

Are the Teams Sports Soccer, Futsal and Beach Soccer Similar?

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Abstract Soccer, Futsal and Beach Soccer are classified as team sports of invasion, thus having common characteristics. The aim of this study is: (i) to analyze the evolutionary trends concerning to the average number of goals per game and per competition; (ii) to analyze the incidence of goals regarding the periods of play they tend to occur; and (iii) to scrutinize the influence of scoring first a goal in a match on the respective final result. We analyzed Soccer (n=836), Futsal (n=306) and Beach Soccer (n=148) matches played in World Cup tournaments, organized by the *Fédération Internationale de Football Association* (FIFA), performing a total of 1290 matches. It was found that the average number of goals per game obtained in FIFA World Cups, as both Soccer and Beach Soccer, evidenced a marked tendency to decrease, while for Futsal game it was verified the opposite. Regarding the timing of the goals, in the three team sports it was found that the majority of goals were scored in the last period of the game (Soccer: 19.42%; Futsal: 36.25%; Beach Soccer: 37.21%). Examining the influence of scoring the first goal in the final result of the match, in soccer and in Futsal it was found that the average probability of winning the game is approximately 70%, while in Beach Soccer it is about 60%. Thus, we suggest that the origin of the results for the analyzed variables is related to the interaction of physical, technical, tactical and psychological aspects, and the weighting of each one is different in relation to the specificity of the each team sports.

Keywords Psychological goal, Evolutionary trends, FIFA World Cup, Goal time, Invasion games

1. Introduction

Soccer, Futsal and beach soccer are games included in a category named as Team Sports, due to incorporating the six invariants mentioned by Bayer [1]: (i) ball or similar object; (ii) playing space; (iii) opponents, (iv) teammates; (v) a target to attack and a target to defend; and (vi) specific rules. These sports are also classified as invasion games, category that is characterized by the continuous confrontation between attack and defense, particularity anchored in the permanent relations of opposition and cooperation between players and teams in a common space. So, in the same playing space, both the teams fight for having the ball possession as well as to dominate its circulation through predominant trajectories [2].

Despite Soccer, Futsal and Beach soccer have principles of action and operational rules that give them specific characteristics, guiding the behavior of the players in the context of training and competition [3], these sports also hold similarities with other games that are also classified as Team

Sports, such as Basketball, Handball or Water Polo. Bayer [1] reports that these similarities are largely confined to operational objectives that, in turn, are divided into defensive and offensive. According to this author, the three objectives to follow in defensive phase are: recovering the ball possession, preventing the progression of the opposing team and protecting the own target; while for the offensive phase, the aim is to keep the ball possession, to progress towards the opponent's target and to create scoring opportunities, to reach the main objective of the game: the point or the goal. Concerning to energetic point of view, despite these team sports have evolved and specialized in different ways over time [4], are still characterized by an acyclic activity [5], requiring athletes wit capacity to perform intermittent and alternating mixed (aerobic-anaerobic) exercises [2].

In its institutionalized forms (formal game), the generality of the team sports represent high complex activities on regards of the dimensions that induce the performance, namely physical, technical, tactical and psychological. Graça et al. [6] add that team sports requires of the athletes a high adaptability and response to cognitive, affective and motor domains, conditions that Mesquita and Graça [7] fit in the assessment of perception, comprehension and decision-making, supported by affective and social aspects and by the development of the ability to play. Thus, due to

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the immense variability of situations that emerge from this category of games, if the player requires a high-speed information processing, ability to perceive the involvement, consistency in decision-making and speed of execution of the motor actions, conditions that, when combined, induce a high complexity and unpredictability into the game [8-10].

According to Barreira, Garganta and Anguera [11], in Soccer actual research it is evident a high investment in the study of the tactical dimension of the game in an ecological context (e.g. [12, 13]). Nowadays, in this approach, the modeling of the game through the searching of behavioral patterns that lead to the success of the attack is the most used [14, 15]. Vouga [16] confirms the current trend to the investment in the study of the attack on Soccer, stating that 55.4% of the studies developed at the Faculty of Sport, University of Porto, Portugal, focus on the offensive phase. So it is an attempting to inquire performance indicators, technical and tactical perspective, that unbalance the game in our favor [17], proceeding so, to this detection and interpretation of stable and regular features in the variability of attacker's actions. This reference seems to be transversal to the Soccer, the Beach Soccer and Futsal, in that the goal is the aim for what all stakeholders compete [18], and therefore the indicator that arouses most interest among researchers today [19].

Being marking goals considered critical to the success of the teams in competitive context, knowledge about the evolution of this indicator over time, the variables that contribute to this event succeed, as well as the consequences that adds on patterns of play, should be a requirement for coaches to prepare and conduct their training processes more effectively [20, 18]. It becomes therefore necessary to know, for example, the evolution of average goals per game and consequently changes in the patterns of the game [14] tendency for the distribution of goals throughout the game [21, 22], the influence of scoring first on the final outcome of the game [23], a phenomenon also called "psychological goal" [24], or the influence of momentary result [25] on patterns of game of the teams, so you can create a favorable environment for the development of players and teams [26].

Once it comes to similar modalities in their sporting gestures [27], and being the scarce literature on information in this context, the aim of this work was to expand the knowledge level of the internal dynamics involving Soccer, Futsal and Beach Soccer. Thus, it is tried to identify and to understand the similarities and specificities among these three team games, as well as variables that possibly explain the phenomena that occur in the practice of these sports modalities. It seems that this premise will contribute to the training process and, consequently, the performance in competition, may be more effective due to its development according to the degree of specificity of each modality [28]. In this sense, the present study aims to: (i) investigate the evolutionary trends regarding the amount of goals per game in the modalities of Soccer, Futsal and Beach Soccer; (ii) analyze the incidence of goals in games of Soccer, Futsal and Beach Soccer in relation to the periods of the game they tend

to occur; and (iii) identify the team that scored the first goal of the game, questioning the influence of this event on the final result obtained by this same team.

2. Materials and Methods

2.1. Sample

We analyzed all the games soccer, Futsal and Beach Soccer realized on the World Cups organized by the Fédération Internationale de Football Association (FIFA). In the modality of Soccer, we analyzed the games of the FIFA World Cups between 1930 and 2014, a total of 836 games in 20 tournaments considered; relative to Futsal, analyzed in 7 tournaments - the FIFA World Cups between 1989 and 2012 -, we analyzed 306 games; were analyzed at the Beach soccer games of the FIFA World Cups between 2005 and 2013, except for tournaments of 2007 and 2008 for failure to meet the required data, and so 148 games were considered. In summary, the three types under study examined a total of 1290 games.

Data on number of goals and the moment they were scored in the matches of the FIFA World Cups were obtained from FIFA (www.fifa.com) site [29], using up the official summaries of games. The use of game statistics from FIFA, according to the study by Castellano, Casamichana and Lago [30], has high reliability, in that these authors encoding randomly five games and comparing the data collected with the FIFA website, with the use of Cohen's Kappa statistic tool, found excellent reliability values ($0.93 \leq \kappa \leq 0.97$) [31].

2.2. Variables

For the study, we used the following variables:

- a) Average goals per game and obtained by competition;
- b) Division of game in periods of time:
 - i. Soccer: 1st-15th min.; 16th-30th min.; 31st-45th min.; extra time for the 1st half of the match; 46th-60th min.; 61st-75th min.; 76th-90th min.; extra time for the 2nd half of the match; 1st extra time (91st-105th min.) and 2nd extra time (106th-120th min.) (adapted from Garganta [32]);
 - ii. Futsal: 1st-10th min.; 11th-20th min.; 21st-30th min.; 31st-40th min.; 1st extra time (41st-45th min.) and 2nd extra time (46th-50th min.);
 - iii. Beach soccer: 1st-12th min.; 13th-24th min.; 25th-36th min. and extra time (37th-40th min.).
- c) The relationship between scoring the first goal of the game and the final result obtained by the same team, using the variables: Victory, Draw and Defeat. For this variable we analyzed games played in seven tournaments for Soccer and Futsal, while for the Beach Soccer 5 tournament. As it is described in studies developed by Barreira, Garganta, Guimarães, Machado and Anguera [33] and Machado et al. [34], only the goals scored during regular time of the game, including: Soccer (90 minutes), Futsal (40 minutes), and Beach soccer (36 minutes) were considered.

2.3. Statistical Analysis

All data were analyzed using the statistical package for PC SPSS 20.0. (Lead Technologies Inc, USA). Non parametric chi-square (χ^2) analysis was used to determine the statistically significant differences and the level of significance was set at $p < 0.05$.

3. Results

3.1. Goals Scored per Game and Competition

The analysis of 1,290 games corresponding to the FIFA World Cup of Soccer (n = 836), Futsal (n = 306) and Beach

Soccer (n = 148) allowed us to analyze 5,706 goals (Table 1).

The average amount of goals scored per game in the FIFA World Cups shows that in the game of football and the game of Beach Soccer there is a tendency for a sharp decrease. Thus, since the Soccer World Cup 1930 Uruguay (3.9 goals per game) to the Brazilian World Cup in 2014 (2.7 goals per game), there is a reduction of 1.2 goals per game obtained (Figure 1).

For the modality of Beach Soccer, the 8-year period considered, there is also a reduction in the average number of goals per game since the FIFA World Cup 2005 Brazil 8.2 goals were scored per game while in Tahiti 2013 tournament 7.6 goals per game were scored, meaningless 0.6 goals per game (Figure 2).

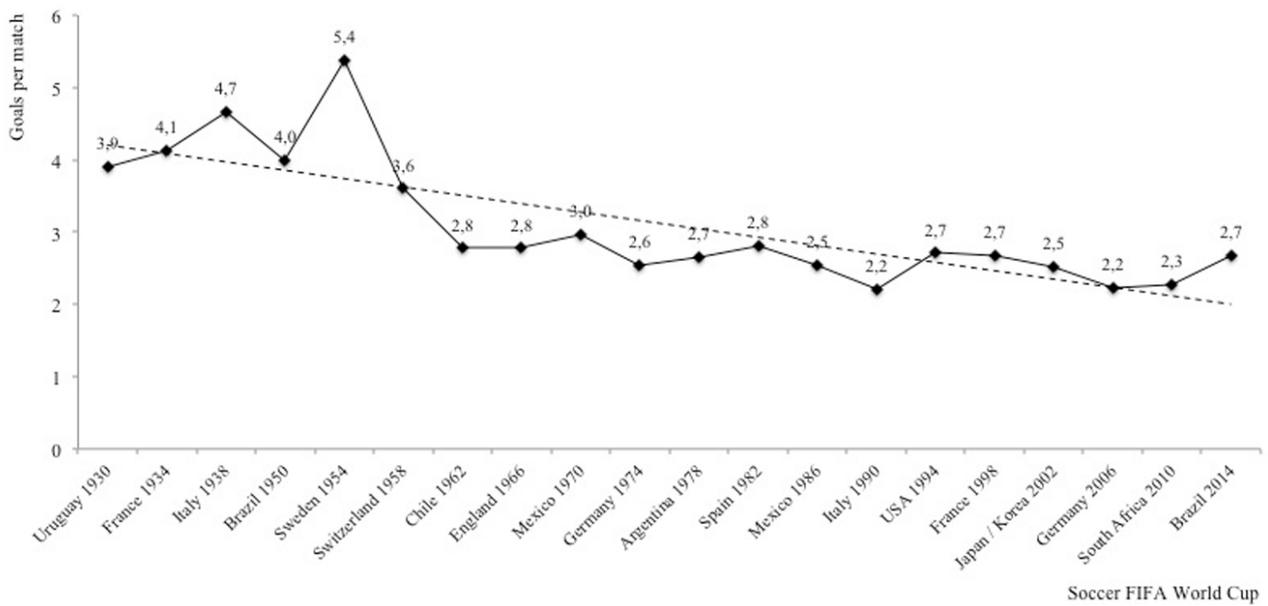


Figure 1. Evolution of average goals per game in the Soccer FIFA World Cup between 1930 and 2014

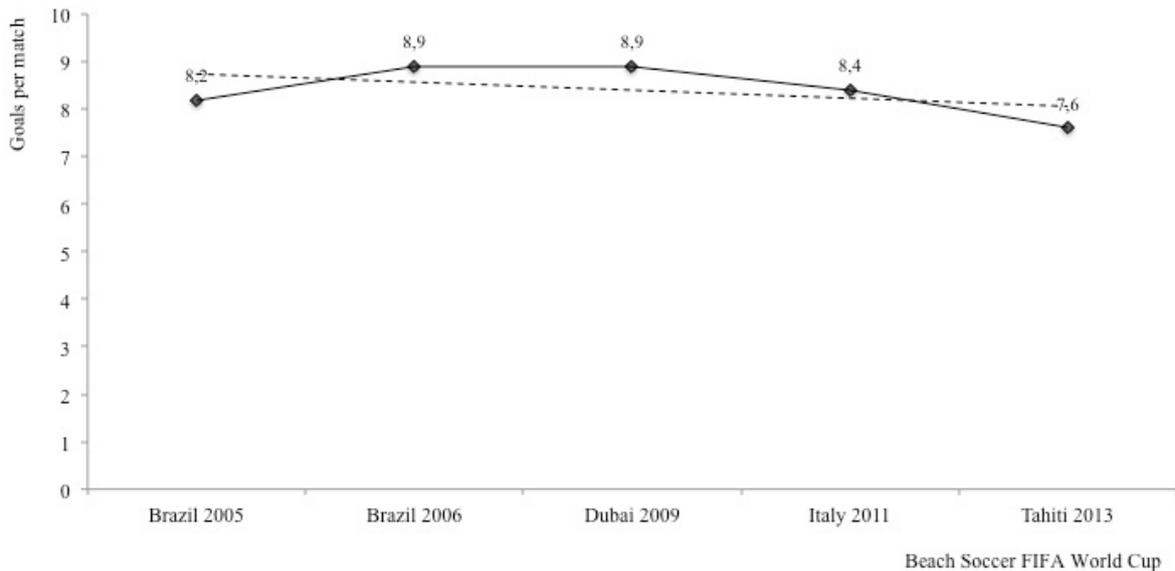


Figure 2. Evolution of average goals per game in the Beach Soccer FIFA World Cups between 2005 and 2013

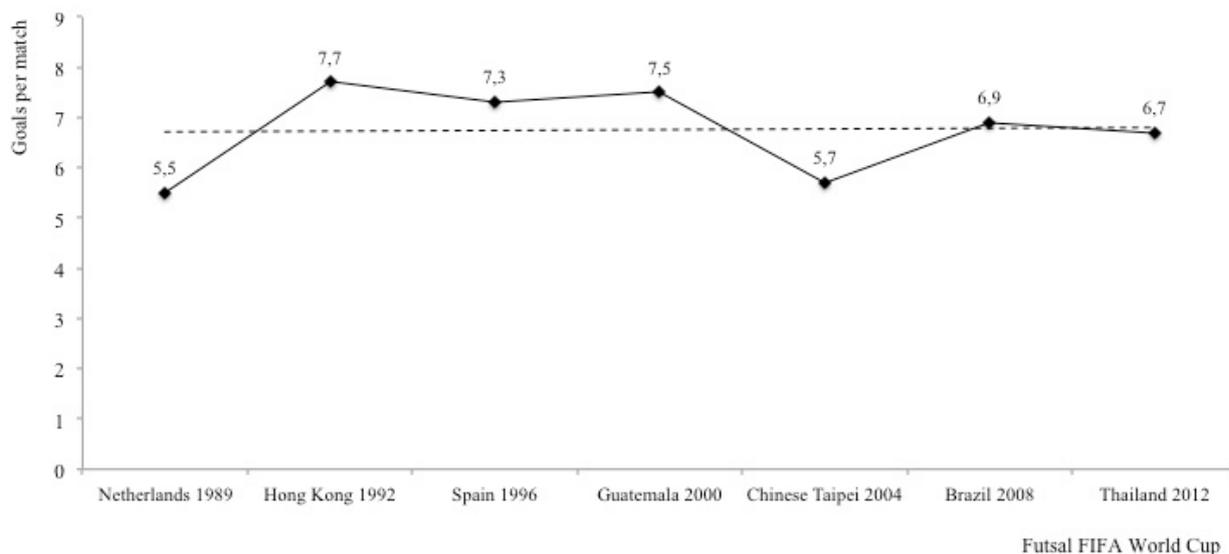


Figure 3. Evolution of average goals per game in Futsal FIFA World Cup between 1989 and 2012

Table 1. Distribution of goals scored in Soccer FIFA World Cups, divided by the periods of the game, namely the regulation period (i.e. 90'+) and extra-time (e.t.) (adapted from Leite [35])

Half	1 st half				2 nd Half				Extra time		Total	Matches	Average
	Minutes	1 st -15 th	16 th -30 th	31 st -45 th	45 th +	46 th -60 th	61 st -75 th	76 th -90 th	90 th +	1 st e.t.			
2014	18	25	19	3	24	33	29	12	3	5	171	64	2.7
2010	14	23	20	2	22	27	29	6	1	1	145	64	2.2
2006	24	24	20	3	19	10	36	8	1	2	147	64	2.2
2002	27	18	20	5	28	30	27	4	1	1	161	64	2.5
1998	24	20	16	10	31	25	35	9	-	1	171	64	2.7
1994	22	19	24	-	23	23	27	-	2	1	141	52	2.7
1990	9	13	12	-	19	22	34	-	2	4	115	52	2.2
1986	19	18	18	-	21	26	25	-	2	3	132	52	2.5
1982	16	22	12	-	28	40	24	-	3	1	146	52	2.8
1978	12	10	30	-	13	20	15	-	1	1	102	38	2.7
1974	14	16	15	-	16	16	20	-	-	-	97	38	2.6
1970	12	14	8	-	19	19	16	-	3	4	95	32	3.0
1966	14	13	15	-	11	14	20	-	1	1	89	32	2.8
1962	16	14	9	-	15	17	18	-	-	-	89	32	2.8
1958	16	22	18	-	22	23	24	-	1	-	126	35	3.6
1954	20	29	14	-	25	20	28	-	2	2	140	26	5.4
1950	9	17	15	-	15	12	20	-	-	-	88	22	4.0
1938	11	13	16	-	8	12	15	-	6	3	84	18	4.7
1934	9	16	8	-	11	14	8	-	2	2	70	17	4.1
1930	12	11	9	-	9	17	12	-	-	-	70	18	3.9
Total	318	357	318	23	379	420	462	39	31	32	2.379	836	-
%	13.37	15.0	13.37	0.97	15.93	17.65	19.42	1.64	1.30	1.34	100	-	-

Contrary to Soccer and Beach Soccer in Futsal, the 23-year period considered, since the FIFA World Cup Netherlands 1989 (5.5 goals per game) to Thailand tournament in 2012 (6.7 goals per game), there was an increase of 1.2 goals per game (Figure 3).

3.2. Temporal Occurrence of Goals

In 836 games played in 20 Soccer FIFA World Cup, were scored a total of 2379 goals, 1016 goals (42.71%) were obtained during the 1st half of the match, 1300 goals (54.64%)

in the 2nd half and 63 goals (2.65%) in extra time. In particular, 318 goals (13.37%) occurred in the period from 1st to 15th min.; 357 goals (15.0%) of 16th to 30th min.; 318 goals (13.37%) of 31st to 45th min.; 23 goals (0.97%) in increments of time in the 1st half; 379 goals (15.93%) in the period from the 46th to the 60th min.; 420 goals (17.65%) of 61st after 75th min.; 462 goals (19.42%) of 76th to 90th min.; 39 goals (1.64%) in increments of time in the 2nd half; 31 goals (1.30%) in the 1st extra time; and 32goals (1.34%) in the 2nd extra time (Table 1).

In 306 Futsal games played in seven FIFA World Cups considered, we obtained a total of 2080 goals, 868 goals (41.73%) were scored in the 1st half, 1201 goals (57.74%) in the 2nd half and scored 11 goals (0.53%) in extra time. When analyzing the time period in which the goal occurred, it was found that 364 goals (17.5%) were collected between 1st and 10th min.; 504 goals (24.23%) from the 11th to 20th min.; 447goals (21.49%) of 21th to 30th min.; 754 goals (36.25%) of

31st to 40th min.; and 11 goals (0.53%) in extra time (Table 2).

In 148 Beach Soccer games analyzed in 5 FIFA World Cups, 1.247 goals were scored, according to the following distribution: 362 goals (29.03%) in the 1st period, 405 goals (32.48%) in the 2nd period; 464 goals (37.21%) in the 3rd period, and 16 goals (1.28%) in extra time (Table 3).

3.3. Relationship between Scoring the First Goal and the Final Result of the Game

Considering the games of the Soccer FIFA World Cup from 1990 to 2014, it was found that the team that scored the first goal was the winner in 69.77% of games played (table 4).

Since in the Futsal modality, analysis of the Futsal World Cups from 1989 to 2012 show that the team that scored the first goal of the game won in 73.67% of the time.

Table 2. Distribution of goals scored in Futsal FIFA World Cups, divided by the periods of the game

Half Minutes	1 st Half		2 nd Half		Extra time	Total	Matches	Average
	1 st -10 th	11 st -20 th	21 st -30 th	31 st -40 th				
2012	67	86	77	116	3	349	52	6.7
2008	79	90	98	117	3	387	56	6.9
2004	37	53	49	87	-	226*	38	5.7
2000	53	67	53	127	-	300	40	7.5
1996	49	74	63	104	-	290	40	7.3
1992	45	72	84	106	-	307	40	7.7
1989	34	62	23	97	5	221	40	5.5
Total	364	504	447	754	11	2.080	306	-
%	17.50	24.23	21.49	36.25	0.53	100	-	-

* The data related to 11 goals of this tournament are omitted (total goals in 2004 = 237).

Table 3. Distribution of goals scored in Beach soccer FIFA World Cups, divided by the periods of the game

Goals	1 st period	2 nd period	3 rd period	Extra time	Total	Matches	Average
2013	69	76	89	9	243	32	7.6
2011	74	104	88	3	269	32	8.4
2009	97	80	104	4	285	32	8.9
2006	73	94	119	-	286	32	8.9
2005	49	51	64	-	164	20	8.2
Total	362	405	464	16	1.25	148	-
%	29.03	32.48	37.21	1.28	100	-	-

Table 4. Comparison between the first goal scored and the winnings in Soccer FIFA World Cups between 1990 and 2014

World Cups	2014	2010	2006	2002	1998	1994	1990	Average
Matches won by the team scoring first (%)	71.43	76.78	73.21	61.29	62.29	72.00	71.43	69.77

Table 5. Comparison between the first goal scored and the winnings in Futsal FIFA World Cups between 1989 and 2012 (adapted from Leite [36])

World Cups	2012	2008	2004	2000	1996	1992	1989	Average
Matches won by the team scoring first (%)	71.15	73.21	76.32	82.50	67.50	75.00	70.00	73.67

Table 6. Comparison between the first goal scored and the winnings in Beach Soccer FIFA World Cups between 2005 and 2013

World Cups	2013	2011	2009	2006	2005	Average
Matches won by the team scoring first (%)	59.38	43.75	59.38	71.88	65.00	59.88

Analyzing the games of the Beach Soccer World Cup FIFA between 2005 and 2013, it was found that the team that scored the first goal of the game came out victorious in 59.88% of matches played.

4. Discussion

The main purpose of this study was to characterize and compare the team sports games Soccer, Futsal and Beach Soccer with regard to the amount of evolutionary quality trends of goals obtained per game, the different periods in which these events occurred and the influence of scoring the first goal for the final result of the team in the game.

4.1. Temporal Analysis of Scored Goals

The results shown in tables 1, 2 and 3 shows that most of the goals, in three modes analyzed were obtained in the last period of the games. In the present study, the highest incidence of goals in the game of Soccer (462 goals, 19.42%) was found between the 76th and the 90th minute; in the Futsal game between the 31st and 40th minute of the game (754 goals, 36.25%); and Beach soccer between the 25th and the 36th minute (464 goals, 37.21%).

The results confirm the many studies on Soccer, which refer to a tendency for the occurrence of goals in the last period of the game, i.e., between the 76th and the 90th minute [35, 37-42]. Silva [43] analyzing 7599 goals in 2902 games played occurred in 8 national championships in professional soccer, including Argentine Championships, German, Brazilian, French, Dutch, English and Italian, confirms this trend (21.88%). Armatas, Yiannakos and Sileloglou [44] analyzed the 90 games played in three World Cups Women's football (1995, 1999 and 2003), also verifying that a large percentage of goals (32.3%, 22.0% and 24.3%, respectively) was obtained in the last 15 minutes of play.

According to the literature, the predominance of goals late in the Soccer game seems to be mainly related to muscle fatigue of athletes [45], which seems to induce a higher frequency of errors made by players at final instants of games. Thus, the increase in physical and physiological requirements in the final moments of games induce increased fatigue in the players, impacting in their physical, technical and psychological performance, and consequently, the driving tactics and actions carried out in the course of the game [46-48], whereby Gomes *et al.* [41] confirms that the best performance (physical, technical, tactical and psychological) in Soccer is directly related to the less physical wear of the players. Particularly, the decreased level of muscle glycogen, accumulation of metabolic byproducts, the flaws in the nervous system and the mechanism of

stimulus-contraction in the final moments of the games seem to contribute to the deterioration of performance [45-52]. According to Reilly [53] and Rahnama *et al.* [48], the decline in explosive force, which is translated into lower frequency of accelerations and heels, is related to the less effective actions of the players at the end of games.

Several studies comparing the rates of effort between the first and second half of the soccer game, showing a reduction in athletic performance [51, 54, 55]. The results reported a reduction of 5 to 10% of the total distance between the first and the second half as well as the amount of running performed at high intensity (Mohr *et al.*, 2003; Bangsbo *et al.*, 1991; Bangsbo, 1994; Reilly & Thomas, 1979, *cit.* Armatas *et al.* [44]). However, according to Reilly [47], the higher incidence of goals in final time of the game is not only due to physical wear, since this factor tends to occur for both teams, although different in scale and impact. The author adds that the reduction of the intensity of play tends to be more pronounced for smaller defenders and attackers for what is the advantage of the latter prevail and therefore, the greatest ability to verify the best performance of the players playing in early areas of the playing area in relation to later ones.

The influence of fatigue on the concentration of the players seems to be, according Reilly [47], another possible explanation for the greater number of goals in the final 15 minutes of play. Thus, the highest sustainable physical effort seems to lead to a greater amount of tactical and motor errors, causing more probability score goals [46, 56, 57]. According to Brandão [58], the psychological point of view, stress is related to the activation of cognitive, psychological or mental activity functions. The author found the stress factors in Soccer players, saying that it seems a complex and multifactorial process that may negatively influence the performance of the athlete. In this context, Bompa [59] adds that the greater the expertise of the player, the greater will be the demand and, consequently, the stress during a game

Some studies on the physical dimension of soccer players indicate that the player is essential to have a good aerobic capacity because it seems to avoid the slowdown in the job until the end of the game [46, 47, 52]. Differentiated tactical strategies can also be used to reduce fatigue effects in the final stages of the game [53, 60]. Thus, it is concluded that fatigue, both physical and mental, can prove to be an inhibiting factor for performance in soccer, which is expressed mainly in the late stages of games, justifying, in large part, a significant portion of goals at those moments of the game [35, 46, 47, 61-64].

In Futsal and Beach Soccer, the possibility of making the replacement of players unlimited during the game, in our view could dilute the influence of fatigue on the occurrence of goals in the last minutes of play. However, studies in

Futsal reveal that, despite of the coaches having high technical freedom in regulation to define strategies to replace players throughout the game in order to maintain the intensity and the physical level of the athletes, the distribution of the occurrence of goals does not appear more linear as the occurrence of goals between periods for the checked in soccer game [20, 28, 65, 66]. Thus, studies in Futsal show that most of the goals obtained occur in the last period of the game, i.e. from 31st to 40th minutes [18, 26, 67-69], so the final minutes of the game of Futsal, thus, appear to be a critical period of the match, in which the errors on the part of the players are more frequent, inducing greater number of goals [20].

Junior Bello (1998, cit. Santana et al. [69]), reports that the time period of 31st to 40th minutes requests a high level of players cautioned in which errors should be minimized and the team should be incorporated in its best training. According to Fukuda and Santana [18], the final 10 minutes is the time setting of the game, insofar as, according to the momentary result of the game, the attack scenarios may become sharpened and consequently can facilitate situations counterattack. According to Reilly [53], it is possible that the losing team tends to guide its players to more advanced areas of the pitch in order to create more completion situations, giving higher probability of scoring and conceding goals.

Thus, it appears that the physical and mental state of the players due to the high intensity of the game in its final moments, seems to exert significant influence on the implementation of technical-tactical actions, thus, regardless of the momentary outcome of the game, the player's action includes a closer higher risk, as closer as it is from the of the game. Noteworthy is also that the tactics adopted by the technical options, for example, the use of the goalkeeper as the row player (5th player) or play on the counterattack, meet a circumstantial demand of game and does not necessarily imply that the teams are unbalanced emotionally-compromised and/or tactically fitness unstructured. Thus, the literature reports that the highest incidence of goals in the final 10 minutes of play in soccer can be explained by both physical and emotional components, such as tactical options [20, 69].

Regarding to Beach Soccer, the literature reveals non-existent as analysis of the occurrence of goals throughout the game. In our view, the reason for this phenomenon in this modality is similar to the Futsal game, insofar as it also involves the possibility of freely replace the players during the game. Therefore, it is concluded that since the level of physical performance can be ensured with the exchange of players at any time during the game, the mental dimension of the player, circumstances combined to the tactics applied in the final of the game (this variable applies only to futsal), those seem to be the main answers to this phenomenon.

4.2. Relationship between Scoring the First Goal and the Final Result of the Game

In the present study, in both Soccer and Futsal, it was found that the team that scores the first goal of the game has a high probability of achieving victory (approximately 70%), while in the Beach Soccer this probability is lower, i.e., about 60%. These results corroborate a study in Professional Leagues of Soccer and Futsal in Spain [70], which reveals that in the game of football, the teams who are playing in their home town and score a first goal tend to win 74.45% of the games, while when they play outside hometown they tend to win 62.09% of the matches. The same study found an advantage to score first in Futsal, that is lower than that for the game of soccer, in that when teams play Futsal in their home towns they tend to win 64.77% of the games while playing outside they win in only 43.86% of situations. Thus, in the soccer game the advantage of scoring first (86.15%) is significantly higher than that found for Futsal (75.93%) [70].

According Armatas and Yiannakos [71], the participation of teams of very low level in the final stages of the Soccer and Futsal World Cup, as well as the accumulation of fatigue on the players in the period in which the competition is held – i.e. end of sports seasons - appears to have resulted in a decrease of the reaction when a team suffers the goal. Regarding the tactical dimension, Michailidis et al. [19] states that after reaching a goal teams are subject to tactical and strategic changes that tend to cause a density of defensive block in backward areas of the pitch. Thus, generally the team that scores the first goal tends to take a more defensive stance in the game at that contrary, the team that is at a disadvantage seeks to steer more offensively to reverse the score [25]. This fact seems to have the following consequences for the team at a disadvantage:

- projects to areas of early pitch and greater amount of players, allowing more space indented areas for the adversary to perform a greater number of actions of counterattack;
- stronger physical stress, which seems to favor a higher incidence of goals in the final period of the game by the opposing team.

The goal then appears to be an inducer factor of high psychological burden on the players [65]. Theis [72] states that when a team scores the first goal of the game, it can display performance improvements through increasing self-confidence. However, team players suffering first goal need to be prepared tactic, physically and psychologically, in order to achieve respond to adverse situations, so that the training process should include moves with different forms of players and time limit. The mental aspect just seems to be the main factor associated with the impact of the first goal in the final result of the game, however, there are other factors (e.g. substitutions, expulsions, interval) that seem to influence the performance of the teams but with less relevance [24]. I.e., the team that can score the first goal of the game tends to improve your psychological aspect, maintaining or improving their performance, while the team that suffers the first goal suffers a decrease in psychological aspect, tending to reduce its performance in competition.

Thus, there is a high probability that the team who scores the first goal in the game to get the victory in the final result of the same, a situation that seems to be due to physical, technical, tactical, but mainly psychological. In short, according to Garganta [32], the final result of a player or team in sports games has a multifactorial. Therefore, sport performance can be attributed to a high degree of development and specialization of physical, technical, tactical and psychological parameters.

5. Conclusions

According to the results found in this study we suggest the following factors as those that are more directly associated with increased incidence of late goals in three game modalities analyzed:

- Soccer: physical dimension associated with psychological, and induces changes in the technical, tactical and motor dimensions;
- Futsal: psychological dimension, associated with game tactics circumstances, for example, the use of the goalkeeper as 5th row player and counterattacks;
- Beach soccer: psychological dimension associated with physical dimension.

In relationship between scoring the first goal and the final result of the game, for the 3 modalities, the psychological dimension associated to the physical, tactical and technical aspects, seem to have affected the results.

In this sense, it is required different training methods and means for the team sports games Soccer, Futsal and Beach Soccer.

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