MOTOR CHARACTERISTICS OF FAST BREAK IN HIGH LEVEL BASKETBALL

David Cárdenas[1], Enrique Ortega[2], Javier Llorca[1], Javier Courel[1], Guillermo Sánchez-Delgado[1], and María Isabel Piñar[1]

[1]Faculty of Sport Sciences, Department of Physical Education and Sport, University of Granada, Spain
[2]Faculty of Sport Sciences, University of Murcia, Spain

Original scientific paper
UDC: 796.323.2.052.242

Abstract:

One of the most important characteristics, which defines playing style of elite basketball teams, is game speed. We aimed to analyse the use of fast breaks by the winning and losing teams and the relation of its effectiveness with the following variables: a) type of ball recovery; b) initial action, c) ball advancing mode; d) number of passes; e) fast break completion; f) completion type; g) effectiveness; h) points scored. The statistical analyses were conducted in IMB SPSS Statistics by means of Crosstabs command, Chi-square of Pearson and Phi coefficient. Significance differences were set at $p<.05$. Results showed great similarities on the use, efficacy, and points scored from fast breaks when comparing the winning and losing teams. Fast breaks mostly started after a rebound (46.7%), pass interception (27.8%) or steal (18.6%). Furthermore, elite teams usually made the maximum of two passes (96.4%) and ended the attack on the primary break (88.7%). More importantly, fast break successfulness increased when the initial action was a pass. These results might help coaches in designing the training process oriented to improve the offensive transition.

Key words**:** *match analysis, team sport, tactics, transition*

Introduction

Basketball is a sport in which players' interaction is very complex as the consequence of spatial, temporal and motor constraints established by the official rules (Piñar, 2005). These constraints and subsequent rules modifications experienced over time have caused an evolution of teams' game style aimed at reaching optimum performance. Evidence shows that one of the characteristics defining an effective playing style is speeding up the game through faster-paced attacks and fast-breaks (Cárdenas, Piñar, Llorca-Miralles, Ortega, & Courel, 2011; Gómez, et al., 2010). According to the Spanish Basketball Federation, the fast break is the phase of the game where the team possessing the ball tries to *take it to the basket as quickly and as safely as possible, with the goal of getting numerical equality or advantage over the defending team, or of obtaining a good shot option with a high success rate before the defence recovers and gets organized* (FEB, 2008, p. 2).

In a fast break, a team attempts to advance the ball up the court and into scoring position as quickly as possible, so that the defense is normally outnumbered and does not have time to set up. In this sense, previous research has shown that winning teams make a greater number and more effective fast breaks than losing teams (Cárdenas, Moreno, & Almendral, 1995; Ibáñez, Sampaio, Sáenz-López, Jiménez, & Janeira, 2003; Karipidis, Fotinakis, Taxildaris, & Fatouros, 2001; Ortega, Cárdenas, Sainz de Baranda, & Palao, 2006; Tsamourtzis, Karypidis, & Athanasiou, 2005). However, information on how performance motor attributes of fast breaks might account for these differences is scarce (Garefis, Tsitskaris, Mexas, & Kyriakou, 2007; Refoyo, Romarís & Sampedro, 2009).

Once the influence of the fast break on the result of the game is well known, it is necessary to figure out the keys of its effectiveness. As in any other aspect of the game these can be of a different nature: tactical, technical, physical or psychological. The first three refer to players' motor behaviour, which is manifested in a limited space and time. Scientific evidence about fast break has generally been scarce and those works that aimed to go deeper into this kind of knowledge even more so (Cárdenas, et al., 1995, 2011; Garefis, et al., 2007; Refoyo, Romarís, & Sampedro, 2009).

One of the first studies specifically focused on the analysis of the fast break has been made by Cárdenas, Moreno, and Almendral (1995). They noticed that teams made 21.56% of fast breaks. Likewise, fast breaks frequently started after a defensive rebound (46%) or steal (31.45%); nine out of ten effective fast breaks lasted less than 6 seconds, and the maximum of two passes were made. These data suggested changes in training methodology aimed at improving fast break performance in basketball (Cárdenas, et al., 1995). Recently, Refoyo et al. (2009) analysed the differences between male and female teams at the highest competitive level of Spanish basketball in the way they developed fast breaks. They analysed spatial variables such as the zone of ball possession recovery, fast break development and finalization; temporal variables such as fast break global duration; and motor variables such as the action to recover the ball, to transit from the defensive toward the offensive court or to finalize a fast break. They also recorded the player in charge of making each of these actions and the degree of opposition. More specifically, Cárdenas et al. (2011) studied the influence of zone of ball recovery, its first pass reception, transition and completion.

Temporal characteristics of fast break have been widely studied. Thus, an evolutionary tendency toward the reduction of time globally invested to make it in male basketball was observed. This trend can be verified if we compare 5.15 seconds, found by Cárdenas et al. (1995), with 3.89 seconds of Refoyo et al. (2009). Probably, this evolution is the consequence of motor skill improvement in players of high performance teams as an adaptive response to championship demands. Nevertheless, differences induced by different methodological approaches to the observation and evaluation of temporal characteristics of fast breaks cannot be rejected.

The aim of this study was to complement the information about how effective were fast breaks carried out at the highest European level and, specifically, about their motor variables. For that, a comparative research paradigm between winning and losing teams was used.

Method

Sample

A sample of 172 fast breaks from the 12 Eurobasket Championship games played in Poland 2009 was analysed. Games from the latest phases of the Championship were included to ensure a higher level of competition and equality between teams (i.e. final and semi-final games, games for 3rd position, quarterfinals and the previous four games played by any of those teams qualified for the final phase of the competition).

A fast break was considered to be any transition of play between defensive and offensive phases of game played at maximum speed in order to get numerical, positional or tactical advantages over the opponent.

Study design and variables

A descriptive design based on the performance analysis through systematic observation (Hughes & Frank, 2004) was used. For the content validity, an *expert panel technique* was used. To this aim three experts, with PhDs in Sports Sciences, National coaching qualification and over 10-year of coaching practical experience, defined the following categorical variables:

1. Way of ball recovery: a) field goal; b) baseline inbounding; c) steal; d) intercepted pass; e) rebound.
2. Initial action: a) pass; b) dribble
3. Ball advancing mode: a) pass; b) dribble; c) combination of dribble and pass.
4. Number of passes made.
5. Fast break completion: a) primary break (the first, principal phase of the fast break; starts with the ball recovery; it is usually considered finished if the first three attackers arriving to the frontcourt cannot score, so they must wait for the trailers); b) secondary break (the second phase regarded as a continuation of the first after the failure to score; it is executed before all the opponents manage to return and arrange a proper defence [Kozlowsky, 1997]).
6. Completion type: a) individual action; b) pass-and-go (PG); c) pass-and-go away (PGA); d) pass and go and return (PGR); e) drive-dribble (DD); f) clearout (C); g) pick (P); h) screen (S); i) others.
7. Fast break effectiveness**:** a) no score; b) score.
8. Points scored: a) 0 points; b) 1 point; c) 2 points; d) 3 points
9. Game outcome: a) victory; b) defeat

Procedure

Four observers specialising in basketball analysed all games after a 3-week training following Behar's methodological proposal (Behar, 1993). Observers objectivity (inter-observer reliability) and reliability (intra-observer reliability) were assessed using Cohen's Kappa. Scores over .90 were obtained that is classified as *almost perfect agreement* (Altman, 1991).

Statistical analysis

The statistical analyses were conducted in IMB SPSS Statistics for Windows v. 17.0 (Released 2008, Chicago: SPSS Inc.) by means of Crosstabs command, Chi-square of Pearson and Phi Coefficient. Significance of differences was set at $p<.05$, and marginal differences were considered at $p<.10$ (Ntoumanis, 2001). Data were collected

using SportsCode Gamebreaker® V8 (Sportec Ltd, Sydney, Australia) software for MacBook Pro ® (Apple Inc., Cupertino, CA).

Results

Table 1 shows the percentage of use and efficacy of fast breaks by the winning and losing teams according to different fast break motor attributes.

Winning teams made a larger number of fast breaks with a higher efficacy rate than the defeated. The results show marginal significance between the game outcome and the efficacy (χ^2 (1,N=172) = 2.231, Φ=-.11, p=.090).

In the analysis of the interaction between the fast break initiating mode and the outcome of the game no significant relations were found. As shown in Table 1, both the winning and losing teams started their fast breaks mainly after a defensive rebound or by stealing the ball. In addition, no significant relationships were found between the fast break initiating mode and its effectiveness either for the winning (χ^2 (4,N=90) = 2.115, Φ=.16, p=.715), or losing teams (χ^2 (3,N=77) =2.131, Φ=.17, p=.546).

No significant relationships were found between the initial action and the fast break effectiveness either for the winning (χ^2 (1,N=90) = 2.205, Φ=.16, p=.138) or losing teams (χ^2 (1,N=78) =.609, Φ=.09, p=.435). Significant relationships were not found when analysing the initial action and outcome of the game (χ^2 (1,N=168) =.241, Φ=.38, V=.38, p=.623), although the winning teams achieved a higher efficacy rate in all cases.

Table 1. Comparison of use and efficacy of fast breaks between winning and losing teams regarding motor characteristics

VARIABLE	CATEGORY	WINNING TEAMS		LOSING TEAMS		GLOBAL USE N=168	GLOBAL EFFICACY N=85
		USE N=93	EFFICACY N=53	USE N=79	EFFICACY N=36		
Way of ball recovery	Field goal	6.7%	66.7%	9.1%	42.9%	7.8%	53.8%
	Baseline inbounding	1.1%	100%	.0%	.0%	.6%	100%
	Steal	17.8%	43.8%	19.5%	60.0%	18.6%	51.6%
	Intercepted pass	32.2%	58.6%	23.4%	44.4%	27.8%	53.2%
	Rebound	42.2%	55.3%	48.1%	37.8%	44.9%	46.7%
Initial action	Pass	41.1%	64.9%	44.9%	40.0%	42.9%	52.8%
	Dribble	58.9%	49.1%	55.1%	48.8%	57.1%	49.0%
Ball advancing mode	Pass	2.2%	50.0%	5.1%	50.0%	3.6%	50.0%
	Dribble	27.8%	64.0%	17.9%	57.1%	23.2%	61.5%
	Pass + dribble	70.0%	52.4%	76.9%	41.7%	73.2%	47.2%
Number of passes	0	18.9%	58.8%	16.7%	53.8%	17.9%	56.7%
	1	55.6%	60.0%	52.6%	48.8%	54.2%	54.9%
	2	21.1%	42.1%	28.2%	36.4%	24.4%	39.0%
	3	4.4%	50.0%	2.6%	.0%	3.6%	33.3%
Fast break completion	Primary break	88.9%	57.5%	88.5%	43.5%	88.7%	51.0%
	Secondary break	11.1%	40.0%	11.5%	55.6%	11.3%	47.4%
Completion type	Individual	65.6%	55.9%	73.1%	47.4%	69.0%	51.7%
	PG	.0%	.0%	1.3%	.0%	.6%	.0%
	PGA	1.1%	.0%	2.6%	50.0%	1.8%	33.3%
	PGR	.0%	.0%	1.3%	.0%	.6%	.0%
	DD	27.8%	56.0%	17.9%	35.7%	23.2%	48.7%
	C	.0%	.0%	.0%	.0%	.0%	.0%
	P	4.4%	75.0%	.0%	.0%	2.4%	75.0%
	S	.0%	.0%	.0%	.0%	.0%	.0%
	OTHERS	1.1%	.0%	3.8%	66.7%	2.4%	50.0%
Effectiveness	No score	53.8%		68.4%		60.5%	
	Score	46.2%		31.6%		39.5%	
Points scored	0 points	53.8%	*	68.4%	*	60.5%	
	1 points	3.2%		3.8%		3.5%	
	2 points	29.0%	*	21.5%	*	25.6%	
	3 points	14.0%	*	6.3%	*	10.5%	

Abbreviations: PG (pass and go), PGA (pass-and-go away), PGR (pass and go and return), DD (drive-dribble), C (clearout), P (pick), S (screen); * =p≤.05

No significant relationships were found between the technical actions used to advance the ball from the defensive to offensive court and fast break effectiveness for either the winning (χ^2 (2,N=90) =1.004, Φ=.11, p=.605) or losing teams (χ^2 (2,N=78) =1.144, Φ=.12, p=.564). In the same way, no significant relationships were found between the technical actions used in the fast break performance and game outcome (χ^2 (2,N=168) =3.001, Φ=.13, p=.223), although the winning teams had a better percentage of efficacy than the losing teams in all cases.

No significant relationships were found between the number of passes and fast break effectiveness in either the winning (χ^2 (3,N=90) =1.916, Φ=.15, V=.15, p =.590) or the losing teams (χ^2 (3,N=78) =2.948, Φ=.20, V=.20, p=.400). We found no significance when analysing the interaction between the number of passes and outcome of the game (χ^2 (3,N=168) =1.460, Φ=.10, V=.10, p=.692). With regard to the efficacy of fast break the winning teams had a better percentage in all cases except in two-pass fast breaks.

No significant relationships were found between the type of fast break and its efficacy in either the winning (χ^2 (1,N=90) =1.103, Φ=.11, p=.294) or losing teams (χ^2 (1,N=78) =.469, Φ=.08, p=.493). When analysing the type of fast break and outcome of the game, we did not find any statistical relationship (χ^2 (1,N=168) =1.008, Φ=.01, p=.930). The winning teams had a better efficacy percentage of the primary break and the losing teams of the secondary one.

No significant relations were found between the mode of completion and the fast break effectiveness in either the winning (χ^2 (4,N=90) =3.118, Φ=.19, p=.538) or losing teams (χ^2 (5,N=78) =2.843, Φ=.20, p=.724). In the same way, significant relations between the mode of fast break completion and the outcome of the game were not obtained. The winning teams achieved a better efficacy percentage than the losing teams in fast breaks whether finished individually, or by means of "drive-drible" or "pick".

Finally, the winning teams scored in a higher percentage out of fast breaks than the losing teams (χ^2 (1,N=172) =3.835, Φ=.16, p =.036), showing the main differences in the fast breaks out of which 2 or 3 points were made.

Discussion and conclusions

The main findings of this study show that, as expected, the winning teams make a larger number of fast breaks and are more efficacious compared to the losing teams. This tendency observed for winning teams demonstrates the importance of fast break at the highest competition level. Our results establish a global reference about some key fast break variables and could be of interest to coaches in design of an efficient training in the high level basketball context, as well as to research on performance analysis in sport.

Our data on fast break effectiveness are in accordance with those found in previous research, although the percentages obtained are clearly lower. While previous studies have shown fast breaks' effectiveness between 55.9 and 72% for male teams (Cárdenas, et al., 1995; Schmidt & Braum, 2004; Ibáñez, et al., 2003; Gómez, 2007; Refoyo, et al., 2009), we found effectiveness of 46.2% for the winners and 31.6% for the losers. Although fast break effectiveness has shown a growing tendency in recent years, our results differ from this trend.

Relating to the ways of starting fast breaks, defensive rebound and pass interception stand out as the most common ones. First, considering rebounds (44.9% on average), our data agree with previous studies, although the possible differences due to the competitive level of the samples analysed by those authors must be taken into account. Thus, between 32.2 and 61.9% of fast breaks were initiated by a defensive rebound in previous studies (Mikes, 1988; Cárdenas, et al., 1995; Moreira & Tavares, 1996; Fotinakis, Karipidis, & Taxildaris, 2002a; Tsamourtzis, et al., 2002; Refoyo, et al., 2009). Second, the results obtained on ball interceptions (both pass interception and steal=46.4% on average) are in accordance with the range (29.7-50.2%) found in other studies (Fotinakis, et al., 2002a; Tsamortzis, et al., 2002; Mikes, 1988; Filipovski, 1998; Refoyo, et al., 2009). These results, confirming that the most frequent types of ball recovery are defensive rebounds and pass interceptions, followed by steals, might help coaches in designing the training process focused on improving the offensive transition by means of exercises that promote these types of ball recovery and, to a lesser extent, other less frequent modes.

Interestingly, inbounding after a field goal has been conceded is the most effective way of starting fast breaks (53.8%), although being the least common (7.8% on average). This finding agrees with Cárdenas et al. (1995), but it is clearly lower than those reported by Refoyo et al. (2009), who found even greater effectiveness when inbounding after a field goal (77.8% for female players and 75% for male players). Although the spatial and temporal conditions derived from inbounding behind the baseline may be detrimental in achieving advantage during the transition, we consider that this efficacy might be associated with psychological aspects such as certain relaxation of players after scoring. Due to the obtained high level of efficacy of fast breaks initiated by inbounding after a field goal, it seems convenient to promote its use taking care of technical and tactical details which guarantee its effectiveness. In this sense it could be useful for coaches

not to allow players to repeat automatized behaviours acquired naturally, during practice, which can be clearly detrimental. We are referring primarily to the need to overcome the frustration caused by the conceded goal and, contrary to practice, to perform inbounding action at the highest possible speed. Also, it should be indispensable to reproduce real game situations in training; for example, a player must not inbound from the place where the ball has fallen down after a made goal; instead, inbound should be done properly behind the baseline.

The analysis of the technical actions used to advance the ball to the frontcourt (dribble or pass) failed to establish any significant relations with either fast break efficacy or game outcome. Nevertheless, higher scoring efficacy of winning teams was observed independently of the action used. This shows a clear qualitative predominance of the best teams and the need to improve fast break development using both possibilities.

Over nine out of ten fast breaks consist of the maximum of two passes (winning teams=95.6%; losing teams=97.5%). Although a significant relationship between the number of passes and fast break effectiveness was not found, a great efficacy difference between the one-pass fast breaks (54.9% on average) and two-pass ones (39% in average) was observed. Similarly, Cárdenas et al. (1995) found that the average of passes made per effective fast break was 1.43; Gómez (2007) found 1.36 in male basketball and 1.01 in female basketball, and Refoyo et al. (2009) counted 1.03 passes for men and 1.22 for women. However, some other authors, like Bazanov, Vohandu and Haljand (2006), Montero, Onega and Cons (2000), Montero, Cons and Onega (2001), and Fernández, Ducoing and Ortega (2007), found more than two passes per fast break. These differences might be explained by the possible differences in competitive level of the analysed samples. Nevertheless, the differences can also be under strong influence of the differences in operational definitions, so that more research is warrant.

Taking into account that most of fast breaks involve the execution of two passes as the maximum, it is essential to design fast break drills according to this limitation. Although this datum has been indicated in previous papers, in training it is frequently forgotten, thus impeding the necessary learning transfer, which is based to a great extent on providing the players with practical experiences similar to those of real game in competition (Eccles, Ward, & Woodman, 2009).

Nine out of ten fast breaks end as the primary break, whilst only 11.3% as the secondary one. These data are very similar to those found by Refoyo et al. (2009) for both men (89.6%) and women (88%) and slightly lower than those found by Cárdenas et al. (1995) with 95.74% of fast breaks ending in the primary break. Particularly at the championship analysed in this study, the winning teams achieved higher efficacy when ending in the primary break (57.5%), while the losing teams were more effective in the secondary break (55.6%), which had not been referred to in previous studies.

In addition, our results demonstrate that most fast breaks are finished by an individual action, drive-dribble being the second most frequent way. This latter action forces the defence to make help movements to stop the player with the ball, thus allowing the attacking teammate to open for ball reception. Given the short duration of fast breaks needed to play in numerical superiority, fast break effectiveness may increase when fewer actions are performed across a shorter time period (Bazanov, et al., 2005; Refoyo, et al., 2009). Therefore, offensive players should make simple actions taking a short time in order to avoid the defensive balance reaches the basket, thus enhancing options for an easy score. The lack of analysis of this variable in previous studies makes it difficult to make comparisons, but the fast break completion in primary break should be promoted by means of individual or collective actions of a short duration (drive-dribble).

References

Altman, D.G. (1991). *Practical statistics for medical research*. London: Chapman & Hall.

Bazanov, B., Vohandu, P., & Haljand, R. (2006). Trends in offensive team activity in basketball. Ugdymas. Kuno Kultura. *Sportas, 2*(61), 5-11.

Behar, J. (1993). Sesgos del observador. [Observer' biases. In Spanish.] In M.T. Anguera (Ed.), *Metodología observacional en la investigación psicológica* (Vol. 2). Barcelona: Promociones y Publicaciones Universitarias.

Cárdenas, D., Moreno, M.I., & Almendral, P. (1995). Análisis de los factores que inciden en la eficacia del contraataque en baloncesto. [Analysis of the factors influencing the fast break efficacy in basketball. In Spanish.] *Revista de Entrenamiento Deportivo, 9*(4), 11-16.

Cárdenas, D., Piñar, M., Llorca-Miralles, J., Ortega, E., & Courel, J. (2011). Análisis de las variables espaciales en las fases del contraataque en el baloncesto de alto rendimiento. [Analysis of the spatial variables of the fast break phases in the high performance basketball. In Spanish.] *Journal of Sport and Health Research, 4*(2), 181-190.

Eccles, D., Ward, P., & Woodman, T. (2009). Competition-specific preparation and expert performance. *Psychology of Sport and Exercise, 10*, 96-107. doi:10.1016/j.psychsport.2008.01.006

Federación Española de Baloncesto. (2008). *Llegar jugando.* [Arriving play. In Spanish.]. Course of the National Basketball Coaches. Madrid: FEB.

Fernández, R., Ducoing, E., & Ortega, E. (2007). Relationship between the number of passes made with the points made per phase of offense and with the final result in basketball. *Iberian Congress on Basketball Research, 4*, 58-60.

Filipovski, S. (1998). *Characteristics of fast breaks of basketball teams competing at the Final Four in Rome*. [In Slovenian.]. (Graduation thesis, University of Ljubljana). Ljubljana: Fakulteta za šport.

Fotinakis, P., Karipidis, A., & Taxildaris, K. (2002). Factors characterising the transition game in European basketball. *Journal of Human Movement Studies, 42*(4), 305-316.

Garefis, A., Tsitskaris, G., Mexas, K., & Kyriakou, D. (2007). Comparison of the effectiveness of fast breaks in two high level basketball championships. *International Journal of Performance Analysis in Sport, 7*(3), 9-17.

Gómez, M.A. (2007). *Estudio de la actividad competitiva en baloncesto masculino y femenino mediante el análisis de las estadísticas de juego y las posesiones de balón.* [Analysis of the male and female competitive activity in basketball through the game statistics and ball possesions. In Spanish.]. (Doctoral thesis. Polytechnic University of Madrid). Madrid: Facultad de ciencias de la actividad física y del deporte.

Gómez, M.A., Lorenzo, A., Ibáñez, S.J., Ortega, E., Leite, N., & Sampaio, J. (2010). An analysis of defensive strategies used by home and away basketball teams. *Perceptual and Motor Skills, 110*(1), 159-166.

Hughes, M., & Franks, I.M. (2004). *Notational analysis of sport: Systems for better coaching and performance in sport*. London: Routledge

Ibáñez, S.J., Sampaio, J., Sáenz-López, P., Jiménez, J., & Janeira, M.A. (2003). Game statistics discriminating the final outcome of Junior World Basketball Championship matches (Portugal, 1999). *Journal of Human Movement Studies, 74*, 1-19.

Karipidis, A., Fotinakis, P., Taxildaris, K., & Fatouros, J. (2001). Factors characterizing a successful performance in basketball. *Journal of Human Movement Studies, 41*, 385-397.

Kozlowsky, M. (1987). *A concise dictionary of American basketball.* Warsaw: YPSYLON.

Mikes, J. (1988). Percentage basketball: The percentages favour the team that can fast break the opponents and prevent them from doing the same. *Scholastic Coach, 57*(6), 82-84.

Montero, A., Cons, M., & Onega, A.B. (2001). Los pases en baloncesto: análisis de la copa del Rey 2001. [Passes in basketball: Analysis of the King's cup 2001. In Spanish.]. Paper presented at the CIB'2001. *I Iberian Congress on Basketball Research*.

Montero, A., Onega, A.B., & Cons, M. (2000). Análise do pase como elemento de interacción: un estudio do basquetebol de alta competición. [Analysis of the pass as an interaction element: A study of high performance basketball. In Portuguese.]. Paper presented at the *VIII Congress of Physical Education and Sport Sciences of the Portuguese Language Countries*.

Moreira, P., & Tavares, F. (1996). Estudo descritivo das acçoes de ressalto e sua espacialização em jogadores seniores masculinos de basquetebol [Descriptive study of the rebound actions and its specialization in basketball senior players. In Portuguese.]. In C. Moutinho & D. Pinto (Eds.), *Estudos 1.* (pp. 71). Oporto: FCDEF-UP.

Ntoumanis, N. (2001). *A step-by-step guide to SPSS for sport and exercise studies*. London: Routledge.

Ortega, E., Cárdenas, D., Sainz de Baranda, P., & Palao, J.M. (2006). Differences between winning and losing teams in youth basketball games (14-16 years old). *International Journal of Applied Sports Sciences, 18*(2), 1-11.

Ortega, E., Palao, J.M., Gómez, M.A., Lorenzo, A., & Cárdenas, D. (2007). Analysis of the efficacy of possessions in boys 16-and-under basketball teams: Differences between winning and losing teams. *Perceptual and Motor Skills, 104*, 961-964.

Parra, J. (2008) Fast-break: A comparative analysis ACB-World Champioship 06. The Blackboard. AEEB. Retrieved June 20, 2014 from: http://www.aeeb.es/v2/publicaciones.php?area =publicaciones&sub=pizarra

Piñar, M.I. (2005). *Incidencia del cambio de un conjunto de reglas de juego sobre algunas de las variables que determinan el proceso de formación de los jugadores de minibasket (9-11 años).* [Incidence of a group of game rules change on some of the variables determining the training process of minibasket players (9-11 years old). In Spanish.]. (Doctoral thesis, University of Granada). Granada: University of Granada.

Refoyo, I., Romarís, I.U., & Sampedro, J. (2009). Analysis of men's and women's basketball fast breaks. *Revista de Psicología del Deporte, 18*(SUPPL.), 439-444.

Schmidt, G.J., & Braun, C. (2004). Entwiclung der Angriffs- und Verteidigungstaktik im eurpäischen Spitzenbasketball. [Development of offensive and defensive tactics in the European highest basketball. In German.]. *Leistungssport, 2*, 32-35.

Tsamourtzis, E., Karypidis, A., & Athanasiou, N. (2005). Analysis of fast breaks in basketball. *International Journal of Performance Analysis in Sport, 5*(2), 17-22.

Vieira, I.M. (2010). *O contra-ataque em basquetebol. Estudo descritivo e comparativo no escalao sub-16 feminino e masculino da Associaçao de basquetebol do Porto.* [Fast break in basketball. Descriptive and comparative study of the male and female under 16 category of the Oporto's basketball association. In Portuguese.]. Porto: University of Oporto.

Submitted: August 8, 2014
Accepted: January 12, 2015

Correspondence to:
David Cárdenas, Ph.D.
Physical Education and Sport Sciences
Senior lecturer
Faculty of Sport Sciences, University of Granada
Carretera de Alfacar s/n. 18011 Granada, Spain
Phone: 34- 654330271
Fax: 34- 958244369
E-mail: dcardena@ugr.es