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### **BASKETBALL SPORTS SHOES SELECTION AND FEATURES**

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## ABSTRACT

Present-day technology brings with several which equipments are the irrevocable components of sports besides success also in the competitive environment, and shows its influence on sports equipment in a appreciable way. While considering the stated amounts in the embarkments invested in the sports sector in the era we live in, the performance of the athletes additionally gains value in this giant sector. When we distinguish the factors that affect the performance of athletes as internal and external factors, trainer shoes confront as a very important external factor and а performance tool. Consequently, benefiting from all kinds of materials and technologies that will protect the athlete's sanitary and bear his/her performance to the best possible level will bring success with it. Basketball is a very popular team sport where players are intensely active on the court. The action, movement and success in balance of the athlete in the game frequently depends on the right choice of basketball shoes. The accurate basketball shoes are extremely significant for the athlete's health and performance on the court. Shoes and models produced in present-day technology are very successful products. However, that doesn't mean all shoes are appropriate for each athlete's feet. Due to the characteristics of basketball game, players have their positions and choosing shoes according to their positions is important. It is a complicated condition for a basketball to choose suitable shoes athlete for himself/herself among many brands and models. In this study of compilation, the place and importance of shoes, which are in the first place among the materials that come to mind when the athlete's performance and health are considered, was mentioned, and information about the points that should be considered in choosing the right shoes in basketball was given.

Key Words: Basketball, Basketball Shoes, characteristics of the shoes.

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## **INTRODUCTION**

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Basketball consists of a large number of movement types and highly specific game positions, and thus the anthropometric profile of the players varies significantly. Players are shaped with various physical, technical, cognitive skills and specific game positions (Brauner et al., 2012). When playing sports in this intense activity and complex situation, it is very important to choose the right shoes to minimize the risk of injury (Bosch, 2007, Gür, 2012, Sevmiş et al., 2017). Basketball shoes are designed with regarding to performance, comfort and fashion . As an athlete, you need to understand the style of the game and abilities before making any decisions about footwear.

The International Basketball Federation (FIBA) declares that there are 450 million basketball players worldwide (FIBA.Basketball). This huge potential in athletes attracts the attention of shoe manufacturers. It impresses the spectators not only in terms of athletes but also in terms of being the most watched team sport in the Olympic games and executes the size of the market.

Spectators and amateur athletes are into imitating the star athletes they admire, and are disposed to buy basketball shoes that are often produced on behalf of the star players. Brands aim at reflecting the expectations and feelings of the consumers and sticking the products they associate with star players in their minds. (Kotler, 2004). On February 20th, 2019, during the Duke - North Carolina NCAA basketball game, millions of spectators on tv / internet watched Zion Williamsons' side moving with a sprint and afterwards the outsole of one pair of his basketball shoes went into pieces in his attempt to stop, and Zion Williamson was seriously injured and even his foot was broken. With the basketball shoe's going into pieces, the following day the financial value of the shoe brand resulted in a loss of around 1 billion US dollars (Luczak, 2019). While this incident was being inquired by the brand, the question whether Zion Williamson was wearing the appropriate shoes or not was revived. The brand has designed a newly reinforced shoe according to the player's game style (Leonard, 2019). Customizing shoe design and conformity in that way for a non-professional athlete, designing it to the athlete's game style, is an extremely rare situation. As it is in many sports branches, the structure of the feet is important in functions such as standing, walking, running and jumping in basketball, and it is effective in the performance and success of the athlete. In order to minimize injuries and maximize their performance, outsoles and sports shoes suitable for structure of feet should be designed (Manna et al., 2001; Hall & Riou, 2004; Engelhart et al., 2005).

While selecting basketball shoes, Guard, Striker and Pivot positions, which constitutes the main characters of the basketball game, body posture and defining characteristics of the body, play an important role in choosing the ideal shoe. During the selection shoes for the athletes in this special condition, expert advice and a research about the structure of the feet should be done (Wessinghage et al., 2006).

## MATERIAL AND METHOD

In this study, the points of choosing basketball shoes and the points that need to be considered were compiled with a literature scan, and the points that athletes should pay attention to during the shoe selection and purchasing process were mentioned.

## FINDINGS

Sneakers usually have outsoles and insoles. The outsole of the shoe protects the foot from external sourced injuries and can improve the performance of the athlete. The upper part of the shoe provides the connection between the shoe and the outsole.

By preventing foot injuries, it can provide an ability to be resistant to external factors during the activity of the athlete (Weidl, 2020).

Basketball Shoes; The feature that distinguishes basketball shoes from other types of sports shoes is the height of their collar. Upper quarter is reinforced. Places against strain and abrasion are made in a supported structure. Being with high or low legit is designed to wrap around the ankle to prevent sprains. The upper quarter is being made of leather, canvas (cotton fabric), leather / canvas or nylon / canvas, and the tip is supported with a curving, leg and tongue pads. Rubber or polyurethane is used as base material (MEGEP, 2008). When it is taken into a general consideration, basketball shoe design can be divided into four main groups as upper, insole, midsole and outsole. However, designs of basketball shoe manufacturers in different shapes and structures, additions of technological materials embody a complex

production process and more functions. Lam Wing Kai et al. (2017) reported that a basketball shoe has special functional requirements for movement and that certain parts of the shoe have a significant effect on comfort and conformity. Basketball shoes differ clearly from sneakers and other sports shoes. There are clear differences between basketball shoes, running shoes, or other athletic shoes. The most essential reason for this is, when basketball is compared to other sports that the risk of ankle injury is as high as 3.85 per 1000 players (Jiang, 2020). In order to reduce such injuries, brands are involved in developing new designs. A basketball shoe consists of tongue, ankle collar, heel counter, insole, heel, outsole, toe box, lining, toe tip, eyelets, laces, and upper shoe parts. (Kong, 2018). The objective of all parts is primarily designed to affect the health and performance of the wearer. Basketball shoes are in a relationship with a society which is in a rapid variety. It can be stated that fashion, lifestyles, and economic indicators are efficient in shoe selection.

## Anatomy of the Foot;

The human feet are the final parts of the legs beginning from the wrists. It is in such a strong and complex structure and is formed of 26 bones, 33 joints and more than a hundred muscles, tendons and cords. (Bonnel et al., 1998). The foot serves as a strength balance between bones, liagamans, the muscles that control the movement and tendons that tie bones and muscles, ground and human skeleton system. With reference to the Chinese medicine, the foot is in the form of the second heart of the human body (Xiong et al., 2010). When the order of importance in the structure of the foot is listed, the foot sole is the first place to be evaluated. The shape of the stepping of the foot sole is important in selection of shoes. The contact of the outer part of the heel on the ground and the diagonal movement of the sole of the foot structure can be used for the preference and evaluation of the right shoes.(Forriol ve Pascual 1990; Waldecker 2004).

# The detection of the size of the shoes;

The point called the size of the shoe is the size number of the shoe. The size of the shoe is determined according to some measurement standards that are accepted internationally. The size number of the shoes produced and used in Turkey is the same as those used in Europe. This method is originated from France and is called " the Point System of Paris". In addition to this the USA, Canada, England, Australia and New Zeland use their specific measurement systems. As for Japan uses centimeter which is a measurement of length as the size of the shoe (Kastan, 2009; Saya, 2011). In the categories of kids, women and men, the sizes of the shoes differ from each other by each brand. The selection of the shoe can be done according to measurements of the shoe table of each brand.

#### CONCLUSION

The results obtained after the extensive literature review on basketball shoes, which constitute the main theme of the study and have a very important place on athlete's health and performance, indicated that the location and position of the athlete on the court is the main distinguishing characteristics in the selection of basketball shoes. Furthermore, height, comfort, shoetree, size, visuality, quality and price are also very important in basketball shoes as in the election of other types of shoes. For basketball shoes, ankle support is extremely important. Among the ankle-supported shoes, which will appear in three sizes as short, medium and high during the process of buying shoes, the short ones are generally used by guards (playmaker position) as they contribute to speed and agility. Medium-height shoes, on the other hand, are preferred by players who want something in a medium degree besides the ankle support, but whose position is not clear yet, while high ankle shoes provide significant support to the ankle in terms of balance and are generally used by pivots.

During the research, it was observed that comfort has also been an important determinant in the selection of basketball shoes. In basketball, where action and movement are at the highest level, shoe

size, sole material and quality are as important factors as comfort. As a result; for sure, there is a limit to what basketball shoes can contribute to the athlete. However, while choosing the right shoes for the enhancement of performance can bring very successful results in revealing existing talent and performance, selection of the shoes falsely and unconsciously are equally successful in suppressing existing talent and performance.

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