

Analysis of corner kicks in FIFA 2022 world cup-Qatar

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Abstract:

This study aimed to analyze corner kicks taken in the matches played in the FIFA world cup 2022-Qatar to provide information to coaches on how to score goals from corner kicks, and the most important tactics used in the implementation of corner kicks, whether in an offensive or defensive situation, and place them in their training programs. The descriptive method in its survey form through scientific observation was used, the researchers used many parameters to analyze data (direction in which corners were taken, the time interval in which the corners were taken, the region where the ball kicked in, the player whom the ball met in the penalty area, which part of the body contacted the ball, corner kicks result, how goals are scored from the corner kicks.

(554) corner kicks in (64) matches were analyzed in FIFA world cup 2022, the results showed that (283) corners were taken from right side percentage (51.2%) and (271) percentage (49.8%) from left side, the most interval time corner kicks were taken between (76-90+) from the match (147) corners, percentage (26.5%), the defenders were the most players met the ball in the penalty area (296) percentage (53.4%) and the head was the most part contacted the ball (341) with percentage (67.5%), ten (10) goals were scored from the corner kicks with percentage of (1.8%) and (4) scored by head and (6) scored by foot.

Keywords: Match analyzes, Football, FIFA, Setplay, Qatar2022.

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Introduction:

Football is considered the most popular and practiced sport among various sports in more than 200 countries. It is played by millions of players and watched and enjoyed by billions of people, especially the World Cup tournament, which is held once every four years, and lasts for 30 days of excitement and suspense in an event that is considered the most important and the most prominent in sport. Countries from all over the world compete to achieve positive results and win this huge event.

Matches analysis is one of the most important means that contributes to helping players evaluate their performance and enactment of the directives obtained during training. In addition to, discovering the strengths and weaknesses of the team players and the opposing players as well. Furthermore, discovering the opponent's playing style, improving performance and the possibility of changing tactics in a way that suits the playing conditions. The performance of the players in the match is considered a true reflection of what the players have achieved in terms of developing and mastering their physical capabilities and understanding what has been trained in terms of technique and tactics as a group. (Al-Mursi, 2017, pp. 168-169).

Mostafa (2011) indicated that set play is one of the most offensive tactical performances that contribute to the results of the matches. Hammad (1990) explained that offensive stance plans are effective and influential in achieving goals. Due to that, they must be well exploited and put into a diversified training programs to achieve the best results. Many studies showed that about 30-40% of goals are scored through set kicks. (Bangsbo & Peitersen, 2003)'s study indicated that 32% of the goals in the 1990 World Cup Italy were scored from free kicks

and (Car, et al, 2009) 37% of the goals were scored through set kicks in the 2006 World Cup Germany, and 29% in the 2002 World Cup Korea and Japan.

Studies explain that the average corner kicks per match is about (10) Corner kicks are relatively uncommon and largely ineffective, but they are frequently a determining factor in the outcome of a match between two teams of a similar level (Castelo, 2009). Carling & et al (2005) explained that coaches use recorded videos as a tool to record, monitor, analyze, and evaluate the performance of their players and the players of the opposing team as well. He added that Video analysis leads to increase the efficiency of training. The researchers of this study noticed as a coaches, analysts, and followers of the football game, that set kicks, especially corner kicks, can play a major role in determining the outcome of the match. As the World Cup is the largest and the most developed competitive event in the world, it prompted the researcher to analyze corner kicks as it is an important element that affects scoring.

This study aimed to conduct a technical and quantitative analysis of corner kicks in the Qatar World Cup (2022). And specified the following:

- The number of corner kicks and where they took place (right, left).
- The time of the corner kick (1-15, 16-30, 31-45+, 46-60, 61-75, 76-90+).
- The place where the corner kick landed (1st, 2st, 3st, 4st, 5st, 6st, 7st).
- The player who met the corner kick (goalkeeper, defender, attacker).
- The body part used (hand, head, foot)
- The result of the corner kick (goal, outside the goal, new corner, cleaning the ball, goal keeping)

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- How to score goals from corner kicks (head, foot, own goal)

Material & methods

The researchers used analysis special form for data collection, (554) corner kicks in (64) matches were analyzed in FIFA world cup 2022, by watching live or from the record by the same researchers, many parameters were used: the direction in which the corner was taken, the time interval in which the corner kick was taken, the region where the ball failed, the who met the ball, the body part which contacted the ball, the result of the corner, the body part with which the goals were scored, The researchers used a set of tools that are commensurate with the nature of the study, by making use of scientific references, research, and previous reference studies:

-Analysis form: The researchers, by virtue of their experience and the fact that they have a professional diploma in football training, which is the highest training certificate granted by the Asian Football Confederation, designed a special form for data collection, attached (1).
Measuring devices and tools:

-A computer.

-A USB with recorded tournament matches.

-Technical program for slow and fast display.

The researchers found the stability coefficient of the analysis form by applying the form and re-applying it at a rate of a week between the two applications on an exploratory sample consisting of (5) matches from the European Champions League for the season 2021-2022 AD, and the value of the Pearson correlation coefficient was calculated as (0.95), which is a statistically significant value at the level ($\alpha \leq 0.01$) and fulfills the purposes of the study. SPSS statistics v 23 package program was used for data analysis, in this study means, standard deviations, percentages, and Pearson correlation coefficient were presented.

Results and Discussion

Table 1- Frequencies and percentage of the number of corner kicks according to the position of corner Total = (554)

Variables	The side of the field	Frequency	Percentage
Position	Right	283	51.2%
	Left	271	48.8%

The results of table (1) showed that the number of corner kicks obtained during (64) matches in the Qatar World Cup 2022 were (554) in total. (283) corners were right sided at a rate of (51.8%) and (271) corners were left sided at a rate of (48.8%). These results indicate that Corner kicks were distributed close to both sides of the goal.

Based on these results, the rate of corner kicks per match amounted to 8.66, and this percentage is lower than that of previous tournaments: (13) in the 1990 World Cup, (10.4) in the 1994 World Cup, (9.58) in the 1998 World Cup, 9.72 in the 2002 World Cup, 10.2 for the 2006 World Cup, 9.79 for the 2010 World Cup (casal et al, 2015), and 9.47 for the 2018 World Cup Russia (zileli et al, 2022).

Table 2- Frequencies and percentage of the number of corner kicks according to the time of occurrence, Total =554

Time	Frequency	Percentage
1-15	75	13.5
16-30	70	12.6
31-45+	102	18.4
46-60	86	15.5
61-75	74	13.5
76-90+	147	26.5

The finding showed in Table (2) that the largest percentage of (147) corner kicks, with a rate of (26.5%), were obtained during the period (76-90+) of the matches time during the last 15 minutes and added times. While (102) corner kicks were obtained at the end of the first half (+45-31) with a percentage of 18.4%. However the rest of the corner kicks were distributed over the remaining periods of the match, where the number of corner kicks reached (75), (13.5%), during the first 15 minutes of the matches. (70) corners (12.6%) during the period (16-30) minutes, and 86 corner kicks (13.5%) during the period (46-60) minutes, (74) corner kicks (13.5%) during the period (61-75) minutes.

These results indicate that the teams try at the end of the first half or the end of the second half and in the added time, especially at the playoffs (round of 16, quarter-finals, and semi-finals) to try to settle the result or amend it if the team is behind in the result. This result is consistent with studies conducted on the previous World Cup, such as the study (Zileli, ea al2022, Casal, et al, 2015, Acar et al, 2009, Armatas et al, 2007).

Table 3- Frequencies and the percentage of the number of corner kicks, according to the zone to which the kick was sent Total=554

Zone to which the kick in sent	Frequency	Percentage
Near post	120	21.6
Far post	100	18
Penalty area	178	32.1
4	30	5.4
5	29	5.4
6	7	1.3
Two touches	90	16.2



Fig 1-Distribution of the corners according to the zone to which the kick was sent

The results of table (3) showed that the penalty area in the figure(1) above, received a large number of corner kicks (178) with a rate of 32.1%.

(120) corner kicks were played towards the near post area with a rate of 21.6% while 100 corner kicks towards the far post area with a rate of 18% . Respectively comes areas 4 and 5 with a rate of 5.4% while 7 corner kicks were executed outside the goal with a percentage of 1.3%.The findings also presented that about 90 corner kicks were executed from two touches, and then a tactical action without playing the ball into the penalty area, but rather an attempt to take possession, or a compound play to penetrate from the depth or long shot.

The results of this study were different from the previous studies conducted on World Cup matches. (Baranda & Riquelme, 2012) pointed out that about 36.6% were implemented towards the near post on the 2006 World Cup in Germany and 61.8%(Casal, 2015) in 2010 FIFA World Cup, UEFA Euro 2012, and the UEFA Champions League 2010-2011.

Table 4- The number of frequencies and the percentage of corner kicks according to the player who received the ball Total=554

Player	Frequency	Percentage%
Goal keeper	53	9.6
Defender	296	53.4
Attacker	172	31
Outside the field	33	6

The results of table (4) presented that the defending player is the one who most faced the corner kicks (296) attempted corner kicks with a rate of 53.4%. While attackers faced (172) corner kicks with a rate of 31%. However the goalkeeper faced (53) corner kicks by(9.6%).These results meet with previous study (Zileli, et al, 2022) on World Cup in Russia, which indicated that defenders are the most players who face corner kicks with a rate of (48%). In addition to, these results show the extent of the effectiveness and success of defenders when dealing with corner kicks. If we took into account the capabilities of some attackers at the present time and the ability to score goals, most coaches would focus tactically on how to deal with free kicks, especially corner kicks. Meanwhile the important role of defenders and goalkeepers appears in the defensive especially in elite levels such as the World Cup and major leagues.

Table 5- Frequencies and the percentage of the number of corner kicks, according to the body part that touched the ball Total=554

The body part that touched the ball	Frequency	Percentage %
Hand	50	9.9
Head	341	67.5
Foot	114	22.6

The results of Table (5) indicated that most of the corner kicks were met by the defender or attacker's head with a rate of 67.5%. Whereas 22.6% by foot and the goalkeeper's hands with a rate of 9.9%.

The researchers believe that this result is consistent with how corner kicks are executed, as the large percentage of corner kicks were executed in the form of high kicks. Therefore the best way to deal with such kicks is either with the head or with the goalkeeper's hands.

Table 6- The number of frequencies and the percentage of the corner kicks, according to the result of the corner kick Total=554

Variable		Total corner kicks	Frequencies	Percentage %
The result of the corner kicks	Goal	554	10	1.8
	Outside the goal	554	81	14.6
	A new corner kick	554	45	8.1
	Cleaning the ball	554	338	61
	Goal keeping	554	42	7.5
The body part that scored	Head	10	4	40
	Foot	10	6	60
	Own goal	10	0	0

Table (6) shows that the number of goals scored from corner kicks were (10) goals at a rate of (1.8%), which is the same percentage of scoring in the World Cup Russia 2018 where (11) goals were scored through a total of (606) corner kicks. The table also shows that the largest percentage of corner kicks were deflected with a rate of (61%), while the percentage of corner kicks that resulted outside the goal were about (14.6%). In addition to the result of a new corner kick which was about (8.1%), and the goalkeeper controlled (7.5%).

The table indicates that 60% of the corner kick's goals were scored by head and (40%) by foot.

Conclusions

- Corner kicks are uncommon in football and are often ineffective, but they are sometimes a determining factor in the outcome of the match.
- The most effective corner kicks are those taken towards the penalty area, with a large number of attackers constantly moving inside this area.
- One of the modern trends in football is the implementation of corner kicks through two or more touches instead of direct play.
- Mixed defense (zone defense and man-to-man) is more effective than other strategies, taking into account the team's defensive capabilities.
- Physical figure and some physical characteristics such as height plays an important role in corner kicks, whether in the defensive or offensive side.
- The goalkeeper plays an effective and important role in corner kicks and deflecting kicks is one of the most important strategies used when defending.

In light of the findings of the study, the researchers recommend to use different methods in executing corner kicks and place them within the training programs such as the implementation of corner kicks from two touches, and diversification in the place of their implementation (the near post, the far post, and the penalty area). Obtain the mixed defense as a successful defensive strategy against corner kicks, and building a defensive strategy with focus on the goalkeeper as a pivotal player who plays a major role in dealing with corner kicks and design training programs to serve that.

Conflicts of interest: no potential conflict of interest relevant to this article was reported .

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REFERENCES:

- Acar, M. F., Yapicioglu, B., Arikani, N., Yalcin, S., Ates, N., & Ergun, M. (2009). Analysis of goals scored in the 2006 world cup. En T. Reilly and Feza Korkusuz (Eds.). *The Proceedings of the Sixth World Congress on Science and Football, Science and football VI* (pp. 233-242). London: Routledge.
- Al-Morsa, W. (2017). *Technological and technical Kinetic Analysis*. Faculty of Physical Education, Mansoura University, Egypt, pp. 167-168.
- Bangsbo, J., & Peitersen, B. (2003). *Fútbol: jugar en ataque*. Barcelona: Paidotribo.
- Carling, C., Williams, M., & Reilly, T. (2005). *Handbook of soccer match analysis*, Routledge publishers.
- Casal, C.A., Maneiro, R., Ardá, T., Losada, J.L., Rial, A. (2015). Analysis of corner kick success in elite football. *International Journal of Performance Analysis in Sport*, 15, 430-451.
<https://doi.org/10.1080/24748668.2015.11868805>.
- Casal, C., Dios, R., Ardá, T., Losada, J., & Boubeta, A. (2015). Analysis of Corner Kick Success in Elite Football. *International Journal of Performance Analysis in Sport*. 15. 10.1080/24748668.11868805.
- Castelo, J. (2009). *Tratado General de Fútbol. Guía práctica de ejercicios de entrenamiento*. Barcelona: Paidotribo.
- Hammad, M. (1990). *Attack in Football*, Dar Al-Fikr Al-Arabi, Cairo.
- Kubayi, A., & Larkin, p. (2019). Analysis of teams' corner kicks defensive strategies at the FIFA world cup 2018, *International journal of performance analysis in sport*, 19(5), 809-819.
<https://doi.org/10.1080/24748668.2019.1660547>.
- Mustafa, M. (2011). *An analytical study of offensive tactical performances contributing to finding a scoring opportunity in the 2009 FIFA Confederations Cup*, unpublished master's thesis, Faculty of Physical Education, Port Said University.
- Strafford, B.W., Smith, A., North, J.S. Stone, J.A. (2019). Comparative analysis of the top six and bottom six teams' corner kick strategies in the 2015/2016 English premier league. *International Journal of Performance Analysis in Sport*, 19(6), 904-918.
<https://doi.org/10.1080/24748668.2019.1677379>.
- Zileli, R., & Söyler, M. (2022). Analysis of corner kicks in FIFA 2018 World Cup, *Journal of Human Sport and Exercise*. 17(1):156-166. <https://doi.org/10.14198/jhse>.
- Zileli, R., Söyler, M., Genç, A. (2017). 2016-2017 match analysis of corner kicks used in the turkcell super league. Inonu University, *Journal of Physical Education and Sport Sciences*, 4(3), 48-58.r
- Zileli, R. (2006). Computer aided match analysis of corner kicks used in Turkcell Super League in the games played in 2006-2007. Unpublished Thesis, Abant İzzet Baysal University, Bolu, Turkey.r, Title of the Paper,(year), *Journal of Physical Education and Sport*, 11(1), pp. 70-74