



IRB JUNIOR WORLD CHAMPIONSHIP 2010

STATISTICAL REVIEW AND MATCH ANALYSIS

IRB GAME ANALYSIS

CONTENTS

	Page
Commentary	1
Pool Standings, Results & Final Standings	4
Player Statistics	7
Overall Statistical Summary	8
Statistical Analysis and Match Summary	
Scoring	9
Try Scoring	10
Tries	13
Kicks at Goal	16
Ball in Play	17
Activity Cycles	19
Restarts	26
Lineouts	37
Scrum	37
Penalties	28
Cards	29



The attached report does 3 things:

- 1 it reflects the shape of the Under 20 game as played in the Junior World Championship 2010
- 2 it shows any changes in the shape of the game compared with the Junior World Championship 2009
- 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 being used to establish benchmarks and performance indicators for future tournaments.

The 2010 tournament contained certain similarities to previous years, the clearest of which was the domination of the tournament by **New Zealand**.

In 2010, just as in 2009 and 2008, all their 5 matches were won with ease with this year's winning margins exceeding those of last year. The extent of New Zealand's superiority since the inauguration of the tournament in 2008 is illustrated by showing the winning margins in each of their 15 matches.



NZ winning points margin	Year
75	2009
70	2010
60	2008
55	2008
55 - Final	2010
39	2008
39	2009
35 - Final	2008
33	2010
33	2010
29	2010
25	2008
17	2009
16 - Final	2009
14	2009

Another constant was that the same teams dominated the competition this year. **New Zealand, Australia, England, South Africa** and **France** took the first 5 places – just as they did last year. The only change in the top half of the table was **Argentina** who overtook **Wales** to end in 6th place.

This made **Argentina** the most improved team this year moving up from 11th to 6th - and they achieved this with a highly distinctive and prioritised approach to the game which reflected their perceived strengths. Possession was regarded as critical, pressure was regarded as essential and risks were minimised.

This was emphasised by the remarkable fact that the number of rucks and mauls they created actually exceeded the total number of passes they made. This is exceptional – in this or any other tournament.

The following data will not therefore come a surprise

- They made fewer passes than any other team and had the lowest passing rate. Several other teams made twice as many passes.
- Of their 249 passing sequences only 5 contained more than 3 passes while certain teams exceeded 30

- Over 90% of their tries contained 3 or fewer passes with almost half containing none
- Their forwards were by far the team the least likely to pass the ball. Their front row, for example, passed the ball on only 7% of occasions while the average for the other 12 teams was 24%. Their 2 props made a total of just 2 passes in the entire tournament
- They were – together with Australia- the highest rucking team.
- They were also the highest kicking team
- 67% of their restarts were kicked long while all other teams almost invariably kicked short
- Of all the drop goal attempts in the tournament, they attempted 40% of them
- They opted to take just 3 tap penalties - the other teams averaged 4 times as many

It was not surprising therefore that this highly contained and tight approach, where possession and territory were seen as the priority, resulted in 8 of their 12 tries starting from within 22metres of the opponents' goalline.

Argentina's game strategy was, therefore, clearly defined and reflected their perceived strengths. It also produced an improvement of 5 places in the final table illustrating again that rugby invites different approaches to success.



At this stage, it needs to be emphasized 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 and this was the case in this year's Junior World Championship. This is to be expected however, since playing numbers vary enormously from country to country and the degree of professionalism among the players has 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.

This almost invariably manifests through the less resourced teams finding it difficult break down defences and to sustain passing movements under constant opponents' pressure. – and so it was this year. Passing movements with more than 3 passes, are, for example, far, far rarer among the teams at the bottom of the table than the teams at the top. A further illustration of this point is the attached short statistic, which relates to tries scored by backs and forwards,

	Tries scored by Backs	Tries scored by Forwards
New Zealand Australia South Africa	61	27
Scotland Tonga Samoa	7	12

Other differences are seen in turnovers. Of the 24 tries scored from turnover possession, the top 4 teams accounted for 21. The bottom 6 teams managed just 2 between them.

For participants in world championships therefore, there are a range of major challenges to be faced - and one of the benefits of having to face such challenges, is that particular problem areas can be identified.

In this year's championship, for example, the difficulties experienced in certain areas of the game by the Pacific Island teams soon became apparent.

- The three least successful teams at the scrum were **Fiji, Samoa** and **Tonga**. These 3 teams lost scrum possession 36 times – the other 3 teams in the bottom half of the table lost just 14. Further, **Fiji, Samoa** and **Tonga** obtained scrum possession on their opponents put-in on 6 occasions. The other 3 teams won 22
- The team that was involved in the most collapsed scrums was **Fiji**
- **Fiji, Samoa** and **Tonga** were the only teams that did not score a single try from scrum possession. The other 9 teams each managed at least 3.
- **Fiji, Samoa** and **Tonga** were the 3 least successful teams at the lineout. Their lineouts were stolen 14,18, and 12 times respectively, By contrast, **New Zealand** and **South Africa's** lineouts were stolen once and 3 times respectively.
- **Fiji, Samoa** and **Tonga** were the 3 teams with the lowest success rate in kicks at goal. Their success rates were 43%, 44% and 45% respectively. The other 3 teams in the bottom half of the table had success rates of 86%, 78% and 75%.
- **Fiji** and **Tonga** were the most penalised teams.
- Almost 60% of yellow cards were awarded against the 3 Pacific Island teams. Over the last 2 years, they have received 29 yellow cards between them – an average of 10 each. The other 9 teams have each averaged 3.





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.









JUNIOR WORLD CHAMPIONSHIP
ARGENTINA 2010

POOL STANDINGS

	P	W	D	L	F	A	TF	TA	BP	PTS
 New Zealand	3	3	0	0	164	28	22	3	3	15
 Wales	3	2	0	1	63	59	5	8	0	8
 Fiji	3	1	0	2	29	87	3	8	0	4
 Samoa	3	0	0	3	32	114	3	14	1	1

	P	W	D	L	F	A	TF	TA	BP	PTS
 England	3	3	0	0	101	52	9	5	1	13
 France	3	2	0	1	65	62	5	5	1	9
 Argentina	3	1	0	2	69	100	8	11	0	4
 Ireland	3	0	0	3	64	85	5	6	2	2













	P	W	D	L	F	A	TF	TA	BP	PTS
 Australia	3	3	0	0	167	53	25	7	3	15
 South Africa	3	2	0	1	148	56	20	6	4	12
 Scotland	3	1	0	2	40	134	4	20	0	4
 Tonga	3	0	0	3	22	134	2	18	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















JUNIOR WORLD CHAMPIONSHIP
ARGENTINA 2010
POOL RESULTS

POOL A

	New Zealand	44		Fiji	11
	Wales	22		Samoa	13
	Wales	31		Fiji	3
	New Zealand	77		Samoa	7
	New Zealand	43		Wales	10
	Samoa	12		Fiji	15

POOL B

	France	25		Ireland	22
	Argentina	22		England	48
	England	36		Ireland	21
	Argentina	23		France	31
	England	17		France	9
	Argentina	24		Ireland	21













POOL C

	South Africa	40		Tonga	14
	Australia	58		Scotland	13
	Australia	67		Tonga	5
	South Africa	73		Scotland	0
	Scotland	27		Tonga	3
	South Africa	35		Australia	42















PLAY OFF RESULTS

SEMI FINALS

	Ireland	37		Samoa	10
	Scotland	28		Tonga	8
	Wales	19		Argentina	19
	France	44		Fiji	9
	Australia	28		England	16
	New Zealand	36		South Africa	7













FINALS

	Samoa	3		Tonga	23
	Ireland	53		Scotland	23
	Wales	39		Fiji	15
	Argentina	23		France	37
	England	22		South Africa	27
	Australia	17		New Zealand	62



FINAL STANDINGS

2010 JWC

1 st		New Zealand
2 nd		Australia
3 rd		South Africa
4 th		England
5 th		France
6 th		Argentina
7 th		Wales
8 th		Fiji
9 th		Ireland
10 th		Scotland
11 th		Tonga
12 th		Samoa

2009 JWC

1 st
4 th
3 rd
2 nd
5 th
11 th
6 th
12 th
8 th
9 th
10 th
7 th






PLAYER STATISTICS

TOP POINT SCORERS

	Tyler Bleyendaal	New Zealand	82
	Patrick Lambie	South Africa	75
	Matthew Jarvis	Wales	61
	Matt Toomua	Australia	54
	Tom Homer	England	50

TOP TRY SCORERS

	Julian Savea	New Zealand	8
	Andrew Conway	Ireland	5
	Telusa Veainu	New Zealand	5

OVERALL STATISTICAL 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 2010.

	JWC 2010	JWC 2009	JWC 2008
Av POINTS per game	52	49	50
Av TRIES per game	6.0	6.4	6.4
Av PENALTY GOALS per game	4.6	2.9	3.1
Av DROP GOALS per game	1 every 8 games	1 every 8 games	1 every 8 games
% of points from TRIES	57%	65%	65%
% of Tries scored by BACKS	60%	65%	66%
% of Tries scored by FORWARDS	40%	34%	32%
% of PENALTY TRIES scored	-	>1%	2%
MATCHES with points margin of 20 or less	14 or 47%	22 or 55%	19 or 48%
MATCHES won by team scoring most tries	25 or 83%	36 or 90%	37 or 92%
MATCHES where tries were equal	4	4	2
MATCHES won by team scoring least tries	1	-	1
CONVERSION success %	69%	65%	61%
PENALTY GOAL success %	69%	60%	68%
DROP GOAL success %	4 of 32 or 13%	5 of 40 or 13%	5 of 26 or 19%
% of tries scored from OWN LINEOUT	32%	27%	24%
% of tries scored from OWN SCRUM	25%	23%	22%
% of tries scored from PENALTY/FREE KICKS	10%	8%	10%
% of tries scored from TURNOVER/ERROR	13%	17%	18%
% of tries scored from OPPONENTS KICKS	8%	12%	16%
Av PASSES per game	218	206	200
Av KICKS per game	44	54	49
Av RUCKS/MAULS per game	138	125	132
RUCK/MAUL success %	94%	88%	91%
Av BALL IN PLAY TIME	40% or 32mins 06s	43% or 34mins 29s	42% or 33min 40s
% of all PASSES MADE BY BACKS	38%	39%	39%
% of all PASSES MADE BY SCRUM HALF	44%	43%	45%
% of all PASSES MADE BY FORWARDS	18%	18%	17%
Av LINEOUTS per game	25	28	30
LINEOUT success %	78%	78%	78%
Av SCRUMS per game	20	21	21
SCRUM success %	87%	85%	87%
Av PENALTIES/FREE KICKS per game	24	25	25
Total YELLOW and RED CARDS	Yellow = 26 Red = 0	Yellow = 42 Red = 5	Yellow = 48 Red = 4

1.0 SCORING

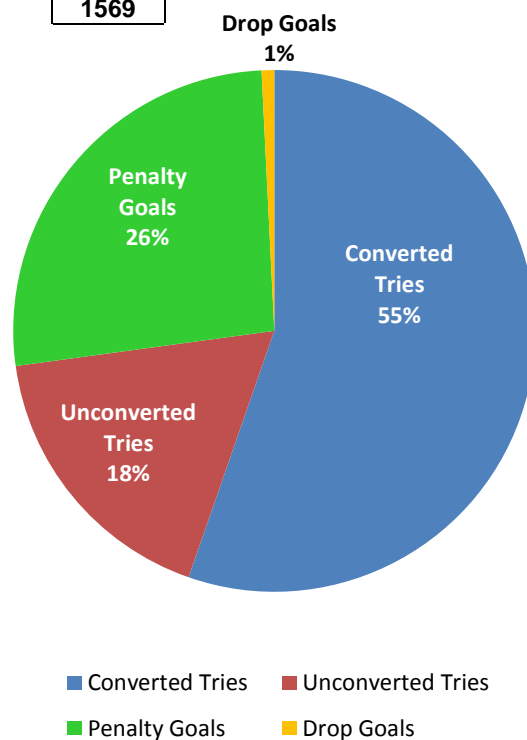
There were **1569** points scored in the 30 matches played, giving an average of **52** points per game (*JWC 2009 – 49*). They were made up as follows:

Type of Score

	Total	Points
Converted Tries	124	868
Unconverted Tries	55	275
Penalty Goals	138	414
Drop Goals	4	12
Total		1569

Points Makeup

57% came from **TRIES**
 26% came from **PENALTY GOALS**
 16% came from **CONVERSIONS**
 1% came from **DROP GOALS**



1.1 WINNING MARGINS

The winning margins in each of the 30 matches fell into the following ranges:

Points Difference in JWC 2010

Points Difference	No of matches	Cumulative
0 – 5	5	5 with 5 points or less = 17% 2009 = 10%
6 – 10	4	9 with 10 points or less = 30% 2009 = 30%
11 – 20	5	14 with 20 points or less = 47% 2009 = 55%
21 – 30	8	22 with 30 points or less = 73%
31 - 40	3	25 with 40 points or less = 83%
41 - 50	2	27 with 50 points or less = 90%
50+	3	3 over 50 = 10%

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

	Points for			Points against		
	JWC 2010	JWC 2010	JWC 2009	JWC 2010	JWC 2010	JWC 2009
	TOTAL	AVERAGE	AVERAGE	TOTAL	AVERAGE	AVERAGE
NEW ZEALAND	262	52	43	52	10	11
AUSTRALIA	212	42	37	131	26	15
SOUTH AFRICA	182	36	39	114	23	17
ENGLAND	139	28	39	107	21	16
FRANCE	146	29	40	94	19	20
ARGENTINA	111	22	19	156	31	23
WALES	121	24	28	93	19	29
FIJI	53	11	18	170	34	33
IRELAND	154	31	16	118	24	11
SCOTLAND	91	18	20	195	39	21
TONGA	53	11	20	165	33	31
SAMOA	45	9	14	174	35	21

1.2 PENALTY GOALS

There were **138** penalty goals kicked in the tournament, an average of **4.6** per game. (JWC 2009 – 2.9)

This year, 6 of the 12 teams scored more penalty goals than tries – **England, Wales, Fiji, Scotland, Samoa, Tonga**. Last year however, all teams scored more tries than penalty goals.

There were some noticeable contrasts. While **Wales** scored twice as many penalty goals as tries, **Australia** scored over 3 times more tries than penalty goals.

1.3 IMPACT OF THE PENALTY GOAL ON MATCH RESULTS

Tries win matches - in the Junior World Championship 2010, **the winning team scored the most tries in 25 of the 30 matches or in 83%** (JWC 2009 – 90%).

In four games, the tries were equal. – in one, the losing team scored more tries than the winning team

2.0 TRY SCORING













There were 179 tries scored in 2010 JWC.

	JWC 2010	JWC 2009
Average Tries per game	6.0	6.4
Most Tries in one game	12	14
Least Tries in one game	2	0

	Penalties Goals Kicked	Ratio PGs : Tries
WALES	20	2.2 to 1
SAMOA	7	1.8 to 1
FIJI	7	1.4 to 1
TONGA	7	1.2 to 1
SCOTLAND	10	1.1 to 1
ENGLAND	16	1.1 to 1
FRANCE	15	1.0 to 1
IRELAND	15	0.9 to 1
ARGENTINA	11	0.9 to 1
NEW ZEALAND	15	0.5 to 1
AUSTRALIA	8	0.3 to 1
SOUTH AFRICA	7	0.3 to 1

The total number of tries, penalty goals and drop goals scored by each country in JWC 2010 was as follows:

**Total Tries / Penalty Goals / Drop goals per Team
& % of points from Tries and Kicks per Team**













		Tries	Penalty Goals	Drop Goals	% of points from Tries	% of points from Kicks
	NEW ZEALAND	33	15	0	63%	37%
	AUSTRALIA	30	8	0	71%	29%
	SOUTH AFRICA	25	7	0	69%	31%
	IRELAND	17	15	0	55%	45%
	FRANCE	15	15	0	51%	49%
	ENGLAND	14	16	1	50%	50%
	ARGENTINA	12	11	2	54%	46%
	SCOTLAND	9	10	0	49%	51%
	WALES	9	20	0	37%	63%
	TONGA	6	7	0	57%	43%
	FIJI	5	7	1	47%	53%
	SAMOA	4	7	0	44%	56%

The above table highlights differences between the teams. **Wales**, for example, scored over twice as many penalty goals as tries while **Australia** and **South Africa** scored over 3 times more tries than penalty goals.

2.1 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.

	Total Tries Scored	Try scoring rate JWC 2010	Try scoring rate JWC 2009	
	NEW ZEALAND	33	1 try scored every 2m 39s	1 try scored every 2m 43s
	SOUTH AFRICA	25	2m 51s	3m 06s
	AUSTRALIA	30	2m 57s	3m 34s
	IRELAND	17	4m 38s	11m 09s
	FRANCE	15	5m 23s	3m 35s
	ENGLAND	14	6m 30s	3m 53s
	ARGENTINA	12	7m 36s	7m 57s
	WALES	9	9m 13s	5m 26s
	SCOTLAND	9	9m 43s	7m 23s
	TONGA	6	12m 49s	5m 31s
	FIJI	5	13m 12s	6m 42s
	SAMOA	4	20m 12s	10m 54s

2.2 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**, despite finishing in 9th position, had the third best defensive record in the tournament, conceding just one try for every 9min 16secs possession. In **Scotland's** case, however, their opponents scored one try for every 2m 50seconds possession – or 3 times more frequently than Ireland.



	Total tries conceded	Try conceding rate JWC 2010	Try conceding rate JWC 2009
NEW ZEALAND	6	1 try conceded every 11m 54s	1 try conceded every 17m 14secs
FRANCE	8	10m 39s	6m 14secs
IRELAND	9	9m 16s	26m 52secs
WALES	11	8m 00s	5m 35secs
SOUTH AFRICA	13	6m 48s	10m 10secs
ENGLAND	12	6m 15s	6m 58secs
ARGENTINA	17	5m 27s	5m 27secs
FIJI	16	5m 24s	4m 33secs
AUSTRALIA	16	4m 30s	8m 57secs
TONGA	21	3m 56s	4m 31secs
SAMOA	22	3m 23s	7m 28secs
SCOTLAND	28	2m 50s	6m 31secs

2.3 PLAYERS AND TRIES

It has been noted above that there were **179** tries scored in the 30 matches:

108 or **60%** of tries were scored by Backs and **71** or **40%** of tries were scored by Forwards - The breakdown between the 12 competing teams is shown in the attached table.

Of tries scored by the top 2 teams – **New Zealand and Australia** – **72%** were scored by backs. By contrast, the comparable figure for the bottom 2 teams – **Samoa and Tonga** - was **40%**.



	Tries by Backs	Tries by Forwards	Total
NEW ZEALAND	22	11	33
AUSTRALIA	21	9	30
SOUTH AFRICA	18	7	25
IRELAND	13	4	17
FRANCE	6	9	15
ENGLAND	10	4	14
ARGENTINA	3	9	12
SCOTLAND	3	6	9
WALES	5	4	9
TONGA	3	3	6
FIJI	3	2	5
SAMOA	1	3	3
TOTAL	108	71	179

3.0 TRIES

3.1 SOURCE OF TRIES

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 2010	JWC 2009
Lineout – Own	32%	27%
Scrum –Own	25%	23%
Turnover/Handling Error	13%	17%
Opponents Kick	8%	12%
Penalty/Free Kick	10%	8%
Lineout - Opp	6%	5%
Restart – Opp	3%	5%
Scrum – Opp	3%	3%

	Lineout	Scrum	Pen/ FK	Kick	Turnover	Restart	Total Scored
NEW ZEALAND	8	10	4	3	6	2	33
AUSTRALIA	9	10	4		6	1	30
SOUTH AFRICA	11	5	2	1	5	1	25
IRELAND	5	5	2	3	1	1	17
FRANCE	7	3	3	1	1		15
ENGLAND	3	6		1	4		14
ARGENTINA	7	3	1	1			12
WALES	3	4		1		1	9
SCOTLAND	5	3		1			9
TONGA	3		2		1		5
FIJI	2		1	2			5
SAMOA	3			1			4

This table shows that the 3 *Pacific Island* teams failed to score a single try from scrum possession. All other countries managed at least 3. Another statistic of note is that of the 24 tries scored from turnovers, 21 came from just 4 teams – *New Zealand, Australia, South Africa* and *England*.

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

	Lineout	Scrum	Pen/ FK	Kick	Turnover	Restart	Total Conceded
NEW ZEALAND	3	1		1	1		6
FRANCE	3	2	1	1	1		8
IRELAND	3	4		1	1		9
WALES	4	2	2	1	1	1	11
ENGLAND	6	4		1	1		12
SOUTH AFRICA	1	8	2		2		13
AUSTRALIA	3	3	2	1	6	1	16
FIJI	6	4	2	2	1	1	16
ARGENTINA	7	4	2	2	2		17
SAMOA	9	7	2	2	2		22
SCOTLAND	15	4	1	2	4	2	28
TONGA	6	6	5	1	2	1	21

3.2 ORIGIN OF TRIES

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

Tries originated from various parts of the pitch:

- 24% of the tries were from the team's *Own Half*
- 7% of the the tries were from between the *Opponent's Halfway to 10m*
- 22% of the tries were from between the *Opponent's 10m to 22m*
- 47% of the tries were from between the *Opponent's 22m to Tryline*

The following table provides the try origin data for each try scored per team. **New Zealand** scored 9 tries of their 33 tries from their own half.

	Own Half	Halfway to 10m	10m to 22m	22m to Try-line	Total Scored
NEW ZEALAND	9	3	7	14	33
AUSTRALIA	8	2	8	12	30
SOUTH AFRICA	5	5	6	9	25
IRELAND	5		3	9	17
FRANCE	3		3	9	15
ENGLAND	2	1	6	5	14
ARGENTINA	3		1	8	12
WALES	3		2	4	9
SCOTLAND	1	1	1	6	9
TONGA	1	1	1	3	6
FIJI	2		1	2	5
SAMOA	1		1	2	4

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 **Ireland's** opponents scored only 2 tries from possession obtained outside Ireland's 22m line.

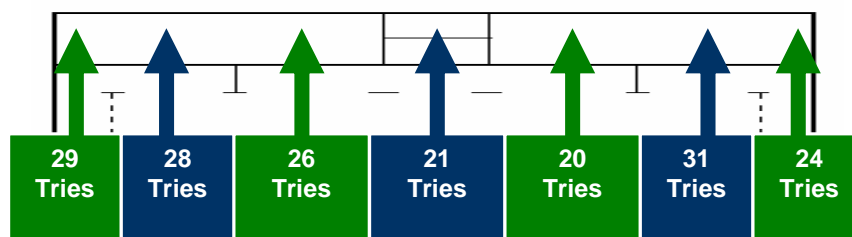
	Opp Half	Halfway to 10m	10m to 22m	22m to Try-line	Total Conceded
NEW ZEALAND	2	1		3	6
FRANCE	2		1	5	8
IRELAND	2			7	9
WALES	2	2	3	4	11
ENGLAND	1		5	6	12
SOUTH AFRICA	2	1	4	6	13
AUSTRALIA	4	3	7	2	16
FIJI	5		3	8	16
ARGENTINA	4		5	8	17
TONGA	3	2	4	12	21
SAMOA	6	2	2	12	22
SCOTLAND	10	2	6	10	28

3.3 TRY LOCATIONS

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

- 12% were scored under the posts
- 46% the left side of the posts
- 42% on the right side of the posts

Overall position of tries scored (%)



3.4 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 179 tries scored in JWC 2010.

Build Up to Tries - Ruck/Mauls

	Number	%	Cumulative %
0 R/Ms	43	24%	24%
1 R/Ms	58	33%	57%
2 R/Ms	32	18%	75%
3 R/Ms	13	7%	82%
4 R/Ms	10	6%	
5 R/Ms	6	3%	
6 R/Ms	7	4%	
7 R/Ms	6	3%	
8 R/Ms	2	1%	
9 R/Ms	0	0%	
10+ R/Ms	2	1%	
Total	179	100%	

Build Up to Tries - Passes

	Number	%	Cumulative %
0 pass	36	21%	21%
1 pass	22	13%	34%
2 passes	23	13%	47%
3 passes	15	8%	55%
4 passes	22	12%	
5 passes	13	7%	
6 passes	12	7%	
7 passes	10	6%	
8 passes	4	2%	
9 passes	7	4%	
10 +passes	15	7%	
Total	179	100%	

The first table shows that 82% of tries were preceded by 3 or fewer second phases.

Detailed analysis shows that 33 tries were conceded after 3 second phases – none of them however were conceded by **South Africa or Wales**.

The second table shows that 55% of tries were preceded by 3 or fewer passes. This was not a figure that was seen consistently throughout all teams. In **Argentina's** case, for example, 92% of their tries (or 1 out of 12) comprised 3 or fewer passes.

In **Australia's** case, only 2 of their 30 tries contained no passes, This contrasts with **Argentina's** whose corresponding figure was 5 out of 12.













3.5 TIMING OF SCORES

There was a difference between the time when tries were scored and the time when penalty goals were kicked.

While **47%** of tries were scored in the first half, the first half penalty count was **60%**.

In **Scotland's** case, all 10 – or 100% - of their penalty goals were kicked in the first half.

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.

		Tries				Penalty goals			
		1 st Half Tries scored	2 nd Half Tries scored	1 st Half Tries conceded	2 nd Half Tries conceded	1 st Half PGs Scored	2 nd Half PGs Scored	1 st Half PGs conceded	2 nd Half PGs conceded
	NZL	17	16	3	3	8	7	3	1
	ENG	7	7	8	4	8	8	6	5
	RSA	14	11	9	4	5	2	3	8
	WAL	3	6	7	4	13	7	4	4
	AUS	14	16	7	9	5	3	6	5
	FRA	7	8	2	6	8	7	5	8
	SAM	3	1	8	14	4	3	10	2
	ARG	6	6	9	8	3	8	7	8
	IRE	7	10	4	5	10	5	12	6
	SCO	3	6	14	14	10	0	4	1
	TON	1	5	8	13	4	3	10	0
	FJI	2	3	5	11	5	2	13	7

4.0 KICKS AT GOAL













Kicking success rates were as follows:

	JWC 2010	JWC 2009
Conversions	69%	65%
Penalty goals	69%	60%
Drop goals	13% - 4 of 32	13% - 5 of 40



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

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 choose 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
	SCOTLAND	89%	83%	86%	0 of 4
	FRANCE	87%	79%	82%	0 of 1
	NEW ZEALAND	79%	88%	82%	0 of 0
	WALES	89%	74%	78%	0 of 5
	IRELAND	71%	79%	75%	0 of 1
	SOUTH AFRICA	72%	78%	74%	0 of 1
	AUSTRALIA	63%	89%	69%	0 of 1
	ENGLAND	64%	70%	53%	1 of 1
	ARGENTINA	50%	52%	52%	2 of 13
	SAMOA	50%	44%	45%	0 of 2
	TONGA	17%	58%	44%	0 of 0
	FIJI	40%	44%	43%	1 of 3

There were just 4 successful drop goals from 32 attempts. While 2 teams attempted none, **Argentina** attempted 13 (accounting for 40% of all attempts) and succeeded just twice. **Wales** failed on all five and **Scotland** failed on all four.

Argentina beat **Wales** in a Penalty Shoot out (Argentina won 9 - 8)

5.0 BALL IN PLAY

In percentage terms, JWC 2010 matches produced an average ball in play time of **32 min 06 secs or 40%**

	JWC 2010	JWC 2009
Average B-I-P per game	32min 06s or 40%	34min 29s or 43%
Highest B-I-P in one game	37min 14s or 47% <i>Scotland v Tonga</i>	41min 21s or 52% <i>Uruguay v Canada</i>
Lowest B-I-P in one game	27min 26s or 34% <i>Ireland v Samoa</i>	28min 09s or 35% <i>Australia v Canada</i>

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 30 matches. It can be seen that the winning team did not always have the most possession. In 11 of the 30 matches – or 37% - and highlighted below, the winning team had the least possession.



BALL IN PLAY %	BALL IN PLAY TIME	WINNING TEAM	%	LOSING TEAM	%
48% inc extra time	47m 57s	Argentina	52%	Wales	48%
47%	37m 14s	Tonga	55%	Scotland	45%
44%	34m 52s	Argentina	57%	France	43%
43%	34m 16s	Scotland	57%	Ireland	43%
43%	34m 32s	Argentina	52%	France	48%
43%	34m 12 s	England	54%	France	46%
43%	34m 37s	New Zealand	52%	South Africa	48%
42%	33m 50s	England	56%	Argentina	44%
42%	33m 27s	Australia	54%	New Zealand	46%
41%	32m 59 s	England	58%	Ireland	42%
41%	32m 33 s	Samoa	58%	Wales	42%
41%	32m 26s	Australia	53%	South Africa	47%
41%	32m 40s	Wales	60%	Fiji	40%
41%	32m 35 s	Ireland	58%	Argentina	42%
41%	32m 51s	Samoa	57%	Fiji	43%
41%	32m 49s	England	58%	South Africa	42%
40%	31m 44s	Scotland	56%	South Africa	44%
40%	31m 57s	France	55%	Ireland	45%
40%	32m 11s	Tonga	58%	Samoa	42%
40%	32m 14s	Australia	51%	England	49%
39%	31m 23s	Australia	62%	Scotland	38%
39%	31m 02s	Australia	56%	Tonga	44%
39%	31m 03s	New Zealand	63%	Wales	37%
38%	30m 17s	New Zealand	57%	Samoa	43%
38%	30m 23s	France	52%	Fiji	48%
38%	30m 39s	Scotland	65%	Tonga	35%
37%	29m 44s	New Zealand	58%	Fiji	42%
35%	28m 20s	Tonga	58%	South Africa	42%
34%	26m 53s	Wales	56%	Fiji	44%
34%	27m 26s	Ireland	50%	Samoa	50%

The attached table is a summary of the above, showing the overall average possession time obtained by all 12 teams: It can be seen that **England** obtained almost 40% more possession than **Fiji**.

Fiji also obtained less possession than their opponents in all 5 of their matches.

	ARGENTINA
	ENGLAND
	AUSTRALIA
	NEW ZEALAND
	SCOTLAND
	WALES
	SAMOA
	FRANCE
	TONGA
	IRELAND
	SOUTH AFRICA
	FIJI

JWC 2010	JWC 2009
18m 14s**	17m 30s
18m 12s	18m 39s
17m 41s	19m 16s
17m 31s	17m 56s
17m 12s	17m 43s
16m 36s**	17m 23s
16m 10s	15m 16s
16m 09s	18m 38s
15m 23s	15m 26s
15m 10s	20m 05s
14m 16s	15m 30s
13m 12s	13m 24s

** extra time in one game

6.0 ACTIVITY CYCLES

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

The following paragraphs show the number of rucks/mauls, passes and kicks

	JWC 2010	JWC 2009
Passes	218	206
Rucks/Mauls	138	125
Kicks	44	54













6.1 PASSING

Games, on average, contained **218** passes (*JWC 2009 – 206*)

	JWC 2010	JWC 2009
Average Passes per game	218	206
Most Passes in one game	271 <i>Australia v England</i>	266 <i>Scotland v Fiji</i>
Least Passes in one game	153 <i>Wales v Samoa</i>	133 <i>Argentina v Ireland</i>

The most by any team in a game was 179 – the fewest, 41. The following table shows the average passes per game per team:

Again, there were noticeable differences between the 12 teams with **Australia** making over double the passes made by **Argentina**. A team may however make more passes than another simply because it had more possession – but this was not the case with **Australia** and **Argentina**. Australia passed at a far higher rate. I.e they made twice as many passes per minute's possession. This attached table also shows the average number of passes per minute's possession i.e the rate of passing.

	Average Passes		Rate of Passing	
	JWC 2010	JWC 2009	JWC 2010	JWC 2009
 AUSTRALIA	153	137	8.7 passes per minute	7.0 per minute
 ENGLAND	143	125	7.8	6.7
 NEW ZEALAND	134	127	7.7	7.0
 SCOTLAND	123	125	7.1	7.0
 WALES	118	98	7.1	5.7
 IRELAND	108	115	7.1	5.7
 SOUTH AFRICA	97	86	6.8	5.6
 FRANCE	90	105	5.5	5.6
 TONGA	90	88	5.9	5.7
 SAMOA	89	92	5.5	6.1
 FIJI	89	92	6.8	6.9
 ARGENTINA	72	82	4.0	4.7

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 difference between the most and the least.

	Average	Most	Least	Difference between most and least
AUSTRALIA	153	173	143	30
ENGLAND	143	159	123	37
NEW ZEALAND	134	165	108	57
SCOTLAND	123	162	68	94
WALES	118	179	56	123
IRELAND	108	129	91	38
SOUTH AFRICA	97	121	85	36
TONGA	90	127	41	86
FRANCE	90	120	55	65
FIJI	89	109	78	31
SAMOA	89	122	60	62
ARGENTINA	72	91	48	43

It can be seen from the table that there were noticeable contrasts between the highs and lows of certain teams. **Australia** were extremely consistent, there being a difference of only 30 passes between their highest and lowest passing games. In **Wales'** case however, the difference between the highest and lowest was 123.

6.2 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 2010 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	107	347	312	766
ENGLAND	157	269	288	714
NEW ZEALAND	146	271	254	671
SCOTLAND	105	288	220	613
WALES	113	239	240	592
IRELAND	64	242	233	539
SOUTH AFRICA	93	222	172	487
FRANCE	78	205	165	448
TONGA	101	202	148	451
FIJI	85	160	202	447
SAMOA	86	206	151	443
ARGENTINA	58	195	108	361
TOTAL	1193	2846	2493	9532

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. **England's** forwards, for example, made two and a half times as many as **Ireland's**.

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 2010	JWC 2009
Passing % by forwards	18%	18%
Passing % by scrum half	44%	43%
Passing % by backs	38%	39%

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

	TONGA
	NEW ZEALAND
	ENGLAND
	FIJI
	WALES
	SOUTH AFRICA
	SAMOA
	FRANCE
	SCOTLAND
	ARGENTINA
	AUSTRALIA
	IRELAND

	% by Forwards	% by Scrum Half	% by Backs
TONGA	22%	45%	33%
NEW ZEALAND	22%	40%	38%
ENGLAND	22%	38%	40%
FIJI	19%	36%	45%
WALES	19%	40%	41%
SOUTH AFRICA	19%	46%	35%
SAMOA	19%	47%	34%
FRANCE	17%	46%	37%
SCOTLAND	17%	47%	36%
ARGENTINA	16%	54%	30%
AUSTRALIA	14%	45%	41%
IRELAND	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 with **England's** forwards being the forwards most likely to pass the ball and **Argentina's** the least...

	ENGLAND
	NEW ZEALAND
	SOUTH AFRICA
	FIJI
	SCOTLAND
	WALES
	AUSTRALIA
	TONGA
	FRANCE
	IRELAND
	SAMOA
	ARGENTINA

	JWC 2010	JWC 2009
ENGLAND	1 in 2.4	1 in 3.3
NEW ZEALAND	1 in 2.8	1 in 2.9
SOUTH AFRICA	1 in 3.0	1 in 3.4
FIJI	1 in 3.1	1 in 2.9
SCOTLAND	1 in 3.2	1 in 3.0
WALES	1 in 3.2	1 in 3.3
AUSTRALIA	1 in 3.3	1 in 3.1
TONGA	1 in 3.6	1 in 2.7
FRANCE	1 in 3.8	1 in 2.9
IRELAND	1 in 3.9	1 in 4.2
SAMOA	1 in 4.1	1 in 3.0
ARGENTINA	1 in 6.2	1 in 4.4













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 following table: it shows that passing by **Argentina's** front row was somewhat unusual – they passed the ball on only 7% of occasions which amounted to just 8 passes out of the 113 times they had the ball in their hands. Their 2 props made a total of 2 passes in the entire tournament.

		% of times ball passed by Front Row JWC 2010
	ENGLAND	43%
	NEW ZEALAND	30%
	TONGA	27%
	SAMOA	27%
	WALES	26%
	IRELAND	25%
	AUSTRALIA	24%
	SCOTLAND	23%
	FIJI	20%
	FRANCE	19%
	SOUTH AFRICA	14%
	ARGENTINA	7%

These percentages were however not the same as far as the second rows were concerned although **Argentina's** second row were still the team the least likely to pass the ball..



		% of times ball passed by 2 nd Row JWC 2010
	SOUTH AFRICA	38%
	FRANCE	33%
	ENGLAND	30%
	NEW ZEALAND	30%
	TONGA	30%
	FIJI	30%
	SCOTLAND	28%
	IRELAND	24%
	SAMOA	23%
	WALES	21%
	AUSTRALIA	21%
	ARGENTINA	19%

This next chart confirms that it was **Argentina's** forwards who were the least likely to pass the ball –with their front row, second row and back rows forming a consistent pattern.



-  ENGLAND
-  SOUTH AFRICA
-  NEW ZEALAND
-  FIJI
-  WALES
-  AUSTRALIA
-  SCOTLAND
-  TONGA
-  FRANCE
-  IRELAND
-  SAMOA
-  ARGENTINA

% of times ball passed by Back Row JWC 2010	
ENGLAND	45%
SOUTH AFRICA	44%
NEW ZEALAND	42%
FIJI	39%
WALES	38%
AUSTRALIA	37%
SCOTLAND	36%
TONGA	28%
FRANCE	28%
IRELAND	26%
SAMOA	23%
ARGENTINA	21%

6.3 PASSING MOVEMENTS

Passes are grouped into passing movements – i.e. one pass movement, two pass movements and so on. The data shows that some **82%** of all passing movements contained two passes or less. There were however noticeable differences between the various countries as shown in the table

-  ARGENTINA
-  TONGA
-  SAMOA
-  FRANCE
-  SOUTH AFRICA
-  SCOTLAND
-  AUSTRALIA
-  IRELAND
-  WALES
-  NEW ZEALAND
-  ENGLAND
-  FIJI

% of passing movements with 2 or fewer passes JWC 2010	
ARGENTINA	91%
TONGA	89%
SAMOA	86%
FRANCE	84%
SOUTH AFRICA	83%
SCOTLAND	82%
AUSTRALIA	82%
IRELAND	81%
WALES	81%
NEW ZEALAND	79%
ENGLAND	77%
FIJI	75%

The data also shows that **Argentina** had just 5 passing movements with more than 3 passes. This contrasts with **New Zealand** who had 35 and **England** and **Australia** who had 33.

6.4 RUCKS/MAULS (2nd PHASE)













Games, on average, contained **138** rucks/mauls (*JWC 2009 – 125*)

	JWC 2010	JWC 2009
Average R/Ms per game	138	125
Most R/Ms in one game	168 <i>Argentina v France</i>	170 <i>New Zealand v Australia</i>
Least R/Ms in one game	102 <i>Wales v Fiji</i>	93 <i>Fiji v Italy</i>

The most by any team in a game was **108** and the least, **36**.

The following 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 is also shown in the following table:













	Average R/Ms		Rate of Ruckng	
	JWC 2010	JWC 2009	JWC 2010	JWC 2009
 AUSTRALIA	84	84	4.8 per minute	4.3 per minute
 ARGENTINA	83	60	4.6	3.4
 NEW ZEALAND	76	65	4.2	3.6
 SAMOA	76	48	4.7	3.2
 ENGLAND	75	73	3.9	3.9
 SCOTLAND	71	67	4.3	3.8
 TONGA	70	57	4.5	3.7
 WALES	65	65	3.7	3.8
 FRANCE	65	66	4.1	3.5
 SOUTH AFRICA	56	53	3.9	3.4
 IRELAND	54	75	3.5	3.7
 FIJI	51	46	3.8	3.5

This table shows, for example, that while **Australia** made 50% more passes than **South Africa**, their rate of passing was only 23% more.

6.5 BREAKDOWN RETENTION

At the breakdown, the team taking in the ball retained possession by either winning the ball or being awarded a penalty on **94%** of occasions.

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

	JWC 2010	JWC 2009
 NEW ZEALAND	97%	89%
 ARGENTINA	95%	85%
 SCOTLAND	95%	92%
 FRANCE	95%	84%
 IRELAND	95%	90%
 ENGLAND	94%	92%
 FIJI	94%	82%
 AUSTRALIA	93%	89%
 SAMOA	93%	88%
 TONGA	93%	88%
 WALES	93%	90%
 SOUTH AFRICA	89%	89%













6.6 KICKING

	JWC 2010	JWC 2009
Average Kicks per game	44	54
Most Kicks in one game	71 <i>Wales v Argentina</i>	61 <i>Argentina v Ireland</i>
Least Kicks in one game	13 <i>Australia v Tonga</i>	11 <i>Australia v Canada</i>

The most by a team in a game was **38** – the least **6**. Each country's average is shown in the table below..

The two highest kicking games contained 71 and 66 kicks respectively - **Wales** were involved in both of them. The two lowest kicking games contained 13 and 29 - **Australia** played in both.













When an adjustment is made to take account of possession obtained, by each team, then the kicking table changes slightly. It shows that while **South Africa** was the only sixth highest kicking team, it kicked at the highest rate. The table below includes the average number of kicks per team per minute's possession:

	Average Kicks		Rate of Kicking	
	JWC 2010	JWC 2009	JWC 2010	JWC 2009
 ARGENTINA	27	33	1.5 per minute	1.9 per minute
 WALES	26	32	1.6	1.8
 IRELAND	24	30	1.6	1.5
 ENGLAND	24	27	1.3	1.4
 SAMOA	24	27	1.5	1.8
 SOUTH AFRICA	23	34	1.6	2.2
 FRANCE	22	21	1.4	1.1
 SCOTLAND	22	30	1.3	1.7
 FIJI	22	19	1.6	1.4
 NEW ZEALAND	18	26	1.0	1.5
 TONGA	18	23	1.2	1.5
 AUSTRALIA	13	22	0.7	1.1

6.7 SUMMARY

A summary of previous activity 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	76	4.2	134	7.7	18	1.0
 ENGLAND	75	3.9	143	7.8	24	1.3
 SOUTH AFRICA	56	3.9	97	6.8	23	1.6
 AUSTRALIA	84	4.8	153	8.7	13	0.7
 FRANCE	65	4.1	90	5.5	22	1.4
 WALES	65	3.7	118	7.1	26	1.6
 SAMOA	76	4.7	89	5.5	24	1.5
 IRELAND	54	3.5	108	7.1	24	1.6
 SCOTLAND	71	4.3	123	7.1	22	1.3
 TONGA	70	4.5	90	5.9	18	1.2
 ARGENTINA	83	4.6	72	4.0	27	1.5
 FIJI	51	3.8	89	6.8	22	1.6

7.0 RESTARTS

Of 50m restarts, **37%** were kicked long – **63%** 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 most kicked short far more often than long, some countries kicked long on the majority of occasions. Further, success rate and restart type varied between the 12 teams. The most effective teams in retaining short restarts are also shown.

The most successful teams at regaining restarts were **Tonga** and **Wales**. **Wales** kicked short the most and in regaining just over half their restarts, and were the most successful. Their rate of 1 in 2 contrasts with **South Africa's** for example, whose rate was closer to 1 in 5.

Argentina consistently kicked long – such kicks accounted for 67% of all their restarts compared to an overall average of 37%.

Interestingly, on short 22metre restarts – of which there were only 5 in the entire tournament – 3 were successfully regained.

	50m Restarts		Retention rate
	Short	Long	Short
 WALES	83%	17%	1 in 2
 SAMOA	82%	18%	1 in 4
 IRELAND	78%	22%	1 in 5
 NEW ZEALAND	77%	23%	1 in 3
 SCOTLAND	72%	28%	1 in 3
 ENGLAND	69%	31%	1 in 5
 FRANCE	59%	41%	1 in 4
 SOUTH AFRICA	55%	45%	1 in 5
 FIJI	54%	46%	1 in 5
 TONGA	53%	47%	1 in 2
 AUSTRALIA	50%	50%	1 in 3
 ARGENTINA	33%	67%	1 in 4

8.0 LINEOUTS

The average number of lineouts per game was **25** (JWC 2009 – 28)

The most line outs in a game was **33** – the least **17**.

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 – ie those lost on own throw in and those won on opponents throw in.

New Zealand had the highest overall percentage success rate on their own throw in and they also had the most steals on opposition throw ins. Even though **Samoa** had the lowest success rates on their own throw in they managed to steal opposition throw ins on 10 occasions.

	JWC 2010	JWC 2009
Average no per game	25	28
Percentage competed	61%	66%
Possession retained	78%	78%



NEW ZEALAND
SOUTH AFRICA
IRELAND
WALES
FRANCE
AUSTRALIA
ENGLAND
SCOTLAND
ARGENTINA
TONGA
FIJI
SAMOA

	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
NEW ZEALAND	95%	29%	1	13	2	4
SOUTH AFRICA	87%	29%	3	14	6	7
IRELAND	86%	33%	7	12	1	7
WALES	82%	23%	7	12	3	6
FRANCE	80%	24%	6	16	5	5
AUSTRALIA	79%	19%	9	6	4	4
ENGLAND	78%	21%	8	10	4	4
SCOTLAND	77%	13%	11	6	3	3
ARGENTINA	75%	17%	19	6	5	3
TONGA	74%	21%	12	6	6	6
FIJI	68%	11%	14	4	5	2
SAMOA	58%	21%	18	10	9	2

9.0 SCRUMS

The average number of scrums per game was **20**

The most scrums in a game was **29** – the least **9**

Scrum ball retention was relatively high for all teams.













Australia retained possession on all their 39 put-ins – by contrast, **Tonga** lost 17.

Average no per game
Possession retained

	JWC 2010	JWC 2009
Average no per game	20	21
Possession retained	87%	85%

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 **24** in 592 scrums or 1 in 25 (JWC 2009 - 42 in 824 scrums – or 1 scrum in 32). The table below shows the tight heads won and lost by each country.

Of all scrum penalties, two thirds were awarded to the team putting the ball in.

		Scrum Success %		Heels against the head	
		Own Feed	Opposition Feed	Lost on Own Feed	Won on Opposition Feed
	AUSTRALIA	100%	17%	0	2
	SCOTLAND	94%	19%	1	5
	ARGENTINA	93%	16%	0	2
	ENGLAND	91%	7%	0	0
	WALES	90%	22%	2	1
	FRANCE	90%	18%	1	0
	IRELAND	89%	11%	2	1
	NEW ZEALAND	85%	24%	1	2
	SOUTH AFRICA	84%	18%	0	4
	FIJI	82%	4%	2	0
	SAMOA	81%	6%	2	2
	TONGA	69%	2%	8	0

10.0 PENALTIES / FREE KICKS













In JWC 2010, the average number of penalties and free kicks awarded in a game was **24**.

This reflected a spread of between 32 and 15 per game.

The most conceded by a team in one match was 23 - the least 5.

	JWC 2010	JWC 2009
Average no per game	24	25
Most Pens/FKs in one game	32	35
Least Pens/FKs in one game	15	18

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 **South Africa** were the least penalised team in relation to their opponents while **Fiji** was the most, conceding 50% more penalties than their opponents.

		Pens/FKs For and Against		Proportion of Pens/FKs	
		Pen/FK For	Pen/FK Against	% Pen/FK For	% Pen/FK Against
	SOUTH AFRICA	62	46	57%	43%
	AUSTRALIA	58	46	56%	44%
	IRELAND	70	56	56%	44%
	ARGENTINA	67	54	55%	45%
	WALES	70	59	54%	46%
	SAMOA	62	58	52%	48%
	NEW ZEALAND	61	65	48%	52%
	SCOTLAND	51	57	47%	53%
	FRANCE	61	70	47%	53%
	ENGLAND	49	59	45%	55%
	TONGA	54	69	44%	56%
	FIJI	51	77	40%	60%

Three teams were penalised fewer times than their opponents in all their matches – the teams were **South Africa, Ireland** and **France**.

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 11 tap penalties in the tournament, **Fiji** tapped on 20 occasions while **Argentina** tapped on just 3.

10.1 CATEGORIES OF OFFENCES PENALISED

The following table groups the penalties awarded into 8 categories – these are as follows.

	%
Ruck/tackle on ground	40%
Offside	24%
Scrum	17%
Dangerous tackle	6%
Other	4%
Lineout	2%
Obstruction	5%
Foul play	2%
	100%

11.0 CARDS – YELLOW & RED

There were **no** red cards issued (JWC 2009 – 5)

There were **26** yellow cards issued during the championship, an average of one per game. This was a similar rate as 2009 when 42 were issued in 40 matches.

Of the 30 matches, there were 18 which contained at least one yellow card, meaning 12 (or 40%) of all matches did not contain a single yellow card. The most yellow cards in one match was 3 (*Ireland v Samoa*)

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

The Pacific Island teams were again the teams that conceded the most yellow cards. **Fiji, Tonga** and **Samoa** accounted for over 50% of all Yellow Cards

	JWC 2010	JWC 2009
FIJI	6	5
TONGA	5	6
SAMOA	4	3
SCOTLAND	2	0
FRANCE	2	3
AUSTRALIA	2	1
NEW ZEALAND	1	2
SOUTH AFRICA	1	3
ENGLAND	1	1
IRELAND	1	1
ARGENTINA	0	2
WALES	0	5

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

	JWC 2010
Dangerous Tackle	11
Foul Play (punching/kicking/trampling)	3
Ruck/Tackle – Incorrect joining	1
Ruck/Tackle - Preventing Release	2
Ruck/Tackle – Not staying on feet	2
Scrum	1
Ruck - offside	4
Unsportsmanlike behaviour	2
Total	26