75 - MATURACIONAL STAGES OF FUTSAL BEGINNERS ATHLETES FROM THE POTIGUAR SEMI-ARID REGION.

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INTRODUCTION

Futsal in Brazil through the Brazilian national team, has achieved positive results in frequent international competition which it took part into. This works well for its popularity in the country. Despite being a relatively new sport in a short time became one of the most popular sports in Brazil, the dimensions of education, leisure and competitions. Additionally, the constant changes in the rules of the sport have made the Futsal increasingly attractive and dynamic.

For Silva Dantas (2002), an ideal application to sport Futsal requires the use of prior knowledge of the genetic capabilities and trends, coupled with phenotypic contribution that can contribute to a proper development.

With this knowledge, the professional will detect the basic needs that an athlete needs to Futsal development in sport. With its inherent physical abilities, energy sources and methodologies appropriate for each age group. Thus creating specific lessons/training to different groups.

And to guide these groups of genetically different natures, it is necessary for physical education teachers have knowledge about growth, development, maturation, chronological age and biological age, these concepts which are relevant to the understanding of the true role of physical activity for children.

Malina and Bouchard (2002) conceptualize growth as the biological changes that involve increasing the child's body, especially considering the evolution of weight, height and head circumference.

For the same development is the ability to perform increasingly complex functions. The individual develops neuromuscular control, skills and character traits, functions that can only be measured by tests or functional tests.

For Tourinho Filho and Tourinho (1998), maturation is the stabilization of the adult state, resulting from the growth and development, qualifying the individual to progress to higher levels of functioning. During puberty, sexual maturation reaches high levels of change.

According to chronological age represents the age of the individual in months or years and is ordered in accordance with the age of birth, whereas biological age represents the age that the body appears based on the biological condition of their tissue confronted with standards, interrelating with the processes of biological maturation and exogenous factors (MALINA & BOUCHARD, 2002).

The understanding of biological maturation and the genetic and environmental influences in this process have been studied for several decades. This process represents a source of great attention of science by the great need for these skills to poor communities who suffer from unfavorable environmental conditions for growth and harmonious development.

Given the issues addressed on this study, and little is known about maturation of Futsal athletes, especially those in regions where there is little research on the subject, it is made necessary to see that information about the athletes. And such information seem to be relevant both to the choice of strategies of fitness to be applied as for the detection and selection of young talent for the sport.

Therefore, the aim of this study was to analyze sexual maturation stages through the genitals and pubic hair (Tanner) of Futsal beginner athletes from potiguar semiarid region.

MATERIALS AND METHODS

Research ethics

This research was submitted to the Ethics in Research Involving Human-Euro-American Network of Human Kinetics, in order to comply with the provisions prescribed in Resolution 196/96 of the National Health Council, which approved the guidelines and regulating norms for research human beings, being the same with the approved protocol number 008/2010.All parents and / or guardians of the school members of the sample in the study signed a consent form (including: objective of the study, evaluation procedures, possible consequences, emergency procedures, the voluntary character of the subject's participation and exemption from responsibility by the evaluator, and by the institution that will house the experimental treatment).

Sample

The sample consisted of 33 males who are aged 12 to 18 years, belonging to the first four finalists Futsal teams that participated in the regional stage of Mossoró School Games in Rio Grande do Norte, 2009, residents in the potiguar semiarid region, a place where the study was conducted and its implication in the field. The sample was selected intentionally, and consists of volunteers, following the criteria of inclusion and exclusion.

Procedures for Data Collection Sexual maturation

To check the level of sexual maturation was used the self-evaluation protocol in the determination of the sexual maturation (MATSUDO & MATSUDO, 1991). Children and adolescents verified through photos and colorful illustrations of TANNER scales, where the stages were in relation to pubic hair and genitals and noted in a statement. The classification of genital pubic hair ranged from stage I to V, considering the stage (I) pre-pubescent, the stages (II, III and IV) pubescent and stages (V) post-pubescent. There was some precautions such as: self-evaluation was conducted in a quiet place and individually, were placed pen and sheet of specific note and was told that the evaluation should not be checked on the answer sheets, was always placed explanatory sheet stapled to the answer sheet preventing the photos to be exposed, if any doubt about the self-evaluation being answered wrong was suggested that an evaluator of the same gender as the evaluated checked the classification by direct examination of the sexual characteristics.

Statistical Treatment

In this study we used descriptive statistics of the sample pointing the measures of central tendency: average, standard deviation and maximum and minimum values.

RESULTS AND DISCUSSION

Table 1 describes the characteristics of been investigated as to their sexual maturation. We identified a predominance of pubescent athletes in the sample, with a much higher percentage in relation to other maturational stages.

Table 1 - Stages of maturation of athletes new to Futsal semi-arid region of Rio Grande do Norte - 2010.

| Stages | N | % | |
|--------------|----|-------|--|
| Prepubertal | 4 | 12,1 | |
| Pubescent | 25 | 75,8 | |
| Postpubertal | 4 | 12,1 | |
| Total | 33 | 100,0 | |

Source: Research data

The results in the maturational stages of 04 athletes were prepubertal, 25 pubertal athletes and 04 athletes post-pubescent.

Similar results found in the study of 34 soccer young athletes by Campos and Dantas (2009), which identified 09 prepubertal stage, pubertal stage in 20 and 05 post-pubertal stage.

Medeiros (2005) in a study conducted in Rio Grande do Norte found that the appearance of pubic hair was on average 12.6 years. In the present study this feature was found at 10 years of age, indicating an accelerated maturation. Alonso (2005) in their study of young soccer athletes from 14 to 17 years, found that maturational descent over the years, observing the 04th stage in pre-pubertal, pubertal stage in 54 and 73 in the post-pubescent. It is possible that these differences are dependent on factors such as genetic condition, nutritional status, economic status, physical activity, disease and environmental influences.

These organic changes that occur at puberty towards the mature stage, i.e., the final acquisition of biological maturation, occur gradually in time own pace, allowing each individual to complete a specific maturational stage in different chronological ages, making it difficult to its determination (MEDEIROS, 2005).

As Alonso and Ré (2005) the sexual maturation relates biological age through the interaction of the contextual effect of the medium and the subject, athletes are encouraged to excessive loads of physical and psychological training tend to recruit higher levels of testosterone to handle the experienced demanding. Thus, the increase of the hormone in the organism to meet the needs required by strenuous exercise, may be one factor that influences early maturation.

CONCLUSION

In the results revealed a predominance of pubescent athletes in the sample, with a much higher percentage in relation to other maturational stages. These results were within the expectations of the study, since the group was composed of student athletes from a relatively poor region, with characteristic uniform, i.e., with little variability, generally similar results with other studies in the age group studied.

The results of similar studies that can be applied in the direction and development of the sport soccer, serving as a reference for other research in this area, contributing to the growth of the sport and that it evolves to excellence. Therefore, we suggest that they are associated with these findings, further studies with different sets of characteristics, as well as the inclusion of variables relating to psychological capacities and / or cognitive, anthropometric characteristics and physical fitness.

It is suggested to help health professionals to analyze and plan, basing their training objectives from the results of studies such as these, tend to show positive and negative common traits among athletes, which can be correlated with better performance.

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MATURACIONAL STAGES OF FUTSAL BEGINNERS ATHLETES FROM THE POTIGUAR SEMI-ARID REGION. ABSTRACT:

To lead groups of genetically different natures, it is necessary for physical education teachers have knowledge about growth, development and maturation, which are essential to the formation of young athlete. The aim of this study was to analyse the maturational stages of Futsal beginner athletes from potiguar semiarid region. It was used the selfavaluation protocol in the determination of the sexual maturation by Tanner scales. The data indicate a predominance of pubescent athletes in the sample, with a much higher percentage compared to other maturational stages. We conclude that, in most cases, athletes evaluated presented similar characteristics in the stage of maturity, characterized by little variability and predominantly in general approximate results to other studies on the age group studied.

KEY-WORDS: Futsal, Maturation, Growth

STAGES DE MATURATIONS DE SPORTIFS DÉBUTANT DE FUTSAL DE LA RÉGION SEMI-ARIDE DE RIO GRANDE DO NORTE.

RÉSUMÉ:

Pour orienter des groupes de natures génétiquement différentes c'est nécessaire au professionnel de l'éducation physique avoir de la connaissance à propos de la croissance, du développement et de la maturation qui sont déterminants dans la formation de jeunes sportifs. L'objectif de cette étude a été vérifier les stages de maturations des sportifs débutants de Futsal de la région du semi-aride du Rio Grande do Norte. On a utilisé le protocole de l'autoévaluation dans la détermination de la maturation sexuelle par le moyen des planches de Tanner. Les donnés indiquent prédominance de sportifs pubères dans l'analyse, avec un pourcentage bien majeur par rapport aux autres stages de maturations. On a conclu que les sportifs analysés présentent, dans leur majorité, des caractéristiques semblable quant au stage de maturation caractérisée par petite quantité de variabilité et en prédominant généralement des résultats approchés à d'autres études dans le groupe d'âge recherché.

MOTS-CLÉS: Futsal, Maturation, Croissance

ETAPAS DE MADURACIÓN DE ATLETAS PRONCIPIANTES DE FÚTBOL SALA DE LA REGIÓN SEMIÁRIDA POTIGUAR

RESUMEN:

Para guiar a los grupos de naturalezas diferentes genéticamente es necesario que los profesionales de educación física tengan un conocimiento sobre el crecimiento, desarrollo y maduración, que son decisivas en la formación de jóvenes atletas. El objetivo de este estudio fue evaluar las etapas de maduración de los atletas principiantes de Fútbol Sala de la región semiárida potiguar. Fue usado el protocolo de auto-evaluación para la determinación de la maduración sexual por las escalas de Tanner. Los datos indican un predominio de los atletas púberes en la muestra, con un porcentaje mucho mayor en comparación con otras etapas de maduración. Llegamos a la conclusión de que, en la mayoría de los casos, los atletas evaluados presentaron características similares en la etapa de madurez, caracterizada por la poca variabilidad y sobre todo, en general, los resultados se aproximan a otros estudios en el grupo de edad estudiado.

PALABRAS CLAVE: Fútbol Sala, Maduración, Crecimiento

ESTÁGIOS MATURACIONAIS DE ATLETAS INICIANTES DE FUTSAL DA REGIÃO DO SEMIÁRIDO POTIGUAR RESUMO:

Para orientar grupos de naturezas diferentes geneticamente, é necessário ao profissional de educação física ter conhecimento sobre crescimento, desenvolvimento e maturação, que são determinantes na formação de jovens atletas. O objetivo do presente estudo foi verificar os estágios maturacionais dos atletas iniciantes de Futsal da região do semiárido potiguar. Foi utilizado o protocolo da autoavaliação na determinação da Maturação sexual através das pranchas de Tanner. Os dados indicam uma predominância de atletas púberes na amostra, com um percentual bem maior em relação aos outros estágios maturacionais. Conclui-se que, em sua maioria, os atletas avaliados apresentaram características semelhantes quanto ao estágio maturacional, caracterizada pela pouca variabilidade e predominando no geral resultados aproximados a outros estudos na faixa etária pesquisada.

PALAVRAS-CHAVES: Futsal, Maturação, Crescimento