Which factors are related with coaches' perception of young soccer players competence: Physical fitness, motor coordination or specific skill?

VÍTOR P. LOPES¹ 🖾, ÁLVARO FORTUNATO², CELINA GONÇALVES¹

¹Research Center in Sports Sciences, Health Sciences and Human Development (CIDESD) and Instituto Politécnico de Bragança, Portugal

²Research Centre in Physical Activity, Health and Leisure and Instituto Politécnico de Bragança, Portugal

ABSTRACT

A large number of youth sports programs in sport clubs focus on results. However, the success of young practitioners depends on several factors, as generic and specific motor competence that develops with the practice. The sample was boys (N=111) with 10.5(2.48) years of age, who practiced soccer regularly, and their coaches (N=17). Boys were evaluated on physical fitness (multistage aerobic test), motor coordination (KTK) and in specific soccer skills (passing and receiving, juggling the ball, dribbling, and kicking to the goal). A bioimpedance scale were used to determine percent body fat. The coaches were asked about the future success (achieving high performance) of each of their athletes. Multiple regression was performed to identify the variables that predicted the coaches' perception of the competence of young soccer players. Results show that only physical fitness test (cardiovascular fitness) was associated with coaches' perception of young soccer players competence. In conclusion, cardiovascular fitness was associated with the perception that coaches have of their young soccer players competence, but the specific skill levels and motor coordination were not. **Keywords**: Motor competence; Youth sport programs; Motor skills; Soccer; Physical fitness.

 Corresponding author. Research Center in Sports Sciences, Health Sciences and Human Development (CIDESD), and Instituto Politécnico de Bragança, Campus de Santa Apolónia, 5300-253 Bragança, Portugal.
E-mail: <u>vplopes@ipb.pt</u>
Supplementary Issue: Spring Conferences of Sports Science. International Seminar of Physical Education, Leisure and Health, 17-19 June 2019. Castelo Branco, Portugal.
JOURNAL OF HUMAN SPORT & EXERCISE ISSN 1988-5202
© Faculty of Education. University of Alicante. doi:10.14198/jhse.2019.14.Proc4.82

INTRODUCTION

Many youth sports programs in sport clubs aim to develop sporting excellence and focus on results, with the tangible success of a sports program (Galatti, et al., 2016). often related to the club's ability to produce good athletes within specific sporting disciplines. However, the success of young practitioners depends on several factors, namely the generic and specific motor competence that develops with the practice (Galatti, et al., 2016).

The present study aims to understand if physical fitness, specific skill levels, and motor coordination, are associated with the perception of coaches about young soccer players competence.

MATERIAL AND METHODS

Participants

Participants were N=111 boys with 10.5(2.48) years of age, who practiced soccer regularly in youth training clubs, and their coaches (N=17).

Measures

Boys were evaluated on physical fitness (multistage aerobic test), motor coordination (KTK) and in specific soccer skills (passing and receiving, juggling the ball, dribbling, and kicking to the goal). Percent body fat was determined with a bioimpedance scale. The coaches were asked about the future success (achieving high performance) of each of their athletes, having into account four parameters: tactic ability, motor skills, physical aptitude, and psychological skills.

Coaches' perceptions

The coaches were asked about the future success (achieving high performance) of each of their athletes, having into account four parameters: tactic ability, motor skills, physical fitness, and psychological skills. For each parameters each coach responded in a 3-point scale: (1) Will not succeed, (2) Could succeed, (3) Will succeed. The result is the sum of the points assigned in the four parameters.

Analysis

Pearson correlation were calculated between coaches' perceptions and each performance test. Multiple regression was used to identify the variables that predicted the coaches' perception of the competence of young soccer players. The performance results in specific soccer skills were previously transformed into z-scores and the results of all the skills' tests were summed to obtain an indicator of soccer skill performance.

RESULTS

Table 1. Descriptive statistics of coaches' perceptions in the four parameters: tactic ability, motor skills, physical fitness, and psychological skills

	Mean	SD
Physical fitness	2.1	.6
Motor skills	2.1	.6
Psychological skills	2.1	.7
Tactic ability	2.1	.7
Total	8.42	1.9

Table 1 shows the descriptive statistics of coaches' perceptions in the four parameters: tactic ability, motor skills, physical fitness, and psychological skills.

Table 2 shows the Person correlation between coaches' perceptions and each performance test. Motor coordination test results (KTK) has no significant correlation with coaches' perception. Specific soccer skills have a significant correlation but negative with coaches' perception. Multistage Fitness Test have the highest correlation with coaches' perception.

		Coaches' perceptions
Specific soccer skills	r	263*
	Ν	93
КТК	r	.109
	Ν	102
Multistage Fitness Test	r	.321**
	Ν	88
	* significant for $p < 0$.	05

Table 2. Person correlation between coaches' perceptions and each performance test

* significant for p < 0.05 ** significant for p < 0.001

Multiple regression results show that only cardiovascular fitness (Multistage Fitness Test) predict coaches' perception of young soccer players competence.

DISCUSSION

The main goal of this study was to find out if physical fitness, specific skill, and motor coordination, were associated with the perception of coaches about young soccer players competence and their future success. The results shows that only cardiovascular fitness predicts the coaches' perception, nor generic motor coordination nor specific motor skills significantly predict coaches' perception.

These results suggest that most coaches have a better understanding of the cardiovascular fitness of young athletes. Eventually this fact derives from the susceptibility of the coaches to be in tune with this parameter, to the detriment of others that also assume important relevance. It is pertinent that coaches develop the ability to perceive that other factors, such as those associated with motor coordination and specific gaming skills, should be the subject of systematic reflection.

CONCLUSIONS

In conclusion, the perception that coaches have of their young soccer players competence was associated with cardiovascular fitness, but not with specific skill levels and motor coordination. This suggests that coaches need to better now their young soccer player's competence and not only focus on results. Other important aspect it is that Coaches' perceptions could be influenced by their experience (Santos et al., 2010), for this reason could be interest include this variable in the future investigation (e.g. education, training programs of the coaches).

REFERENCES

- Galatti, L.; Scaglia, A.; Bettega, O.; & Paes, R. (2016). Coaches' perceptions of youth players' development in a professional soccer club in Brazil: paradoxes between the game and those who play. Sports Coaching Review, 5(2), 174–185. <u>https://doi.org/10.1080/21640629.2016.1201359</u>
- Santos, S; Mesquita, I; Graça, A.; & Rosado, A. (2010). Coaches' perceptions of competence and acknowledgement of training needs related to professional competences. Journal of Sports Science and Medicine, 9, 62-70.



This work is licensed under a Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0).