THE EFFECTS OF POSITIONAL ROLE ON TACTICAL BEHAVIOUR IN A FOUR-A-SIDE SMALL-SIDED AND CONDITIONED SOCCER GAME

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Abstract:

In soccer, different tactical behaviours of individuals are necessary to perform well as a team. The demands put on players of different positional roles can be manipulated in training through small-sided and conditioned games and so players' tactical behaviours might be stimulated. The aim of this study was to assess the effects of positional role in tactical behaviour of U-17 youth soccer players based on core tactical principles in a four-a-side small-sided and conditioned game. The sample was comprised of 268 U-17 youth Brazilian soccer players. They were of five positional roles: centre backs; fullbacks; defensive midfielders; offensive midfielders; and forwards. The instrument used to collect and analyse data was the System of Tactical Assessment in Soccer (FUT-SAT). Results revealed that players of different positional roles showed no differences in the quantity of tactical actions performed. However, forwards showed lower quality of tactical behaviour in the defensive phase (M=69.1, SD=16.0; $p<.05$) compared to fullbacks (M=77.0, SD=13.1; $p<.05$) and performed worse in actions far from the ball that ensured team cohesion in the defensive phase (M=69.7, SD=22.8; $p<.05$) compared to fullbacks (M=80.1, SD=18.4; $p<.05$). This study showed that the four-a-side format allows U-17 players to perform a similar quantity of tactical actions regardless of their positional role, but the player's positional role influence quality of their tactical behaviour. Therefore, this structure might be used for trainings that promotes similar tasks and stimuli for players' development that do not focus on specific tactical roles.

Key words: *youth sport, football, tactical actions, playing position, performance analysis, team sports*

Introduction

In soccer (Association Football), the tactical dimension has been considered an important factor for soccer players to achieve a high performance level (Garganta, 1997; Kannekens, Elferink-Gemser, & Visscher, 2011). This dimension is defined as the management of playing space and might be modulated by tactical behaviours performed by players in interactions with the ball, their teammates and the opponents (Teoldo, Guilherme & Garganta, 2015). Tactical behaviour is defined as a series of responses (i.e. actions) performed by players with the purpose of dealing with match situations (Boulogne, 1972). In this sense, a range of tactical behaviours might be stimulated in training through small-sided and conditioned games (SSCGs) that are smaller and adjusted versions of a formal game. SSCGs allow players of different ages, skill levels, experience and positional roles to spend a high percentage of time under diverse tactical stimuli and tasks constraints (Davids, Araújo, Correia, & Vilar, 2013; Ford, Yates, & Williams, 2010; Halouani, Chtourou, Gabbett, Chaouachi, & Chamari, 2014).

Due to the highly demanding environment of soccer matches, different tactical functions of individuals are necessary to perform well as

a team (Gréhaigne, Bouthier & David, 1997). These diverse functions are determined by the position-specific roles performed by each player in the match. Different studies have been carried out that considered the positional role in regard with anthropometrical characteristics (Carling & Orhant, 2010), physiological capacities and technical skills (Boone, Vaeyens, Steyaert, Bossche & Bourgois, 2012; Dellal, et al., 2012) of players in SSCGs. As regards tactical behaviour, most studies have examined the positional roles in the 11-a-side game design (Gonçalves, Figueira, Maçãs, & Sampaio, 2014; Ortega, Evangelio, Clemente, & González-Víllora, 2016; Taylor, Mellalieu & James, 2005) and seldom in SSCGs (Padilha, Moraes, & Teoldo, 2013; Praça, Clemente, Andrade, Morales, & Greco, 2017), although tactical behaviours have widely been investigated in a range of tactical measures and task constraints in SSCGs.

In this sense, the demands put on players of different positional roles can be manipulated through pedagogical principles, such as representation and exaggeration (Serra-Olivares, González-Víllora, & García-Lopez, 2015a; Serra-Olivares, González-Víllora, García-López, & Araújo, 2015b), and measured through tactical principles, such as general, operational or core tactical principles (Teoldo, et al., 2015). Studies with SSCGs based on the core tactical principles have a great potential to enhance the training process and are also indicated to investigate tactical behaviour in soccer (González-Víllora, Serra-Olivares, Pastor-Vicedo, & Teoldo, 2015a; Serra-Olivares, et al., 2015a). The core tactical principles are characterized by a set of rules that guide players' behaviour/actions towards the intended performance outcomes, relative to each phase of the game. Such principles have been evaluated according to the number of players (Castelão, Garganta, Santos, & Teoldo, 2014; Folgado, Lemmink, Frencken, & Sampaio, 2014; Padilha, Guilherme, Serra-Olivares, Roca, & Teoldo, 2017; Silva, Garganta, Santos & Teoldo, 2014a), pitch size (Silva, et al., 2014b; Teoldo, Garganta, Greco, Mesquita, & Muller, 2011a), goal size (Castellano, Silva, Usabiaga, & Barreira, 2016; Teoldo, et al., 2009a), players' age (Américo, et al., 2016; Machado & Teoldo, 2016), and cognitive skills (Andrade, Machado, & Teoldo, 2016; Machado, Cardoso, & Teoldo, 2017). Regarding the influence of positional role in SSCGs, the core tactical principles were evaluated for comparing defenders, midfielders and forwards in U-13 soccer players (Padilha, et al., 2013), whereby midfielders manifested better tactical performance in only one out of the five tactical offensive principles compared to forwards. In a similar study carried out with the U-15 soccer players, no differences were found among the core tactical principles comparing defenders, midfielders and forwards (Gonzaga, Gonçalves & Teoldo, 2014a). These results suggest that positional roles have a low influence on players' tactical performance in U-13 and U-15 soccer players.

Although the aforementioned studies showed similar tactical performance considering positional role in two different age categories, there is still a need to assess players from different age groups. Diverse studies have shown that as the U-8 to U-20 soccer players' age increases, the quantity of tactical actions and the quality of their tactical behaviour also increases, taking into account both the core and operational tactical principles (Américo, et al., 2016; Gonzalez-Villora, Garcia-Lopez, & Contreras-Jordan, 2015b; Teoldo, Garganta, Greco, Mesquita, & Afonso, 2010a). Therefore, taking into account the stages of sport participation developed by Côté (1999), the evaluation of players' performance considering positional role during the investment years (age 16+) is indicated, as specific training settings are designed to adequate players' positional role demands (Américo, et al., 2016). Furthermore, soccer players of this age have already passed through the specialization years and are usually playing in a specific positional role (e.g. centre back, fullback, or defensive midfielder). For this reason in this age (16 +) it is indicated to assess players through core tactical principles of soccer (González-Víllora, et al., 2015a) and avoid to assess general team functions such as defender or midfielder.

In this sense, previous research suggested for future studies the need to assess which core tactical principles are applied more often comparing the positional role, then to assess the quality of tactical behaviour and, also, to use samples of different ages (Padilha, et al., 2013). Additionally, the assessment of tactical behaviour and positional role in small-sided and conditioned games might be a useful information for coaches developing appropriate training programmes during the sports development phase and also for identifying talented players, consequently. Therefore, we aimed to assess the effects of positional role on tactical behaviour of U-17 youth soccer players based on the core tactical principles in a small-sided and conditioned game. We hypothesized that there would be no difference in the quantity of tactical actions between the different positional roles (Gonzaga, et al., 2014a). Additionally, we expected differences in the quality of tactical behaviour between the different positional roles (Padilha, et al., 2013).

Methods

Sample

The sample was comprised of 268 U-17 youth Brazilian (outfield) male soccer players (16.49±.65 years of age) from 17 soccer teams. They performed

8,723 offensive and 9,744 defensive tactical actions during the small-sided and conditioned games. Considering the positional role, the sample was divided into five positional roles: centre backs (n=45); fullbacks (n=52); defensive midfielders (n=52); offensive midfielders (n=56); and forwards (n=63).

All the participants were training at least three times a week and were participating at a regional level championship for their age level, affiliated to their respective state soccer federations. This study was approved by the Research Ethics Committee (Of. Ref. No. 169/2012) and all procedures were in accordance with the standards of the Declaration of Helsinki (2008). Moreover, the participants and their parents signed a legal consent authorizing the data collection and their use for research purposes.

Instruments

The instrument used to collect and analyse data was the System of Tactical Assessment in Soccer (FUT-SAT) (Teoldo, Garganta, Greco, Mesquita, & Maia, 2011b). This system has been used in previous studies, which reported reliability values over .79 (Gonçalves, et al., 2017; Gonzaga, Albuquerque, Malloy-Diniz, Greco, & Teoldo, 2014b; Teoldo, Garganta, Greco, Mesquita, & Seabra, 2010b). It was designed to assess tactical actions performed by players, according to the ten core tactical principles of soccer game. These principles are categorized into five offensive and five defensive principles (see Chart 1) (Teoldo, Garganta, Greco, & Mesquita, 2009b; Teoldo, et al., 2015; Worthington, 1974).

The actions in which players performed throw-ins, free kicks, corner kicks, as well as those actions in which they did not comply with any tactical principle, were not considered for the assessment. Tactical behaviour was assessed through the quality of tactical behaviour which takes into account the number of correct actions performed while complying with each of tactical principles divided by the total number of actions for the respective principle (Teoldo, et al., 2011b, 2015).

Test procedures

Players were informed about the objectives of the research. In order to record the tests, a video camera was placed perpendicularly to the goal line of the field. Participants were randomly grouped by their coaches, regardless of their regular positional role, into teams of four-a-side in order to balance forces. The teams were of the following structure: GK+3vs3+GK (goalkeeper + three outfield players vs. three outfield players + goalkeeper). This test format was chosen because it was the smallest configuration still enabling players to comply with the ten core tactical principles in soccer (Garganta, 1997; Teoldo, et al., 2015). The field size was 36 metres long by 27 metres wide, and the game was played according to the official rules of soccer, except for the offside rule. The dimensions of this test were calculated based on the measures of a soccer field permitted by the International Football Association Board and on the ratio calculation of the use of game space by outfield players (Teoldo, et al., 2011b).

Chart 1. Definitions of the ten core tactical principles of soccer

Category	Sub-categories	Variables	Definitions
Core tactical principles	Offensive	Penetration	Movement of the player with the ball towards the goal line.
		Offensive coverage	Offensive supports to the player with the ball.
		Depth mobility	Movement of players between the last defender and the goal line.
		Width and length	Movement of players to extend and use the effective play-space.
		Offensive unity	Movement of the last line of the own team defenders towards the offensive midfield in order to support offensive actions of the teammates.
	Defensive	Delay	Actions to slow down the opponent's attempt to move forward with the ball.
		Defensive coverage	Positioning of the off-ball defenders behind the "delayed" player, providing defensive support.
		Balance	Positioning of the off-ball defenders in reaction to movements of attackers in order to achieve numerical stability or superiority in the opposition relationship.
		Concentration	Positioning of the off-ball defenders to occupy vital spaces and protect the scoring area.
		Defensive unity	Positioning of the off-ball defenders to reduce the effective play-space of the opponents.

Source: Teoldo, et al., 2015.

Data collection

To record field tests, a digital video camera was used (25Hz, Sony HDR-XR100 digital camera). Video footage was imported in a digital format into a laptop (TOSHIBA model Satellite L755 processor Intel Core™ i3) via a USB cable and converted to .avi video format. Video processing and analysis were performed using the Soccer Analyser® software. This software has been developed for use with FUT-SAT and enables the insertion of spatial references and the accurate verification of position and movement of the players, as well as the analysis and categorization of the actions that were to be assessed.

Participants played one four-minute game in the small-sided and conditioned game format. The amount of time was established through a pilot study, in which it was found that four minutes, comparatively with the time of up to eight minutes, would suffice for all players to perform actions related to all the tactical principles assessed by the observation instrument (Teoldo, et al., 2015). Actions performed by goalkeepers were not assessed or considered for analysis. Prior to each test session, 30 seconds were given to players to familiarize with test procedures. Players wore numbered vests to enable easy identification during video analysis. No coaches or experimenters' verbal feedback was allowed during the test. A standardized warm-up, consisting of running, dynamic stretching and agility exercises, was executed before each SSCG. All the matches were played on natural turf under similar weather conditions. In total, 92 four-a-side teams participated in the study and 46 small-sided and conditioned games were analysed.

Data analyses

Descriptive analyses were performed. Analyses of means (M) and standard deviations (SD) were performed for the variables *quantity of tactical actions* and *quality of tactical behaviour.* Players were compared according to their positional roles (centre backs; fullbacks; defensive midfielders; offensive midfielders; and forwards). Kolmogorov-Smirnov test was performed. Kruskal-Wallis test was performed to compare the dependent variables from quantity of tactical actions and quality of tactical behaviour (tactical principles). In order to identify the differences between the positional roles, the Mann-Whitney *post-hoc* test was performed. A Bonferroni correction was applied and all effects were reported at a .05 level of significance. Effect size for the Mann-Whitney tests was calculated through the formula described below (Fritz, Morris & Richler, 2012).

$$r = \frac{Z}{\sqrt{n}}$$

The interpretation of r value was as follows (Ferguson, 2009): no effect 0-0.19; minimum effect 0.20-0.49; moderate effect 0.50-0.79; and strong effect >0.80. For statistical procedures, the software SPSS (Statistical Package for Social Sciences) for Windows version 18.0 was utilized.

Reliability analysis

Test-retest reliability for the observations was performed respecting a 21-day interval for reanalysis, thus avoiding task familiarity issues (O'Donoghue, 2012). For the calculation of reliability, the Cohen's Kappa test was used. Analyses were verified through the reassessment of 3,124 tactical actions, or 17.42% of the overall sample, a value which is greater than the percentage (10%) suggested in literature (Tabachnick & Fidell, 2001). Intra- and inter-observer reliabilities displayed Kappa values of 0.823 (SE=0.015) and 0.875 (SE=0.012), respectively. These values are classified as almost perfect (0.81-.99) in literature (Landis & Koch, 1977).

Results

There was found no main effects for the mean and standard deviations of quantity of tactical actions according to the ten core tactical principles of soccer (see Table 1). Players of the five positional roles performed a similar number of tactical actions considering the same tactical principle.

The quality of tactical behaviour was significantly affected by the positional role for the tactical principle of defensive unity, which was related to defensive movements off-ball to reduce the effective play-space of the opponents, $H_{(4)}=12.74$, $p<.05$ (see Table 2). The Mann-Whitney *post-hoc* tests were used to follow up these findings. It was shown that forwards were less efficient than fullbacks (U=1099, r=-.283, minimum effect). We also found main effects for the quality of tactical behaviour for total defensive, $H(4)=10.79$, $p<.05$ (see Table 2). Forwards performed worse than fullbacks in the defensive phase (U=1133, r=-.264, minimum effect). The effect size was small for both results. No more effects were found for this sample.

Discussion and conclusions

This study aimed to assess the effects of positional role on tactical behaviour of U-17 youth soccer players in small-sided and conditioned games. The quantity of tactical actions and the quality of tactical behaviour was evaluated. Our prediction that the quantity of tactical actions would not be influenced by positional roles was upheld. Additionally, we found the differences in the quality of tactical behaviour according to the different positional roles

Table 1. Means and standard deviations of the quantity of tactical actions related to the ten core tactical principles and phases of play in each positional role during the small-sided and conditioned game

Quantity of tactical actions	Centre backs (n=45)	Fullbacks (n=52)	Defensive midfielders (n=52)	Offensive midfielders (n=56)	Forwards (n=63)	p
Offensive principles						
Penetration	2.6±1.8	3.4±1.7	3.1±1.9	3.5±2.0	3.0±1.6	.144
Offensive coverage	9.7±4.7	8.6±3.8	8.7±4.5	8.6±3.7	8.0±3.5	.563
Depth mobility	1.3±1.7	2.0±1.9	1.4±1.3	1.5±1.5	1.7±1.6	.299
Width and length	11.6±5.2	13.0±6.5	14.3±5.0	12.4±4.4	13.7±5.0	.088
Offensive unity	7.3±4.4	5.8±3.7	6.3±3.6	6.0±4.4	5.4±4.2	.125
Defensive principles						
Delay	7.8±3.1	6.9±3.1	6.5±3.0	7.2±3.4	7.1±3.6	.399
Defensive coverage	2.6±1.9	1.9±1.6	2.2±1.7	2.2±1.6	2.5±2.2	.353
Balance	7.1±3.2	8.6±4.0	9.1±5.1	8.4±4.4	8.5±3.6	.210
Concentration	5.4±3.8	5.1±3.1	5.0±3.6	5.2±3.5	4.9±3.0	.995
Defensive unity	13.9±4.9	12.8±5.1	13.4±4.5	14.1±6.0	13.5±5.8	.719
Phases of play						
Total offensive	32.6±8.1	32.8±8.0	33.7±7.0	32.1±7.1	31.8±6.9	0.704
Total defensive	36.7±7.8	35.2±8.6	36.3±8.5	37.2±7.6	36.4±7.8	0.780

Table 2. Means and standard deviations of the percentage (%) of the quality of tactical behaviour related to the ten core tactical principles and phases of play in each positional role during the small-sided and conditioned game

Quality of tactical behaviour	Centre backs (n=45)	Fullbacks (n=52)	Defensive midfielders (n=52)	Offensive midfielders (n=56)	Forwards (n=63)	p
Offensive principles						
Penetration	87.0±23.4	79.5±28.2	82.9±29.8	82.2±27.0	75.1±30.2	.131
Offensive coverage	93.7±9.1	88.8±14.7	89.6±12.8	90.4±10.5	88.0±13.2	.270
Depth mobility	59.1±39.7	76.9±32.2	68.9±38.8	76.8±35.3	69.3±40.6	.380
Width and length	87.2±14.6	86.5±13.6	84.6±12.7	87.0±13.7	85.3±15.6	.683
Offensive unity	84.0±20.8	82.5±26.5	82.6±26.1	88.9±19.8	85.8±27.1	.188
Defensive principles						
Delay	65.1±28.2	70.6±25.8	69.3±26.2	65.2±28.3	61.8±26.7	.420
Defensive coverage	72.2±35.3	72.2±31.0	78.3±30.9	71.6±37.2	74.8±32.1	.875
Balance	72.9±23.8	69.4±23.8	65.3±21.6	67.6±28.8	59.8±25.7	.062
Concentration	90.1±19.0	91.0±15.1	84.3±24.3	90.0±19.2	90.2±18.2	.499
Defensive unity*	80.1±18.4	82.3±15.8	75.0±20.6	80.4±13.6	69.7±22.8	.013
Phases of play						
Total offensive	86.9±11.4	85.4±9.8	84.1±11.2	86.9±9.9	84.0±12.2	.475
Total defensive*	77.0±13.1	77.6±12.2	73.5±15.2	76.2±12.3	69.1±16.0	.029

Note. *Statistically significant differences (p<.05); differences between fullbacks and forwards.

as initially expected. There was no difference in the quantity of tactical actions performed according to the positional role. These results might be related to the game structure applied, which was a four-a-side small-sided and conditioned game. This structure seems to stimulate the emergence of similar tactical demands independently of the positional role, once the test was carried out with no instruction of specific role during the game (test) and the players were "free" to organize themselves.

In this vein, these results confirm other research findings regarding the quantity of tactical actions based on the core tactical principles analysis and positional roles in different age categories, since U-15 soccer players showed no differences between defenders, midfielder and forwards in the quantity of tactical actions performed as well (Gonzaga, et al., 2014a). The aforementioned results were also from the study carried out with no instruction on specific role during the SSCG. It might be a strategy to motivate players of different positional roles to face and satisfy a similar demand as regards the quantity of tactical actions performed within the four-a-side game structure, independently of their age.

Moreover, in a study carried out by Teoldo and colleagues (2010b) that compared players from different age groups (U-11; U-13; U-15; U-17; U-20) in the four-a-side game structure regardless of their positional role, there was found that the quantity of tactical actions (game involvement/performed) increased with age considering the core tactical principles. Therefore, it suggests that players of different positional roles have to perform a similar number of actions related to respective core tactical principles in this game structure (four-a-side) according to their respective age group. Thus, the results found for the core tactical principles in the current study may be indicative to guide training that promotes similar tasks and stimuli for players' development independently of their positional role.

In regard with the quality of tactical behaviour we found the differences in defensive unity, which is principally responsible for teammates' coordination and balance in defensive actions far from the ball thus ensuring team's cohesion, longitudinal and transverse lines (Teoldo, et al., 2009b). This principle was worse respected by forwards compared to fullbacks, which suggested less participation of forwards in the defensive actions far from the ball, such as reducing pass options over the ball line or re-balance the defensive organization. It might be attributed to forwards' role, who tend to focus their actions on offensive phase by attacking the opposing goal (e.g. dribble and aerial challenge near to the opposing goal) (Taylor, Mellalieu, & James, 2004) and are more likely to behave passively in the defensive phase, as the majority of their behaviour occurs within/into the attacking third (60%) of the pitch and just very few of their actions are performed within the defensive third (3%) in the official matches (Headrick, et al., 2011; Taylor, et al., 2005). Furthermore, both of the aforementioned studies show that due to the soccer players' role in official matches, centre backs, fullbacks and midfielders perform interceptions more often than forwards, which leads to a better quality of actions ensuring cohesion and coordination of the defensive lines in actions far from the ball (defensive unity).

On the other hand, considering the offensive tactical principles, we found no differences between different positional roles. This result is in contrast with earlier findings from Padilha et al. (2013) and Rechenchosky et al (2017), which studies found the differences among positional roles in offensive unity. This tactical principle is related to team's cohesion and balance between the longitudinal and transversal lines in the offensive actions, and the mentioned studies found that midfielders outperformed defenders and forwards in such actions. However, these different results might be related to the different age of the samples; the previous studies were performed with younger players (U-13 soccer players and players with 14.85±1.58 years of age, respectively) compared to the participants of our study (U-17 soccer players, with 16.49±.65 years of age). Once the training of the tactical principle of offensive unity is expected to be emphasized in the U-15 category (Américo, et al, 2017), U-17 soccer players, as those assessed in the current study, are expected to have accumulated similar training experience in such actions and therefore they present similar tactical behaviour, independently of the positional role.

Another finding of our study is a lower quality of tactical behaviour of forwards during the defensive phase in comparison with fullbacks. These results are consistent with those reported by Williams, Ward, Ward, and Smeeton (2008), who demonstrated that semi-professional offensive players (e.g. forwards) had shown less accurate perceptual-cognitive skills in the defensive phase when compared to defensive players (e.g. centre backs and fullbacks). This suggests that forwards tend to be less efficient not only in defensive actions performed farther from the ball (e.g. defensive unity), but also in general defensive actions, including those performed near the ball. This is also supported by the findings of Taylor et al. (2004, 2005) who reported a lower number of tackles and clearances performed by forwards when compared to fullbacks, centre backs and midfielders.

Furthermore, this result suggests that the "overall" performance in both phases (defensive and offensive) must be taken into account in tactical performance assessment, besides the assessment of each tactical principle, because it might be sensitive to performance differences, especially when comparing different positional roles. Thus, both in the actual match context and in small-sided and conditioned games, as the findings of the present study have indicated, forwards usually display a lower quality of tactical behaviour in general defensive actions and in those that demand cohesion

when players are farther from the ball (e.g. defensive unity). These inferences are corroborated with the studies that reported the potential application of small-sided and conditioned games as a means to represent and stimulate situations and behaviours that are typical of actual match settings (Aguiar, Botelho, Lago, Maças, & Sampaio, 2012; Davids, et al., 2013).

In summary, our study indicates that positional role had no influence in terms of the quantity of tactical actions performed in a four-a-side small-sided and conditioned game (GK+3vs3+GK) carried out with no instruction of specific role during the game (test). Regarding the quality of tactical behaviour, the differences were found for positional roles, with forwards performing worse in actions far from the ball that ensure team cohesion in the defensive phase, compared to fullbacks. It might be associated to the forwards' role in official matches that emphasizes actions in the offensive phase. Therefore, these results could be used by soccer practitioners as they indicate the need to improve forwards play in defensive phase through training contents that would stimulate tactical behaviours performed to recover in defence. This type of training might lead forwards to increase their comprehension of tactical behaviour in the defensive phase, thus improving team performance as well. In this way, the use of four-a-side small-sided and conditioned games offers to players a more effective involving/participation in both playing phases, once that a smaller dimension of the field and the number of players during the practice allow them to perform more tactical behaviours and afford most influence on team performance/behaviour (Ford, et al., 2010; Silva, et al., 2014a).

The limitation of our study was the randomness of the positional role allotted to each team. Therefore, we indicate that future studies use teams with the same format regarding the positional roles (e.g. teams with one forward, one midfielder and one defensive player) and to apply offside rule. Additionally, different SSCG formats (e.g. 5vs5 and 7vs7) can be used to represent more specifically the tactical demands that players of different positional roles face in official matches, as the increased number of players requires more specific tactical roles while playing.

Moreover, the creation of a tactical profile taking into account the positional demands in official matches in actions both close to and far from the ball would be a step forward in relation to the study by Taylor et al. (2005), which focused only on tactical behaviours near the ball. Thus, we suggest the investigation of differences within the same positional role (e.g. one forward may display different characteristics compared to another) as proposed by the aforementioned study. This profile would aid coaches and researchers in recreating SSCG tactical situations that are more representative of the official match taking into account the tactical demands. Finally, we also recommend the usage of tactical principles to understand tactics more deeply in multidimensional designs assessing simultaneously the tactical, physical, technical and psychological dimensions of players.

The practical applications of our study are related to training, as we suggest using the four-a-side small-sided and conditioned soccer game (GK+3vs3+GK) to induce similar tactical demands in terms of quantity of tactical actions for players of different positions. Additionally, this SSCG format might be used in training that focuses on tactical knowledge acquisition regardless of the specific demands for each positional role. This game format also allows variability in execution of different tactical principles, opposite to bigger game formats, which generally lead to less diversification in tactical movements (e.g. 7vs7 or 11vs11).

In conclusion, our study has shown that the small-sided and conditioned game of the GK+3vs3+GK format allows U-17 players to perform a similar quantity of tactical actions regardless of their positional role. Therefore, this structure might be used to give stimuli that do not focus on specific tactical roles. Moreover, compared to fullbacks, forwards showed less quality in tactical actions in both the defensive phase and in actions far from the ball that ensures team cohesion in the defensive phase (defensive unity) in this game format. It suggests that positional role may affect the tactical behaviour of U-17 players in four-a-side small-sided and conditioned games. We also highlight the importance and value of tactical principles to assess and train tactics. These results contribute to the knowledge of the way tactics and positional role interact in small-sided and conditioned games.

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