Technical-Tactical Performance Indicators During the Phases of Play in 3x3 Basketball

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Abstract
The current study aims to analyse technical-tactical performance indicators during elite 3x3 basketball games. To do so, the start, development and end of 315 attacking phases were examined using an observational tool during four games of the 3x3 Men's World Cup 2017. The results showed that efficacy from the 6.75 m line and the fast breaks made after defensive rebound were the performance indicators that best discriminated winning and losing teams. During set plays, the best percentages of efficacy were achieved with group-tactical situations involving the three players on court, and mainly with the use of off-ball screens. Coaches when preparing competitions and training drills can use these findings to increase team and player's performance.
Keywords: Observational methodology, Notational Analysis, Small Sided Games

Introduction

Past studies that analyse technical-tactical actions in basketball can be split into two different groups: i) quantitative research: studying the game outcome using game-related statistics; and ii) qualitative research: analysing match events during the game's development, i.e., match observations (Barragán, Ruano, Calvo, Calvo, & Saiz, 2015; ENRIQUE Ortega, 2006; E Ortega, Cárdenas, De Baranda, & Palao, 2006). Quantitative research (game outcome) analyses: (i) game-related statistics in competition as performance indicators, in order to achieve several aims, such as examining the effect of playing at home or away (Gomez, Lorenzo, Ibanez, & Sampaio, 2013); (ii) identifying those performance indicators related to teams' effectiveness (Zhang, Lorenzo, Woods, Leicht, & Gomez, 2019); and (iii) discriminating game statistics by playing positions (ENRIQUE Ortega, 2006; Pion et al., 2018) etc.

On the other hand, there are studies that analyse the game dynamics (qualitative research), which study specific technical-tactical actions during the ball possessions through the game. Qualitative research in basketball focuses on analysing the effectiveness of specific technical-tactical actions based on individual actions such as field-goals Ibáñez, García, Feu, Parejo, and Cañadas (2009), rebound (Ribas, Navarro, Tavares, & Gómez, 2011), assists or passes (Courel-Ibáñez, Suárez, Ortega Toro, Piñar López, & Cárdenas Vélez, 2013) and turnovers (Han, Hawkins, & Choi, 2020); and studies that analyse collective group tactical behaviours (CAs), such as off-ball screen (Arroyave, Bardavio, Sobrino, & González, 2015; Vaquera, Cubillo, García-Tormo, & Morante, 2013) fast break Conte,

Straigis, Clemente, Gómez, and Tessitore (2019), or defence (Gómez et al., 2010). Previous studies examined game situations during 5x5 in basketball, both at the formative stage and elite level. However, the 3x3 basketball discipline has recently been included as a demonstration sport in the next Summer Olympics. As it is, available research conducted on 3x3 basketball is scarce. First, Montgomery and Maloney (2018) quantified and described the physiological and physical requirements in high performance 3x3 basketball by gender, using the Global Positioning System (GPS) and rate of perceived exertion (RPE). The authors concluded that the players performed actions at top speed and high heart rate levels in this discipline. Second, Conte et al. (2019), subsequently, analysed quantitatively technical-tactical events during the finals matches held at the FIBA World Championship 2017. The researchers studied the differences between winning and losing teams considering the following variables: i) length of attack phases; ii) shots (free throws, 2- and 3-point field-goals); iii) shooting success; iv) number of ball possessions; and v) rebound. Their key findings show that winning teams have higher values in free-throws made and scored, steals and lower values in turnovers. Lastly, McGown, Ball, Legg, and Mara (2020), combined the study of the RPE and heart rate in some technical-tactical actions in 3x3 basketball. The results showed that the players' heart rate was higher (90-100%), with longer periods of play, the trend of work-to-rest time ratio was 3:1, and game actions with the highest heart rate involved shots.

However, no research has been particularly focused on performance indicators in elite 3x3 basketball analysing each game action during the full attack phase

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from a qualitative viewpoint. The aim of this study was to analyse technical-tactical performance indicators in elite 3x3 basketball games from start to finish of the attacking phase.

Methods

The sample comprises 315 attack phases analysed in four men's "3x3 World Cup-2017" matches (final, semi-finals and the third-place match.). Data collection was gathered using indirect observational methodology. The research was conducted following qualitative criteria within indirect observation framework (Anguera Argilaga, Portell Vidal, Chacón Moscoso, & Sanduvete Chaves, 2018). The macro-variables observed during the attacking phase were: "start" of ball possession, "development" (technical-tactical actions performed with ball possession), and "end" of ball possession. The observational tool designed by E Ortega and Gómez (2009), was adapted from 5x5 basketball to 3x3 basketball. The variables collected were as follows:

1- Variables analysing the "start" of the offensive phase: i) starting area of ball possessions, the area where the control of the ball is obtained (see figure 1); ii) Starting action (indicates how the offensive player obtains the ball); ball interception (ball recovery action during the pass trajectory between two opposing players, offensive rebound and defensive rebound); iii) Attack types: there are two categories depending on the live or dead ball situation (After a dead ball: check-out the ball administered by the official after dead ball situations such as the start of regular playing time or overtime, violations and fouls, "After a live ball" without prior check-out, either by stole/interception, defensive/offensive rebound or basket scored; iv) "prior technical-tactical action" leading to the start of an attack (pass, bounce and shot); and v) ball source area to begin a new offensive phase, only noted if the team starts after defensive/offensive rebound (figure 2).

2- Variables analysing the "development" of the offensive phase: i) Number of players involved (1, 2, 3); ii) Number of "passes from outside to inside" the paint, is defined as a pass made by a player outside the paint to a teammate on the paint; ii) Number of passes inside the paint: pass made between two players who are on the paint; iv) Number of passes from inside to outside the paint, is defined as a pass made by a player inside the paint to a teammate outside it; v) Number of passes outside the paint, pass that is executed between two players outside of the area; vi) Positional 1x1; vi) Number of on-ball screens; viii) Number of actions that draw an odd opponent's attention (FI); xi) Number of open spaces created (CEL); x) Number of pass and cut actions; xi) Number hand to hand passes, involves handing the ball to the receiver who comes to the position occupied by the passer, making a hand-to-hand pass; xii) Number of off-ball screens; and xiii)

length of the offensive phase.

3- Variables analysing the "end" of the offensive phase: i) Ending area of ball possessions (see figure 2); ii) Game situations: (1x0, 1x1, 2x0, 2x1, 2x2) ; iii) Type of final technical action (Layups; Jump shots beyond the 6.75 m line; Set or jump shots inside the 6.75 m line; Violations/Turnovers/Out-of-bounds; Personal foul resumed with a check-ball; Personal foul with free throws; Personal foul + basket; and unsportsmanlike foul); iv) "CAs" performed during the attack phase: (No/Yes); v) Shooting efficacy is assessed depending on the defender's opposition., following criteria established by Gómez, Alarcón and Ortega (2015): vi) Opposition level: high, medium, low and minimal opposition; vii) Efficacy of the offensive phase: (Effective: basket scored and personal foul received; Non-effective: unsuccessful actions including missed field-goals, turnovers, violations or interceptions); and viii) points scored.

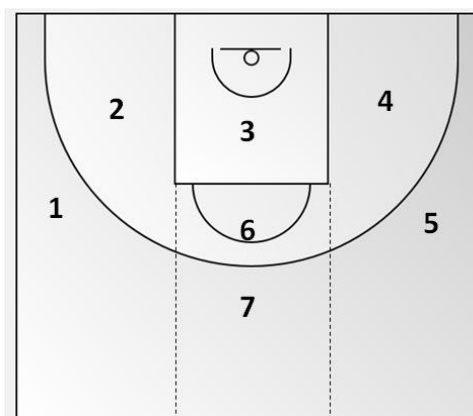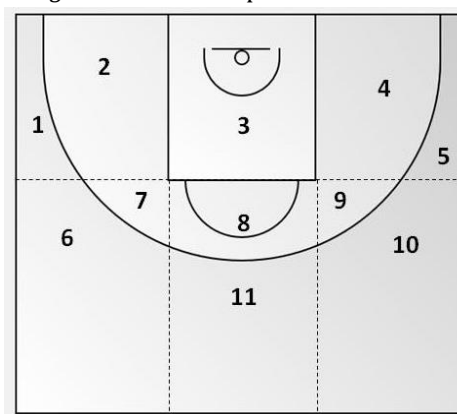*Figure 1.* Offensive phase start areas

Figure 2. Offensive phase end areas

The data collection was carried out by two observers (Sport Sciences Bachelor and specialization in basketball). For observer training, the protocol of Losada and Manolov (2015) was followed. Intra-observer and inter-observer reliability were calculated using Cohen's weighted Kappa. The two observers' agreement values were "very good" for all variables (Altman, 1990). tatistical analyses were performed using the statistic package SPSS Statistics v. 25.0 through Crosstab Commands and Pearson's Chi-square test. The alpha level was set at $p<.05$, and marginal

differences were estimated at p<.10.

Results

The results show a mean of 39.37±4.3 attacking phases played per game, while winning teams played 38.25±2.6 attacks and losing teams played 40.5±5.6 attacks. The attack phase had a mean length of 6.17±0.89 seconds. The mean length of the winning teams' attacks was of 6.44±0.62 seconds, and the effective attacks had a duration of 5.73±0.65 seconds. Losing teams spent an average of 5.91±0.85 seconds in their attack phases and 5.39±0.72 seconds in successful attack phases

Table 1 displays the rate of use (percentage of times players used each category) and efficacy (percentage of times that the category was effective, i.e., finished with a basket/personal foul) of winning and losing teams when "starting" the offensive phase.

Table 1

Percentage of use and efficacy of variables related to the start of the offensive phase.

VARIABLE	CATEGORY	WINNING TEAMS		LOSING TEAMS		TOTAL, USE	TOTAL, EFICACY
		USE	EFICACY	USO	EFICACY		
Origin area of ball possession	1	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	2	1.96%	33.33%	1.23%	100.00%	1.58%	60.00%
	3	57.23%	45.97%	66.04%	45.79%	61.58%	45.87%
	4	0.65%	0.00%	1.23%	50.00%	0.95%	33.33%
	5	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	6	0.65%	0.00%	1.23%	50.00%	0.95%	33.33%
	7	1.96%	100.00%	2.46%	25.00%	2.22%	57.14%
	8	1.30%	50.00%	1.85%	66.66%	1.58%	60.00%
	9	2.46%	75.00%	1.85%	0.00%	2.22%	42.85%
	10	1.96%	100.00%	0.00%	0.00%	0.95%	100.00%
	11	32.02%	30.61%	24.07%	35.90%	27.93%	32.95%
Starting action	After a basket	28.10%	44.19%	29.01%	42.55%	28.57%	43.33%
	After a check-out	32.03%	32.65%	24.07%	35.90%	27.94%	34.09%
	Steal	3.92%	50.00%	2.47%	25.00%	3.17%	40.00%
	Ball interception	5.88%	44.44%	3.09%	40.00%	4.44%	42.86%
	Deffensiverebound	22.22%	44.12%	29.63%	45.83%	26.03%	45.12%
	Offensive rebound	7.84%	75.00%	11.73%	57.89%	9.84%	64.52%
Attack type *† ¥	After dead ball	32.03%	32.65%	23.46%	36.84%	27.62%	34.48%
	After live ball	67.97%	48.08%	76.54%	45.16%	72.38%	46.49%
Prior technical-tactical action *	Pass	54.48%	36.71%	28.75%	39.13%	40.98%	37.60%
	Dribbling	41.38%	46.67%	64.38%	41.75%	53.44%	43.56%
	Shot	4.14%	66.67%	6.88%	63.64%	5.57%	64.71%
Ball source area	1	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	2	6.52%	33.33%	5.88	75.00%	6.14%	57.14%
	3	82.60%	52.63%	80.88%	50.90%	81.57%	51.61%
	4	2.17%	0.00%	1.47%	0.00%	1.75%	0.00%
	5	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	6	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	7	2.17%	100	4.41%	33.33%	3.50%	50.00%
	8	2.17%	0.00%	2.94%	50.00%	2.63%	33.33%
	9	4.34%	50.00%	4.41%	0.00%	4.38%	20.00%
	10	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	11	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Legend: *=p-value <.05 on "USE" (differences between winning and losing on the use of categories); †=p-value <.05 on losing teams "EFFICACY" (differences effective/no effective within the variable in losing teams); ¥= p-value <.05 on winning teams "EFFICACY" (differences effective/no effective within the variable

in winning teams)
Table 2 indicates the rate of use (percentage of times players used each category) and efficacy (percentage of **Table 2**

times that the category was effective, i.e., finished with a basket/personal foul) of winning and losing teams during the "development" of the offensive phase.

Percentage of use and efficacy of variables related to the development of the offensive phase

VARIABLE	CATEGORY	WINNING TEAMS		LOSING TEAMS		TOTAL,	TOTAL,
		USE	EFICACY	USO	EFICACY	**USE**	**EFICACY**
No. of players involved*†	One player	14.38%	54.55%	20.99%	52.94%	17.78%	53.57%
	Two players	41.18%	49.21%	51.85%	47.62%	46.67%	48.30%
	Three players	44.44%	33.82%	27.16%	27.27%	35.56%	31.25%
No. of passes from outside to inside	0	90.20%	43.48%	84.57%	42.34%	87.30%	42.91%
	1	9.80%	53.00%	15.43%	46.00%	12.70%	49%
No. of passes inside the paint	0	97.39%	42.95%	96.91%	44.59%	97.14%	43.79%
	1	2.61%	50.00%	3.09%	0.00%	2.86%	22.22%
No. of passes from inside to outside	0	74.51%	43.86%	78.40%	41.73%	76.51%	42.74%
	1	25.49%	41.03%	21.60%	48.57%	23.49%	44.59%
No. of passes outside the paint	0	35.95%	50.91%	46.91%	44.74%	41.59%	47.33%
	1	28.76%	43.18%	29.01%	53.19%	28.89%	48.35%
	2	25.49%	41.03%	19.75%	28.12%	22.54%	35.21%
	3	8.50%	7.69%	4.32%	28.57%	6.35%	15.00%
	4	1.31%	100.00%	0.00%	0.00%	0.63%	100.00%
No. of positional 1x1	0	54.90%	40.48%	43.83%	40.85%	49.21%	40.65%
	1	43.14%	43.94%	52.47%	45.88%	47.94%	45.03%
	2	1.96%	100.00%	3.70%	33.33%	2.86%	55.56%
No. of on-ball screens	0	85.62%	45.80%	83.33%	42.96%	84.44%	44.36%
	1	14.38%	27.27%	16.05%	46.15%	15.24%	37.50%
	2	0.00%	0.00%	0.62%	0.00%	0.32%	0.00%
No. of FI	0	95.42%	42.47%	93.83%	45.39%	94.60%	43.96%
	1	4.58%	57.14%	6.17%	10.00%	5.40%	29.41%
No. of CEL	0	100.00%	43.14%	98.77%	43.12%	99.37%	43.13%
	1	0.00%	0.00%	1.23%	50.00%	0.63%	50.00%
No. of pass and cut	0	90.85%	41.01%	93.21%	41.72%	92.06%	41.38%
	1	9.15%	64.29%	6.79%	63.64%	7.94%	64.00%
No. of hand-to-hand passes	0	87.58%	44.03%	85.19%	44.93%	86.35%	44.49%
	1	11.76%	33.33%	12.96%	33.33%	12.38%	33.33%
	2	0.65%	100.00%	0.62%	0.00%	0.63%	50.00%
	3	0.00%	0.00%	0.62%	0.00%	0.32%	0.00%
No. of off-ball screens *	0	75.82%	46.55%	88.89%	44.44%	82.54%	45.38%
	1	23.53%	30.56%	9.26%	26.67%	16.19%	29.41%
	2	0.65%	100%	1.23%	50.00%	0.95%	66.67%
	3	0.00%	0.00%	0.62%	100.00%	0.32%	100.00%

Legend: *=p-value <.05 on "USE" (differences between winning and losing on the use of categories); †=p-value <.05 on losing teams "EFFICACY" (differences effective/no effective within the variable in losing teams); ¥= p-value <.05 on winning teams "EFFICACY" (differences effective/no effective within the variable

in winning teams)
Table 3 shows the rate of use (percentage of times players used each category) and efficacy (percentage of times that the category was effective, i.e., finished with a basket/personal foul) of winning and losing teams at the "end" of the offensive phase.
Table 3

Percentage of use and efficacy of variables related to the end of the attack phase.

VARIABLE	CATEGORY	WINNING TEAMS		LOSING TEAMS		TOTAL,	TOTAL,
		USE	EFICACY	USO	EFICACY	USE	EFICACY
Ending area of ball possessions *	1	11.11%	35.29%	11.73%	26.32%	11.43%	30.56%
	2	1.31%	50.00%	3.09%	60.00%	2.22%	57.14%
	3	47.05%	55.55%	61.11%	55.55%	54.28%	55.55%
	4	5.88%	33.33%	3.09%	0.00%	4.44%	21.43%
	5	13.07%	35.00%	11.11%	11.11%	12.06%	23.68%
	6	0.65%	0.00%	2.47%	50.00%	1.59%	40.00%
	7	20.92%	28.12%	7.41%	25.00%	13.97%	27.27%
Game situation	1x0	8.50%	46.15%	6.79%	54.55%	7.62%	50.00%
	1x1	73.20%	43.75%	70.37%	47.37%	71.75%	45.58%
	2x0	0.65%	0.00%	0.62%	0.00%	0.63%	0.00%
	2x1	2.61%	75.00%	6.79%	18.18%	4.76%	33.33%
	2x2	15.03%	34.78%	15.43%	32.00%	15.24%	33.33%
Type of final technical action *¥	Layups	18.30%	57.14%	21.60%	57.14%	20.00%	57.14%
	Set or jump shot inside 6.75m line	14.38%	36.36%	26.54%	41.86%	20.63%	40.00%
	Jump shot beyond the 6.75m line	36.60%	32.14%	19.14%	22.58%	27.62%	28.74%
	Violations/Turnovers/Out-of-bounds	14.38%	0.00%	16.67%	0.00%	15.56%	0.00%
	Personal foul resumed with a check-ball	9.80%	93.33%	11.11%	94.44%	10.48%	93.94%
	Personal foul with free throws	3.27%	100.00%	2.47%	100.00%	2.86%	100.00%
	Personal foul + basket	3.27%	100.00%	1.23%	100.00%	2.22%	100.00%
	Falta antideportiva	0.00%	0.00%	1.23%	100.00%	0.63%	100.00%
CAs*†	Yes	45.75%	50.00%	53.70%	48.28%	49.84%	49.04%
	No	54.25%	39.35%	46.30%	36.33%	50.16%	37.34%
Opposition level	High	42.24%	38.78%	46.09%	33.96%	44.16%	36.27%
	Medium	19.83%	30.43%	12.17%	50.00%	16.02%	37.84%
	Low	12.07%	35.71%	8.70%	20.00%	10.39%	29.17%
	Minimal	25.86%	70.00%	33.04%	63.16%	29.44%	66.18%
Shooting efficacy	Non-effective	56.86%	0.00%	56.79%	0.00%	56.83%	0.00%
	Effective	43.14%	100.00%	43.21%	100.00%	43.17%	100.00%
No. of points scored*†¥	0 pts	66.67%	14.71%	68.52%	17.12	67.62%	15.96%
	1 pt	17.65%	100%	25.31%	100.00%	21.59%	100.00%
	2 pts	15.03%	100%	6.17%	100.00%	10.48%	100.00%
	3 pts	0.65%	100%	0.00%	0.00%	0.32%	100.00%

Legend: *=p-value <.05 on "USE" (differences between winning and losing on the use of categories); †=p-value <.05 on losing teams "EFICACY" (differences effective/no effective within the variable in losing teams); ¥= p-value <.05 on winning teams "EFICACY" (differences effective/no effective within the variable in winning teams)

DISCUSSION

The aim of this study was to identify technical-tactical performance indicators in elite 3x3 basketball games, in order to obtain successful key performance indicators from the viewpoint of starting, developing and ending the offensive phases.

The results showed that the most frequent offensive phases occurred at high speed between offensive-defensive phases, which may allow players to obtain positional and numeric advantage, given that the average duration of attacks is 6.17 seconds. These results were similar to those reported by Conte et al. (2019). Focusing the attention on efficacy values, the offensive phases of winning and losing teams were most effective with a low duration (5.73 seconds and 5.39 seconds, respectively). However, the winning teams in basketball 5x5 have a shorter average duration of both total and effective offensive phases (Cárdenas et al., 2015).

For winning and losing teams, the most used area at the start of the offensive phase is the paint (area 3). Likewise, the highest efficacy percentages were reached when the attack started from areas 10, 8 and 2, although their use is very low. It is hard to make comparisons between 3x3 and 5x5 basketball disciplines in relation to starting areas, because the court dimensions are different. For instance, the main starting area for fast break is the central backcourt (Conte, Favero, Niederhausen, Capranica, & Tessitore, 2017). Whereas in 3x3 basketball there is no backcourt. This study does not fing differences in efficacy between winning and losing teams depending on starting area. In addition, the most used actions for the start mode are after "basket", "check-out" or "defensive rebound", furthermore, the highest efficacy is achieved after a defensive rebound. Several studies in 5x5 basketball have shown that defensive rebounding is a key factor for winning team's success (A Gómez, J Ibáñez, Parejo,

& Furley, 2017). Notwithstanding, the present study reflects that losing teams are ones securing most defensive rebounds, as in the 3x3 study by Conte et al. (2019), but this is not a determining key indicator in the game outcome.

The variables attack type and technical action at the start of the offensive phase indicated statistically significant differences between winning and losing teams. Winning teams use a higher percentage of attacks after a dead ball, while losing teams use a higher percentage of attacks after a live ball. Both winning and losing teams obtained higher performance when they started the ball possession after a live ball than after dead ball. This type of attack occurs after fast transitions in which there are previously positional imbalances, that facilitating the shooting action. In addition, winning teams display greater efficacy in attacking phases that start with a pass rather than a bounce, as passing reduces the time window for adjusting previous imbalances caused by changes in position between the offensive and defensive phase.

Regarding the players involved in the attacking phase, winning teams tend to use more players than losing teams during the offensive phases (3 vs. 2, respectively). However, the efficacy is higher when few players participate, as fast attack-defence transitions are characterised by a smaller number of players. Likewise, winning teams in 5x5 basketball perform the offensive phases with more players than losing teams (Canadas, Gomez, Garcia-Rubio, & Ibanez, 2018). The participation of fewer players also leads to higher efficacy values (Manzano, Pacheco, & Lorenzo, 2006), due to fast break and transition offences. Therefore, the main efficacy rates arise in a fast break with few players, but slow transition performance improves by creating many individual imbalances and involving a great number of players (Alsasua, Lapresa, Arana, & Anguera, 2019; DiFiori et al., 2018; Santana, Fellingham, Rangel, Ugrinowitsch, & Lamas, 2019)

On the other hand, it is remarkable that almost none of the following passes are made in the attacking phases analysed as part of this study: inside the paint, from inside to outside the paint, from outside to inside the paint. However, when players passing the ball outside the paint, their teams have an efficacy percentage close to 60%. Thus, offensive phases in which at least one pass is made show a higher efficiency than those without passes. These findings agree with those found in the last five minutes of the match by Gomez et al. (2013), who observed that the efficacy during the ball possession was higher when performing more than one pass.

Following this idea, (Courel-Ibáñez et al., 2013) reported that the inside pass is a clear performance indicator. This study shows a low use of this pass (12.7%), although when at least one pass of this type is used, the success rate is higher than when none is used. (49.0% vs 42.9%). Similar findings were found in 5x5

basketball (Courel-Ibáñez, McRobert, Toro, & Vélez, 2016).

The results show that almost half of shots are made after CAs, and its use slightly increases the probability of success during the offensive phase (Gómez Ruano, Alarcón López, & Ortega Toro, 2015). These findings can be explained because most transitions in 3x3 basketball are fast and direct (fast breaks) and do not require the use of CAs to obtain a high efficacy percentage. For slow transitions, it would be necessary to use CAs to generate defensive imbalances and increase attacking success according to the study by Bardavío, Arroyave, González, Leri, and de Ocáriz Granja (2017). Most used CAs by winning and losing teams are on-ball and off-ball screens. In particular, statistically significant differences in the use of off-ball screens were observed between winning and losing teams (winning teams use more off-ball screens than losing teams). While it is true that both teams display a similar percentage of efficacy when using CAs, the offensive phases played by winning teams implies a more sophisticated game due to the participation of more players in the attack (Santana et al., 2019). The on-ball screen is the group-tactical behaviour more used to create more advantageous situations in 5x5 basketball (Arroyave et al., 2015); however, it was less used in 3x3 basketball. By contrast, similar on-ball screen efficacy was found between 3x3 and 5x5 basketball teams (around 60% are ineffective and 40% effective).

The most commonly used areas to end the attacking phase are those close to the basket (area 3: the paint), besides it is the second area with a higher percentage of efficacy, after area 2, although this area shows low number of attacks ending in this zone. In addition, winning teams used area 7 (3-point front area) significantly more, while losing teams used more area 3 (2-point front area). Furthermore, the percentage of use of outside shots is the following: area 1 (far left) 11.43%, area 5 (far right) 12.06% and area 7 (far front) 13.97%. These numbers are very similar to those recorded in the ACB league (Ibanez, Garcia-Rubio, Rodriguez-Serrano, & Feu, 2019) and in elite European basketball (Gryko, Mikołajec, Maszczyk, Cao, & Adamczyk, 2018). In particular, the areas most used for shooting are those close to the rim, and that efficacy is also linked to distance, i.e higher success rates in those areas close to the basket (Arroyave et al., 2015; Gryko et al., 2018).

The most frequent game situations for both teams were 1x1 situation with a 71.75% followed by 2x2 situation with 15.24%. Similar outcomes were found in 5x5 basketball, with almost half of the attacks finishing from an advantage generated by a 1x1 situation or on-ball screen, with 27.8% and 28.7% respectively in the ACB league and 28.9% and 17.5% in the Women's League (Durán, 2016).

The variable type of ending technical action shows statistically significant differences between winning

(preference for 3-point jump shots) and losing teams (preference for 2-point jump shots). There are also statistically significant differences in the percentage of 3-point shooting success between winning and losing teams. These results match with those found in 5x5 basketball, so that the 3-point shooting success is related to the game outcome (Arroyave et al., 2015; Gryko et al., 2018; Santos,

Monezi, Misuta, & Mercadante, 2018).
Regarding the opposition level at the end of the offensive phase, the percentage of successful shooting in winning teams is lower than losing teams with high or minimal opposition. However, with medium or high opposition, the shooting success rate is better in winning teams. These results are similar to those reported in 5x5 basketball by Gómez Ruano et al. (2015).

Finally, winning and losing teams scored over 1 point in at least 33.3% of the attacking phases, and 43% of the times obtained any type of performance (basket/foul).

All these parameters should be used as a reference for designing tasks and setting goals in 3x3-basketball training. Identifying performance indicators in this basketball sport discipline included in the Olympic Games, such as the use and efficacy of specific technical-tactical actions in the attacking phases, will allow coaches to adapt the players' characteristics to the competition, in order to develop strategies to overcome competition requirements.

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