201 - THE FOOT-FOOTWEAR COMFORT'S MAIN POINTERS IN ATHLETES OF BASE CATEGORIES OF A SOCCER CLUB FROM PORTO ALEGRE - RS

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INTRODUCTION

The contact of the individual with the ground happens through a sustentation base, represented by the feet. This sustentation base has important functions for the human being, adaptating itself to supply the flexibility necessary to step on irregularly grounds and to absorb the impact. For the correct activity of this sustentation base, it is necessary an adequate functioning and development of its muscles, including an appropriate mechanics of the foot (THOMPSON & FLOYD, 2002). But also, it is necessary the use of a footwear adequate to the kind of sportive activity. This way, there will be no prejudicial influences for the health of the feet, once the footwear should protect the foot (MANFIO, 2001).

In the soccer, the footwear is an important tool for the stability and control of the movements, but also helps the return and dissipation of the energy and the impact absorption. So, the footwear helps to prevent lesion and gives comfort. The soccer is characterized as being a practice with a lot of physical contact, practiced with the feet on an irregular ground, requiring specific footwear, that respect these particularities (COHEN; ABDALLA, 2003).

According to Tokars et al (2003), the protection, the functional and ambiental adaptation, and the anatomic form should be some of the criterias utilized for the footwear manufacturing; giving comfort and health for the feet during the sport activity. The comfort of the footwear have a fundamental importance for the sportive practice, however it became difficult to be qualified, because it can not be measured directly. Para Geib (1999), the comfort is defined as the none appearance of pain or other sensorial manifestation that could happen either when the individual is trying the footwear or using for longer time; giving a none adequacy of the footwear on the individual during its use. Mundermann et al (2002) agree with Tokars and Geib when he says that the comfort is an important factor for the footwear during the fitness activities. The growing interest on the footwear comfort resulted in diverse inquiries that associate the comfort with the plantar pressure distribution, the force of impact with the ground, the alignment of the foot and sensitivity. However, it is difficult to qualify, once it can be measured directly. The comfort should be one of the most important factors for the footwear on sportive activities, once they should be comfortable. But, a little is known about the footwear comfort, because there are several factors that are associated with the foot adaptation, stabilization, fatigue and humidity of the footwear (NIGG et al, 1999). The comfortable footwear requires that they are not responsible for pain or discomfort. Mündermann (2001) utilized, in his study, an analogue scale to evaluate the comfort in the shoes with different kinds of you soles, because they were none scale to evaluate comfort. His evaluation is very subjective, once the adjust of the foot in the footwear is not sufficient. The foot alignment, feel the damping, the mechanics variations and the shoes flexibility are, also, determinative aspects for the comfort (MILLES et al, 2000).

The footwear comfort is still not well understood and the best way to quantified the comfort is not well defined, but the comfort is important, as well as the consumer's satisfaction level. Satisfaction measurements programs became very popular during the last decade. Some researches have shown the association of the clients' satisfaction with the loyalty and the purchase's behavior (BEVILACQUA, 2004). For Beulke (1999), the satisfaction is an evaluation, what means that is done after the experimentation or the purchasing of the product or the service. Silva et al. (1998) complements Beulke´s idea saying that the success of one product is closely related to the client's satisfaction, attending their implicit and explicit necessities.

Thinking on all the factors that influence the quality of the footwear, became important one study of the satisfaction level and individual's level of perception in relation to the comfort of footwear. So, on this way, the footwear can be manufactured with specific characteristics; contributing for the criteria of comfort, health and security of the athlete.

The aim of this study is to describe the foot-footwear comfort's main pointers in athletes of base categories of soccer, as well as evaluating the satisfaction level of the athletes for the footwear used in their practice and verifying the athletes' level of perception in relation to the comfort of footwear.

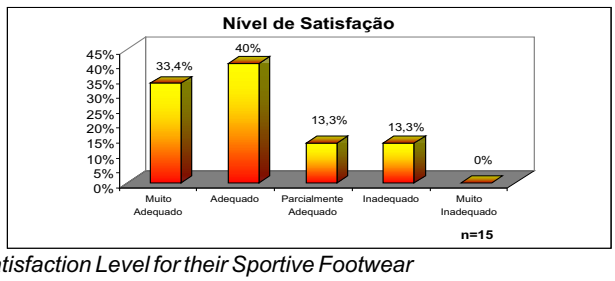
MATERIALS AND METHODS

This research is characterized as being an observational descriptive study in a quantitative paradigm. The study was realized in a gaucho soccer club situated in the city of Porto Alegre, Rio Grande do Sul state, Brazil. It was conducted with 15 male soccer athletes of base categories of a soccer club, between 15 and 21 years of age. The athletes participated of this study voluntarily and signed an Informed Consentment Term.

The instruments used for this research were: an interview with personal data of the athletes and the footwear utilized during the sportive practice, a questionnaire of the athlete's satisfaction level for the footwear used in their practice and the evaluation's adapted table for the level of perception in relation to the comfort of footwear, elaborated according to the Brazilian Association of Technical Norms (ABNT) - NBR 14840, of March 2002. The athletes were asked to write a "X" on the note that better shows the following items that were in the adapted table: if the footwear gives a sensation of well-being, if hams the feet, if there is a footwear adaptation for the feet, if the footwear feels good, if there is liberty for movement, if there is functional harmony of the footwear with the foot sizes (pressed), if the footwear gives security during the walking and the sensation of dry of the footwear.

RESULTS AND DISCUSSION

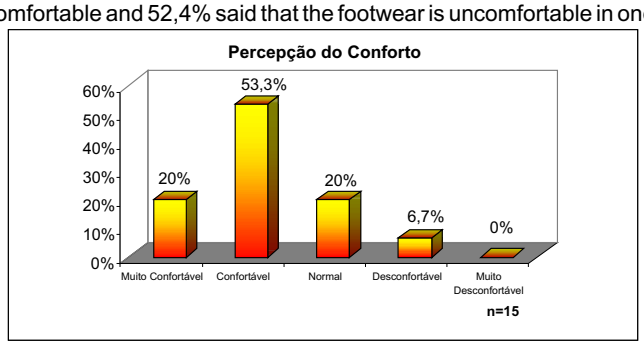
The study was conducted with 15 male soccer athletes of base categories of a soccer club, who were, in a media, 17,2 years old. The youngest one was 15 years old and the oldest, 21. To evaluate the athletes´ satisfaction level of the footwear used for their sportive practice, the athletes were asked to answer a questionnaire. The participants should choose, from the answers: very adequate, adequate, partially adequate, inadequate and very inadequate, the one the most represent their satisfaction level.



Graphic 1: *Athletes Satisfaction Level for their Sportive Footwear*

The graphic one shows the athletes´ satisfaction level for his footwear used during the sportive practice. It is possible to observe that, from the 15 athletes, 40% (6 athletes) considered their footwear adequate and 33,4%, (5 athletes) considered their footwear very adequate.

According to Manfio (2001), in her study that analyzed the pain and/or the discomfort during footwear use for man participants, 47,6% considered comfortable and 52,4% said that the footwear is uncomfortable in one or more regions of the foot.



Graphic 2: *Athlete's Comfort Perception for their Sportive Footwear*

The graphic 2 demonstrate the athletes' perception of the footwear during its use, according to the Adapted Norm of the Brazilian Association of Technical Norms (ABNT) - NBR 14840: 2002. The norm has the aim of being a method to determine the perception level of the footwear during its use. The participants of this study answered the following items: if the footwear gives a sensation of well-being, if hams the feet, if there is a footwear adaptation for the feet, if the footwear feels good, if there is liberty for movement, if there is functional harmony of the footwear with the foot sizes (pressed), if the footwear gives security during the walking and the sensation of dry of the footwear. Each question could receive a note from 1 (one) to 10 (ten). After that, it was calculated a media from the chosen notes, classifying the athletes perception of the footwear during its use. The media was done adding the notes that each participant had chosen for each item and dividing for 8 (eight), which is the number of items in the norm.

According to the graphic 2, it can be observed that eight (8) athletes (53,3%) had considered their footwear comfortable; 20% of them had considered their footwear very comfortable and other 20% considered it as normal; 6,7% had considered uncomfortable and none of them had considered their footwear very uncomfortable. Therefore, 93,3% of the participants think that their footwear is normal to vary comfortable.

Henning (2000) say that the pain on the feet is originated from defective footwear. These defects can be caused by one error on the project or on the manufacture, or either on the none adequacy of the foot in the footwear.

According to Rosa (2004), more then the half of the participants of her study (mailmen), 55,4%, had considered their shoes normal and 28,4% had considered their shoes as comfortable.

CONCLUSION

In this study, it was described the foot-footwear comfort's main pointers in male athletes of base categories of soccer, between the ages of 15 and 21 years.

It was verified that the majority of the athletes consider the footwear used on the sportive practice comfortable, being satisfied with them.

The several studied factors demonstrated that, to obtain a comfortable sportive footwear, it is necessary not just the kind of footwear indicated for the sportive modality, but also adequate this footwear to the comfort perception of the athlete, guaranteeing the athletes´ satisfaction.

Through this study, perceives the importance of more researches aiming to evaluate the comfort of the sportive footwear in the soccer and the athletes' satisfaction level. Since the footwear is considered a fundamental equipment for the sport practice, as well as the relation between foot and footwear.

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THE FOOT-FOOTWEAR COMFORT'S MAIN POINTERS IN ATHLETES OF BASE CATEGORIES OF SOCCER CLUB FROM PORTO ALEGRE - RS

ABSTRACT

The specific footwear is an important instrument for soccer players. For this reason those footwear should be made respecting the characteristics of the foot of each athlete, providing comfort for them. The aim of this study is to describe the foot-footwear comfort's main pointers in athletes of base categories of soccer, as well as evaluating the satisfaction level of the athletes for the footwear used in their practice and verifying the athletes' level of perception in relation to the comfort of footwear. This research is characterized as being an observational descriptive study in a quantitative paradigm. The study was conducted with 15 male soccer athletes of base categories of a soccer club, between 15 and 21 years of age. The instruments used for this research were one interview with personal data of the athletes and the footwear utilized during the sportive practice, one questionnaire of the athlete's satisfaction level for the footwear used in their practice and the adapted table for the level of perception in relation to the comfort of footwear, elaborated according to the Brazilian Association of Technical Norms (ABNT) - NBR 14840, of March 2002. Through this instruments, it was observed that the majority of the athletes consider the footwear used on the sportive practice comfortable, being satisfied with them. All the items studied had demonstrated that, to obtain a comfortable sportive footwear, it is necessary not just the specific footwear for that kind of sport, but, also, adequate it to the individual perception of comfort. And, on this way, guaranteeing the athletes satisfaction. **KEY-WORDS:** foot-footwear, comfort, soccer.

DES INDICATEURS DE CONFORT SUR LE COUPLE PIED - CHAUSSURE PARMIS LES ATHLÈTES DES CATÉGORIES DE BASE DE FOOTBALL DE TERRAIN D'UN CLUB SPORTIF DE PORTO ALEGRE - RS

RÉSUMÉ

Au football, la chaussure spécifique constitue un outil important, mais il faut que celle-ci soit adaptée aux caractéristiques du pied de chaque athlète afin de lui procurer du confort. Cette étude a pour but décrire les principaux indicateurs de confort sur "le couple" pied-chaussure, parmis les athlètes des catégories de base de football de terrain, ainsi qu'évaluer le niveau de satisfaction de ces derniers en ce qui concerne la chaussure de sport et leurs perceptions par rapport à la chaussure utilisée. La recherche a été caractérisée autant qu'une étude d'oservation déscriptive de paradigme quantitatif. La population de l'amostrage a été composée de 15 athlètes de football masculin des catégories de base, agés de 15 à 21 ans, d'un club de football de Porto Alegre - RS. L'interview comportait des données personnel de l'athlète et de la chaussure utilisée dans la pratique sportive, un questionnaire d'evaluation du niveau de satisfaction de la chaussure utilisée pour l'activité em question, ainsi qu'un tableau d'évaluation adapté aux niveaux des percerptions de l'utilisation de la chaussure, formulés selon les régles de l'Associação Brasileira de Normas Técnicas (ABNT), de mars 2002. On a verifié que l'expressive majorité des athlètes considère la chaussure utilisée dans la pratique sportive confortable et est donc satisfaite de celle-ci. Les nombreux facteurs abordés montrent que pour obtenir une bonne chaussure de sport, il ne suffit pas d'avoir le genre de chaussure indiqué pour la modalité sportive, il faut l'adapter à la perception de confort de l'individu, en assurant ainsi la satisfactoin de ce dernier. **MOTS - CLÉS:** pied-chaussure, confort, football.

INDICADORES DE CONFORT EN LA DÍADA PIE-CALZADO EN ATLETAS DE LAS CATEGORÍAS DE BASE DE FÚTBOL DE CAMPO DE UN CLUB DE PORTO ALEGRE - RS

RESUMEN

En el fútbol, el calzado específico es un instrumento importante pero debe estar adecuado a las características del pie de cada atleta proporcionándole confort.

El presente estudio tiene como objetivo describir los principales indicadores de confort de la díada pie-calzado, en atletas de las categorías de base de fútbol de campo, así como evaluar el nivel de satisfacción de los atletas en lo referente al calzado utilizado en la práctica deportiva y la percepción de los mismos con relación al confort del calzado utilizado. La investigación se caracterizó como siendo un estudio observacional descriptivo de paradigma cuantitativo. La población de la muestra fue formada por 15 atletas de fútbol masculino de las categorías de base, con edades entre 15 a 21 años de un club de fútbol de Porto Alegre - RS. A través de una entrevista con datos personales del atleta y del calzado utilizado en la práctica deportiva, de un cuestionario sobre el nivel de satisfacción con relación al calzado utilizado en la práctica deportiva y de una tabla de evaluación adaptada para niveles de percepción del calce, elaborados según normas de la Asociación Brasileña de Normas Técnicas (ABNT) - NBR 14840, de marzo de 2002, se verificó que la gran mayoría de los atletas consideró su calzado utilizado para la práctica deportiva confortable, estando satisfechos con el mismo. Los diversos factores abordados demuestran que, para obtener un calzado deportivo confortable, es necesario no solamente que el tipo de calzado sea indicado para la modalidad deportiva en especial, sino también adecuarlo a la percepción de confort del individuo, garantiéndole satisfacción. **PALABRAS-CLAVE:** pie-calzado, confort, fútbol.

INDICADORES DE CONFORTO NA DÍADE PÉ-CALÇADO EM ATLETAS DAS CATEGORIAS DE BASE DE FUTEBOL DE CAMPO DE UM CLUBE DE PORTO ALEGRE - RS

RESUMO

No futebol o calçado específico é um instrumento importante, mas deve estar adequado conforme as características do pé de cada atleta proporcionando conforto para estes. O presente estudo tem como objetivo descrever os principais indicadores de conforto da díade pé-calçado em atletas das categorias de base de futebol de campo, assim como avaliar o nível de satisfação dos atletas quanto ao calçado utilizado na prática desportiva e a percepção dos mesmos em relação ao conforto do calçado utilizado. A pesquisa caracterizou-se como sendo um estudo observacional descritivo de paradigma quantitativo. A população da amostra foi formada por 15 atletas de futebol masculino das categorias de base, com idades entre 15 a 21 anos de um clube de futebol de Porto Alegre - RS. Através de uma entrevista com dados pessoais do atleta e quanto ao calçado utilizado na prática desportiva, de um questionário sobre o nível de satisfação quanto ao calçado utilizado na pratica desportiva e da tabela de avaliação adaptada para níveis de percepção do calce, elaborados segundo normas da Associação Brasileira de Normas Técnicas (ABNT) - NBR 14840, de março de 2002, verificou-se que a grande maioria dos atletas considerou o seu calçado utilizado para a prática desportiva confortável, estando satisfeitos com o mesmo. Os diversos fatores abordados demonstram que, para se obter um calçado esportivo confortável, é necessário não somente o tipo de calçado indicado para a modalidade esportiva, mas também adequá-lo a percepção de conforto do indivíduo, garantindo a satisfação do mesmo. **PALAVRAS-CHAVE:** pé-calçado, conforto, futebol.