## 116 - STATURE OF PROFESSIONAL FOOTBALL PLAYER - ANALYSIS OF THE IMPORTANCE THROUGH 10 YEARS OF BRAZILIAN CHAMPIONSHIP

BERNARDO OEST;<br>LUCAS BRETAS ${ }^{1}$;<br>MARCIA ALBERGARIA ${ }^{12}$<br>1-Curso de Educação Física. Universidade Estácio de Sá; 2-LAFIEX - Campus Parque das Rosas; Rio de Janeiro/RJ - Brasil<br>mba2802@gmail.com

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## INTRODUCTION

Football is seen as a sports practice, which historically has as main function the social question in different ways in different societies has been presented. For each place where football is implemented, every game itself has its own peculiarities, depending on how each company views the game. This is the culture of the place where the football is being played, making football have diverse backgrounds as Soulé, Harpastun, Tsu-chu, Kemari, and Medieval Football Calcio Italiano. Today one can see the difference in style of play set by each country. (SILVA, 2011).

Football came to Brazil from England in the nineteenth century from the relations that Brazil did with England, political and social economic relations. Football was introduced in the country, because the elite controlled the country economically, with the flow of coffee industrialization and urbanization of Brazil, which also invests in trade and press, determines the social transformation of the country, contextualizing individuals in around the practice of football in the formation of consciences involved process. (SILVA, 2011).

Starkes et al (1996), Paoli, Silva and Soares (2008) say that even players who are provided with more talent, still has to develop the practice of football, because football is increasingly becoming a very physical game causing these players have to focus on fitness.

Developing the talent of a player is determined not only by the conditions of training and the time spent on it, but also the training methodology used by professional applying to this, which facilitated the detection for the selection of athletes and can thus determine the true potential of the athlete. However, detecting the talent of an athlete is not the only thing to be seen for you to select a team, besides talent, has to observe their characteristics to know their faults and their virtues, placing it in the correct way, for the game, his qualities are harnessed and their limitations are minimized.

For Machado et al (2011) and Oliveira (2012) is correct to say that the results of anthropometric measurements, can not be seen in isolation by the assessor to determine whether the athlete will be selected or not, because these results in isolation can not determine whether the athlete will succeed or not in the path, since there are other aspects that must be considered in the evaluation of players, moreover, these aspects should not be evaluated in isolation, as they are interdependent on the athlete's performance in the match.

There are not a effective processes to identify the talent of athletes even with the evolution of the sport. When the apparaiser wants to evaluate an athletes he doesn't have any pre established criteria which makes such an assessment is made of subjective manner, causing many athletes have delayed its development in sport and causing many athletes to give up football. (PAOLI; SILVA; SOARES, 2008 apud OLIVEIRA, 2012)

Clubs and training center for athletes training does not have any regulatory agency to see if they are doing a proper job in terms of training conditions and how this training is done, causing them to determine the training load, activities to be developed, besides the choice of professionals to provide this training, causing many professionals do not have a higher education. (DAMO, 2005, cited in Soares et al,. 2011 apud OLIVEIRA, 2012).

To Monteiro (2011) hypothesized that "scouts" put a different weight for your criteria in evaluating players (physical, technical, tactical and psychological), thinking they place the physical athlete as the main factor in the evaluation of players, not confirmed.

The physical criterion only showed up as very important factor for middle defenders and side defenders, and the side seen by their agility and middle defenders for its stature, besides observing the speed in two athletes. (Monteiro, 2011).

Observing one year of screens, selection of athletes in a second division state championship of the State of Rio de Janeiro club, it was seen that ten thousand $(10,000)$ youth in the various categories of basic football, try to get into this club annually but only 120 (one hundred twenty) are availed. (Rocha et al., 2011)

Many parents start their kids at soccer practice, too early, putting the child in clubs and / or sports bodies, to have the initiation of the sport, while enhancing the technical and tactical understanding in putting a child. This happens because these parents think about leaving the young prepared both physically, technically and tactically, for when you get to the selection process in higher categories are able to pass and get to follow a professional career. (CAVICHIOLLI et al., 2011 apud OLIVEIRA, 2012)

Chronological age is characterized by time from birth to a certain point in life, that is, the time that has to be compared with the environment in which he lives. Institutions of sports initiation take this very account at the time of selection, but the chronological age does not report accurately the extent that each individual can get after their maturation. Sometimes it can happen that the professional athlete underestimate her because of a late maturing and sometimes overestimate because of an accelerated maturation. (Koslowsky, Afonso, 2007)

The study of Assis; Barbosa; Costa; Ferreira; Serpa; Son (2011) shows that the average evolution of children in relation to height, remains stable until the transition from under-15 to under-17 category, this decreasing trend significantly.

In relation to the positions on the team, defenders are the ones that perform the actions more slowly. This occurs by the fact that these athletes typically have a higher height, a greater amount of body weight and also because of the way they play tactically. In the case of athletes playing in midfield and attack, because they require to perform faster movements, have a lower body mass, because then there will be a lower energy expenditure. (FONSECA, Rech, Moura, ZINN, 2004).

Athletes born in nearby dates the beginning of the year have higher stature than the others who were born after the mid-year, with that influence the selection of players. (PENNA; FERREIRA; COSTA, Santos; Moraes, 2012).

Often, even a child or adolescent characteristics that would provide gathering that he could become a player on a professional team, due to a poor performance by the little school or club, this fact is not realized. (CAVICHIOLLI; CHELUCHINHAK; CAPRARO; MARCHI JR; Mezzadri, 2011).

The variation of height among the players of the category of sub-base and 20 professional players in futsal, is greater than in football, and futsal ranging in average 4 cm in height and 1 cm in football.

For Oliveira (2012) the stature of an athlete, does not determine whether or not he will succeed in the career of a football player, especially in some positions, but even in positions that stature is by many considered important, one should not exclude players who do not fit. Therefore the selection of young players in this anthropometric riável va can exclude players.

The market for buying and selling players in Brazil has changed significantly since the duration of Pelé Law (Law No. 9.615 / 98) given by the Sports Ministry, causing it to move the market much more money than before. Consequently, the discovery of young talent has become increasingly important for the club to be linked with this player and earn an amount in selling this player. (WILLIANS, 2000 apud MONTEIRO, 2011)

For each sport has a specific height for the athlete to get a better performance, for example, in swimming athletes greater height can in most cases better than those of smaller stature. The same happens in football, each position within the team has a specific average height in order to obtain a better result. (GUTIERREZ; FIERRO; GALAVIZ, 2009)

Ferreira and Melnikov (2012) through a study of two teams who often play the state championship in Mato Grosso do Sul, observed that a group of 50 players, height varies from 1.62 to 1.91 with an average height of 176 noting that defensive players have a higher than average stature attacking players, moreover, the highest defenders are more leveraged than the lowest of the same.

European athletes are higher than the mean height of the Brazilians, athletes or not, making Brazilian athletes have to fill this gap in stature, increasingly developed its technical capacity and seeking improvement in all the fundamentals of football. (FALK; PEREIRA, 2011).

The proposed study seeks to ascertain whether the stature influences so there is exclusion in the selection of players, which is observed in the lower grades, where coaches often are more concerned with the physical, than with the technique and also whether the stature influence on the quality of the team as a whole.

This study hopes to open the eyes of the professionals already working in the sport and also for those who are yet to come. For that height does not remain the main factor influencing the decision to choose an athlete or team formation.

Each position has a particular medium height, making defensive players are taller than offensive players, but in relation to the fundamentals of the game, height does not necessarily influence the player's skill, managing to find both high and low skilled players regardless of position.

This study aims to determine whether there is any relationship between the height of a soccer player and success in their professional careers, by plotting the mean height of players from five teams most qualified for the Libertadores Cup of America from the Brazilian championship and the five teams that were most often relegated to the Brazilian Championship Serie $B$ over the past ten years.

## MATERIALAND METHOD

This study was done in descriptive and exploratory manner since sought to analyze an anthropometric trait, in this case, the height of the football players that were studied, making the lifting of this measure, relating it to success. Documentary was because there was no measurement of articles on this subject. (OLIVEIRA, 2012)

The research was reference male athletes with a minimum age of 16 years and maximum 42 years who played the Brazilian Championship Serie A in the last 10 years, what was the point of accrued points, a change in the way how the league is played, it began to be a long championship, with many games being played by the teams.

The last 10 years were chosen because in 2003 the Brazilian Championship Serie A became a championship run points and kept this format until today, which did not happen in previous years where the championship format changed constantly.

Success and failure were determined by five teams more often qualified for the Libertadores Cup of America for the Brazilian Championship Serie A and 5 more clubs were relegated to Campeonato Brasileiro Serie B.

The selection of subjects, even indirectly, was intentional and not probabilistic, In other words, the selection of subjects for the sample population depends partly on the judgment of the researcher or interviewer in the field where a deliberate choice of the elements of the sample occurred.

The numbers were obtained on the stature in the public domain by being present in different sites on the World Wide Web without the need of authorization of athletes or clubs. The site was used www.goal.com.br

The material required for data collection consisted of 1 Samsung ${ }^{\circledR}$ notebook, a personal computer Intel® an iPad® and access to the internet site www.ogoal.com.br

The result of this data collection was obtained from descriptive statistics (mean and standard deviation) and inferential ( T -test for $\mathrm{p} \leq 0.05$ ) for the subsequent triangulation and interpretation of data.

## DISCUSSION AND ANALYSIS

Starting the study, we selected the ten teams who would compose the work, dividing them into two blocks, the block of the teams that were successful and the teams that were not successful, for such there is the five teams that have qualified more for the Libertadores Cup of America (pack of teams that were successful) and five times more than were downgraded (block of which were unsuccessful).

The teams were: Cruzeiro, Santos, Sao Paulo, Palmeiras and Gremio, who comprise the group's success and Vasco da Gama, Victoria, Sport, Náutico and Coritiba, the group's failure. It is noteworthy that the ten teams studied, only three appeared in every year and the team had appeared less than a minimum of four times.

For the composition of the study were collected from the heights of all the players that make up the rosters of the clubs present in the Brazilian Championship Serie A every year in the period 2003-2013, using the T test for data analysis.

For the data analysis, four themes in order to assess the best way, the importance of height in the success or failure of a team were drafted. These themes were: Best year's team $\times$ Worst year's team, Best team of the Year $x$ Worst team of the year, every year each team, position by position: Block x Block. For the composition of the work, we selected two of these themes, Best Worst year's team x year's team and Position by Position: Block x Block, because these topics were the ones with greater relevance to the purpose of the study.

The theme Best year's team x Worst year's team analyzed the mean height of each position of team play (goalkeeper, side defender, defender, midfielder and striker) comparing the best year in terms of ranking in the league with the worst year using the test for making this assessment.


Figura 1. Average height of Coritiba


Figura 2. Average height of Grêmio

Comparing the observed years it appears that in both positions in the world of football talk that should be higher, this graph shows that even with the increase in the average height in these positions, the team was not successful. Noting that there is no significant difference between the mean height in all positions, with the $T$ test with a result of 0,41

This graph shows that in all positions of the average height of the players of the Grêmio was higher in the year in which the club got their best in the league. Noting that there is no significant difference between the mean height in all positions, with the T test with a result of 0.28 .

These two graphs were chosen because they best represent the purpose of the issue, because the graphics of the eight remaining teams do not run much the rule, obtaining similar results between them.

The theme Position by Position: Block x Block, had the intention to analyze the mean height of each position by comparing the numbers of each block, using the $T$ test for assessing the data.


Figura 3. Average height of Goalkeepers


Figura 4. Average height of Defenders


Figura 5. Average height of Strikers
The five graphs of the subject studied has the same pattern, with the mean height of each position in both blocks follow the same pattern, so that there is no significant difference in any of the positions.

The present study is consistent with that carried out by Oliveira (2012), where he demonstrated the same pattern observed in this study in mean height at each position of the teams champions of the Brazilian Championship Serie A in the period 2004-2011

Going against the idea of Monteiro (2011), that the stature for the defenders is critical to the assessment criteria of the athlete, the present study demonstrates that there is a significant difference of the data so that one can make such a claim.

## CONCLUSION

After collecting and analyzing the data, it is observed that there is a pattern at each position of the game and he is taken seriously by professional football, because there is no significant difference when comparing the teams that were successful and the teams that had failure, so no one can say that stature is linked to success.

Players must be evaluated for their technical physical ability, tactical and giving the same importance to all of them, without excluding an athlete because he was outside the physical standards of football. An assessment tool for a better analysis of the athlete to have a better grounding in time to approve it or not, must be created making it clear that we are not claiming that tall players are bad and small are good or vice versa, but it must be done a complete analysis of the athlete.

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## STATURE OF PROFESSIONAL FOOTBALL PLAYER - ANALYSIS OF THE IMPORTANCE THROUGH 10 YEARS OF BRAZILIAN CHAMPIONSHIP ABSTRACT

Over the years, football has undergone several changes in their training, both in the tactical, technical and physical side, however things do not change, despite the evolution of the sport. Football is a sport that has many preconceptions, because even with the evolution of professional sports still use old methods that have made him successful in the past, but will not necessarily have the same result in this. Height, for example, has always been a factor that caused discussion in the middle of football, for many it is essential that the athlete is tall to play a specific sport position, causing many promising athletes leave the sport in the basic categories because they not possess such an attribute. The present study sought to investigate whether the height was a key factor for the success of both the athletes and their teams, so ten teams were used for research teams that competed in the Brazilian League Serie A between 2003 and 2013 identified the average height at five positions (goalkeeper, side, defenders, midfielders and attackers). These ten teams were divided into two blocks, the block of success (five teams more often qualified for the Libertadores Cup for the Brazilian League) and the block of failure (five teams more often relegated from the Brazilian League Serie A for the Brazilian League Serie B). Data were collected in the internet, site www.ogol.com.br and thrown into a spreadsheet for analysis. With all the data collected it was found that there was a standard height in all positions with very little variation between one and another and between one block and another. It is concluded that stature analyzed in isolation should not exclude athletes already in the youth, as the results showed that height is not directly linked to success and can see that for several years the stature of the failure block is greater than the block of success.

KEYWORDS: Stature;Athletes; Basic Divisions; Soccer

## STATURE DE JOUEUR DE FOOTBALL PROFESSIONNEL-ANALYSE DE LA PERTINENCEPAR LE BIAIS DE 10 ANS DU CHAMPIONNAT BRÉSILIEN <br> RESUME

Au cours des années, le football, a connu plusieurs changements dans leur formation, aussi bien à la technique et physique, tactique, mais certaines choses ne changent jamais, malgré l'évolution de ce sport. Le football est un sport qui a de nombreuses idées préconçues, puisque même avec l'évolution des sports professionnels utilisent encore les vieilles méthodes qui ont réussi dans le passé, mais pas nécessairement aura le même résultat dans le présent. La stature, par exemple, a toujours été un facteur qui a provoqué des débats dans le milieu de football, pour beaucoup, c'est essentiel que l'athlète est élevé à jouer dans une position spécifie le sport, causant de nombreuses promettant athlètes abandonnent le sport déjà dans les catégories de base pour ne pas posséder d'attribut. La présente étude a cherchéà rechercher si la stature a été qu'un facteur dominant pour le succès des athlètes et de leurs équipes, donc ils ont utilisé des dix équipes de recherche, les équipes qui concurrençaient le Campeonato Brasileiro Serie A entre 2003 et 2013 en identifiant la hauteur moyenne de cinq postes (milieu de gardien de but, défenseurs, milieux de terrain et attaquants de côté). Ces 10 équipes ont été divisés en deux blocs, le bloc du succès (cinq équipes qualifiées pour la Copa Libertadores en championnat brésilien) et le bloc de l'échec (des cinq équipes qui ont été reléguées en Serie A campeonato brasileiro série un Campeonato Brasileiro Serie B). Les données ont été recueillies sur l'internet site www.ogol.com.br et lancement dans un tableur pour l'analyse. Avec toutes les données recueillies a été trouvées qu'il y avait un motif de stature dans toutes les positions, avec une très petite variation entre un an et l'autre et d'un bloc de l'autre.

Il est conclu que la stature analysée isolément ne devrait pas exclure les athlètes déjà dans la jeunesse, parce que les résultats ont montré que la stature n'est pas directement liée à la réussite, être capable d'observer que, depuis plusieurs années, la stature du bloc de l'échec est plus élevée que le bloc à succès.

MOTS-CLÉS: Stature; Athlètes; Divisions de Base ; Football

## ALTURA DE FÚTBOL- ANÁLISIS DE JUGADORES DE RELEVANCIA A TRAVÉS DE 10 AÑOS DE CAMPEONATO BRASILEÑO RESUMEN

Con los años, fútbol ha ido experimentando varios cambios en su formación, tanto en lo técnico y físico, táctico, pero algunas cosas nunca cambian, a pesar de la evolución de este deporte. El fútbol es un deporte que tiene muchas ideas preconcebidas, ya que incluso con la evolución de los deportes profesionales todavía utilizan métodos antiguos que lograron en el pasado, pero no necesariamente tendrá el mismo resultado en esto. La estatura, por ejemplo, siempre ha sido un factor que provocó la discusión en el medio del fútbol, para muchos es esencial que el atleta es alto para jugar una posición especifica del deporte, provocando que muchos prometedores atletas abandonan el deporte ya en las categorías básicas para no poseer tal atributo. El presente estudio trató de buscar si la estatura fue un factor dominante para el éxito de los atletas y sus equipos, así que utilizaron diez equipos de investigación, equipos que disputaron el Campeonato Brasileiro Serie A entre 2003 y 2013 mediante la identificación de la altura media en cinco posiciones (medio de arquero, defensores, mediocampistas y atacantes de lado). Los 10 equipos fueron divididos en dos bloques, el bloque de éxito (los cinco equipos clasificados para la Copa Libertadores por el Campeonato Brasileño) y el de la falta (los cinco equipos que fueron relegados del Campeonato Brasileño de Serie A una para el Campeonato Brasileiro Serie B). Los datos fueron recogidos en el www.ogol.com.br sitio internet y lanzaron en una hoja de cálculo para su análisis. Con todos los datos recogidos se encontraron que había un patrón de estatura en todas las posiciones, con una muy pequeña variación entre un año y otro y entre un bloque y otro. Se concluye que la estatura analizada aisladamente no debería excluir a los atletas ya en la juventud, porque los resultados han mostrado que la estatura no está vinculada directamente al éxito, pudiendo observar que desde hace varios años la estatura del bloque de fracaso es mayor que el bloque hacia el éxito.

PALABRAS CLAVE: Estatura; Atletas; Divisiones Básicas; Fútbol.
ESTATURA DO JOGADOR DE FUTEBOL- ANÁLISE DA RELEVÂNCIA ATRAVÉS DE 10 ANOS DE CAMPEONATO BRASILEIRO

## RESUMO

Ao longo dos anos, o futebol vem passando por diversas mudanças nos seus treinamentos, tanto na parte tática, técnica e física, porem certas coisas não mudam, apesar da evolução do esporte. O futebol é um esporte que possui diversos pré-conceitos, pois mesmo com a evolução do esporte profissionais ainda utilizam antigos métodos que o fizeram ter êxito no passado, mas não necessariamente o farão ter o mesmo resultado no presente. A estatura, por exemplo, sempre foi um fator que causou discussão no meio do futebol, para muitos é indispensável que o atleta seja alto para jogar em uma posição especifica do esporte, fazendo com que muitos atletas promissores abandonem o esporte já nas categorias de base por não possuir tal atributo. O presente estudo buscou pesquisar se a estatura era um fator preponderante para o sucesso, tanto dos atletas como de suas equipes, por isso foram utilizadas dez equipes para pesquisa, equipes que disputaram o Campeonato Brasileiro da Serie A entre os anos de 2003 e 2013 identificando a estatura média em cinco posições (goleiro, laterais, zagueiros, meio campistas e atacantes). Essas dez equipes foram divididas em dois blocos, o bloco do sucesso (as cinco equipes que mais se classificaram para a Taça Libertadores pelo Campeonato Brasileiro) e o bloco do insucesso (as cinco equipes que mais foram rebaixadas do campeonato brasileiro da Serie A para o Campeonato Brasileiro da Serie B). Os dados foram coletados na internet, do site www.ogol.com.br e lançados em uma planilha para analise. Com todos os dados coletados verificou-se que houve um padrão de estatura em todas as posições, com uma variação muito pequena entre um ano e outro e entre um bloco e outro. Conclui-se que a estatura analisada de forma isolada não deveria excluir atletas já nas categorias de base, pois os resultados mostraram que a estatura não esta diretamente ligada ao sucesso, podendo observar que por vários anos a estatura do bloco do insucesso fica superior ao bloco do sucesso.

PALAVRAS-CHAVE: Estatura; atletas; Divisoes de base; Futebol.

