Review article



Small-sided games in teaching the technical and tactical skills of basketball in children and adolescents: a systematic review

Juegos reducidos en la enseñanza de las habilidades técnicas y tácticas del baloncesto en niños y adolescentes: una revisión sistemática

Jogos reduzidos no ensino de habilidades técnicas e táticas de basquetebol

em crianças e adolescentes: uma revisão sistemática

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ABSTRACT

The study analyzes, through a systematic review, the effects of small-sided games in teaching basic technical and tactical basketball skills in children and adolescents. To do this, a search was carried out in the Web of Science, PubMed, Eric, and Scopus, focusing on original research published from 2010 to 2020. The search criteria encompassed population, intervention, comparison, outcomes, and study types (PICOS). The identified articles were carefully examined by reviewers according to predetermined selection criteria. From the review, a total of six articles met the eligibility criteria, revealing a prevalence of small-sided games, particularly in a 3v3 format on half-court, and the significant role of coach presence and instruction in game development. The review shows that the implementation of small-sided games in basketball proves to be an effective methodological approach to enhancing fundamental technical and tactical aspects of the sport. It appears that both the frequency and active involvement of players during the games contribute to the development of technical and tactical skills in basketball.

Key words: Sport, Methodology, Physical education, Pedagogy, Performance.

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RESUMEN

El estudio analiza, mediante una revisión sistemática, los efectos de los juegos reducidos en la enseñanza de habilidades técnicas y tácticas básicas del baloncesto en niños y adolescentes. Para ello, se realizó una búsqueda en las bases de datos Web of Science, PubMed, Eric y Scopus. considerando investigaciones originales publicadas desde el año 2010 hasta 2020. La búsqueda incluyó términos referentes al modelo de población, intervención, comparación, resultados y tipos de estudio (PICOS). Los artículos encontrados se examinaron con participación de revisores mediante criterios de selección predefinidos. De la revisión, un total de seis artículos cumplieron los criterios de elegibilidad, los resultados muestran que prevalecen juegos reducidos en modalidad 3v3 en mitad de cancha y la presencia e instrucción del entrenador en el desarrollo del juego. La revisión muestra que la aplicación de juegos reducidos en baloncesto es una estrategia metodológica eficaz para mejorar aspectos técnicos y tácticos básicos del deporte. Parece ser que la frecuencia y participación de los jugadores durante el juego podrían contribuir al desarrollo de habilidades técnicas y tácticas en el baloncesto.

Palabras clave: Deporte, Metodología, Educación física, Pedagogía, Rendimiento.

RESUMO

O estudo analisa, por meio de uma revisão sistemática, os efeitos dos jogos reduzidos no ensino das habilidades técnicas e táticas básicas do basquetebol em crianças e adolescentes. Para isso, foi realizada uma busca nas bases de dados Web of Science, PubMed, Eric e Scopus, considerando pesquisas originais publicadas entre 2010 e 2020. A busca incluiu termos referentes ao modelo de população, intervenção, comparação, resultados e tipos de estudos (PICOS). Os artigos encontrados foram examinados por revisores com base em critérios de seleção predefinidos. A partir da revisão, um total de seis artigos atenderam aos critérios de elegibilidade. Os resultados mostram que prevalecem jogos reduzidos na modalidade 3v3 na metade da quadra e a presença e instrução do treinador no desenvolvimento do jogo. A revisão mostra que a aplicação de jogos reduzidos no basquetebol é uma estratégia metodológica eficaz para melhorar os aspectos técnicos e táticos básicos do esporte. Parece que a frequência e a participação dos jogadores durante o jogo podem contribuir para o desenvolvimento das habilidades técnicas e táticas no basquetebol.

Palavras chave: Esporte, Metodologia, Educação física, Pedagogia, Performance.

INTRODUCTION

The high prevalence of physical inactivity in children and adolescents is a latent risk factor in the world (Aubert et al., 2018; Bull et al., 2020) that challenges that various intervention strategies should promote the acquisition of a greater range of movements, which favor the learning of new sports in order to physically literacy in the child-youth population to create positive affective responses and adherence to an active and healthy life (Dudley et al., 2017; Rudd et al., 2020a; Rudd et al., 2020b; Poitras et al., 2016).

In sports pedagogy, at least two pedagogical currents are recognized; Classical or linear pedagogy, which is developed in controlled and closed environments with direct instructions that do not leave room for creativity, being a more structured process in addition to being limited by the ability of each individual (Davids et al., 2013); and on the other hand, a practice-based teaching model that defends the manipulation of restrictions as a methodological key to facilitate learning through practical experiences based on real game contexts (Correia et al., 2018). The latter also allows participants to have the possibility of questioning the "why?" of the game possibilities and abandoning the "how?" (Barba-Martín et al., 2020), as well as being able to self-regulate in search of more functional and innovative performance solutions, leaving room for creativity and self-criticism constantly, which allows for independent and more experienced students or athletes (Rudd et al., 2020b). In this context, smallsided games have been proposed as a widely used resource in practice-based models, since they allow for the management of variables in the sports teaching process, such as the modification of the court size, number of players and rules modified on purpose to achieve a final objective, generating playful actions that can offer a more attractive edge for the participants (Fernández-Espínola et al., 2020). Additionally, they are widely used as a resource in different sports disciplines to develop physical fitness and the technical and tactical skills of the sport in question (Hernando-Garijo et al., 2021).

These small-sided games are particularly appropriate in basketball, since, in addition to being one of the most practiced sports worldwide (Scanlan & Dalbo, 2019), they offer multiple modifications to the structure of the game, thus achieving different playful or sporting objectives (Chase et al., 2013). These modifications may be attractive for teachers and coaches looking to manage aspects of the game that add effective experiences in learning movements applied to basketball, as it is key to the development of technical and tactical skills (Halouani et al., 2014) isolated or simultaneous (Stojanović et al., 2021), favoring basketball-specific skills, such as shooting, blocking, rebounding and passing, as well as physical fitness for the sport (Hammami et al., 2019).

Given the relevance of understanding how to implement small-sided games for teaching, this systematic review aims to analyze the effects of small-sided games in teaching basic technical and tactical basketball skills in children and adolescents.

METHODS

A descriptive qualitative systematic review was carried out, according to the guidelines of "Preferred Reporting Items for Systematic Reviews and Meta-Analysis" (PRISMA) (Liberati et al., 2009; Page et al., 2021).

Eligibility criteria:

A population, intervention, comparison, outcomes, and types of study (PICOS) model was used to establish eligibility criteria for the systematic review. Population (P); studies conducted in children and adolescents between 6 and 18 years of age, with or without previous experience in sport, were included. Intervention (I); studies that implemented small-sided basketball games were included. Outcomes (O); included studies had to report at least one outcome related to technical performance (passing, shooting, rebounding, blocking, receiving, dribbling, and ball handling) or tactical performance (offensive and defensive actions, collective performance averages) during the small-sided game intervention. Type of study (S); descriptive cross-sectional or experimental studies were examined.

Sources and search strategy:

A systematic search was conducted in the databases Web of Science, PubMed, Eric, and Scopus for articles published in English and Spanish between January 2010 and November 2020. The search strategy used English terms: Children, childhood, adolescent, adolescence, youth, and Young for the population and small-sided games, small-sided basketball game, "SSG," and basketball for the intervention. Boolean symbols OR and AND were used as appropriate.

Study Selection:

Two reviewers analyzed the eligibility of the studies, that is, compliance with the relevant Population, Intervention and Outcomes (PICOS) elements. Duplicates were then eliminated in the first search using the Mendeley reference manager (version 1.19.8), then the title and abstract were read to identify potentially relevant articles. Finally, the potentially relevant texts were read in full by the reviewers and organized in an Excel template to analyze their eligibility according to the criteria previously described.

Data collection process:

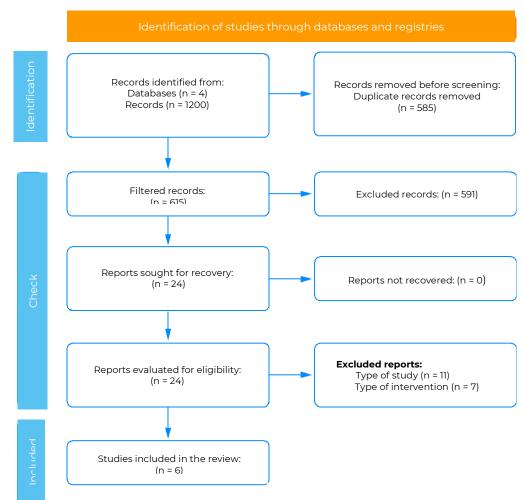
In the data collection process, two reviewers grouped the relevant information obtained after reading the full text of the selected articles independently considering variables such as: author and year of publication (2010 to 2020), study characteristics (name of the study, information about the participants, average age, years of experience, sex, technical skills, tactical skills and the application of small-sided games in basketball as a methodological strategy). After the process of reading and considering important information, they grouped the studies relevant to the research, for their subsequent full reading and corresponding analysis to be integrated into the systematic review.

RESULTS

The search in the databases yielded a total of 1200 articles, of which 585 were duplicates or were outside the years included for selection. The title and abstract of 615 articles were read, concluding that 24 articles were possibly included, which were read in full text, of which six articles were identified as relevant to the research (Figure 1).

Figure 1

Flow diagram.



Characteristics of studies and participants

This systematic review analyzed the results of six articles that applied small-sided games as a methodological strategy for teaching technical and tactical basketball skills, of which three were from Portugal, two from Spain and one from Turkey. These studies included a total of 100 participants, 18 females and 72 males between 9 and 16 years old, with previous experience in basketball between 1.1 and 6.4 years (Table 1).

Characteristics of the intervention

Technical and tactical results were compared in different ways depending on the author: anthropometry, age and number of players (Clemente et al., 2018), number of players (López-Herrero & Arias-Estero, 2019), number of players and presence of the coach (Sanchez-Sanchez et al., 2018), different orders in small-sided games and pitch size (Clemente et al., 2017), number of players and team composition (Leite et al., 2014).

All studies included in this systematic review used game models that modified the number of players 4v4, 3v3, 2v2 and 1v1 or used only one game format. The 3v3 format was the most commonly used by the authors (Atll et al., 2013; Clemente et al., 2017, 2018; Leite et al., 2014; López-Herrero & Arias-Estero, 2019; Sanchez-Sanchez et al., 2018).

Playing time was also analyzed, where the shortest playing time was 2 minutes (Clemente et al., 2018) compared to the other authors who averaged a playing time of around 4 to 5 minutes with 2 or 3 minutes of rest (Atll et al., 2013; Clemente et al., 2017; López-Herrero & Arias-Estero, 2019; Sanchez-Sanchez et al., 2018).

The playing area per player varied depending on the study; Two studies did not include modifications in the court size (Leite et al., 2014; Sanchez-Sanchez et al., 2018) and the rest of the authors used the court size as a variable to modify, varying between half and full court (Atll et al., 2013; Clemente et al., 2017, 2018; López-Herrero & Arias-Estero, 2019). Only one study modified the height of the hoop (2.60 meters) and the size of the ball (number 6) for its intervention (López-Herrero & Arias-Estero, 2019), (see Table 1).

Table 1

General characteristics of the studies included in the systematic review.

Author, country	Aim	Participant characteristics. n; gender M/F; age or category; experience.	Game regime	Game restrictions	Main results	Conclusion
	To analyze the relationships		(i) 1 ∨ 1; CS : 15x6; PA : 45m2; PT : 2r x2m x 1 b	_		
	between anthropometry, physical condition and		(ii) 2 v 2; CS : 22x8; PA 44m2; PT : 2r x 2m x 2 b	- No timeouts; no free	Technical performance – physical condition –	The results of this study revealed that
Clemente et al., 2018, Portugal	technical actions and perceived effort in youth	20; M; Under 14, Under 16; With experience.	(iii) 3 v 3; CS : 24x11; PA 44m2; PT : 2r x 3m x 2 b	throws; position for fouls.	anthropometry – perception of effort –	both anthropometric and physical fitness variables are associated with
	basketball during different SSG formats.		(iv) 4 v 4; cs : 26x13; pa 42m2; pt : 2r x 4m x 2 b	- Touis.	age.	technical performance during SSG.
	SSG formats.		(v) 5 v 5; cs : 28x15; pa 42m2; pt : 2r x 5m x 2 b	-		
López-Herrero &	To analyze the 3v3 game mode, compared to 5v5 in		(i) 3 v 3; CS: 14x15; PA 35m2; PT: 8 min matches; Reduced rim height (2.60)		Technical performance - perception of effort -	The results showed higher values in favour of the 3v3 mode. To promote engagement in the game, quality
Arias-Estero, 2019, Spain	extracurricular basketball played by children between 9 and 11 years old.	42; M;9-11; Experienced.	(ii) 5 v 5; CS: 14x15; PA 21m2; PT: 8 min matches; Reduced rim height (2.60)	 Court size; ball size. 6 	enjoyment - psychological aspects - intention to be active	practice, positive emotions, and at the same time satisfy children's preferences, the 3v3 game mode should be chosen.
			(i) $3 \vee 3$; CS: 14x15; PA 35m2; With encouragement from the coach			
Sanchez-Sanchez	To describe the physiological and technical-tactical	6; F; Under 14;	(ii) $3 \vee 3;$ CS: $14x15;$ PA $35m2;$ With encouragement from the coach	- Individual defense; position due to fouls; ball in the air at the	Technical performance –	In conclusion, SSG with verbal encouragement should be chosen to focus on physiological load, while the
et al., 2018, Spain .	responses in young women during small-sided games.	Experienced (14.3 \pm 0.5 years).	(iii) $3 \vee 3$; CS: 14x15; PA $35m2$; With encouragement from the coach; With Dribbling	start; ball out of the zone after a defensive rebound.	training load.	one without it may be useful to improve collective behavior, without limitations on physiological load.
			(iv) 3 v 3; CS: 14x15; PA 35m2; With encouragement from the coach; Without Dribbling	-		

Author, country	Aim	Participant characteristics. n; gender M/F; age or category; experience.	Game regime	Game restrictions	Main results	Conclusion
			(i) 3 v 3; cs : 17x9; PA 25.5m2; PT : 5m x 3 b ; normal			
	To analyze the effect of different small-sided		(ii) 3 v 3; CS : 17x9; PA 25.5m2; PT : 5m x 3 b ; offense	_		A smaller format significantly increased heart rate, playing volume, efficiency index, and collective density during
Clemente et al.,	conditioning games (SSCG) with different tactical contents on heart rate	10; M; Under 14, Under	(iii) 3 v 3; CS : 17x9; PA 25.5m2; PT :5m x 3 b : defense	— Official basketball rules –	Technical performance; tactical performance;	attacking plays. The SSG with the attacking content statistically increased heart rate, efficiency index, and
2017, Portugal.	responses, technical performance, and collective organization in youth	16; With experience.	(iv) 5 v 5; CS : 28x15; PA 42m2; PT :5m x 3 b ; normal	— court size.	physical condition; age.	performance score. Therefore, this study revealed that different SSCGs with tactical content influenced the
	basketball.		(v) 5 v 5; CS : 28x15; PA 42m2; PT :5m x 3 b ; offense			physiological responses of youth players.
			(vi) 5 v 5; CS : 28x15; PA 42m2; PT : 5m x 3 b ; defens e			
Atll et al., 2013,	To compare FC responses and frequencies of various technical actions between	12; F. Average of 15.5;	(i) $3 \lor 3;$ CS: $28x15;$ PA $70m2;$ PT:4m and 2 of passive play; With encouragement from the coach	Size of the court and		The results of this study show that when the court size per player is
Turkey.	half court and full court in 3v3 games among female high school basketball players.	With experience.	(ii) $3 \lor 3;$ CS: $14x15;$ PA $35m2;$ PT: 4m and 2 of passive play; With encouragement from the coach	balls in the back.	Technical performance.	reduced, the number of actions in the game increases, but heart rate responses decrease.
			(i) 5 v 5; CS: 14x15; PA 21m2; PT: 4r x 4m x 2b; 5:0 formation; 2 guards, 2 forwards and 1 center			When playing with a post player, teams
Leite et al., 2014, Portugal.	Compare 3v3 and 5v5 game formats in heart rate.	10; M, average of 13.3; With experience.	(ii) 5 v 5; CS : 14x15; PA 21m2; PT : 4r x 4m x 2b; formation 4:1; 2 guards, 2 forwards and 1 center	 Traditional rules – court size – playing formation.	Physical condition; technical aspects; team constitution; tactical aspects.	had more possessions, scored more points, and had greater success on offense. These results suggest that the use of a post player could contribute to a more balanced game formation and
			(iii) 3 v 3; cs : 8.5x15; pa 21m2 ; pt : 4r x 4m x 2 b	_		also benefit the long-term development of basketball players.

M: male; F: female; v: versus; CS: court size; PA: playing area; PT: playing time; r: repetitions; m: minutes of play; b: break; (i): game intervention; SSG: small-side game.

The main restrictions in small-sided basketball games presented in the six articles considered in this review were identified. These restrictions were analyzed based on the following game variables: passing, shooting, rebounding, blocking, and overall tactical indicators.

Performance in basic passing fundamentals

The passes were analyzed based on restrictions such as number of players, reduced height of the rim, ball size number 6 and court size (Leite et al., 2014; López-Herrero & Arias-Estero, 2019). It was observed that the 3v3 model is superior in the number of passes made during the half-court game (Leite et al., 2014; López-Herrero & Arias-Estero, 2019). Other restrictions evaluated were the playing area in 3v3 games, where Atll et al. (2013) indicated that in assists and pass execution the half-court model is superior to the full-court game. The variables of games with the presence of the coach showed that there was a higher number of passes compared to games without the presence of the coach (Sanchez-Sanchez et al., 2018). Another game variable was the 4:1 formation in 5v5 where there was a higher percentage of passes compared to the 5:0 game format (Leite et al., 2014). Finally, Clemente et al. (2018),

The influence of anthropometric characteristics was also analyzed, finding that body weight resulted in U-16 players in the 4v4 and 5v5 formats being superior in assisting than in other formats such as 2v2 and 3v3. They also observed that, in the height section, U-14 players in the 4v4 game format had a higher percentage of assists (Clemente et al., 2018) (Table 2).

Table 2

		Game Form	at Variables Compa	ared
Technical/Tactical Action	Number of players	Play area	Game adjustments	Covariates
Performance in basic passing fur	ndamentals			
Clemente et al., 2018	 1∨1 2∨2 3∨3 4∨4 5∨5 	NA	NA	Weight (s16: AB [4v4]; AB [5v5]) Height (s14:AB [4v4])
López-Herrero & Arias-Estero, 2019	3v3 > 5v5	NA	NA	NA
López-Herrero & Arias-Estero, 2019 (Eficacia)	3v3 > 5v5	NA	NA	NA
Sánchez-Sánchez et al., 2018	NA	NA	C/D > NC/D	NA
Atll et al., 2013 (Passes)	NA	FC <hc< td=""><td>NA</td><td>NA</td></hc<>	NA	NA
Atll et al., 2013 (As sists)	NA	FC=HC	NA	NA
Leite et al., 2014 ()	3v3 > 5v5	NA	5v5[4:1]	NA

Summary of results for comparisons between small-sided game formats on passing performance.

Abbreviations: V: Versus; AB: Assisted balls; C: Coach; NC: No coach; D: Dribbling; FC: Full court; HC: Half court; 4:1 formation with one inside and 4 outside players; NA: Not applicable; >, <: significant differences; =, No significant differences.

Performance in basic shooting fundamentals

Two studies analyzed shots in response to the playing area, showing a higher percentage of executions when using half court compared to full court style of play (Atll et al., 2013). Another study analyzed the presence of the coach (Sanchez-Sanchez et al., 2018) finding that mid-range shots (2 points) and three-point shots with the presence of the coach are superior to the counterpart without a coach, however, it shows equal results in total shots and layups with the presence of the coach or without a coach (Table 3).

Table 3

Summary of results for comparisons between small-sided game formats on shooting performance.

Technical/Tactical Action —	Game Format Variables Compared		
Technical/Tactical Action —	Play area	Game adjustments	
Performance in basic shooting fundamental	S		
Sánchez-Sánchez et al., 2018 (total)	NA	C/D = NC/D	
Sánchez-Sánchez et al., 2018 (3 points)	NA	C/D > NC/D	
Sánchez-Sánchez et al., 2018 (2 points)	NA	C/D > NC/D	
Sánchez-Sánchez et al., 2018 (layups)	NA	C/D = NC/D	
Atll et al., 2013	FC <hc< td=""><td>NA</td></hc<>	NA	

Abbreviations: C: Coach; NC: No coach, FC: Full court, HC: Half court; D: Dribbling; >, <: significant differences; =, No significant differences.

Performance in basic rebounding fundamentals

In the rebounds with the playing area restriction, it was mentioned that half court was superior to full court in obtaining rebounds (Atll et al., 2013). In the restriction that considered the presence of the coach, the variables were divided into offensive rebounds, in which there was a greater number of rebounds without the presence of the coach, and defensive rebounds, in which there were no differences with or without a coach (Sanchez-Sanchez et al., 2018). In the height covariates, in the under-14 category there were differences to highlight in 2v2 and 5v5 and in under-16 in 3v3 (Clemente et al., 2018). (See Table 4).

Table 4

Summary of results for comparisons between small-sided game formats on rebounding performance.

	Game Format Variables Compared			
Technical/Tactical Action	Play area	Game adjustments	Covariates	
Performance in basic rebounding f	undamentals			
Clemente et al., 2018			Height (s14: R [2v2]; R [5v5]) (S16: R [3v3])	
Sánchez-Sánchez et al., 2018 (Off)		C/D < NC/D		
Sánchez-Sánchez et al., 2018 (Def)		C/D = NC/D		
Atll et al., 2013	FC <hc< td=""><td></td><td></td></hc<>			

Abbreviations: R: Rebounds; C: Coach; NC: No coach; D: Dribbling; FC: Full court; HC: Half court; Of: Offensive rebounds; >, <: significant differences; =, No significant differences.

Performance in basic blocking fundamentals

The playing area restrictions show equality in half court or full court (Atll et al., 2013). In relation to the height and weight covariate, the under-14 category showed differences in the reduced 4v4 and 5v5, observing a greater number of blocks (Clemente et al., 2018). (See Table 5).

Table 5

Summary of results for comparisons between small-sided game formats on technical and tactical performance.

	Game Format Variables Compared		
Technical/Tactical Action ——	Play area	Covariates	
Performance in basic blocking fur	ndamentals		
Clemente et al. 2018	NA	Weight (s14: BL [4v4]) Height (s14: BL [4v4]; BL [5v5])	
Atll et al., 2013	FC =HC	NA	

Abbreviations: BL: Blocks; FC: Full court; HC: Half court; s: sub; >, <: significant differences; =, No significant differences.

Global Tactical Indicators

The global indicators were divided into two sections: the number of players in 3v3 and 5v5 formats, and in the under-14 and under-16 categories. In both sections, the 3v3 format was superior to the 5v5, and in the game adjustments section, only in the under-14 category "efficiency" and in "attacks with the ball" was there a difference between defensive games and attacking games, where the latter had a greater volume of play (Clemente et al., 2017) (See Table 6).

Table 6

Summary of results for comparisons between small-sided game formats on technical and tactical performance.

	Game Format Variables Compared			
Technical/Tactical Action	Number of players	Game adjustments		
Performance in global indicators				
		S14 T1=T2;		
	S14 3v3>5v5	T1=T3; T3=T2		
Clemente et al., 2017 (Play volume)	S16 3v3>5v5	S16 T1=T2;		
		T1=T3; T3=T2		
		S14 T1=T2;		
	S14 3v3>5v5	T1=T3; T3>T2		
Clemente et al., 2017 (Efficiency)	S16 3v3>5v5	S16 T1=T2;		
		T1=T3; T3 = T2		
		S14 T1=T2;		
	S14 3v3>5v5	T1=T3; T3>T2		
Clemente et al., 2017 (Attacks with the ball)	S16 3v3>5v5	S16 T1=T2;		
		T1=T3; T3=T2		

Abbreviations: V: versus; TI: regular game; T2: defensive game; T3: attacking game; >, <: significant differences; =, No significant differences.

DISCUSSION

This systematic review aimed to analyze the effects of small-sided games in teaching basic technical and tactical basketball skills to children and adolescents, so that coaches and teachers could use this tool in physical education and sports training classes. The main results were a coincidence between the studies regarding the effect of small-sided games on performance in technical and tactical fundamentals, especially with the application of variables such as number of players (3v3), half court, coach presence, height and weight. These game modifications presented better results in fundamentals such as passing, shooting, blocking and rebounding. They were recommended by this review to be added to classes and training for children and adolescents.

Recently, research was carried out that analyzed different systematic reviews that, in turn, analyzed small-sided games in different sports: soccer (eight reviews), basketball (one review) and team ball sports (three reviews) (Clemente et al., 2021). Their results show that the game format, field configuration, assigned strategy, and conceptual factors such as experience and intensity of the game consistently affect, favoring technical and tactical factors. In addition, the systematic review notes the low number of investigations that study the effect of small-sided games in sports other than soccer (Clemente et al., 2021).

The only systematic review in basketball considered 37 articles that analyzed the basis of passing (Maimón et al., 2020). The results were evaluated in four fundamental sections: biomechanics, physical condition, mental factors, and motor skills. The results of the study determined that the two-handed passing style was more effective, and they also recommend performing exercises similar to the reality of games, since they help manage stress and improve group work (Maimón et al., 2020). Our results show that small-sided games would benefit the execution and effectiveness of passes, however, it is necessary to consider anthropometric differences during their implementation, because it was observed that, in the under-16 and under-14 categories, weight and height could affect the execution of passes during activities (Clemente et al., 2018). In addition, the results of the studies included in our review showed that the 3v3 game presented greater effectiveness and number of passes based on the variable of players on the court. On the other hand, it is possible that modifying the variable of ball size (number 6) and height of the hoop (2.60 meters) may also be favorable in the execution of passes (López-Herrero & Arias-Estero, 2019).

The presence of the coach is an aspect to consider, since it can benefit certain aspects of the game such as offensive rebounds, total passes, and 2- and 3-point shots (Sanchez-Sanchez et al., 2018). Regarding the court size, he compared full court and half court, the latter being superior (Atll et al., 2013) and the formation of four outside players and one inside player was superior compared to the formation of 5 players on the perimeter of line 3, where fewer passes were made compared to the 4:1 formation (Leite et al., 2014).

No systematic reviews were found that included information on the influence of small-sided games on shooting, blocking and rebounding. However, this systematic review found evidence on these aspects of the game. Shooting improves with the presence of the coach in 2-point shots and 3-point shots (Sanchez-Sanchez et al., 2018). In half-court games and with small-sided players (3v3), there was also an improvement in total shots (Atll et al., 2013). In blocking, the presence of the coach did not make a difference in the variable (Atll et al., 2013), although in under-14 categories a greater number of blocks were made with greater weight and height in 4v4 and 5v5 game formats (Clemente et al., 2018).

In the rebounding section, the work in the midfield was superior (Atll et al., 2013), with the variable of the presence of the coach, only offensive rebounds showed improvements, since in defensive rebounds equality was maintained with and without a coach (Sanchez-Sanchez et al., 2018). In the under-14 categories in 2v2 and 5v5 formats, under-16 3v3, height was a precedent for a greater number of rebounds (Clemente et al., 2018).

The implementation of small-sided games has been widely studied for the development of physical skills, where game variables have been manipulated to have higher workloads (O'Grady et al., 2020). In addition, it is known that small-sided games generate situations similar to the reality of the game, but with a low perception of effort (Stojanović et al., 2021). Our systematic review presents evidence that small-sided games should be considered as a methodological strategy for working on technical and tactical skills in basketball. In the multiple works analyzed, it is possible to observe that small-sided games provide advantages for coaches and teachers, since they allow optimizing the work time of basic skills such as shooting, rebounding, blocking, passing and the rest of the fundamentals of basketball. In addition, they also allow us to combine physical conditioning and the practice of technical and tactical fundamentals effectively (Moran et al., 2019). Small-sided games would allow students to generate the option of self-regulating in training and develop greater autonomy, since they would have more possibilities of encountering the ball due to the modifications of variables such as court size, number of players and constant support from the coach or teacher.

It should be noted that there are limitations in this review. Firstly, the included studies mainly considered participants with previous sports experience, so the application of small-sided games in contexts of sports initiation or school basketball teaching must critically analyze the inclusion of this type of strategies. Furthermore, the low representation of women in the studies analysed in this review does not allow the phenomenon to be analysed from a gender perspective.

CONCLUSION

The application of small-sided games in basketball is an effective methodological strategy to improve basic technical and tactical aspects of the sport due to greater exposure to contextualized situations similar to those of the sport. The variables that had the greatest effects on technical and tactical skills in players were those corresponding to the number of players (3v3) and half-court games, because they favor the frequency and participation of players, which could contribute to experience, confidence and self-perception of their skills. Likewise, exercises with the presence of the coach showed an effective improvement in sports practice, suggesting the importance of constant support and/or corrections in the game proper to the role of the coach.

AUTHORSHIP STATEMENT

Author contributions: MLP, NGA: Literature search; MLP, GPA, NGA, YOP: Data analysis, manuscript design and writing.

CONFLICT OF INTEREST

None of the authors have any conflict of interest.

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