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The Cream of the Crop: Analysing FIFA World Cup 2014 and Germany's Title Run

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ABSTRACT

Kempe, M., Vogelbein, M., & Nopp, S. (2016). The Cream of the Crop: Analysing FIFA World Cup 2014 and Germany's Title Run. *J. Hum. Sport Exerc.*, 11(1), 42-52. Analysis of game related statistics provides opportunities to analyse the characteristics and tactical patterns of the teams in order to improve the quality of the training and quality of the opponent's observation. The main objective of this study was to analyse performance parameters and characterize the most successful teams on FIFA World Cup 2014, in order to describe the most relevant parameters that can improve the efficacy of the teams. In addition, we analysed the winner of the FIFA World Cup 2014 in more detail to see if and in which ways they stood out within this tournament. Analyses of variance among groups of teams were made in order to characterize the performance parameters and find differences that can explain the efficacy of the teams on competition. The results of this study could show that successful teams score more goals through open play and via set pieces. As main difference, it could be found that successful teams had more high-percentage goal scoring opportunities within the penalty area. As a general pattern, teams attacked mostly on the left side of the pitch and through the middle. The winner of the WC 2014 stood out with a high efficiency for creating high percentage goal scoring opportunities and in converting them. Germany also protruded with their free flowing and accurate passing to create their goal scoring chances. This separation in the passing statistics was quite outstanding as there was no overall difference between different success groups within the tournament. **Key words:** PERFORMANCE ANALYSIS, NOTATIONAL ANALYSIS, OFFENSIVE INDICATORS, DEFENSIVE INDICATORS.



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INTRODUCTION

Winning the FIFA World Cup represents the greatest achievement for players and coaches in football. Besides the glory in winning this event, every World Cup (WC) presents a state of the art of tactical approaches and ideas. By investigating statistics, tactical or movement data of participating teams and players we are able to figure actual trends and developments in football. For example, Wallace and Norton (2014) found out that the games' speed increased about 15% and the passing rate about 35% by comparing the World Cup final games from 1966 to 2010.

Notation analysis and the analysis of game-related statistics helped to reveal major trends in football and to describe and distinguish between successful and less successful teams (for recent reviews see Sarmento et al., 2014 and Mackenzie & Cushion, 2013). Early studies could show that most goals in the WC 1986 were scored after crosses (Miller, 1994), however the most successful teams scored through the middle instead of both flanks. In a more recent study on the WC 2010 Clemente (2012) could show that teams executed significantly more attacks on the right side of the pitch than on the left side or through the middle. In addition, he showed that successful teams had more scoring opportunities and scored more goals in the penalty area. Furthermore, in comparison to less successful teams they scored more often via open play. Those findings are in line with previous observations on the WC 2002 in which 97% of the goals were scored in the penalty area (Carling, Williams, & Reilly, 2005). Such numbers can give an impression on the tactical approaches used during the WC and how teams tried to succeed.

Ball possession and variables concerning the passing game are often used to get a more global view on the style of play of teams. By analysing passing sequences of the WC in 1990 and 1994 Hughes & Franks (2005) found that successful teams scored more efficient when using more passes to create an opportunity then by using a more direct approach, but no such effect was found for less successful teams. This indicates that longer possession of the ball relates to team success. Playing time with ball possession was also filtered out as the main variable, besides number of shots and shots on goal, to predict success in WC 2006 by using a component analysis on game-related statistics (Moura, Martins, Luiz Eduardo Barreto, & Cunha, 2014). Those findings are in line with Lago-Peñas, Lago-Ballesteros, and Rey (2011) on the following Champions League seasons (2007-2010) who found that creating more shots, shots on goal, passes, successful passes and achieving more possession of the ball are strong predictors for team success.

In an impact assessment study of ball possession on winning, drawing, and losing, Collet (2013) found higher numbers of ball possession time for winning than for drawing or losing teams in the WC 2010. However, he stated that frequent and accurate passing, instead of 'just' holding the ball, was strongly linked to goals and wins and therefore "game-control" is essential. Furthermore, he emphasised that ball possession is an implausible predictor for individual match results.

Especially the lack of prediction power on individual games or more precisely the miss-prediction based on those statistical findings led us to try to find more global indicators of tactical and team performance. The prime example for this case has been the semi-final of the 2014 WC in which Germany beat Brazil 7-1. Brazil dominated Germany in most of the statistics previously highlighted for team success. They had more ball possession (52% vs. 48%), more shots (18 vs. 14) and shots on goal (13 vs. 12) and drilled more crosses (22 vs. 10), but had slightly less passes (557 vs 592) and successful passes (433 vs 483) (statistics obtained by Fifa.com). Regardless of this statistical advantage, Brazil was totally crushed by Germany.

In a previous study we introduced and evaluated the Index of Offensive Behaviour (IOB) and the Index of Game Control (IGC) and found that teams preferring “possession play” (positive IOB) were more successful than teams using “direct play” (negative IOB) (Kempe, Vogelbein, Memmert, & Stephan Nopp, 2014). More important successful teams scored high on the IGC regardless of their style of play, which indicates that game control might be the most important variable for winning or losing.

Within this recent study we analysed the game-related statistics of the FIFA World Cup 2014 and compared our findings with previous ones to find important variables to determine success in soccer. In addition, we calculated the IOB and IGC for all games of Germany (Germany and the respective opponent) to see if the aforementioned indexes are better individual game predictors than those presented by previous literature and to determine why Germany was, also statistically, the best team of the WC 2014.

METHODS

The present research fully complies with the highest standard of ethics and participant protection which have been approved by the Ethics Committee of the German Sport University Cologne.

Data collection

The data used in our study was obtained through the official website of the FIFA World Cup 2014 (<http://www.fifa.com/worldcup/statistics/index.html>). More specifically, we obtained the data of 32 international teams during 64 matches over the competition for the dependent variables of offensive phase and defensive phase. All variables are per game values to allow comparability. Games of the German national team were monitored and recorded via the official broadcasting signal and further analysed using the “MathBall”- notation software (Algorithmia Ltd., 2009, www.mathball.com). The software enables to mark desired variables within the video footage per mouse click and in advance to automated type out offensive actions. With the help of this software tool different standard game-related statistics for passing, shooting, ball control and ball possession were recorded and advanced variables were calculated (see Table 1).

Index of Game Control (IGC), of the games played by Germany, was calculated using several passing parameters (passes per action, passing direction, and target player passes) and parameters of passing success (passing success rate and passing success rate in forward direction). To aggregate the various parameters with different dimensions they were Z-transformed in advance of the calculation (see Equation 1). This index gives an impression how accurate an attack was performed, regardless of the preferred style of play of the team.

$$IGC = zPA + zPD + zTP + zPS + zPSF \quad (1)$$

In order to assess the style of play used by Germany and its opponents (to distinguish between direct and possession play) we calculated the Index of Offensive Behaviour (IOB, see Equation 2). The IOB characterizes the offensive behaviour of a team by using parameters of ball possession, gain of possession and quality of possession (IGC) as well as parameters of the duration and the covered distance of offensive actions and the overall game speed. A positive value of the IOB is associated with possession play and a negative value with direct play by the respective team.

$$IOB = IGC + zRP + zDPA + zGP - zTA + zGS + zMPA \quad (2)$$

Further information on the calculations of both indexes, as well as proves of validity and reliability are given in Kempe et al. (2014).

Table 1. Variables obtained via MATHBALL to calculate the Index of Offensive Behaviour and Index of Game Control.

Variable	Name	Description
PA	Passes per action	Number of passes of one offensive action
PD	Passing direction	Number of passes forward in relation to the overall number of passes subtracted from 1
TP	Target player passes	Number of passes to a target player in relation to number of overall and non-target player passes
PS	Passing success rate	Number of successful passes in relation to the overall number of passes
PSF	Passing success rate in forward direction	Number of successful passes forward in relation to the overall number of passes forward
MPA	Mean passes per attack	Relation of total number of passes to total number of attacks
GS	Game speed	Relation of the distance covered within one attack to the time with ball possession
TA	Mean time of attack	Relation of the total time of all attacks to the number of attacks
GP	Gain of possession	Mean time of the attack of the opponent subtracted by the own mean time of attack
DPA	Distance per attack	Distance covered during all attacks in relation to the total number of attacks
RP	Relative ball possession rate	Sum of all periods of possession of one team in relation to the sum of the periods of possession of both teams

Data analysis

All 32 teams were divided into four success groups according to their performance during WC 2014 (see Table 2).

Means and standard deviations are given as descriptive statistics. A one-way ANOVA was conducted to establish the statistically significant differences between four success groups for each dependent variable. The assumption of normality distribution of one-way ANOVA was investigated using the Kolmogorov-Smirnov test with correction Lilliefors and analysis of homogeneity was done using the Levene test. Normality distribution could not be revealed in all dependent variables. Even though, since $n \geq 30$, using the Central Limit Theorem we assumed the assumption of normality (Akritas & Papadatos, 2004). As homogeneity was not found in all cases, Post-Hoc analysis of the ANOVA was done using Dunnett's T_3 . All analyses were executed in IBM® SPSS Statistics for Windows, version 22.0 (IBM Corp., Armonk, NY) and the statistical significance was set at $p\text{-value} < .05$. To determine if the German team performed statistically different from the other teams in SC 1, a one way ANOVA was used including the game-related statistics of each game of all teams of SC 1 (excluding Germany) and Germany.

Table 2. Categorization of Success.

Competition	Round (teams)	Number of teams	Success Category
FIFA World Cup 2014	Quarterfinal (Germany, Argentina, Netherland, Belgium, Brazil, Costa Rica, Columbia, France)	8	SC1
	Second round (Chile, Uruguay Mexico, Greece, Switzerland, Nigeria, Algeria, USA)	8	SC2
	3 rd in Group stage (Russia, Portugal, Bosnia and Herzegovina, Ecuador, Italy, Ivory Coast, Spain, Croatia)	8	SC3
	4 th in Group stage (South-Korea, Ghana, Iran, Honduras, England, Japan, Australia, Cameroon)	8	SC4

RESULTS

Descriptive statistics of game-related statistics for goal scoring, attacking, defending, discipline, and passing for each success group are shown in Tables 3 to 7. Comparisons of goal scoring statistics between success groups showed a significant group effect for goals scored, goals conceded, set piece goals, and shot attempts on target from inside the penalty area (see Table 3).

Table 3. Goal related statistics by success group and One-Way- ANAVO of group differences.

		Goals	Goals conceded	Open Play Goals	Set Piece Goals	Shots	Attempts On Target	Attempts Off-Target	Attempts on-target from inside the area	Attempts on-target from outside the area
SC 1	Mean	1.75	0.76	1.44	0.31	14.11	9.10	5.02	5.31	3.79
	Std	0.61	0.51	0.47	0.19	3.53	2.58	1.30	1.94	1.28
SC 2	Mean	1.25	1.34	0.94	0.31	12.00	6.91	5.09	3.31	3.59
	Std	0.40	0.35	0.35	0.26	2.44	1.68	1.23	0.48	1.71
SC 3	Mean	1.21	1.58	1.04	0.17	13.42	7.96	5.46	4.04	4.00
	Std	0.43	0.58	0.45	0.25	2.80	1.74	1.42	1.66	1.45
SC 4	Mean	0.71	2.17	0.67	0.04	12.63	6.46	6.17	2.96	3.50
	Std	0.38	0.67	0.36	0.12	3.81	1.83	2.62	1.08	1.68
Germany	Mean	2.57	0.57	2.14	0.43	14.00	10.14	3.86	6.71	3.43
		F= 6.8	F= 9.2	F= 4.9	F= 3.01	F= .667	F= 2.789	F= .726	F = 4.383	F= .166
Group effect	p=	p=	p=	p=	p=	p=	p=	p=	p=	p=
		0.001	0.00	0.007	0.047	0.579	0.059	0.545	0.012	0.919

Scoring more goals, overall and via set pieces or open play, and conceding less are therefore accountable for success. Post-hoc analyses for significant group effects showed that the most successful teams scored more goals overall, on set pieces, and on open play than the least successful teams. They also conceded significant fewer goals than the least successful teams. However, there were no significant differences between success groups for shot attempts on target, but a significant group effect for shots on target inside the penalty area.

Attacking statistics showed no significant group differences (Table 4).

Table 4. Attacks and offensive actions.

		Attacks	Attacks left	Attacks right	Attacks center	Offsides	Assists	Solo Runs
SC 1	Mean	41.59	14.95	7.99	18.65	2.52	1.17	3.51
	Std	9.11	4.55	1.34	3.73	1.07	0.53	1.16
SC 2	Mean	35.31	12.84	6.13	16.34	2.03	0.88	2.53
	Std	4.85	2.58	2.08	3.77	1.04	0.44	1.09
SC 3	Mean	41.04	14.38	7.88	18.79	2.67	0.88	3.04
	Std	4.60	2.09	2.40	3.43	1.95	0.31	1.79
SC 4	Mean	37.46	13.21	6.79	17.46	1.67	0.63	2.04
	Std	9.28	3.42	2.94	6.53	1.50	0.33	0.74
Germany	Mean	44.86	15.14	9.00	20.71	2.43	1.86	4.00
Group effect		F=1.335 <i>p</i> = 0.283	F = 0.713 <i>p</i> = 0.552	F =1.252 <i>p</i> = 0.310	F = 0.509 <i>p</i> = 0.679	F =0.813 <i>p</i> = 0.497	F =2.369 <i>p</i> = 0.092	F =2.067 <i>p</i> = 0.127

However, when investigating the different ways of attacking, teams performed much more attacks on the left side of the pitch (almost twice as much) and through the middle (more than twice the number) than on the right side of the pitch. This pattern was adherent in all success groups. In contrast, success groups significantly differentiated for several defensive statistics (Table 5).

Table 5. Defensive actions.

		Attempted Clearances	Clearances completion rate	Completed Clearances	Tackles	Tackles won	Tackles suffered	Saves
SC 1	Mean	13.08	0.85	10.99	16.11	10.45	14.68	2.92
	Std	2.02	0.06	1.55	3.24	2.09	2.70	1.03
SC 2	Mean	17.53	0.81	14.06	20.56	13.09	19.28	4.44
	Std	2.54	0.05	2.34	2.02	3.08	5.19	1.66
SC 3	Mean	11.54	0.83	9.67	14.96	10.29	15.13	3.33
	Std	2.87	0.12	2.88	4.27	3.67	4.93	1.40
SC 4	Mean	12.67	0.86	10.79	15.67	9.17	13.38	3.63
	Std	4.39	0.02	3.65	5.16	2.54	2.75	0.92
Germany	Mean	14.86	0.85	12.57	15.71	13.00	17.86	3.43
Group effect		F = 5.821 <i>p</i> = 0.003	F = 0.748 <i>p</i> = 0.533	F = 3.842 <i>p</i> = 0.020	F = 3.464 <i>p</i> = 0.029	F = 2.620 <i>p</i> = 0.070	F = 3.158 <i>p</i> = 0.040	F = 1.997 <i>p</i> = 0.137

Successful teams attempted and completed more clearances than less successful teams. The first mentioned attempted and suffered more tackles as well. Post-hoc analyses showed that success group 2 attempted and completed more clearances as well as attempted more tackles than success group 1 and 3. Interestingly, there were no further significant differences between success groups.

Regarding passing parameters (Table 7) only crosses completion rate yielded a significant group effect.

No group effects were found for the disciplinary statistics (Table 6). However, surprisingly most successful teams committed the most fouls per game within the tournament.

Table 6. Discipline

		Yellow Card	Second yellow card and red card	Red Cards	Fouls Committed	Fouls Suffered	Fouls causing a penalty
SC 1	Mean	1.37	0.03	0.03	15.83	14.78	0.12
	Std	0.45	0.07	0.07	3.00	2.39	0.13
SC 2	Mean	1.41	0.03	0.03	15.34	15.44	0.06
	Std	0.52	0.09	0.09	2.10	3.44	0.12
SC 3	Mean	1.29	0.00	0.17	14.17	12.00	0.13
	Std	0.52	0.00	0.18	2.40	2.53	0.17
SC 4	Mean	1.63	0.04	0.04	14.33	14.08	0.08
	Std	0.33	0.12	0.12	1.89	1.15	0.15
Germany	Mean	0.86	0.00	0.00	13.00	14.29	0.00
Group effect		F = 0.764 $p = 0.524$	F = 0.374 $p = 0.772$	F = 2.466 $p = 0.083$	F = 0.898 $p = 0.454$	F = 2.811 $p = 0.058$	F = 0.350 $p = 0.789$

Table 7. Passing

		Total Passes	Passes Completed	Passes Completed ratio	Crosses	Crosses Completed	Crosses Completed ratio	Corners
SC 1	Mean	544.81	417.34	0.76	20.43	4.95	0.24	5.60
	Std	96.91	93.45	0.04	5.67	1.80	0.05	1.52
SC 2	Mean	485.94	361.41	0.74	18.91	3.75	0.20	4.69
	Std	60.95	57.63	0.03	4.87	0.53	0.03	1.09
SC 3	Mean	543.00	425.17	0.78	19.63	4.33	0.22	5.42
	Std	92.51	97.57	0.05	4.81	1.60	0.05	1.07
SC 4	Mean	469.92	350.33	0.74	18.42	4.96	0.27	4.96
	Std	77.82	74.30	0.05	2.83	1.19	0.05	1.64
Germany	Mean	726.29	593.86	0.82	21.14	5.71	0.27	5.29
Group effect		F = 1.725 $p = 0.185$	F = 1.719 $p = 0.186$	F = 1.202 $p = 0.327$	F = .283 $p = 0.837$	F = 1.417 $p = 0.259$	F = 3.055 $p = 0.045$	F = 0.768 $p = 0.522$

Comparing the German Team to the other teams participating in WC 2014 and especially to success group (SC) 1, it can be seen that Germany scored more goals, but not significant more, and conceded fewer goals ($F(1,47) = 6.187$, $p=.042$) than the mean value of SC 1. Especially, they scored six more open play goals than SC 1 ($F(1, 47) = 6.808$, $p=.035$). Germany shot with a high accuracy attempting more shoots and misplacing less than SC 1 while attempting most of them inside the penalty area. However none of those parameters yield significant differences. They did so while producing three more attacks per game than SC1, while using the same pattern of attack like the other teams performing the most attacks through the middle and second most through the left side of the pitch (Table 4). Considering defensive statistics, no variable stood out as Germany performed within SC1 as the other teams in SC1 below the numbers of SC2. Germanys passing numbers, however, did protrude. They passed the ball 185 times more than SC1 ($F(1, 47) = 16.67$, $p=.005$) and completed 176 more of them in comparison to SC1 ($F(1, 47) = 17.363$, $p=.004$) with the best passing completion rate (.82, $F(1, 47) = 7.9991$, $p=.026$) of all teams in the WC. Furthermore, they attempted and completed more crosses per game than the other teams during the tournament.

As an addition to common statistics we calculated the IOB and IGC for all German games. The mean IOB for Germany was 15.23 which indicate a very dominant ball possession approach. Overall they achieved an IOB above 15, which is as very high value, in all of their games except for the semi-final against Brazil (Table 8).

Table 8. Index of Game Control (IGC) and Index of Offensive Behaviour (IOB) for Germany and its different opponents during WC 2014 (ALG- Algeria; ARG-Argentina; BRA-Brazil, FRA- France; GHA- Ghana; POR- Portugal; USA- United States of America)

		ALG	ARG	BRA	FRA	GHA	POR	USA	Mean
Opponent	IGC	-3.37	1.84	3.68	-.13	-.21	5.84	2.18	1.41
	IOB	-12.67	1.64	8.51	.15	-2.12	9.06	-1-16	.48
Germany	IGC	5.35	6.84	4.81	2.54	5.91	7.22	8.76	5.92
	IOB	16.71	16.51	9.61	2.43	14.56	17.91	29.16	15.27

In contrast, Germanys opponents mostly used a counter-attacking approach accompanied by defending close to the own goal. The only teams that played against Germany with a possession play approach were Portugal (9.06) and Brazil (8.51), which were the wins with the highest margins (4-1 and 7-1, respectively) for Germany. The mean IGC for Germany was 5.92, while their opponents achieved an IGC of 1.43. The outlier of the very stable performance of the German team was against France in the quarter-final (2.43). The highest IGC performed against Germany was 5.84 by Portugal and the lowest -3.27 by Algeria.

DISCUSSION AND CONCLUSIONS

In the first part of this study we analyzed game-related statistics of the WC 2014 in Brazil to encounter recent trends and tactical patterns that led to success: In addition, we compared the world champion Germany with the rest of the teams to get more insights on their success. In the second part, we calculated two aggregated indexes of game control (IOC) and offensive behavior (IOB) to further analyze the effectiveness and the tactical approach used by the German team and their opponents.

As expected teams scoring more goals and succeeding less were most successful in the WC 2014. However, only success group 1 and 4 differed significantly considering goals scored and goals conceded. In line with those findings most successful teams scored more goals via open play and set pieces than less successful teams. These results are quite similar to the ones of Clemente (2012), who found significant differences for scored goals, conceded goals and open play goals in the WC 2010.

In contrast to these findings, all success groups had an equal amount of opportunities to score goals as they did not differ in the number of attacks or number of shot attempts on target. However as previous literature points out most goals are scored inside the penalty area (Carling et al., 2005), a significant group effect of shot attempts on target inside the penalty area indicates a higher quality of goal scoring opportunities for more successful teams. This higher effectivity of creating more high-percentage scoring opportunities and high conversion ratios, was describes as effectiveness in previous literature and is seen as a main predictor for success (Delgado-Bordonau, Domenech-Monforte, Guzmán, & Méndez-Villanueva, 2013; Lago-Penas, Lago-Ballesteros, Dellal, & Gomez, 2010; Lago-Peñas et al., 2011).

Delgado-Bordonau et al. (2013) revealed that successful teams were more effective defensively than unsuccessful teams in WC 2010. In line with those findings, successful teams in WC 2014 attempted and completed more clearances as well as tackles. Surprisingly, SC 2 attempted and completed more clearances and tackles than the other groups. This might point to a more defensive game approach of those teams. The lower amount of total passes of SC 2 (about 55 fewer total passes per game) in comparison to SC 1 and SC3 supports this impression.

Despite these differences of SC1 and SC2, there are no group effects for all passing parameters except crosses completion rate, which was quite unexpected. In 2010 successful teams played significantly more passes (Clemente, 2012). Overall, passing parameters are seen as one of the most important predictors for success in the literature (Collet, 2013; Lago-Peñas et al., 2011; Moura et al., 2014). Therefore this finding indicates that all teams focused on a high quality passing game.

Regarding tactical approaches, unlike the WC 2010 (Clemente, 2012) where teams tended to attack more from the right side, teams in WC 2014 performed more than twice the number of attacks on the left side and through the middle of the pitch in comparison to the right side. This emerged as a general pattern as no group effects are adherent for the different attacking sides.

The winner of the WC 2014, Germany, pulled themselves ahead from their peers in several statistics seen as predictors for success. They stood out in comparison to the other teams in SC1 by scoring more goals, conceding less, and especially scoring more open play goals per game. The last fact might be important as for WC 2010 open play goals were seen as mean distinction between successful and non successful teams by (Clemente, 2012). In addition, Germany had more shots on goal and shot with a higher accuracy, two other main predictors for success according to Lago-Peñas et al. (2011) and Moura et al. (2014). Regarding the quality of their scoring opportunities, they produced 1.4 more shot attempts on target from inside the penalty area implying that Germany had more high-quality finishes than the other teams in SC1. For creating these high-percentage finishes, Germany could rely on fluid and accurate passing game. They played and completed the most passes, by a large margin (Table 7), while having the best passing completion rate of all teams in the tournament. Such a frequent and accurate passing game was previously carved out as strongly linked to goal scoring by Collet (2013). This finding could also imply that Germany controlled the games they played.

The Index of Game Control supports this implication. Germany achieved a high number in the IGC with 5.92 in comparison to their opponents 1.41, meaning that they played accurate, especially in forward direction, and reaching target players on a high percentage. The IGC in 2014 of the German team is also an improvement of their previous number in 2010 (4.35, see Kempe et al., 2014) and only Spain performed a higher number (7.15) in their 2010 title run. In line with this approach of perceiving game control, Germany preferred possession rather than direct play throughout the tournament. This is indicated by a mean IOB of 15.23 with a positive value representing possession and a negative value representing direct play (Kempe et al., 2014). In contrast, their opponents mostly used direct play and a counter-attacking approach (mean IOB of Germany's opponents was .48). The only two teams that tried a more possession play-approach were Portugal and Brazil. Germany might have benefitted from the offensive playing style by Portugal and Brazil that could provide space for German attacks as these were the wins with the highest margins by Germany. As pointed out previously the German team was highly effective in front of the goal, which might be the main difference between these wins against Portugal and Brazil. In contrast, the close games for Germany had been the quarterfinal against France, as they forced them to a low IOB and therefore into an unfamiliar game approach. Comparing the German IOB numbers to their ones of the WC

2010 (7.35 ± 6.45 , see Kempe et al., 2014 & Nopp, 2012), a changed game plan might be concluded. In 2010, as indicated by the standard deviation, Germany was switching between a direct and a possession play approach. Whereas in 2014, they were constantly using a possession play approach. However the German team did not reach the level of the dominant possession play of Spain in 2010 that achieved an IOB of 16.13 ± 3.55 (see Kempe et al., 2014 & Nopp, 2012).

Using the IGC and IOB it is also possible to see that some of the medial criticism was unjust. After the games against USA and Algeria, media members were questioning the quality of the German squad. However, the indexes show that those were their most dominant performances. This shows us once again, that by looking at the right numbers we are able to gain a clearer picture of team performance in soccer that is more objective than subjective impressions.

In conclusion, game-related statistics of the WC 2014 in Brazil revealed that successful teams scored more goals overall, via set pieces and open play and conceded fewer per game than less successful teams. As main difference, it could be found that successful teams had more high-percentage goal scoring opportunities within the penalty area. As a general pattern, teams attacked mostly on the left side of the pitch and through the middle, which is in contrast to previous years (Clemente, 2012). In addition, defensive statistics could indicate that SC 2 used a more defensive approach to overcome their lack of individual talent. The winner of the WC 2014, Germany, stood out with a high efficiency for creating high percentage goal scoring opportunities and in converting them. Germany also protruded with their free flowing and accurate passing to create their goal scoring chances. This separation in the passing statistics was quite outstanding as there was no overall difference between different success groups within the tournament. These findings are underpinned by the IOB and IGC of the German team, which indicated that they were using a strict possession play approach which helped them to achieve a high control of the game. However, as good as Germany played in WC 2014, they did not reach the level dominance of Spain in WC 2010.

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