

# Ciencia y Deporte

Volume 9 issue 1; 2024





Artículo original

DOI: https://doi.org/10.34982/2223.1773.2024.V9.No1.008

## A Theoretical and Methodological Conception for Talent Spotting in Local Soccer Practice

[Concepción teórico-metodológica de identificación y detección de talentos en el fútbol de base]

[Concepção teórico-metodológica de identificação e detecção de talentos no futebol de base]



Received:09/04/2023 Accepted:10/24/2023

**ABSTRACT** 

**Introduction**: Sports talent selection is a priority in present-day Cuba; however, in the sports structure, particularly at lower levels, there are striking shortcomings during the talent detection stage.



**Aim**: To design a theoretical-methodological rationale based on a comprehensive approach for the detection of local soccer talents.

**Materials and methods**: this study relied on theoretical, empirical, and mathematical-statistical methods for the detection of local soccer talents. The population of the study consisted of 16 soccer teachers from Imias Sports Complexes.

**Results**: New relations were identified through a systemic interrelation among the components of the theoretical-methodological rationale. The study offers a definition of its components, the method, and the detection of local soccer talents, which provided teachers with the necessary ways and procedures that can be used as didactic tools, based on a comprehensive approach.

**Conclusions**: The theoretical-methodological rationale bears new components and essential relationships among the subsystems that reveal the dynamic of talent spotting based on a comprehensive approach, which focuses on the specifics, contextualization, and demands of local soccer practice.

**Keywords**: rationale, methodology, soccer talent detection.

#### RESUMEN

**Introducción:** el proceso de selección de talentos en los deportes constituye una prioridad en la actualidad en Cuba, sin embargo, en la pirámide deportiva, específicamente en la base persisten limitaciones en el fútbol de base, de forma notoria en la etapa de identificación y detección, lo cual se demuestra su actualidad e importancia.

**Objetivo:** elaborar una concepción teórico-metodológica con enfoque integrador que se concreta en una metodología de identificación y detección de talentos en el fútbol de base con un enfoque integrador.

**Materiales y métodos:** para el desarrollo de la investigación se utilizaron métodos teóricos, empíricos y matemáticos y/o estadísticos para la determinación de los elementos teóricos acerca de la identificación y detección de talentos en el fútbol de base.



Los mismos se aplicaron a una población conformada por 16 profesores de fútbol de los Combinados deportivos en Imías.

**Resultados:** se sintetizan nuevas relaciones que se develan en la interrelación sistémica entre los componentes de la concepción teórico-metodológica, se ofrecen definiciones de la concepción teórico-metodológica, sus componentes, de la metodología, así como de la identificación y detección de talentos contextualizadas en el fútbol de base, todo ello, permite ofrecer vías y procedimientos a los profesores como una herramienta didáctica necesaria, la cual se distingue por su enfoque integrador.

Conclusiones: la concepción teórico metodológica que se concreta en una metodología, es portadora de nuevos componentes y relaciones esenciales entre los subsistemas que revelan la dinámica de la identificación y detección de talentos a partir de un enfoque integrador, los cuales responden a las particularidades, contextualización y exigencias del fútbol de base.

Palabras clave: concepción, metodología, identificación, detección de talentos.

#### **RESUMO**

**Introdução:** o processo de seleção de talentos no esporte é atualmente uma prioridade em Cuba, porém, na pirâmide esportiva, especificamente na base, persistem limitações no futebol de base, notadamente na etapa de identificação e detecção., o que demonstra sua relevância e importância.

**Objetivo:** desenvolver uma concepção teórico-metodológica com abordagem integrativa que se concretize em uma metodologia de identificação e detecção de talentos no futebol de base com abordagem integrativa.

Materiais e métodos: para o desenvolvimento da pesquisa foram utilizados métodos teóricos, empíricos e matemáticos e/ou estatísticos para determinar os elementos teóricos sobre a identificação e detecção de talentos no futebol de base. Foram aplicados a uma população composta por 16 professores de futebol das equipes esportivas de Imías.





Resultados: são sintetizadas novas relações que se revelam na inter-relação sistêmica entre os componentes da concepção teórico-metodológica, são oferecidas definições da concepção teórico-metodológica, seus componentes, a metodologia, bem como a identificação e detecção de talentos contextualizados. No futebol de base, tudo isso nos permite oferecer meios e procedimentos aos professores como uma ferramenta pedagógica necessária, que se distingue pela sua abordagem integradora.

Conclusões: a concepção teórico-metodológica que se especifica em uma metodologia é portadora de novos componentes e relações essenciais entre os subsistemas que revelam a dinâmica de identificação e detecção de talentos a partir de uma abordagem integrativa, que responda às particularidades, contextualização e demandas do futebol de base.

Palavras-chave: concepção, metodologia, identificação, detecção de talentos.

#### INTRODUCTION

Various papers have included different opinions about talent spotting in soccer, such as Reyes, Bautista, and Noa (2016); Iznaga (2017); and Iznaga (2022).

These authors have contributed several rationales and models associated with improvements in talent selection, particularly in high-performance athletes and other subsequent stages. The reports have demonstrated significant scientific value. However, there are still shortcomings in terms of proposals that dynamize and correct the distortions derived from talent spotting in soccer, using a comprehensive approach resulting from improvements in the sports didactic.

In that sense, Pruna *et al.* (2018), coincided in that an athlete does not emerge spontaneously, but as the result of combining natural talent and the capacity to adapt their bodies to multiple interactions and everyday environmental stimuli.





For this research, talent spotting is a key area within sports development, and it aims to detect, acquire, select, and promote athletes with skills and competencies for the sport, and therefore, the potential to ensure long-term progress.

Despite the advances in research, the talent selection process goes through various stages, including detection or spotting, which shows limitations in terms of theoretical preparedness by teachers of the sports that hinder the process according to the current demands.

So far, studies have failed to tackle the early selection stages of local soccer practice, particularly detection. Hence, this research study focuses on the detection of local soccer players, based on the criteria stated by Conde Rojas *et al.* (2019) in relation to the physical, physiological, and energy demands of soccer competition to provide full and objective control.

Accordingly, the aim of this paper is to design a theoretical-methodological rationale based on a comprehensive approach to the detection of local soccer talents.

#### **MATERIALS AND METHODS**

This study relied on theoretical, empirical, and mathematical-statistical methods for the detection of local soccer talents. The following methods were used in this investigation:

Theoretical methods.

Analytical-synthetic and inductive-deductive, to determine the theoretical elements about talent selection during the detection stage, and to design the theoretical-methodological rationale for local soccer practice. The systemic-structural-functional method was used to determine the structural and functional elements of the theoretical-methodological conception and the relations of all its components.

Ciencia y Deporte ISSN 2223-1773, RNPS: 2276

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Modeling was necessary to model the theoretical-methodological rationale.

Empirical methods.

Observation, surveys, and interviews helped check teachers' scientific and methodological preparedness for talent spotting in local soccer practice, in the municipality of Imias.

The documentary analysis helped researchers look for and review the criteria associated with talent spotting in local soccer practice.

In-depth interviews of coaches to detect changes and the evolution through the implementation of the methodology.

Socialization workshops were conducted to facilitate the spreading of new contributions and the collection of reliable information.

Expert opinion was helpful to know the opinion of experts about the theoretical-methodological conception and about the methodology, for feasibility analysis.

Pre-test (pre-test-post-test in a single group) to evaluate the feasibility of the theoretical-methodological rationale.

The methodological triangulation permitted a contrast of the results from the experts' opinions, pre-test, and the socialization workshops to assess the feasibility of the theoretical-methodological rationale.

Mathematical-statistics method.

Descriptive analysis (proportion calculation) and inferential to quantify the results of the instruments used throughout the research, and for data processing. The absolute and relative frequencies were estimated, and the sign rank test was conducted.





The population of the study consisted of 16 soccer teachers from Imias Sports Complexes.

#### **RESULTS AND DISCUSSION**

To review the current state of talent spotting in local soccer practice, the following parameters were considered for gathering pertinent criteria.

- Presence in the requirements for talent spotting in local soccer practice.
- Soccer teachers and directors' opinions about talent spotting.
- Regular players' opinions about talent spotting.
- Teacher training in talent spotting in local soccer practice.

Upon finalizing the current state of talent spotting in local soccer practice, a series of flaws and shortcomings were observed in teacher training for the local soccer practice, demonstrating the need for implementing a theoretical-methodological rationale based on a comprehensive approach methodology, through the corrective method for talent selection using didactic procedures.

The theoretical-methodological rationale for talent spotting in local soccer practice follows the structure recommended by Samacá *et al.* (2021) when suggesting that all the components that form such conception define the objectives, main ideas, principles, methodological procedures, and implementation strategies theoretically. The methodological component permits its implementation through the local soccer practice's methodological guidelines for talent spotting.

According to the different sources and authors in terms of the rationale, theoretically or methodologically, or both, this study defines talent spotting in local soccer practice as,



"The system of transforming ideas around the theoretical and methodological standpoint that reveals new components and essential relationships for the detection of talents in local soccer practice that favors its comprehensive approach Sarracén (2022).

The following chart shows the structure of the theoretical-methodological rationale and talent spotting in local soccer, as an expression of the dialectic relationship between every component and category, so that the systemic-structural-functional method functions as one of the main premises assumed Figure 1.

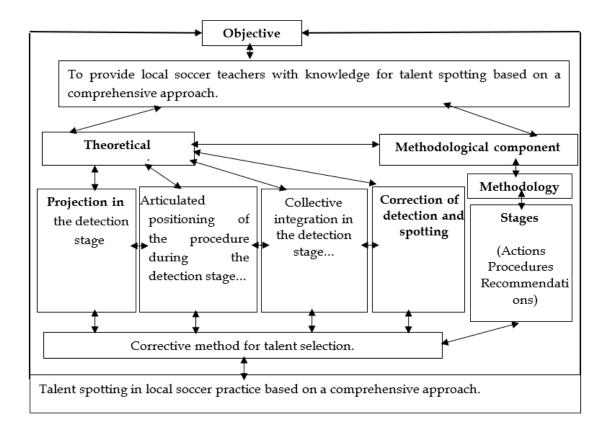


Fig 1. - Theoretical-methodological rationale for talent spotting in local soccer practice

To design the theoretical-methodological rationale, this study assumed the criteria stated by Milán (2023), as to the structural elements, and the criteria of Tejada (2021) for talent detection and selection.





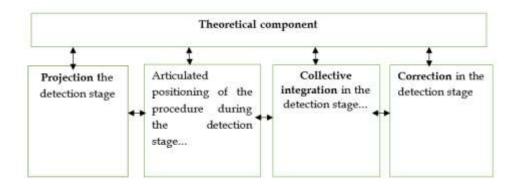
Another valid perspective for this study was Valle & Navarro (2019), who stated that "a theoretical system is more solid the more coherent it is in terms of theoretical rationales in keeping with a proper system of categories. Therefore, a rationale is theoretically formed by categories and their relationships, principles, and relations, as well as the determination of its concepts.

### Description of the structure of the theoretical-methodological rationale

The theoretical-conceptual component is thought of as lower, resulting from relations established between categories: projection during the detection stage, articulated procedure in the same stage, collective integration, and correction during detection. It interacts through a systemic relation with the higher component (methodological), which has two elements: methodology of the stages, actions, procedures, and recommendations.

The theoretical conceptual component comprises the necessary elements in terms of theoretical training by teachers locally to perform quality jobs as a professional of physical culture. It guarantees previous performance for a more suitable intervention in the talent selection process.

This component contains the following categories, as shown in the following chart (Figure 2).



**Fig. 2.** - A representation of internal relationships of component talent spotting in local soccer practice





The theoretical conceptual component is defined as the previous process of local soccer teacher training theoretically, to help the local soccer teacher during the detection stage, so that the necessary categories and concepts of the stage can be known, allowing for a coherent articulation of further procedures based on a comprehensive approach (Sarracén, 2022).

Consequently, this component permits determining the needs, demands, expectations, and possibilities of the talent selection process, including detection or spotting. This component favors understanding, interpretation, and transformation of the educational reality of sports to articulate attitudes and values that favor their prolongation, derivation, and consequent generalization to promote proper teacher training at the sports complexes.

It helps with proper projection coherently during talent spotting, and therefore, in the talent selection process, and it embraces cognitive, procedural, attitudinal, and other aspects. It is an expression of soccer teacher inquiry associated with their conscious behaviors and procedures. Accordingly, the utilization of methods and procedures for better teacher performance is an indispensable condition.

This category works according to an arrangement of necessary tools for planning actions, ways, and procedures with a comprehensive character, and it is defined as the process that guides and ensures local soccer teacher training, thus favoring their performance in the detection stage.

The category articulated positioning during the spotting stage permits adjustments for satisfactory talent selection implementation. It is defined as the assumption of a position that leads to further articulation of ways and actions in keeping with the results of the diagnostic of teacher preparedness level at the local levels to deal with the detection or spotting stage requirements.





A new collectively articulated category was devised as a result of the relations established between the projection and articulated positioning for the detection stage, a process that permits totaling the theoretical aspects linked to procedures and ways used by the local soccer teachers.

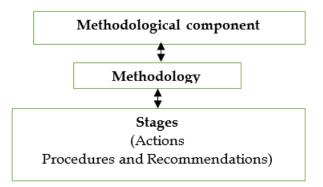
This category is defined as the unifying process and embracing positioning that guarantees the procedures for talent spotting in local soccer practice.

It is closely related to the corrective selection method as a driver for the theoretical-methodological rationale for talent spotting in local soccer practice.

Complying with the system's approach demands the interrelation of the first theoretical or conceptual component with the second one, the methodological or instrumental described below.

Methodological conception for talent spotting rationale in local soccer practice

The components can be observed in the following chart (Figure 3).



**Fig. 3.** - Representation of internal relationships of methodological component talent spotting in local soccer practice

The methodology is the main part of the component, which is an expression of the practical use of the theoretical-methodological rationale suggested. Consequently, this





paper coincides with the findings of Noa and Milán (2022) about the essence and structure of the talent-spotting methodology in local soccer practice.

To evaluate the feasibility of the theoretical-methodological rationale through expert opinion:

- They recognized the scientific novelty of the scientific results suggested, as well
  as their high possibility for implementation and contribution to improvements
  in talent spotting in local soccer.
- The proposal meets a real need and calls for immediate treatment in present-day Cuban sports, particularly soccer. Talent selection has taken place empirically in this sport.
- The rationale, its structure and category, and methodological system, among other contributions, constitute a valuable tool in the hands of local soccer teachers.
- The instruments devised to make this process more viable, considering the
  enormous technological limitations of Cuban sports. This method is easy to use,
  accurate, and reliable for talent spotting, in compliance with the modern
  requirements of soccer.
- The results from this research must be implemented with the coordination and endorsement of the Provincial Soccer Commission.

#### Main recommendations and remarks:

- In the conception of the proposal, it is important to consider replacing the word talent with sports talent.
- The components should reveal the correspondence with the current particularities and demands of soccer, and offer new qualities and relationships in concert with the rationale for talent selection.
- To assess the possibility of declaring concepts offered in the proposal.
- Following the analysis of expert opinions, the main pre-test results were presented.





The outcomes of the initial diagnostic showed the following:

- Higher teacher training in terms of theory, practice, and methodology for talent spotting in local soccer practice.
- New ways and methods to express structural and functional relationships in talent spotting in local soccer practice.
- Correspondence between the theoretical fundamentals and the contributions made, which had a cognitive character and were compatible with the reality, purposes, and procedures presented. This shows a coherent way of revealing their integration so that they can improve their preparedness and action in the sports facility.
- They constitute bases that explain their necessary existence as a reflection of their contribution to social theory and practice.

There was a correspondence between the criteria achieved in any of the previous scientific methods cited by the subjects of the sample. Some of the coinciding or articulate points are the following:

- Scientific and methodological value, and relevance of the structure of the theoretical-methodological rationale for talent spotting in local soccer, and its methodology, driven by the corrective method of talent selection, in accordance with teacher training.
- It was said that the training actions and activities led to an increase in the knowledge about the governing documents, the theoretical platform for talent spotting in local soccer practice.
- They have agreed that soccer teachers can have a theoretical-methodological rationale for talent spotting in local soccer practice that suits the current purposes.
- The priorities of the National Institute of Sports and Recreation and the Cuban Soccer Federation are similar.
- Improved design and implementation of ways and procedures with comprehensive approaches.





The current study notes the contributions to talent selection, with an invaluable theoretical contribution, such as Reyes, R., Batista, P. & Noa-Cuadro, H. (2016). Reyes, Iznaga (2017); Iznaga (2022). However, new didactic procedures are needed by the local soccer players that help optimize the ways to enhance local soccer teacher performance, particularly for talent spotting, in keeping with the current needs.

#### **CONCLUSIONS**

The systematization of theoretical referents about local talent spotting evidenced theoretical and methodological knowledge incoherence, thus demanding an approach change to meet the particularities and requirements of local talent spotting in soccer.

The empirical inquiries conducted at the beginning of this research evidenced the lack of systematicity in the detection stage in local soccer practice, whose causes lie mainly in the theoretical shortcomings and utilization of procedures by teachers in sports facilities to implement a working conception using a comprehensive approach.

This theoretical-methodological rationale reveals the theory, practice, and methodology of a possible solution to the flaws observed in talent spotting in local soccer practice based on a comprehensive approach.

The results observed upon the implementation of the methodological triangulation following expert opinion, the pre-test, and discussion workshops, revealed the feasibility of the theoretical-methodological conception for the initiation and detection of talents in local soccer practice, thus corroborating the hypothesis stated.



#### **BIBLIOGRAPHIC REFERENCES**

- Conde Rojas H. M., Caro Cely, W.F., Chaparro Díaz, Y.A., y Agudelo Velázquez, C.A. (2019). Correlación entre somatotipo y fuerza explosiva de tren inferior de la selección Boyacá de baloncesto masculina, categoría sub 15. VIREF. Revista De Educación Física 8(2), 97-105. https://revistas.udea.edu.co/index.php/viref/article/view/33870
- Iznaga-Bouly, E., & Heredia-Guilarte, D. (2017). Metodología para el perfeccionamiento de la preparación táctica defensiva de los futbolistas escolares. *Revista científica Especializada En Ciencias De La Cultura Física Y Del Deporte*, 14(31), 76-89. https://deporvida.uho.edu.cu/index.php/deporvida/article/view/369
- Iznaga Bouly, E., & Mengana Osorio, I. (2022). Los componentes didácticos y sus relaciones en el proceso de preparación técnico-táctica defensiva de los futbolistas de la categoría escolar 13-15 años. *Revista científica Especializada En Ciencias De La Cultura Física Y Del Deporte*, 20(1), 84-94. https://deporvida.uho.edu.cu/index.php/deporvida/article/view/901
- Milán, E., Mengana, I., Dopico, H. M., Beltrán, M. (2023). Modelo didáctico de relaciones interdisciplinarias en el año académico de la carrera de Cultura Física. *ATHLOS.* Revista Internacional de Ciencias Sociales de la Actividad Física, el Juego y el Deporte, 29(12), 27-52. https://dialnet.unirioja.es/servlet/articulo?codigo=8875732
- Reyes- Lausao, R., Batista- Santiesteban, P. R., & Noa- Cuadro, H. (2016). Indicadores por áreas organizativas para la selección de talentos en la categoría 13-15 años del béisbol en el municipio de Antilla. *Revista científica Especializada En Ciencias De La Cultura Física* Y *Del Deporte*, 13(30), 119-132. https://deporvida.uho.edu.cu/index.php/deporvida/article/view/362



- Pruna R., Tribaldos Luz, M., y Bahdur, K. (2018). Player talent identification and development in football. *Apunts Sports Medicine*, 53 (198), 43-46. https://doi.org/10.1016/j.apunts.2018.02.002
- Samacá García, J.A Sanabria Arguello, Y.D., y Agudelo Velázquez, C.A (2021). Características del somatotipo de las jugadoras de la Selección Boyacá Femenina sub-21 de balonmano, por posición de juego. VIREF Revista de Educación Física. https://revistas.udea.edu.co/index.php/viref/article/view/345431
- Sarracén, R., Noa, H., Milán E. (2022). Metodología de identificación y detección de talentos en el fútbol de base. *Fama Deportes*, 12(21).
- Valle Lima, A., y Navarro Quintero, S. (2019). La generalización de los resultados de la experimentación. III Perfeccionamiento del Sistema Nacional de Educación. Evento OACE y escuelas ramales. Pedagogía 2019.

#### Conflict of interest statement:

The authors declare having no competing interests.

#### Author contribution statement:

The authors have participated in the redaction of the manuscript and the documentary review.



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