها إحصائيا حيث أظهرت نتائج الدراسة أن المتوسطات الحسابية للاختبارات البدنية كانت تتراوح ما بين المقبول والجيد. الكلمات المفتاحية: المستويات المعيارية ؛ الصفات البدنية؛ الانتقاء ؛ المواهب الشابة؛ عدائي المسافات المتوسطة؛ فئة U16.

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1-Introduction:

Selection means choosing the best elements from male and female athletes through an in-depth study of all aspects that affect athletic performance, based on scientific foundations, principles, and methods (Hussein, and Al-Mahshash, 2001).

Issam Laayadi, quoting Ikhlas Mohamed Mostafa, believes that the selection process for high achievers lacks the components for success and continuity to achieve athletic performance. The focus on developing athletic performance and reaching high levels begins with discovering and utilizing athletic talents and raw potential. This is done through selection processes, which are considered the cornerstone for achieving high-level athletic accomplishment (Laayadi and Ikhlas, 1992).

The process of selecting gifted individuals is considered complex, involving many procedures that require the use of measurement and diagnostic tools. The process of selecting and developing talents is not subject to chance; rather, it has become subject to scientific principles through which the elite of young athletes can be chosen at multiple temporal stages. These are individuals who possess special abilities and aptitudes that predict their potential to reach the highest levels in a specific sport. This means an early discovery of young individuals with highly distinguished aptitudes and abilities and the capacity to align these aptitudes and abilities with the specific type of sport.

Local studies on the reality of sports guidance have indicated that the selection and guidance process in athletics in Algeria still preoccupies those responsible for training this sport, and its practical application has not gone beyond the traditional method. This is consistent with Ben Chernin study in his attempt to determine the criteria and determinants of grassroots sports guidance for various physical and

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sports activities, according to the opinions of specialists, after he found a lack thereof on the ground.

Through a preliminary study and interviews we conducted with coaches, it became clear to us that there is ambiguity and a lack of understanding among these coaches regarding the factors that determine the selection of these runners. The selection process to date still relies on chance and selection from school cross-country races, due to the coaches' lack of familiarity with proper scientific methods based on specific tests and measurements for selection, on the one hand, and the lack of academic training for some, on the other. Considering this, we were prompted to pose the following general question:

Can standardized levels and grades be constructed for some physical attributes for the selection of middle-distance running talents, U16 category?

From this, a set of specific questions arose:

1-Can standardized levels be constructed for some physical attributes for the selection of young talents in middle-distance running, U16 category?

2-Can standardized grades be constructed for some physical attributes for the selection of young talents in middle-distance running, U16 category?

To answer the questions outlined above, temporary answers, or what are known as hypotheses, can be used to develop a theoretical framework for the study.

- **General Hypothesis:**

-It is possible to construct standardized levels and grades for some

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physical attributes for the selection of middle-distance running talents in the U16 category.

• Specific Hypotheses:

1-It is possible to construct standardized levels for some physical attributes for the selection of young talents in middle-distance running in the U16 category.

2-It is possible to construct standardized grades for some physical attributes for the selection of young talents in middle-distance running in the U16 category.

2- Study Objectives:

Through our study, we aim to:

- Assist coaches in the scientific and systematic selection of exceptional talents in middle-distance races, based on their physical, physiological, and morphological characteristics and determinants.
- Arrive at a set of tests that include some physical and morphological indicators as a benchmark for selecting youth in middle-distance running competitions.
- Raise coaches' awareness of the critical importance of the selection process and its impact on the athletic future of young athletes in track and field

3- Definition of Concepts and Terminology:

3.1 First Subtitle Standardized Levels:

The level of physical, physiological, and morphological characteristics or requirements that distinguish middle-distance runners.

3.2 Selection

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In the sports field Saad Fathallah Mohamed Al-Alem points out that selection is a process through which the best talented players are chosen from a large number of them according to specific determinants (Basstouci, 1999).

Operationally: A process through which the elite of young athletes who have special abilities and aptitudes that predict their potential to reach the highest levels in the future can be chosen.

3.3 Middle-Distance:

An event in track and field that consists of 1200-meter and 2000-meter races.

3.4 Young Talents:

Helmy mentioned that talent in physical education means the athlete who possesses good innate physical and mental qualifications and attributes and who surpasses their peers in the same age group in the level of their motor abilities and aptitudes, thus giving them a distinct advantage and full readiness to engage in general and specific sports activities. MANN Mill also defines sports talent as: a mixture of many special aptitudes that can be continuously developed (Helmy, 1993).

4. Previous and Similar Studies:

4.1 Study Title: Proposal of Standardized Levels for Certain Elements of Physical Fitness Based on a Test Battery for the Selection of Young Talents among Handball Players (17-19 years old).

The researchers used the descriptive survey method and a sample of 54 players aged 17-19, who were selected intentionally. A proposed physical test battery was used to collect data, which was then statistically analyzed using standardized scores to classify the sample into six levels, ranging from "poor" to "excellent." The study recommended using the proposed levels as scientific support for field observation to facilitate the selection process (Belamrri, 2020,).

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4.2 Study Title: Determining Standardized Levels in Light of a Proposed Test Battery for the Selection and Guidance of Emerging Talents in Football.

The researchers used the descriptive survey method. After analyzing the raw results based on the determined standardized levels for the proposed tests and the total performance variable, the researchers found variations in the levels of the young players based on each individual's aptitudes and abilities. This confirmed the need to select them according to their potential. The study emphasized the necessity of using the proposed standards as scientific support for field observation to facilitate this process for the benefit of Algerian football (Maim, 2018).

4.3 Study Title: Proposal of Standardized Levels for Some Physical Characteristics Based on a Test Battery for Talent Selection in Athletics: A Survey Study of Some Clubs in Batna Province.

The study used the descriptive survey method and included a sample of 64 athletes aged 10-11, who were intentionally selected. A proposed physical test battery was applied, and the results were statistically analyzed using standardized scores to classify the sample into six levels, ranging from "very poor" to "excellent." The study recommended using the proposed levels as a scientific support for field observation to facilitate the talent selection process (Zemmouli, 2020).

5.Field Research Procedures:

5.1 Research Methodology:

We use the descriptive-correlational method due to its alignment with the study's objectives.

5.2 Population and Sample:

5.2.1 Research Population:

The study of population refers to all the units of the phenomenon being studied by the researcher. In this research, the study population consists of middle-distance runners in the U16 category.

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5.2.2 Research Sample:

The researchers used a purposive sample consisting of 23 runners from the U16 category specializing in middle-distance running (800 meters). These runners represent the Chlef Athletics Association, which is one of the specialized centers relied upon by the Algerian Athletics Federation to develop athletics in Algeria.

Table 1. This table shows the sports clubs and the number of runners for each club.

Number	Chlef Provincial Athletics Association	Number of Runners
09	Ouled Abdelkader Rising Generation Club	01
08	Boukadir Al-Fath Athletics Club	02
06	Ouled Mohamed Youth Sports Club	03
23	Total	

5.3. Research Scope

5.3.1. Human Scope

This was represented by the sample of test subjects targeted by the research, which consisted of middle-distance runners from the U16 category. Their number was 23 runners, distributed among several sports clubs affiliated with the Chlef Provincial Athletics Association.

5.3.2. Spatial Scope

The research was conducted in the sports complexes of the municipalities of Chlef, Ouled Ben Abdelkader, and Boukadir.

5.3.3. Temporal Scope

As a first phase, the researcher was able to investigate the reality and potential of middle-distance training and assess the research problem. This was done through field visits to various regions of the country and personal interviews with some cadet coaches during the period from March 2025 to the beginning of April. This took place during the provincial competitions held in Chlef.

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-The field work period for the research extended over two main phases:

Phase One: This involved conducting the exploratory experiment, which extended from the beginning of the 2024/2025 sports season and included the following steps:

-A period of field visits and personal interviews with coaches.

-A period of research into tests according to the purposes to be measured.

Phase Two: During this time period, the physical tests were completed on the following dates:

From 01/05/2025 to 03/03/2025.

5.4. Research Tools

To carry out his research in the best possible way and achieve his intended goals, the researcher used the following tools.

5.5. Procedural Control of Variables

Field studies require the control of variables to manage them and to isolate other variables. Without this, the results a researcher obtains become difficult to analyze, classify, and interpret.

The research includes the following variables:

Independent Variable: The standardized levels of physical abilities.

Dependent Variable: The selection of young talents in middle-distance running.

5.6. Physical Tests

- **30m Sprint Test (from an approximate run)**
- **Briksi 5-Minute Run Test (to measure specific endurance)**
- **Sargent Vertical Jump Test**

5.7. Scientific Foundations of the Tests

5.7.1. Exploratory Study

The exploratory experiment is a scientific training for the researcher to identify the negatives and positives encountered during the tests, to avoid them, and to ensure the smooth progress of the research experiment and the achievement of the research objectives and hypotheses.

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5.7. 2. Test Reliability

Test reliability means that the test gives the same results if it is repeated on the same individuals and under the same conditions. Test reliability refers to the "degree of confidence" that the test result does not change (i.e., has a constant value) during repetition or retesting. In other words, it gives stability to the results obtained by the researcher if the experiment is repeated on a similar group (Farahat, 2005).

5.7.3. Test Validity

Validity is considered the most important requirement for a good test, as it indicates the extent to which the test achieves its intended purpose. Test validity refers to "the degree to which the test is suitable for measuring what it was designed to measure" (Abdelhafid, 1993). To ensure the validity of the tests, the researcher used self-validity (construct validity). This is considered the most accurate representation of experimental scores relative to the true scores, which are free from measurement errors. It is calculated by taking the square root of the test's reliability coefficient (Kamalash and Bashir Saad, 2006).

Validity = $\sqrt{\text{Reliability Coefficient}}$

Table 02. This table shows the validity coefficient and reliability coefficient of the tests.

Physical Tests	Sample Size	Reliability Coefficient	Validity Coefficient
Briksi Run Test	04	0.94	0.95
30m Sprint Test		0.82	0.90
Sargent Vertical Jump Test		0.88	0.93

Based on the results recorded in Table (02), it is evident that these tests are characterized by a high degree of reliability. All the obtained values were high, with the lowest value among the physical tests

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reaching (0.94) and the highest value reaching (0.82). This indicates a strong correlation between the results of the pre- and post-tests for all physical tests. This statistical finding confirms the high reliability of all the tests. Furthermore, regarding self-validity, the physical tests were found to have a high degree of self-validity.

6. Presentation and Analysis of the Studied Sample's Results

6.1. Mean and Standard Deviation Values for Physical Tests

Table 03. Shows mean and Standard Deviation Values for Physical Tests of the Middle-Distance Runners Sample (U16 Category)

Variables	Mean	Standard Deviation	Kurtosis	Skewness
Sargent Test	0.382	0.272	1.318	2.328
Briksi 5-Minute Run Test	1786.48	14.84	0.138	-0.548
30-Meter Test	5.385	1.236	-0.432	-0.436

Based on the results in Table No. (03), the mean values for the study sample's physical tests were as follows: Briksi 5-minute run test (1786.48); 30-meter sprint test (5.358 seconds); Sargent test (0.382 meters); the corresponding standard deviations were (1.236, 14.84, and 0.272), respectively.

The table also shows the skewness coefficients for the means and standard deviations, which ranged between (-0.548 and 2.328). The corresponding kurtosis values ranged between (-0.432 and 1.318). These values indicate that the data for the physical tests are normally distributed, and the skewness values falling within ± 3 are an indicator of the sample's regularity and its conformity to a normal curve.

6.2. Standardized Scores and Levels for Physical Tests

6.2.1. Standardized Levels for the Endurance Test (Briksi 5-Minute Run).

Table 04. Distribution of the U16 Middle-Distance Runners Sample Across Standardized Levels for the Briksi 5-Minute Run Test.

		Briksi Test 14.84 1786.48 ±			
Standard	Stand	Boundaries of	Percentage	Numb	Percenta

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ized Levels	ardize d Grade s	Standardized Levels	Allocated in the Normal Distribution Curve	er of Player s	ge
Very Good	81-100	More than 1887.40	4.86	00	00%
Good	61-80	1856.8-1885.8	24.52	11	47.82%
Acceptable	41-60	1826.6-1855.2	40.96	07	30.43%
Poor	21-41	1795.6-1824.6	24.52	03	13.04%
Very Poor	20	Less than 1794.07	4.86	02	8.69%
Total			99.72	23	100%

From Table No. (04), the mean for the Briksi run test was (1786.48) with a standard deviation of (14.84). The percentages of U16 middle-distance runners across the Briksi test level ranged between (47.82%) as the highest percentage and (00%) as the lowest.

The distribution showed that the best result was in the good level, with the highest percentage of (47.82%) for (11) runners, at the standardized level boundary of (1856.8 - 1885.8). There was a (0%) percentage in the Very Good level, with (0) runners, at the standardized level boundary of (1887.40 or more).

Meanwhile, the number of runners in the Acceptable level was (07), with a percentage of (30.43%), at the standardized level boundary of (1826.6 - 1855.2). We also find that the number of runners in the Poor level was (03), with a percentage of (13.04%), at the standardized level boundary of (1795.6 - 1824.6). Finally, at the Very Poor level, there were (02) runners, with a percentage of (8.69%), at the standardized level boundary of (1794.07 or less).

6.2.2. Standardized Levels for the Speed Test (30-meter Sprint)

Table 05. Distribution of the U16 Middle-Distance Runners Sample Across Standardized Levels for the 30-Meter Sprint Test.

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		30m Sprint Test 1.236 ± 5.358			
Standardize d Levels	Standardize d Grades	Boundaries of Standardize d Levels	Percentage Allocated in the Normal Distributio n Curve	Numbe r of Players	Percentag e
Very Good	81-100	Less than 4.97	4.86	00	00%
Good	61-80	4.57-4.95	24.52	03	13.06%
Acceptable	41-60	5.17-5.55	40.96	09	39.13%
Poor	21-41	5.16-5.78	24.52	10	43.47%
Very Poor	20	More than 5.75	4.86	01	4.34%
Total			99.72	23	100%

From Table No. (05), the mean for the 30-meter sprint test was (5.358) with a standard deviation of (1.236). The percentages of U16 middle-distance runners across the 30-meter sprint test levels ranged between (43.47%) as the highest percentage and (00%) as the lowest. The distribution showed that the best result was in the good level, with a percentage of (13.06%) for (03) runners, at the standardized level boundary of (4.47 – 4.95). There was a (0%) percentage in the Very Good level, with (0) runners, at the standardized level boundary of (4.97 or less).

Meanwhile, the number of runners in the Acceptable level was (09), with a percentage of (39.13%), at the standardized level boundary of (5.17 – 5.55). We also find that the number of runners in the Poor level was (10), with the highest percentage of (43.47%), at the standardized level boundary of (5.78 – 5.16). Finally, at the Very Poor level, there was (01) runner, with a percentage of (4.34%), at the standardized level boundary of (5.75 or more).

Table 06. Distribution of the U16 Middle-Distance Runners Sample Across Standardized Levels for the Sargent Test.

Standardi zed	Standardi zed	Boundari es of	Percenta ge	Numb er of	Percenta ge
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Levels	Grades	Standardi zed Levels	Allocated in the Normal Distributi on Curve	Player s	
Very Good	81-100	More than 0.421	4.86	01	04.34%
Good	61-80	0.371- 0.398	24.52	06	26.08%
Acceptabl e	41-60	0.325- 0.367	40.96	10	43.47%
Poor	21-40	0.235- 0.321	24.52	06	26.08%
Very Poor	20	Less than 0.234	4.86	00	00%
Total			99.72	23	100%

Based on the results in Table No. (06), the mean for the Sargent test was (0.344) with a standard deviation of (0.272). The percentages of U16 middle-distance runners across the Sargent test levels ranged between a high of (43.47%) and a low of (00%).

The distribution showed that the best result was in the Very Good level, with a percentage of (4.34%) for (01) runner, at the standardized level boundary of (0.421 or more). A percentage of (26.08%) was in the good level, with (06) runners, at the standardized level boundary of (0.371 - 0.398).

Meanwhile, the number of runners in the Acceptable level was (10), with the highest percentage of (43.47%), at the standardized level boundary of (0.325 - 0.367). We also find that the number of runners in the Poor level was (06), with a percentage of (26.08%), at the standardized level boundary of (0.235 - 0.321). Finally, at the Very Poor level, there were (00) runners, with a percentage of (00%), at the standardized level boundary of (0.234 or less).

7. Discussion of Results considering Hypotheses:

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From the results in Table No. (03) for the physical tests of the research sample (U16 middle-distance runners), we found that the mean for the endurance variable (Briksi test) was (1786.48) with a standard deviation of (14.84). When these results are applied to Table (04), which details the standardized levels for this indicator in U16 middle-distance runners, the results fall into the good level. Specifically, we found (11) runners, representing (47.82%), at the standardized level boundary of (1856.8 - 1885.8), with a standardized score of 61-80, compared to other standardized levels.

The researchers observe a good level of endurance in the study sample, which is a result of effective physical preparation for the runners. Among the physical attributes that play a crucial role in the 800-meter and 1500-meter races, endurance is a key factor. The aerobic system (oxygen) contributes significantly to improving performance, and speed is a fundamental factor in raising the level of middle-distance runners. Sabri, quoting Bowersfield, confirmed that endurance and speed are the two physical attributes that determine an athlete's performance level in middle-distance running (Mouin, 1988). It is also worth noting that specific endurance, which consists of speed endurance and strength endurance, is of great importance to middle-distance runners. "These two combined attributes represent the most important requirements for performing middle-distance running" (Thill and Raymond, 2003).

The mean for the speed variable was (5.358) with a standard deviation of (1.236). When these results are applied to Table (05), which details the standardized levels for this indicator in U16 middle-distance runners for the 30-meter sprint test, the results fall into the Poor level. Specifically, there were (10) runners, representing (43.47%), at the standardized level boundary of (5.78 - 5.16), with a standardized score of 21-40 compared to the other standardized levels.

The researchers believe that this poor level of speed components negatively impacts digital performance in middle-distance running. Speed is one of the important physical attributes that a runner needs in

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the 800-meter race in the future, especially for youth in this specialty. This weakness is attributed to the exercises used to develop speed, which were not in the specific technical form of the skill. In other words, speed training is fundamentally training for the nervous system and fast-twitch muscle fibers. Physiological adaptation can only occur if these physiological systems are placed in the same form in which the movement is performed. This was confirmed by Abu Al-Alaa and Ahmed Nasr, who stated that "speed training must be performed according to the target speed level in the training program for the process of physiological adaptation to the movement to occur according to the required speed, the targeted movement frequency, and the supporting strength" (Abu Al-Alaa and Sayyid, 2003).

As for the mean for the lower limb strength variable, it was (0.344) with a standard deviation of (0.272). When these results are applied to Table (06), which details the standardized levels for this indicator for middle-distance runners on the Sargent test, the results fall into the Acceptable level. Specifically, there were (10) runners, representing (47.43%), at the standardized level boundary of (0.325 - 0.367), with a standardized score of 41-60 compared to the other levels. The researchers believe that this attribute is important for middle-distance runners, and therefore the coach must pay attention to it and work on its development. The main reasons for the weakness in muscular strength are the failure to use weight training, medicine balls, running in sand, and hill running. Recent studies have proven that improving speed-strength in the legs is necessary, as it increases the strength of muscles, ligaments, and tendons. Mohamed Abdel Rahim confirmed that strength training with weights enhances bone density and strengthens tendons, ligaments, and connective tissues in the muscle, protecting them from injuries (Mohamed Jasem, and Al-Abidi, 2010). Based on the above, the researcher believes that physical or functional measurements and tests are important in middle-distance training, especially for the U16 category. These tests, whether laboratory or field-based, are conducted on the runner to select young talents and to

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understand the best methods for regulating training loads. They also help in assessing the runner's readiness for training or competition. Therefore, coaches should conduct tests periodically throughout the training season to achieve physiological adaptation, evaluate the athlete's physical abilities and the training programs they undergo, and construct standardized criteria for evaluating various physical abilities. This agrees with the following similar studies:

Maim Mokhtar (2018): "Determining standardized levels in light of a proposed test battery for the selection and guidance of emerging talents in football." This study aimed to define standardized levels to act as a scientific tool for facilitating the selection of talented players based on their physiological, physical, and some somatometric measurements. The study emphasized the necessity of working with the proposed standards as scientific support for field observation to facilitate this process for the benefit of Algerian football.

Zemmouli Lahcen (2020): "Proposal of standardized levels for some physical characteristics based on a test battery for talent selection in athletics: A survey study of some clubs in Batna province." This study aimed to propose standardized levels that are consistent with the specific characteristics of athletes in the region and to avoid relying on Western standards. The study used a descriptive survey method on a sample of 64 athletes aged 10-11 and recommended using the proposed levels as scientific support for field observation to facilitate the talent selection process.

Madassi Lotfi (2023): "Determining criteria for the selection and guidance of young talents in middle-distance races." This study aimed to identify the criteria adopted in the selection and guidance of youth in middle-distance running. The study found that coaches rely heavily on physical and physiological criteria while neglecting morphological criteria.

It is clear from these similar studies that they agree with and support the results reached by the researcher, which validates the first hypothesis: "It is possible to construct standardized levels for certain

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physical attributes for the selection of talents in middle-distance running, U16 category."

Additionally, the second hypothesis: "It is possible to construct standardized grades for certain physical attributes for the selection of talents in middle-distance running, U16 category," has also been confirmed.

8. CONCLUSION:

Based on the theoretical and empirical data presented in this research, and in response to the problem statement, we have analyzed the results concerning the construction of standardized levels for specific physical attributes of middle-distance runners. The research sample consisted of U16 runners from clubs within the Chlef Athletics Association. To address this problem, the research hypotheses were formulated as temporary solutions. To verify their validity, we conducted a survey with coaches and administered a series of physical tests to athletes to determine the standardized grades and levels for selecting talents in the U16 middle-distance running category.

Our findings indicate that a proper evaluation process, using tests applied to runners, is crucial for determining their true physical level. The results from the clubs showed a good level of certain physical abilities, such as muscular strength and endurance, but only a moderate level for the speed component.

The selection process, when based on physical tests and morphological measurements, plays a vital role in understanding the physical level of middle-distance runners. This is a sensitive process, as it has a significant impact on future performance records in the 800m and 1500m events.

However, the results suggest that middle-distance coaches do not rely on scientific principles for selection, and that U16 middle-distance runners lack the specific physical attributes required to reach a high level. Therefore, the researcher emphasizes the need to use physical tests during the selection phase of the sports season as an essential tool for evaluating physical abilities. This will help coaches select the best

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runners and regulate training loads to help athletes at this stage reach their highest possible physical level, as they are considered the reservoir for the national team.

8. References:

1. Abdel-Fattah, Abu Al-Ela Ahmed, and Ahmed Nasr El-Din Sayed. *Physiology of Physical Fitness*. Dar Al-Fikr Al-Arabi, 2003.
2. Abdel-Khaliq Ikhlas, Essam El-Din laayadi. *Sports Training, Theories and Applications*. Dar Al-Ma'arif, 1992.
3. Al-Abidi, Mohamed Jasem, and Alaa Mohamed Al-Abidi. *Scientific Research Methods*. 1st ed., Dar Dibono for Publishing and Distribution, 2010.
4. Ahmed El Basstouci, *Foundations of Sports Training Theories*, Cairo, Dar Al-Fikr Al-Arabi, 1999.
5. Farahat, Leila El-Sayed. *Measurement and Testing in Physical Education*. 2nd ed., Al-Kitab Publishing Center, 2005.
6. Helmy, Abdel Qader. *An Introduction to Statistics*. 2nd ed., Dar Al-Matbu'at Al-Jami'yah, 1993.
7. Kamalash, Youssef Lazem, and Saleh Bashir Saad. *Physiological Foundations of Training in Football*. Dar Al-Wafa' for Printing and Publishing, 2006.
8. Qassem, Hassan Hussein, and Al-Mahshash. *The Gifted Athlete*. Vol. 1, Dar Al-Fikr for Printing and Publishing, 1999.
9. Thill-Thomas, Edgar Raymond. *educateur sportif préparation au brevet d'état*. Edition Vigot, 2003.
10. Maim, Mokhtar. "Determining Standard Levels in Light of a Proposed Test Battery for Selecting and Guiding Emerging Talents in Football." *Tafawuq Journal in Sciences and Techniques of Physical and Sports Activities*, vol. 3, no. 1, 20 June 2018, pp. 195-207.
11. Yacine, Belamri. "Proposing Standard Levels for Some Elements of Physical Fitness According to a Test Battery for Selecting Young Talents in Handball (17-19) Years." *Journal of Sports Creativity*, vol. 11, no. 4, 20 Dec. 2020, pp. 180-199.
12. Zmouli, Lahcen. "Proposing Standard Levels for Some Physical Characteristics Based on a Test Battery for Selecting Talents in

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Journal of Science and Technology for Physical and Sports
Activities, vol. 17, no. 2, 13 June 2020, pp. 73-88.