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The Role of Guiding Young Athletes (Ages 9-12) in Achieving High Performance in Athletics

دور عملية توجيه الناشئين من(9-12سنة) في تحقيق المستوى العالي لرياضة ألعاب القوى

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Abstract : When we talk about guidance in the field of sports training, sports guidance has become a necessary and mandatory matter, especially at this age stage, as it is the appropriate stage to introduce young athletes—particularly the talented ones, who are the subject of our study—and to give them an early opportunity to express their desires and capabilities, and then reach the highest levels.

The guidance process represents an important part of the coach's sports journey, where the young athlete is discovered, guided, and even their future is predicted based on physical and skill considerations, as well as the trainee's general abilities. This process is also economical in terms of time and effort. Coaches agree that the appropriate age for guiding a young athlete is between 9 and 12 years old.

Keywords: Sports Guidance _ Age Group (9-12 years) _ Athletics

الملخص: إذا ما تكلمنا عن التوجيه في مجال التدريب الرياضي، فالتوجيه الرياضي أصبح أمرا ضروريا ومفروضا وخاصة في هذه المرحلة العمرية حيث أنها المرحلة المناسبة لتعريف الناشئين وخاصة الموهوبين منهم والذي هو موضوع دراستنا وإعطائهم الفرصة في وقت مبكر لإبراز رغباتهم وقدراتهم ثم الوصول إلى أعلى المستويات عملية التوجيه تمثل لمدرب جزء مهم من المشوار الرياضي حيث يتم إكتشافه وتوجيهه و حتى التنبؤ بمستقبله بالاعتبارات البدنية و المهارية و قدرات الناشئ بصفة عامة و هذه العملية اقتصادية في الوقت و الجهد يجمع المدربون على أن السن المناسب لتوجيه الناشئ هو من 9 -12 سنة.

- **الكلمات المفتاحية :** - التوجيه الرياضي _ الفئة العمرية من (09_12سنة)_ العاب القوى

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- **The methodological steps followed in a scientific paper:**
- **Literature Review:**

Sports Guidance: Sports guidance is concerned with assisting the developing individual in selecting the type of sport that suits them; that is, the sport that aligns with the quantity and quality of their existing abilities, aptitudes, inclinations, traits, economic and familial circumstances, as well as their level of motivation and enthusiasm.

The late childhood stage (ages 9-12) is the pre-adolescence preparation phase, during which the child experiences a sense of independence and confidence in their personal abilities. In this stage, differentiation between the sexes becomes markedly more pronounced. It is also considered a means for learning moral standards and values.

Track and field athletics constitute the dynamic driver of comprehensive physical development, serving as the cornerstone upon which the evolution of other sports is predicated.

Considerable progress has been achieved by researchers across various domains of science and knowledge. This scientific advancement in the field of athletics has resulted in the refinement and multiplication of its research avenues. Accordingly, scholars have unearthed substantial findings that have facilitated the formulation of scientific principles and theories. These serve as foundational guidelines for coaches in designing programs intended to elevate performance standards within this discipline.

*** Introduction and problematic of the study**: Athletics is characterized by a training strategy that differs from team sports. Sprinting disciplines require meticulous preparation for competition, and they involve variables and specificities that must be adjusted based on the coach's expertise and competence. Moreover, a training program planned by the coach remains incapable of achieving success unless it aligns with the athlete's physical composition and the requirements of the discipline. Therefore, talent identification and sport-specific orientation are of great importance, as they ensure compatibility and prevent effort being wasted on a body type entirely unsuitable for the discipline's demands

The training process requires significant and continuous effort from the coach, coupled with dedication and discipline from the youth athlete. This is especially true in the guidance phase, as it forms the fundamental building block at the start of the sports journey or when selecting a specialized sport. It is here that a fertile ground is laid for developing the youth's physical and skill-based abilities and elevating the training process toward achieving the ultimate goal: reaching high levels of participation in international competitions that bring honor to both the country and the athlete.

The coach is responsible for selecting and guiding youth athletes who are physically, technically, and psychologically qualified to achieve greater successes. Through this modest work of ours, we have attempted to shed light on an important stage at the beginning of the training journey. We started from hypotheses and ultimately answered them based on demanding field work, a

systematic approach, and the honest and scientifically accurate reporting of results.

Our diagnosis of the field situation at an Olympic athletics complex in the capital gave us an understanding of the reality of guidance and selection by coaches. They rely on direct field observation and the naked eye, even though they prefer to use techniques, tools, and physical tests in the guidance process. However, they attribute the lack of such methods to the unavailability of resources and financial incentives for talent identification. This indicates the absence of a clear plan for nurturing these categories.

In the end, it can be said that the process of guiding youth athletes in athletics, as carried out by coaches, often depends on observation or chance in discovering the true gem.

Discussing the guidance of young athletes in track and field is essential and imperative. It allows us to study many aspects of their predispositions, capabilities, and inclinations, which helps determine the appropriate specialization.

Based on the findings of such research, the current study aims to guide young athletes toward the discipline that best matches their abilities and the requirements of sprinting events. This is also intended to assist coaches and athletes in achieving a high level in sprinting disciplines. By framing the problem, we can formulate the research question as follows: How can young athletes be effectively guided towards sprinting disciplines that align with their individual

capacities and the specific demands of those events, to optimize talent development and performance outcomes?

Suggested Enhanced Wording for a Research Context:

- **Main Question (Enhanced):** To what extent does systematic talent identification and sport-specific orientation during the childhood stage (ages 9-12) contribute to the long-term development of elite-level performance in athletics?
- **Sub-Question 1 (Enhanced):** What is the correlation between effective talent identification/early orientation programs and the subsequent athletic achievement across various developmental age groups?
- **Sub-Question 2 (Enhanced):** Is the age range of 9-12 years considered a critical or optimal

1- The practical chapter:

Followed Methodologies: The significance of the talent orientation process in the sports field lies in its ability to assist young athletes in selecting the type of sporting activity that suits them, aligns with their predispositions, capabilities, inclinations, and the motivation and enthusiasm they possess. This is because the process of preparing athletes for participation in sports competitions is of paramount importance, as it is centered on several crucial factors.

Methodology Used:

The descriptive analytical method was employed. Descriptive research aims to describe specific phenomena or objects, gather facts, information, and observations, and report on their status.

Reverche Variables:

Independent Variable: The process of talent identification and orientation for young athletes.

- **Dependent Variable:** The achievement of a high-performance level in athletics.

Research Sample:

The sample for this study was selected using a purposive sampling method, targeting individuals relevant to our topic. We selected 20 coaches frome varions athlétique disciplines.

Spatial Scope (Study Setting):

- **Theoretical Aspect:** For the theoretical part of our research, we utilized the resources at the municipal library and the library of the Institute of Physical Education at University of Algiers 3.

- **Practical/Field Aspect:** The field study was conducted at the **"Mohamed Boudiaf" Olympic Athletics Complex in Algiers, Algeria.**

Temporal Scope (Time Frame):

- **Theoretical Aspect:** The theoretical phase of our research spanned from **December to March.**

- **Practical/Field Aspect:** The practical/fieldwork phase lasted approximately **one and a half months, from the end of February to the beginning of April.**

1- Exposure, analyses and result exam:

We chose the questionnaire as the research instrument due to its suitability.

Statistical Tools Used:

The percentage system was employed to process the obtained results.

Furthermore, hypotheses were tested using **Chi-square (χ^2)** to determine the presence or absence of statistical significance in the study's findings.

Discussion and Analysis of the Results of the First Axis Concerning the Hypothesis: The Achievement of Age-Specific Athletic Performance Levels is Attributed to Appropriate Guidance.

First Question: Is sports guidance essential during the formative/training process?

Its Purpose: To determine the extent to which an individual persists in the specialized sports training/development process

Table 1. It highlights the necessity of the guidance process in athletic development.

Axes / Variables	Frequency	Percentage %	Calculated χ^2	Tabulated χ^2	Significance Level	Degrees of Freedom	Statistical Significance
Yes	17	85%	09.80	03.84	0.05	01	Significant
No	03	15%					
Total	20	100%					

Analysis and Discussion of Results:

85% of trainers agree on the role and importance of training in the guidance process, which explains the correct guidance of the individual, their acceptance of the training and educational process within the specialty, and their

continuation in the sports journey. It also develops the trainee's skill level, enhances their personal capabilities, and helps them advance and succeed to achieve a high level in their training and competition. However, 15% do not see a role for training through the individual's guidance process. For this question, there are statistically significant differences at a significance level of 0.05 and degrees of freedom equal to 1, where the calculated chi-square (χ^2) was 9.80, which is greater than the tabulated chi-square of 3.84.

Question Two: On what basis are young athletes guided/oriented?

Its purpose: To identify the foundations and criteria they deem appropriate for the process of guiding athletes toward a sports specialization.

Table 2. It outlines the foundations and criteria of the guidance process.

Axes / Variables	Frequency	Percentage %	Calculated χ^2	Tabulated χ^2	Significance Level	Degrees of Freedom	Statistical Significance
Morphological Structure	01	05%	32.40	07.82	0.05	03	Significant
Tests and Measurement	02	10%					
Observation During Play	16	80%					
Something Else	01	05%					
Total	20	100%					

Analysis and Discussion of Results : The results shown in the table indicate that there are statistically significant differences in favor of the larger value at a significance level of 0.05 and with 3 degrees of freedom, as the calculated χ^2 value of 32.40 is greater than the tabulated χ^2 value of 7.82.

This is reflected in the fact that the majority of track and field coaches, approximately 80%, focus on observation during athletic practice, considering observation a very important aspect of the coaching process, although its application varies from one coach to another. In contrast, only about 10% emphasize tests and measurements—a very low percentage compared to countries that prioritize high-tech techniques in coaching. This is followed by 5% for each of morphological structure and other factors that differ from one coach to another, such as discipline, consistency in training, etc.

Analysis and discussion of the results for the second axis related to the hypothesis: The age group of 9-12 years is suitable for athletic guidance in track and field.

Question One: In your opinion, what is the appropriate age for guiding young athletes?

Purpose: To determine the appropriate age for athletic guidance.

Table 3. Shows the appropriate age for guidance.

Axes / Variables	Frequency	Percentage %	Calculated χ^2	Tabulated χ^2	Significance Level	Degrees of Freedom	Statistical Significance
From 07 to 09 years	02	10%	15.69	5.99	0.05	02	Significant
From 09 to 12 years	15	75%					
From 12 to 14 years	03	15%					
Total	20	100 %					

Analysis and Discussion of Results:

The results presented in the table indicate the presence of statistically significant differences in favor of the largest value, at a significance level of 0.05 and with 2 degrees of freedom. This is evidenced by a calculated χ^2 value of 15.69, which is greater than the tabulated χ^2 value of 5.99.

Based on the table, the majority of coaches (75%) confirm that the age group of 9 to 12 years is appropriate for guiding young athletes. Others believe, at a rate of

15%, that the suitable age for specialized sports guidance is from 12 to 14 years. A smaller group, 10%, sees the appropriate guidance age as from 7 to 9 years, which is the weakest proportion. Additionally, three coaches suggested an age range of 11 to 13 years, which, fortunately, falls within the age group under study.

Question Two: Are you familiar with and knowledgeable about the characteristics, growth features, and the educational and sports practice requirements for the 9-12 age group?

Purpose: To determine whether the coach is knowledgeable about the characteristics of this age group for young athletes.

Table 4. Shows the characteristics and features of the age group.

Axes / Variables	Frequency	Percentage %	Calculated χ^2	Tabulated χ^2	Significance Level	Degrees of Freedom	Statistical Significance
Yes	17	85%	09.80	03.84	0.05	01	Significant
No	03	15%					
Total	20	100%					

Analysis and Discussion of the Results:

The results presented in the table indicate that there are statistically significant differences in favor of the higher value at a significance level of 0.05 and with 2 degrees of freedom.

The calculated χ^2 value reached 29.18, which is greater than the critical χ^2 value of 5.99.

Furthermore, the table reveals that the majority of trainers are aware of the characteristics and features of the age stage, with an estimated percentage of 90%. This is crucial for understanding this stage, which coincides with adolescence—a period of maturation across all aspects. Meanwhile, 10% responded with "somewhat." The key takeaway from all this is that the trainer possesses knowledge of the characteristics of the age stage.

Analysis and Discussion of Findings:

Table 14 indicates that 45% of young athletes achieve a distinguished competitive record in track and field, a finding attributable to the persistence and determination these athletes demonstrate in their pursuit of success.

Conversely, 55% of coaches identify the primary challenge as athletes' discontinuation of specialized sport engagement for reasons that remain unidentified, despite these individuals possessing all the necessary qualifications for success. The data presented in the table reveal no statistically significant differences at the significance threshold of $\alpha = 0.05$ with one degree of freedom ($df = 1$), as the computed Chi-square (χ^2) value of 0.2 falls below the critical value of 3.84.

The findings of this investigation, derived from the first axis of the questionnaire (items 1 through 14), demonstrate that coaches accredited by the Algiers Olympic Track and Field Complex possess both sound theoretical knowledge and practical experience, including exposure to Olympic-level competition. These coaches employ principles of athletic guidance and selection, which they consider appropriate for the developmental process and instrumental in achieving appropriate sport specialization. While guidance methodologies may vary, they converge upon a unified objective: providing suitable direction for the developing athlete. Consequently, it can be asserted that the first hypothesis, which proposes:

The attainment of competitive performance levels across age categories is contingent upon appropriate guidance of the young athlete".

Has been substantiated.

Table 24 indicates that 45% of coaches rely on personal field observation or the establishment of a performance monitoring network for each individual. In second place comes each coach's individual evaluation process at 30%, a percentage that is natural given that most coaches work with groups or units consisting of 10 to 15 individuals. In third place come physical and skill performance tests at 25%, which are not favored by coaches, as physical and skill tests are considered a result of the training process and specialization.

This study revealed, through the questionnaire in the second axis from question 15 to question 24, that coaches take into consideration the inclinations and

desires of young athletes and account for individual differences. They are also knowledgeable about the characteristics of the age stage (9-12 years), and most of them believe that this age is suitable for guiding young athletes. Accordingly, it can be stated that the second hypothesis, which posits:

The age stage (9-12 years) is suitable for the process of athletic guidance in track and field".

Has been confirmed.

Based on the first and second sub-hypotheses, which have been confirmed, it can be stated that the general hypothesis, which posits:

The process of guiding young athletes aged 9-12 years plays a role in achieving a high level of performance among track and field athletes".

Has been validated.

Discussion and Analysis of Survey Findings in Light of the Research Hypotheses:

Data presented in Table 24 reveal that 45% of coaches utilize personal field observation or establish a performance monitoring network for each athlete. The second most prevalent approach is the coach's individualized evaluation process, accounting for 30%, a proportion that is expected given that the majority of coaches work with groups or units comprising 10 to 15 individuals. Physical and skill performance tests rank third at 25%, a method less preferred by coaches, as

such tests are typically regarded as outcomes of the training process and specialization.

The findings of this investigation, derived from the second axis of the questionnaire (items 15 through 24), demonstrate that coaches consider the interests and preferences of developing athletes, take individual differences into account, and possess awareness of the characteristics pertinent to the 9-12 age group. The majority concur that this age is appropriate for the guidance of young athletes. Consequently, it can be asserted that the second hypothesis, which states:

The 9-12 year age group is suitable for the athletic guidance process in track and field".

Has been substantiated.

In light of the confirmation of both the first and second sub-hypotheses, it is reasonable to conclude that the overarching hypothesis, which proposes:

The guidance process for young athletes aged 9-12 contributes to the attainment of high performance levels among track and field athletes".

Has been corroborated.

General Conclusion

The current study revealed that athletics coaches are aware of talent identification and guidance methods.

Most coaches take into account the individual differences among young athletes and consider them.

The talent identification process represents, for the coach, an important part of the athletic journey, as it involves discovering, guiding, and even predicting the athlete's future based on physical, skill-related, and general abilities of the young athlete. This process is also efficient in terms of time and effort.

Coaches agree that the appropriate age for guiding a young athlete is between 9 and 12 years old.

The training process requires significant and continuous effort from the coach and discipline from the trainee, especially during the guidance phase, as it forms the foundation for choosing a specialized sport. From this point, fertile ground is laid for developing the trainee's physical and skill capacities and elevating the training process to achieve the goal of reaching top levels in global competitions, which bring honor to the country, the athlete, and the coach

2- References and quotations:

Aurélien , B., & Olivier , B. (2012). *La préparation physique moderne : Optimisation des techniques de préparation à la haute performance.* FRANCE: 4 tainer edition 2012.

P. W Kong و ،H De Heer . .(2008) .Anthropometric, gait and strength characteristics of Kenyan distance runners .*Journal of sports science & medicine* ، .499 ,(4) 7

Alanbagi, Y. (2016). *Méthodologie de l'entraînement sportif.* PARIS: Edité par Ellipses. Paris.

connor.h. (2007). Athletics Federations. Physique and performance for track and field. *journal international*, 25 s4.

Cristóbal , S. (2020, 01 19). Anthropometric Characteristics, Body Composition and Somatotype of Elite Male Young Runners. *Int. J. Environ. Res. Public Health*, 674.

-1paul osterieth, psychologie de lenfant,éd vigot.paris, 194

-2Aurgon Weink., MANUEL D'ENTRAINEMENT, ED VIGOT, PARIS, 1983