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## 2-POINT SHOT IN FIBA 3X3 BASKETBALL – HOW, WHERE AND DOES IT MAKE A DIFFERENCE?

## MET ZA DVE TOČKI V FIBA 3X3 KOŠARKI – KAKO, KJE IN ALI RES NAREDI RAZLIKO?

### ABSTRACT

3x3 basketball is a sport that is receiving increased attention worldwide. While it shares many similarities with traditional basketball, there are key rule differences that distinguish how the two sports are played. This study examines the distribution, efficiency, and importance of two-point shots in 3x3 basketball. The research sample comprised data from 28 senior-level international 3x3 matches. Data were obtained through expert video analysis and official box scores. Mann–Whitney U test results show that free throw makes, one-point makes and percentages, are significantly different between winning and losing teams, while no significant differences were observed in two-point shooting. This suggests that consistent and more reliable scoring methods are more important in the fast-paced nature of this sport. The study demonstrates that nearly all two-point shots come from central and wing zones (more than three attempts per zone per team), with the central zone being the most efficient (>35%). The most frequently used two-point shot types are off-the-dribble attempts (5.14 per game) and catch-and-shoot attempts after movement along the perimeter (2.93 per game), while the most efficient are catch-and-shoot shots after movement (>35%). When comparing two-point shots before and after the bonus, catch-and-shoot attempts are significantly more efficient before the bonus (37.7% compared to 20.79%), which reflects the importance of movement and shooter fatigue in 3x3 basketball. Future research could compare 3x3 and traditional basketball, analyzing not only shooting techniques from beyond the 6.75m line but also physiological parameters such as blood lactate levels and heart rate.

*Keywords:* 3x3 basketball, 2-point shot, efficiency, distribution, game outcome

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### IZVLEČEK

Košarka 3x3 je šport, ki po svetu prejema vse več pozornosti. Čeprav ima s tradicionalno košarko številne podobnosti, obstajajo ključne razlike v pravilih, ki določajo, kako se športa med seboj razlikujeta. Raziskava preučuje razporeditev, učinkovitost in pomen metov za dve točki v 3x3 košarki. Vzorec je zajemal podatke iz 28 mednarodnih članskih 3x3 tekem. Podatki so bili pridobljeni z ekspertno video-analizo in uradnimi statističnimi zapisniki. Rezultati Mann–Whitneyjevega U-testa kažejo, da se število zadetih prostih metov, zadetih metov za eno točko ter odstotki pri teh metih statistično značilno razlikujejo med zmagovalnimi in poraženimi ekipami, medtem ko pri metih za dve točki ni bilo ugotovljenih pomembnih razlik. To nakazuje, da so pomembnejše zanesljivejše in bolj konstantne metode doseganja točk pri športih hitre narave. Raziskava ugotavlja, da skoraj vsi meti za dve točki izvirajo iz osrednjih in krilnih con (več kot trije poskusi na cono na ekipo), pri čemer je osrednja cona najučinkovitejša (>35 %). Najpogosteje uporabljeni vrsti metov za dve točki sta met iz driblinga (5,14 na tekmo) ter met po podaji in takojšnjemu metu po gibanju ob perimetru (2,93 na tekmo); najučinkovitejši pa so meti po podaji in gibanju (>35%). Pri primerjavi metov za dve točki pred bonusom in po njem so meti po podaji in gibanju pred bonusom statistično značilno učinkovitejši (37,7% v primerjavi z 20,79 %), kar odraža pomen gibanja in utrujenosti strelcev v 3x3 košarki. Prihodnje raziskave bi lahko primerjale 3x3 košarko in tradicionalno košarko, pri čemer bi analizirale ne le tehnike metanja zunaj črte 6,75m, temveč tudi fiziološke parametre, kot so koncentracija laktata v krvi in srčni utrip.

*Ključne besede:* 3x3 košarka, košarka, met za 2 točki, učinkovitost, razporeditev, izid igre

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## INTRODUCTION

FIBA 3x3 basketball has experienced a significant surge in popularity in recent years. Given that 2024 was an Olympic year—marking the second time 3x3 basketball was featured in the Games—the dramatic increase in all publicly available tracking metrics on the FIBA 3x3 website comes as no surprise. This sport is considered the leading urban discipline derived from traditional basketball. However, aside from nearly identical basketball techniques, almost everything else differs between the two sports. Distinct rules, court dimensions, and the number of players impose entirely different demands on athletes. According to official FIBA 3x3 documents comparing the intensity of basketball and 3x3, the relative workload per minute is twice as high in 3x3. Numerous researchers have examined the specific physiological demands of this sport, as well as the effects of fatigue on gameplay (Cabarkapa et al., 2023, 2024; Montgomery & Maloney, 2018; Paulauskas et al., 2025; Figueira et al., 2022).

The physiological demands are dictated by the game's rules. Key differences include court size, shot clock duration, number of players, and scoring system. In addition to the 10-minute time limit, another major distinction is the "first to 21 points" rule, which allows a team to win before time expires. What particularly caught our attention was the difference in scoring for shots beyond the 6.75m line. In traditional basketball, shots from this distance are worth 3 points, whereas in 3x3, they count as 2 points. Conversely, shots inside the 6.75m line are worth 2 points in basketball but only 1 point in 3x3. Considering this, we can presume that shots beyond the 6.75m line have a greater impact on the outcome of a 3x3 game than in traditional basketball.

Another rule that sets 3x3 apart is the bonus rule. After a team's 6th foul, they enter the penalty situation, and the opposing team is awarded two free throws after every subsequent defensive foul. Following the 9th team foul, each additional foul grants the opponent two free throws plus possession. This rule drastically alters gameplay, significantly reducing the possibility of intentional ("tactical") fouling, which is common in traditional basketball. Finally, we must highlight the rule that most intensifies the game: the 12-second shot clock. Finding a solution within this short timeframe requires tremendous effort. For context, the world record in the 100m sprint is 9.58 seconds, making FIBA 3x3 basketball a kind of basketball sprint.

In traditional basketball, numerous studies have analyzed the differences between shots taken inside and beyond the 6.75m line, including biomechanical variations in shooting technique and the impact of scoring efficiency (Bourdás et al., 2024; Gou & Zhang, 2022; Vencúrik et al., 2021; Yang et al., 2024; García et al., 2014; Stavropoulos et al., 2021; Puente et al., 2015).

Considering the limited number of studies that have specifically examined 2-point shooting in 3x3 basketball (Nowak et al., 2025), these studies guided our analysis of shots outside the line 6.75m. In this paper, we examined how these shots were executed, from which court positions, and whether tendencies changed after entering the bonus situation and does the generally higher intensity of the game affect the performance of the shot. We also analyzed shooting inside this line as well as free throws to see the overall performance of the winning and losing teams.

## **METHODS**

### **Sample**

The research sample comprised data from 28 senior-level international 3x3 basketball matches, specifically from the knockout stages of AmeriCup 2024 (8 matches), World Cup 2023 (8 matches), Europe Cup (8 matches) and Champions Cup 2025 (4 matches). AmeriCup, World Cup and Europe Cup matches included those from the quarter-finals, semi-finals, final, and third-place game. The Champions Cup matches encompassed the semi-finals, and both the final and third-place games.

### **Procedure and Variables**

Data for the present study were obtained through expert video analysis of matches sourced from the official FIBA 3x3 YouTube channel, employing systematic observational and notational analysis techniques. Supplementary variables were extracted from the official “box score” statistics available on the FIBA 3x3 website for analyzed competitions. The variables collected for analysis included:

- a) General Statistics: Metrics related to the frequency and efficiency of free throws, 1-point, and 2-point field shots and possessions per game.
- b) Shot Execution Type: Classification of 2-point attempts based on the player's movement prior to the shot. Shots were categorized as either:
  - Dribble shots (initiated off the dribble), or
  - Catch-and-shoot shots (following a pass), further subdivided into:

- o Stationary catch-and-shoot: where the player was stationary prior to receiving the pass, which could originate either from the perimeter (SP\_catch-and-shot) or the inside area (SI\_catch-and-shot),
- o Dynamic catch-and-shoot: where the player was in motion prior to receiving the pass and executing the shot, with the movement originating either from the perimeter (DP\_catch-and-shot) or from the inside area (DI\_catch-and-shot).

c) Shooting Location: The court was segmented into five shooting zones: left wing, right wing, central position, left corner, and right corner (Bozovic et al., 2021).

### **Statistical analysis**

Data analysis was conducted using descriptive statistics, Mann Whitney U tests to evaluate differences (a) between winning and losing teams and (b) between 2-point shots before and after opposing teams reached the bonus, Kruskal-Wallis tests to compare groups of different classifications of analyzed 2-point shots. Use of nonparametric tests is present because of the results from tests for normality of the data ( $p < 0.05$  for all variables).

All statistical results are presented in tabular form, expressed as nominal counts and percentages where appropriate. The threshold for statistical significance was set a priori at  $p < 0.05$ . All statistical analyses were performed using IBM SPSS Statistics for Windows, Version 20.0 (IBM Corp., Armonk, NY, USA).

## **RESULTS**

Descriptive statistics, including means and standard deviations, as well as statistically significant differences between independent groups, are presented in Tables 1–3. Each table provides comparative data on performance differences between winning and losing teams as well as global averages.

Table 1 presents aggregate data on shooting frequencies—free throws, 1-point field goals, and 2-point field goals, alongside possessions per game. Significant differences were found between winning and losing teams. Specifically, winning teams recorded more free throws made ( $p = 0.012$ ), a greater number of 1-point shots made ( $p = 0.014$ ), and a higher 1-point shooting efficiency ( $p = 0.012$ ).

Table 1. Frequency and efficiency of free throw, 1- and 2-point shots per game and possessions per game - Descriptive data and differences between the winning and losing teams and global averages.

Shots, Possessions per game	Winning team (Mean $\pm$ SD)	Losing team (Mean $\pm$ SD)	Global averages (Mean $\pm$ SD)
Free throw made	3.21 $\pm$ 1.77*	2.07 $\pm$ 1.59*	2.64 $\pm$ 1.76
Free throw attempt	4.25 $\pm$ 2.47	3.07 $\pm$ 1.7	3.66 $\pm$ 2.18
Free throw percentage	81.25 $\pm$ 18.22	66.44 $\pm$ 30.87	74.12 $\pm$ 25.97
1-point made	9.75 $\pm$ 2.49*	7.82 $\pm$ 2.71*	8.79 $\pm$ 2.75
1-point attempt	15.07 $\pm$ 4.35	14.07 $\pm$ 4.19	14.57 $\pm$ 4.26
1-point percentage	66.43 $\pm$ 14.55*	56.20 $\pm$ 14.24*	61.32 $\pm$ 15.17
2-point made	3.61 $\pm$ 1.66	3.00 $\pm$ 1.76	3.3 $\pm$ 1.73
2-point attempt	10.93 $\pm$ 3.17	11 $\pm$ 3.43	10.96 $\pm$ 3.28
2-point percentage	34.42 $\pm$ 15.94	27.77 $\pm$ 12.25	31.1 $\pm$ 14.48
Possessions	34.32 $\pm$ 5.49	33.39 $\pm$ 4.97	33.86 $\pm$ 5.21

Notes. SD – standard deviation, \* – Statistical significance ( $p < 0.05$ ).

Table 2 details 2-point shooting performance by court zone. The highest frequency of 2-point attempts originates from the central position (3.7 attempts per game), followed by the left and right wing positions (with 3.3 and 3.18 attempts per game respectively), with the fewest attempts from the corners (with less than half an attempt per game from each corner). In terms of efficiency, central zone is ahead of wing zones by about 10%, and the highest percentage zone is right corner (57.14%), although on a small number of attempts. Winning teams demonstrated a significantly lower number of right corner attempts ( $p = 0.002$ ) and a higher 2-point shooting percentage from the left corner ( $p = 0.017$ ).

Table 2. Shooting location of the 2-point shot - Descriptive data and differences between the winning and losing teams and global averages.

2-point shooting location	Winning team (Mean $\pm$ SD)	Losing team (Mean $\pm$ SD)	Global averages (Mean $\pm$ SD)
Central position made	1.46 $\pm$ 1.17	1.04 $\pm$ .84	1.25 $\pm$ 1.03
Central position attempt	3.64 $\pm$ 1.37	3.75 $\pm$ 2.24	3.70 $\pm$ 1.84
Central position percentage	38.55 $\pm$ 30.67	32.61 $\pm$ 30.98	35.64 $\pm$ 30.68
Right wing made	.96 $\pm$ .92	.57 $\pm$ .57	.77 $\pm$ .79
Right wing attempt	3.32 $\pm$ 1.96	3.04 $\pm$ 1.57	3.18 $\pm$ 1.77
Right wing percentage	28 $\pm$ 28.47	24.63 $\pm$ 31.97	26.32 $\pm$ 30.03
Left wing made	1 $\pm$ 1.02	.86 $\pm$ .85	.93 $\pm$ .93
Left wing attempt	3.54 $\pm$ 2.03	3.07 $\pm$ 1.59	3.3 $\pm$ 1.82
Left wing percentage	27.59 $\pm$ 25.29	22.9 $\pm$ 21.94	25.25 $\pm$ 23.57
Right corner made	.07 $\pm$ .26	.25 $\pm$ .52	.16 $\pm$ .42
Right corner attempt	.07 $\pm$ .26*	.46 $\pm$ .58*	.27 $\pm$ .49
Right corner percentage	100 $\pm$ 00	50 $\pm$ 52.22	57.14 $\pm$ 51.36

Left corner made	.18 ± .39	.04 ± .19	.11 ± .31
Left corner attempt	.39 ± .74	.57 ± 1.03	.48 ± .89
Left corner percentage	54.17 ± 50.2*	2,78 ± 8.33*	26.96 ± 42.85

Notes. SD – standard deviation, \* - Statistical significance ( $p < 0.05$ ).

Regarding execution type (Table 3), the most prevalent is the dribble shot (5.14 attempts per game), followed by the DP\_catch-and-shot (2.93 attempts per game), and DI\_catch-and-shot (1.59 attempts per game). The most efficient shooting method is the DI\_catch-and-shot (37.12%), followed by DP\_catch-and-shot (35.43%). The only two statistically significant differences that were found between winning and losing teams regard DP\_catch-and-shot, both in terms of made shots ( $p = 0.001$ ) and efficiency ( $p = 0.029$ ).

Table 3. Execution type of the 2-point shot - Descriptive data and differences between the winning and losing teams and global averages.

2-point shot execution type	Winning team (Mean ± SD)	Losing team (Mean ± SD)	Global averages (Mean ± SD)
Dribble shot made	1.39 ± 1.23	1.21 ± .88	1.30 ± 1.06
Dribble shot attempt	4.89 ± 1.69	5.39 ± 2.3	5.14 ± 2.01
Dribble shot percentage	29.53 ± 29.41	24.64 ± 22.35	27.08 ± 26
SI_catch-and-shot made	.18 ± .39	.18 ± .39	.18 ± .39
SI_catch-and-shot attempt	.82 ± .90	.57 ± .74	.70 ± .83
SI_catch-and-shot percentage	25.56 ± 41.24	29.17 ± 39.65	27.16 ± 39.8
SP_catch-and-shot made	.18 ± .39	.21 ± .42	.2 ± .4
SP_catch-and-shot attempt	.71 ± .98	.46 ± .92	.59 ± .95
SP_catch-and-shot percentage	25 ± 38.19	52.38 ± 36.55	34.58 ± 39.02
DI_catch-and-shot made	.61 ± .99	.61 ± .74	.61 ± .87
DI_catch-and-shot attempt	1.46 ± 1.79	1.71 ± 1.33	1.59 ± 1.57
DI_catch-and-shot percentage	41.83 ± 43.24	33.48 ± 33.66	37.12 ± 37.83
DP_catch-and-shot made	1.29 ± .94*	.54 ± .58*	.91 ± .86
DP_catch-and-shot attempt	3.04 ± 1.62	2.81 ± 1.81	2.93 ± 1.7
DP_catch-and-shot percentage	43.7 ± 30.12*	26.83 ± 33.31*	35.43 ± 32.55

Notes. SD – standard deviation, \* - Statistical significance ( $p < 0.05$ ).

As it can be seen in Table 4, there are significant differences between 2-point shooting zones in makes and attempts. Both observed variables show differences of top 3 zones (central, right and left wing) from right corner shots as well as from the left corner shots ( $p < 0.00$  for all comparisons in post hoc tests), while no differences when comparing all groups were observed in percentage of the shots variable.

Table 4. Kruskal-Wallis results for shooting location of the 2-point shot- Differences between 5 observed zones of the court and execution type of the 2-point shot- 5 observed shot execution types.

2- point shooting location	P values
2-point shot zones made	0.000
2-point shot zones attempt	0.000
2-point shot zones percentage	0.094

Notes. SD – standard deviation, \* - Statistical significance ( $p < 0.05$ ).

Table 5 shows that made and attempted 2-point shots are significantly different between execution types. In variable regarding made shots, post hoc tests show that dribble shot significantly differs from all groups ( $p < 0.01$  for all comparisons) except DP catch and shot ( $p = 0.939$ ), and DP catch and shot differs from both standing catch and shot (from the inside area ( $p = 0.00$ ) and the perimeter ( $p = 0.00$ )). In variable 2-point shots attempted by execution type, all groups are significantly different between each other ( $p < 0.014$  for all comparisons) except SI catch and shot from SP catch and shot ( $p = 1.00$ ) and from DI catch and shot ( $p = 0.083$ ). Between analyzed execution types of 2-point shots among all groups, no differences were observed in percentage of the shots variable.

Table 5. Kruskal-Wallis results for execution type of the 2-point shot- differences between 5 observed shot execution types.

2-point shot execution type	P values
2-point shot made by execution type	0.000
2-point shot attempt by execution type	0.000
2-point shot percentage by execution type	0.462

Notes. SD – standard deviation, \* - Statistical significance ( $p < 0.05$ ).

Differences in 2-point shots before and after defensive team reaches the bonus can be seen in table 6. All 2-point shots are split in 2 categories, off the dribble and catch and shot. Significant differences exist between all observed variables in favor of shots before the bonus, except for dribble shot percentages. About twice as many dribble shots are made ( $p = 0.002$ ) and attempted ( $p = 0.000$ ) before the defending teams reaches the bonus, and even larger differences can be seen in catch and shot makes ( $p = 0.000$ ), attempts ( $p = 0.000$ ) and even in percentages ( $p = 0.002$ ).

Table 6. 2-point shots by dribble and catch and shot shots- Descriptive data and differences between before and after defensive team reaches the bonus.

2-point shot execution type	Before bonus of the defending team (Mean $\pm$ SD)	After bonus of the defending team (Mean $\pm$ SD)
Dribble shot made	.93 $\pm$ 1.02*	.38 $\pm$ .59*
Dribble shot attempt	3.43 $\pm$ 1.92*	1.71 $\pm$ 1.73*
Dribble shot percentage	22.91 $\pm$ 25.08	23.19 $\pm$ 32.52
Catch-and-shot made	1.39 $\pm$ 1.09*	0.45 $\pm$ 0.74*
Catch-and-shot attempt	3.96 $\pm$ 2.59*	1.75 $\pm$ 1.54*
Catch-and-shot percentage	37.7 $\pm$ 28.34*	20.79 $\pm$ 27.36*

Notes. SD – standard deviation, \* - Statistical significance ( $p < 0.05$ ).

## DISCUSSION

In professional sports, participation is not enough - winning is what matters. Therefore, we will first examine the differences between winning and losing teams. As expected, winning teams outperformed their opponents in several key parameters (Table 1). The most significant differences were observed in the number of made free throws ( $3.21 \pm 1.77$  vs.  $2.07 \pm 1.59$ ;  $p < 0.05$ ) and 1-point field goals ( $9.75 \pm 2.49$  vs.  $7.82 \pm 2.71$ ;  $p < 0.05$ ). Regarding shooting percentages, the only statistically significant difference was found in 1-point field goal percentage ( $66.43 \pm 14.55$  vs.  $56.20 \pm 14.24$ ;  $p < 0.05$ ). Importantly for our analysis, even though most of the papers that examined 3-point shooting in traditional basketball showed that it has big influence in winning the games (Stavropoulos et al., 2021; Puente et al., 2015; Çene, 2018), no significant differences were observed in 2-point shooting (beyond the 6.75m line). This leads us to conclude that, at least statistically, 2-point shooting does not have the same effect like in 5 on 5 basketball and does not determine the winner in 3x3 basketball. The rules dictate a different style of play compared to traditional basketball. In 3x3 basketball, the real difference-makers are 1-point shooting efficiency and free throw opportunities.

An uneven distribution of 2-point shot attempts across court zones can be seen in table 2. On average, more than three attempts per game were taken from the central and wing areas, while corner attempts were significantly fewer (less than one per game), as further illustrated in Table 4. Statistically significant differences between winning and losing teams were only observed in right corner attempts and left corner shooting percentages. Given the low volume of these shots, their actual impact on game outcomes is negligible.

An interesting trend in 3x3 basketball is the predominant use of the central and wing areas. As explained in previous studies (Niemi, 2024), player collaboration almost exclusively occurs in these three zones, which is logical considering where possessions typically originate. Players and coaches should keep that in mind when working on a training program and make the most out of their time on the practice courts.

Table 3 highlights a key difference between winning and losing teams: the number of made 2-point field goals via DP\_catch-and-shot ( $1.29 \pm 0.94$  vs.  $0.54 \pm 0.58$ ;  $p < 0.05$ ) and the corresponding shooting percentage ( $43.7 \pm 30.12$  vs.  $26.83 \pm 33.31$ ;  $p < 0.05$ ). Since offensive play is based on two-player actions aimed at creating advantages, the DP\_catch-and-shot is typically taken by the third player, who often remains unguarded. This can be interpreted in several ways: winning teams likely defend better to prevent such open shots, and their ability to convert these opportunities may be a decisive factor.

Collected data (Tables 3 and 5) show that the most prevalent types of 2-point shots in 3x3 basketball are off-the-dribble and DP catch-and-shoot shots (in terms of both made and attempted shots). Both of these shot types testify to the fact that this is an extremely fast-paced sport, predominantly played by agile players with strong ball-handling and 2-point shooting skills. As such, coaches and managers should primarily look for players who possess these attributes, as well as keep the main emphasis during training on these types of shots.

Table 6 presents unexpected results. In the analyzed games, teams usually entered the bonus phase during the final minutes, which logically leading to more 2-point attempts and makes before the bonus. Contrary to our expectations, while dribble shot percentages remained unchanged, Catch-and-shoot percentages dropped significantly ( $37.7 \pm 28.34$  vs.  $20.79 \pm 27.36$ ;  $p < 0.05$ ). We anticipated that defensive intensity and quality would decline upon entering the bonus, leading to higher shooting percentages, as in traditional basketball (Csataljay et al., 2013). However, fatigue in the closing moments appears to be a decisive factor affecting shooting accuracy. The impact of fatigue has been previously demonstrated in basketball (Bourdass et al., 2024), which is played at a significantly lower intensity.

Another crucial factor is the "first to 21 points" rule, which significantly alters team behavior. Since the bonus is typically reached in the final stages, most teams adjust their defensive approach by reducing aggressiveness to avoid fouling. However, the threat of the opponent winning by reaching 21 points forces defenders to close out on 2-point shooters, which - due to reduced aggressiveness - creates driving lanes for easier 1-point finishes.

## **Strengths and limitations**

The strength of this paper lies in the fact that it addresses a new topic in a new sport that has only recently become an Olympic discipline, thereby gaining importance and popularity. The data presented here can change the philosophy not only of training but also of the game itself, as it highlights the importance of a single point compared to a two-point shot.

This challenges the prevailing belief in the 3x3 basketball world that games are won primarily through two-point shooting. It also raises the issue of how shots are distributed in this sport and how shooting methods compare to traditional basketball.

The limitations of this paper are that the analysis can always be expanded and new factors included, which may determine the winner or positively or negatively influence shot selection, and a small sample size. One example is that games are played outdoors, where wind is often present and can significantly affect shooting accuracy.

## **CONCLUSION**

Every game is dictated by its rules. FIBA 3x3 basketball offers new interpretations and perspectives on basketball tactics and techniques. The possibility of winning in different ways influences team behavior throughout the game. This study clearly demonstrates that corner zones are almost entirely underutilized in 3x3 basketball. Given the spatial distribution of players and the collaborative nature of play in central areas, it raises the question of whether practicing corner-based actions is worthwhile. Most utilized types of 2-point shots are shots off the dribble and catch and shoot shots after moving on the perimeter. These shot types reflect the level of speed, skill and intensity required to play 3x3 basketball.

Future research could compare 3x3 and traditional basketball players, analyzing not only shooting techniques from beyond the 6.75m line but also physiological parameters such as blood lactate levels and heart rate, which differ significantly between these two seemingly similar yet fundamentally different sports.

## **Declaration of Conflicting Interests**

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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