

**The reality of the process of detecting athletically gifted students in the half-long running activity (1500 meters.3000 meters)
A field study of the relationship between permanence and speed among athletic talented students in the intermediate stage**

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Abstract

The study aims to identify the relationship between speed and endurance during the process of discovering and scouting sports talent in the middle-distance running races. In this study, we used the descriptive approach on a sample of 245 students were deliberately selected. To collect data we used Brikci test to measure endurance, and to measure speed we chose the 70 meter running test. After collecting and processing the results and them, the results show that there is a relation between endurance and speed during the process of discovering and scouting process. The statistical results showed that there is a correlative relationship between endurance and speed in young middle-distance runners in athletics, so the results of the physical tests confirmed the contribution of early detection of gifted young people with exceptional physical quality.

1. Introduction

The process of selection and detection of sports talent is one of the most important processes. It should be relied on to detect and select athletes who have certain abilities. To select also the talent regarding physical criteria. (Ayadi, 2019, p. 386) states that "The interest in developing sports performance and reaching higher levels begins with the discovery and exploitation of sports talents and raw materials", Talent selection is an insightful and thorough view of the skill level of the emerging according to psychological, physical, skill and planning limitations in order to select the best talents according to scientific foundations to prepare them healthily to reach high levels. (Almani Iman, 2021, p. 15). In it, a set of tests are applied to students to measure the level of abilities and characteristics that are considered an indicator to predict the athletic future of the athletically gifted student. Detection is then defined as "the identification among all the practitioners only who are capable of reaching a high level sport, this detection is carried out by continuous census and evaluation of the best athletes on the basis of special studied criteria". (Le Derooff, J.Y. 2007), Sporting talent is the child or adolescent who possesses all the characteristics and abilities necessary to develop and achieve high level results in the chosen sport specialization. Thus, the child who possesses a set of physical and mental abilities, having skills, which distinguish him from his peers and qualify him as suitable to reach the high level (Mokrani et al., 2009, p. 89). (Zarari, 2021, p. 05) stated that "the selection process is a process that has scientific bases provided by specialists in this field, as tests and measurements are objective and honest means to achieve a good selection", adding to this "that high athletic performance can be achieved only by individuals endowed with rare morphological characteristics, accompanied by the highest level of development of physical and mental functional abilities" (Platonov, 1984, p228). The development of sports has become a subject of great interest of all countries in the world, because it is one of the best methods of raising and refining individuals physically, mentally, psychologically and morally, and one of the requirements for the progress of sports is to detect and select talents at an early age, follow them and take care of them, Weinneck (1997, p. 331) stated that "any sport practice must be oriented towards a high level of athletic performance", also Zemouli and Mekran (2020, p. 72) stated that "coaching young people to a high level can only be achieved if the selection and orientation process is done appropriately", Abbas et al. (2019, p. 241) mentioned that "for the success of the selection process, it is necessary to

accurately identify the model requirements and specifications that need to be met in the athlete in order to reach a good level". This process is only effective with a methodical work by respecting the scientific requirements as Ghazal, Ben Si Kaddour points out that "it is necessary to work to help the talented students with physical qualities to choose practices that correspond to their abilities in order to invest it to reach the highest possible level of sports performance" (2017, p. 185). As a result, the human wealth residing in schools represents the true reservoir of future champions, Baboucha stated that "selection is one of the most important processes that most sports teams go through by focusing on the best elements that have the aspect of success, and certain qualifications that help them excel" (2021, p. 352). Ben Si Kaddour Habib (2008, p. 29) mentioned that "talented individuals in any field of sport represent a human wealth that needs to be discovered and early attention to nurture and preserve it." The detection and selection of gifted students in sports no longer depends on the factor of chance, but has become the process of detection and selection of the rules of scientific foundations that allow the selectors to obtain accurate results and scientifically identify the level of different abilities possessed by gifted students, Thanks to the data obtained, the selection process aims to detect the elements that have predispositions, inherited or acquired, and refine and fix them in successive stages leading to the construction of a high level champion in a particular activity (Almani Iman 2021, p. 74). Process of the detection of selection should be subject to scientific criteria that allow identifying the abilities and aptitudes of beginners and precisely in the specialty of middle distance in athletics (Zamuli and Mokrani, 2020, p. 74). It is important that the athletically gifted student in middle-distance races, has the ability to exert a constant physical effort and distribute it over the distance covered, which requires the vital organs of the runner to provide the energy necessary for the physical effort exerted at all stages of the race, and for this, it is necessary to rely on specialized physical tests to measure these abilities and provide the necessary means when detecting and selecting the student is athletically gifted, as Aroussi (2021, p. 02) stated: "the necessary abilities must be available and the coach must have the ability to raise the level of these young talents and bring them to the highest level". Due to the importance of running long and medium distance races in athletics, on the physical side, the runner combines the elements of basic fitness such as strength, speed and endurance to achieve excellence and high level athletic achievement in this specialty, to this end, the athlete should have the elements of fitness in one way or another.

Endurance is one of the most important elements of physical fitness in middle distance running events, it is the ability of the runner to make a constant physical effort and distribute it over the distance covered, and this requires the vital systems to provide the energy necessary for the effort made at all stages of the race, Abdelhak, Nagal (2021, p. 70) pointed out that "endurance has an important role in the development of other physical qualities, as well as in athletic events, especially in middle-distance races. Specialists in the field of training also emphasize the importance of speed in athletics events, because it plays a primary role in the practice and performance of all sports activities and depending on the type and nature of the activity practiced, and it is necessary for long-distance runners, in this context, Nahal et al. (2022, p. 05) emphasize that "speed is one of the physical variables and one of the important and fundamental components of physical performance and plays a key role in all physical activities. Alili and Bouhaj (2021, p. 266) add that "speed and speed endurance dominate in running, as this type of running requires high speed". The present study aims is to contribute to the provision of a theoretical and applied scientific foundation that examines the correlation between the physical endurance of the athlete and the quality of speed in light of the selection process of athletic talent in middle-distance running for college students, to determine the optimal age to detect the quality of endurance and speed in young athletes, and to identify the role of these two physical qualities in middle-distance running in athletics, Bouali. Bonab (2019, p. 63) defines athletics as a set of exercises aimed at the harmonious development of physical capacities and includes multiple branches, the middle-distance races (half-long) are: 800 meters, 1500 meters, 3000 meters and 5000 meters (Alawi Mounir, 2016, p. 12).

The importance of the study stems from a theoretical point of view, as it is a simple addition to the comparative studies between detection ,selection and promotion of the sport as outcomes, and to demonstrate the importance of repeating the speed effort as long as possible. In this regard, Zarf and Laklib (2019, p. 18) mention that "endurance is the ability to make continuous and long contractions using a number of muscle groups strongly for a sufficient period of time to get rid of fatigue and play on the functions of the circular and respiratory system. Muscular endurance is based on the resistance of muscle fibers to a given effort, Budvan (2016, p. 264) states that speed endurance is "the ability to withstand varying and different speeds for long periods of time." Bennour Mammam (2014) during his study, he based on the identification of the relationship between physical tests and

morphological measurements in track and field athletes specialized in long distance running (a case study on minims and cadets beginners in the wilaya of Chlef), the tests applied are anthropometric measurements and physical tests on a sample of 45 athletes. One of the most important results is that the members of the study sample are distinguished by morphological characteristics and physical abilities proportional to the specialization of middle-distance running. Thus the study of Shagur Al-Arabi (2020) which aimed at the analysis of the selection process of middle distance runners in the age group (15-16) years, (a field study in western Algeria, was based on a purposive sample that included (169) runners from (07) wilayas of western Algeria, One of the main results he concluded was the existence of differences in the level of long-distance runners in western Algeria in terms of important performance requirements in specialization. There is a disparity in terms of the ability of runners in the study sample to practice this specialty compared to the standard levels of this age group. Zammouli Lahcen, Mokran Ismail (2020) in their studies proposed standard levels for certain physical characteristics based on a battery of tests for the selection of talent in athletics, a survey of some clubs in the wilaya of Batna. The study was based on the descriptive approach and the research sample included (64) athletes, the results were processed statistically, and it was found that the standard levels of certain physical characteristics based on the proposed test battery (physical tests) contribute positively to the selection of talent in athletics. After these various findings of theoretical background and these previous studies, we find that middle distance running in athletics requires a high level of physical skills, but the problem that arises is to know the basic physical qualities appropriate for this specialty in athletics, And on this perspective that the questioning of this study asks about the relationship between endurance and speed in the process of detection and selection of young athletic talent in the specialty of middle distance running in athletics in physically gifted students, and is there a statistically significant correlation between endurance and speed in light of the process of detection of athletic talent in middle distance running in young college students? Is the correlation between endurance quality and speed an indicator for predicting athletic talent in middle-distance running in the middle school youth category?

After this main questioning, we assume that there would be a statistically significant correlation between endurance and speed quality in light of the process of detecting athletic talent in the specialty of middle-distance running among young college students. Thus, we believe that the correlation

between endurance and speed would represent a predictive indicator of athletic talent in the specialty of middle-distance running in track and field

1.1. Literature Review

More specifically, experimental studies indicate that CWI generates a series of physiological changes including, the reduction of core body temperature (Peiffer, Abbiss, Watson, Nosaka, & Laursen, 2009).

Through this literature review, we assume that the response of the recovery indicators varies significantly depending on the type of CWI recovery protocol. Therefore, the main objective of this study is to compare the effects of two recovery protocols by CWI after a state of intense fatigue in young Handball players.

2. Method and Materials

2.1. Participants

The research sample consists of 245 students from the fourth year of intermediate education who were selected by the intentional method, distributed over 10 averages so that 25 students from each medium.

2.2. Materials

Collection tools: Collection tools - Data collection tools used to measure the speed element: fast running a distance of 70 meters. In the measurement of the quality of permanence, the Brixie test runs for (05) minutes. Data collection tools have been subject to scientific requirements

2.3. Design and Procedure

Research/study procedures: These include:

Methodology: We relied on the descriptive approach to suit the merits of the research. Independent variable Physical Consistency: Measured by applying the Brixie running test for (05) minutes. Dependent variable: speed and was measured by a 70-meter running test.

2.4. Statistical Analysis

Statistical tools (arithmetic mean, standard deviation, Pearson correlation coefficient, simple and multiple linear regression, coefficient of determination.).

3. Results

Table (01): Regression coefficients between the independent variable Continuity characteristic and the dependent variable Speed characteristic of mathematically gifted students in half-long running

	Non-standardized coefficients		Standardized coefficients	t	Sig.	R	R-two	R-two adjusted
	B	Bêta						
(Constant)	2,79	0,26		10,70	0,00	0,92	0,85	0,85
endurance	0,80	0,02	0,92	37,57	0,00			

The explanation of the model

The explanatory ability of the regression model is judged through the modified coefficient of determination, which is found in Table (01), which shows the significant relationship between the independent variable the characteristic of continuity and the dependent variable of the speed characteristic of the members of the study sample, as the value of the estimated adjusted determination coefficient (0.85), this means that the variables of the study selected for the model have interpreted the value of (85%) of the effect of the independent variable The sustainability characteristic of the members of the study sample on the dependent variable is the speed characteristic, meaning that (85%) of the changes These results reflect the validity of the variables selected for the study and the extent of their ability to interpret the results of the regression model, while the statistical significance of this model has been justified by the level of significance estimated at the probability value (0.00), which is statistically significant and is in line with the hypotheses of the study.

Table (2): Regression coefficients between the independent variable Continuity characteristic and the dependent variable Speed characteristic of mathematically gifted students in half-long running

	Sum of squares	ddl	Average square	F	Sig.
Regression	3 036,86	1	3 036,86	1 411,79	,000b
Residues	522,71	243	2,15		
Total	3 559,57	244			

A- The overall morale of the model

It is clear from Table (02) that the calculated value of (F) is equal to (1 411.79) and the p.VALUE is equal to (0.00), which is less than the level of significance (0.05), this means that there is at least one regression coefficient that differs from zero and has a significant value.

2- Partial morality of the model

In the previous step we got a texture that there is at least one regression coefficient that differs from zero, and to determine which of these coefficients is significant, we perform a partial semantics test of the model by T.test.

Through the results in Table (02)

- The fixed part of $\beta = (10,70)$ at the probability value $(0,00)$, which is less than the value $(0,05)$, from which we conclude that the constant magnitude in the regression model is significant.

4. Discussion

The selection and detection of sports talent is largely related to the youth category, and this category is characterized by the ability to practice several types of sports, but success is oriented towards a specific discipline, Boumediene Qaeda et al. (2018, p. 286) pointed out that "selectors must determine the specific criteria of each activity, This helps to select the young athlete according to specific scientific bases." In this regard, Zemouli and Mokrani (2020, p. 76) recommend that "those responsible for sports training set precise reference levels according to the requirements of specialization and the nature of their societies and its specificities to ensure that the athlete reaches the higher levels", (Hamzawy et al., 2021, p. 382), citing Bastawisi Ahmed, stressed that "time and distance are significant measures and an indicator of the progression of the level that all practitioners seek to achieve, whether at personal, local, international or Olympic level", one of the most important objectives of the selection and detection of sports talent is the early detection of talented people in various sports activities, who are young people who are very willing to perform in their field of activity and predict what these preparations will lead to in the future (Ben Si Kaddou, 2008, p. 32)

Our study analyzes the selection of young college students in the specialty of middle distance running, which requires great effort special physical abilities that must be detected at an early age such as endurance or speed, which must be available at the required level in the athletically gifted child, which provides the energy necessary to make a high-level physical effort throughout the race, to maintain or support the respiratory effort in medium-distance running events, which is the basis for preparing the runner physically, since it increases the capabilities of the respiratory devices and increases the heart rate and regulates the circulatory system and increases the maximum oxygen consumption, namely the speed of 3000 meters of running that requires great effort and continuous performance of this effort, This confirms the importance of the speed endurance element in 3000-meter runners. Saber (2019, p. 37) points out that durability and endurance in running over medium distances are often associated with speed in the direction of rolling speed, that is, the ability to perform the activity at high speed for a long period of time. Amari Suhaila et al. (2020, p. 97) mention

that the aerodynamic system must be developed in such a way that the rider can maintain the high tempo throughout the race distance.

Speed is of great importance from an energy point of view, as it helps to increase the energy reserves of phosphate creatine and adenosine triphosphate (Saber, 2019, p. 42), so Chalghoum Abdel Rahman (2011, p. 95) state that it is necessary to link running speed to endurance because speed without endurance can accomplish nothing and endurance without speed is the same thing. Allemani Iman (2021, p. 152) explains that the middle-distance runner must develop his aerobic system so that he can withstand the speed of the race, and the runner needs the anaerobic system to be able to finish the race quickly in a state of fatigue. Kadrawi (2018) cited that speed endurance determines efficiency and helps develop success, (Ghallab et al., 2018, p. 157) state that the middle-distance runner must maintain his physical fitness, especially speed.

5. Conclusion

Selection is a kind of prediction based on a solid scientific basis and through which it is possible to know what the athlete will be in the future (Aroussi Abdel Majeed, p. 12), the process of good selection of young people at the beginning of their career with good training programs leads to bring the selected individuals to high sports levels (Zamouli, 2020, p. 43), (Dahmani Nawal et al., 2020, p. 237), citing Mohamed Sabri, indicated that the selection and development of sports talents is one of the fundamental factors that lead to the preparation of the athlete to become capable of achieving superior performance, Shashou Sadawi et al. (2018, p. 84) indicated that it is possible to predict on the basis of the capabilities of the functional potential of the player, and the effectiveness of the circulatory and respiratory systems, when performing the high-level test.

To this end, it can be concluded that early detection based on scientific bases allows breeders to predict the performance of selected youngsters in the future, which is confirmed by the results of our study concerning the correlation between endurance and speed in young middle-distance runners in athletics. Bilbali and Bin Dahman (2018, p. 272), citing Essam Abdel-Khaleq, confirmed that there is a strong link between the results of physiological measurements and the prediction of sports excellence in various sports activities, Zarari (2021, p.18) stated that the determinants of selection provide the coach with the opportunity to predict high sports levels to be achieved in the future. And through these results, we hope, in the future, that researchers will begin this topic with other assumptions

concerning the early detection of gifted talents and especially in athletics, as well as the different correlative relationships that exist between physical qualities and coordinating abilities.

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