Talent Development in Basketball: A Perspective from Brazilian Coaches

Dilson Borges Ribeiro Junior[1], Jeferson Macedo Vianna[1], Hélder Zimmermann de Oliveira[2], Emerson Filipino Coelho[3], Antonio Antúnez[4], Francisco Zacaron Werneck[3]

Abstract

The coach plays a central role in the identification, selection, and development of talent. The aim of this study was to investigate into the opinions of Brazilian coaches about the importance of different factors for the development of young basketball players. A total of 94 coaches from different clubs and with diverse professional experience are administered a questionnaire on anthropometric, physical, technical, tactical, psychological, and environmental characteristics. On a scale of 1 (not at all important) to 5 (extremely important), the coaches indicated to what extent a factor/indicator of athletic potential was important for the development of a young basketball player. Repeated measures ANOVA showed that, in the coaches' opinion, the technical and physical factors were the most important in relation to the other factors for the development of young basketball players, with differences according to the playing position. Most coaches considered the following indicators of the sporting potential as extremely important: Shooting skill, passing and individual defense technique, speed, agility, and lower limb strength. The coaches also considered tactical skills, especially positioning and decision-making, as well as the quality of practice and psychological skills (confidence, withstanding pressure, concentration, dealing with adversity, coachability, and determination) to be extremely important. The relevance of these indicators varied according to the competitive level of the coaches (international vs. regional/national). Our results can potentially help coaches in the process of identifying and developing talents for the Brazilian basketball.

Keywords: Basketball, coaches, talent development.

Introduction

Basketball is the second most investigated sport in the world in the research on sport talent (Baker et al., 2020). The career progression of a young basketball player until they become an elite athlete depends on a combination of characteristics related to the individual, to the task and the environment, which interact with each other and change over time (Ribeiro Júnior et al., 2021). This transformation of sporting potential into excellence performance is a dynamic and complex process that challenges researchers in search of new evidence (Till & Baker, 2020). Within this context, the knowledge of the coaches is considered a rich source of data and can contribute to optimizing the process of talent identification and development (Roberts et al., 2019; Till & Baker, 2020).

Experienced coaches are able to identify a talented young athlete and the essential characteristics to achieve high performance (Greenwood, Davids, & Renshaw, 2014). The assertiveness of coaches to project the future of young athletes can reach 79% (Schorer, Rienhoff, Fischer, & Baker, 2017). Generally, they use their "gut feeling," based on objective and subjective information acquired throughout their career, to make decisions during the process of talent identification, selection, and development (Roberts et al., 2019). Ribeiro Junior, Vianna, Lauria, Coelho, and Werneck (2019) highlights the importance of using the opinion of the coaches combined with performance results for a better understanding of the

sporting potential of young basketball players.

In basketball, scientific research has sought to describe not only the criteria that coaches use to select talent (Silva Filho, Luguetti, de Oliveira Paes, & Böhme, 2011), but above all, what is the importance they attribute to each of the possible relevant aspects for success (Gonçalves, Santos, Tavares, & Janeira, 2017; Ramos & Tavares, 2000; Sáenz-López, Ibáñez, Giménez, Sierra, & Sánchez, 2005). Gonçalves, Santos, Tavares, and Janeira (2017) interview Portuguese basketball coaches and conclude that the context in which the athlete is placed, the psychological aspects, and knowledge of the game are the most relevant factors for athletes to succeed in their career. In Spain, from interviews with players, coaches, managers and researchers, Sáenz-López et al. (2005) also verify that the environmental factor was the most important for a young athlete to become an expert, combined with other individual factors, such as: psychological, tactical and technical, physical conditions, anthropometric components and psychosocial factors. In Brazil, Ramos and Tavares (2000) interview 16 coaches about the selection process of young basketball players and the importance attributed to anthropometric, physical, technical, tactical and psychological factors. This study shows that the anthropometric indicators are more important for the centers; whereas the point guards need an optimal combination of technical, physical, tactical, and psychological indicators; and for the forwards, it is found that shooting and individual defense technique are the

---

[1] Sports Department, Federal University of Juiz de Fora (UFJF), MG, Brazil
[2] Salgado de Oliveira University – UNIVERSO, Juiz de Fora, MG, Brazil
[3] School of Physical Education, Federal University of Ouro Preto (UFOP), MG, Brazil
[4] Faculty of Sports Science, University of Extremadura, Cáceres, Spain
Corresponding authors: Antonio Antúnes, email: antunez@unex.es; Dilson Borges Ribeiro Junior, E-mail: dilsonborges.junior@ufjf.edu.br

most important indicators.

Considering that the coach is the main social agent in the formation of elite athletes, investigating the variables that he/she considers relevant in this process could make the development of the young athlete more efficient (Silva Filho et al., 2011). In addition, quantifying the subjective perception of coaches helps in defining the weights to be assigned to the indicators that will be part of the talent identification models. However, in basketball there are still only a limited number of studies that investigate the opinion of coaches regarding the factors and indicators that influence the identification and development of talents, especially in the Brazilian country-context. Therefore, the objective of this study has been to investigate the opinion of Brazilian coaches about the importance of different factors for the development of young basketball players, analyzing differences between game positions and the competitive level of the coaches.

Method

Participants

Table 1

Brazilian's basketball coach characteristics (n = 94)

	N	%
Gender		
Male	86	91.5
Female	8	8.5
Age		
20 to 30 years	14	14.9
31 to 50 years	58	61.7
>50 years	22	23.4
Region		
North	5	5.3
South	13	13.8
Southeast	65	69.1
Northeast	4	4.3
Midwest	7	7.4
Sport experience		
Up to 10 years	31	33
11 to 20 years	27	28.7
>20 years	36	38.3
Competitive level		
International	15	16
National	39	41.5
Regional	40	42.5
Skill Level		
School	12	12.8
Beginner	12	12.8
Developing	51	54.3
Expert	19	20.2
Former basketball players		
Yes	86	91.5
No	8	8.5

A total of 94 basketball coaches participated in this study, the majority being male, from the southeast region and former athletes, with a mean age of 41.7 ± 10.4 years and experience length of 17.4 ± 10.5 years. About 20% of the coaches had international experience and most worked with young athletes (Table 1). Coaches were recruited from a national database and through social media. The coach should hold a coaching certificate and a minimum of 1-year experience in a sports training category. The consent of the coaches was obtained in advance. This study is an integral part of the "Projeto Atletas de Ouro®: Multidimensional and Longitudinal Evaluation of the Sporting Potential of Young Athletes" and it was approved by the Research Ethics Committee of the Federal University of Ouro Preto (CAAE: 32959814.4.1001.5150).

Data Collection

For the data collection process, an online questionnaire distributed by Google Forms to the coaches via email was utilized. The questionnaire was composed of 39 indicators that were chosen based on the modeling of the sporting potential, proposed by the Projeto Atletas de Ouro®, which aims to create a talent identification system (Ribeiro Junior et al., 2019, Werneck et al., 2020). The content of the instrument was validated by four experts (university professors, PhDs, and basketball experts). The questionnaire contained instructions about the purpose of the research and the following guideline: "What is the importance you attribute to the determining factors for the development of young basketball players?" In consideration of the anthropometric factor, the aspects related to the size, shape and body composition of the athlete; physical factor: the physical capacities, strength, speed, endurance; technical factor: specific motor skills, technical fundamentals; tactical factor: aspects related to decision making, tactical skills and game intelligence; psychological factor: psychological and emotional skills; and environmental factor: context in which the athlete is inserted, sports experience, time of practice and family support.

The first page of the questionnaire contained demographic data (name, age, gender, geographical region, club) and information about the level of the coaches (experience length, competitive level). In the second part of the questionnaire, the coaches were asked questions about the importance of anthropometric, physical, technical, tactical, psychological, and environmental factors for the development of young basketball players, with a range of 1 = not important at all to 5 = extremely important. Next, they were asked to assign the order of importance of these factors, from the most important (1st) to the least important (6th). Finally, the coaches responded regarding the importance of the sporting potential factors for each of the playing positions: point guard, shooting guard, forward, power forward, and center. In the third part of the questionnaire, the coaches were asked about the importance of the sporting potential indicators (Table 2), ranging from 1 = not important at all to 5 = extremely important.

Statistical Analysis

The descriptive statistics were presented as mean ± standard deviation and absolute and relative frequencies. In order to test the differences in the importance of factors for the development of sporting potential and possible

differences between playing positions, the repeated measures ANOVA was used, followed by Bonferroni's post-hoc test. The 95% confidence intervals for the mean (95%CI) were presented. The independent t-test was used to test for differences in factors and indicators of sporting potential between international vs. national/regional level coaches. The effect size was assessed by Cohen's d and Eta2 (Cohen, 1992). All the analyses were performed in IBM SPSS software version 24.0 (IBM Corp., Armonk, NY). The p value ≤ 0.05 was adopted for the statistical significance.

Results

The descriptive values of the importance attributed by the coaches to the factors and indicators for the development of young basketball players are presented in Table 3.
It is found that there was a statistically significant difference in the order of the factor importance of sporting potential (F5, 465 = 18.642; p<0.001; eta2 = 0.17). The order from 1st to 6th most important was reversed so that graphically the highest mean represented the most important factor. The technical and physical factors were considered the most important, followed by the psychological, tactical, and anthropometric factors, with the environmental factor being the least important (Figure 1).

It is found that there was a statistically significant difference in the order of the factor importance of sporting potential (F5, 465 = 18.642; p<0.001; eta2 = 0.17). The order from 1st to 6th most important was reversed so that graphically the highest mean represented the most important factor. The technical and physical factors were considered the most important, followed by the psychological, tactical, and anthropometric factors, with the environmental factor being the least important (Figure 1).
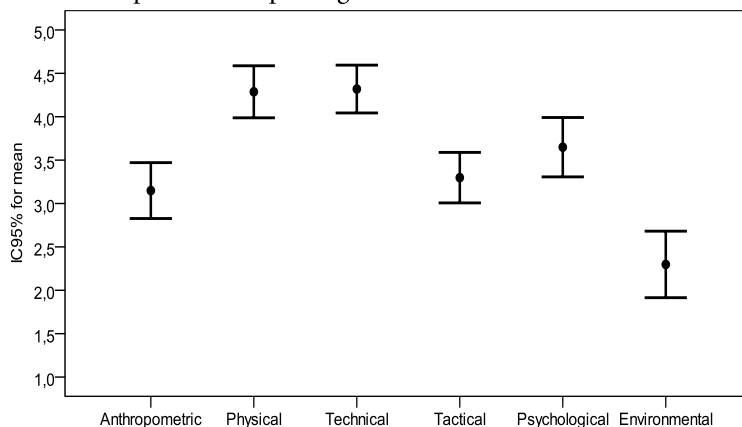

Figure 1. Importance attributed by Brazilian coaches (n = 94) to sporting potential factors for the development of young basketball players.
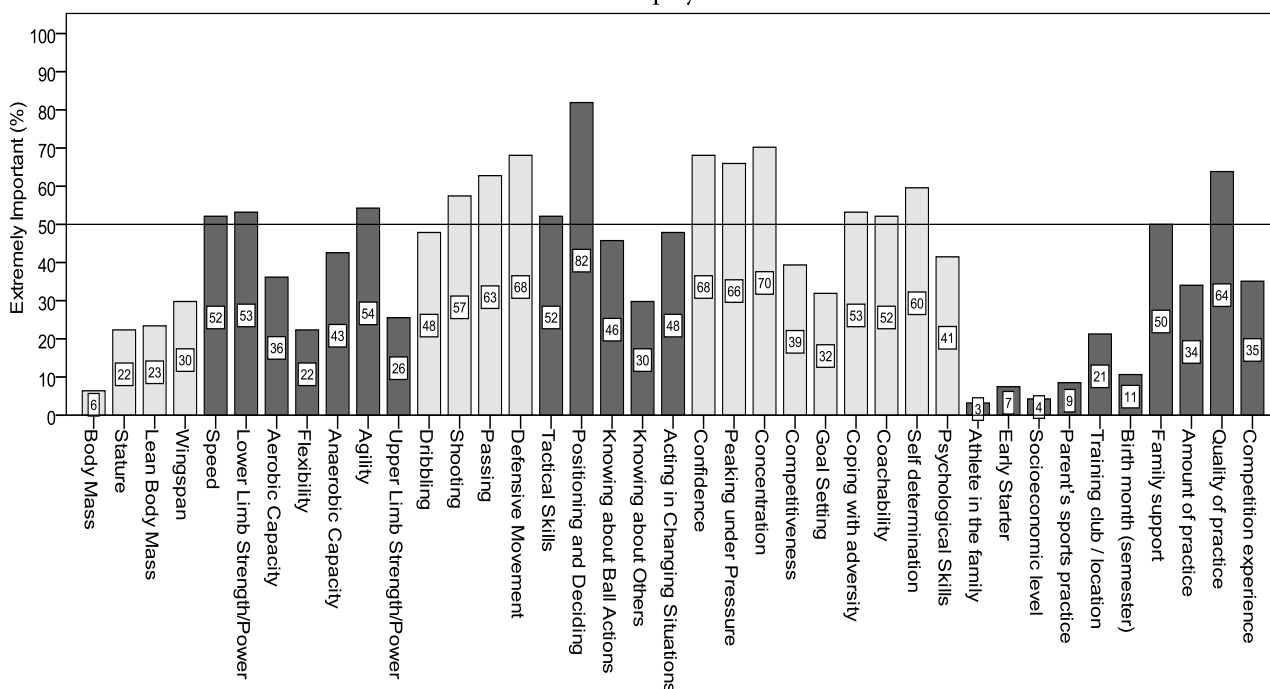

Figure 2. Sporting potential indicators assessed as "Extremely important" by Brazilian coaches (n = 94) for the development of young basketball players

Table 2

Factors and indicators of the development of young basketball players.

Anthropometric	Physical	Technical	Tactical	Psychological	Environmental
Body mass	Speed	Dribbling	Tactical Skills	Confidence	Athlete in the family
Stature	Lower limb Strength/Power	Shooting	Positioning and deciding	Peaking under pressure	Early starter
Lean body mass	Aerobic capacity	Defensive movement	Knowing about ball actions	Concentration	Socioeconomic level
Wingspan	Flexibility	Passing	Knowing about others	Competitiveness	Parent's sports practice
	Anaerobic capacity		Acting in changing situations	Goal setting	Training club / location
	Agility			Coping with adversity	Birth semester
	Upper limb Strength/Power			Coachability	Family support
				Self determination	Amount of practice
				Psychological Skills	Quality of practice
					Competition experience

Figure 2 presents the relative frequency of the indicators of sporting potential evaluated by the coaches as extremely important. Most coaches considered the following as extremely important for the development of young basketball players: shooting skills, passing and individual defense technique, speed, agility, and lower limb strength, the tactical skills, mainly, the positioning and decision making, as well as the quality of practice, family support, and psychological skills (confidence, withstanding pressure, concentration, coping with adversity, coachability, and determination).

Statistically significant differences between playing positions were observed for all factors of sporting potential, except for the environmental factor (Table 4). According to the coaches, the anthropometric factor is more important for the centers than for the other playing positions. The post hoc analysis did not identify differences in the physical factor between the playing positions. The technical, tactical, and psychological factors were considered more important for the point guards, having differences among the other playing positions.

International level coaches attributed greater importance to the anthropometric factor when compared to national/regional level coaches. In practice, the effect size observed was moderate. Regarding the other factors of sporting potential, no statistically significant differences were found between the coaches (p>0.05). Regarding the indicators of sporting potential, the international coaches attributed greater importance to the defensive movement technique, tactical skills (positioning and decision, and action in changing situations), psychological skills (concentration, trainability, and determination), and to an early start in basketball, training place, quantity, and quality of practice. The national/regional level coaches, on the other hand, attributed greater importance to family support. The effect size observed in the comparison between coaches ranges from small to high (table 5).

Other important variables for the development of young basketball players were cited by the coaches in the questionnaire, such as: love basketball, watch basketball, enjoy training, commitment, discipline, good coaches, team spirit, sociability, leadership, avoid protagonism for the sake of the team, early departure from the family, resilience, knowing how to deal with mistakes, maturational stage, learning ability, cognitive and perceptual skills, and late specialization.

Table 3
Importance attributed by Brazilian coaches (n = 94) to sporting potential factors and   indicators for the development of young basketball players

	mean ± SD	Nothing	Little	Neutral	Very	Extremely
		Importance Attributed (%)				
Anthropometric	3.60±0.86	1.1%	7.4%	37.2%	40.4%	13.8%
Body mass	3.31±0.80	2.1%	8.5%	52.1%	30.9%	6.4%
Stature	3.83±0.82	1.1%	1.1%	34%	41.5%	22.3%
Lean body mass	3.73±0.93	2.1%	3.2%	37.2%	34%	23.4%
Wingspan	3.96±0.85	0.0%	4.3%	25.5%	40.4%	29.8%
Physical	4.30±0.80	0.0%	1.1%	17%	35.1%	46.8%
Speed	4.34±0.82	0.0%	4.3%	9.6%	34%	52.1%
Lower limb strength/power	4.40±0.82	1.1%	1.1%	7.4%	37.2%	53.2%
Aerobic capacity	4.00±0.93	1.1%	3.2%	27.7%	31.9%	36.2%
Flexibility	3.66±0.96	0.0%	11.7%	33%	33%	22.3%
Anaerobic capacity	4.18±0.90	2.1%	2.1%	13.8%	39.4%	42.6%
Agility	4.40±0.76	0.0%	3.2%	7.4%	35.1%	54.3%
Upper limb strength/power	3.86±0.94	2.1%	6.4%	20.2%	45.7%	25.5%
Technical	4.20±0.86	0.0%	6.4%	9.6%	42.6%	41.5%
Dribbling	4.30±0.81	0.0%	3.2%	12.8%	36.2%	47.9%
Shooting	4.50±0.71	0.0%	3.2%	3.2%	36.2%	57.4%
Passing	4.50±0.78	0.0%	3.2%	7.4%	26.6%	62.8%
Defensive movement	4.60±0.71	0.0%	2.1%	6.4%	23.4%	68.1%
Tactical	3.95±0.98	2.1%	6.4%	18.1%	41.5%	31.9%
Tactical skills	4.32±0.87	2.1%	0.0%	13.8%	31.9%	52.1%
Positioning and deciding	4.76±0.63	1.1%	1.1%	1.1%	14.9%	81.9%
Knowing about ball actions	4.26±0.85	1.1%	3.2%	10.6%	39.4%	45.7%
Knowing about others	3.96±0.88	1.1%	3.2%	24.5%	41.5%	29.8%
Acting in changing situations	4.34±0.73	0.0%	1.1%	11.7%	39.4%	47.9%
Psychological	4.16±0.95	1.1%	4.3%	19.1%	28.7%	46.7%
Confidence	4.54±0.80	1.1%	2.1%	6.4%	22.3%	68.1%
Peaking under pressure	4.56±0.70	0.0%	2.1%	5.3%	26.6%	66%
Concentration	4.61±0.74	1.1%	2.1%	2.1%	24.5%	70.2%
Competitiveness	4.13±0.89	1.1%	3.2%	17%	39.4%	39.4%
Goal setting	4.03±0.90	1.1%	2.1%	21.3%	43.6%	31.9%
Coping with adversity	4.40±0.78	0.0%	2.1%	11.7%	33%	53.2%
Coachability	4.40±0.75	1.1%	1.1%	6.4%	39.4%	52.1%
Self determination	4.51±0.70	0.0%	2.1%	4.3%	34%	59.6%
Psychological skills	4.20±0.82	0.0%	2.1%	20.2%	36.2%	41.5%
Environmental	3.61±0.99	2.1%	9.6%	35.1%	31.9%	21.3%
Athlete in the family	2.31±0.98	18.1%	47.9%	22.3%	8.5%	3.2%
Early starter	2.70±1.10	13.8%	30.9%	37.2%	10.6%	7.4%
Socioeconomic level	2.04±1.03	34%	39.4%	19.1%	3.2%	4.3%
Parent's sports practice	2.64±1.10	10.6%	42.6%	27.7%	10.6%	8.5%
Training club / location	3.30±1.16	4.3%	22.3%	34%	18.1%	21,3%
Semester of birth	2.68±1.30	21.3%	25.5%	27.7%	14.9%	10.6%
Family support	4.20±1.00	1.1%	6.4%	16%	26.6%	50%
Amount of practice	3.93±0.95	1.1%	5.3%	27.7%	31.9%	34%
Quality of practice	4.47±0.84	1.1%	2.1%	9.6%	23.4%	63.8%
Competition experience	3.95±1.00	2.1%	4.3%	25.5%	33%	35.1%

Percentage refers to the total of 94 coaches.

Table 4
Importance attributed by Brazilian coaches to sporting potential factors for the development of young basketball players according to the playing position (n = 94).

Factor	Point guard	Shooting guard	Forward	Power Forward	Center	F	p
	Playing position						
Anthropometric	3.12±0.79[a]	3.50±0.88[b]	3.94±0.86[c]	4.21±0.84[d]	4.53±0.82[e]	95.17	<0.001*
Physical	4.14±0.81	4.17±0.82	4.29±0.84	4.34±0.75	4.40±0.76	3.88	0.01*
Technical	4.55±0.73[a]	4.40±0.76[b]	4.31±0.83[b,c]	4.20±0.91[c]	4.19±0.90[c]	10.30	<0.001*
Tactical	4.56±0.88[a]	4.34±0.87[b]	4.16±0.93[c]	4.16±0.95[b,c]	4.10±1.00[c]	14.51	<0.001*
Psychological	4.44±0.84[a]	4.30±0.92[b]	4.21±0.91[b]	4.02±0.99[c]	4.20±0.98[b,c]	8.96	<0.001*
Environmental	3.36±1.02	3.36±1.06	3.44±1.01	3.35±1.01	3.41±1.05	0.81	0.49

(Along the same line, different letters indicate a statistical significant difference between the playing positions (a,b,c,d, e), p<0.05).

DISCUSSION

The objective of the present study was to measure the subjective perception of coaches regarding the importance of certain factors and indicators for the development of young basketball players, investigating potential differences between the game positions and according to the competitive level of the coaches. It was found that the technical and physical factors were the most important in relation to the other factors, varying according to the

playing position, and that a set of multiple indicators were considered extremely important. In addition, international level coaches placed more value on body size and other characteristics related to the athlete and training, while national/regional level coaches placed more importance on family support.

The coaches have increasingly participated in the processes of identification, selection, and development of sports talent. Study results partly corroborate the findings of the studies by Gonçalves et al. (2017) and Sáenz-López et al. (2005), although, these authors attributed greater importance to the environmental factor and less importance to the physical factor. The divergence in the results can be explained by the difference between the samples and the indicators evaluated in each data collection instrument. On the other hand, it is possible that the Brazilian basketball coaches may be attributing more importance to the physical and technical aspects, based on momentary performance advantages, influenced by the biological maturation and the relative age of the athletes. As observed by Junior et al. (2021), it is necessary that coaches have access to information and knowledge about the influence of the relative age effect and biological maturation on the development process of young basketball players, in order to minimize the risk of misjudgments and errors in the process of selection and identification of sports talent. Ibáñez, Mazo, Nascimento, and García-Rubio (2018) postulated that player selection processes are negatively biased towards players born late in the year, denying them access to the best training processes and the best coaches, missing the opportunity to reach their full potential.

According to Roberts et al. (2019), coaches make decisions for talent identification based on "gut instinct," taking into account player characteristics such as guidance and ambition, game intelligence, and physical and technical skills. In this sense, it is speculated that the coaches evaluated in the present study, still make use of these characteristics exclusively to determine the developmental attributes of young basketball players. However, the environment in which the players are inserted, the psychological and tactical factors, and the experience acquired along the process are also fundamental for achieving sporting excellence.

Figure 2 highlights that 83% of the coaches considered as extremely important the positioning and decision making as an extremely important indicator for the development of the young basketball player. This finding agrees with the study by Kannekens, Elferink-Gemser, and Visscher (2011) where the authors found that soccer players involved in a talent development program, who become professionals in the future, possessed greater positioning and decision-making skills. The invasion team sports impose on athletes the need for constant adaptation to the opposition (Catarino, Carvalho, & Gonçalves, 2017; Gréhaigne & Godbout, 1995). In basketball, the demands of the game require the athlete to make decisions and solve problems that arise during the game (Praça et al., 2017).

According to Silva, Conte, and Clemente (2020), the athlete needs to perceive, interpret information from the game environment concerning the positioning of the ball, his teammates and opponents, and make the right decisions.

Considering the playing positions, the coaches attributed high significance to the anthropometric factor from the point guard to the center, whereas this factor is more important for the center in relation to the other positions. This result agrees with the results of Ramos and Tavares (2000). The physical factor was important for all positions, i.e., everyone should be strong, fast, quick and resistant. For the technical, tactical and psychological factors, the evaluated coaches consider that these factors are more important for the point guards in relation to the other positions. The point guards should be more skilled, have a better understanding of the game and be able to control and lead the actions, corroborating the results of Ramos and Tavares (2000). Similarly, in the present study, we observed a greater importance attributed to the technical indicators of shooting and individual defense fundamentals for the shooting guard and the forward. The comparison between these studies should be taken into consideration due to the difference of at least 20 years between them, a period in which the basic positions of the game and their attributions have undergone several changes due to the evolution of the game, requiring increasingly versatile and universal players.

The comparison between coaches of international levels with other levels is relevant, considering that having contact with other environments of basketball practice, with different cultures increases the ability to observe the factors and indicators that interfere with the development of young athletes. Schorer et al. (2017) observed that there is a difference between predicting the future success of young athletes and differentiating between novice and experienced players among coaches of different levels. Rocha et al. (2019) when evaluating the skill areas of high-level Portuguese coaches with international experience, i.e., renowned expert coaches, identified that coaches master a multiplicity of knowledge areas (training methodology, psychology, sociology, and sport philosophy), which conditions them to knowing how to apply and identify characteristics necessary to achieve success. Therefore, the international competitive level coaches in this study attributed a greater importance to the anthropometric factor, the positioning and decision indicators of the tactical factor, concentration, coachability, determination to the psychological factor, early starter, training place/club, quality and quantity of practice in relation to the other coaches.

When observing the effect size, the indicators training location (1.11) and amount of practice (0.84) presented a high practical applicability (large), that is, the international level coaches consider that for the development of sporting potential in basketball, these indicators are really determinants, thus valuing the environmental factor as found in other studies (Gonçalves et al., 2017; Sáenz-López

et al., 2005) and the proposal of deliberate practice, contradicting the findings of Lima et al. (2020) in which early deliberate practice does not seem to offer an advantage in terms of the development of functional abilities, and consequently, future success in basketball.

One of the strengths of this study is the representativeness of the sample of basketball coaches in the Brazilian context. Coaches from all regions of Brazil were recruited, with a predominance of the southeast region, where about 40% had more than 20 years of experience, either in the youth or high-performance categories, and 16% of them had international experience. As a limitation of the study, we highlight that there are additional factors and indicators of the sporting potential of young basketball players that were not included in the questionnaire for the evaluation of the coaches.

Table 5

Importance attributed to sporting potential factors and indicators to the development of young basketball players, according to the competitive level of coaches.

	International (n = 15)	National/regional (n = 79)	p-valor	*d*
Anthropometric	4.00±0.76	3.51±0.86	0.04*	0.60
Body mass	3.53±0.74	3.27±0.81	0.24	0.33
Stature	3.80±0.80	3.84±0.84	0.90	0.05
Lean body mass	3.73±0.70	3.73±0.97	1.00	0.00
Wingspan	4.13±0.91	3.92±0.84	0.40	0.24
Physical	4.33±0.82	4.30±0.78	0.76	0.04
Speed	4.40±0.63	4.33±0.86	0.76	0.09
Lower limb strength/power	4.50±0.64	4.40±0.80	0.73	0.14
Aerobic capacity	4.13±0.91	3.96±0.94	0.52	0.18
Flexibility	3.53±0.91	3.70±0.97	0.58	0.18
Anaerobic capacity	4.13±0.83	4.20±0.92	0.83	0.08
Agility	4.53±0.64	4.40±0.80	0.48	0.18
Upper limb strength/power	3.93±0.90	3.85±0.96	0.75	0.08
Technical	4.53±0.64	4.13±0.90	0.09	0.51
Dribbling	4.40±0.63	4.30±0.84	0.56	0.13
Shooting	4.70±0.50	4.44±0.75	0.27	0.40
Passing	4.70±0.62	4.46±0.80	0.33	0.33
Defensive movement	4.73±0.46	4.54±0.75	0.05*	0.30
Tactical	4.00±0.84	3.94±1.00	0.82	0.06
Tactical Skills	4.30±0.90	4.33±0.87	0.80	0.03
Positioning and deciding	4.93±0.26	4.72±0.68	0.04*	0.41
Knowing about ball actions	4.47±0.83	4.22±0.86	0.30	0.30
Knowing about others	4.27±0.90	3.90±0.87	0.14	0.41
Acting in changing situations	4.33±0.90	4.34±0.70	0.04*	0.01
Psychological	4.30±0.90	4.14±0.97	0.64	0.17
Confidence	4.73±0.60	4.51±0.83	0.32	0.30
Peaking under pressure	4.67±0.50	4.54±0.73	0.53	0.21
Concentration	4.80±0.41	4.60±0.80	0.05*	0.31
Competitiveness	4.40±0.63	4.08±0.92	0.20	0.40
Goal setting	4.13±0.91	4.01±0.84	0.62	0.14
Coping with adversity	4.53±0.74	4.34±0.80	0.40	0.25
Coachability	4.80±0.41	4.33±0.80	0.01*	0.74
Self determination	4.80±0.41	4.46±0.71	<0.001*	0.58
Psychological skills	4.40±0.83	4.13±0.82	0.24	0.33
Environmental	3.60±0.91	3.61±1.02	0.98	0.01
Athlete in the family	2.20±1.10	2.33±0.96	0.64	0.12
Early starter	3.33±1.05	2.54±1.05	<0.001*	0.75
Socioeconomic level	2.07±1.40	2.04±0.95	0.92	0.02
Parent's sports practice	2.33±1.20	2.70±1.06	0.24	0.33
Training club / location	4.20±1.01	3.13±1.11	<0.001*	1.11
Semester of birth	2.60±1.05	2.70±1.30	0.80	0.08
Family support	3.87±1.20	4.24±0.95	0.04*	0.34
Amount of practice	4.53±0.74	3.81±0.96	<0.001*	0.84
Quality of practice	4.73±0.46	4.42±0.90	0.01*	0.43
Competition experience	4.00±1.00	3.94±1.00	0.82	0.06

CONCLUSION

On the basis of an analysis of the opinions of Brazilian basketball coaches, this study concludes that technique and physical skills are the most important factors of sporting potential for the development of young basketball players, but not the exclusive ones. There are also tactical skills, psychological skills, and aspects of the environment that have been found to be extremely significant in this regard, especially athlete positioning and decision making, coping skills, and the quality of training. The relative importance of factors and indicators of sporting potential varies according to playing positions and between coaches at the international and national level. Basketball increasingly demands universal players with greater resources, even if coaches overvalue certain characteristics for certain playing positions. Clubs and federations should organize multidimensional, systematic, and dynamic development programs that meet the needs of the young basketball player and close the gap between scientific evidence and the daily life of the coach.

ACKNOWLEDGMENT

REFERENCES

Baker, J., Wilson, S., Johnston, K., Dehghansai, N., Koenigsberg, A., De Vegt, S., & Wattie, N. (2020). Talent Research in Sport 1990–2018: A Scoping Review. *Frontiers in Psychology, 11.* doi:10.3389/fpsyg.2020.607710

Catarino, L., Carvalho, H., & Gonçalves, C. (2017). Analysing tactical knowledge through team sport assessment procedure/TSAP: a case study in basketball.

Cohen, J. (1992). A power primer. *Psychological bulletin, 112*(1), 155. doi:https://doi.org/10.1037/0033-2909.112.1.155

Gonçalves, L., Santos, A., Tavares, F., & Janeira, M. (2017). From Talent to High Performance: e view of coaches, players and club coordinators on the relevant factors in the development of a Basketball player. *Cuadernos de Psicología del Deporte, 17*(3), 129-136.

Greenwood, D., Davids, K., & Renshaw, I. (2014). Experiential knowledge of expert coaches can help identify informational constraints on performance of dynamic interceptive actions. *Journal of Sports Sciences, 32*(4), 328-335. doi:https://doi.org/10.1080/02640414.2013.824599

Gréhaigne, J.-F., & Godbout, P. (1995). Tactical knowledge in team sports from a constructivist and cognitivist perspective. *Quest, 47*(4), 490-505. doi:https://doi.org/10.1080/00336297.1995.10484171

Ibáñez, S. J., Mazo, A., Nascimento, J., & García-Rubio, J. (2018). The Relative Age Effect in under-18 basketball: Effects on performance according to playing position. *Plos one, 13*(7), e0200408. doi:https://doi.org/10.1371/journal.pone.0200408

Junior, D. B. R., Werneck, F. Z., Oliveira, H. Z., Panza, P. S., Ibáñez, S. J., & Vianna, J. M. (2021). From talent identification to Novo Basquete Brasil (NBB): multifactorial analysis of the career progression in youth Brazilian elite basketball. *Frontiers in Psychology, 12.* doi:10.3389/fpsyg.2021.617563

Kannekens, R., Elferink-Gemser, M., & Visscher, C. (2011). Positioning and deciding: key factors for talent development in soccer. *Scandinavian journal of medicine & science in sports, 21*(6), 846-852. doi:https://doi.org/10.1111/j.1600-0838.2010.01104.x

Lima, A. B., Nascimento, J. V., Leonardi, T. J., Soares, A. L., Paes, R. R., Gonçalves, C. E., & Carvalho, H. M. (2020). Deliberate Practice, Functional Performance and Psychological Characteristics in Young Basketball Players: A Bayesian Multilevel Analysis. *International journal of environmental research and public health, 17*(11), 4078. doi:https://doi.org/10.3390/ijerph17114078

Praça, G. M., Morales, J. C. P., Bredt, S. D. G. T., Sousa, R. B. E., De Andrade, A. G. P., & Greco, P. J. (2017). The development of tactical skills in U-14 and U-15 soccer players throughout a season: A comparative analysis. *Human Movement, 18*(5), 39-47. doi:10.1515/humo-2017-0046

Ramos, V., & Tavares, F. J. d. S. (2000). A seleção de jovens atletas de basquetebol: estudo com técnicos brasileiros. *Rev Bras Cineantropom Desempenho Humano, 2,* 42-49.

Ribeiro Junior, D. B., Vianna, J. M., Lauria, A. d. A., Coelho, E. F., & Werneck, F. Z. (2019). Sports potential modeling of young basketball players: a preliminary analysis. *Revista Brasileira de Cineantropometria & Desempenho Humano, 21.* doi:https://doi.org/10.1590/1980-0037.2019v21e59832

Roberts, A. H., Greenwood, D. A., Stanley, M., Humberstone, C., Iredale, F., & Raynor, A. (2019). Coach knowledge in talent identification: A systematic review and meta-synthesis. *Journal of science and medicine in sport, 22*(10), 1163-1172. doi:https://doi.org/10.1016/j.jsams.2019.05.008

Rocha, J. C. R., dos Santos Graça, A. B., de Matos Serrano, J. J., Paulo, R. M. D., da Silva Batista, M. A., Honório, S. A. A., . . . Petrica, J. M. P. D. (2019). Performance factors that guide expert coaches basketball courts in Portugal. *Revista de Psicologia del Deporte, 28*(3), 106-112.

Sáenz-López, P., Ibáñez, S., Giménez, J., Sierra, A., & Sánchez, M. (2005). Multifactor characteristics in the process of development of the male expert basketball player in Spain. *International Journal of Sport Psychology, 36*(2), 151-171.

Schorer, J., Rienhoff, R., Fischer, L., & Baker, J. (2017). Long-term prognostic validity of talent selections: comparing national and regional coaches, laypersons and novices. *Frontiers in Psychology, 8,* 1146. doi: https://doi.org/10.3389/fpsyg.2017.01146

Silva, A. F., Conte, D., & Clemente, F. M. (2020). Decision-making in youth team-sports players: A systematic review. *International journal of environmental research and public health, 17*(11), 3803. doi:https://doi.org/10.3390/ijerph17113803

Silva Filho, F. J., Luguetti, C. N., de Oliveira Paes, F., & Böhme, M. T. S. (2011). Critérios para detecção e seleção de jovens atletas de basquetebol na cidade de São Paulo. *Revista Mackenzie de Educação Física e Esporte, 10*(2).

Till, K., & Baker, J. (2020). Challenges and [possible] solutions to optimizing talent identification and development in sport. *Frontiers in Psychology, 11.* doi:10.3389/fpsyg.2020.00664

Werneck, F.Z., et al. (2020). Sistema Atletas de Ouro – Modelagem do Potencial Esportivo. In: Werneck, F.Z., Coelho, E.F., Ferreira, R.M. (Orgs). *Manual do Jovem Atleta: da Escola ao Alto Rendimento.* Curitiba: CRV; 2020.