

Methodology for the training of rapid reaction of the softball gardeners of the schoolchild category

Metodología para el entrenamiento de la rapidez de reacción de las jardineras de softbol de la categoría escolar

Irina San Loy-Suárez¹, Enrique Iznaga-Bouly²

¹Univ. EIDE. Guantánamo. Cuba.

²Ph.D. Titular Professor. Guantánamo University. Cuba.

Email:

irina.sanloy@gmail.com

enriqueib@cug.co.cu

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ABSTRACT

A study was carried out with the intention of designing a methodology aimed at training reaction speed in the softball field. Investigative methods and techniques at the theoretical, empirical and statistical level were used that allowed us to substantiate the object and field of the research, determine the existing regularities and process the data obtained. The results of the diagnosis support the need for the design of the methodology, as they reveal the insufficient study of practical knowledge in these planters, the conception of its treatment does not have a systemic, integrative, contextualized character and it is not sufficiently explicit in the literature consulted how to achieve it in training.

RESUMEN

Se realizó un estudio, con la intención de diseñar una metodología dirigida al entrenamiento del de la rapidez de reacción en la jardinera de softbol. Se utilizaron métodos y técnicas investigativas del nivel teórico, empírico y estadístico que permitieron fundamentar el objeto y el campo de la investigación, determinar las regularidades existentes y procesar los datos obtenidos. Los resultados del diagnóstico sustentan la necesidad del diseño de la metodología, pues revelan el insuficiente estudio del conocimiento práctico en dichas jardineras, la concepción de su tratamiento no posee un carácter sistémico, integrador, contextualizado y no se explicita suficientemente en la literatura consultada cómo lograrlo en el entrenamiento.

Keywords

Softball; Training; Improves; Reaction speed; Outfielders.

Palabras clave

Softbol; Entrenamiento; Mejorar; Rapidez de reacción; Jardineras.

INTRODUCTION

Today's sport, and softball in particular, is characterized by a decreasing age range for competition, a high level of competition driven by the participation of professional athletes, the speed of technical and tactical actions, and the rapid technological development. This new context in the sports landscape requires special attention to the preparation of softball players.

One of the problems affecting the performance of softball athletes lies in the level of physical preparation of their players. Coaching teams from various softball teams recognize the importance of rapid reaction time for achieving high competitive results. It is widely accepted that this is a very important motor skill in the physical component of athletes' preparation.

The above requires a deeper study of the physical preparation of softball outfielders because, in this regard, training has been directed at enhancing the development of technical and tactical skills, without any intentional attention being paid to understanding the procedures involved in the physical abilities used to solve problems when facing the connections that occur in the outfield area during the development of the game.

Proper reaction speed training in softball outfielders is a fundamental aspect of their competitive performance; however, observing the behavior of this indicator reveals, under current conditions, shortcomings in the preparation of these players. Within the framework of this problematic situation, the following research question can be addressed: How can we promote the increase in reaction speed and maintain it during training and competition in softball outfielders in the school category?

The solution to the aforementioned problem is intended to be achieved by fulfilling the general objective indicated below: To develop a methodology that allows for the increase in reaction speed and its maintenance during training and competition in softball outfielders in the school category.

The review of specialized literature about methodologies for training reaction speed in sport, allows us to find research related to them: the preparation contents were defined in the decade of the 60s by Matveev, Forteza (2000) states that the contents of sports training that are framed in the concept of Sports Preparation, do not satisfy the needs of organization of the training load, Grosser and Neumair (1982), propose to relate directions of different orientation for different sports.

DEVELOPMENT

As a theoretical basis for the proposed methodology, we find the concept of methodology referred to by De Armas and Valle (2011), who state that it is a set of methods, procedures, and techniques that, regulated by certain requirements, allow us to better organize our thinking and our mode of action to

obtain and discover new knowledge in the study of theoretical problems or in the solution of problems in practice.

This definition constitutes the theoretical framework for the methodology presented here, with the intention of developing the defensive tactical preparation process for softball players in the school category; therefore, I adopt this definition based on these considerations.

Regarding the elements that should comprise a methodology, De Armas (2003), citing Bermúdez and Rodríguez (1996), propose that methodologies must have a structure integrated by two structural apparatuses: the theoretical or cognitive apparatus and the methodological or instrumental apparatus. These criteria identify two fundamental components: structure and process.

The methodology was developed within a philosophical framework, in which the prevailing scientific worldview is Dialectical Materialism. It also takes into account the humanistic nature of softball by recognizing the softball player as the center of the process. Furthermore, Selye's General Adaptation Syndrome (GAS) (1936) law was taken into consideration. In this sense, the softball players' bodies try to adapt to the changes caused by the complex environmental setting, and they attempt to adapt to the prevailing conditions in order to improve their performance.

In terms of teaching, the methodology is informed by a humanistic conception that embraces the position of individualized sports education based on accepting and respecting the biological, psychological, and social diversity of school-aged softball players.

The theoretical and methodological foundations of sports training planning (Forteza, A., 2001, 2004; Oroceno, M. et al., 2003; Collazo, A. et al., 2006; Hechavarría, M. et al., 2006; Font, J., 2006, 2011; Romero, E., 2006) are also based on specific principles of sports training: cyclical nature of the training process; variation in training loads; progression; continuity; unity of general and specific preparation; frequent monitoring of the process; appropriate selection of content; recovery; overcompensation; and conscious awareness. Achievement of increasingly higher goals and objectives. Psychological characterization of athletes. Psychological characterization of the sport practiced. Optimal and conditioned environment.

The methodology is organized into three closely related stages: diagnosis and planning, implementation, and evaluation. The methodology's effectiveness is demonstrated in its transition, establishing close relationships of interdependence and continuity among them. That is, each stage has its own identity but maintains a relationship with the previous one, which is responsible for ensuring its functional success by providing the necessary structural, instrumental, and organizational support.

In terms of teaching, the methodology is informed by a humanistic concept that embraces the position of individualized sports education based on accepting and respecting the biological, psychological, and social diversity of softball players in the school category.

Stage 1. Diagnosis and Planning:

Objective: To determine the players' limitations and strengths

Actions:

1. Develop the objective of the diagnosis.
2. Develop the tools to conduct the diagnosis.
3. Conduct an analysis of the training or performance level using scientific-sports or practical tests to verify the athletes' condition.
4. Apply group dynamics to discuss and determine strengths and weaknesses to achieve the proposed objective.

The planning will be carried out taking into account the results of the diagnosis, as they allow for the identification of the softball players' general and individual needs, as well as the guidelines issued by the Comprehensive Athlete Preparation Program.

The objective is to plan and organize actions, objectives, aspirations, and goals based on the training of the softball outfielders' reaction speed.

Action 1. Conduct an analysis of competitive demands.

Action 2. Design the macro planning structure for the new cycle.

Action 3. Determine the didactic components involved in the physical preparation process.

Action 4. Determine an exercise system for training reaction speed.

Action 5. Determine the ways in which the exercise system for developing reaction speed will be evaluated.

Stage 2: Application of the Methodology.

After having designed and planned the process, we move on to the Application stage. This stage is related to the previous one and has a practical nature, as it executes the proposed methodological actions and training tasks. It is undoubtedly essential to the methodology and extremely complex, as it is where ideas are converted into results through the actions and exercises developed.

Objectives. Its objective is to apply the plan to develop rapid reaction time in the softball outfielders of the school category, applying the system of actions and the activity plan.

Actions

Action 1. Create a favorable socio-psychological climate

Action 2. Raise awareness and motivate players and coaches with reaction speed training.

Action 3. Implement the didactic components for each training unit.

Action 4. Implement training tasks by level of complexity.

Action 4. Develop a system of exercises to contribute to increasing reaction speed.

Action 5. Systematic evaluation and monitoring of training exercises for developing the reaction speed of softball outfielders.

Evaluation Stage. This stage has an unavoidable systemic relationship with the other stages. The evaluation is continuous, allowing for the assessment of the levels gradually being achieved; it is flexible so that each player can be diagnosed; and it is comprehensive, encompassing other previous content, allowing for the assessment of learners who have not yet achieved some objectives and the strengthening of others that need to be ensured.

Objective: The objective of this stage focused on evaluating the methodology to verify its practical feasibility.

Action 1. Define the evaluation objective.

Action 2. Develop and implement evaluation instruments.

Action 3. Collect, process, and interpret the information.

Action 4. Discuss the results among the coaches and softball players and develop new suggestions.

Action 5. Plan new actions.

Methodological Guidelines for Implementing the Methodology

1. Create favorable environmental conditions and resources that encourage the softball players' active participation in the assessment.

2. The assessment will highlight the softball players' strengths, limitations, and needs to integrate them into their practice.

3. The results of the assessment will be taken as a starting point, in line with the needs of the individuals involved.

4. Include varied training tasks that can be adapted to the players' specific characteristics in the planning.

5. It is essential that the assessment of the tasks be measured in terms of their continuous, qualitative, quantitative, and integrative nature, based primarily on the softball players' performance.

6. Classroom groups, individual meeting, and groups may be developed to allow for systematic monitoring to make the necessary adjustments and provide continuous feedback on the process.

Conclusions

The methodology developed is based on theoretical foundations: philosophical, sociological, psychological, pedagogical, didactic, and legal. It consists of three stages, each of which contains a system of actions to contribute to the treatment of musical expressive media.

The introduction of the methodology into practice corroborated its feasibility and scientific-methodological relevance based on its verification through the criteria of specialists, demonstrating that the research developed offers a solution to the scientific problem and meets the proposed objective.

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