

**1994 World Cup
Winners' Performance Profile**

The performance of the winning side in each of the USA '94 matches was notated and analysed and then tested for their significance with the winning margin by a Spearman's Rank Correlation. The size of the data set was twenty three matches. The matches recorded were:

Match Number	Teams	Winning Margin
1	Germany v Bolivia	1
2	Columbia v Romania	2
3	Brazil v Russia	2
4	Holland v Saudi Arabia	1
5	Argentina v Greece	4
6	Nigeria v Bulgaria	3
7	USA v Columbia	1
8	Italy v Norway	1
9	Mexico v Republic of Ireland	1
10	Brazil v Cameroon	3
11	Sweden v Russia	2
12	Belgium v Holland	1
13	Argentina v Nigeria	1
14	Germany v South Korea	1
15	Argentina v Bulgaria	2
16	Germany v Belgium	1
17	Spain v Switzerland	3
18	Saudi Arabia v Sweden	2
19	Argentina v Romania	1
20	Ireland v Holland	2
21	Brazil v USA	1
22	Bulgaria v Italy	1
23	Sweden v Brazil	1

The data collected was grouped in four sections - shooting and goal-scoring, primary possession, discipline, and ball retention.

1. Shooting and Goal Scoring

For n=23 the significant levels for correlation are 0.351 at the 0.05 level and 0.496 at the 0.01 level. The data for goals scored in the second half are significant at both the 0.05 and at the 0.01 level.

None of the correlations for the shooting being on target or not were significant.

Match Number	Own Shots On Target	Own Shots Off Target	Opposition Shots On Target	Opposition Shots Off Target	Goals Scored in the First Half	Goals Scored in the Second Half
1	4	2	9	4	0	1
2	5	6	6	12	2	1
3	8	8	3	8	1	1
4	8	2	21	7	0	2
5	6	4	11	6	2	2
6	6	6	3	7	2	1
7	8	4	10	12	1	1
8	4	9	1	6	0	1
9	5	4	4	8	1	1
10	6	5	1	7	1	2
11	7	15	2	9	1	2
12	4	11	7	13	0	1
13	7	8	5	7	2	0
14	6	7	7	13	3	0
15	5	2	2	13	0	2
16	10	11	2	10	3	0
17	8	6	5	13	1	2
18	5	13	10	13	1	2
19	8	5	8	13	2	1
20	7	9	3	15	2	0
21	4	0	12	4	0	1
22	4	7	5	4	2	0
23	10	2	14	0	0	1
SR	0.080	0.120	-0.309	0.210	0.186	0.551

2. Primary Possession

The only variable within primary possession which was significant was a positive relationship between opposition throw-ins and the winning margin.

In terms of the goal-kick variables only one was significant at any of the levels and that was the number of times the goal-keeper played the ball short from his possessions. This variable had a negative relationship with the winning margin.

No	FreeKicks & Pens against	FreeKicks & Pens For	Own Throw-ins	Opposition Throw-ins	Own Corners	Opposition Corners
1	20	16	20	15	6	2
2	18	25	17	20	5	8
3	13	14	18	23	7	2
4	16	17	25	15	6	6
5	21	19	19	23	2	4
6	19	12	17	25	5	10
7	10	19	19	23	4	7
8	18	32	24	21	6	4
9	18	16	22	37	2	3
10	19	20	17	29	6	2
11	18	19	24	26	1	4
12	16	28	12	10	3	7
13	5	37	15	9	6	2
14	21	16	14	19	3	7
15	28	17	22	23	3	6
16	23	13	18	18	10	9
17	24	22	19	24	3	12
18	10	10	14	19	2	8
19	22	22	6	25	4	5
20	16	19	19	19	5	9
21	18	14	28	19	10	4
22	30	18	19	28	2	2
23	16	18	17	16	4	0
SR	0.158	-0.017	-0.047	0.431	-0.214	0.291

No	Own Goal Kicks	Opposition Goal Kicks	Own Goal-Keeper Long	Own Goal-Keeper Short	Opposition Goal-Keeper Long	Opposition Goal-Keeper Short
1	4	14	0	13	11	11
2	8	6	7	3	2	13
3	9	8	6	10	8	6
4	6	12	0	9	16	5
5	5	15	7	7	6	8
6	7	9	13	6	12	8
7	12	6	13	15	4	14
8	5	5	4	14	0	21
9	11	12	3	18	15	4
10	10	8	2	17	8	11
11	8	12	6	14	8	7
12	16	13	7	17	1	16
13	9	13	6	9	4	7
14	14	9	4	12	8	9
15	9	5	7	12	0	14
16	17	12	9	11	5	12
17	15	6	20	2	5	9
18	13	10	11	15	1	16
19	16	2	16	7	0	11
20	14	20	16	10	12	5
21	4	9	4	7	10	7
22	11	6	9	20	1	18
23	3	13	1	15	22	8
SR	-0.045	-0.036	0.343	-0.355	0.032	-0.113

3. Ball Retention

The ability to retain the ball was measured and although there was no significant relationship at the 0.01 level, at the 0.05 level the absolute number of passes attempted, and the number of passes retained (both absolute and relative) were significant.

No	Own Passes	Opposition Passes	Own 0-3 passes	Own 4-7 passes	Own 8-11 passes	Own 12+ passes	Opp 0-3 passes	Opp 4-7 passes	Opp 8-11 passes	Opp 12+ passes
1	396	282	72	39	8	0	67	25	3	1
2	232	549	57	18	0	0	78	37	15	6
3	446	346	64	38	11	7	66	30	8	0
4	510	158	61	38	16	4	66	5	3	0
5	449	347	63	25	11	5	92	26	7	0
6	304	320	60	19	6	3	58	26	4	1
7	243	559	76	20	2	0	78	47	12	4
8	393	276	70	32	8	2	77	22	3	0
9	362	281	79	28	6	2	82	16	3	1
10	449	274	63	33	10	6	76	21	3	1
11	368	365	97	18	8	2	53	28	5	2
12	348	403	60	37	5	1	54	35	10	3
13	476	285	62	33	10	5	54	28	6	0
14	342	342	67	26	7	1	80	31	5	0
15	330	394	57	26	5	5	69	35	9	1
16	361	368	85	19	11	1	69	31	9	1
17	270	297	85	18	1	2	79	24	5	0
18	416	324	53	43	10	1	77	26	3	1
19	241	428	46	19	4	1	69	32	8	2
20	384	325	59	28	10	0	69	25	3	0
21	423	215	54	21	5	7	52	10	3	2
22	327	419	83	22	7	0	79	32	6	3
23	602	252	68	44	12	7	80	22	1	0
SR	-0.036	0.072	-0.139	-0.245	0.013	0.229	0.082	-0.040	0.056	-0.156

4. Discipline

No	Own Fouls Committed	Opposition Fouls Committed	Own Off-Side Decisions	Opposition Off-Side Decisions	Own Hand Balls	Opposition Hand Balls
1	15	15	5	1	0	0
2	15	22	3	3	0	0
3	10	13	2	0	1	1
4	12	15	3	2	1	0
5	19	15	2	4	0	1
6	14	10	2	2	3	0
7	6	14	4	4	0	1
8	12	26	3	5	3	1
9	16	13	2	3	0	0
10	13	18	4	2	2	0
11	10	13	7	5	1	1
12	7	24	7	2	2	2
13	5	31	0	6	0	0
14	16	13	5	2	0	1
15	19	15	8	1	1	1
16	17	12	4	0	2	1
17	18	20	6	1	0	1
18	8	9	1	1	1	0
19	16	18	6	3	0	1
20	15	13	1	6	0	0
21	12	14	6	0	0	0
22	22	16	7	2	1	0
23	15	14	1	4	0	0
SR	0.157	-0.141	-0.133	-0.052	0.148	0.014

In terms of discipline there was no significant correlation.

Summary

	0.05 level	0.01 level
Positive	Goals scored in the second half Opposition throw-ins Passes attempted Passes retained (frequency and %)	Goals scored in the second half
Negative		

Appendix One

Spearman Rank Correlation Coefficients

n	Significance Level (one-tailed test)	
	0.05	0.01
4	1.000	
5	0.900	1.000
6	0.829	0.943
7	0.714	0.893
8	0.643	0.833
9	0.600	0.783
10	0.564	0.746
12	0.506	0.712
14	0.456	0.645
16	0.425	0.601
18	0.399	0.564
20	0.377	0.534
22	0.359	0.508

24	0.343	0.485
26	0.329	0.465
28	0.317	0.448
30	0.306	0.432