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COACHES PERCEIVED IMPORTANCE OF TACTICAL ITEMS IN BASKETBALL PLAYERS' LONG-TERM DEVELOPMENT

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ABSTRACT: One of the topics of sport sciences that have not been adequately investigated is the importance that specialists dedicate to tactical skills in long-term players development. The purpose of this study was to evaluate the importance that basketball coaches give to the development of these abilities in both sexes. Data were collected using a questionnaire. Items tapped six areas tactic related to: small sided games, offensive superiority games, defensive superiority games, formal game, offense and defense. The sample was divided according to team's sex and stage of long-term development: initiation, orientation, specialization, or high-performance. No significant differences were found in small sided games and formal game. Significant differences in assigned importance between coaches of boys to offensive superiority and defensive superiority games were found, supporting that these items should be the subject of more intense development primarily until 14 years of age. Significant differences in assigned importance between coaches of girls to defense were found. Coaches reinforced the importance of developing team offensive aspects, primarily at high-performance stage. Finally, significant differences in assigned importance between coaches of both sexes to defensive tactical work were found. Results confirmed that defensive tactical work should be the subject of more intense development between 11 and 14 years old but mostly after 19 years of age, reinforcing the importance of tactical work in later stages of development, i.e., high-level performance.

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Introduction

The long term development process of basketball players is long and complex because a high number of factors influencing it, especially, training, psychological, physiological and genetic (Davids and Baker, 2007). The combination and the interaction between these factors determine the possibilities of player evolution. In order to obtain an optimal development of the athlete some authors agree that the age of initiation should be between 8 and 13 years and that performance age will be around 20 to 30 years in most sports (see Smith, 2003).

During this long process, the athlete should develop several skills and abilities, related with the sport-specific techniques and tactical items. Specifically in the tactical development, researchers have been investigating the effects of different teaching methods, mainly the contrast between traditional teaching (based on technical development) and trough models based on tactical understanding (i.e., TGfU, Rink, 2001; Holt et al., 2002; Harvey et al., 2007; Keh & Yu, 2007). Conclusions of those studies suggest that experimental groups (submitted to the tactical understanding model) have a more significant development in their procedimental knowledge in game-like situations. However, one of the aspects of sport sciences that has not been adequately explored and investigated is the importance that specialists dedicate to the development of tactical skills during players lifespan. The purpose of this study was to evaluate the importance that basketball coaches assign to the tactical issues in players of both sexes.

Method

To accomplish this, 185 basketball coaches filled out a questionnaire, previously validated by sport science specialists. The coaches rated the importance of six tactical-related items: small sided games, offensive superiority games, defensive superiority games, regular game, offense and defense. The sample was divided according to team's sex and stage of long-term athlete development: initiation (between 6 and 10 years of age, n=27), orientation (11 to 14 years, n=34 boys and n=18 girls), specialization (15 to 18 years, n=39 boys and n=29 girls), and high-performance (19 years and beyond, n=18 men and n=20 women). The answers were chosen by the coach from a set of alternatives supplied by the authors using 5-point Likert use scale. Data were analyzed through one-way ANOVA and post-hoc multiple comparisons were done through Tukey HSD test. Statistical significance was set at 5%. Corresponding effect sizes were also calculated.

Results

The means, standard deviations, and statistical differences between the stages of initiation, orientation, specialization, and performance for both sexes are presented in Table 1. No significant differences were found in small sided games and regular games. ($p>.05$).

Discussion

Results of present study supported literature, principally the suggestions of some advantage to the players' long term development in privileging game-like situations, such as small sided games, offensive and defensive superiority games in the teaching of team sports. Researchers have been analyzing the effects of different teaching models, mainly contrast between

Tactic items	Stage	Males	F		ES	Females	F		ES
Small sided games	Initiation	4.19 ± 0.79	0.31			4.19 ± 0.79	0.56		
	Orientation	4.27 ± 0.71				4.28 ± 0.83			
	Specialization	4.10 ± 0.94				4.21 ± 0.77			
	High-performance	4.28 ± 0.75				4.45 ± 0.61			
Offensive superiority games	Initiation	3.85 ± 0.86	7.52*	a	0.38	3.85 ± 0.86	1.93		
	Orientation	4.53 ± 0.56		d, e		4.39 ± 0.78			
	Specialization	3.90 ± 0.85				4.31 ± 0.85			
	High-performance	3.50 ± 1.04				4.20 ± 0.89			
Defensive superiority games	Initiation	3.19 ± 1.00	4.26*	d	0.28	3.19 ± 1.00	0.58		
	Orientation	3.71 ± 1.06				3.17 ± 0.86			
	Specialization	2.87 ± 1.03				2.86 ± 0.99			
	High-performance	3.06 ± 0.34				3.05 ± 1.15			
Formal game	Initiation	3.96 ± 1.06	0.31			3.96 ± 1.06	1.57		
	Orientation	3.82 ± 0.80				3.83 ± 0.86			
	Specialization	4.00 ± 0.97				3.93 ± 1.03			
	High-performance	4.06 ± 0.99				4.45 ± 0.95			
Offense	Initiation	3.89 ± 1.21	1.78			3.89 ± 1.12	2.79*	f	0.23
	Orientation	4.27 ± 0.80				4.06 ± 0.73			
	Specialization	4.08 ± 0.81				3.76 ± 0.74			
	High-performance	4.44 ± 0.71				4.45 ± 0.69			
Defense	Initiation	3.63 ± 1.31	4.48*	a, c	0.29	3.63 ± 1.31	3.09*	c	0.25
	Orientation	4.44 ± 0.75				4.06 ± 0.80			
	Specialization	4.13 ± 0.80				3.86 ± 0.74			
	High-performance	4.39 ± 0.70				4.45 ± 0.69			

* Significant differences were at p≤.05, with a= Initiation vs. Orientation, b= Initiation vs. Specialization, c= Initiation vs. Excellence, d= Orientation vs. Specialization, e= Orientation vs. High-performance, f= Specialization vs High-performance

Table 1. Results of the descriptive and inferential statistics of tactic items

teaching games for understanding and traditional pedagogic teaching (Turner, 1995; Rink, 2001; Holt et al., 2002; Harvey et al., 2007; Keh & Yu, 2007).

Significant differences in assigned importance of coaches working with boys to offensive and defensive superiority games were found. Coaches agreed that those game-like situations should be more intensely developed between 11 and 14 years of age. Consequently, coaches reinforced the importance of developing tactic issues early. This may benefit later learning and solving of more complex tactical game-like situations.

Simultaneously, the sample agreed that offensive tactical work should be the subject of more intense development primarily between 11 and 14 years of age and in later stages of development, i.e., after 19 years of age. Significant differences in assigned importance of coaches working with girls to offense were found. These results can be understood as

a consequence of the increasing frequency and complexity of competitions during high-performance stage. It seems that after an early privileging of technical issues (Leite, Sampaio, & Ferreira, 2007), coaches working in later stages seem to attribute a greater importance to tactical and strategically situations, characteristic of high-level competitions.

Results obtained in defense confirmed these previous findings. In fact, defensive tactical work should be the subject of more intense development mostly after 19 years of age, reinforcing the importance of tactical work in later stages of development, i.e., high-level performance. Despite the fact that scientific research on these topics is scarce (see Kannekens et al., 2009), researchers seem to agree in the importance of the appropriate development of defensive issues, especially valuable in high-level competitions. Significant differences in assigned importance between coaches of both sexes to defense were found. In both sexes, lower means were assigned by coaches at initiation stages which, taking into consideration the values obtained for the technical items, may suggest that coaches initially focus on technical (and typically offensive) aspects, facilitating problem resolution in the game and promoting success in offense. This strategy, confirmed in a previous study by Leite, Sampaio, & Ferreira (2007), brings misbalance to the game, driving the coaches to introduce more complex defensive solutions in later stages, and, at the same time, conceding more importance to the appropriate preparation of competitions where taller and more physical players are recruited, and so, whereas coaches need to dedicate greater time to the defensive aspects of the game.

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