


Influence of match status in ball possessions in the FIFA Women's World Cup France 2019

Proc IMechE Part P:
J Sports Engineering and Technology
1–8
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DOI: 10.1177/17543371221133624
journals.sagepub.com/home/pip


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Abstract

There is little scientific knowledge about the influence of the match status criteria (winning, drawing, losing) in ball possessions in women's football. Therefore, the aims of this study were: (i) to discover how technical-tactical criteria in ball possessions in women's football are modified based on the match status, and (ii) to find out which criteria provide the best probability for offensive success (i.e. goal, shot, and sent to area) under the influence of match status. To this end, 2323 ball possessions were analyzed in the FIFA Women's World Cup France 2019 using observational methodology. Two types of analysis were applied: firstly, a bi-variate analysis between match status and the rest of the criteria, followed by a predictive multivariate binary logistic regression analysis. The results obtained from the bi-variate analysis reveal the existence of significant statistical differences in the start and development of ball possessions in this championship depending on the match status. On the other hand, there was no evidence of differences when it comes to goal scoring, shots, and passes into the area based on these criteria. From the logistic regression models used, it was observed that there is a common pattern of success regardless of the match status, consisting of ball possessions that start in forward zones, in contexts of offensive interaction and with the intention of rapid progression toward the opponent's goal. These results could be used for planning match and training strategies in elite women's football.

Keywords

Women's football, observational methodology, logistic regression, offensive phase, possession outcome, FIFA Women's World Cup, soccer

Date received: 9 January 2022; accepted: 2 October 2022

Introduction

Football is the most studied sport in scientific literature.¹ Despite this fact, studies of women's football make up less than 25% of the total research.^{1–3} This has been a problem for trainers and technical staff of women's football due to the technical-tactical differences in games played by men and women.^{4–6} Knowledge about the phases of the game and their association with individual and collective performance in women's football are necessary for teams to gain an advantage in preparing for their matches. Therefore, it is currently a field of study with great developmental potential³ that in the coming years should be intensified,⁷ attending to the needs of players and technical staff.⁸

Performance in team sports must be understood from a multifactorial approach (i.e. technical-tactical, conditional, psychological).⁹ For this reason, in recent decades many variables that can influence performance in the offensive phase in football have been studied.⁸ In

terms of the technical-tactical criteria that determine offensive success in women's football, most of the research carried out has been done in the last few years.^{1,3,10,11} Regarding this subject matter, it was observed that the variable that most influenced match

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results was scoring the first goal.¹² Similarly, Kubayi and Larkin¹³ concluded that the teams that won the most matches in the FIFA Women's World Cup France 2019 had more possession time, and made more passes and shots, per match compared with the losing teams. On the other hand, Scanlan et al.¹⁴ showed that in the FIFA Women's World Cup Canada 2015 actions that were started by ball interception in midfield related to a higher probability of offensive success, just as had been observed in men's football years earlier.^{15,16} In that same championship, it was observed that the result of ball possession depended on temporality, offensive intention, possession time, number of passes, match outcome, and match status.¹⁷

In terms of the match status criterion, its influence on success and offensive play has been studied in men's football^{18–20} and, more recently, in women's football.^{17,21–23} However, the sample of these studies focused on a single championship, which may be a limitation in obtaining general conclusions for women's football. Regarding match status criterion, it was observed that it was a specific criterion that modified the development of set piece actions in the FIFA Women's World Cup France 2019²⁴ and FIFA Women's World Cup Canada 2015.²⁵ On the other hand, in neither of the two studies was the influence of match status criterion shown in terms of greater success in set piece actions.^{24,25} The influence of this criteria in the development of ball possessions was also analyzed, showing that teams modified their ball possession based on match status, with the effect being greater for losing teams compared with winning teams.²³

In view of the above, knowledge about the influence of the match status criteria in ball possession in women's football is scarce. Therefore, the aims of this study were: (i) to discover how technical-tactical variables in ball possession in women's football is modified based on the match status variable, and (ii) to find out which variables provide a greater probability of offensive success under the influence of this criteria.

Materials and methods

Study design

This study was carried out via observational methodology²⁶ due to its suitability in the observation of behaviors in natural contexts.^{26,27} Its approach is nomothetic – various units of study; punctual – only one championship analyzed between the months of June and July 2019; and multidimensional – various dimensions and levels of answers in the observational instrument. This design is in the third quadrant of those proposed by Anguera et al.²⁷

Participants

All ball possessions ($N = 2323$) with a duration of over 3 s were analyzed in the 16 matches of the final phase of

the FIFA Women's World Cup France 2019. Ball possessions were classified based on match status in *winning* ($n = 540$), *drawing* ($n = 978$), and *losing* ($n = 805$). The inclusion criteria were adapted from Almeida et al.¹⁵ Ball possessions in which the attacking team fulfilled any of the following requirements were coded by the observers: (i) three consecutive contacts with the ball or (ii) a finished pass – lasting more than three seconds, or (iii) a shot taken. The offensive actions lasted from the first contact with the ball up to (i) possession changing to the rival team or (ii) there being a regulatory interruption in the game.

The teams analyzed were classified for this final phase after a group stage. This initial phase consisted of six groups of four teams, the two best teams from each group and the four best third ranked teams qualified for the final phase. Group stage matches were not analyzed due to large differences between teams (i.e. USA 13 – 0 Thailand). The fact that the analyzed matches were played in knockout qualifying rounds removed any speculation about the results in ball possession²⁸ due to the requirement of winning the match to advance to the next phase. Both teams were analyzed in each match. To obtain a homogeneous sample and due to the non-existence of these periods in all matches, ball possessions that took place in overtime were excluded from the study.

Observation instrument

The observation instrument used in this study was proposed by Iván-Baragaño et al.²² and can be consulted in Table 1. It involved a combination of field format and category systems.²⁷ It has three dimensions, 17 criteria, and 52 categories. The first dimension (Start of Possession) identified the criteria that characterized the beginning of possession: Match Outcome, Time, Match Status, Start Form, Start Zone, Defensive Organization, Defensive Positioning, and Interaction Context. The match status criterion was divided into three categories: (i) Winning: the observed team was winning at the time of the start of possession, (ii) Drawing: the match was tied at the time of the start of possession, and (iii) Losing: the observed team was losing. The second dimension included all the criteria related to the development of possessions: offensive intention, defensive intention, MD (seconds) (possession time in own half, in seconds), MO (seconds) (possession time in opponent's half, in seconds), Possession Time, Passes, and Possession Zone. In this second dimension, the criteria MD, MO, Possession Time, and Passes were registered with a quantitative data type. Finally, the Possession Outcome criterion (Dimension 3) was divided into two categories: (i) Success: the observed team finished the ball possession with a goal, a shot, or a pass into the penalty area, and (ii) No Success: the rest of ball possessions. The register and codification of ball possessions was done via the

Table 1. Observation instrument.

Dimensions	Criteria	Categories	Definition
Dimension 1. Start of possession	Match outcome	Win	The team observed won the match
		Lose	The team observed lost the match
		Draw	The team observed tied the match
	Time	1Q	The action starts between the start of the game and minute 15
		2Q	The action starts between minute 16 and minute 30
		3Q	The action starts between minute 31 and the end of the first half
		4Q	The action starts between the start of the second half and minute 60
		5Q	The action starts between minute 61 and minute 75
		6Q	The action starts between minute 76 and the end of the match
	Match status	Winning	The team observed is winning when the action starts
		Drawing	The teams are level when the actions starts
		Losing	The team observed is losing when the action starts
	Start form	Set Play	The action starts after an interruption of the game
		Transition	The action starts with a steal or an interception of the ball
	Start zone (length)	Defensive	The action begins in the defensive area of the pitch
		Predefensive	The action begins in the pre-defensive area of the pitch
		Middle	The action begins in the midfield area of the pitch
		Preoffensive	The action begins in the pre-offensive area of the pitch
	Start zone (width)	Offensive	The action begins in the offensive area of the pitch
		Left	The action starts from the left wing
		Central	The action starts from the center
	Defensive organization	Right	The action starts from the right wing
		Organized	The opposing team is defensively organized
Defensive positioning	Circumstantial	The opposing team is defensively disorganized	
	Low	Opponents positioning is at the back at the start of the action	
	Medium	Opponents positioning is midfield at the start of the action	
Interaction context	Advanced	Opponents positioning is forward at the start of the action	
	MM	Midfield area vs midfield area	
	A0	Forward area vs goalkeeper	
	AA	Forward area vs forward area	
	AM	Forward area vs midfield area	
	AR	Forward area vs rear area	
	MA	Midfield area vs forward area	
	MR	Midfield area vs rear area	
	RA	Rear area vs forward area	
	RM	Rear area vs midfield area	
Dimension 2. Possession development	Offensive intention	PA	Goalkeeper vs forward area
		Keep	The team observed progresses toward the rival goal
	Defensive intention	Progress	The team observed maintains possession of the ball
		No pressure	The opposing team shows an intention to defend their goal
	MD (seconds)	Pressure	The opposing team shows a pressing intention to recover the ball
		MO (seconds)	Possession time in own half (in seconds)
	Possession time	MD	Most possession in own half
		MO	Most possession in opponent's half
	Passes	MO	Most possession in opponent's half
		Possession zone	Success
Dimension 3. Possession outcome	Possession outcome	No success	The offensive action ends with no success

software LINCE PLUS v 1.1.1. [<https://observesport-github.io/lince-plus/>].²⁹

The inter-rater reliability of the observation instrument was found via Cohen's kappa coefficient³⁰ from the average obtained between three observers (authors of this study). For this purpose, ball possessions in two matches ($n = 258$) under the same conditions were analyzed. The value obtained for this statistic was 0.869,

considered as "Almost Perfect" on the Landis and Koch scale.³¹

Procedure

The analyzed matches were recorded from public television and stored on hard disk. The ball possessions were analyzed "post event." The study was approved by the

Table 2. Summary and adjustment of logistic regression models.

	Sensitivity (%)	Specificity (%)	Total classification (%)	R2 Nagelkerke	AUC	95% CI AUC
Winning	55.0	90.2	81.7	0.407	0.856	0.822–0.890
Drawing	33.1	92.3	77.9	0.366	0.833	0.807–0.859
Losing	53.3	89.0	79.6	0.411	0.853	0.826–0.880

AUC: area under curve; 95% CI AUC: 95% confidence interval in area under curve.

ethics committee of the Universidade da Coruña (approval code: CEID-UDC-2019-0024).

Three observers were familiarized with and trained in using the proposed observation instrument over four sessions.³² The three observers were UEFA A Coaches, with two of them holding PhDs in Sports Science and more than 6 years of experience in using observational methodology.

Data analysis

Two kinds of analysis were carried out in this study. Firstly, a descriptive and bivariate analysis was done between the analyzed criteria and categories, and the Match Status criterion separately. Differences were detected between the categories winning, drawing, and losing from the Chi Squared statistic for qualitative criteria. The effect size was calculated for this kind of criteria from the contingency coefficient. Contingency coefficient effect sizes were calculated and described as small ($ES = 0.10$), medium ($ES = 0.30$) or large ($ES \geq 0.50$).²¹ For quantitative criteria, and due to the sample size ($n > 100$) the central limit theorem was assumed and the differences were calculated from the one-way ANOVA test.

Once this analysis had been done, three binary logistic regression models were carried out to determine the influence of the analyzed criteria and categories in the offensive success of ball possession for each of the categories of the match status criterion. For this, it has been verified which criteria showed bivariate association ($p < 0.05$) with the Possession Outcome criterion from the Chi Squared statistic and the Mann-Whitney test for ball possessions that developed winning, drawing, and losing. The criteria that showed association were inserted into each of the proposed regression models. The criteria Defensive Organization, Defensive Positioning and Defensive Intention were excluded from the model because they refer to the tactical behavior of the defending team. Furthermore, of the four quantitative criteria, only the criterion MO (seconds) was introduced to eliminate collinearity problems. The proposed models adjusted correctly as can be seen in Table 2. The statistical analysis was performed using SPSS 25.0 (IBM Corp. Released 2017. IBM SPSS Statistics for Windows, Version 25, IBM Corp., Armonk, NY, USA).

Results

Table 3 shows the results obtained from the descriptive and bivariate analysis carried out in this study for the

qualitative criteria. Significant differences were found for Match Outcome ($p < 0.001$; $ES = 0.606$), Time ($p < 0.001$; $ES = 0.423$), Start Form ($p < 0.05$; $ES = 0.062$), Start Zone (Width) ($p < 0.005$; $ES = 0.083$), Defensive Organization ($p < 0.001$; $ES = 0.094$), Defensive Positioning ($p < 0.005$; $ES = 0.088$), Interaction Context ($p < 0.05$; $ES = 0.118$) and Offensive Intention ($p < 0.05$; $ES = 0.044$) criteria.

The results obtained from the binary logistic regression model are shown in Table 4. The Offensive Intention (progress) criterion significantly increased the odds ratio in favor of obtaining offensive success between 2.1 and 5.9 times, with its influence being greater for the winning category. Likewise, the Possession Zone (MO) criterion increased between 4.3 and 7.1 times the odds ratio in favor of offensive success, with its influence being greater when the match status was drawing. This fact was contrasted for the MO (seconds) criterion: the more time spent in the opponent's half, the more the probability of success increases in the analyzed ball possessions. However, the Start Zone (length) criterion only has a significant influence on the proposed models with a winning and drawing match status. For the first, starting the action in the pre-offensive and offensive zone increased the odds ratio 2.29 and 7.9 times, respectively. For the losing category, an increase of 3.9 and 6.8 was observed in the odds ratios compared with the reference model. Lastly, the Interaction Context criterion was only inserted in the proposed model for the drawing category. In this case, the AR category increased the odds ratio 2.9 times in favor of offensive success, compared with the reference category of the model (MM).

Discussion

This study was carried out with the aim of discovering how ball possession in women's football is modified based on the match status criteria. Furthermore, the aim was to find out which criteria provide greater probability of offensive success under the influence of match status.

To this end, 2323 ball possessions were analyzed in the FIFA Women's World Cup France 2019 using observational methodology. From the total number of possessions, 540 were studied with the winning match status, 978 drawing and 805 losing. The descriptive and bivariate results obtained allow us to verify the existence of significant differences in the development and result of ball possessions depending on this criterion.

Table 3. Descriptive and bivariate results based on the match status criterion.

Criteria	Categories	Winning N = 540	Drawing N = 978	Losing N = 805	p overall [ES] ^a
Match outcome	Win	501 (92.8%)*	365 (37.3%)	37 (4.6%)**	< 0.001 [0.606]
	Draw	36 (8.2%)**	303 (31.7%)*	101 (12.5%)**	
	Lose	3 (0.6%)**	310 (31.0%)**	667 (82.9%)*	
Time	1Q	27 (5.0%)**	347 (35.5%)*	36 (4.5%)**	< 0.001 [0.423]
	2Q	81 (15.0%)	177 (18.1%)	135 (16.8%)	
	3Q	102 (18.9%)	167 (17.1%)	134 (16.6%)	
	4Q	93 (17.2%)	158 (16.2%)	116 (14.4%)	
	5Q	113 (20.9%)*	75 (7.7%)**	177 (22.0%)*	
	6Q	124 (23.0%)*	54 (5.5%)**	207 (25.7%)*	
Start form	Set play	144 (26.7%)**	333 (34.0%)*	257 (32.0%)	< 0.05 [0.062]
	Transition	396 (73.3%)*	645 (66.0%)**	547 (68.0%)*	
Start zone (length)	Defensive	86 (15.9%)	158 (16.2%)	122 (15.2%)	0.608 [-]
	Predefensive	187 (34.6%)	310 (31.7%)	274 (34.0%)	
	Middle	145 (26.9%)	263 (26.9%)	217 (27.0%)	
	Preoffensive	111 (20.6%)	213 (21.8%)	161 (20.0%)	
	Offensive	11 (2.0%)	34 (3.5%)	31 (1.3%)	
Start zone (width)	Left	120 (22.2%)	228 (23.3%)	178 (22.1%)	< 0.005 [0.083]
	Central	316 (58.5%)*	518 (53.0%)	400 (49.7%)**	
	Right	104 (19.3%)**	232 (23.7%)	227 (28.2%)*	
Defensive organization	Organized	511 (94.6%)**	955 (97.6%)	790 (98.6%)*	< 0.001 [0.094]
	Circumstantial	29 (5.4%)*	23 (2.4%)	11 (1.4%)**	
Defensive positioning	Low	203 (37.6%)**	455 (46.6%)	392 (48.8%)*	< 0.005 [0.088]
	Medium	106 (19.6%)	170 (17.4%)	140 (17.4%)	
	Advanced	231 (42.8%)*	351 (36.0%)	272 (33.8%)**	
Interaction context	MM	224 (41.5%)	409 (41.9%)	310 (38.5%)	< 0.05 [0.118]
	A0	4 (0.7%)	3 (0.3%)	3 (0.4%)	
	AA	6 (1.1%)	22 (2.3%)	11 (1.4%)	
	AM	5 (0.9%)	7 (0.7%)	3 (0.4%)	
	AR	58 (10.7%)*	79 (8.1%)	56 (7.0%)	
	MA	4 (0.7%)	11 (1.1%)	14 (1.7%)	
	MR	9 (1.7%)	19 (1.9%)	9 (1.1%)	
	RA	163 (30.2%)	280 (28.7%)**	296 (36.8%)*	
	RM	12 (2.2%)	40 (4.1%)	26 (3.2%)	
	PA	55 (10.2%)	106 (10.9%)	77 (9.6%)	
Offensive intention	Keep	295 (54.6%)	595 (60.8%)*	457 (56.8%)	< 0.05 [0.044]
	Progress	245 (45.4%)	383 (39.2%)**	348 (43.2%)	
Defensive intention	No pressure	330 (61.1%)	605 (61.9%)	513 (63.9%)	0.540 [-]
	Pressure	210 (38.9%)	372 (38.1%)	290 (36.1%)	
Possession zone	MD	274 (50.7%)	492 (50.4%)	377 (46.9%)	0.247 [-]
	MO	266 (49.3%)	484 (49.6%)	472 (53.1%)	
MD (seconds)		7.46 (±8.03)	7.50 (±8.02)	6.72 (±7.15)	0.082
MO (seconds)		6.49 (±6.44)	6.84 (±6.46)	6.82 (±6.62)	0.559
Pos. time		13.86 (±8.94)	14.34 (±9.14)	13.41 (±8.79)	0.099
Passes		3.55 (±3.05)	3.77 (±2.83)	3.53 (±2.73)	0.167
Possession outcome	No success	409 (75.7%)	742 (75.9%)	593 (73.7%)	0.519 [-]
	Success	131 (24.3%)	236 (24.1%)	212 (26.3%)	

Percentages represented as the percentage of each category of the match status criterion.

^aES calculated from the contingency coefficient.

*More observed than expected values for each cell calculated from the adjusted residual ($p < 0.05$).

**Less observed than expected values for each cell ($p < 0.05$).

The Match Outcome variable showed significant differences depending on the match status. This may prove the fact that teams which score the first goal tend to maintain a winning match status throughout most of the possessions and vice versa, which emphasizes the importance of scoring the first goal of the match.¹² Therefore, it would appear logical that the Time variable would be significant based on match status. It was observed that for the categories 5Q and 6Q the percentage of possessions that took place under the drawing match status was lower than the expected value. In this sense, it could be that it was during this time period (the

last half hour of the match) that the imbalance in the score was produced. This data coincides with other studies in men's football³³ and women's football.³⁴ In relation to the latter, it was proved that most of the goals were scored in the last 15 min of the match after analyzing the FIFA Women's World Cup Matches in 1995, 1999 and 2003.³⁴

As far as the Start Form criterion is concerned, the results show statistically significant differences. We were able to see that, in the analyzed possessions, the biggest percentage of dynamic starts was produced under the winning match status. This fact may be

Table 4. Predictive model of binary logistic regression for the categories winning, drawing, and losing.

Match Status = Winning; N = 540						
Category	B	Error ES	Wald	df	Sig.	Exp (B)
OI (Progress)	1.776	0.292	37.058	1	< 0.001	5.904
PZ (MO)	1.480	0.370	16.011	1	< 0.001	4.391
MO (seconds)	0.066	0.021	9.574	1	< 0.005	1.068
SZ (Predefensive) ^a	-	-	11.341	4	< 0.05	-
SZ (Preoffensive)	0.828	0.351	5.558	1	< 0.05	2.289
SZ (Offensive)	2.065	0.734	7.912	1	< 0.005	7.888
Constant	-4.079	0.396	106.134	1	< 0.001	0.017
Match Status = Drawing; N = 978						
IC (MM)	-	-	19.226	9	< 0.05	-
IC (AR)	1.051	0.274	14.729	1	< 0.001	2.860
OI (Progress)	0.731	0.181	16.247	1	< 0.001	2.078
PZ (MO)	1.967	0.274	51.525	1	< 0.001	7.146
MO (Seconds)	0.059	0.015	14.938	1	< 0.001	1.061
Constant	-3.440	0.271	160.995	1	< 0.001	0.032
Match Status = Losing; N = 805						
OI (Progress)	0.946	0.209	20.409	1	< 0.001	2.575
PZ (MO)	1.555	0.327	22.659	1	< 0.001	4.735
MO (seconds)	0.083	0.017	24.135	1	< 0.001	1.087
SZ (Predefensive)	-	-	38.700	4	< 0.001	-
SZ (Preoffensive)	1.362	0.285	22.895	1	< 0.001	3.902
SZ (Offensive)	1.921	0.460	17.431	1	< 0.001	6.830
Constant	-3.842	0.323	141.076	1	< 0.001	0.021

Logistic regression results presented with respect to *Success*.

OI (Progress): Offensive intention: progress; PZ (MO): Possession zone: middleoffensive; MO (seconds): Possession time in opponent's half; SZ (Predefensive): Start zone: predefensive; SZ (Preoffensive): Start zone: preoffensive; SZ (Offensive): Start zone: offensive; IC (MM): Interaction context: middle vs middle zone; IC (AR): Interaction context: forward vs delayed zone.

^aReference category.

explained by the losing team's need to elaborate their attacks more quickly, which can produce a poorer quality technical performance and therefore a greater number of lost balls. This fact coincides with the data obtained in men's football by Vogelbein et al.³⁵ who showed that teams who were winning managed to regain possession in less time after losing it, compared to teams that were losing. Another possible explanation could be found in the fact that teams that are losing tend to transfer possession to areas near to the opposing goal to a greater extent,¹⁶ an aspect which, due to an increased density in the game area, might mean a higher number of lost balls. Whilst this fact may have been widely studied and contrasted in men's football^{18,36,37} the bivariate results of Possession Zone variable did not show significant differences in this championship and clear conclusions cannot be drawn. However, in terms of the level of significance of the Interaction Context criterion a higher percentage of the AR category was observed under the losing match status, which could be due to a greater use of short pass sequences and a more direct playing style of teams that are winning.^{37,38} This data coincides with results obtained from the bivariate analysis in the criteria Defensive Organization and Defensive Positioning: the probability of the opposing team being defensively organized in a

Circumstantial way was four times higher for teams that were winning than for teams that were losing.

On the other hand, the Offensive Intention criteria showed significant differences, although this significance value should be treated with caution. The fact that, in the analyzed possessions, a higher value than expected was observed in the Keep category when the match status was drawing demonstrates a growing tendency in women's elite football toward a combination or positional game (i.e. long, and controlled ball possessions in which the team tries to disorganize the opposing team through elaborate passing sequences). However, as soon as one of the teams is in the lead, that intention to dominate the positional game tended to diminish, leading the teams to combine an intention to progress quickly toward the opponent's goal with an intention to keep possession in order to greater develop their offensive phase.²³

To tie up the results on a bivariate level, it can be highlighted that no statistically significant differences were found for the Possession Outcome criteria based on match status. This fact, which contradicts the results obtained in men's elite football,^{18,20,39} shows that women's football teams are incapable of increasing situations of danger (i.e. goals, shots and crosses into

the penalty area) when the score is not in their favor, proving the importance of scoring the first goal¹² (except for the small effect this variable may have when a team scores in the last minutes of the match) as was seen in this championship: 89% of the teams that scored the first goal won their matches.

Based on the results obtained from the binary logistic regression, it was observed that, regardless of match status, the Offensive Intention (progress) variable, the Possession Zone (middle offensive) and the possession time in the opponent's half were criteria that increased the probability of success (i.e. goal, shot, sent to penalty area) in ball possessions at the FIFA Women's World Cup 2019. Furthermore, for possessions that were developed under winning and drawing match status, starting the possession in the pre-offensive zone increased the probability of success between 2.2 and 7.9 times. These results show that the greatest probability of achieving success in ball possessions occurs in possessions with characteristics appropriate to an offensive transition situation, coinciding with other studies of women's football^{15,17} and men's football.^{20,39–41}

Coaches and players will be able to apply these results in their training sessions and match strategies, proposing collective strategies for recovering the ball and rapid progression of the ball toward the opposing goal, with the aim of increasing the probability that the ball possessions developed by their national teams end with a goal, a shot, or a send to penalty area. Given all this, we consider it necessary to continue researching further into the influence of this variable in the development of the game in women's elite football. For example, future studies analyzing the offensive behavior of women's football teams based on their system of play and the match status criterion, or the influence of the match status criterion on the game of national teams based on the classification in the FIFA ranking.

Conclusions

The results obtained in this study show that the *match status* criterion significantly modified ball possessions in the FIFA Women's World Cup France 2019. On the other hand, there was no evidence of a modification in the *possession outcome* based on this *match status*. Furthermore, the results obtained from the multivariate analysis carried out lead us to conclude that, although the criteria included in each of the models was different based on match status, the offensive tactical behavior that provides a higher probability of offensive success showed similar characteristics, regardless of whether the possessions took place winning, drawing, or losing.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The authors gratefully acknowledge the support of a Spanish government subproject Mixed method approach on performance analysis (in training and competition) in elite and academy sport [PGC2018-098742-B-C33] (2019-2021) [del Ministerio de Ciencia, Innovación y Universidades (MCIU), la Agencia Estatal de Investigación (AEI) y el Fondo Europeo de Desarrollo Regional (FEDER)], that is part of the coordinated project New approach of research in physical activity and sport from mixed methods perspective (NARPAS_MM) [SPGC201800X098742CV0].

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