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ABSTRACT
The aim of this study was to compare the quantity, the quality and the outcome of the tactical actions of the champions’ teams compared to runner-up and third-placed teams in small-sided and conditioned games tournaments in the under-15 category. We analyzed 18 teams composed of three players, they were 13.92 ± 1.17 years old and with 5.65 ± 2.65 years of time practice. These players performed 4,716 tactical actions evaluated by System of Tactical Assessment in Soccer (FUT-SAT). Descriptive statistics (mean, standard deviation and percentage difference), Shapiro–Wilk test, independent t-test, Mann–Whitney test, paired t-test, and Cohen’s kappa test were used. The results indicated that the champions’ teams accomplished more offensive tactical actions (quantitatively) and were more efficient (qualitatively) in these actions than the other teams. In addition, the champions’ teams were more effectiveness (action outcomes) in offensive and defensive movements. Otherwise, the runner-up and third-placed performed more (quantitatively) defensive tactical actions and were more efficient (qualitatively) in these actions. It is concluded that the champions’ teams had more initiative in the matches due to the greater quantity and quality of their offensive tactical actions and more effectiveness in the offensive and defensive actions, while their opponents were reactive.

1. Introduction
Performance of soccer teams and their final ranking in competitions are influenced by several factors, such as the physical (Clemente et al., 2018), psychological (Williams & Jackson, 2019), technical (Lago-Peñas, Lago-Ballesteros, & Rey, 2011) and tactical (Gonçalves, Marcelino, Torres-Ronda, Torrents, & Sampaio, 2016) components of the performance. In general, to become champion, teams need to show regularity in their performance throughout the competition (Maleki, Dadkhah, & Alahvisi, 2016). For this,
stability in every action in the play is essential, especially in the offensive and defensive organisation phases (Gréhaigne, Bouthier, & David, 1997).

The offensive and defensive organisation are obtained through the positioning and the tactical movements that allow players and their team to manage the game space (Teoldo, Guilherme, & Garganta, 2017). In addition, the efficiency and effectiveness of these movements are considered as key requirements that can influence the ranking in competitions (Szwarc, 2008), since efficiency is related to the execution of the movement (quality of tactical actions) and effectiveness to its outcome (Mesquita, 1998).

Regarding effectiveness, some studies conducted with professional teams have sought to verify how champions’ teams reach the top ranking in competitions. These studies allowed demonstrating that top teams are more effectiveness in maintaining ball possession and finalising to the goal than the other teams (Gómez-López & Álvaro, 2002; Hughes & Franks, 2005; Maleki et al., 2016), despite they show a different conceptions of the game by the way they play it. For example, Maleki et al. (2016) analyzed the 2014 World Cup semifinalists and found that the balanced distribution of players on the field provided greater consistency for ball recovery of the champions and runner-up half, these actions may provide to the teams longer possession of the ball.

Despite the contribution of these studies to the understanding on how teams achieve the best rankings in competitions, some limitations are found. For instance, comparing one team to another can result in a loss of meaningful information, since each team has different conceptions of the game and strategies (Lago, 2009; Taylor, Mellalieu, James, & Shearer, 2008). In turn, comparing aggregate data from different teams would indicate general values that can be used as normative data to design and assess team practices. This point has implications for training, especially in training categories, as the teaching-learning and training process is responsible for modelling the behaviour of players and teams (Teoldo et al., 2017).

Besides evaluating the effectiveness of actions individually, the joint research on the quantity, the quality, and the outcome of tactical actions can be a useful tool for coaches to understand how to improve team performance, even through the teaching-learning and training process (Machado et al., 2019). Therefore, one way to obtain these data in the training context is through small-sided and conditioned games (Clemente, 2016). Small-sided and conditioned games are used to replicate the demands of the game in a potentialised way. For instance, there is a more active participation of the players who play small-sided games since they make more touches on the ball and consequently learn some actions faster, and make more decisions during the game (Fédération Internationale de Football Association, 2012; García, Román, Calleja-González, & Dellal, 2014). In addition, the coach can also manipulate game restrictions to direct the learning of specific behaviour (Hill-Haas, Dawson, Impellizzeri, & Coutts, 2011; Sarmento et al., 2018).

In this sense, opposition situations reflect restrictions that influence the player’s behaviour. That being, it seems important that the game should be evaluated and understood in relation to the strength between the teams (Tenga, Mortensholm, & O’Donoghue, 2017). The behavior of the players and teams can be observed through the execution the core principles of the game of football, which are a set of rules about the game that allow players to obtain tactical solutions to the problems that appear in the play (Garganta & Pinto, 1994; Teoldo
et al., 2017). These authors affirm that, collectively, the principles help in the better control of the game (both in the offensive phase and in the defence phase).

However, few studies have compared opposition situations between teams in respect with tactical principles. For example, analyzing opposition situations help understanding that the offensive and defensive tactical performance of the teams that won the matches was greater than the teams that drew them (Carvalho, Scaglia, & Teoldo, 2013). In addition, Silva et al. (2013) affirm that the winning teams made better the movements that allow to: (1) ensure defensive stability and, (2) allow the team to defend in unity. As a result, these teams are able to play more without the ball, in order to recover its possession, and to have more chances on the opponent’s goal.

Despite the understanding of the tactical performance of the winning teams, as far as literature has been concerned, studies have not yet been accomplished with the aim to investigate the differences in the tactical performance between the teams with the best ranking (champions) compared to teams ranked runner-up and third placed, in small-sided and conditioned games tournaments. Also, no study has compared performance by aggregating data from different teams. Finally, as far as we know, no research in such matter has been conducted before with youth players. According to the literature on tactical principles, under-15 players have most cognitive conditions to perform all the movements (Gonzalez-Villora, Serra-Olivares, Pastor-Vicedo, & Costa, 2015), which suggests that tactical analysis can be conducted on their performance in the play. Thus, this particular age-category can be an interesting window of opportunity to identify the possible differences on tactical behaviour of teams and detect which factors should be understood as determinant to improve the competence of these youth players and to adequate their behaviours in game. Based on those reasons, the aim of this study was to compare the quantity, the quality and the outcome of the tactical actions of the champions’ teams compared to runner-up and third-placed teams in small-sided and conditioned games tournaments in the under-15 category.

2. Materials and methods

2.1. Sample

The sample included 18 teams composed of three players, for a total of 54 players in the Under-15 age level. They were selected from three different Brazilian clubs affiliated to the Federação Mineira de Futebol. These players performed 4,716 tactical actions and they were, in average, 13.92 ± 1.17 years old and had 5.65 ± 2.65 years of practice time. As an inclusion criterion, players should be enrolled in systematic training programs, with at least three sessions per week (with 90 min of average training).

The present study was approved by the Ethics Committee of the Universidade Federal de Viçosa, under the protocol number CAAE – 48139515.3.0000.5153 and meets the Helsinki agreement of 1996 and the National Health Council (CNS 466/2012) norms. The study was conducted with the consent of the club officers and the players. For the players’ participation, a free and informed consent form and an assent form were filled.
2.2. Data collection instrument

The instrument used to assess the tactical actions was the System of Tactical Assessment in Soccer (FUT-SAT) (Teoldo, Garganta, Greco, Mesquita, & Maia, 2011), which consists of a field test (Goalkeeper+3 vs. 3+ Goalkeeper) with dimensions of 36 m long by 27-m wide, for 4 min. All the tactical actions executed by the players were filmed for further analysis.

After the test, the system allows the assessment of all the tactical actions – with and without the ball – in respect with the 10 core tactical principles of the soccer game. These principles include, in the offensive phase: i) penetration, progression movements of the ball carrier toward the goal and/or the opposing bottom line, ii) offensive coverage, movements of support to the ball carrier, iii) depth mobility, movements of players between the last defender and goal line, iv) width and length, movements for use and expansion of the effective game space, and (v) offensive unity, movements that allow the teams to attack in unity; and in the defensive phase: (i) delay, movements of direct opposition to the ball carrier, (ii) defensive coverage, movements of support of the player who directly opposes the ball carrier, (iii) balance, movements that ensure defensive stability in the area of the ball dispute (iv) concentration, movements that increase the goal protection and facilitate the recovery of the ball possession, and (v) defensive unity, movements that allow the team to defend in unity (Teoldo et al., 2011).

The FUT-SAT is composed of two Macro-categories: Observation and Outcome (Teoldo et al., 2011). The Macro-category Observation consists of three categories: Tactical Principles, Place of Action in the Game Field and Action outcome, among which are 24 variables. In turn, the Macro-category Outcome is composed of four categories: Tactical Performance Index (TPI), Tactical Actions, Percentage of Errors and Place of Action Relative to the Principles (PARP), among which there are 52 variables. The Macro-category Product receives this denomination, because its variables are dependent on the information coming from the Macro-category Outcome.

2.3. Data collection procedure

The FUT-SAT field test (Goalkeeper+3 vs. 3+ Goalkeeper) was performed to assess the quantity, the quality and the outcome of each tactical action. However, the goalkeepers were not evaluated, since the specific actions of their position differ from the actions taken by the players of the other positions. Before the start of the field test, 30 s of familiarisation were provided to the players to understand the task. Players were instructed to play according to the official rules of the soccer game, and the coaches did not provide any kind of instruction or encouragement to the players during the test. The coaches were responsible for dividing the teams in order to balance the skill level of the players according to the positional role: a defender, a midfielder and a forward. Several five-sized balls were placed around the field, in order to increase the effective playing time. Thus, when one ball left the field, it was quickly replaced by another one. In order to facilitate further analysis, all players received numbered bibs from one (1) to six (6).

Two tournaments were conducted in each club, applying the round-robin system where each team played against each other team only once. Each tournament took place
on different days and the number of teams and consequently the number of games in each tournament was conditioned by the release of the players by their respective clubs. Two tournaments were held in the first club. The first tournament had four teams and six games. The second tournament had five teams and ten games. In the second club, both tournaments had six teams and fifteen games. In turn, in the third club, the two tournaments had eight teams and had twenty-eight games in each tournament. The points of the six tournaments were considered as follows: win (three points); draw (one point); defeat (no point). The points were added after each game, and at the end of each tournament, one team was crowned champion (i.e. 1st placed). In this way, the six champion teams were selected to be compared in the direct confrontation with the runner-up teams and third-placed teams.

### 2.4. Materials

The matches were recorded with a SONY digital camera model HDR-XR100 (it was positioned in the diagonal between the side line and the bottom line) and the video material was transferred to a desktop computer (Star Plus Intel® Core ™ i3-2100 CPU @ 3.10 GHz) by USB cable, and converted to “.avi” format using the Format Factory software. The Soccer Analyser® software was used for image processing and game analysis. Soccer Analyser® software allows the insertion of dynamic and static spatial references that enable the analysis of the tactical behaviour of soccer players based on the realisation of the core tactical principles of the soccer game. The spatial references can be found in Teoldo et al. (2017).

### 2.5. Statistical analysis

Descriptive statistics (mean, standard deviation and percentage difference) were used to characterise the sample regarding the quantity, the quality and the outcome of the tactical actions. The Shapiro–Wilk test was used to verify the data distribution. The independent t-test and the Mann–Whitney test for the normal and non-normal distribution, respectively, were used to verify the difference between the champions’ teams and their opponents. The paired t-test was used to compare the actions the champions’ teams in the confrontations between the runner-up and third-placed teams. The significance level of $p < 0.05$ was adopted for all tests. For the statistical treatment of the data, the software SPSS (Statistical Package for Social Science) for Windows®, version 20.0 was used.

The effect size measured with Pearson’s $r$ was used as a measure of the standard magnitude of the observed effect, because although a statistical test is significant, it does not mean that the effect it measures is significant or important. In this way, effect sizes are useful because they give an objective measure of the importance of an effect. The effect size is categorised in small (<0.29), medium (0.30–0.49) and large (>0.50) according to the calculation performed through the independent and paired t-test (a) and the Mann–Whitney test (b) formulas, respectively (Cohen, 1992):
\[ r = \sqrt{\frac{t^2}{t^2 + df}} \]  

(a) 

\[ r = \frac{Z}{\sqrt{n}} \]  

(b)

### 2.6. Reliability analysis

The test–retest method was used to demonstrate the reliability and the reliability sessions were performed respecting a three-week interval (21 days) in order to avoid familiarity problems with the task (Robinson & O’Donoghue, 2007). It was calculated using the Cohen’s kappa test. For its analysis, 510 tactical actions were reassessed; representing 10.81% of the sample, this value is higher than the reference (10%) indicated in the literature (Tabachnick & Fidell, 2001).

The re-test results presented intra-rater reliability in the tournament matches with values ranging from a minimum of 0.856 (SE = 0.041) to a maximum of 1.000 (SE = 0.000). For inter-rater reliability in tournament matches, values ranged from a minimum of 0.824 (SE = 0.054) to a maximum of 1.000 (SE = 0.000). For the data statistical treatment was used the software IBM SPSS for Windows®, version 20.0.

### 3. Results

#### 3.1. Quantity and quality of the tactical actions

In the total actions of offensive and defensive phases (see Table 1), the champions’ teams performed more offensive tactical actions than the runner-up (40.57%) and third-placed teams (23.93%) and were more efficient in these actions than the runner-up (41.49%) and third-placed teams (20.17%).

Otherwise, the runner-up and third-placed teams performed more defensive actions (68.75%; 33.28%, respectively) and were more efficient (82.10%; 31.24%, respectively) than the champions’ teams. In addition, the champions’ teams performed more offensive tactical action (16.75%) when they played against the runner-up than when they played against the third. The champions’ teams were also more efficient in the defensive tactical actions (79.51%) when they played against the third-placed teams than when they played against the runner-up ones.

Regarding tactical principles of the offensive phase, the champions’ teams performed more movements of support to the ball carrier (Offensive Coverage) than the runner-up (47.05%) and third-placed teams (37.30%). In the ball carrier support movements (Offensive Coverage), they were more efficient (29.41%) than the third-placed teams. Besides that, the champions’ teams performed more progression movements of the ball carrier toward the goal and/or the opposing bottom line (Penetration) (39.59%) than the third-placed teams. Moreover, they accomplished more movements for use and expansion of the effective game space (Width and Length) (46.63%) and movements that allow the teams to attack in unity (Offensive Unity) (37.78%) than the teams’ runner-
Table 1. Mean and standard deviation of the quantity and quality of tactical actions in the direct confrontation between the teams in the tournaments.

<table>
<thead>
<tr>
<th></th>
<th>Quantity</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Champions’ teams</td>
<td>Runner-up teams</td>
</tr>
<tr>
<td>Offensive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Penetration</td>
<td>3.55 ± 2.35</td>
<td>2.61 ± 2.32</td>
</tr>
<tr>
<td>Offensive Coverage</td>
<td>11.22 ± 4.05</td>
<td>5.94 ± 5.02</td>
</tr>
<tr>
<td>Depth Mobility</td>
<td>1.94 ± 2.31</td>
<td>2.00 ± 1.94</td>
</tr>
<tr>
<td>Width and Length</td>
<td>13.83 ± 4.97</td>
<td>7.38 ± 3.75</td>
</tr>
<tr>
<td>Offensive Unity</td>
<td>7.94 ± 4.80</td>
<td>4.94 ± 4.94</td>
</tr>
<tr>
<td>Delay</td>
<td>4.61 ± 3.22</td>
<td>8.16 ± 3.24</td>
</tr>
<tr>
<td>Defensive Coverage</td>
<td>1.77 ± 1.59</td>
<td>4.05 ± 3.05</td>
</tr>
<tr>
<td>Balance</td>
<td>4.00 ± 3.27</td>
<td>8.44 ± 3.80</td>
</tr>
<tr>
<td>Concentration</td>
<td>3.38 ± 2.22</td>
<td>6.16 ± 4.19</td>
</tr>
<tr>
<td>Offensive Unity</td>
<td>11.61 ± 4.52</td>
<td>16.00 ± 5.63</td>
</tr>
<tr>
<td>Total</td>
<td>38.50 ± 5.80*</td>
<td>22.88 ± 9.33</td>
</tr>
<tr>
<td>Offensive</td>
<td>25.38 ± 9.88</td>
<td>42.83 ± 6.43</td>
</tr>
</tbody>
</table>

(p < 0.05). Statistically significant difference between the teams with different ranks: Penetration: Quantity: Champions’ teams vs. Third-placed teams: (Z = −2.238); Offensive Coverage: Quantity: Champions’ teams vs. Runner-up teams: (t = 3.470); Champions’ teams vs. Third-placed teams: (t = 2.867); Quality: Champions’ teams vs. Third-placed teams: (t = 2.132); Width and Length: Quantity: Champions’ teams vs. Runner-up teams: (Z = −4.199); Quality: Champions’ teams vs. Runner-up teams: (Z = −3.576); Offensive Unity: Quantity: Champions’ teams vs. Runner-up teams: (Z = −2.015); Delay: Quantity: Champions’ teams vs. Runner-up teams: (Z = −2.941); Champions’ teams vs. Third-placed teams: (Z = −3.879); Quality: Champions’ teams vs. Runner-up teams: (Z = −2.799); Defensive Coverage: Quantity: Champions’ teams vs. Runner-up teams: (Z = −4.445); Champions’ teams vs. Third-placed teams: (Z = −2.727); Quality: Champions’ teams vs. Runner-up teams: (Z = −2.200); Champions’ teams vs. Third-placed teams: (Z = −2.442); Balance: Quantity: Champions’ teams vs. Runner-up teams: (Z = −3.485); Champions’ teams vs. Third-placed teams: (Z = −2.287); Depth: Quantity: Champions’ teams vs. Runner-up teams: (Z = −2.759); Champions’ teams vs. Third-placed teams: (Z = −2.356); Concentration: Quantity: Champions’ teams vs. Runner-up teams: (Z = −2.559); Offensive Unity: Quantity: Champions’ teams vs. Runner-up teams: (Z = 2.480); Offensive Total: Quantity: Champions’ teams vs. Runner-up teams: (Z = 4.246); Champions’ teams vs. Third-placed teams: (Z = 4.395); Offensive: Quantity: Champions’ teams vs. Runner-up teams: (t = 4.815); Champions’ teams vs. Third-placed teams: (t = 3.039); Defensive Total: Quantity: Champions’ teams vs. Runner-up teams: (Z = 4.576); Champions’ teams vs. Third-placed teams: (Z = −3.591); Quality: Champions’ teams vs. Runner-up teams: (t = −4.548); Champions’ teams vs. Runner-up teams: (t = −3.902).

*Statistically significant difference between the champions teams in different confrontations: Offensive Total: Quantity: Champions’ teams vs. Champions’ teams (p = 0.006; t = 3.131); Defensive Total: Quality: Champions’ teams vs. Champions’ teams: (p < 0.001; t = −5.620).
up. However, they were more efficient only in the use and expansion movements of the effective game space (Width and Length) (42.74%).

Concerning tactical principles of the defensive phase, the runner-up and third-placed performed more actions (77.00%; 60.86%, respectively) and were more efficient (136.31%; 101.96%, respectively) than the champions’ teams in the movements of direct opposition to the ball carrier (Delay). In addition, the runner-up and third-placed performed more actions (128.81%; 138.79%, respectively) and were more efficient (100.30%; 106.41, respectively) in the support of the player who directly opposes the ball carrier (Defensive Coverage), as also performed more actions (111.00%; 44.20%, respectively) and were more efficient (99.45%; 56.86%, respectively) to ensure defensive stability in the area of the ball dispute (Balance). Moreover, the runner-up teams performed more movements that increase the goal protection and facilitate the recovery of the ball possession (Concentration) (82.24%) and to allow the team to defend in unity (Defensive Unity) (37.81%), being more efficient only in the movements to increase the goal protection and facilitate the recovery of the ball possession (Concentration) (116.18%).

Figure 1 shows the effect size measured with the Pearson’s r of the variables that presented significant difference (Table 1) regarding of the quantity and quality of tactical actions between the teams in the tournaments.

### 3.2. Action outcomes

The quantity and the quality of the champions’ teams offensive tactical actions led to a greater effectiveness compared to the runner-up and third-placed teams, are presented in Table 2.

In the offensive phase, the champions’ teams were more effectiveness than the runner-up and third-placed teams in the finalisations to the goal (25.99%; 35.45%, respectively) and in the maintenance of the ball possession (51.07%; 32.65%, respectively). The champions’ teams also suffered more fouls, gained throw-ins or corners (42.50%) when they played against the runner-up. Otherwise, the runner-up committed more fouls, gave throw-ins or corners (59.45%) against the champions’ teams. While the third-placed teams lost more possession of the ball (72.20%) when they played against the champions’ teams.

In the defensive phase, the champions’ teams recovered more possession of ball (41.86%) than the third-placed. Besides, the champions’ teams suffered more fouls, gained throw-ins or corners (45.35%) against the runner-up teams. The runner-up teams committed more fouls, gave throw-ins or corners (86.08%) than the champions’ teams. The third-placed teams suffered more fouls, gained throw-ins or corners (66.86%) against the champion’s teams. In addition, the runner-up and third-placed teams remained more without the ball possession (100.06%; 49.32%, respectively) and suffered more finalisations to their own goal (38.00%; 60.92%, respectively) against the champion’s teams.

Figure 2 shows the effect size measured with the Pearson’s r of the variables that presented significant difference (Table 2) regarding of the Outcome of the Action between the teams in the tournaments.
4. Discussion

The aim of this study was to compare the quantity, the quality and the outcome of the tactical actions of the champions’ teams compared to runner-up and third-placed teams in small-sided and conditioned games tournaments in the under-15 category. The results indicated that the champions’ teams performed more offensive tactical actions and were more efficient than the runner-up and third-placed teams in many key aspects of the game. Otherwise, the runner-up and third-placed teams performed more defensive tactical actions and were more efficient in executing them than the champion teams.

Figure 1. Effect size (Pearson’s r) of the quantity and quality of tactical actions in the direct confrontation between the teams in the tournaments. (a) Quantity of tactical actions, (b) Quality of tactical actions.
Due to the quantity and the quality of offensive tactical actions performed by the champions’ teams, it is possible to infer that these teams pull their advantage in the play by insuring constancy in their offensive actions, while their opponents were more reactive. Therefore, the results of this study corroborate those found in the literature, which prove that successful players not only bid on their opponents’ mistakes to take advantage of them, but continually seek to recover and maintain the ball possession, regardless of the game model and the competition stage, in addition to seeking to destabilise the opponent’s defense structure (Maleki et al., 2016; Tenga et al., 2017).

It also should be noted that, according to the results, the champions’ teams found more difficulty in the confrontations against the runner-up than against the third-placed teams, since they needed to achieve more offensive tactical actions to obtain success in the tournaments. Besides, they were more effective in defensive tactical actions when they played against the third-placed than against the runner-up teams. According to the literature, the quality of the opponent constrain the actions of the teams and, therefore, the players and the teams need to adapt their management of width and length (positioning and movement) ahead of their opponents (Lago-Peñas & Lago-Ballesteros, 2011; Machado et al., 2019; Vilar et al., 2014). This player’s quality can be acquired through the process of qualified training, as well as experiences in relevant championships or games (Kannekens, Elferink-Gemser, & Visscher, 2009).

In addition to the opponent’s quality which constraints the tactical actions of the teams, this quality can condition the teams’ organisation for a given game or situation.

### Table 2. Mean and standard deviation of the outcome of the actions in the direct confrontation between the teams in the tournaments.

<table>
<thead>
<tr>
<th>Outcome of the Action</th>
<th>Champions’ teams</th>
<th>Runner-up teams</th>
<th>p</th>
<th>Champions’ teams</th>
<th>Third-placed teams</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Offensive</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shoot at goal</td>
<td>4.27 ± 1.22</td>
<td>3.16 ± 2.09</td>
<td>0.028</td>
<td>3.61 ± 1.24</td>
<td>2.33 ± 1.08</td>
<td>0.004</td>
</tr>
<tr>
<td>Keep possession of the ball</td>
<td>26.00 ± 6.55</td>
<td>12.72 ± 6.25</td>
<td>&lt;0.001</td>
<td>21.77 ± 4.16</td>
<td>14.66 ± 3.51</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Earn a foul, win a corner or throw-in</td>
<td>3.27 ± 1.87</td>
<td>1.88 ± 1.56</td>
<td>0.042</td>
<td>1.33 ± 1.28</td>
<td>1.00 ± 0.84</td>
<td>0.552</td>
</tr>
<tr>
<td>Commit a foul, give away a corner or throw-in</td>
<td>1.11 ± 1.32</td>
<td>1.77 ± 1.16</td>
<td>0.038</td>
<td>2.55 ± 1.46</td>
<td>1.61 ± 1.64</td>
<td>0.059</td>
</tr>
<tr>
<td>Loss of ball possession</td>
<td>3.83 ± 2.45</td>
<td>3.33 ± 2.76</td>
<td>0.689</td>
<td>2.77 ± 0.64</td>
<td>4.77 ± 2.01</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Regain the ball possession</td>
<td>3.50 ± 2.95</td>
<td>4.22 ± 2.28</td>
<td>0.471</td>
<td>5.16 ± 2.00</td>
<td>3.00 ± 0.59</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Earn a foul, win a corner or throw-in</td>
<td>1.83 ± 1.24</td>
<td>1.00 ± 1.18</td>
<td>0.025</td>
<td>1.66 ± 1.74</td>
<td>2.77 ± 1.47</td>
<td>0.041</td>
</tr>
<tr>
<td>Commit a foul, give away a corner or throw-in</td>
<td>1.94 ± 1.55</td>
<td>3.61 ± 2.06</td>
<td>0.024</td>
<td>0.94 ± 0.87</td>
<td>1.33 ± 1.28</td>
<td>0.428</td>
</tr>
<tr>
<td>Ball possession of the opponent</td>
<td>14.55 ± 6.07</td>
<td>29.11 ± 6.96</td>
<td>&lt;0.001</td>
<td>16.22 ± 3.54</td>
<td>24.22 ± 3.63</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Take a shot at own goal</td>
<td>3.50 ± 2.35</td>
<td>4.83 ± 1.09</td>
<td>0.009</td>
<td>2.38 ± 1.09</td>
<td>3.83 ± 1.24</td>
<td>0.002</td>
</tr>
</tbody>
</table>

(\(p < 0.05\)). Statistically significant difference between the teams: **Offensive**: Shoot at goal: Champions’ teams vs. Runner-up teams (Z = −2.192); Champions’ teams vs. Third-placed teams (Z = −2.889); Keep possession of the ball: Champions’ teams vs. Runner-up teams (t = 6.217); Champions’ teams vs. Third-placed teams: (t = 5.535); Earn a foul, win a corner or throw-in: Champions’ teams vs. Runner-up teams: (Z = −2.029); Commit a foul, give away a corner or throw-in: Champions’ teams vs. Runner-up teams: (Z = −2.071); Loss of ball possession: Champions’ teams vs. Third-placed teams: (Z = −3.571); **Defensive**: Regain the ball possession: Champions’ teams vs. Third-placed teams: (Z = −4.178); Earn a foul, win a corner or throw-in: Champions’ teams vs. Runner-up teams: (Z = −2.242); Champions’ teams vs. Third-placed teams: (Z = −2.039); Commit a foul, give away a corner or throw-in: Champions’ teams vs. Runner-up teams: (Z = −2.263); Ball possession of the opponent: Champions’ teams vs. Runner-up teams: (Z = −4.577); Champions’ teams vs. Third-placed teams: (Z = −4.557); Take a shot at own goal: Champions’ teams vs. Runner-up teams (Z = −2.603); Champions’ teams vs. Third-placed teams: (Z = −3.164).
to face, generating different confrontation strategies (Teoldo et al., 2017). These authors preconised that the strategy can completely change from one game to another, besides changing within the same game. For example, a strategy can change as a result of a goal accomplished or suffered. Therefore, competitive situations in the training context can stimulate the adaptations of the players and the teams to different game situations (Garganta & Gréhaigne, 1999). In that case, independently of the strategy employed by the team, it is recommended that all players should be taught the game through tactical principles throughout the teaching-learning and training process, so that the players can adapt better to different situations of play and optimise the control of the game.

As a consequence, the runner-up and third-placed teams performed more defensive tactical actions and were more efficient than the champions’ teams in these actions. These results corroborated the fact that the runner-up teams provided more resistance to the champions’ teams, since they performed more movements on all defensive principles and were more efficient in those principles, except in the movements that allow the team to defend in unity. However, the failure in these movements may have influenced the ranking of the runner-up, as the successful accomplishment of these movements provides better conditions for the players closer to the ball to press the opponent (Teoldo, Garganta, Greco, & Mesquita, 2009; Teoldo et al., 2017). Besides, these movements allow the team to put pressure on the opponent, which can produce technical-tactical and psychological failures, generate errors in their actions, and increase the own team’s performance (Teoldo et al., 2009, 2017). In such case, the ability to identify possible mistakes in the execution of tactical principles can direct coaches’ decisions and strategy, and emphasise on determined content in the formative process.
In turn, the third-placed teams performed more movements and were more efficient in the movements of direct opposition toward the ball carrier, supported to the player who makes the direct opposition and defensive stability in the centre of the play. According to the literature, the defensive movements of the runner-up and third-placed teams can be explained due to the characteristic offensive movements of the champions’ teams, since their attack patterns are able to constrain the opponents (Santos, Lago-Peñas, & García-García, 2017; Vilar et al., 2014). Therefore, it is opportune that coaches seek to promote different game situations so that the players can explore them and, consequently, broaden their actions repertoires. By promoting such a vast repertoire, players can acquire new information and promote more experiences, which tend to provide the creative behaviour in team sports games (Kannekens et al., 2009; Serrano, Pizarro, García-González, Domínguez, & Álvaro, 2017).

Moreover, the specific movements of the players indicate the team’s adaptation to different match contexts. During the offensive phase, the champions’ teams performed more support movements to the ball carrier, besides using and seeking to extend the effective game width and length and allowing the team to attack in unity against the runner-up teams. As indicated by the literature, these movements indicated that the champions’ teams crossed "longer metric" paths, with the aim of finding less difficulty to approach the opposing goal. This specially occurred against the runner-up in comparison to the games against the third-placed teams. This reinforces champions perform more offensive movements in and out of the centre of play (Teoldo et al., 2017).

When playing against the third-placed teams, the champions performed more movements in order to destabilise the opponent’s defensive organisation, progressing in the match field through dribbling and movements to support the ball carrier, in detriment of other movements further away from the centre of play. In this way, the champions’ teams were able to follow a more direct path regarding the opponent’s goal, possibly due to the lower quality of the third-placed teams in the defensive phase movements (Tenga et al., 2017; Teoldo et al., 2017).

In addition, the champions’ teams were more efficient in the movements of use and expansion of the effective game space against the runner-up teams. Against the third-placed teams, they were more efficient in the movements of support to the ball carrier, within the centre of play and in the corridor subsequent to the game direction. These results proved the necessary adaptation to the games contexts, in which the champions’ teams were more efficient in movements consistent with the path that they have crossed to approach the opposing goal. Therefore, both the quantity of actions and the quality of these actions led the teams to top in the tournaments.

Thus, it should be noted that the greater quantity and quality of offensive tactical actions of the champions’ teams, provided greater offensive and defensive effectiveness compared to the other teams. In this manner, the results of this study, which was performed through small-sided and conditioned games, corroborate the studies accomplished in the formal game context (11x11), which indicate that the champions’ teams in the competitions performed more finalisations to the opposing goal and remained more time with the ball possession (Gómez-López & Álvaro, 2002; Hughes & Franks, 2005). This fact proves that small-sided and conditioned games demands are similar to the formal games (Clemente, 2016). Consequently, small-sided and conditioned games
can be used to improve the effectiveness of players and teams due to the transfer of learning in these matches for application in the formal game.

In turn, during the offensive and defensive phase, the interaction of some aspects indicated the greater effectiveness. Among them are: the number of game fragmentation (e.g. fouls, the throw-ins or corners), the fact that the third-placed teams lost more the ball possession and the runner-up teams suffered more finalisations. These results showed those continually perform offensive actions, since they are capable of maintaining and recovering the ball possession, besides seeking to carry actions that destabilise the opponent’s defence (Maleki et al., 2016; Tenga et al., 2017). Therefore, the outcomes of the teams’ actions can support coaches’ understanding of how champions’ teams behave in the matches.

This study has demonstrated the importance of insert competitive situations in the practice context and provides understanding into how champions’ teams behave in small-sided and conditioned gaming tournaments. However, some limitations should be noted. Among these limitations, the deliberated practice time of the players was not assessed, which can influence the players’ actions due to the experience acquired, especially at the beginning of the training process. Besides that, the time that players participate in competitions and in games considered more relevant was not verified. Finally, a found limitation is when the teams faced each other in the tournaments of accumulated points system with different numbers of teams, because the different moments (beginning or end of the tournament) may have conditioned the level of the teams’ involvement in the matches. This information could help in the understanding on how teams have conquered their ranking as more experienced players tend to perform better.

5. Practical implications

The competitive situation in the practice context can be used to assess and design the teams’ performance in competitions with formal games. As a method of assessment, tournaments may also prove to be valid, since coaches can use this context to identify and select players with emerging talent in soccer, as the best performing teams in small-sided and conditioned game tournaments seem to explore the match space in a way more quantitative and qualitative, continually performing offensive and defensive actions more effectively.

6. Conclusion

It is concluded that the champions’ teams in small-sided and conditioned games tournaments had more initiative in the matches, since they perform more offensive movements, while their opponents are more reactive to these movements. The champions’ teams are also more efficient in offensive tactical actions, while their opponents are more effective in defensive tactical actions. Finally, the champions’ teams are more effective in offensive and defensive movements against their opponents, especially in accomplishing finalisation to the opponent’s goal and maintaining the ball possession during the offensive phase and in the greater recovery of the ball possession and the less quantity of finalisations to the own goal during the defensive phase.
Further studies can be done to improve the understanding of how champions’ teams conquer small-sided and conditioned game competitions. Among them, we highlight the playoffs tournaments and championships throughout the year.

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References


