

# Construction, Validation and Application of an Observation System in a Pilot Study on the Offensive Process in Women's Football



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## INTRODUCTION:

The football game emerges from the nature of the confrontation between two teams, characterized by the successive alternation of states of high order, disorder, stability and variability (1). Considering the natural development of football, new challenges emerge for the coach in terms of team preparation (2). The evolution and development of the football game requires coaches to constantly update their knowledge about the players and the teams where they work (3). The analysis of the football game, based on the observation of the activity of players and teams, assumes enormous importance in sports preparation (4).

Along with game analysis, a topic that has gained a lot of relevance in today's football is women's football. It's possible to observe this growth in popularity at UEFA Women's Euro 2017 held in the Netherlands where there was an increase of 20.7 million spectators compared to the same competition in 2013. The stadiums at the home team's games were always sold out, with the total attendance of the competition being 240,045 spectators, record numbers for this sport (5).

The observational methodology was used in this study because of its closely relation to sports analysis. It favors the description and analysis between the observed object and the observer in this logic of scientific investigation, due to the great interaction of the characteristics of the conducts between them and the difficulty in controlling contextual constraints (6).

## OBJETIVES:

The general objectives of the study focus on characterizing the phases of the offensive process, through the analysis of two games in three teams with different qualifications in the main women's football league in Portugal, the BPI league, during the 2018/2019 sports season. The specific objectives of the present study were the construction, validation and application of a pilot study in the area of sports training.

## METHODS:



- 893 registered actions;
- 6 games in Liga BPI (1<sup>st</sup> division of the women's championship)
- 3 teams ranked in 1<sup>st</sup> (Team A), 6<sup>th</sup> (Team B) and 12<sup>th</sup> place (Team C);
- 7 unaccounted actions due to recording issues.



- Ensure natural behavior;
- The study is primarily ideographic;
- The observation instrument is developed ad hoc;
- Ensure temporal continuity;
- Perceptible behavior.



- Base studies: "Observational Analysis of the Goal. Pattern Detection in Completion "(2018) "Development and Validation of an Observation System in Competition in Fixed Ball Football" (2014);
- Contact with the Instat Scout platform;
- Review by 3 experts;
- Intra Observer Analysis with GSW7 software.



### Criterion 1

Momentary Game Characterization

### Criterion 2

Initiation of the Offensive Action Construction Phase

### Criterion 3

Development of the Offensive Situation Creation Phase

### Criterion 4

Consequence of the Finalization Phase

### Intra Observer Analysis

**2<sup>nd</sup> Observation**  
(21/11/2019)

**1<sup>st</sup> Observation**  
(7/11/2019)

**98%**

### 1<sup>st</sup> Analysis

Descriptive analysis of the categories with the highest incidence rate.

### 2<sup>nd</sup> Analysis

Descriptive analysis of categories depending on the team.

## RESULTS:

### 1<sup>st</sup> Analysis

- 20% of the offensive actions occur between 76 and 90 minutes;
- When the offensive process was started by running ball, 23.7% was the result of interception to the opponent;
- The throw-in was the most relevant set pieces in the start of offensive process (21.2%)
- The right side in the offensive midfield is where the greatest number of ball recoveries occurs (16%)
- During the creation phase, the right side of the offensive sector was the most requested area to transport the ball to the finishing area (27.6%).
- The central aisle was the most requested in the finalization phase (71.2%);
- The most recurring finishing action was the shot out with a total of 40.1% of the shares.
- Analyzing the success in the construction phase, only 17.7% of the actions were successful, with the partial success criterion being privileged with 53%.
- In the creation phase, success was also not the most recurrent (30.4%), with the failure criterion totaling 45.2%.
- Checking the change in the result, 60% of the actions were carried out when the teams were winning.

### 2<sup>nd</sup> Analysis

- 45% of the plays of Team A happen when they were already winning by more than one goal;
- In the Construction Phase existed an equality where the three teams presented the same high category.
- The most recurrent game initiation with a running ball was the Recovery in Interception to the Opponent and the Set Piece was the throw in.
- Team A stood out in the criterion of Initiation of the Offensive Action Construction Phase by starting in the middle sector, left corridor 22,5% of their attacks, using 3 players (28%) in a time space set in 8 to 11,99 seconds (28,5%).
- In the Development of the Offensive Situation Creation Phase the three teams used the same sector to get closer to the finalization phase, only distinguishing the corridor.
- Team A and Team B used the offensive sector and the right corridor 32% and 24,5% and Team C used the offensive sector and the left corridor 28%.
- In the last criterion, the Consequence of the Finalization Phase it can be detached that Team A in 65% of their plays that get the opponent goal they were winning and continue winning, Team B in 28,5% were tied and they still get tied and Team C in 68% of the plays they were losing and they still get losing.

### CONCLUSION:

The observation system analyses the offensive process through 4 criteria, 22 sub-criteria and 145 categories, which reveals that the instrument is efficient. The application of the pilot study allowed to characterize the offensive process, thus revealing possible trends for this phase of the game in women's football. The results reflected the rankings obtained by the difference of the capacity of the construction, creation and finalization were the Team were the most efficient and the Team C were the weakest in the criterion.

### REFERENCES:

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