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Long-term influence of technical, physical performance indicators and situational variables on match outcome in male professional Chinese soccer

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31 Van Rooyen, & Sampaio, 2010). Specifically, the definition and selection of KPI has
32 been related to winning and losing or successful and unsuccessful teams (Castellano,
33 Casamichana, & Lago, 2012; Gómez et al., 2008; Harrop & Nevill, 2017; Lago-
34 Ballesteros & Lago-Peñas, 2010; Vaz et al., 2010).

35 In terms of the influence of several constraints, it is necessary to combine
36 performance indicators and situational variables (e.g., match location and quality of
37 opposition) to determine match performances (Aquino, Munhoz Martins, Palucci
38 Vieira, & Menezes, 2017; Bradley, Lago-Penas, Rey, & Sampaio, 2014; Liu, Hopkins,
39 & Gomez, 2016; Taylor, Mellalieu, James, & Barter, 2010). Firstly, the technical-
40 tactical indicators (e.g., shots on target, successful passes, possession) associated with
41 winning or having positive effects on the match outcome have been identified in the
42 research (Harrop & Nevill, 2017; Lago-Ballesteros & Lago-Peñas, 2010; Lago-Peñas
43 et al., 2010; Liu, Gomez, Lago-Penas, & Sampaio, 2015; Liu et al., 2016; Mao, Peng,
44 Liu, & Gomez, 2016). Secondly, although previous studies indicate that overall
45 technical and tactical effectiveness are more important than physical performance in
46 determining success in soccer (Di Salvo, Gregson, Atkinson, Tordoff, & Drust, 2009),
47 recent work shows that high-intensity actions are related to the outcome of the match
48 (Aquino et al., 2017; Zhou, Zhang, Lorenzo Calvo, & Cui, 2018). Barnes, Archer,
49 Hogg, Bush, and Bradley (2014) also revealed that the players' physical ability
50 demands have increased with the soccer development. Thirdly, the situational variables,
51 match location and quality of opposition, are two factors that can affect the match
52 outcome (Gómez, Serna, Lupo, & Sampaio, 2016; Lago-Penas, Lago-Ballesteros, &

53 Rey, 2011). Previous studies have showed that the influence of these two situational
54 variables on match outcome have changed over the development (e.g., the last two
55 decades) of soccer sport (Bradley et al., 2016; Pollard & Pollard, 2005). In fact, the gap
56 between successful teams was narrowing across seven consecutive England Premier
57 League seasons (2006-07 to 2012-13) (Bradley et al., 2016) indicating that it could
58 change across seasons. Along these lines, soccer has evolved across time because of
59 rule changes and match tactics and strategies, increases in professionalism, the use of
60 new technologies, global exposure, and transformations in training and selection
61 process (Wallace & Norton, 2016). Understanding these evolutionary tendencies can
62 provide valuable information to estimate, for example, future match and training
63 demands, to assist in the player selection and talent identification, or to predict the
64 impact of rule changes. In practice, soccer coaches not only need to be familiar with
65 the demands of modern players in technical-tactical and physical aspects, but also
66 understand the KPI and their impact along the seasons when determining the match
67 outcome in combination with situational variables (Barnes et al., 2014; Bush, Barnes,
68 Archer, Hogg, & Bradley, 2015; Robertson & Joyce, 2018). However, from the
69 available research in soccer, few studies can provide this information due to most of
70 them were focused on identifying KPI in single a season/championship or few seasons
71 and exploring the variability/stability of performance indicators along the seasons
72 (Barnes et al., 2014; Bradley et al., 2016; Bush et al., 2015). So far, Robertson and
73 Joyce (2018) used binary logistic regression models to determine the level of
74 association between some factors (performance indicators and situational variables)

75 and match outcome in a long period in Australian football with concluding remarks
76 (e.g., the influence of playing away from home on match difficulty became stronger as
77 the season progressed). However, no research has studied the influence of KPI on the
78 match outcome in soccer considering a longitudinal approach.

79 Recently, there has been growing interest in the Chinese soccer (Gai, Leicht,
80 Lago, & Gomez, 2019; Lago-Peñas, Gómez-Ruano, & Yang, 2018; Mao et al., 2016;
81 Yang, Leicht, Lago, & Gomez, 2018; Zhou et al., 2018) analysing the KPI, team playing
82 styles and comparisons between domestic and foreign soccer players in the Chinese
83 Soccer Super league (CSL). Specifically, technical (e.g., shot on target, shot accuracy,
84 possession) and physical indicators (sprinting distance in ball possession) were related
85 to match outcome in the CSL (Mao et al., 2016; Yang et al., 2018; Zhou et al., 2018).
86 Additionally, investigations have been confined to long-term trend study in Chinese
87 elite soccer. CSL is the highest level of professional soccer match in China, which starts
88 in March (spring in China) and ends in November (winter) every season. As a
89 developing of the league, playing patterns in CSL are different from European leagues
90 or international championships (e.g., World Cup), the effects of match regulation,
91 signing policies, and economical investment, which are unique to China soccer, would
92 lead to some changes in match performances across seasons. Specifically, this
93 information would help to monitor training and match strategy selection for coaching
94 staffs. Therefore, the aim of the present study was to determine whether the role of
95 every performance indicator has varied over six seasons in the CSL. It was

96 hypothesized that the KPI and situational variables were not stable over the seasons
97 showing different performance trends in the CSL.

98 **2. Method**

99 *2.1. Sample, data resource and variables*

100 CSL is the highest level of professional soccer match in China (16 teams playing a
101 balanced schedule against their opponents both at home and away from March to
102 November every season, 30 matches per team and 240 matches per season). The end-
103 of-season rank was determined by the final accumulated points (win for 3 points, draw
104 for 1, loss for 0). A total of 1,429 matches (data from 11 matches were missed) were
105 selected as the sample of the current study from 2012 to 2017 seasons in the CSL.

106 Teams' data were collected by AMISCO (Amisco, Nice, France) tracking
107 system. The reliability and validity of the system in measuring player movement has
108 been evaluated and verified (Zubillaga, Gorospe, Mendo, & Villaseñor, 2007). In line
109 with previous related literature (Bradley et al., 2014; Carling, Bradley, McCall, &
110 Dupont, 2016; Mao et al., 2016; Yang et al., 2018), 17 technical performance-related
111 parameters, 11 physical performance-related parameters and 2 situational variables
112 were chosen as indicators in the analysis. The grouping and definition of these variables
113 are presented in the Table 1.

114

115 ***Table 1 near here***

116 **2.2. Procedure and statistical analysis**

117 Descriptive statistics (Mean \pm SD) were calculated for each indicator during the
118 six seasons under analysis. In addition, in order to make comparisons ignoring the scale
119 units of each indicator, the variables were standardized using z -scores (Norman &
120 Streiner, 2008). A binary logistic regression was used to identify the relationship
121 between match outcome and indicators (Robertson & Joyce, 2018). In the league, teams
122 usually pursue wining instead of drawing or even losing, so we set match outcome as
123 Win = 1 and Unwin (Draw and Loss) = 0 (Liu et al., 2016). We used backward (LR)
124 stepwise method to avoid multicollinearity between variables (Harrop & Nevill, 2017).
125 Odds ratios (OR) and corresponding 90% confidence intervals (90% CI) were also
126 reported in order to provide a standardized measure of the influence of each indicator
127 included in the model of six seasons. Relationships were assessed as effects of one-
128 standard deviation (SD) increase in the value of the indicator on the change (decrease
129 or increase) in the probability of a team winning a match (Menard, 2011). Performance
130 of the model was evaluated as the percentage of match outcomes correctly classified.
131 All analyses were undertaken using the statistical software IBM SPSS Statistics 22
132 (Armonk, NY: IBM Corp) and the level of significance was set at $p \leq 0.05$.

133 **3. Results**

134 Descriptive statistics of performance-related match events and actions per season (from
135 2012 to 2017) and total results in the CSL are presented in Table 2.

136

Table 2 near here

137

138

139 Table 3 shows the OR for fixed factors related to the logistic regression models
140 for each season (six models). The classification accuracies were 82.0%, 80.6%,
141 76.8%, 83.3%, 83.4% and 85.7%, for the seasons 2012 to 2017, respectively. The
142 results identified ten statistically significant technical-tactical variables: Shots
143 (OR=0.58-0.66), Shots on target (OR= 1.76-4.50), Corners (OR= 0.67), Crosses (OR=
144 0.29-0.61), Possession (OR= 5.46-138.51), Passes (OR= 2.68-2.69), Pass accuracy
145 (OR= 0.47-0.50), Forward passes (OR= 0.42-0.62), Forward pass accuracy (OR= 1.78-
146 1.93), 50-50 challenge won (OR= 1.72), fouls committed (OR= 1.43). In addition, the
147 models showed seven significant physical variables= Total distance (OR= 1.79-2.06),
148 Total distance in ball possession (OR= 0.02-0.16), Total distance out of ball possession
149 (OR= 2.75-57.03), Sprinting efforts (OR= 0.47-5.18), High-Speed distance (OR=2.23-
150 69.13), High- speed distance in ball possession (OR= 0.11-0.19), High-speed distance
151 out of ball possession (OR= 0.03-0.33); and two situational variables= Quality of
152 opponent (OR= 0.19-0.40) and Match location (OR= 1.78-7.06). However, only Shots
153 on target, possession, total distance in possession of the ball, total distance without ball
154 possession, match location and quality of opposition exerted a significant effect on
155 winning the match in all the seasons ($p<0.05$).

156

Table 3 near here

157

158

159 In order to identify the long-term effect, the six statistically significant KPI and
160 situational variables on winning the match were selected and accounted for into next
161 analysis. Figure 1 shows the changes in OR of the six KPI and situational variables
162 during six seasons. Results showed that shots on target, possession, total distance in
163 ball possession, total distance out of ball possession, and match location exerted a
164 decreased influence on winning the game from 2012 to 2014 season. However, these
165 variables have a more powerful role when winning the match from 2014 to 2017 season.
166 Additionally, the quality of opposition has a continuously increased role on the match
167 outcome.

168

169 ***Figure 1 near here***

170 **4. Discussion**

171 The aim of this study was twofold: (i) to explore key performance indicators
172 across six seasons; and (ii) to determine whether the role of every KPI in impacting on
173 match outcome has varied over the six seasons in the CSL. As was argued, the KPI and
174 situational variables were not stable in affecting the match outcome over the seasons
175 and showing different performance trends in the CSL. The main findings showed that
176 the significant KPI were not same during the seasons under analysis. Specifically, there
177 were six significant variables (Shots on target, possession, total distance in possession
178 of the ball, total distance out of ball possession, match location and quality of opposition)
179 that exerted a meaningful influence on winning the match in all the seasons and every
180 KPI plays a different role across six seasons.

181 Although the role of shots on target on winning the match has declined from
182 2012 to 2014 season, it has rebounded and stabilized in recent years. In recent years,
183 the CSL teams have increased its financial budget for players' recruitment. Especially
184 in the 2015 season, CSL clubs spent £81m on players and coaches, placing in the second
185 league that most invested (most of the players signed were midfielders or forward
186 foreign players), and only the EPL spent more money than CSL (Connell, 2018). The
187 advantage of these foreign attackers in offense, especially in shooting skills, may be the
188 cause of the increase roles of shots on target on winning the match in recent years (Gai
189 et al., 2019). The number of shots on target is the most important factor affecting the
190 match outcome in soccer (Lago-Ballesteros & Lago-Peñas, 2010; Lago-Peñas et al.,
191 2010; Mao et al., 2016; Yang et al., 2018). The current results showed that a one-SD
192 increase in the value of shot on target could bring a 0.79-3.50 times higher probability
193 of winning matches. Then, the sustaining positive impact of the shots on target on
194 winning the match, requires the soccer coaches to still pay attention to this indicator
195 and set more practice to improve players' shot capacity. In addition to the number of
196 shots, the match competition and trainings should be more focused on shooting
197 accuracy (Mao et al., 2016).

198 In the present study, possession is a factor affecting the match outcome
199 positively and plays a more important role in the match during the recent seasons. The
200 current result is supported by a previous study focused on the EPL (Bush, Archer,
201 Barnes, Hogg, & Bradley, 2017) that found the recruitment of more outstanding foreign
202 players and coaches could contribute to the development of possession-based playing

203 strategies in the CSL. This finding indicates that obtain and use more possession is
204 essential to win the match in the CSL. It is arguable whether the possession is a key
205 performance indicator in determining the match outcome (Collet, 2013; Kempe,
206 Vogelbein, Memmert, & Nopp, 2014; Lago-Penas & Dellal, 2010; Lago, 2009; Lago
207 & Martin, 2007). In particular, Chassy (2013) demonstrated that speed and precision of
208 passes generated positive match outcomes rather than the percentage of possession.
209 However, Kempe et al. (2014) showed that not only the percentage of ball possession
210 but also the variables related to the possession have an impact on the match outcome.
211 In one study related to the CSL (Zhou et al., 2018), the authors found that the number
212 of passes per possession was the variable that best differentiated winning, drawing and
213 losing (match outcomes) during close matches when KPI were normalized by
214 possession of the ball. The different influence of possession on the match outcome in
215 these studies may be related to the differences of match samples used, different
216 variables selected and different methods of analysis. Further research on CSL should
217 pay more attention on the relationship between possessions and passing patterns.

218 Regarding the physical aspect, although the total distance does not influence the
219 match outcome in the CSL, the physical distribution does. Total distance in possession
220 has a negative effect on winning the game while total distance out of possession has a
221 positive effect on winning the match. Hoppe, Slomka, Baumgart, Weber, and Freiwald
222 (2015) pointed out that the total distance in possession of the ball has a positive
223 correlation with final points accumulated in the German Bundesliga, and it is related to
224 the high-level of ball possession due to the superior technical/tactical skills of

225 successful teams. The present results suggested that when teams have the same
226 percentage of possession, less distance covered in ball possession and more distance
227 covered out of ball possession can increase the winning probability. This is in
228 accordance with previous studies (Almeida, Ferreira, & Volossovitch, 2014;
229 Vogelbein, Nopp, & Hokelmann, 2014) which indicated that the players from better
230 teams employed proactive defensive strategies via covering more distance to press the
231 opposition and regain the ball possession quickly when their teams are out of the ball
232 possession. Once the winning team regains the ball in CSL, they prefer to maintain the
233 ball possession to keep the physical conditioning, creating the space to attack in CSL.

234 In this study, match location and quality of opposition have a significant
235 influence on the match outcome, which is in accordance with the previous studies
236 (Lago, 2009; Liu et al., 2016). For instance, the home advantage (HA) has experienced
237 some changes and plays a more important role when winning the match (shown in
238 Figure 1) in the latest four seasons. There may be several factors that contribute to this
239 phenomenon. On the one hand, Pollard and Gómez (2014) identified a HA effect of
240 63.82% in Chinese Super League (the fourth league in the Asian countries ranked by
241 HA effect and similar to the main European countries such as England or Spain).
242 Specifically, some factors are likely to affect the degree of home advantage such as
243 crowd effects, travel effects, local derbies, familiarity with local conditions, referee
244 bias, territoriality, special tactics, rule factors, team composition and psychological
245 factors. In particular, the increasing financial budget of clubs, players' recruitment or

246 the increased match attendance (crowd size) due to society and economy development
247 in China could be related to the increased importance of HA.

248 Differences between the end-of-season rankings of the competing teams can
249 truly reflect the strength gap between the two teams (Bradley et al., 2014). The
250 increased role of the quality of the opposition on match results demonstrates that the
251 performance gap between the teams in the CSL is widening, it is getting harder to beat
252 stronger opponents. This phenomenon may indicate that the Chinese teams
253 acknowledge more about each opponent and can arrange the corresponding tactics in
254 advance. On the other hand, the weaker teams lack corresponding changes in tactics in
255 the face of the stronger teams.

256 **5. Conclusion**

257 This study demonstrates that the influence of various factors exerts on match outcome
258 change over six seasons. The results showed the significant trends of factors influencing
259 the match outcome: shots on target, possession, total distance possession of the ball,
260 total distance out of ball possession. Additionally, match location exerted a decreased
261 influence on winning the game from 2012 to 2014 season and increased their impact
262 when winning the match from 2014 season. Lastly, the quality of opposition has a
263 continuously increased negative influence on the match outcome.

264 **Practical applications**

265 The role of KPI and situational variables in the CSL was evaluated over the six
266 seasons. Therefore, identifying how these factors alter their influence on the match

267 outcome throughout the seasons is of practical use in monitoring the training, players'
268 selection, even talent identification. On the one hand, the more percentage of ball
269 possession is related when winning the match in the CSL, less distance covered when
270 a team in ball possession and more distance covered without ball possession could be
271 the most important task in the training practice. On the other hand, match location and
272 quality of opposition have a huge influence on the match outcome. The coach should
273 set up some targeted training (e.g., psychological skill) and try to improve the stability
274 of player's performance in home and away. The coach should consider the quality of
275 the opponent and analyse the playing patterns of the opponent, formulating the
276 corresponding match strategy and practice in advance.
277

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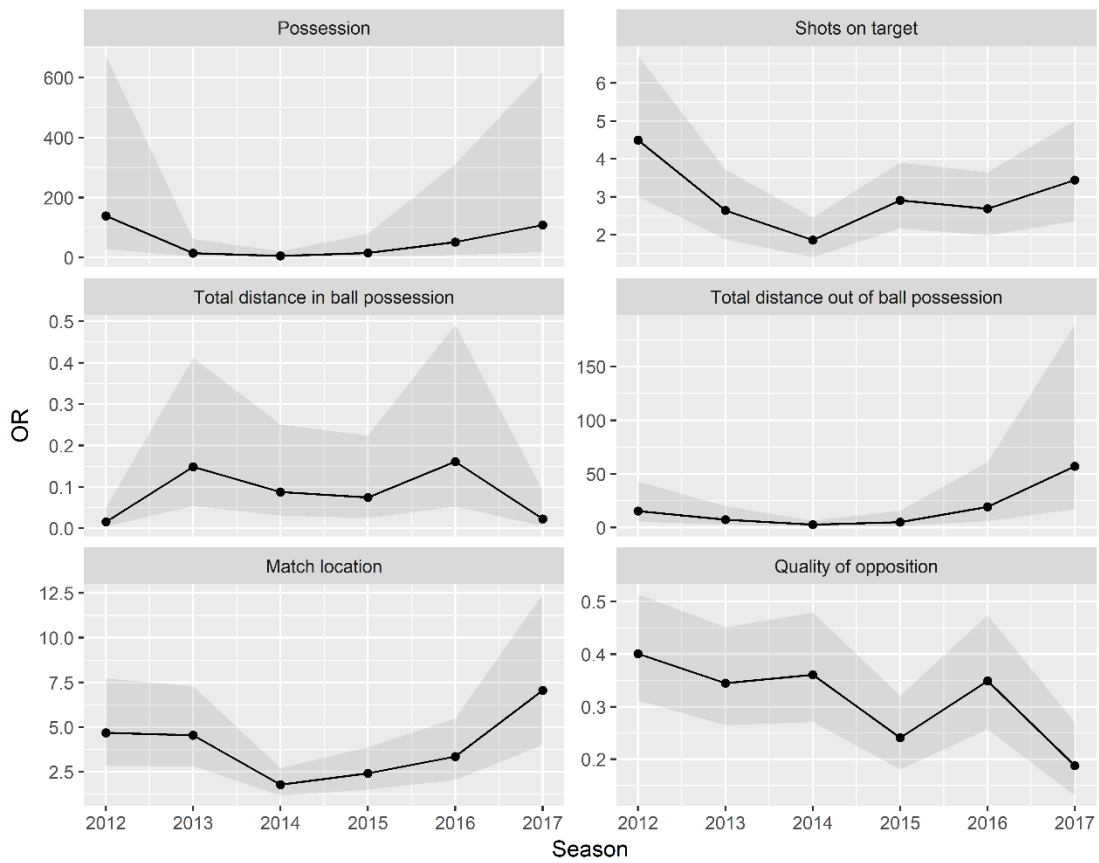
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396 **Figures**



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398 Figure 1. Changes in odds ratios for six factors relating to the match outcome over 6
 399 seasons. Black line represents the mean value of OR and 90% confidence interval.

400

Table 1. Selected variables definition

Technical performance-related parameters: operational definition	
Shot	An attempt to score a goal, made with any (legal) part of the body, either on or off target
Shot on target	An attempt to goal which required intervention to stop it going in or resulted in a goal/shot which would go in without being diverted
Possession (%)	The duration when a team takes over the ball from the opposing team without any clear interruption as a proportion of total duration when the ball was in play
Possession in opponent half (%) (PIOH%)	Possession of a team in opponent's half of pitch
Pass:	An intentional played ball from one player to another
Pass accuracy (%)	Successful passes as a proportion of total passes
Forward pass	An intentional played ball from one player to another who is located closer to the opponent goal.
Forward pass accuracy (%) (FPA %) :	Successful forward passes as a proportion of total forward passes
Opponent 35m entry	Number of times when the ball (possessed by the attacking team) enters the 35m area of the opponent's half of pitch
Opponent penalty area entry (OPAE)	Number of times when the ball (possessed by the attacking team) enters the penalty area of the opponent's half of pitch
Cross	Any ball sent into the opposition team's area from a wide position
Corner	Ball goes out of play for a corner kick
Offside	Being caught in an offside position resulting in a free kick to the opposing team
50-50 challenge won (%)	50%-50% challenge duels won by a team as a proportion of total duels of the match
Foul committed	Any infringement that is penalised as foul play by a referee
Yellow card	Where a player was shown a yellow card by the referee for reasons of foul, persistent infringement, hand ball, dangerous play, time wasting, etc.
Red card	Where a player was sanctioned a red card by the referee, including straight red card and a red card from the second yellow card
Physical performance-related parameters: operational definition	
Total distance (m):	Distance covered in a match by all the outfield players of a team
Total distance IP(m):	Total distance covered when in ball possession
Total distance OP(m):	Total distance covered when out of ball possession
Sprinting distance (m):	Distance covered at the speed over 23km/h in a match by all the outfield players of a team
Sprinting effort:	Number of sprinting in a match by all the players of a team
Sprinting distance IP (m):	Sprinting distance covered when in ball possession
Sprinting distance OP (m):	Sprinting distance covered when out of possession
High-speed running distance (m):	Distance covered at the speed of 19.1-23km/h in a match by all the outfield players of a team
High-speed running effort:	Number of high-speed running in a match by all the outfield players of a team
High-speed running distance IP (m):	High-speed running distance covered when in ball possession
High-speed running distance OP (m):	High-speed running distance covered when out of ball possession
Situational variables	
Match location:	Playing at home or away
Quality of opposition:	The difference between end-of-season rankings of the competing teams, i.e. quality of opposition = $R_A - R_B$, where R_A is the ranking of sampled team and R_B is the ranking of the opponent

Table 2. Performance indicators across the 2012 to 2017 seasons. Data are displayed as means and standard deviations.

	Total	2012	2013	2014	2015	2016	2017
Shots	12.5±4.9	12.2±4.7	12.7±5.0	12.4±5.2	12.3±4.9	12.3±5.0	13.1±4.7
Shots on target	4.8±2.6	4.3±2.3	5.2±2.7	4.9±2.8	4.6±2.7	4.7±2.7	4.8±2.5
Corners	4.7±2.7	4.6±2.7	4.6±2.8	4.8±2.8	4.6±2.8	4.4±2.5	5.0±2.8
Crosses	14.3±6.7	12.8±6.0	13.7±6.3	14.3±6.8	14.5±6.6	14.9±7.2	15.6±6.9
Possession %	50.0±7.3	50.0±7.1	50.0±6.9	50.0±7.2	50.0±7.4	50.0±8.0	50.0±7.2
PIOH%	44.5±7.5	43.9±7.6	44.6±7.4	44.2±7.6	44.3±7.5	45.0±7.9	44.9±7.2
Passes	369.0±94.3	357.2±92.0	387.4±91.8	379.2±92.9	362.7±94.7	367.0±101.1	360.0±90.0
Pass accuracy %	78.9±5.8	77.3±5.9	79.7±5.6	79.8±5.5	79.6±5.7	79.5±5.9	77.8±5.8
Forward passes	124.7±25.3	122.1±27.2	127.1±27.4	128.3±24.5	122.9±24.9	123±24.7	124.7±22.3
FPA %	63.4±8.5	62.7±8.8	65.6±9.1	64.1±8.3	63.8±8.2	62.7±8.5	61.3±7.7
Opponent 35m entries	44.6±14.1	43.4±14.1	45.7±14.4	45.6±14.6	44.0±13.9	45.1±14.8	43.9±12.9
OPAE	6.9±3.8	6.4±3.5	6.9±3.8	6.7±3.7	6.9±3.8	7.2±4.2	7.1±3.7
50-50 challenge won	51.7±6.9	54.0±5.6	55.3±5.9	50.9±5.6	50.0±6.5	50.0±7.7	50.0±7.9
Fouls committed	16.4±4.7	16.9±4.4	15.6±4.5	16.7±4.6	17.1±5.1	15.7±4.8	16.1±4.6
Offsides	2.2±1.8	2.2±1.7	2.3±1.9	2.2±1.8	2.3±1.8	2.2±1.8	2.3±1.7
Yellow card	2.0±1.3	2.1±1.3	2.0±1.3	1.9±1.3	1.9±1.4	2.0±1.4	2.1±1.4
Red card	0.1±0.3	0.1±0.3	0.1±0.3	0.1±0.3	0.1±0.3	0.1±0.3	0.1±0.3
Total distance	107,575.9±5,710.6	108,116.1±6,264.1	103,874.9±5,251.0	110,203.3±5,646.4	109,475.9±4,873.8	107,866.4±4,741.5	105,925.1±4,842.6
Total distance IP	35,842.2±6035.0	35,485.1±5861.4	35,391.3±5733.4	37,066.2±6060.4	36,510.1±6083.6	35,965.4±6384.3	34,628.9±5786.6
Total distance OP	38,097.2±6,503.3	37,435.4±6,279.6	37,357.2±6,000.8	39,345.8±6,566.2	38,752.6±6,555.2	38,496.4±6,946.6	37,198.2±6,370.9
Sprinting distance	2,098.2±500.3	2,069.7±509.3	1,790.4±444.1	2,234.3±488.2	2,109.5±458.5	2,116.3±457.8	2,272.0±493.6
Sprinting efforts	99.1±21.9	100.1±22.8	86.7±19.7	106.2±23.0	99.6±20.0	97.4±19.1	104.8±20.8
Sprinting distance IP	1,047.2±313.2	1,033.6±322.2	915.8±278.9	1,105.4±309.1	1,062.9±300.1	1,054.3±309.2	1,112.1±318.7
Sprinting distance OP	985.6±307.7	963.3±310.4	820.6±262.6	1,059.3±303.1	987.1±293.3	997.6±295.9	1,087.7±307.5
High-Speed distance	2,587.8±493.3	2,568.4±503.5	2,332.6±456.1	2,692.7±492	2,616.6±439.1	2,494.6±441.1	2,823.1±479.2
High-speed effort	186.7±35.5	187.5±36.1	166.8±32.1	195.8±36.2	187.9±31.7	177.7±29.9	204.7±33.7
High-speed distance IP	1,128.1±270.1	1,131.1±278	1,047.1±262	1,168.5±275.4	1,146.6±249.8	1,070.2±245.8	1,205.4±275.3
High-speed distance OP	1,341.6±327.0	1,301.8±314.5	1,184.3±283.8	1,393.9±319.7	1,360.1±308.5	1,319.6±321.7	1,491.5±331.8

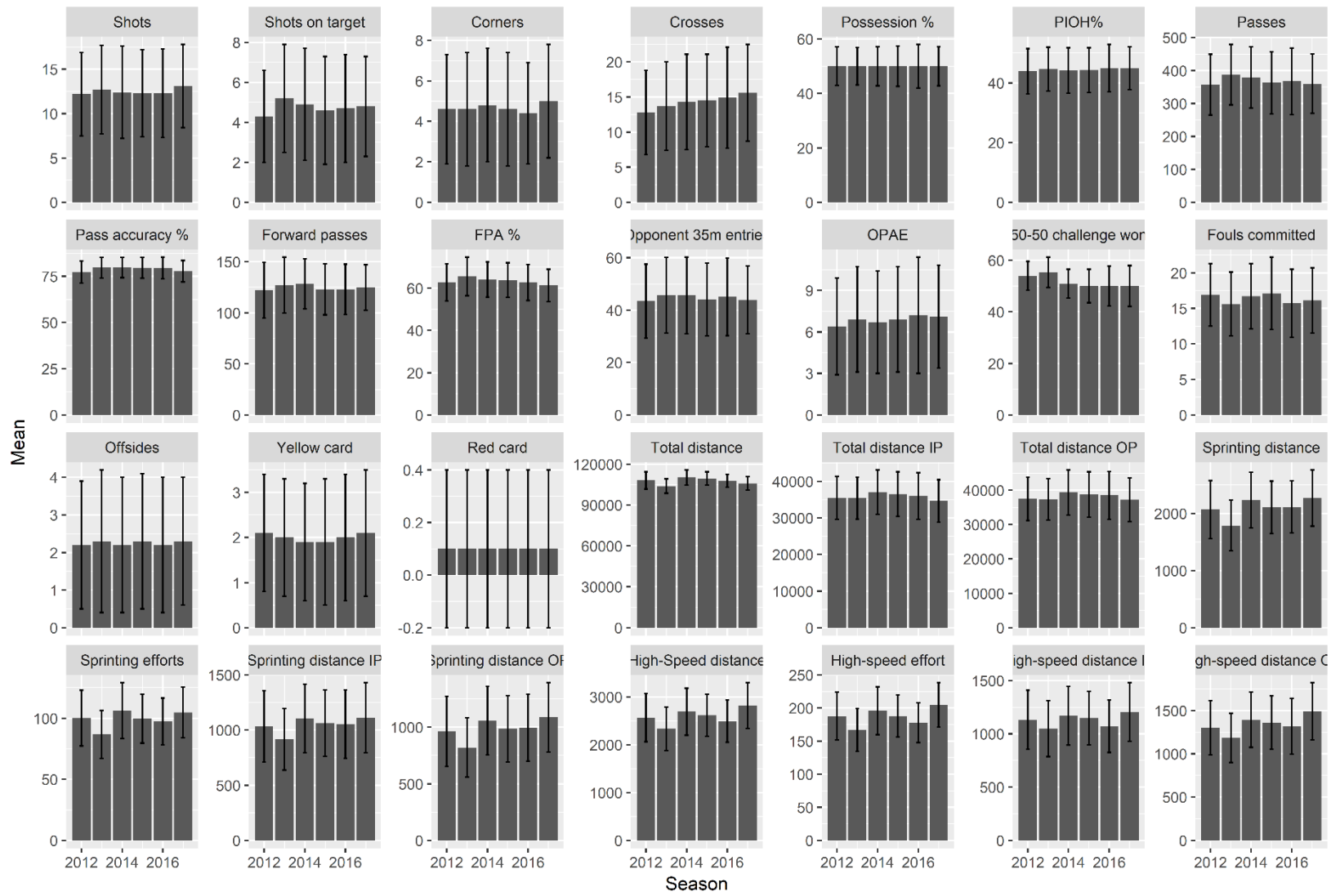


Table 3. Odds ratios for fixed factors relating to the 6 seasons logistic backward (LR) stepwise regression models

	Standardized OR mean (\pm 90% CI)					
	2012	2013	2014	2015	2016	2017
Shots	0.58 (0.39,0.85) *	0.59 (0.40,0.87) *	0.66 (0.49,0.89) *			0.63 (0.43,0.92) *
Shots on target	4.50 (3.01,6.72) *	2.64 (1.88,3.72) *	1.86 (1.41,2.45) *	2.91 (2.17,3.90) *	2.69 (1.98,3.64) *	3.44 (2.36,5.01) *
Corners	0.71 (0.52,0.96)	0.67 (0.51,0.89) *		0.76 (0.58,0.99)		
Crosses	0.51 (0.35,0.74) *	0.55 (0.39,0.78) *		0.52 (0.37,0.73) *	0.29 (0.21,0.41) *	0.61 (0.45,0.84) *
Possession %	138.51 (28.53,672.44) *	14.31 (3.29,62.32) *	5.46 (1.47,20.38) *	15.47 (3.03,78.96) *	51.22 (8.39,312.55) *	108.49 (19.05,618.02) *
Passes			2.68 (1.30,5.50) *			2.69 (1.16,6.25) *
Pass accuracy %			0.50 (0.32,0.80) *	1.54 (1.04,2.29)	0.47 (0.25,0.88) *	
Forward passes					0.62 (0.40,0.98)	0.42 (0.25,0.70) *
FPA %			1.93 (1.34,2.79) *		1.78 (1.04,3.05)	
50-50 challenge won					1.72 (1.36,2.17) *	
Fouls committed						1.43 (1.11,1.83) *
Red card				0.66 (0.46,0.96)		
Total distance	1.79 (1.18,2.72) *		2.06 (1.27,3.33) *	1.98 (1.14,3.43) *		
Total distance IP	0.02 (0.01,0.05) *	0.15 (0.05,0.41) *	0.09 (0.03,0.25) *	0.08 (0.03,0.22) *	0.16 (0.05,0.49) *	0.02 (0.01,0.09) *
Total distance OP	15.40 (5.53,42.90) *	7.32 (2.68,19.97) *	2.75 (1.16,6.51) *	5.13 (1.68,15.63) *	19.32 (6.11,61.08) *	57.03 (17.23,188.68) *
Sprinting distance			3.43 (2.30,5.11) *	0.31 (0.19,0.53) *	0.06 (0.02,0.15) *	
Sprinting efforts		0.47 (0.28,0.78) *			5.18 (2.12,12.65) *	
Sprinting distance IP	2.57 (1.91,3.46) *	5.13 (3.18,8.28) *		4.53 (2.80,7.35) *	9.79 (5.58,17.17) *	1.81 (1.34,2.45) *
Sprinting distance OP	0.31 (0.21,0.44) *		0.18 (0.12,0.27) *			0.68 (0.49,0.96)
High-Speed distance	1.61 (1.06,2.43)	2.41 (1.26,4.62) *		2.23 (1.15,4.31) *	42.00 (4.11,429.80) *	69.13 (11.04,432.73) *
High- speed distance IP					0.11 (0.03,0.44) *	0.19 (0.06,0.54) *
High-speed distance OP		0.33 (0.17,0.64) *		0.45 (0.23,0.90)	0.05 (0.01,0.27) *	0.03 (0.01,0.11) *
Quality of opponent	0.40 (0.31,0.51) *	0.35 (0.27,0.45) *	0.36 (0.27,0.48) *	0.24 (0.18,0.32) *	0.35 (0.26,0.47) *	0.19 (0.13,0.27) *
Match location	4.69 (2.85,7.72) *	4.54 (2.82,7.30) *	1.78 (1.17,2.71) *	2.41 (1.50,3.87) *	3.36 (2.05,5.49) *	7.06 (4.01,12.43) *
Chi-square	254.36	224.08	184.32	256.36	273.92	287.16
Cases correctly classified	82.0%	80.6%	76.8%	83.3%	83.4%	85.7%

* $p \leq 0.05$