



IRB JUNIOR WORLD CHAMPIONSHIP 2009

STATISTICAL REVIEW AND MATCH ANALYSIS

IRB GAME ANALYSIS

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COMMENTARY

There was one quite remarkable aspect of the Junior World Championship 2009. There has seldom – if ever – been such a similarity in the shape of the game in two consecutive tournaments - at any level. The Junior World Championship of 2009 was all but a mirror image of the 2008 Championship as illustrated in the table below.:

	JWC 2009	JWC 2008
POINTS per game	49	50
% of POINTS from tries	65%	65%
TRIES per game	6.4	6.4
PENALTY GOALS per game	2.9	3.1
DROP GOALS - total	5	5
Tries scored by BACKS	65%	66%
Tries scored by FORWARDS	34%	32%
KICK at goal success rate	63%	64%
BALL IN PLAY	43%	42%
LINEOUTS	28	30
SCRUMS	21	21
PENALTIES/FKICKS	25	25

This similarity was also reflected in the performance of most of the participating teams, starting with the winning team – **New Zealand** who won the inaugural JWC played last year.

In 2008 all their 5 matches were won with ease - with points margins of 25,35,39,55 and 60 respectively. This year, they also won their 5 matches with ease albeit with some closer margins – 14,16,17,39, and 75. Further, they retained the ability of scoring tries at the final stage of the tournament scoring 44 points in this year's final and 38 in last year's.



As in 2008, it was the same teams that dominated the competition. **New Zealand, England and South Africa** were first, second and third – just as they were last year, and **Australia, France and Wales** continued to take the next 3 positions albeit in a slightly different order.

What was noticeable this year however that there was a closer grouping in the points scored the top 6 teams. While last year, the 6th team averaged 26 points a game less than the first team, this year that difference was down to 15 points. In addition, South Africa, Australia and New Zealand all scored fewer points while England, on the other hand, scored more. A likely explanation for this is that in 2008, England's last three matches were against Australia, South Africa and New Zealand, the three teams with the most impressive attacking and defensive records. England therefore had a tough run-in especially when compared to New Zealand, South Africa and Australia, who did not play each other once.

In looking at the data therefore, the pattern of fixtures and strength of opposition is always relevant. Judgements of performance therefore have to involve such an equation. An example from last year, is illustrative of this – in 2008 Australia averaged over 40 points a game, lost only once by a charged down kick in the last minute of a game and ended up 5th in the table.

At this stage, it is probably worth re-emphasising a further point that was made last year. It is that in any rugby world championship – at whatever level, male or female, the relative strengths of the participating teams can vary enormously. Tournaments frequently contain matches with points margins of 60 or 70 points and to quote last year’s Commentary “This is hardly surprising. Not only do playing numbers vary enormously from country to country but the level of professionalism will have an inevitable impact. When a team that contains players who are playing professionally at the highest level finds itself opposed by a team who are completely amateur then the amateur team is likely to struggle.”

The data contained in the following report identifies this, with possession being a good example. Despite finishing in the bottom half of the table, many teams still manage to achieve a high level of possession. This year, for example, Japan acquired the second highest possession of all sixteen teams, but finished in 15th position. What happens is that teams below the top flight find it difficult break down defences and to sustain passing movements under constant opponents’ pressure. This results – almost inevitably - in more kicking as well as kicking at a higher rate than the more successful teams. In addition, the effect of such pressure results in such teams finding the second half of matches particularly difficult. While the leading teams scored 60% more tries in the second half than the first, the teams in the lower half scored fewer.

For participants in world championships therefore, there are a range of major challenges to be faced. There are, on the other hand, considerable benefits from having to face such challenges and these are well documented. Success – or failure - therefore can come in a variety of forms with one objective being the production of more teams being able to compete at the world level.

In this, the 2009 Junior World Championship, showed a positive development - albeit modest. The points producing a similar profile to that seen in the senior world championship - RWC 2007. The figures are shown in the following table:

Points difference	JWC 2009 matches	JWC 2008 matches	RWC 2007 matches
0 - 5	10%	<i>18%</i>	<i>27%</i>
0 - 10	30%	<i>28%</i>	<i>35%</i>
0 - 20	55%	<i>48%</i>	<i>50%</i>
0 - 30	68%	<i>70%</i>	<i>67%</i>

The word ‘difference’ also appears when looking at playing strategies. One of the enduring attractions of the game of rugby is the different playing approaches that can be adopted. They may be based on a range of factors - physical characteristics, perceived national temperament, playing traditions and so on. One of the interesting areas at Junior World Championships therefore is to identify whether the participating teams reflect the characteristics of their senior teams. The answer is ‘yes’. Fiji, for example, at RWC and JWC are the least successful in managing the set pieces of scrum and lineout. Conversely, no teams score proportionately more tries from broken play. Similarly, Argentina’s traditional strength in the scrum is reflected at both senior and junior level.

The most striking similarity however concerns South Africa. At the time of writing, the South African senior team has developed a clearly identified but highly effective and successful playing strategy. It involves, in broad terms, exerting territorial pressure on its opponents through tactical kicking combined with intense physical pressure while minimising risk and effectively converting opponents errors into points - Possession is not a priority.

And so it was in the 2009 Junior World Championship. Only 4 teams obtained less possession than South Africa, only one team kicked more penalty goals, no team kicked more drop goals, no team scored more tries from turnovers, no team kicked more, no team had

fewer passing movements that contained more than 3 passes – with no better illustration being in South Africa’s match against Australia.

In that game, the detailed breakdown showed:

PASSES - Australia 169 – South Africa 58
RUCKS & MAULS – Australia 110 – South Africa 31
KICKS - Australia 8 – South Africa 21
POSSESSION - Australia almost 80% more

- and South Africa won the game by 32 points to 5 with 2 of their 4 tries coming from interceptions.



All these facts – and many others - are contained in the following report where the performance of each country in every major constituent element of the game is recorded.







FINAL STANDINGS


1 st		NEW ZEALAND
2 nd		ENGLAND
3 rd		SOUTH AFRICA
4 th		AUSTRALIA
5 th		FRANCE
6 th		WALES
7 th		SAMOA
8 th		IRELAND
9 th		SCOTLAND
10 th		TONGA
11 th		ARGENTINA
12 th		FIJI
13 th		ITALY
14 th		CANADA
15 th		JAPAN
16 th		URUGUAY







POOL STANDINGS

	P	W	D	L	F	A	TF	TA	BP	PTS
 New Zealand	3	3	0	0	140	9	22	0	2	14
 Argentina	3	2	0	1	61	26	8	2	1	9
 Ireland	3	1	0	2	51	79	5	10	2	6
 Uruguay	3	0	0	3	15	153	2	25	0	0

	P	W	D	L	F	A	TF	TA	BP	PTS
 England	3	3	0	0	125	14	17	2	3	15
 Samoa	3	2	0	1	53	86	7	12	1	9
 Scotland	3	1	0	2	33	54	4	7	1	5
 Japan	3	0	0	3	27	84	5	12	2	2

	P	W	D	L	F	A	TF	TA	BP	PTS
 South Africa	3	3	0	0	144	40	19	4	3	15
 France	3	2	0	1	118	81	17	9	2	7
 Fiji	3	1	0	3	55	98	6	12	0	4
 Italy	3	0	0	2	30	128	2	19	1	1

















	P	W	D	L	F	A	TF	TA	BP	PTS
 Australia	3	3	0	0	164	11	24	1	3	15
 Wales	3	2	0	1	107	58	14	7	2	7
 Tonga	3	1	0	3	47	111	7	15	1	5
 Canada	3	0	0	2	35	173	5	27	0	0

P=Played W=Won D=Draw L=Lost PF=Points For PA=Points Against
 TF=Tries For TA=Tries Against BP=Bonus Points PTS=Points



















POOL RESULTS

















ROUND ONE

	Argentina	9		Ireland	16
	New Zealand	75		Uruguay	0
	Samoa	17		Scotland	14
	England	43		Japan	0
	France	43		Italy	13
	Fiji	10		South Africa	36
	Australia	86		Canada	10
	Tonga	9		Wales	29

ROUND TWO

















	Argentina	33		Uruguay	15
	Ireland	0		New Zealand	17
	England	30		Scotland	7
	Japan	20		Samoa	29
	Fiji	25		France	48
	Italy	6		South Africa	65
	Australia	40		Tonga	6
	Canada	15		Wales	51

















ROUND THREE

	Ireland	45		Uruguay	0
	Argentina	9		New Zealand	48
	England	52		Samoa	7
	Japan	7		Scotland	12
	Fiji	20		Italy	14
	France	27		South Africa	43
	Canada	20		Tonga	36
	Australia	38		Wales	5



PLAY OFF RESULTS

	New Zealand	31		Australia	17
	South Africa	21		England	40
	Ireland	17		Wales	19
	Samoa	6		France	16
	Argentina	17		Tonga	26
	Scotland	39		Fiji	16
	Uruguay	11		Canada	29
	Japan	15		Italy	21

	New Zealand	44		England	28
	Australia	5		South Africa	32
	Wales	13		France	68
	Ireland	3		Samoa	9
	Tonga	25		Scotland	28
	Argentina	27		Fiji	10
	Canada	22		Italy	32
	Uruguay	17		Japan	54





SUMMARY

The attached report does 3 things:

- 1 it reflects the shape of the Under 20 game as played in Junior World Championship 2009
- 2 it shows any changes in the shape of the game compared with the Junior World Championship 2008
- 3 it provides a basis whereby each participating country can compare its performance in major areas of the game with the other teams that played in the competition as well as perhaps being used to establish benchmarks and performance indicators for future tournaments.



SECTION 1 – SUMMARY OF CONSTITUENT GAME ELEMENTS



OVERALL SUMMARY

The following data comes from the detailed report that follows and reflects in summary form the shape of the current junior game as expressed through JWC 2009.

	JWC 2009	JWC 2008
Av POINTS per game	49	50
% of points from TRIES	65%	65%
Av TRIES per game	6.4	6.4
Av PENALTY GOALS per game	2.9	3.1
Av DROP GOALS	1 every 8 games	1 every 8 games
TRIES SCORED BY BACKS	65%	66%
TRIES SCORED BY FORWARDS	34%	32%
PENALTY TRIES	>1%	2%
MATCHES with points margin of 20 or less	22 or 55%	19 or 48%
MATCHES won by team scoring most tries	36 or 90%	37 or 92%
MATCHES where tries were equal	4	2
MATCHES won by team scoring least tries	-	1
CONVERSION SUCCESS RATE	65%	61%
PENALTY GOAL SUCCESS RATE	60%	68%
DROP GOAL SUCCESS RATE	5 of 40 – or 13%	5 of 26 – or 19%
% of TRIES FROM LINEOUT POSSESSION	27%	24%
% of TRIES FROM SCRUM POSSESSION	23%	22%
% of TRIES FROM PENALTY/FREE KICKS	8%	10%
% of TRIES FROM TURNOVER/ERROR	17%	18%
% of TRIES FROM OPPONENTS KICKS	12%	16%
% OTHER (opp scrum / opp l'out / restarts)	13%	10%
Av PASSES per game	206	200
Av RUCKS/MAULS per game	125	132
Av KICKS per game	54	49
Av BALL IN PLAY TIME	43% - or 34mins 29secs	42% - or 33min 40secs
% of all PASSES MADE BY BACKS	39%	39%
% of all PASSES MADE BY SCRUM HALF	43%	45%
% of all PASSES MADE BY FORWARDS	18%	17%
Av LINEOUTS per game	28	30
% of LINEOUT POSSESSION RETAINED	78%	78%
Av SCRUMS per game	21	21
% of SCRUM POSSESSION RETAINED	85%	87%
Av PENALTIES per game	25	25
% of RUCK/MAUL POSSESSION RETAINED	88%	91%
Total YELLOW AND RED CARDS	Yellow = 42: Red = 5	Yellow = 48: Red = 4



















SECTION 1 – SUMMARY OF CONSTITUENT GAME ELEMENTS



TEAM SUMMARY

This section comprises some brief highlights of each team's activities and performances in certain critical areas of the game. Again, further and far more extensive analysis can be found in the main report.

Meanwhile, the number of tries scored by each team, the number conceded by each team and the number of penalty goals kicked is shown in the following table

	TRIES SCORED 2009	TRIES SCORED 2008	TRIES CONCEDED 2009	TRIES CONCEDED 2008	PENALTY GOALS 2009	PENALTY GOALS 2008	DROP GOALS 2009
 SOUTH AFRICA	25	37	9	8	12	5	2
 NEW ZEALAND	33	33	5	1	4	11	0
 AUSTRALIA	27	33	9	9	5	6	0
 ENGLAND	24	20	11	12	13	8	0
 FRANCE	26	19	19	12	10	9	0
 FIJI	10	14	20	23	9	3	0
 JAPAN	15	14	18	19	1	3	0
 WALES	15	13	16	15	11	8	0
 SCOTLAND	12	13	13	20	8	3	0
 SAMOA	7	12	13	9	6	7	1
 IRELAND	9	11	3	15	8	13	0
 TONGA	14	10	21	19	4	11	0
 ARGENTINA	11	7	15	18	9	5	1
 ITALY	9	7	24	11	8	16	0
 CANADA	13	7	32	30	3	8	1
 URUGUAY	6	n/a	38	n/a	3	9	0



























SECTION 1 – SUMMARY OF CONSTITUENT GAME ELEMENTS

The table below shows (a) how effective each team was in converting possession into **tries** and (b) how effective each team was in preventing opponents from converting possession into **tries**.

(a) Try Scoring rate

	Total Tries Scored	JWC 2009	JWC 2008
 NEW ZEALAND	33	1 try scored every 2m 43s	1 try scored every 2m 37secs
 SOUTH AFRICA	25	3m 06s	2m 07secs
 AUSTRALIA	27	3m 34s	2m 34secs
 FRANCE	26	3m 35s	5m 02secs
 ENGLAND	24	3m 53s	4m 43secs
 WALES	16	5m 26s	6m 34secs
 TONGA	14	5m 31s	7m 35secs
 JAPAN	15	6m 40s	5m 22secs
 FIJI	10	6m 42s	5m 25secs
 CANADA	13	6m 53s	13m 19secs
 SCOTLAND	12	7m 23s	7m 25secs
 ARGENTINA	11	7m 57s	12m 13secs
 ITALY	9	8m 16s	12m 28secs
 SAMOA	7	10m 54s	6m 31secs
 IRELAND	9	11m 09s	7m 45secs
 URUGUAY	6	13m 34s	n/a

















(b) Try Conceding rate

	Total Tries Conceded	JWC 2009	JWC 2008
 IRELAND	3	1 try conceded every 26m 52secs	1 try conceded every 6m 22secs
 NEW ZEALAND	5	17m 14secs	72m 10secs
 SOUTH AFRICA	9	10m 10secs	10m 29secs
 AUSTRALIA	9	8m 57secs	9m 10secs
 SAMOA	13	7m 28secs	9m 47secs
 ENGLAND	11	6m 58secs	6m 52secs
 SCOTLAND	13	6m 31secs	4m 18secs
 FRANCE	10	6m 14secs	6m 25secs
 WALES	16	5m 35secs	5m 22secs
 ARGENTINA	15	5m 27secs	4m 46secs
 FIJI	20	4m 33secs	4m 05secs
 TONGA	21	4m 31secs	4m 23secs
 JAPAN	18	4m 07secs	4m 25secs
 ITALY	24	3m 58secs	9m 05secs
 CANADA	32	2m 40secs	3m 08secs
 URUGUAY	38	2m 33secs	n/a

The average time in **possession** of the ball per game by each team is shown in the attached table:

		JWC 2009	JWC 2008
	IRELAND	20m 05s	15m 56s
	JAPAN	19m 58s	15m 01s
	AUSTRALIA	19m 16s	16m 58s
	ENGLAND	18m 39s	18m 53s
	FRANCE	18m 38s	19m 07s
	NEW ZEALAND	17m 56s	17m 15s
	CANADA	17m 53s	17m 46s
	SCOTLAND	17m 43s	18m 15s
	ARGENTINA	17m 30s	17m 06s
	WALES	17m 23s	17m 05s
	URUGUAY	16m 16s	n/a
	SOUTH AFRICA	15m 30s	15m 39s
	TONGA	15m 26s	15m 09s
	SAMOA	15m 16s	15m 39s
	ITALY	14m 54s	16m 17s
	FIJI	13m 24s	15m 11s

Each teams overall **kick at goal** success rate is shown in the attached table:

		JWC 2009	JWC 2008
	FRANCE	82%	75%
	ENGLAND	77%	61%
	WALES	73%	78%
	AUSTRALIA	68%	61%
	ITALY	65%	69%
	FIJI	64%	47%
	JAPAN	63%	56%
	SCOTLAND	62%	53%
	IRELAND	61%	81%
	SOUTH AFRICA	60%	65%
	ARGENTINA	58%	67%
	TONGA	52%	54%
	NEW ZEALAND	50%	70%
	SAMOA	50%	41%
	CANADA	45%	63%
	URUGUAY	42%	n/a

The above data – and additional data - on comparative aspects of key areas of play are shown in the main body of the report which now follows.

SCORING

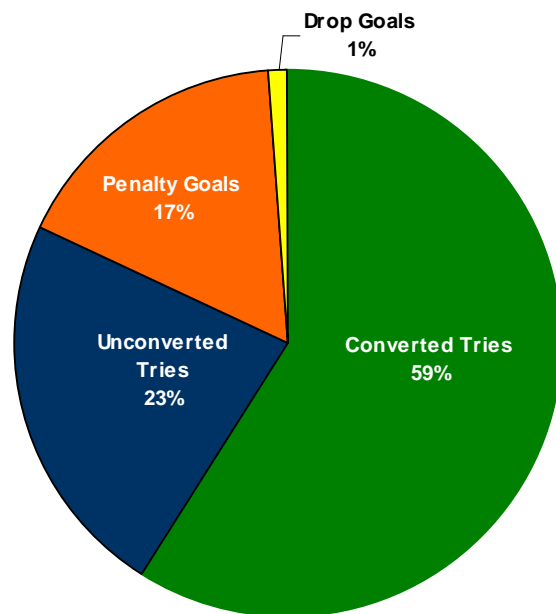
There were **1976** points scored in the 40 matches played, giving an average of **49** points per game (2008 – 50). They were made up as follows:

Type of Score	Total	Points
Converted Tries	167	1169
Unconverted Tries	90	450
Penalty Goals	114	342
Drop Goals	5	15
Total		1976

% of points scored by Tries
65%

Points Makeup

- 65% came from **TRIES**
- 18% came from **PENALTY GOALS**
- 17% came from **CONVERSIONS**
- >1% came from **DROP GOALS**



WINNING MARGINS

The winning margins in each of the 40 matches fell into the following ranges:

















Points Difference in JWC 2009

Points Difference	No of matches	Cumulative
0– 5	4	4 with 5 points or less
6 – 10	8	12 with 10 points or less
11 – 20	10	22 with 20 points or less
21 – 30	5	27 with 30 points or less
31 - 40	5	32 with 40 points or less
41 - 50	4	36 with 50 points or less
50+	4	4 over 50



SECTION 2 – STATISTICAL ANALYSIS & MATCH SUMMARY

Not surprisingly, points scored and conceded varied considerably - and the total and average points scored and conceded by each team are shown below:

	Points for			Points against		
	JWC 2009	JWC 2009	JWC 2008	JWC 2009	JWC 2009	JWC 2008
	TOTAL	AVERAGE	AVERAGE	TOTAL	AVERAGE	AVERAGE
 NEW ZEALAND	215	43	48	54	11	6
 FRANCE	202	40	31	100	20	20
 SOUTH AFRICA	197	39	51	85	17	15
 ENGLAND	193	39	30	79	16	21
 AUSTRALIA	186	37	44	74	15	14
 WALES	139	28	22	146	29	23
 SCOTLAND	100	20	18	105	21	33
 TONGA	98	20	18	156	31	30
 JAPAN	96	19	19	122	24	27
 ARGENTINA	95	19	13	115	23	28
 FIJI	91	18	18	164	33	32
 CANADA	89	18	13	216	43	40
 ITALY	83	17	17	165	33	20
 IRELAND	81	16	22	54	11	25
 SAMOA	68	14	18	105	21	16
 URUGUAY	43	9	n/a	236	47	n/a

PENALTY GOALS

There were 114 penalty goals kicked in the tournament, an average of 2.9 per game.

















Last year, five teams scored more penalty goals than tries – **USA, Tonga, Italy, Canada and Ireland**. This year however, all teams scored more tries than penalty goals.

There were some noticeable contrasts. While **New Zealand** scored 8 times as many tries as penalty goals and Japan only kicked one penalty goal in 5 matches, in **Fiji and Ireland's** case, the try:penalty ratio was almost 1 to 1.

IMPACT OF THE PENALTY GOAL ON MATCH RESULTS

Tries win matches - in the Junior World Championship 2009, **the winning team scored the most tries in 36 of the 40 matches or in 90%**.

In the other four games, the tries were equal.

















	Penalties Goals Kicked	Ratio PGs : Tries
 ENGLAND	13	1 : 1.8
 SOUTH AFRICA	12	1 : 2.1
 WALES	11	1 : 1.5
 FRANCE	10	1 ; 2.6
 ARGENTINA	9	1 : 1.2
 FIJI	9	1 : 1.1
 IRELAND	8	1 : 1.1
 SCOTLAND	8	1 : 1.5
 ITALY	8	1 : 1.1
 SAMOA	6	1 : 1.2
 AUSTRALIA	5	1 : 5.4
 TONGA	4	1 : 3.5
 NEW ZEALAND	4	1 : 8.3
 CANADA	3	1 ; 4.3
 URUGUAY	3	1 : 2.0
 JAPAN	1	1 : 15.0

TRY SCORING

	JWC 2009	JWC 2008
Tries – average per game	6.4	6.4
Tries – most in one game	14 Australia v Canada	18 – South Africa v USA
Tries – least in one game	0 – Ireland v Samoa	0 – Ireland v Italy

The total number of tries, penalty goals and drop goals scored by each country in JWC 2009 was as follows:

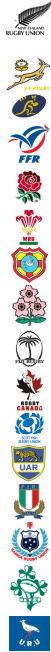
Total Tries/Penalty Goals/Drop goals per Team and % of points from tries and kicks

	Tries	Penalty Goals	Drop Goals	% of points from Tries	% of points from Kicks
 NEW ZEALAND	33	4	0	77%	23%
 AUSTRALIA	27	5	0	73%	27%
 FRANCE	26	10	0	64%	36%
 SOUTH AFRICA	25	12	2	63%	37%
 ENGLAND	24	13	0	62%	38%
 WALES	16	11	0	58%	42%
 JAPAN	15	1	0	78%	22%
 TONGA	14	4	0	71%	29%
 CANADA	13	3	1	73%	27%
 SCOTLAND	12	8	0	60%	40%
 ARGENTINA	11	9	1	58%	42%
 FIJI	10	9	0	55%	45%
 ITALY	9	8	0	54%	46%
 IRELAND	9	8	0	56%	44%
 SAMOA	7	6	1	51%	49%
 URUGUAY	6	3	0	72%	28%

RATE OF TRY SCORING

An earlier table shows the number of tries scored by each country. The table does not show however how effective each team was in scoring tries in relation to the possession that it obtained. A team may obtain little possession but still manage to score a significant number of tries. The following paragraphs consider this and attempt to show how successful each team was in converting possession into tries.

This was done by adding together the time each team was in possession of the ball in each of the matches played and then dividing it by the number of tries scored. The result then gave a rate of try scoring – or a measure of how effective each country was in converting possession into tries.



	Individual matches (no of tries scored)	Total Tries Scored	Try scoring rate JWC 2009	Try scoring rate JWC 2008
NEW ZEALAND	2,4,7,7,13	33	1 try scored every 2m 43s	1 try every scored 2m 37secs
SOUTH AFRICA	2,4,4,5,10	25	3m 06s	2m 07secs
AUSTRALIA	1,2,4,6,14	27	3m 34s	2m 34secs
FRANCE	1,3,7,7,8	26	3m 35s	5m 02secs
ENGLAND	3,4,4,6,7	24	3m 53s	4m 43secs
WALES	1,1,1,6,7	16	5m 26s	6m 34secs
TONGA	0,1,3,4,6	14	5m 31s	7m 35secs
JAPAN	0,1,2,4,8	15	6m 40s	5m 22secs
FIJI	1,1,2,3,3	10	6m 42s	5m 25secs
CANADA	0,2,3,3,5	13	6m 53s	13m 19secs
SCOTLAND	1,1,2,3,5	12	7m 23s	7m 25secs
ARGENTINA	0,0,3,3,5	11	7m 57s	12m 13secs
ITALY	0,1,1,3,4	9	8m 16s	12m 28secs
SAMOA	0,0,1,2,4	7	10m 54s	6m 31secs
IRELAND	0,0,1,1,7	9	11m 09s	7m 45secs
URUGUAY	0,0,1,2,3	6	13m 34s	n/a

RATE OF TRY CONCEDED











Following the above exercise, the converse was looked at ie. how effective was each team in restricting tries in relation to the possession that their opponents obtained. The following paragraph tries to measure this by illustrating how successful each team was in preventing their opposition from converting possession into tries.

This was done by adding together the total time the team's opponents were in possession of the ball - and then dividing it by the number of tries conceded. The result then gave a rate of try scoring by the opposition. As an illustration of this, **Ireland** who finished in 8th position, had the best defensive record in the tournament, conceding just one try for every 26min 52secs possession by their opponents. In **Uruguay's** case, however, their opponents scored one try for every 2m 33seconds possession – or 13 times less effective than in **Ireland's** case.





















SECTION 2 – STATISTICAL ANALYSIS & MATCH SUMMARY

	Individual matches (no of tries conceded)	Total tries conceded	Try conceding rate JWC 2009	Try conceding rate JWC 2008
 IRELAND	0,0,0,1,2	3	1 try conceded every 26m 52secs	1 try conceded every 6m 22secs
 NEW ZEALAND	0,0,0,2,3	5	17m 14secs	72m 10secs
 SOUTH AFRICA	0,1,1,3,4	9	10m 10secs	10m 29secs
 SAMOA	0,1,1,4,7	13	7m 28secs	9m 47secs
 AUSTRALIA	0,0,1,4,4	9	8m 57secs	9m 10secs
 ENGLAND	0,1,1,2,7	11	6m 58secs	6m 52secs
 SCOTLAND	1,2,3,3,4	13	6m 31secs	4m 18secs
 FRANCE	0,1,1,3,5	10	6m 14secs	6m 25secs
 WALES	1,1,2,4,8	16	5m 35secs	5m 22secs
 ARGENTINA	1,1,2,4,7	15	5m 27secs	4m 46secs
 ITALY	2,2,3,7,10	24	3m 58secs	9m 05secs
 FIJI	1,3,4,5,7	20	4m 33secs	4m 05secs
 TONGA	3,3,3,6,6	21	4m 31secs	4m 23secs
 JAPAN	2,3,3,4,6	18	4m 07secs	4m 25secs
 CANADA	1,4,6,7,14	32	2m 40secs	3m 08secs
 URUGUAY	5,5,7,8,13	38	2m 33secs	n/a

PLAYERS AND TRIES

It has been noted above that there were **257** tries scored in the 40 matches:

168 or **65%** of tries were scored by Backs and **88** or **34%** of tries were scored by Forwards - **1** or **>** was a penalty try. The breakdown between the 16 competing teams is shown below:

	Tries by Backs	% by Backs	Tries by Forwards	% by Forwards	Pen Tries	% Pen Tries	Total
 IRELAND	8	89%	1	11%			9
 NEW ZEALAND	29	88%	4	12%			33
 SOUTH AFRICA	21	84%	4	16%			25
 ITALY	7	78%	2	22%			9
 AUSTRALIA	20	74%	7	26%			27
 SAMOA	5	71%	2	39%			7
 TONGA	9	64%	5	36%			14
 CANADA	8	62%	5	38%			13
 SCOTLAND	7	58%	5	42%			12
 ARGENTINA	6	55%	5	45%			11
 ENGLAND	13	54%	11	46%			24
 JAPAN	8	53%	7	47%			15
 FRANCE	13	50%	12	46%	1	4%	26
 FIJI	5	50%	5	50%			10
 WALES	7	44%	9	56%			16
 URUGUAY	2	33%	4	67%			6



SECTION 2 – STATISTICAL ANALYSIS & MATCH SUMMARY

Of tries scored by the top 4 teams – **New Zealand, England, South Africa and Australia** – 76% were scored by backs.

By contrast, the comparable figure for the bottom 4 teams – **Italy, Canada, Japan, and Uruguay** - was 58% were scored by backs.

Wales and **Uruguay** were the only two teams whose forwards scored more tries than their backs.



TRIES


1. SOURCE OF TRIES

There were **257** tries scored in JWC 2009.


The teams scoring the tries obtained possession of the ball prior to the scoring of the try from a variety of sources. The source of possession from which tries were scored was as follows:

	JWC 2009	JWC 2008
Lineout – Own	27%	24%
Scrum –Own	23%	22%
Turnover/Handling Error	17%	18%
Opponents Kick	12%	16%
Penalty/Free Kick	8%	10%
Lineout - Opp	5%	6%
Restart – Opp	5%	2%
Scrum – Opp	3%	2%

The following table shows the possession source from which tries were scored by the 16 teams:

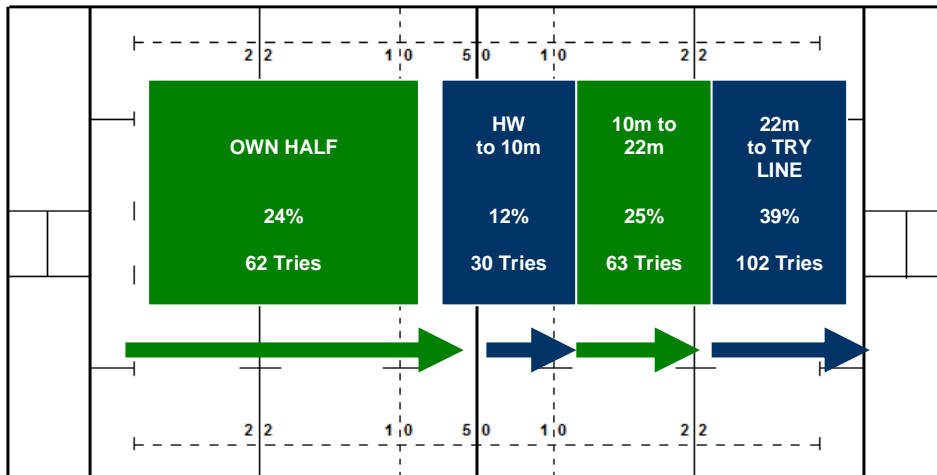
	Lineout	Scrum	Pen/ FK	Kick	Turnover	Restart	Total Scored
 NEW ZEALAND	8	12	3	2	4	2	31
 AUSTRALIA	8	9		7	3		27
 FRANCE	12	6	3	1	4		26
 SOUTH AFRICA	5	6	3	4	6	1	25
 ENGLAND	6	9	2	2	3	2	24
 WALES	5	4	1	2	4		16
 JAPAN	8	3		3		1	15
 TONGA	2	2		7	3		14
 CANADA	4	3		1	4	1	13
 SCOTLAND	2	5	2		1	2	12
 ARGENTINA	4	4			3		11
 FIJI	3		1		5	1	10
 IRELAND	6	1			1	1	9
 ITALY	4	3	1		1		9
 URUGUAY	5	1			2		8
 SAMOA	1	1	4	1			7

The next table shows the possession source from which their opponent's tries came:

	Lineout	Scrum	Pen/ FK	Kick	Turnover	Restart	Total Conceded
 IRELAND	1	1	1				3
 NEW ZEALAND	1	2	1	1	1	1	7
 SOUTH AFRICA	5	1			2	1	9
 AUSTRALIA		2		2	4	1	9
 FRANCE	1	2	3		3	1	10
 ENGLAND	4	3	2	1	1		11
 SCOTLAND	6	0	1	4	2		13
 SAMOA	6	5		1		1	13
 ARGENTINA	6	2		2	4	1	15
 WALES	7	3	2	3	1		16
 JAPAN	5	6	4	1	2		18
 FIJI	5	11	1		3		20
 TONGA	6	4		5	4	2	21
 ITALY	9	4	3	2	5	1	24
 CANADA	8	13		5	6		32
 URUGUAY	13	10	2	3	6	2	36

2. ORIGIN OF TRIES

















Tries originate from various parts of the pitch – this is illustrated below:





















SECTION 2 – STATISTICAL ANALYSIS & MATCH SUMMARY

The origin is that point on the pitch where the team scoring last obtained possession before scoring a try.

	Own Half	Halfway to 10m	10m to 22m	22m to Try-line	Total Scored
 NEW ZEALAND	8	8	5	10	31
 AUSTRALIA	10	3	3	11	27
 FRANCE	5	2	5	14	26
 SOUTH AFRICA	8	3	6	8	25
 ENGLAND	5	3	5	11	24
 WALES	3	1	5	7	16
 JAPAN	3	2	1	9	15
 TONGA	8	2	3	1	14
 CANADA	4	2	3	4	13
 SCOTLAND	1	1	5	5	12
 ARGENTINA	1	1	1	8	11
 FIJI	1	2	5	2	10
 IRELAND	2	0	3	4	9
 ITALY	0	1	1	7	9
 URUGUAY	3			5	8
 SAMOA	0	1	3	3	7

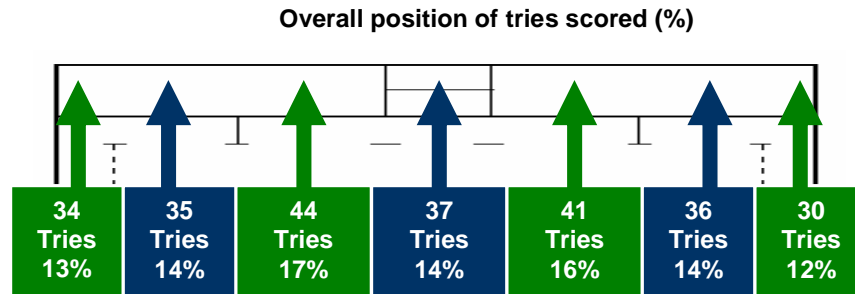
The following table provides the converse to the above ie. It shows – for each team – the origin of all tries conceded. This shows for example that none of **Ireland's** opponents scored a try from possession obtained outside Ireland's 22m line

	Opp Half	Halfway to 10m	10m to 22m	22m to Try-line	Total Conceded
 IRELAND	0	0	0	3	3
 NEW ZEALAND	2	0	1	4	7
 AUSTRALIA	5	0	1	3	9
 SOUTH AFRICA	1	1	3	4	9
 FRANCE	1	2	2	5	10
 ENGLAND	3	1	4	3	11
 SAMOA	0	2	4	7	13
 SCOTLAND	4	1	3	5	13
 JAPAN	3	2	1	9	15
 ARGENTINA	3	3	4	5	15
 WALES	2	4	2	8	16
 FIJI	3	2	2	13	20
 TONGA	9	1	1	10	21
 ITALY	5	4	9	6	24
 CANADA	13	2	5	12	32
 URUGUAY	9	6	8	13	36

3. TRY LOCATIONS

The chart below indicates where across the goal-line tries were scored. It shows that:

- 14% were scored under the posts
- 44% the left side of the posts
- 42% on the right side of the posts



4. BUILD-UP TO TRIES

Possession of the ball that leads to tries is obtained from a number of sources – and they are listed above. More often than not, other actions – second phase, kicks and passes – then take place before the try is scored.

The tables below show the number of rucks and mauls (2nd phase) and the number of passes that preceded each of the 257 tries scored in JWC 2009.

Build Up to Tries - Ruck/Mauls

	Number	%	Cumulative %
0 R/Ms	94	36%	36%
1 R/Ms	68	26%	62%
2 R/Ms	39	15%	77%
3 R/Ms	23	9%	86%
4 R/Ms	13	6%	92%
5 R/Ms	11	4%	96%
6 R/Ms	5	2%	98%
7 R/Ms	2	1%	99%
8 R/Ms	1	>1%	100%
9 R/Ms	1	>1%	100%
10+ R/Ms	0		
Total	257	100%	

Build Up to Tries - Passes

	Number	%	Cumulative %
0 pass	65	25%	25%
1 pass	34	13%	38%
2 passes	25	10%	48%
3 passes	34	13%	61%
4 passes	30	12%	73%
5 passes	25	10%	83%
6 passes	11	4%	87%
7 passes	18	7%	94%
8 passes	4	2%	96%
9 passes	5	2%	98%
10 +passes	6	2%	100%
Total	257	100%	

The first table shows that **86%** of tries were preceded by 3 or fewer second phases.

The second table shows that **61%** of tries were preceded by 3 or fewer passes. This was not a figure that was seen consistently throughout all teams.

In **New Zealand's** case, only 2 of their 33 tries contained no passes, this contrasts with **England** who had nine with no passes in their 24 tries.

















TIMING OF SCORES

44% of tries were scored in the first half - 56% in the second half.

There was a noticeable difference between the time when tries were scored and the time when penalties were kicked.

While 44% of tries were scored in the first half, the equivalent first half penalty count was 71%.

The following table breaks down these figures further and shows the halves in which teams scored tries and penalty goals and the halves which they conceded tries and penalty goals.

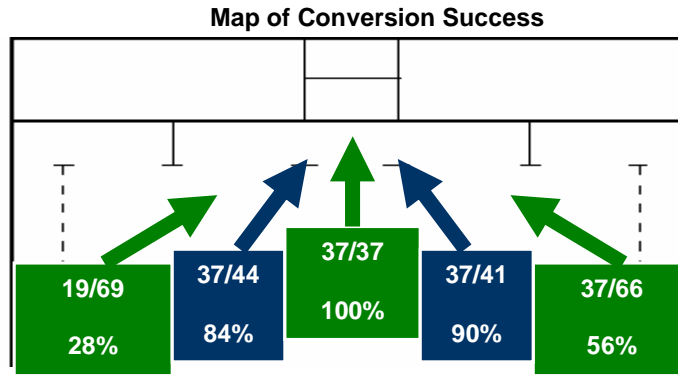
	1st half				2nd half			
	Tries scored	PGs Scored	Tries conceded	PGs conceded	Tries scored	PGs Scored	Tries conceded	PGs conceded
 NZL	11	3	2	3	22	1	4	2
 ENG	11	11	5	6	13	2	3	1
 RSA	8	9	4	5	17	3	6	2
 WAL	7	10	5	11	9	1	12	2
 AUS	10	4	3	6	17	1	4	1
 FRA	11	9	3	7	15	1	8	3
 SAM	4	5	7	6	3	1	8	2
 ARG	5	5	6	9	6	4	2	2
 IRE	5	3	1	2	4	5	8	3
 SCO	7	5	6	7	5	3	8	2
 ITA	6	3	8	16	3	5	1	3
 CAN	7	3	15	17	6	0	4	2
 TON	7	4	9	12	7	0	5	2
 FJI	6	5	8	12	4	4	7	4
 JAP	8	0	11	7	7	1	2	0
 URU	1	2	21	17	5	1	0	2
TOTAL	114	81	114	81	143	33	143	33

It was noticeable that each one of the top 6 teams scored most of their tries in the second half. By contrast, and with only 2 exceptions, the remaining 10 teams scored the majority of their tries in the first half.

KICKS AT GOAL

Kicking success rates were as follows:

	Kicks at Goal Success Rates
Conversions	65% - (2008 61%)
Penalty goals	60% - (2008 68%)
Drop goals	13% - 5 of 40 (2008 – 19% or 5 of 26)



The kicking success for **penalty goals, conversions and drop kicks** – of each of the participating countries is shown below.

The table gives the kicking success rate of each participating team. The percentages should however only be regarded as indicative since success depends on a number of factors. Some tries are scored near the touchline – others under the post. Further, when few kicks at goal are taken, the success or failure of relatively few can have a disproportionate effect on percentages. Certain teams may take tap penalties, scrums and lineouts instead of eminently kickable penalties. Other teams may chose to kick for goal whenever 3 points are more or less guaranteed. The table should therefore be looked at within such potential constraints.

	Conversion Success %	Penalty Success %	Overall Success %	Drop goal Success
FRANCE	81%	83%	82%	0 of 3
ENGLAND	71%	87%	77%	0 of 1
WALES	81%	65%	73%	0 of 0
AUSTRALIA	67%	71%	68%	0 of 0
ITALY	78%	57%	65%	0 of 1
FIJI	70%	60%	64%	0 of 1
JAPAN	60%	100% ie 1 out of 1	63%	0 of 0
SCOTLAND	67%	57%	62%	0 of 4
IRELAND	67%	57%	61%	0 of 2
SOUTH AFRICA	60%	60%	60%	2 of 7
ARGENTINA	46%	69%	58%	1 of 11
TONGA	57%	44%	52%	0 of 2
NEW ZEALAND	58%	31%	50%	0 of 2
SAMOA	86%	46%	50%	1 of 2
CANADA	46%	43%	45%	1 of 2
URUGUAY	33%	50%	42%	0 of 2

There were just 5 successful drop goals from 40 attempts. 3 teams attempted none while **Argentina** attempted 11 and succeeded just once.

**BALL IN PLAY**

In percentage terms, JWC 2009 matches produced an average ball in play time of **34min 29secs or 43%** (2008 - 33min 40secs – or 42%)

The highest Ball in play figure was **52%** or 41 mins 21 secs (**Uruguay v Canada**)

The lowest Ball in play figure was **35%** or 28 mins 09 secs (**Australia v Canada**)

The following table shows the ball in play % and time for each match and it also includes how much possession (%) was obtained by each team in the 40 matches. It can be seen that the winning team did not always have the most possession. In 16 of the 40 matches – or 40% - the winning team had the least possession.

BALL IN PLAY %	BALL IN PLAY TIME	WINNING TEAM	%	LOSING TEAM	%
52%	41min 21s	Canada	50%	Uruguay	50%
51%	40min 27s	Italy	39%	Japan	61%
50%	39min 36s	France	54%	Samoa	46%
48%	38min 10s	Australia	54%	Tonga	46%
48%	38min 01s	New Zealand	52%	Australia	48%
47%	37min 52s	Wales	45%	Ireland	55%
47%	37min 42s	Ireland	57%	Argentina	43%
46%	36min 49s	Australia	46%	Wales	54%
45%	36min 13s	Scotland	37%	Japan	63%
45%	36min 01s	Ireland	57%	Uruguay	43%
45%	35min 52s	South Africa	36%	Australia	64%
45%	35min 41s	New Zealand	59%	Uruguay	41%
44%	35min 30s	England	51%	Scotland	49%
44%	35min 28s	Wales	46%	Canada	54%
44%	35min 05s	Italy	43%	Canada	57%
44%	35min 00s	Samoa	41%	Ireland	59%
44%	34min 59s	New Zealand	42%	England	58%
44%	34min 53s	Samoa	42%	Scotland	58%
43%	34min 37s	Tonga	45%	Canada	55%
43%	34min 35s	South Africa	52%	Italy	48%
43%	34min 31s	New Zealand	51%	Ireland	49%
43%	34min 30s	England	45%	Japan	55%
43%	34min 10s	Argentina	51%	Uruguay	49%
43%	34min 03s	South Africa	57%	Fiji	43%
43%	34min 01s	Scotland	55%	Tonga	45%
42%	33min 44s	France	53%	Wales	47%
41%	32min 52s	Scotland	57%	Fiji	43%
41%	32min 44s	Tonga	45%	Argentina	55%
41%	32min 43s	England	58%	Samoa	42%
41%	32min 40s	New Zealand	51%	Argentina	49%
41%	32min 29s	South Africa	46%	France	54%
41%	32min 25s	Wales	56%	Tonga	44%
40%	32min 13s	England	63%	South Africa	37%
40%	32min 05s	Argentina	62%	Fiji	38%
39%	31min 33s	Japan	55%	Uruguay	45%
39%	31min 22s	Samoa	49%	Japan	51%
38%	30min 19s	France	63%	Italy	37%
37%	29min 38s	Fiji	47%	Italy	53%
37%	29min 27s	France	59%	Fiji	41%
35%	28min 09s	Australia	62%	Canada	38%

The following table is a summary of the above, showing the overall average possession time obtained by all 16 teams: It can be seen that **Ireland** obtained 50% more possession than **Fiji**.



- IRELAND
- JAPAN
- AUSTRALIA
- ENGLAND
- FRANCE
- NEW ZEALAND
- CANADA
- SCOTLAND
- ARGENTINA
- WALES
- URUGUAY
- SOUTH AFRICA
- TONGA
- SAMOA
- ITALY
- FIJI

	JWC 2009	JWC 2008
IRELAND	20m 05s	15m 56s
JAPAN	19m 58s	15m 01s
AUSTRALIA	19m 16s	16m 58s
ENGLAND	18m 39s	18m 53s
FRANCE	18m 38s	19m 07s
NEW ZEALAND	17m 56s	17m 15s
CANADA	17m 53s	17m 46s
SCOTLAND	17m 43s	18m 15s
ARGENTINA	17m 30s	17m 06s
WALES	17m 23s	17m 05s
URUGUAY	16m 16s	n/a
SOUTH AFRICA	15m 30s	15m 39s
TONGA	15m 26s	15m 09s
SAMOA	15m 16s	15m 39s
ITALY	14m 54s	16m 17s
FIJI	13m 24s	15m 11s

ACTIVITY CYCLES

Activity cycles comprise - ruck/mauls, passes, and kicks.

The following paragraphs show the number of rucks/mauls, passes and kicks made in JWC 2009.

	JWC 2009	JWC 2008
Passes	206	200
Rucks/Mauls	125	132
Kicks	54	48

PASSING

Games, on average, contained **206** passes (2008 – 200)

The most in any game was **266 (Scotland v Fiji)**

The least was **133 (Argentina v Ireland)**

The most by any team in a game was **169** – the fewest, **54**.

The attached table shows the average passes per game per team:

- AUSTRALIA
- NEW ZEALAND
- SCOTLAND
- ENGLAND
- JAPAN
- IRELAND
- FRANCE
- CANADA
- WALES
- SAMOA
- FIJI
- TONGA
- SOUTH AFRICA
- ITALY
- ARGENTINA
- URUGUAY

	JWC 2009	JWC 2008
AUSTRALIA	137	102
NEW ZEALAND	127	144
SCOTLAND	125	112
ENGLAND	125	97
JAPAN	117	90
IRELAND	115	107
FRANCE	105	114
CANADA	105	81
WALES	98	99
SAMOA	92	105
FIJI	92	84
TONGA	88	101
SOUTH AFRICA	86	91
ITALY	82	102
ARGENTINA	82	73
URUGUAY	75	96

Again, there were noticeable differences between the 16 teams with **Australia** making almost double the passes made by Uruguay, A team may however make more passes than another simply because it had more possession – but this was not the case with **Australia** and **Uruguay**. Australia had only 18% more possession – the reason for difference was that Australia passed at a far higher rate. ie they made many more passes per minute's possession. When an adjustment is made to take account of this, it can be seen that the above table changes – albeit slightly.

This attached table now shows the average number of passes per minute's possession ie the rate of passing.

Under this method of calculation, when passing is related to possession, then **France**, for example, while they made noticeably more passes than **Fiji**, passed at a far lower rate. Further, the number of passes made by a team can also vary considerably from match to match while other teams – such as **England** - have a more consistent level of passing.

The following table shows the average number of passes per country per game as shown above, together with the most in a game and the least in a game – and the percentage difference between the highest and the lowest

	JWC 2009	JWC 2008
NEW ZEALAND	7.0 per minute	8.4 per minute
SCOTLAND	7.0	6.1
AUSTRALIA	7.0	6.0
FIJI	6.9	5.5
ENGLAND	6.7	5.1
SAMOA	6.1	6.7
CANADA	5.9	4.6
JAPAN	5.8	6.0
IRELAND	5.7	6.7
WALES	5.7	5.8
TONGA	5.7	6.8
FRANCE	5.6	5.0
SOUTH AFRICA	5.6	5.8
ITALY	5.5	6.3
ARGENTINA	4.7	4.3
URUGUAY	4.6	n/a

	Average	Most	Least	Difference
ARGENTINA	82	114	46	148% more
SOUTH AFRICA	86	129	58	122% more
ITALY	82	125	59	112% more
JAPAN	117	158	79	100% more
CANADA	105	134	68	97% more
SCOTLAND	125	164	84	95% more
URUGUAY	75	103	54	91% more
NEW ZEALAND	127	166	88	89% more
IRELAND	115	161	87	85% more
AUSTRALIA	137	169	106	59% more
WALES	98	117	75	56% more
FRANCE	105	136	89	53% more
FIJI	92	114	78	46% more
TONGA	66	103	76	36% more
SAMOA	92	113	83	36% more
ENGLAND	125	140	111	26% more

















It can be seen from the table that there were noticeable contrasts between the highs and lows of certain teams. In **Argentina's** case, for example, they made 148% more passes in their highest passing game compared to their lowest.

PLAYER PASSING

Total passes made in the championship were broken down into 3 groups:

- Passes made by forwards
- Passes made by the scrum half
- Passes made by backs

All the passes made in JWC 2009 have been allocated into these 3 groups, and are shown in the attached table:

		Passes by Forwards	Passes by Scrum half	Passes by Backs	Total Passes
	AUSTRALIA	118	286	279	683
	NEW ZEALAND	112	243	279	634
	ENGLAND	105	287	233	625
	SCOTLAND	108	266	250	624
	JAPAN	125	263	196	584
	IRELAND	73	280	222	575
	FRANCE	109	216	201	526
	CANADA	63	236	227	526
	WALES	101	215	176	492
	SAMOA	105	178	179	462
	FIJI	77	160	223	460
	TONGA	110	162	166	438
	SOUTH AFRICA	79	219	133	431
	ITALY	94	173	144	411
	ARGENTINA	57	218	134	409
	URUGUAY	48	168	160	376
	TOTAL	1484	3570	3202	8256

What the above table shows is the number of passes made by the three groups of players. It simply shows how active they were in passing the ball.

The following table takes this further. It shows the proportion of a team's passes made by each group. In other words – of all the passes made by a team, what proportion were made by the forwards? what proportion by the scrum half? and what proportion by the backs. Such tables can show if certain teams use forwards more as suppliers of the ball for onward transmission by the backs, rather than the forwards themselves being more involved in the distribution process.

Overall, the percentages for each of the 3 groups was as follows.

	JWC 2009	JWC 2008
Passing % by forwards	18%	17%
Passing % by scrum half	43%	45%
Passing % by backs	39%	39%



The percentages for each participating country are shown in the following table:

		% by Forwards	% by Scrum Half	% by Backs
TONGA		25%	37%	38%
ITALY		23%	42%	35%
SAMOA		23%	39%	38%
FRANCE		21%	41%	38%
JAPAN		21%	45%	34%
WALES		21%	44%	35%
SOUTH AFRICA		18%	51%	31%
NEW ZEALAND		18%	38%	44%
ENGLAND		17%	46%	37%
AUSTRALIA		17%	42%	41%
SCOTLAND		17%	43%	40%
FIJI		17%	35%	48%
ARGENTINA		14%	53%	33%
URUGUAY		13%	45%	42%
IRELAND		13%	49%	38%
CANADA		12%	45%	43%

The next table shows the number of times each countries' forwards had the ball in their hands and then notes the number of times they passed it. This is expressed as a ratio so that if a team's forwards passed the ball 20 times having received it 100 times, the ratio would be expressed as 1 to 5 – ie 1 pass for every 5 possessions. Again, the table shows major differences between the countries.

What the table shows, for example, is that while **Tonga's** forwards made many fewer passes than **Japan's**, they were just as likely to pass it when they had the ball in their hands.,



	JWC 2009	JWC 2008
ITALY	1 in 2.4	<i>1 in 4.1</i>
SAMOA	1 in 2.6	<i>1 in 3.0</i>
TONGA	1 in 2.7	<i>1 in 2.9</i>
JAPAN	1 in 2.7	<i>1 in 3.5</i>
FRANCE	1 in 2.9	<i>1 in 3.1</i>
FIJI	1 in 2.9	<i>1 in 3.3</i>
NEW ZEALAND	1 in 2.9	<i>1 in 2.4</i>
SCOTLAND	1 in 3.0	<i>1 in 3.6</i>
AUSTRALIA	1 in 3.1	<i>1 in 3.9</i>
ENGLAND	1 in 3.3	<i>1 in 3.3</i>
WALES	1 in 3.3	<i>1 in 4.2</i>
SOUTH AFRICA	1 in 3.4	<i>1 in 3.2</i>
IRELAND	1 in 4.2	<i>1 in 3.7</i>
CANADA	1 in 4.3	<i>1 in 4.4</i>
ARGENTINA	1 in 4.4	<i>1 in 3.6</i>
URUGUAY	1 in 4.4	<i>n/a</i>

This difference between the forwards of each country is even more graphically illustrated when the forwards are broken down into the 3 groups of (a) front row, (b) second row and (c) back row.

This time the relationship between passes and possession is expressed in percentage terms, so that if a group of forwards received the ball 20 times and passed it 6 times, it means they passed it on 30% of occasions. The front row passing percentages for each team is shown in the attached table:

	SAMOA
	ITALY
	FRANCE
	ENGLAND
	TONGA
	NEW ZEALAND
	FIJI
	AUSTRALIA
	SOUTH AFRICA
	WALES
	SCOTLAND
	CANADA
	IRELAND
	ARGENTINA
	URUGUAY
	JAPAN

% of times ball passed by Front Row JWC 2009	
SAMOA	39%
ITALY	38%
FRANCE	37%
ENGLAND	34%
TONGA	34%
NEW ZEALAND	32%
FIJI	30%
AUSTRALIA	28%
SOUTH AFRICA	24%
WALES	24%
SCOTLAND	23%
CANADA	21%
IRELAND	20%
ARGENTINA	17%
URUGUAY	16%
JAPAN	15%

These percentages were however not the same as far as the second rows were concerned. **Japan's** second row were some three times more likely to pass the ball than their front row.



	ITALY
	JAPAN
	AUSTRALIA
	FRANCE
	SAMOA
	SCOTLAND
	ENGLAND
	NEW ZEALAND
	TONGA
	WALES
	FIJI
	URUGUAY
	SOUTH AFRICA
	CANADA
	IRELAND
	ARGENTINA

% of times ball passed by 2 nd Row JWC 2009	
ITALY	45%
JAPAN	38%
AUSTRALIA	34%
FRANCE	32%
SAMOA	32%
SCOTLAND	30%
ENGLAND	28%
NEW ZEALAND	27%
TONGA	26%
WALES	24%
FIJI	22%
URUGUAY	22%
SOUTH AFRICA	20%
CANADA	19%
IRELAND	16%
ARGENTINA	13%

This chart confirms that it was **Italy's** forwards who were the most likely to pass the ball –with their second row and back rows heading the list with their front rows showing up in second place..

	ITALY
	FIJI
	TONGA
	SAMOA
	JAPAN
	SCOTLAND
	NEW ZEALAND
	SOUTH AFRICA
	AUSTRALIA
	WALES
	FRANCE
	ENGLAND
	IRELAND
	ARGENTINA
	CANADA
	URUGUAY

% of times ball passed by Back Row JWC 2009	
ITALY	43%
FIJI	43%
TONGA	42%
SAMOA	41%
JAPAN	41%
SCOTLAND	40%
NEW ZEALAND	40%
SOUTH AFRICA	36%
AUSTRALIA	35%
WALES	35%
FRANCE	34%
ENGLAND	31%
IRELAND	31%
ARGENTINA	30%
CANADA	27%
URUGUAY	26%

PASSING MOVEMENTS

Passes are grouped into passing movements – i.e. one pass movement, two pass movements and so on. The data shows that some **83%** of all passing movements contained two passes or less. There were however noticeable differences between the various countries as shown in the table

% of passing movements with 2 or fewer passes JWC 2009		
	SOUTH AFRICA	95%
	ARGENTINA	89%
	TONGA	86%
	URUGUAY	85%
	IRELAND	83%
	WALES	82%
	FRANCE	82%
	AUSTRALIA	82%
	ENGLAND	82%
	CANADA	82%
	SAMOA	81%
	ITALY	81%
	JAPAN	81%
	NEW ZEALAND	80%
	FIJI	79%
	SCOTLAND	79%

The data also shows that **South Africa** had just 10 passing movements with more than 3 passes.

This contrasts with **Australia** who had 31 and **Japan** who had 29.

RUCKS/MAULS (2nd PHASE)

The average number per game was **125** (2008 – 132).

The most in any game was 170 – **New Zealand v Australia**.

The fewest was **93 – Fiji v Italy**

The most by any team in a game was **110 (Australia)** – the least, **35 (South Africa)**

The average for all countries is shown in the attached table:



	JWC 2009	JWC 2008
AUSTRALIA	84	69
IRELAND	75	59
JAPAN	74	57
ENGLAND	73	76
CANADA	70	69
SCOTLAND	67	74
FRANCE	66	77
NEW ZEALAND	65	69
WALES	65	66
ARGENTINA	60	61
TONGA	57	60
URUGUAY	55	n/a
SOUTH AFRICA	53	63
SAMOA	48	59
FIJI	46	63
ITALY	44	65

The above table indicates the total number of rucks/mauls created by each team in the competition expressed as average per game.

Just as in the case of passes, however, the number of rucks and mauls made by one team may be constrained because it obtained only limited possession of the ball. In order to address this, an alternative calculation has been made which relates the number of rucks/mauls to the share of ball in play time won by each team. This is expressed in the number of rucks created for every minutes' possession obtained by a team and shows, for example, that **Australia's** rate of rucking exceeded that of all the other 15 teams by between 10% and 40%.

















Again this table shows, for example, that the reason why **Australia** made almost double the rucks and mauls made by **Italy** was due to an accumulation of more possession and a greater rate of rucking.

	JWC 2009	JWC 2008
AUSTRALIA	4.3 per minute	4.1 per minute
ENGLAND	3.9	4.0
CANADA	3.9	3.9
SCOTLAND	3.8	4.1
WALES	3.8	3.9
TONGA	3.7	4.0
JAPAN	3.7	3.8
IRELAND	3.7	3.7
NEW ZEALAND	3.6	4.0
FRANCE	3.5	4.0
FIJI	3.5	4.2
URUGUAY	3.4	n/a
SOUTH AFRICA	3.4	4.0
ARGENTINA	3.4	3.6
SAMOA	3.2	3.8
ITALY	3.0	4.0

BREAKDOWN RETENTION

At the breakdown the team taking in the ball retained possession by either winning the ball or being awarded a penalty on **88%** of occasions.

The percentage success rate for almost all teams was very similar and is shown in the attached table:

		JWC 2009	JWC 2008
	ENGLAND	92%	88%
	SCOTLAND	92%	91%
	WALES	90%	91%
	IRELAND	90%	90%
	NEW ZEALAND	89%	93%
	ITALY	89%	93%
	AUSTRALIA	89%	90%
	SOUTH AFRICA	89%	93%
	CANADA	89%	89%
	SAMOA	88%	91%
	JAPAN	88%	91%
	TONGA	88%	92%
	ARGENTINA	85%	90%
	FRANCE	84%	90%
	FIJI	82%	90%
	URUGUAY	78%	n/a

KICKING

















The average number per game was **54** (2008 – 49)

The most open play kicks in a game was **61** – Argentina v Ireland

















The fewest **11** (Australia v Canada)

The most by a team in a game was **34** – the least **4**

The average for all countries is shown in the attached table:

		JWC 2009	JWC 2008
	SOUTH AFRICA	34	23
	ARGENTINA	33	27
	WALES	32	25
	ITALY	31	32
	IRELAND	30	29
	SCOTLAND	30	26
	URUGUAY	27	n/a
	ENGLAND	27	23
	SAMOA	27	26
	CANADA	26	24
	NEW ZEALAND	26	24
	JAPAN	24	27
	TONGA	23	23
	AUSTRALIA	22	24
	FRANCE	21	22
	FIJI	19	19

















When an adjustment is made to take account of possession obtained, by each team, then the kicking table changes slightly. It shows that **South Africa** kicked at a higher rate than the other teams as well as making most kicks. The table below shows the average number of kicks per team per minute's possession:

	JWC 2009	JWC 2008
 SOUTH AFRICA	2.2 per minute	1.4 per minute
 ITALY	2.1	1.9
 ARGENTINA	1.9	1.6
 SAMOA	1.8	1.7
 WALES	1.8	1.5
 SCOTLAND	1.7	1.4
 URUGUAY	1.7	n/a
 TONGA	1.5	1.5
 IRELAND	1.5	1.8
 NEW ZEALAND	1.5	1.4
 CANADA	1.4	1.4
 FIJI	1.4	1.2
 ENGLAND	1.4	1.2
 JAPAN	1.2	1.8
 AUSTRALIA	1.1	1.4
 FRANCE	1.1	1.1

SUMMARY

A summary of previous tables is shown below – it shows the average number of rucks, passes, and kicks per game and the rate for each per minute possession.

Activity Cycle Summary
Average per game and Rate per minute possession

	Rucks/Mauls		Passes		Kicks	
	Average	Rate	Average	Rate	Average	Rate
 NEW ZEALAND	65	3.6	127	7.0	26	1.3
 ENGLAND	73	3.9	125	6.7	27	1.4
 SOUTH AFRICA	53	3.4	86	5.6	34	2.2
 AUSTRALIA	84	4.3	137	7.0	22	1.1
 FRANCE	66	3.5	105	5.6	21	1.1
 WALES	65	3.8	98	5.7	32	1.8
 SAMOA	48	3.2	92	6.1	27	1.8
 IRELAND	75	3.7	115	5.7	30	1.5
 SCOTLAND	67	3.8	125	7.0	30	1.7
 TONGA	57	3.7	88	5.7	23	1.5
 ARGENTINA	60	3.4	82	4.7	33	1.9
 FIJI	46	3.5	92	6.9	19	1.4
 ITALY	44	3.0	82	5.5	31	2.1
 CANADA	70	3.9	105	5.9	26	1.4
 JAPAN	74	3.7	117	5.8	24	1.2
 URUGUAY	55	3.4	75	4.6	27	1.7

















RESTARTS

Of 50m restarts, **45%** were kicked long – **55%** were kicked short and were contestable.

When restarts were kicked short, the kicking team regained possession on 1 in 3 occasions.

The table shows the type of restart kicked by each team at 50m and retention rates of short restarts.

It can be seen that there was a major contrast between many of the teams. While some kicked short far more often than long, other countries kicked long on the majority of occasions. Further, success rate and restart type varied between the 16 teams. The most effective teams in retaining short restarts are also shown.

		50m Restarts		Retention rate
		Short	Long	Short
	URUGUAY	2	37	1 in 2.0
	ENGLAND	15	3	1 in 2.1
	SOUTH AFRICA	11	10	1 in 2.2
	ARGENTINA	14	12	1 in 2.3
	SCOTLAND	20	4	1 in 2.5
	FRANCE	13	11	1 in 2.6
	JAPAN	14	9	1 in 2.8
	WALES	15	19	1 in 3.0
	AUSTRALIA	7	11	1 in 3.5
	SAMOA	17	10	1 in 4.3
	FIJI	17	18	1 in 4.3
	CANADA	29	13	1 in 4.8
	IRELAND	15	4	1 in 5.0
	NEW ZEALAND	10	7	1 in 5.0
	ITALY	17	14	1 in 5.7
	TONGA	18	12	1 in 6.0

LINEOUTS

The average number of lineouts per game was **28** (2008 – 30)

The most line outs in a game was **39** – the least **13**.

	JWC 2008	JWC 2008
Average no per game	28	30
Percentage competed	66%	70%
Possession retained	8%	78%

All teams had high success rates on their own throw while rates of success on opponents throw-ins showed more variation. Lineout success on own throw and opposition throw are shown in the following table. It also highlights lineout steals won - and steals lost on opposition throw ins:

	Success %		Lineout Steals		Not straight / Pen/FK / Knock-on	
	Own Throw	Opp Throw	Lost on Own Throw	Won on Opp Throw	Own Throw	Opp Throw
AUSTRALIA	85%	28%	4	18	5	4
JAPAN	84%	22%	7	12	7	4
FRANCE	84%	31%	6	14	4	8
IRELAND	84%	26%	7	15	4	5
SCOTLAND	83%	23%	11	10	1	8
ENGLAND	83%	30%	5	15	7	7
NEW ZEALAND	83%	19%	7	7	4	6
ARGENTINA	81%	27%	9	12	5	7
WALES	81%	26%	6	10	6	7
FIJI	78%	17%	17	6	3	5
SAMOA	77%	15%	11	8	7	3
URUGUAY	74%	20%	20	9	3	4
SOUTH AFRICA	69%	22%	13	11	9	6
CANADA	69%	32%	19	11	3	3
ITALY	66%	11%	14	7	6	1
TONGA	66%	12%	13	3	6	4

Australia had the highest success rate % on their own throw in and they also had the most steals on opposition throw ins. Even though **South Africa** and **Canada** had low success rates on their own throw in they managed to steal opposition throw ins on 11 occasions.

SCRUMS

The average number of scrums per game was **21**

The most scrums in a game was **34** – the least **15**

Average no per game Possession retained

	JWC 2009	JWC 2008
Average no per game	21	21
Possession retained	85%	87%

Scrum ball retention was relatively high for all teams.



With such high percentage of possession retained, it is no surprise that heels against the head were few and far between. In total there were **42** (2008 **26 in 824 scrums – or 1 scrum in 32**). The table below shows the tight heads won and lost by each country.



	Scrum Success %		Heels against the head	
	Own Feed	Opposition Feed	Lost on Own Feed	Won on Opposition Feed
ARGENTINA	98%	20%	-	4
SOUTH AFRICA	94%	36%	-	13
WALES	93%	18%	-	3
NEW ZEALAND	92%	17%	-	-
AUSTRALIA	91%	12%	2	4
SCOTLAND	89%	13%	2	2
IRELAND	88%	11%	-	2
ENGLAND	88%	14%	2	4
FRANCE	88%	22%	-	2
JAPAN	85%	9%	1	1
CANADA	84%	12%	5	3
SAMOA	81%	10%	5	1
URUGUAY	77%	8%	4	-
TONGA	76%	8%	5	1
FIJI	71%	11%	11	1
ITALY	69%	18%	5	1

There were 5 teams with success rates over 90% on their own feed (**Argentina, South Africa, Wales, New Zealand and Australia**) and 4 teams with success rates under 80% (**Uruguay, Tonga, Fiji and Italy**). **Argentina** only lost 1 scrum in the entire tournament. On opposition put ins **South Africa** achieved the most heels against the head – with 13 in 5 matches, 6 of them being against **Fiji**.

PENALTIES

In JWC 2009, the average number of penalties and free kicks awarded in a game was **25**.

















	JWC 2009	JWC 2008
Average no per game	25	25

There was a wide spread between the matches.

The most awarded in a single game was 35 – the least, 18.

The most conceded by a team in one match was 24 - the least 4.

The following table comprises the total penalties awarded to and conceded by each team. However, because the number of penalties can vary from match to match, a better measure is the **proportion** of penalties conceded by a team in all their matches compared with their opponents. This shows that Canada were the least penalised team in relation to their opponents.

		Penalties For and Against per Team per Game		Proportion of Penalties For and Against per Team	
		Pen/FK For	Pen/FK Against	% Pen/FK For	% Pen/FK Against
	CANADA	62	45	58%	42%
	URUGUAY	64	47	58%	42%
	ENGLAND	66	56	54%	46%
	JAPAN	62	54	53%	47%
	ARGENTINA	69	64	52%	48%
	SCOTLAND	60	56	52%	48%
	WALES	64	65	50%	50%
	IRELAND	53	52	50%	50%
	SAMOA	62	62	50%	50%
	ITALY	65	67	49%	51%
	SOUTH AFRICA	69	72	49%	51%
	TONGA	58	62	48%	52%
	NEW ZEALAND	56	60	48%	52%
	FIJI	62	74	46%	54%
	AUSTRALIA	51	64	44%	56%
	FRANCE	66	88	43%	57%

Of the penalties and free kicks awarded, teams took around 20% as tap penalties. The differences between the teams however showed clear differences. While overall, teams took an average of 12 tap penalties in the tournament, **Samoa** tapped on 18 occasions while **Argentina, Ireland and Scotland New Zealand** each tapped on 8 occasions.

CATEGORIES OF OFFENCES PENALISED

The following table groups the penalties awarded into 9 categories – these are as follows.

% of Offences Penalised	
	%
Ruck/tackle on ground	45%
Offside	13%
Scrum	17%
Dangerous tackle	7%
Other	2%
Lineout	4%
Obstruction	6%
Maul pulling down	1%
Foul play	3%
	100%

CARDS – YELLOW & RED

RED CARDS

There were **five** red cards issued – against players from **South Africa (2), England, France and Samoa**.

The offences were: 2 x Dangerous Tackles, 2 x Punching/Striking and 1 x Kicking.

YELLOW CARDS

There were **43** yellow cards issued during the championship.

Of the 40 matches, there were 26 (2008 – 30) which contained at least one yellow card, meaning 14 (or 35%) of all matches did not contain a single yellow card. The most yellow cards in one match was 3 – this happened on 5 occasions (**Canada v Italy, Australia v South Africa, Italy v South Africa, Fiji v South Africa and Samoa v France**)

The table attached shows the breakdown of yellow cards per team.

	JWC 2009	JWC 2008
TONGA	6	1
ITALY	5	3
FIJI	5	3
WALES	5	4
CANADA	4	2
SOUTH AFRICA	3	5
FRANCE	3	3
SAMOA	3	5
ARGENTINA	2	3
NEW ZEALAND	2	2
URUGUAY	2	n/a
IRELAND	1	3
JAPAN	0	5
SCOTLAND	0	4
ENGLAND	1	2
AUSTRALIA	1	1

The reasons for each of the yellow cards were as follows:

	JWC 2009
Dangerous Tackle	11
Foul Play (punching/kicking/trampling)	7
Dangerous Charging	6
Ruck/Tackle – Hands	5
Ruck/Tackle – Incorrect joining	4
Ruck/Tackle - Preventing Release	3
Ruck/Tackle – Not staying on feet	2
Scrum	2
Obstruction	1
Offside	1
Not 10m	1
Total	43