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ORIGINAL

ANALYSIS OF THE FOOTBALL GOALKEEPER'S TECHNICAL-TACTICAL ACTIONS IN COMPETITION

ANÁLISIS DE LAS ACCIONES TÉCNICO-TÁCTICAS DEL PORTERO DE FÚTBOL EN COMPETICIÓN

López-Gajardo, M.A.[1]; González-Ponce, I.[2]; Pulido, J.J.[3]; García-Calvo, T.[4]; Leo, F.M.[5]

[1] Predoctoral Employee FPU, Faculty of Sport Sciences, University of Extremadura (Spain) malopezgajardo@unex.es
[2] Associate Professor, Faculty of Education, University of Extremadura (Spain) ingopo@unex.es
[3] Postdoctoral Employee, Faculty of Sport Sciences, University of Extremadura, (Spain) jjpulido@unex.es
[4] Professor, Faculty of Sport Sciences, University of Extremadura, (Spain) tgarcíacalvo@unex.es
[5] Associate Professor, Faculty for Teacher Education, University of Extremadura, (Spain) franmilema@unex.es

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Spanish-English translator: Rocío Domínguez Castells, rocio@sport-science.net

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ABSTRACT

The present study tries to respond about three different objectives: a) to quantify the number of technical-tactical actions carried out by goalkeepers during matches and to analyze if there are differences between divisions, b) to examine the possible differences in the number and type of technical-tactical actions between divisions under investigation, and c) to analyze the differences between this number and the type of technical-tactical actions when goalkeepers play at home team or away teams . To this end, a viewing was made of the 80 matches of the four most important divisions of Spanish football and a total of 160 goalkeepers were analyzed using the observational methodology. After the application of the tests the H-test of Krustal-Wallis and U of Mann-Whitney, showed no significant differences between the number of average actions performed per game in each division. Only significant differences were found in 9 of the 48 specific technical-tactical gestures studied. So, the first conclusion in this study is the importance of analyzing the types of technical-tactical actions of goalkeepers, due to they can offer relevant information for training and competition.

KEY WORDS: Clearance, observational methodology, goal kick.

RESUMEN

El objetivo del presente estudio fue analizar las diferencias en el número y tipo de acciones técnico-tácticas de los porteros en competición en función de la división y de si juegan como local o visitante. Para ello, se han analizado 80 partidos con un total de 160 porteros de 1ª, 2ª, 2ªB y 3ª división española. Los resultados mostraron que no existen diferencias significativas entre el número de acciones medias realizadas por partido en cada división, pero sí se encontraron diferencias significativas en 9 de los 48 gestos técnico-tácticos específicos estudiados. Además, se encontraron pequeñas diferencias en cuanto al número de acciones en función de si los porteros juegan como local o visitante. Por tanto, la principal conclusión de este estudio es la importancia de analizar los tipos de acciones técnico-tácticas de los porteros ya que nos pueden ofrecer información relevante para el entrenamiento y la competición.

PALABRAS CLAVE: Despeje, metodología observacional, saque de puerta.

INTRODUCTION

In the last decades, football has become a subject of study for sport scientists. Since it is a team sport, it requires more complex analysis than individual sports because there are more and more complex factors affecting performance (Palau, López & López, 2010). Therefore, different technical, tactical, physical and psychological factors must be considered (Leo, Sánchez-Miguel, Sánchez-Oliva, Amado & García-Calvo, 2014). In this regard, studies have been published about football, its history and culture (García-Ocaña, 1994; FIFA, 2012; Martínez, 2001), its evolution along the world cups (Castellano, Perea-Rodríguez & Hernández-Mendo, 2008) and the individual differences in visual anticipation to block penalties in competition (Dicks, Davids & Button, 2010). There are also studies that have examined the influence of tactical and situation variables on offensive sequences during elite football matches (Sarmento et al., 2017), among others. This has fostered the proliferation of research papers involving all fields related to football (biomechanics, physiology, psychology, technique, tactics, etc.). Nonetheless, the majority of these studies focus on topics related to the different field player positions, while research about the goalkeeper is scarce. It is important to know the role of goalkeepers during matches in order to programme their training according to real competition situations. To this end, it is essential to analyse the goalkeeper's role in a football team during competition.

The football goalkeeper

In football, the goalkeeper plays a specific role since they occupy a unique position on the field within the team (White et al., 2018). The goalkeeper position has experienced an important evolution in the past decades. Furthermore, in modern football, the goalkeeper has to respond to technical-tactical demands within the offensive and defensive collective game. Therefore, they need to play the ball with feet very often, as well as to control the spaces between the defence and their goal in order to intercept the ball (Sainz de Baranda, Llopis & Ortega, 2005). All the above has led to better knowledge of offensive and defensive technical-tactical game concepts by the goalkeeper. As a result, apart from holding the defensive functions, the goalkeeper becomes more important at an offensive level, to the benefit of a more dynamic game and the preparation of rehearsed attacking plays (Sainz de Baranda et al., 2015). Technical-tactical skills are important aspects a goalkeeper must feel confident with, since they will allow them to develop other skills and improve team strategy. On one hand, technique refers to the ability of achieving the desired outcome by using a good movement pattern (Rebelo-Goncalves, Figueiredo, Coelho-e-Silva & Tessitore, 2016). Thus, by acting efficiently, unnecessary expenditure of the energy available is avoided during competition. On the other hand, tactics is the ability to correctly apply the technical skills, according to every specific situation and always following the game rules (Abellán, González Martí & Fernández-Bustos, 2009).Considering both definitions and real game context, the most appropriate training for the goalkeeper should not only consist in individual technical and physical training, but it would also be important to include tactical aspects. Consequently, the goalkeeper should train together

with their team mates and work on both offensive and defensive actions (Shamardin & Khorkavyy, 2015).

According to García-Ocaña (2008), the different technical-tactical actions performed by a football goalkeeper in competition can be classified into: blocks, interceptions, clearances or deflections, come-outs, shots, goal kicks and others. Using all these actions, Ruiz, Guerrero and Garrido (2007) discovered that the most frequently performed actions by goalkeepers from Spanish first and second divisions were blocks, goal kicks and foot passes, 17.55 per match on average. Similarly, blocks and foot controls were the most repeated actions by goalkeepers during the 2002 World Cup Korea/Japan (Sainz de Baranda, Ortega & Palao, 2008). In this case, goalkeepers completed 25.2 technical-tactical actions per match on average. These results are in accordance with those obtained later by Muñoz, Muñoz, Cayetano, García and Muñoz (2016) in professional goalkeepers during competition. Besides, Sainz de Baranda and Ortega (2002) analysed goalkeepers' technical-tactical actions during 1998 World Cup France and the European Championship 2000. Likewise, Sainz de Baranda et al. (2019) analysed goalkeepers' offensive and defensive actions during 2011 Women's World Cup Germany. They observed that goalkeepers from teams that went through after the group phase completed a higher number of offensive and feet actions than those from teams that were knocked out in this first phase of the championship. Furthermore, Hansen et al. (2017) observed that goalkeepers from teams that reached a better position in 2015 World Handball Championship Denmark completed a more successful technical-tactical intervention than those whose teams ended the championship in a worse place.

The differences between playing at home or away must also be taken into account in football. From a general perspective, Pollard (2008) proved that home teams had greater advantage to be successful in competition. In a like manner, Leite (2017) found out that playing at home provides an advantage for the final match result. The study conducted by Lago-Penas and Lago-Ballesteros (2011) concluded that home teams have greater probability of scoring goals and of shooting at the goal. Therefore, according to this research, goalkeepers playing away would have more opportunities to be involved in the game during competition.

Each of the previous results is relevant and must be considered when working with goalkeepers. Thus, according to Sainz de Baranda et al. (2005), an analysis on the football goalkeeper's action and participation could reveal the key factors in order to design tasks involving situations as similar as possible to football internal logics. In order to conduct a comprehensive analysis on the actions performed by the goalkeeper during competition, observational methodology is characterised by high scientific rigour, allowing for study of spontaneous behaviours leaving out external influence (Anguera, Camerino, Castañer, Sánchez-Algarra & Onwuegbuzie, 2017). Moreover, it is one of the most important resources to gain knowledge on the game (Ardá, Maneiro, Rial, Losada & Casal, 2014). That information will be needed for its later application to training and will allow for determining the priority contents to be addressed in specific training (Álvarez, 2012). Nowadays, the aim is to design comprehensive

training sessions for goalkeepers including technical, tactical, physical and psychological aspects (Leo, Sánchez-Miguel, Sánchez-Oliva, Amado & García-Calvo, 2014). Thus, the exercises of the goalkeeper training must be oriented to improve technique (Ion, Serghei & Constantin, 2018) and tactical aspects related to perceptual-cognitive skills (Rebelo-Goncalves et al., 2016). Besides, it is essential to include activities to work on anticipation (Lidor, Ziv & Gershon, 2012) in order to reduce movement time (Dicks, Uehara & Lima, 2011). This training must be twofold: on one hand, specific and individual work and, on the other hand, collective work. Nevertheless, the tasks completed in training must be oriented to the situations and actions that can appear during a real match. Up till now, goalkeeper's technical-tactical actions have only been analysed in international competition (Sainz de Baranda & Ortega, 2002) or in grassroots football (Bezerra, Sabino, Ferreira & Vasconcellos, 2018). However, to our knowledge, the actions performed in competition by goalkeepers from amateur or semi-professional divisions have not been examined. The differences between playing at home or away have not been analysed either. Consequently, the study presented below aims to increase the existing knowledge on the football goalkeeper and their behaviour in a competitive environment through the analysis of the technical-tactical actions performed during football matches of the different divisions.

AIMS

The aims of this study were: 1) to quantify the technical-tactical actions performed by the football goalkeeper per match and to analyse the differences among divisions (first, second, second B and third); 2) to analyse whether differences exist among the divisions under study regarding the number and type of technical-tactical actions performed by the football goalkeeper; and 3) to examine the differences in type and number of technical-tactical actions between playing at home or away.

MATERIAL AND METHODS

PARTICIPANTS

The sample analysed consisted in 160 goalkeepers (40 from each division). The divisions under study were: first division, second division, second B division and third division. From the second B division, group IV was selected, composed of clubs from the self-governing regions of Murcia, Castilla La Mancha, Andalusia and Extremadura. From the 18 groups of the third division, group XIV was chosen, composed of 20 clubs from Extremadura. Age and anthropometric characteristics of the goalkeepers under study are described in Table 1.

Table 1. Anthropometric characteristics of the football goalkeepers.

	DIVISION				
	First division (*n* = 40)	Second division (*n* = 40)	Second B division (*n* = 40)	Third division (*n* = 40)	χ^2
	M (SD)	*M (SD)*	*M (SD)*	*M (SD)*	
Age (years)	29.63 (3.87)	29.47 (4.56)	28.03 (4.63)	27.30 (4.89)	5.39
Body weight (kg)	86.23 (19.36) [a]	80.77 (3.61) [ab]	79.53 (5.36) [b]	79.00 (5.94) [b]	11.90**
Height (cm)	184.03 (20.02) [a]	186.80 (4.96) [ab]	184.97 (3.35) [b]	179.93 (3.35) [b]	12.53*

Note. *p < 0.05, **p < 0.01. The results of Kruskal-Wallis H test are indicated by superscripts [a] and [b], which refer to significant differences between divisions.

INSTRUMENTS

Observational methodology was used to quantify the technical-tactical actions performed by football goalkeepers during a match, since it is a useful strategy to increase understanding and real knowledge on the game (Mombaerts, 2000). This analysis method allowed for comprehensive assessment of the goalkeeper's activity, respecting its interactive nature and own context (competition) and ensuring the absence of direct intervention in the observation process (Anguera, Portell, Chacón-Moscoso & Sanduvete-Chaves, 2018).

Following García-Ocaña's (2008) guide about the different technical-tactical actions of the football goalkeeper, the following have been analysed and quantified in the present study: block, deflection, clearance, other clearances, involuntary deflection after come out, control, dribble, dodge, pass, goal kick, free kick, come out (1x1 and pass interception). As suggested by Ibarrola (2011), the following aspects have been taken into account in each of these actions: execution height (high, medium, low), performed with or without jump, and whether this jump was lateral or vertical. The observation sheet shown in Table 2 was used to collect these data. The sheet was divided into six columns, from more general to more specific (from left to right). For the present study, data were collected regarding the average number of total, general and specific technical-tactical actions per match. For a more global analysis of the general technical-tactical actions, only the 'action' column was used, shown in Table 2. However, for specific technical-tactical actions, the ball height was taken into account, as well as whether the action was performed with or without jump, and whether this jump was lateral (horizontal) or vertical. Therefore, for the analysis of specific actions, all possibilities contained in the first four columns of Table 2 were considered.

Table 2. Observation sheet for the different technical-tactical actions performed by football goalkeepers during competition

ACTION	HEIGHT/ LENGTH	JUMP	DIRECTION	HOME	AWAY
BLOCK	High	With jump	Lateral		
			Vertical		
		Without jump			
	Medium	With jump	Lateral		
			Vertical		
		Without jump			
	Low	With jump	Lateral		
		Without jump			
DEFLECTION	High	With jump	Lateral		
			Vertical		
		Without jump			
	Medium	With jump	Lateral		
			Vertical		
		Without jump			
	Low	With jump	Lateral		
		Without jump	Vertical		
	Opposite hand	Usually with jump			
CLEARANCE	High	With jump	Lateral		
			Vertical		
		Without jump			
	Medium	With jump	Lateral		
			Vertical		
		Without jump			
	Low	With jump	Lateral		
		Without jump			
	Opposite hand	Usually with jump			
CLEARANCE (OTHERS)	Punch	With jump			
		Without jump			
	Foot				
	Head	Usually with jump			
INVOLUNTARY DEFLECTION AFTER COME OUT	After come out				
CONTROL	Foot				
	Chest				
DRIBBLE					
DODGE					
PASS	Hand	Long			
		Short			
	Foot	Long			
		Short			
GOAL KICK		Long			
		Short			
FREE KICK		Long			
		Short			
COME OUT	1 x 1				
	Clearance				
	Pass				
	Pass interception				

PROCEDURE

This research was approved by the University Ethics Committee, following the guidelines established by the Declaration of Helsinki in 1964, as well as the ethical requirements set by the American Psychological Association (APA, 2009). Eighty matches of the first four Spanish football divisions of season 2016-2017 were watched: 20 matches of first division, 20 of second division, 20 of second B division and 20 of third division, and a total of 160 goalkeepers were analysed. Observation was conducted using a nomothetic, tracking, multidimensional design (Anguera, Blanco-Villaseñor, Hernández-Mendo & Losada, 2011).

The matches were viewed by one observer. Prior to the study, an intra- and interobserver training programme was conducted to ensure observer validity and reliability. This training process was designed taking the training phases supported by Anguera and Hernández-Mendo (2013) as reference and also based on the specific aims of the present research. Several professional goalkeeper trainers participated in the interobserver programme. All participants observed individually the same matches of each division included in the present study. Subsequently, once a group of experts had conducted a content analysis to examine the agreement among the different observations, the intraobserver training programme started. In this case, the researcher responsible for watching all matches for the present study viewed twice several matches of all divisions under study. The results of the two observations of the selected matches were compared, as well as the results of the direct and indirect observation of technical-tactical actions in competition. Likewise, the group of experts examined again the agreement among the different observations conducted.

With the aim to obtain objective results and to increase analysis variability, the observation was conducted in an intentional manner. Matches from the first and second competition rounds were watched. Moreover, all teams participating in each division were observed at least once. Matches with different dimensions and morphological characteristics of the playing field were observed. Lastly, goalkeepers' technical-tactical actions were analysed under different weather conditions. In this case, matches with different weather conditions, such as temperature, rain, sun, wind, etc., were selected.

Finally, the observation process of the selected matches was conducted following specific guidelines. Only one match was observed per day and it was done in the morning. Besides, all matches were observed in the same room, with good lighting and in silence to facilitate concentration.

STATISTICAL ANALYSIS

The data analysis was performed using the statistical package SPSS 19. Kolmogorov-Smirnov test was used to assess data normality. A run test was conducted to determine randomness and Levene's test was applied to confirm

the sample's homoscedasticity. According to the results obtained from these tests, a non-parametric, independent-sample analysis strategy was chosen. Subsequently, Kruskal-Wallis H test was applied to examine the differences in goalkeepers' technical-tactical actions performed during football matches of the different divisions (signification level set at $p \leq 0.05$). Furthermore, Mann-Whitney U test was used to analyse the effect of playing at home or away on the total number of technical-tactical actions performed by football goalkeepers during competition matches.

RESULTS

AVERAGE NUMBER OF TECHNICAL-TACTICAL ACTIONS PER MATCH

The average number of technical-tactical actions performed per match by goalkeepers from each division will be described below.
Goalkeepers from first division completed a total of 51.87 technical-tactical actions per competition match, on average. In the case of second division goalkeepers, the average was 49.74 actions. Second B division goalkeepers performed, on average, 46.83 technical-tactical actions and, lastly, third division goalkeepers completed 45.62 technical-tactical interventions per match, on average. However, after applying the statistical tests, the results did not reveal significant differences ($p < 0.05$) in the number of technical-tactical actions completed by goalkeepers among the divisions analysed.

GENERAL TECHNICAL-TACTICAL ACTIONS

Table 3 shows the number of general technical-tactical actions performed by the goalkeeper during competition, divided by division.

Table 3. Effect of the different divisions (first, second, second B and third) on the number of technical-tactical actions performed by goalkeepers during a match.

	DIVISION				
	First division (n = 20)	Second division (n = 20)	Second B division (n = 20)	Third division (n = 20)	χ^2
	M (SD)	*M (SD)*	*M (SD)*	*M (SD)*	
Blocks	5.72 (3.23)^{b}	7.92 (2.56)^{a}	7.59 (4.57)^{ab}	9.19 (3.39)^{a}	20.94***
Deflections	0.62 (0.63)	0.42 (0.59)	0.59 (0.94)	0.45 (0.67)	2.46
Clearances	1.18 (1.42)	0.92 (0.91)	0.83 (0.75)	0.71 (0.90)	3.72
Other clearances	2.79 (1.67)	2.82 (1.85)	2.59 (1.57)	2.45 (1.71)	1.00
Involuntary deflection after come out	0.41 (0.54)	0.44 (0.72)	0.34 (0.61)	0.77 (0.88)	5.95
Controls	10.92 (7.02)^{a}	7.47 (3.95)^{b}	5.66 (3.08)^{bc}	4.45 (3.01)^{c}	30.07***
Hand passes	3.46 (2.18)^{ab}	3.82 (2.19)^{a}	2.38 (2.09)^{b}	3.10 (2.00)^{ab}	9.71*
Goal kicks	9.90 (5.38)^{b}	10.92 (2.79)^{ab}	13.41 (4.84)^{a}	11.94 (4.96)^{ab}	11.26*
Come outs	1.82 (2.05)	2.68 (1.93)	2.24 (1.66)	1.77 (1.45)	6.01

Note. $*p < 0.05$, $**p < 0.01$, $***p < 0.001$. The results of Kruskal-Wallis H test are indicated by superscripts ^{a}, ^{b} and ^{c}, which refer to significant differences between divisions.

As it can be seen, the three most commonly used technical-tactical actions were, in this order, controls, goal kicks and blocks. By contrast, the least used ones by football goalkeepers were deflections, clearances and involuntary deflections after come out.

SPECIFIC TECHNICAL-TACTICAL ACTIONS

Table 4 contains the means of those specific technical-tactical actions for which significant differences were obtained, divided by division (first, second, second B and third).

Table 4. Differences in the number of specific technical-tactical actions performed by football goalkeepers from the different divisions (first, second, second B and third).

	DIVISION				
	First division (n = 20)	Second division (n = 20)	Second B division (n = 20)	Third division (n = 20)	χ^2
	M (SD)	*M (SD)*	*M (SD)*	*M (SD)*	
High block with vertical jump	0.83 (0.90)^{a}	1.05 (0.85)^{a}	1.23 (1.04)^{ab}	1.82 (1.03)^{b}	18.70***
Medium block with no jump	1.60 (1.55)^{b}	2.88 (1.80)^{a}	2.77 (1.77)^{a}	3.62 (1.95)^{a}	24.54***
Foot control	11.03 (7.11)^{a}	7.28 (3.92)^{ab}	5.33 (3.26)^{bc}	4.15 (2.95)^{c}	33.44***
High deflection with lateral jump	0.03 (0.16)^{b}	0.05 (0.22)^{a}	0.17 (0.38)^{a}	0.21 (0.41)^{b}	8.90*
Short hand pass	2.83 (1.93)^{ab}	3.00 (2.12)^{a}	1.77 (1.55)^{b}	2.15 (1.65)^{ab}	8.95*
Short foot pass	7.18 (6.54)^{a}	3.98 (3.21)^{ab}	3.27 (3.38)^{b}	2.15 (2.23)^{b}	16.84**
1x1 come out	0.02 (0.98)^{ab}	0.00 (0.00)^{a}	0.03 (0.19)^{ab}	0.22 (0.42)^{b}	11.66*
Come out and pass interception	1.23 (1.12)^{bc}	2.03 (1.39)^{a}	1.83 (1.39)^{ab}	1.12 (0.77)^{c}	11.77**
Long goal kick	4.40 (2.89)^{b}	6.65 (2.79)^{a}	8.60 (4.37)^{a}	7.18 (3.90)^{a}	21.21**

Note. *p < 0.05, **p < 0.01, ***p < 0.001. The results of Kruskal-Wallis H test are indicated by superscripts ^{a}, ^{b} and ^{c}, which refer to significant differences between divisions.

From the 48 specific technical-tactical actions examined in every division, 9 presented significant differences (p < 0.05). As regards the high block with vertical jump, the highest value was observed in third division, with no differences among the rest of divisions. In line with this, the medium block with no jump showed the lowest value in first division. The highest value for foot control corresponded to first division. The number of occurrences of this technical-tactical action decreased as the playing division decreased.
The lowest number of high deflections with lateral jump was performed in first division, and it is easy to notice that they were performed a much lower number of times than the other technical-tactical actions. With regard to short hand passes, the value observed in second B division was lower than in second division, but no significant differences were detected compared to first or third divisions. By contrast, first division goalkeepers performed a higher number of short foot passes than those from the rest of divisions.

The lowest number of come outs and pass interceptions corresponded to third division goalkeepers. And lastly, first division goalkeepers completed the lowest number of long goal kicks.

DIFFERENCES IN TECHNICAL-TACTICAL ACTIONS WHEN PLAYING AT HOME OR AWAY

The following table shows the means of all technical-tactical actions for which significant differences were obtained between goalkeepers playing at home or away, in all divisions examined (first, second, second B and third).

Table 5. Actions that showed significant differences between goalkeepers playing at home or away.

	HOME (n = 80)	AWAY (n = 80)	χ^2
	M (SD)	*M (SD)*	
High deflection with lateral jump	0.06 (0.23)	0.15 (0.36)	2.44*
Low clearance with lateral jump	0.18 (0.45)	1.38 (0.61)	2.01*
Long goal kick	6.24 (3.90)	6.88 (3.58)	1.99*
1x1 come out	0.04 (0.20)	0.21(0.77)	1.96*

Note. *p < 0.05: according to Mann-Whitney U test.

Using the home/away variable as fixed factor in the data analysis, it was observed that this factor only had a significant effect on 4 of the 48 actions under study, as shown in Table 5.

According to these results, goalkeepers playing away completed a higher number of clearances than those playing at home. Furthermore, goalkeepers playing away also performed more 1x1 come-out actions during a match. Therefore, these goalkeepers participated more frequently in this type of determining technical-tactical actions.

Moreover, goalkeepers playing away performed a larger number of long goal kicks than goalkeepers playing at home.

DISCUSSION

This study aimed to provide new knowledge on the number of technical-tactical actions performed by the football goalkeeper in different divisions and to find out whether there were differences in the number and type of these actions based on the playing division or on the fact of playing at home or away. In general, the results revealed that the goalkeepers of all divisions completed a similar number of technical-tactical actions, but the type of action seemed to vary depending on the playing division and between playing at home or away. More specifically, the first aim of the study was to quantify the total technical-tactical actions per match performed by the football goalkeeper during competition in the different divisions analysed. According to the results obtained, there were no significant differences among the divisions under study. Therefore, it could be stated that the variability in the number of actions

occurred in each division is not related to the goalkeeper's behaviour during competition. These differences may be related to the teams' playing style when they play at home or away (Muñoz et al., 2016), or they may be due to the differences between the attack and the defence, among others. They may also be the consequence of a larger number of shots from the opposing team because they complete more counter attacks (Tenga, Holme, Ronglan & Bahr, 2010). Another aspect affecting the number of interventions needed from a goalkeeper is their team's position in the table (Hansen et al., 2017).

The second aim of this research was to analyse the differences among all divisions under study as regards the number and type of technical-tactical actions performed by the goalkeeper during competition. The results obtained regarding general technical-tactical actions are in keeping with the study by Vales, Sambade and Areces (2002), who explained that the most commonly used skills were goal kicks, foot passes and blocks. Likewise, these three technical-tactical actions were the most frequent in goalkeepers from first and second division during season 2004-2005 (Ruiz et al., 2007). In line with this, the study conducted by Vales et al. (2002) agreed with the results of the present research with regard to the involuntary deflection after come out, it being one of the least frequently used by goalkeepers during competition. Nevertheless, Vales et al. (2002) only studied elite goalkeepers and not those competing at a semi-professional level. Moreover, that study did not describe technical-tactical actions very specifically, and did not take into account whether they included a jump or not, ball height or other action characteristics. Consequently, it could only be compared with the results regarding first division goalkeepers.

Among the specific technical-tactical actions examined, the high block with vertical jump was most commonly observed in third division. This could be due to a larger number of unsuccessful shots at the centre of the goal from medium or long distance. In line with the previous action, the medium block with no jump showed lowest occurrence in first division. With these data, the statement that being more successful towards the goal is directly related to quality and not to quantity gains veracity. In the case of the foot control, the number of occurrences decreased as the playing division decreased. An aspect that may be associated with this result is the playing field state, especially in those matches that were played under bad weather conditions (rain, cold, etc.), what may have hindered the performance of this technical-tactical action by the goalkeepers. Actually, grass quality and maintenance in first and second division fields are considerably better than in second B and third divisions. On the other hand, this type of technical-tactical skills may help trainers prepare and propose different tactical actions during competition (Sampaio & Maçãs, 2012). When comparing the foot control results with other studies, we found that goalkeepers from Ukraine's Premier League performed it less frequently during competition (Shamardin & Khorkavyy, 2015). Similarly, when comparing them with the study by Sainz de Baranda et al. (2008), goalkeepers from 2002 World Cup Korea/Japan performed fewer controls than goalkeepers from first and second divisions in the present study. Nonetheless, goalkeepers from second B and third divisions completed a lower number of foot controls than those analysed during the 2002 World Cup.

The high deflection with lateral jump was observed fewer times than the previous technical-tactical actions. However, short foot passes presented higher values in all divisions, especially in first division, where the highest number of short foot passes was found. This result disagrees with the study conducted by Sainz de Baranda et al. (2019), where female goalkeepers performed a higher number of long passes during 2011 World Cup. The differences observed in the come out and pass interception action may be due to shorter distance between the goalkeeper and the first defensive line in third division. To finish with the specific technical-tactical actions, as regards the long goal kick, the results revealed that Spanish first division players' type of game was mainly based on short-distance technical-tactical actions. These results are in keeping with Muñoz et al. (2016), although the number of long goal kicks performed by professional goalkeepers was lower than those completed by the goalkeepers analysed in the present study. Therefore, professional football is based on more collaborative instead of direct playing, as observed in second B and third divisions. In these two divisions, long passes and direct game prevail, from the starting or defensive areas to the ending areas, close to the opposing team's goal. Moreover, these playing differences may appear as a result of the match relevance or the moment of the season when it takes place (Taylor, Mellalieu, James & Barter, 2010).

Lastly, the third aim was to examine the differences in the type and number of technical-tactical actions performed when playing at home and away. In this case, a higher number of decisive interventions of the goalkeeper playing away were observed. In a competition context, due to the atmosphere generated, it is more difficult for players of the away team to communicate effectively (Boyko, Boyko & Boyko, 2007). In fact, the four actions that showed significant differences were performed a low number of times per match. However, according to Sainz de Baranda et al. (2008), despite these technical-tactical actions being seldom performed in competition, they are key actions in a match and must be taken into account. Considering that the differences between the actions of the home and away teams are minimal, it can be stated that home teams are more likely to achieve better results than away teams, since the away goalkeeper is involved in a larger number of actions (Muñoz et al., 2016). Besides, the results regarding the long goal kick are in agreement with Muñoz et al. (2016). According to these authors, when a team plays at home, it tries to perform a more elaborate and collaborative game, starting from the goalkeeper. By contrast, the construction of the away team's game is more based on direct and long-distance actions. It is important to highlight the large variety of technical-tactical actions executed by a football goalkeeper during competition (García-Ocaña, 2008). Therefore, they are very useful and must be considered when designing the weekly training programme. Such programme must be adapted to a specific context and designed jointly with all technical staff members. By doing so, every goalkeeper will train in a more specific and individualised manner.

CONCLUSIONS, LIMITATIONS AND FUTURE RESEARCH LINES

The data collected and analysed about the football goalkeeper's technical-tactical demands depending on playing division have led to the following

conclusions: 1) Since no significant differences were found in the total number of technical-tactical actions executed by goalkeepers, it can be stated that decisive aspects in the goalkeeper's performance are due to factors that are external to them and their performance during competition. Therefore, when designing training sessions, the average number of technical-tactical actions per session should not be different among the analysed divisions. 2) The goalkeeper's playing division had a significant effect on 9 specific technical-tactical actions. Furthermore, the technical-tactical skill most commonly used by goalkeepers from the four divisions under study and performed with the upper limb was the block. Moreover, it was observed that good control of the ball with the feet is essential for a goalkeeper, regardless of their playing division. 3) The venue of the next competition must be taken into account to design the football goalkeeper's technical-tactical training programme, since slight differences were found in the number of actions depending on the type of field.

According to the results obtained in this study, knowledge on technical-tactical actions is a paramount step in the analysis of a football goalkeeper's performance during competition, both at specific (individual) and collective (together with the team) levels. Consequently, it is useful to practitioners from all divisions examined in order to design a training programme that is adapted to the football goalkeeper competition context.

Considering the above, the practitioners responsible for the goalkeeper training design must pay attention to the learning and perfection of all types of block. The mastery of this technical skill is crucial to achieve an optimal outcome in competition, since it is very used during competition and, when executed correctly, allows for keeping ball possession and prevents the opponent from getting a second chance. It is also essential to teach goalkeepers how to play with feet from early ages. To this end, they need to be included in exercises with the whole group, where this type of technical-tactical actions is frequently executed within a competition environment.

Although some technical-tactical skills are rarely used in competition, they are decisive in the match final result and goalkeeper trainers should take them into account along the whole season in order to achieve better performance.
All in all, the ultimate aim of the proposed study was to approach the football goalkeeper's training in a comprehensive manner, insisting on the integration of all technical-tactical concepts. It was also aimed to improve specific goalkeeper training, based on the results of the present study and depending on their playing division.

Among the limitations of the study, it was not considered whether the technical-tactical actions were performed correctly and they led to an outcome in the match. It was not taken into account either whether the actions were offensive or defensive. Another limitation was the heterogeneity in observation sheets and instruments for technical-tactical action assessment, as every author used specific terminology and order.

It would be interesting to continue in this research line, increasing the sample of matches analysed by including other second B and third division groups, in order to make these two divisions more homogeneous. Another future aim could be to compare female and male football at national level. Moreover, it would also be interesting to examine the technical-tactical actions of goalkeepers from other relevant European leagues and to compare the results with those from the present study. Lastly, it would be useful to analyse the outcome of the actions performed by goalkeepers from each division during competition.

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