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Analysis of Playing Area Dimensions in Spanish Professional Soccer: Extrapolation to the Design of Small-Sided Games With Tactical Applications

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Abstract

The aims of this study were to examine: (1) the width and length dimensions of the playing area in 4v4 situations during competition, (2) the influence of the pitch zone where the ball is on 4v4 dimensions, and (3) the influence of match status on the dimensions of 4v4 situations. Data were collected from 25 matches from the Spanish *La Liga* of the 2007–08 season using the Amisco® system. Length, width and individual playing area of the rectangle that included the nearest four players to the ball from~~of~~ each team were collected in a total of 8,727 4v4 game situations. The pitch-zone and match status were also considered for these 4v4 situations. To determine factors that affect 4v4 game situations, one-way ANOVA was used. The influence of the pitch-zone where 4v4 situations took place showed significant differences ($p<0.001$) between the zones where different principles of the game apply. The areas of the 4v4 situations ranged from 14.70±4.69 x 17.18±6 m to 17.09±5.16 x 20.34±5.93 m, and the individual playing area of the 4v4 playing rectangle ranged from 46.33±20 to 35.48±16.95 m^2, being larger in the central zones of the pitch. The length of the 4v4 rectangle showed a significant reduction in the closer zones to the goal. Match status did~~seemed~~ not ~~to~~ affect the dimensions of these 4v4 game situations significantly. The findings of this study suggest that the size of 4v4 situations proposed for training should be designed according to the pitch-zone where playing actions take place.

Keywords

match analysis, individual playing area, playing tactics, soccer training, soccer drills

INTRODUCTION

Small-Sided Games (SSGs) are a popular soccer training method applied in team sportsdue to their high efficiency (30). The possibility to combine the technical and tactical demands of competition besides sport-specific conditioning stimulus has caused SSG to increase their popularity in adult and youth soccer (35), and to be analyzed in scientific studies from different perspectives (1), with 4v4 SSGs one of the most popular ones. However, few studies have analyzed the tactical implications of SSGs, mainly because of limitations in defining tactical playing behaviors and evaluating them (15). These tactical behaviours related to SSGs are determined by the constant interaction between team-mates and opponents (10), and by the principles of the game (18) that take place at every moment. A collective analysis of positional variables about the relative position of the players on the pitch should be made to know the tactical involvement in SSGs (15). Variables considering the position of players such as covered area or centroids are useful for evaluating tactical behaviors in SSG (17, 36) as they provide measures of players distribution on~~in~~ the pitch. Therefore, including positional variables in SSG analysis would help to gain insight into their tactical demands.

The work by Folgado, Lemmink, Frencken and Sampaio (15), made a novel proposal about the consideration of players positioning on the playing space as a tactical variable. The relationship between length and width of each team in the playing space, understood as the distance between the farthest players in the spatial axis x (length) and y (width) (Figure 1), was considered as the variable of tactical involvement in the SSGs proposed in this study. In an analysis of a soccer game using scientifically validated match analysis technologies (e.g. Amisco, Prozone, Opta) (4, 12, 28), a rectangle of play with dimensions of length in the *x-axis* and width in the *y-axis* can be formed. This rectangle of play can entail only players directly involved in the action with the ball, especially in situations where possession is

controlled by either of the two teams (16), in accordance to the principle of play of keeping the ball (18). This playing rectangle defines a small playing area within the official pitch, where furthest players away in that selected small group determine the outer limits of the playing area (Figure 1).

[insert Figure 1 here]

Location of the ball on~~in~~ the pitch during the game influences tactical behaviors of players (37), while the position of players and distances between them vary depending on the pitch-zone where the ball is (16). Moreover, match status also seems to affect tactical behaviors of players (40). A team winning, drawing, or losing employs different tactics depending on these situations to achieve their aims. Therefore, the location of the ball on~~in~~ the pitch and match status could also influence small playing area game situations during a soccer game.

One of the most important aspects attributed to SSGs is that it is a method that allows a specific and transferable preparation for the competition (7, 29). SSGs are considered as optimal tasks used to fulfill the fitness requirements while developing decision-making and technical and tactical performance (1). This approach presents an advantage in comparison with running conditioning drills because players can achieve the conditioning training doing a more specific task. The use of SSGs requires proper understanding of the design variables, especially the size of the playing area, that may determine the achievement of the intended aim. In previous studies, a game situation with a specific size is usually designed and then the physiological, technical or tactical requirements are analyzed. However, the dimensions of the playing area proposed lack a rationale related to the situations of interaction in limited spaces that appear during competition and which may justify even further the value of SSGs. The

spatio-temporal requirement of SSGs designed in training is determined by the available playing space for each player within the total space, defined as *Individual Playing Area* (IPA), and it should be considered as a critical variable for the ~~right~~ appropriate design of SSGs. In previous studies in which 4v4 SSGs were analyzed, the proposed IPA of the playing rectangle was highly variable; between 67 m^2 (29) and 250 m^2 (33), with a mean length of 31.7m and a mean width of 25.9 m.

Changes in the size of the pitch area influence the intensity of SSGs (21). Previous research showed that HR, RPE and blood lactate concentration increased when the pitch area was also increased (31, 35). Similarly, Casamichana and Castellano (5) revealed that the physical and physiological workload was higher when the individual playing area increased in SSGs. Their findings showed an increment in total distance covered; distances covered in low-intensity running, medium-intensity running, and high-intensity running; maximum speed; and sprint frequency when using larger areas with the same number of players. This suggests that increasing the individual playing area in SSGs would be useful to make the SSG more physically demanding. Therefore, the size of the pitch area in SSGs is a variable that coaches and practitioners should consider in soccer training.

The present study analyzed playing area dimensions of reduced space situations during elite competition involving the nearest four players from each team to the ball to obtain objective information from soccer match play to extrapolate it to training drills. Based on the analysis of competition, the aim is to obtain new knowledge to enable a more specific design of 4v4 SSGs about the variable size of the playing area employed, thereby enhancing the overall training process in soccer. Therefore, considering this novel design and approach, the aims of this study were to analyse (1) the width and length dimensions of the playing area besides the

spaces of individual interaction in 4v4 situations generated during competition, (2) the influence of the pitch zone where the ball is on 4v4 dimensions in match play, and (3) the influence of match status on the dimensions of 4v4 situations.

METHODS

Experimental Approach to the Problem

Match-play data of the Spanish *La Liga* soccer league were collected from the season 2007-2008. Data sample were collected from 25 matches involving five teams (five matches for each team). The Amisco® match analysis system was used to gather the width, length and Individual Playing Area of 8,727 4v4 situations during games. The variables width and length were provided by the match analysis system, and to calculate the Individual Playing Area, the playing area of the 4v4 situation (width x length) in m^2 was divided by the eight players involved. The position of the ball was also recorded according to the 6 different areas of the pitch done by the match analysis system to analyze its influence on the dimensions of the 4v4 situations. Zone 1 corresponded to the zone closer to the own goal and zone 6 corresponded to the zone closer to the opposite goal. Match status, considering 5 different levels (losing by 2 goals or more, losing by 1 goal, drawing, winning by one goal, and winning by 2 goals or more) was also recorded in order to analyze the effect on the dimensions of the 4v4 match-play situations.

Subjects

Twenty-five Spanish matches from the Spanish *La Liga* involving five different teams were monitored during the 2007–08 season using a multiple-camera match analysis system (Amisco Pro®, version 1.0.2, Nice, France). ~~Length and width of the rectangle that included the nearest four players to the ball of each team were obtained from collected data using the~~

~~Animation Mode of the Amisco® semi-computerized match analysis system.~~ Ethics approval for all experimental procedures was granted by the Human Research Ethics Committee from the local university. Written permission from the company Amisco® was obtained prior to the start of the study.

Procedures

The movements of all 22 players were observed during the entire duration of the match using eight synchronised cameras located in the stadium (sampling frequency 25 Hz). Previous research proved that the Amisco® system provides reliable and valid data (32), and other studies have employed this technology to investigate physical (6) and tactical aspects in soccer (14, 24, 34).

For data collection, a total of 8,727 4v4 game situations were recorded. We considered the 4v4 playing area rectangle as the area formed by the nearest four players of each team to the ball. Players on the periphery of the selected area defined the limits of the rectangle (Figure 1). The cases where the nearests players to the ball did not allow an equal distribution of 4 players per team (e.g. a fifth player from one team included in the selected area to obtain the fourth player of the opposite team) were not considered for data collection. The 4v4 playing area was selected by observers according to previous criteria, and then length and width measurements of these areas were retrieved from the software. The 4v4 situations were registered every 5 seconds throughout the game, only including the 4v4 situations where the players were in possession of the ball in open play. The individual playing area of SSGs can be calculated by dividing the pitch size by the number of participating players (5, 20). In the present study, the individual playing area in 4v4 situations was determined by dividing the area of the rectangle that included an interaction between 4 players of each team by 8 (the

total number of players involved). The referred rectangle was defined as the one composed by two horizontal lines parallel to the touchlines and two vertical lines parallel to the goal lines (Figure 1). The pitch zone was recorded for each 4v4 game situation. Depending on the position of the ball, the collected data corresponded to one of the 6 zones in which Amisco® divides the pitch (Figure 2). The team in possession of the ball determined the playing pitch zone. Zone 1 was the nearest zone to the goal of the team with the ball, and zone 6 was the nearest zone to the opponent's goal. To evaluate the reliability of the observation process, four matches were double checked, obtaining acceptable levels for Kappa index ($k > .96$) and intraclass correlation ($ICC > .98$) for the following variables: the position of the ball, length and width. The latter two corresponding to the 4v4 situations.

[insert Figure 2 here]

For the variable match status, it was divided into five levels, taking the home team as a reference when the 4v4 game situation was registered; winning by one goal (+1), winning by two goals or more (+2), drawing (0), losing by one goal (-1), and losing by two goals or more (-2).

We conducted a pilot study prior to the data collection procedure and based on its results we decided to use data collected every five seconds and only when the ball was in play. This procedure was deemed adequate considering our study aims as well as the feasibility of the whole procedure. To exclude the influence of set plays on players' positions, we decided to use the data collected from five seconds after the set play was taken and only at the moments where one team had the possession of the ball under control. Duels, long pass, kick off, throw

in, goal kick, free kick, corner kick and penalty kick were all considered as set plays and were not considered for the record.

Statistical Analyses

A one-way analysis of variance (ANOVA) was used to compare differences in the individual playing area, length, and width of 4v4 game situations according to the six pitch zones and the five match status levels. Data are presented as means and standard deviations, and corresponding 95% confidence intervals were also calculated. When significant effects were found, Games-Howell post-hoc comparisons were applied between individual pairs of pitch zones and match status levels. The effect size was calculated using eta squared (η^2). An eta squared effect size of $\eta^2 = 0.01$ was considered a small effect size, an effect size of $\eta^2 = 0.06$ was considered a medium effect size, while $\eta^2 = 0.14$ was considered a large effect size (8). All statistical analyses were carried out using IBM SPSS Statistics 19.0 for Windows, and alpha levels were set at $p<0.05$ for ANOVAs and $p<0.01$ for the post-hoc comparisons.

RESULTS

Position of the ball proved to have a significant small effect on width ($F = 73.26$, $p < .001$, $\eta^2 = 0.040$, 90% CI [0.033, 0.047]), length ($F = 31.58$, $p < .001$, $\eta^2 = 0.018$, 90% CI [0.013,0.022]) and Individual Playing Area ($F = 60.91$, $p < .001$, $\eta^2 = 0.034$, 90% CI [0.027,0.040]) of the 4v4 game situations. Match status seemed to have a statistically significant but trivial effect on width ($F = 5.06$, $p < .001$, $\eta^2 = 0.002$, 90% CI [0.001, 0.004]), length ($F = 3.50$, $p < .01$, $\eta^2 = 0.002$, 90% CI [<0.001,0.003]) and Individual Playing Area ($F = 5.58$, $p < .001$, $\eta^2 = 0.003$, 90% CI [0.001,0.004]) of the 4v4 game situations.

The IPA in 4v4 game situations during competition presented significant differences depending on the pitch zone where the action took place, except between zone 1 with zones 5

and 6, zone 5 with zone 6, and zone 2 to zone 3 (Table 1). The statistical similarity appears in those zones of the pitch with similar tactical objectives.

The IPA values obtained varied from 46.33, SD = 20 m^2 to 35.48, SD = 16.95 m^2 (Table 1). The IPA was greatest in the central pitch zones (2, 3 and 4) and significantly reduced on~~in~~ the pitch zones closest to the goals (1, 5 and 6). The action in zone 1 showed the smallest IPA value (35.48, SD = 16.95 m^2), increasing in zone 2 ($p<0.001$) and reaching its highest value in zone 3 (46.33, SD = 20 m^2), although the differences between the IPA in zones 2 and 3 were not statistically significant. The IPA in zone 4 decreased as the action was approaching the opponent's goal, and the IPA decreased again significantly ($p<0.001$) in zones 5 and 6 with smaller values than in the central zones of the pitch ($p<0.001$).

[insert Table 1 here]

Width was greater than length in all the areas of the playing rectangle determined in 4v4 game situations (Figure 3). The length of the playing rectangle showed the smallest values in zones 1 and 6, being greater in zones 2, 3 and 4 ($p<0.001$). No significant differences appeared between zones close to the goals (1, 5 and 6) or between zones 2 and 3. In these central zones, the playing area was also greater in width, reaching the highest value in zone 3 (20.34, SD = 5.93 m^2).

[insert Figure 3 here]

The differences in length and width and the IPA values in relation to the five match status levels considered were not significant in any case, except between the 4v4 game situations registered in which the home team is drawing in comparison with moments in which the same team is losing for one goal of difference (Table 2). The IPA was greatest when the home team was losing for one goal of difference (44.30, SD = 21.06 m^2). The greatest value of length (19.5, SD = 6.11 m) during the game situation with this match status could determine this high value of the IPA. The lowest value of the IPA (41.45, SD = 19.15 m^2), maybe also determined by the lowest length value of the playing rectangle, appeared with a match status in which the home team was winning by two goals or more (+2).

[insert Table 2 here]

DISCUSSION

The aims of the present study were to analyse the width and length dimensions of the playing area ~~besides~~ and the spaces of individual interaction in 4v4 game situations during competition, as well as the influence of the pitch zone where the ball is on 4v4 dimensions in match play and the influence of match status on the dimensions of 4v4 situations. Among the main findings of this study it should be noted that the mean dimensions of the playing area in 4v4 situations during competition were 16.34, SD = 5.11 m long, 19.08, SD = 5.98 m wide, and 42.38, SD = 19.71 m^2 for the IPA. These results were lower in comparison with other studies in which the IPA of the 4v4 SSGs were, for example, 94 m^2 (22), 187 m^2 (27), or even 250 m^2 (23). These results showed considerably smaller areas in comparison with the dimensions proposed so far in previous works that have analyzed and justified the use of 4v4 SSGs as a training method in soccer (9, 11, 13, 19, 20, 22, 26, 27, 29, 31, 33). The use of these 4v4 match play situations in training would improve more specifically the technical-

tactical demands. However, a complete conditioning training would not be achieved by only using SSGs in training. Coaches and practitioners should also implement Large Sided Games or other running drills to cover the physicals demands typical of soccer.

To the best of our knowledge, this is the first study that analyzed elite soccer match-play to adapt playing area dimensions of SSGs during training. The work by Owen, Twist and Ford (29) gives the smallest value of IPA proposed so far regarding 4v4 games (62,5 m^2), which is still much greater than the value of 42.38 m^2 obtained from this study. Therefore, it seems that playing space available for players in 4v4 situations during competition is smaller than the ones suggested for SSG training drills. These smaller distances to the opponents will influence technical and tactical behaviours associated with the decision-making process (2). Time and space available for playing actions seem to be more limited in situations of reduced interaction than appear in competition, increasing the difficulty in developing a satisfactory move.

The results also showed that the 4v4 playing area size during competition was wider than longer in all zones of the pitch. According to the studies reviewed, most of them suggested a SSGs size longer than wider, except the studies by Fradua, Zubillaga, Caro, Fernandez-Garcia, Ruiz-Ruiz and Tenga (16) and Rampinini, Impellizzeri, Castagna, Abt, Chamari, Sassi and Marcora (31). The present study used data from official match-play that showed that playing space in 4v4 situations is wider than longer. Previous research did not have any reference of 4v4 playing areas in competition. Therefore, this is a possible reason why the vast majority of studies used SSGs sizes resembling the soccer pitch proportions (i.e. longer than wider).

SSGs are considered a valuable training method due to the specific preparation of players and the high transfer of acquired learning to competition (29). However, we believe that a proper choice of playing area size is important for the success of this training method (38). Reducing the size of the playing area, as well as keeping the length-width ratio and justification of the dimensions based on conditional or technical training objectives, do not seem to generate SSGs representative of real competition situations. In addition, neither the proportional size reduction from overall game situations as argued in the study by Fradua, Zubillaga, Caro, Fernandez-Garcia, Ruiz-Ruiz and Tenga (16) seems to generate representative SSGs. To our knowledge, this mentioned work is the only one with a similar approach to the objectives of this study; the design of more specific SSGs based on prior analysis of competition. The Amisco® system can analyze playing area size in 10v10 situations, considering the rectangular area of the pitch which includes all players from both teams, excluding goalkeepers. The study by Fradua, Zubillaga, Caro, Fernandez-Garcia, Ruiz-Ruiz and Tenga (16) proposed a proportional extrapolation of the dimensions obtained in this global 10v10 situation to design specific SSGs related to real game situations, taking as reference the mean value of the IPA proposed for 10v10 situations in the study (84.1 m^2). However, specific analysis of 4v4 situations measured in this study showed a smaller mean value of the IPA (42.38 m^2), probably due to the focus of attention that the ball generates that cause concentration of players around it. We also consider, according to the results of this study, that it is essential to change the orientation of the playing rectangle in SSGs so that the area is greater in width than length.

Another major finding ~~of this study~~ was the significant differences between playing area dimensions depending on the zone where the action took place. The tactical objectives for each zone (3) and the principles of play associated with them (18) seem to affect the

characteristics of the game situations. For instance, as the action gets closer to the goals (zone 1 and 6), dimensions of playing areas decrease. Decisive actions may occur in these zones that result in scoring or preventing a goal. Playing areas with a larger length facilitate attackers' actions (38). Therefore, defenders seek to hinder the action of the player with the ball through a reduction of interpersonal distance; and therefore, time to execute the action, that moreover prevents opponents from maintaining ball possession or produce shots on goal. Furthermore, ~~the study by~~ Vilar et al. (39) stated that when defending team players reduced the distances with respect to the player with the ball, the attacking team-mates also tend to get closer to the player with the ball to facilitate passing options that will enable the team to keep possession of the ball. As a result of these collective movements towards the ball holder, playing area dimensions of the primary game situations are reduced. These tactical behaviors characteristic of being near the goals may justify the reduced values obtained, especially in relation to the length of the rectangle generated in 4v4 situations recorded during competition. The intention of attacking players to reach the opposite goal and the central zones that allow shots may determine that significantly smaller widths appear in zones 1, 5 and 6 in comparison with the central areas of the pitch.

The results obtained in central zones of the pitch could also be associated with the tactical behaviors of players in relation to momentary positional variables, which may explain the greatest dimensions of 4v4 game situations in central zones. A possible reason for the highest length value in zone 3 could be the increase of the distance between players when the defending team retreats. ~~The retreat of the defending team that usually happens during matches increases the distance between players, which could generate the highest length value in zone 3 of all those obtained although the width of the playing rectangle was still higher.~~ The work by Vilar et al. (39) confirmed that although the distance of individual interaction

between the player with the ball and the nearest defender is reduced, the furthest defenders from the player with the ball tend to move backwards to put themselves in advantageous defensive positions to defend the player with the ball if he overcomes the nearest defender. We believe that these movements may also be associated with the aim of occupying a larger amount of space on the pitch, limiting possibilities for the attacking team to progress through long passes.

It should be noted that in all zones of the pitch, especially in central zones, the reduced playing rectangle is larger in width than in length. Usual tactical behaviours and players positioning in offensive phases of the game may account for these results. It could be considered that when the team intends to advance towards scoring areas, it is usually necessary to overcome the position of defenders. This progression through the defensive lines is generally complex. At the moments when defenders reduce the distance to the player with the ball, the movements by his attacking team-mates to help him to keep the ball (39) can be considered as supportive movements that allow safer play in width (*y-axis* of the playing space). Especially in central zones of the pitch, one of the most important principles of the game is keeping the ball. The retreat of the farthest defenders from the ball and these tactical behaviours that generate greater security for the player with the ball to pass could explain why the greatest dimensions of 4v4 situations arose in central zones of the pitch.

Previous studies showed influences of match status in tactical, technical and physical aspects in soccer (22, 25). According to the results of this study, the position of players and dimensions of the playing rectangle registered were not significantly affected by match status. Differences appeared only between scores 0 and -1. However, the dimensions of the playing rectangle created when the team was losing for one goal could be associated with the frequent

tactical behaviors of forward movements to reach the opposite goal, therefore increasing the distance between the players. It could be the reason for the highest value of the playing rectangle dimensions in which the nearest eight players (4v4) to the ball are involved and can be considered a research objective in futures studies.

This study presents some limitations. Although the Amisco® match analysis system has been proved to provide valid and reliable data (32), it only considers the official soccer pitch measurements. It is possible that the size of 4v4 situations varies in larger or smaller pitches. We are aware of the need to adapt SSGs playing area dimensions according to the age and level of soccer players in a team (38). Another limitation of the study could be that data was collected only from a specific elite level and should be considered with caution. Sizes for 4v4 situations could be different for lower level and youth players. Therefore, the sizes proposed for 4v4 situations should be adapted by coaches and practitioners according to the level and age of players. However, the results of this study can be used as a reference for the design and development of new research with similar approaches.

PRACTICAL APPLICATIONS

~~The results of this study show that new approaches should be made for the design of 4v4 SSGs when aiming at a specific preparation for elite players.~~ ~~The~~ Our results suggested that coaches and practitioners of elite level teams should use smaller area sizes in~~of~~ 4v4 SSGs for soccer training in comparison with the sizes proposed in previous studies. Moreover, these playing areas should be wider than longer to recreate the match-play conditions. Sizes from around 15 m long x 17 m wide to 17 m long x 20 m wide are the ones advised for training 4v4 match-play situations. It would also be recommended to use bigger sizes of that range for training 4v4 situations concerning the central areas of the pitch, and smaller sizes for areas

close to the goals. A reduction of the IPA will result in less space and time available for the task, preparing for the decision-making process and optimal technical execution for the game. Moreover, it is necessary to adapt training drills according to different tactical requirements of each pitch-zone. Practical applications of the present findings from elite soccer analysis can increase the specificity of SSGs, improving their relationship with the real game, and thereby allowing a player preparation through the most appropriate and effective training.

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Figure 1. The playing area involving four players from each team closest to the ball at the time of possession of a controlled ball. Length (x-axis) and width (y-axis) dimensions in meters generated using the Amisco® system.

Figure 2. Pitch Zones by Amisco Pro®

Figure 3. Length and width of the rectangle covering the nearest eight players to the ball (m) and individual playing area (m2) for different positions of the ball on the pitch.

Figure 1

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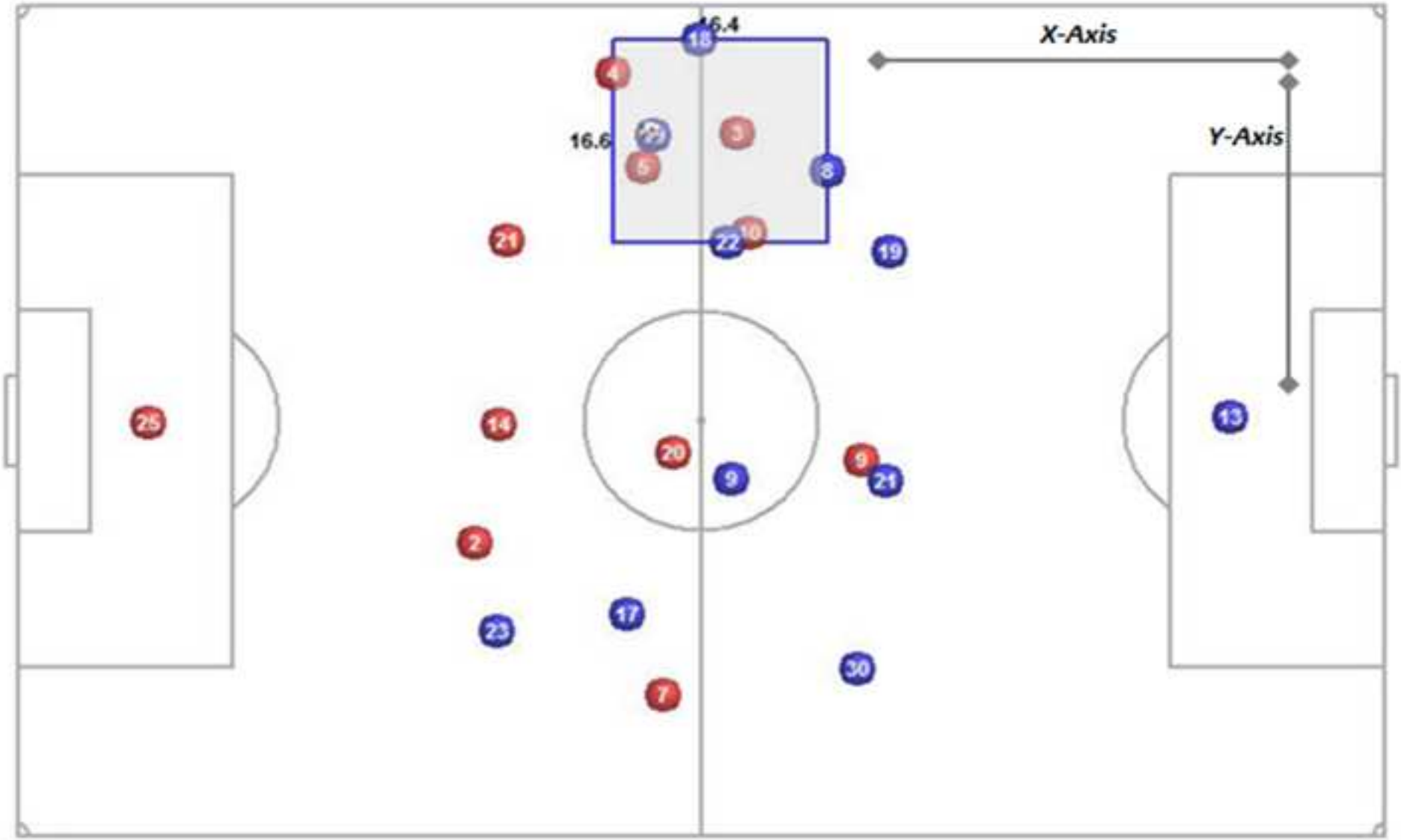

Figure 2

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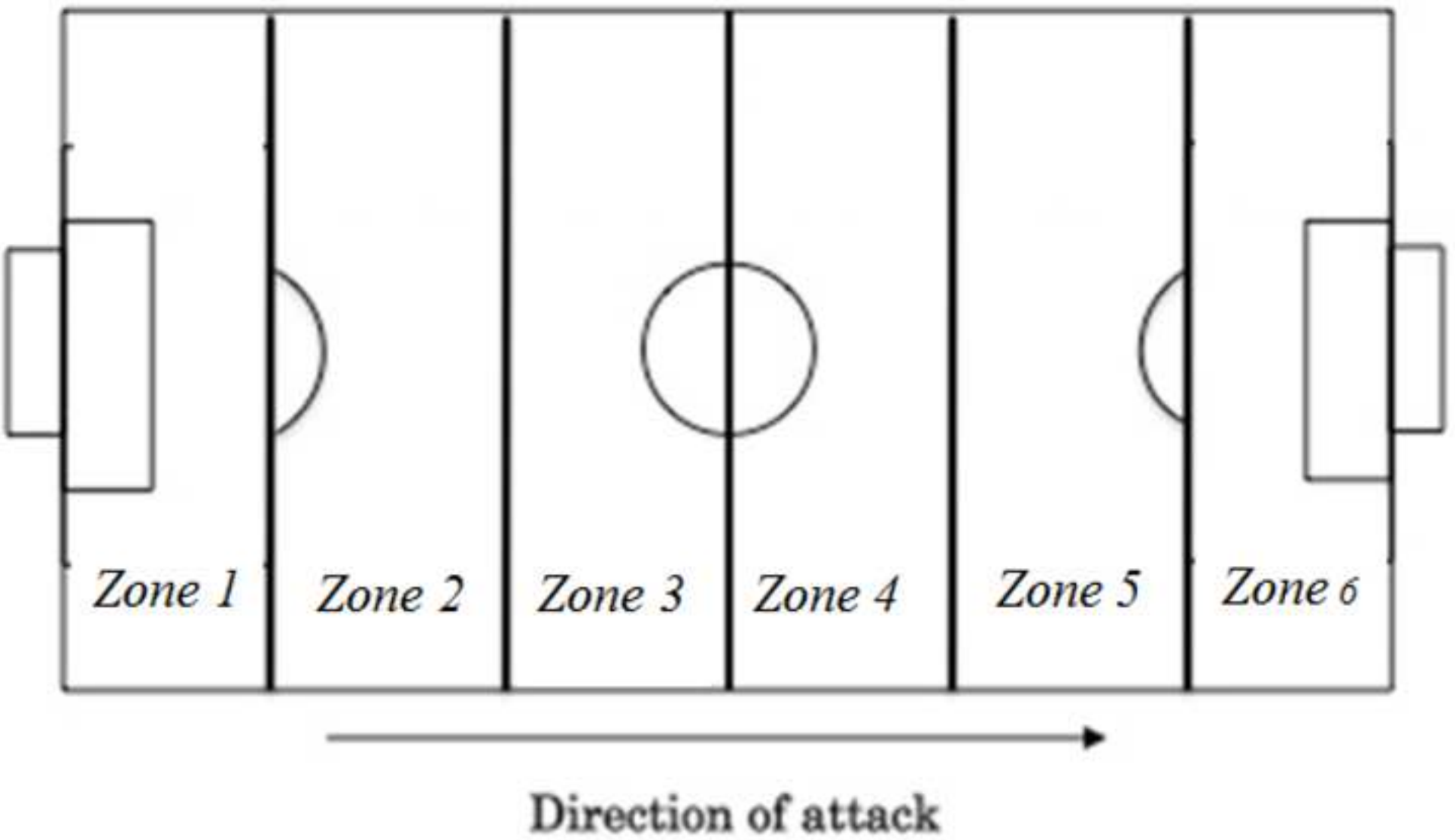

Figure 3

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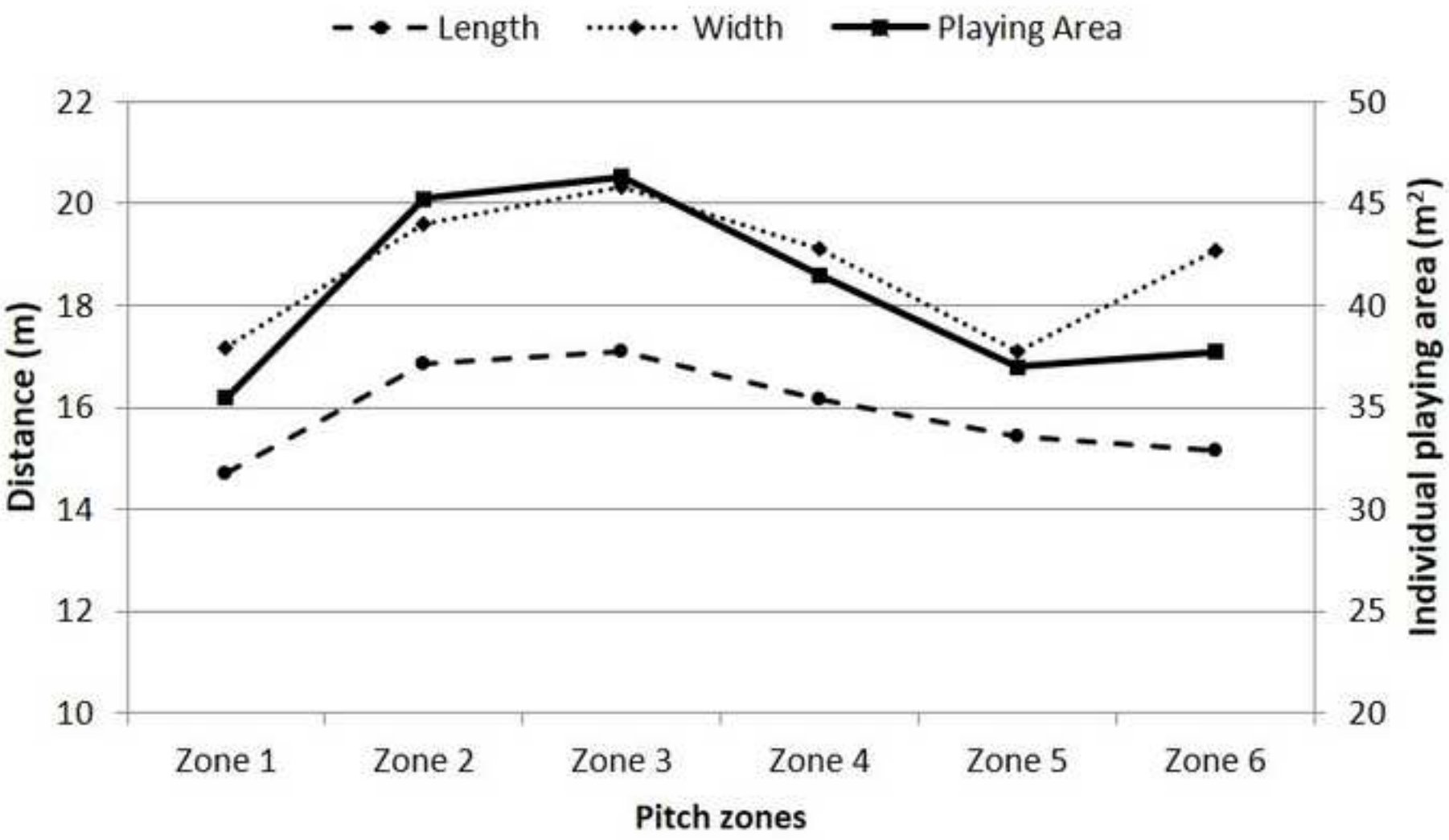

Table 1

Table 1. Individual playing area (m^2), length and width (m) of the rectangle covering the nearest eight players to the ball (four from each team), according to the six zones indicating the position of the ball on the pitch (mean ± SD).

Position of the ball	Individual playing area (95% CI)	Length (95% CI)	Width (95% CI)
η^2	*0.034*	*0.018*	*0.040*
Zone 1	35.48 ± 16.95 (32.52, 38.45)	14.70 ± 4.69 (13.89, 15.53)	17.18 ± 6.00 (16.14, 18.24)
Zone 2	45.24 ± 22.12 (43.94, 46.55)	16.85 ± 5.35 (16.54, 17.17)	19.59 ± 6.25 (19.23, 19.97)
Zone 3	46.33 ± 20* (45.58, 47.08)	17.09 ± 5.16* (16.90, 17.29)	20.34 ± 5.93 (20.13, 20.57)
Zone 4	41.49 ± 17.77 (40.83, 42.15)	16.17 ± 4.74 (16.00, 16.36)	19.12 ± 5.57 (18.92, 19.34)
Zone 5	37 ± 19.32† (36.07, 37.94)	15.43 ± 5.23† (15.18, 15.69)	17.11 ± 5.93† (16.83, 17.40)
Zone 6	37.71 ± 19.28†‡ (35.67, 39.76)	15.16 ± 5.28†‡ (14.60, 15.72)	19.08 ± 5.98†‡ (16.64, 17.90)

Note: Zone 1 is the nearest to the goal of the team in possession while Zone 6 is the nearest to the opponent's goal. There were differences ($P<0.01$ or $P<0.001$) between all positions of the ball, except: * No difference to Zone 2; † No difference to Zone 1; ‡ No difference to Zone 5.

Table 2

Table 2. Individual playing area (m^2), length and width (m) of the rectangle covering the nearest eight players to the ball (4 from each team), according to the five levels of momentary score considered (mean ± SD).

Match Status	Individual playing area (95% CI)	Length (95% CI)	Width (95% CI)
η^2	*0.003*	*0.002*	*0.002*
Home team losing by two goals or more (-2)	42.47 ± 20.12 (40.67, 44.27)	16.11 ± 5.19 (15.65, 16.58)	19.16 ± 6.4 (18.59, 19.73)
Home team losing by one goal (-1)	44.30 ± 21.06* (43.24, 45.38)	16.7 ± 5.22* (16.44, 16.97)	19.5 ± 6.11* (19.19, 19.81)
Drawing (0)	41.61 ± 19.24 (41.03, 42.20)	16.17 ± 5.07 (16.02, 16.33)	18.95 ± 5.91 (18.77, 19.13)
Home team winning by one goal (+1)	42.73 ± 19.62 (41.88, 43.58)	16.45 ± 5.06 (16.23, 16.67)	19.23 ± 5.97 (18.98, 19.49)
Home team winning by two goals or more (+2)	41.45 ± 19.15 (39.75, 43.15)	16.48 ± 5.2 (16.02, 16.94)	18.25 ± 5.82 (17.73, 18.77)

Note: Home team were considered to analyse the influence of momentary match score. No difference appears, except: * Differences in IPA, length and width between -1 and 0 ($p<0.05$).