International Journal of
Disabilities Sports and Health Sciences
e-ISSN: 2645-9094

RESEARCH ARTICLE

Psychological Skill of University Basketball Athletes in Each Playing Position in Indonesia

Komarudin KOMARUDIN*[1], Alen RISMAYADI[1], Mochamad Yamin SAPUTRA[1], Geraldi NOVIAN[1] Xuan Quynh LAI[2], Tite JULIANTINE[1] and Azman Ahmad TAJRI[3]

[1]Universitas Pendidikan Indonesia, Faculty of Sport and Health Education, Bandung / Indonesia
[2]Hanoi University, Faculty of International Studies, Hanoi / Vietnam
[3]Universiti Teknologi MARA, Faculty of Sport Science and Recreation, Negeri Sembilan / Malaysia
*Corresponding author: komarudin_pko@upi.edu

Abstract
The role of psychological skills in sport is one of the cores of research and practice in sports psychology. Even if there is, especially in basketball sport, it is limited to an overview of the physical aspects. For this reason, this research was aimed of examining whether there is a difference in psychological skills of basketball athletes in each playing position based on five playing positions, namely point guard, shooting guard, small forward, power forward, and center. The study was conducted using a quantitative descriptive method with a retrospective causal-comparative design, or ex-post facto design, on 100 basketball athletes from seven provinces spread across 31 universities in Indonesia, consisting of 38 male athletes and 62 female athletes. All collected data were analyzed using one way-ANOVA technique. The results of the analysis found that there were differences in the psychological skills of university basketball athletes in each playing position of in Indonesia. According to the results of the analysis for psychological skills by playing position in Indonesian university basketball athletes in Table 3, ($F(4,99) = 3.483$, significant at $p = 0.011 < 0.05$. The point guard position shows the highest psychological characteristics, while the lowest score is occupied by the small forward position. Coaches can use the results of this study to better understand the psychological characteristics of athletes in different playing positions as well as developing more appropriate types of psychological skills training interventions to each playing position.

Keywords
Psychological Skills, Playing Position, Basketball

INTRODUCTION

Basketball is one of the most popular games in the world, played in almost every country without exception, involving participants from almost all age levels, including children, adults, and the elderly (Dereceli, 2018). Basketball in the United States is considered as the most favorable level to achieve by most countries. Many teams tried to adopt the United States style of play, including athletes' physiological standards and special training programs. In the last two decades, there has been a significant accumulation of scientific data regarding the physiology and medicine in basketball (Ostojic et al., 2006; Stojanović et al., 2018). As the most popular game in the world, many things can happen every second in the game, for example, in remaining seconds a losing team can win. More than 70 million people play basketball and more than 210 countries are members of FIBA (Kamble et al., 2012; Sampaio et al., 2006).

The basketball game is a team sport that is planned and must be carried out by each player using the tactics according to their positional roles (Bhadu & Poonam, 2017; Trninic, 2006). Playing positions in basketball are classified into three groups that reflect a single entity, namely guards, forwards, and centers. Furthermore, in accordance

Received: 01 July 2024 ; **Revised** ; 29 July 2024 ; **Accepted:** 31 August 2024; **Published:** 25 September 2024

How to cite this article: Komarudin, K., Rismayadi, A., Saputra, M.Y., Novian, G., Lai, X.Q., Juliantine, T., and Tajri, A.A.(2024). Psychological Skill of University Basketball Athletes in Each Playing Position in Indonesia. *Int J Disabil Sports Health Sci*;7(5):1098-1105.https://doi.org/10.33438/ijdshs.1508145

with the development of game rules and tactics, the player's positions are developed more specifically to become point guard, shooting guard, small forward, power forward, and center (Abdelkrim, Castagna, et al., 2010). The five playing positions are an elaboration of the three previous classifications of playing positions where the modern basketball game is dependent on these five playing positions.

The specific position is determined by a predictive classification model that can help coaches to place players in the right position on the field (Pion et al., 2018). Each player's position has different fitness and body composition so that the coaches have to give different treatment in the training process. Guards are the shortest and fastest players on the team who have the best ball control, while centers are the tallest and slowest players on the team (Pojskic et al., 2014).

Recent research examining the differences among player positions shows that centers are taller, heavier, and have a higher percentage of body fat than guards and forwards (Abdelkrim, Chaouachi, et al., 2010; Jelicic et al., 2002), while guards have better aerobic and anaerobic capacities (Cormery et al., 2008; Sallet et al., 2005), including better speed and agility (Abdelkrim, Chaouachi, et al., 2010). The forward and center players are better in terms of strength (Abdelkrim, Castagna, et al., 2010; Jelicic et al., 2002; Pojskic et al., 2014). It has been reported in other studies that there are significant differences between playing positions for body size, speed, agility, vertical jump, and maximum oxygen consumption (Cormery et al., 2008; Hoffman et al., 1996; Ostojic et al., 2006; Sallet et al., 2005). There is also a strong relationship among body composition, aerobic, anaerobic, and playing position in basketball. The physical characteristics of an athlete are important predictive factors of whether the athlete will achieve high performance in the sport they choose (Sallet et al., 2005).

The success of an athlete is influenced by several factors. In general, in the context of training, the factors considered to influence the success of an athlete are physical, technical, tactical, and psychological skills. In accordance with the statement, the success of an athlete is influenced by psychological factors (Nanda & Dimyati, 2019; Weinberg & Gould, 2019). These four factors must be trained and developed synergistically and simultaneously from the beginning of coaching, because each factor complements and strengthens each other (Blumenstein & Lidor, 2007).

The role of psychological skills in sport is one of the cores of research and practice in sports psychology. Various conceptual and empirical studies have been carried out to identify the types and functions of relevant psychological skills and how to apply them in the training process (Vealey, 1988; White, 1993). A number of research results show that the efficacy of the application of psychological skills aims to achieve the best performance (Mahoney, 1989; Mahoney et al., 1987). Weakness in psychological skill aspects is related to a number of psychological qualities needed, including aspects of commitment, self-confidence, and anxiety before competition (Goudas et al., 1998; Williams & Krane, 1992), and others.

Research on the of rugby sport found a relationship between psychological skills and playing position. More specifically, it is proven that the function of psychological skills depends on the playing position and the level of the athlete (Andrew et al., 2007). Each player's position has certain skill requirements that are different from other positions. In contrast to the results of other studies, in football game, it was found that psychological skills were not related to playing position but were correlated with player maturity and level of competition (Jooste et al., 2014). While research on volleyball game found gender to be one of the variables that affect the characteristics of the psychological skills of volleyball players, specifically on their anxiety control skills, mental preparation, and the importance of the team. In addition, it was also found that playing position did not affect the psychological skills characteristics of volleyball players in Indonesia (Khoirul & Dimyati, 2019).

Characteristics of psychological skills are practiced in sport today, especially in team sports. But the results are still inconsistent, including in basketball. Apart from being inconsistent, it is also still limited, especially after the development of more specific player positions. For this reason, this study aimed to explore the possibility of psychological skill differentiation in each player's position, namely point guard, shooting guard, small forward, power forward, and center. Therefore, the purpose of this study was to examine whether there were differences in the types of psychological skills in each playing position in basketball. Allegedly,

there are different types of psychological skills in each basketball-playing position. Each playing position requires certain psychological skill characteristics that are different from other playing positions.

MATERIALS AND METHODS

Methods and Design

The research was conducted using a quantitative descriptive method with a retrospective causal-comparative design or ex-post facto design (Fraenkel et al., 2022). The selection of this research method aimed to identify whether or not there are differences in psychological skills for each playing position of university basketball athletes in Indonesia.

Participant

Participants of this study were 100 basketball athletes, aged 18-24 years ($M=21.7_{years}$, $SD=3.82_{years}$), consisting of 38 male athletes and 62 female athletes. All participants came from seven provinces in Indonesia, namely Banten, Jakarta, West Java, Central Java, Yogyakarta, East Java, and Papua, spread across 31 public and private universities in Indonesia. Participants were selected and determined using a non-probability sampling technique (Fraenkel et al., 2022). The participants involved in this study were participants who had participated in the Student Basketball League in the last four years.

This research has met the ethical rules stated in the Helsinki declaration. Research ethics approval was obtained from the Faculty of Sport and Health Education, Universitas Pendidikan Indonesia with project number 1213/UN40.A6/KP/2024. Participant provided informed consent, with the volunteer form covering research details, risks, benefits, confidentiality, and participant rights. The research strictly adhered to the ethical principles of the Declaration of Helsinki, prioritizing participant's rights and well-being in design, procedures, and confidentiality measures.

Data Collection Tools

Psychological Skills Inventory for Sport (PSIS-R5)

The instrument used in this research was The Psychological Skills Inventory for Sport (PSIS-R5), adopted from Mahoney, Gabriel, and Perkins (Mahoney et al., 1987). PSIS-R5 measures six aspects of an athlete's psychological skills which are elaborated into 44 items, consisting of 8 motivational items, 8 self-confidence items, 8 anxiety control items, 6 mental preparation items, 7 team urgency items, and 7 concentration items. The instrument used was also refer to Tenenbaum, Eklund, and Kamata (Tenenbaum et al., 2012) and validated to suit the language and its use in research. The instrument was assessed by a panel of expert judgments in the fields of language, sports psychology, and material integrity (Nanda & Dimyati, 2019).

Procedure

All the required data were collected using the google form media distributed through the WhatsApp group under the name of PERBASI Java-Bali with a total of 14 group members, including PB administrators of Indonesian Basketball Association (PERBASI). The group members distributed it to WhatsApp groups which consisted of university basketball coaches in Indonesia. Furthermore, with the help of the coaches, the athletes were asked to fill out a google form regarding the PSIS-R5 inventory. From 109 participants who were asked to fill out the Google form, only 100 participants filled it out, while 9 people said they were not willing for several reasons. Next, the data were compiled for further analysis.

Statistical Analysis

All collected data were analyzed using the one-way-ANOVA analysis technique, an analysis technique used to explore more than two average differences with the help of SPPS software version 21 (Field, 2009).

RESULTS

There are three findings that will be presented in this section, namely the results of the validation of the PSIS-R5 instrument (validity and reliability), descriptive statistics, and test results on differences in psychological skills among player positions. These three findings are presented as follows:

Validity and Reliability of Instrument

Table 1 presents the results of the validity and reliability analysis of the psychological skills instrument (PSIS-R5) for 100 participants (basketball athletes).

In accordance with the results of the analysis of instrument validity (Table 1), the obtained validity coefficient index was between 0.636-0.839 All validity values were higher than 0.6. It can be interpreted that, based on these results, all PSIS-R5 indicators are declared valid and can be used. Likewise, with Cronbach's Alpha reliability coefficient index, the obtained results are between 0.731-0.921. All values are higher than 0.7. It can be interpreted that all PSIS-R5 indicators are reliable. Thus, the instrument can be used for data collection because it is proven valid (measures what is to be measured) and reliable (can be trusted because the results are consistent).

Table 1: Validity and Reliability of PSIS-R5

Psychological Skill	Coefficient of Content Validity (Aiken's V)	Coefficient of Reliability (Cronbach's Alpha)
Motivation	0.679	0.792
Self-Confidence	0.636	0.775
Anxiety Control	0.779	0.914
Mental Preparation	0.839	0.921
Team Significance	0.665	0.803
Concentration	0.731	0.731

Source: (Nanda & Dimyati, 2019)

Description of Statistics

The results of the research show that there are different psychological skills for different playing positions of college basketball athletes in Indonesia. These results are presented in Tables 2 and 3. Based on the description of the data in Table 2, it is known that the mean of psychological skills of college basketball athletes in Indonesia range between 144.30-159.50. The mean of each position is 159.50 for point guard, 148.10 for shooting guard, 144.30 for small forward, 147.95 for power forward, and 147.60 for center position.

Table 2: Psychological skills by playing position in ındonesian university basketball

Game Position	N	Mean	Standard Deviation	Standard Error
Point Guard	20	159.50	13.105	2.930
Shooting Guard	20	148.10	13.010	2.909
Small Forward	20	144.30	10.815	2.418
Power Forward	20	147.95	18.900	4.226
Center	20	147.60	12.411	2.775
Total	100	149.49	14.604	1.460

Note: N = Number of participants

Hypothesis Testing

The results of the One Way-ANOVA analysis of the psychological skills of university basketball athletes in each playing position in Indonesia are presented in Table 3.

Table 3: ANOVA results for psychological skills by playing position in ındonesian university basketball athletes

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2700.240	4	675.060	3.483	.011*
Within Groups	18414.750	95	193.839		
Total	21114.990	99			

Note: *p < 0,05*; p < 0,01***

In accordance with the results of the analysis in Table 3, it was found that (F(4,99) = 3.483, significant at p = 0.011 <0.05. In other words, the null hypothesis (Ho), which states that there is no difference in psychological skills of basketball athletes in each playing position, is rejected, and the alternative hypothesis (Ha), which states that there are differences in psychological skills of basketball athletes in each playing position, is accepted. It concludes that the psychological skills of university basketball athletes in each playing position in Indonesia are significantly different. Furthermore, to find out the differences, the results are presented in Table 4 using the Least Significant Difference (LSD) post-hoc test, a test to find out which playing positions are significantly different in terms of psychological skills when the null hypothesis is rejected.

Table 4. Comparison of psychological skills by position in ındonesian university basketball

(I) Playing Position	(J) Playing Position	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Point Guard	Shooting Guard	11.400*	4.403	.011*	2.66	20.14
	Small Forward	15.200*	4.403	.001**	6.46	23.94
	Power Forward	11.550*	4.403	.010*	2.81	20.29
	Center	11.900*	4.403	.008**	3.16	20.64
Shooting Guard	Point Guard	-11.400*	4.403	.011*	-20.14	-2.66
	Small Forward	3.800	4.403	.390	-4.94	12.54
	Power Forward	.150	4.403	.973	-8.59	8.89
	Center	.500	4.403	.910	-8.24	9.24
Small Forward	Point Guard	-15.200*	4.403	.001**	-23.94	-6.46
	Shooting Guard	-3.800	4.403	.390	-12.54	4.94
	Power Forward	-3.650	4.403	.409	-12.39	5.09
	Center	-3.300	4.403	.455	-12.04	5.44
Power Forward	Point Guard	-11.550*	4.403	.010*	-20.29	-2.81
	Shooting Guard	-.150	4.403	.973	-8.89	8.59
	Small Forward	3.650	4.403	.409	-5.09	12.39
	Center	.350	4.403	.937	-8.39	9.09
Center	Point Guard	-11.900*	4.403	.008**	-20.64	-3.16
	Shooting Guard	-.500	4.403	.910	-9.24	8.24
	Small Forward	3.300	4.403	.455	-5.44	12.04
	Power Forward	-.350	4.403	.937	-9.09	8.39

Note: *p < 0,05*; p < 0,01***

DISCUSSION

The purpose of this study was to examine whether there were differences in the psychological skills of university basketball athletes in each playing position in Indonesia. To achieve this goal, a quantitative descriptive study was carried out using a retrospective causal-comparative design or ex-post facto design on 100 university basketball athletes in Indonesia. Participants completed the PSIS-R5 inventory through the Google form media. According to the results of the analysis, there were significant differences in psychological skills in each athlete's playing position in basketball. Research on psychological skills, especially related to playing positions in basketball, is relatively limited, but these previous studies show consistent results, even though these studies were oriented towards other components of playing position. For example, Pion, Segers, Stautemas, Boone, Lenoir, & Bourgois (Pion et al., 2018) reported the results of their research that each playing position in basketball showed differences. Other research that corroborates the results of this study can be found in rugby sport. It is proven that there is a relationship between psychological skills and the playing position of rugby athletes. In particular, there is evidence to suggest that rugby players can be differentiated based on their playing position and level of competition in terms of their psychological skills (Khoirul & Dimyati, 2019). An important implication related to the results of this study is that differences in playing positions indicate differences in the development of ball possession in basketball.

Coaches and players must be aware of the positional demands of each playing position (Wierike et al., 2018).

The results of the study show that there are differences in each playing position, namely point guard, shooting guard, small forward, power forward, and center. In this study, point guards have the best psychological skills. There are significant differences among shooting guards, small forwards, power forwards, and centers. Dereceli (Dereceli, 2018) reveals that there are differences in the psychological skills of basketball players from the aspects of concentration and mental preparation. The Point Guard has the hallmark of a strong leadership character, understanding the personality of teammates, and must develop relationships with teammates. The point guard position usually has a better personality, more stable, and relatively able to control emotions compared to other playing positions (Chartrand et al., 2016; Nanda & Dimyati, 2019). Previous studies (Nanda & Dimyati, 2019) and (Giannini, 2009) explain that the guard must be filled with basketball players who have good shooting skills so that victory points can be achieved.

The Small Forward, in this study, showed the lowest psychological skill scores compared to point guards, shooting guards, power forwards, and centers. This is because the small forward position is a playing position that must have high speed and good shooting accuracy, so that the small forward has a selfish tendency. In basketball, a forward is needed to score (Khoeron, 2017; Nanda & Dimyati, 2019). In addition, the small forward also has the advantage of breaking through the opponent's defense. A basketball team is very dependent on this position and therefore the player who occupies the small forward position must be a scoring machine for his team (Nanda & Dimyati, 2019).

Power Forward, in this study, showed the value of psychological skills that are the same as the center. Physically, this is partly because the height of the power forward is generally the second-tallest player after the center. In addition, the power forward has positional duties taking over rebound situations when opposing players try to score or break through the defensive line. A basketball team is very dependent on this position because it must be able to defend or protect the defense area from opponents who will score (Nanda & Dimyati, 2019). In addition, during a basketball game, the power forward position is better in rebounding, defending, assisting, stealing, and blocking than other positions (Sampaio et al., 2004).

The center, in this study, showed the same psychological skill value as the Power Forward. Center has the highest height compared to other playing positions in basketball. According to Nageswaran, (Nageswaran, 2012), the center's body posture is usually taller than a guard or forward. Then, on certain occasions, the center position is occupied by the tallest player in the team (Kucsa & Mačura, 2015). The center position is responsible for keeping opposing players from shooting in vital areas and passing the ball into vital areas. But no less important, the center position is expected to win rebounds in vital areas (Nanda & Dimyati, 2019).

In accordance with all the results of these studies, each athlete's playing position in basketball game is proven to have certain psychological skill characteristics that are different in each playing position. Implicitly, the magnitude of the psychological skill score for each playing position shows different needs and is hierarchical in nature. One of the practical implications of the results of this research, among other things, is to provide important information for coaches regarding the urgency of understanding the psycho-logical characteristics of each athlete's playing position as well as feedback for designing and developing types of psychological skills training interventions that are in line with the psychological needs of each player (Hidayat et al., 2021; Komarudin et al., 2021).

Conclusion

This study shows that the psychological skills of basketball athletes in each playing position differed significantly. The point guard position has the highest psychological characteristics compared to other positions, the shooting guard position is in second place, the power forward and center positions have the same value in the third rank, while the small forward position has the lowest score. Coaches must understand the different psychological skills possessed by each athlete, in order to provide appropriate treatment according to the unique characteristics of each athlete.

Acknowledgment

We express our sincere gratitude to all university basketball coaches and athletes for their willingness to participate in this study. We also thank the Faculty of Sports and Health Education and Research and Community Service Institute of

Universitas Pendidikan Indonesia for funding this research project.

Conflict of Interest

Authors declare no conflict of interest.

Ethics Statement

This research followed ethical standards and received approval from Faculty of Sport and Health Education Universitas Pendidikan Indonesia with numbered 1213/UN40.A6/KP/2024.

Author Contributions

Study Design, KK, AR, and MYS; Data Collection KK, AR, GN; Statistical Analysis, KK, AR, TJ; Data Interpretation, KK, XQL, AAT; Manuscript Preparation, KK, AR, MYS, GN; Literature Search, KK, and AR. All authors have read and agreed to the published version of the manuscript.

REFERENCES

Abdelkrim, N. Ben, Castagna, C., Jabri, I., Battikh, T., Fazaa, S. El, & Ati, J. El. (2010). activity profile and physiological requirements of junior elite basketball players in relation to aerobic. *Training*, *9*(65), 2330–2342. [PubMed]

Abdelkrim, N. Ben, Chaouachi, A., Chamari, K., Chtara, M., & Castagna, C. (2010). *Positional role and competitive-level differences in elite-level men's basketball players.* 1346–1355. [PubMed]

Andrew, M., Grobbelaar, H. W., & Potgieter, J. C. (2007). Sport psychological skill levels and related psychosocial factors that distinguish between rugby union players of different participation levels. *South African Journal for Research in Sport, Physical Education, and Recreation*, *29(1)*, 1–15. [CrossRef]

Bhadu, A., & Poonam, Singh. (2017). Comparison of Speed in Basketball players according to their playing position. *International Journal of Yoga, Physiotherapy and Physical Education.*, *2(3)*, 52-53.

Blumenstein, B., & Lidor, R. (2007). The Road to the Olympic Games: A Four-Year Psychological Preparation Program. *Education*, *9*(4), 15–28.

Chartrand, J. M., Jowdy, D. P., & Danish, S. J. (2016). The Psychological Skills Inventory for Sports: Psychometric Characteristics and Applied Implications. *Journal of Sport and Exercise Psychology*, *14*(4), 405–413. [CrossRef]

Cormery, B., Marcil, M., & Bouvard, M. (2008). Rule change incidence on physiological characteristics of elite basketball players: A 10-year-period investigation. *British Journal of Sports Medicine*, *42*(1), 25–30. [PubMed]

Dereceli, Ç. (2018). An Examination of Concentration and Mental Toughness in Professional Basketball Players. *Journal of Education and Training Studies*, *7*(1), 17. [CrossRef]

Field, A. (2009). *Discovering statistics using SPSS for windows*. London: Sage Publications.

Fraenkel, J. R., Wallen, N., & Hyun, H. H. (2022). *How to design and evaluate research in education. (11th Eds.)*. New York: McGraw Hill L.L.C.

Giannini, J. (2009). *Court sense: Winning basketball's mental game*. New Jersey: Human Kinetics.

Goudas, M., Theodorakis, Y., & Karamousalidis, G. (1998). Psychological Skill in Basketball: Preliminary Study For Development of a Greek Form of the Atletic Coping Skill Inventory-28. *Perceptual and Motor Skills*, *28*, 59–65. [PubMed]

Hidayat, Y., Komarudin, & Martini, T. (2021). Mental imagery applicative model for beginner badminton coaches. *International Journal of Human Movement and Sports Sciences*, *9*(4), 59–65. [CrossRef]

Hoffman, J. R., Tenenbaum, G., Maresh, C. M., & Kraemer, W. J. (1996). Relationship between athletic performance tests and playing time in elite college basketball players. *Journal of Strength and Conditioning Research*, 1-10(2), 67-71.

Jelicic, M., Sekulic´, D., & Marinovic´, M. (2002). *Anthropometric characteristics of high level European junior basketball players*. 26(Suppl.):69-76. [PubMed]

Jooste, J., Steyn, B. J. M., & Van Den Berg, L. (2014). Psychological skills, playing positions and performance of African youth soccer teams. *South Africa Journal for Research in Sport, Physical Education, and Recreation*, *36(1)*, 85–100.

Kamble, P., Daulatabad, V. S., & Baji, P. S. (2012). Study of anthropological parameters, body composition, strength & endurance in Basketball players. *International Journal of Biological Medicine Research*, *3(1): 1404*.

Khoeron, N. (2017). *Buku pintar basket* (Anugrah, Ed.).

Khoirul, A., & Dimyati. (2019). *The psychological skill characteristics of Indonesian volleyball players reviewed based on gender and position*. *5*(1). [CrossRef]

Komarudin, Hidayat, Y., & Novian, G. (2021). Neuro-tracker Training to Improve Shooting Performance of Archery Athletes. *International Journal of Human Movement and Sports Sciences*, 66–70. [CrossRef]

Kucsa, R., & Mačura, P. (2015). Physical characteristics of female basketball players according to playing position. *Acta Facultatis Educationis Physicae Universitatis Comenianae*, *55(1)*, 46–53. [CrossRef]

Mahoney, M. J. (1989). Psychologicd predictors of elite and non-elite performance in Olympic Weighlifting. *International Journal of Sport Psychology*, *20(1)*, 1–12.

Mahoney, M. J., Gabriel, T. J., & Perkins, T. S. (1987). Psychological skills and exceptional athletic performance. *Psychology*, 181–199. [CrossRef]

Nageswaran, N. (2012). The position-wise discriminating tendency among anthropometric characteristics of Indian youth elite basketball players. *International Journal of Scientific Research*, *2(7)*, 1–3.

Nanda, F. A., & Dimyati, D. (2019). The psychological skills of basketball athletes: Are there any differences based on the playing position? *Jurnal Keolahragaan*, *7*(1), 74–82. [CrossRef]

Ostojic, S. M., Mazic, S., & Dikic, N. (2006). *Profiling in basketball: Physical and physiological characteristics of elite players. 20*(4), 740–744. [PubMed]

Pion, J., Segers, V., Stautemas, J., Boone, J., Lenoir, M., & Bourgois, J. G. (2018). Position-specific performance profiles, using predictive classification models in senior basketball. *International Journal of Sports Science and Coaching*, *13*(6), 1072–1080. [CrossRef]

Pojskic, H., Separovic, V., Melika Muratovic, ;, & Uzicanin, E. (2014). Morphological Differences of Elite Bosnian Basketball Players According to Team Position Diferencias Morfológicas de los Jugadores de Baloncesto Bosnios de Elite según sus Posiciones de Equipo. *Int. J. Morphol*, *32*(2), 690–694. [CrossRef]

Sallet, P., Perrier, D., Ferret, J. M., Vitelli, V., & Baverel, G. (2005). Physiological differences in professional basketball players as a function of playing position and level of play. *Journal of Sports Medicine and Physical Fitness*, *45*(3), 291–294. [PubMed]

Sampaio, J., Godoy, S. I., & Feu, S. (2004). Discriminative power of basketball game-related statistics by level of competition and sex. *Perceptual and Motor Skills*, *99*(3 II), 1231–1238. [PubMed]

Sampaio, J., Janeira, M., Ibáñez, S., & Lorenzo, A. (2006). Discriminant analysis of game-related statistics between basketball guards, forwards and centres in three professional leagues. *European Journal of Sport Science*, *6*(3), 173–178. [CrossRef]

Stojanović, E., Stojiljković, N., Scanlan, A. T., Dalbo, V. J., Berkelmans, D. M., & Milanović, Z. (2018). The Activity Demands and Physiological Responses Encountered During Basketball Match-Play: A Systematic Review. *Sports Medicine*, *48*(1), 111–135. [PubMed]

Tenenbaum, G., Eklund, R., & Kamata, A. (2012). *Introduction to measurement in sport and exercise psychology*. In Measurement in Sport and Exercise Psychology. [CrossRef]

Trninic, S. (2006). *Selekcija, Priprema, Vođenje, košarkaša. & momčadi (The selection, preparation, and guiding of basketball players and teams.* 953-97019-2–9.

Vealey, R. S. (1988). Professional Practice in Psychological Skills Training. *The Sport Psychologist*, *2*(April), 318–336.

Weinberg, R., & Gould, D. (2019). *Foundations of sport and exercise psychology*. Illinios: Human Kinetics Publishers.

White, S. A. (1993). The Relationship between Psychological Skills, Experience, and Practice Commitment among Collegiate Male and Female Skiers. *The Sport Psychologist*, *7*(1), 49–57. [CrossRef]

Wierike, S., Huijgen, B., Jonker, L., Elferink-Gemser, M., & Visscher, C. (2018). The importance and development of ball control and (self-reported) self-regulatory skills in basketball players for different positions. *Journal of Sports Sciences*, *36(6)*, 710–716. [PubMed]

Williams, J. M., & Krane, V. (1992). Coping styles and self-reported measures of state anxiety and self-confidence. *Journal of Applied Sport Psychology*, *4*(2), 134–143. [CrossRef]