

**2020 TOKYO OLYMPIC GAMES**  
***WOMEN'S RUGBY SEVENS***  
**Game Analysis Report**



## OVERVIEW

### INTRODUCTION

The following report is a quantitative review of the Tokyo 2020 Women's Rugby Sevens competition. It brings together the relevant data relating to how the game of women's sevens was played at the Tokyo 2020 Olympic Games, how the competition compares to the Rio 2016 Olympic Games and the World Rugby HSBC Sevens World Series, and an analysis of all aspects of the shape of the game.

The report focuses on the game as a whole, while also highlighting the individual performance of a standout team. For a full breakdown of each teams' performance, the 2020 Tokyo Olympics Statistical Summary is provided as an appendix.

For questions concerning the Tokyo 2020 Olympic Games Game Analysis Report or Statistical Summary, please contact:

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## COMMENTARY AND COMPARISON

### RANKING AND RESULTS

Tokyo 2020 was the second time Rugby Sevens has appeared at the Olympic Games, and for the second time New Zealand won a medal, winning gold to go with their silver from 2016. Tokyo also saw two new Olympic medallists with France claiming silver, and Fiji winning the bronze medal.

The table below shows the final ranking of each team and their seeding going into the Olympics in the left-hand column, and their rank at the Rio 2016 Olympic games in the right column. Australia, USA, Canada and Brazil all dropped places in the rankings compared to Rio, with Australia and Canada falling the furthest having medalled in 2016. New Zealand, France, and Kenya all improved their ranking in 2020, while Fiji showed the most improvement jumping 5 places.

Not only did Fiji improve five (5) places on their ranking from 2016, but they also improved five (5) places on their seeding heading into Tokyo 2020. Some reasons behind their improvement will be outlined in a following section of the report.

Rank (Seed)	Team	2016 Rank
1st (1)	New Zealand	 2nd
2nd (5)	France	 6th
3rd (8)	Fiji	 8th
4th (7)	Great Britain	 4th
5th (3)	Australia	 1st
6th (4)	USA	 5th
7th (9)	China	DNQ
8th (6)	Russia	DNQ
9th (2)	Canada	 3rd
10th (12)	Kenya	 11th
11th (11)	Brazil	 9th
12th (10)	Japan	 10th

China and Russia both competed in their first Olympic Games, with China improving two places on their pre-Olympic seeding, while Russia finished two places lower.

## COMPARISON

The below table gives an overview of the average game of Women's sevens as reflected in the 34 matches played in the Tokyo 2020 Olympic Games, with a comparison to the Rio 2016 Olympic Games, and 2020 World Rugby HSBC Sevens World Series. Despite the challenges caused by the Covid-19 pandemic resulting in interrupted preparations for teams, the shape of the game was similar to the Sevens Series and has shown development since 2016.

The main differences at Tokyo 2020 are outlined below:

- Conversion rates increase to 63% showing greater accuracy than 2016.
- Ball in Play 52% on par with 2016 but slightly lower than the series.
- Passes, rucks and kick per match all increase from 2016.
- Scrums per match increased to 4.5 while lineouts dropped compared to the series.
- Penalties per match increased but there were fewer cards.

SCORING	2020	2016	Series
POINTS (average per game)	35.7	32.2	37.4
TRIES (average per game)	5.7	5.3	6
TRY RATE (rate)	1*76s	1*81s	1*76s
CONVERSION SUCCESS (%)	63%	53%	64%
PENALTY / DROP GOALS (total)	0	1	0
MATCH WON by scoring most tries (%)	88%	97%	91%
SOURCE OF TRIES - pens/fks (%)	52%	40%	44%
ORIGIN OF TRIES - own Half (%)	39%	29%	44%
TRY BUILD UP - no rucks/mauls (%)	65%	65%	59%
TRY BUILD UP - 3 Or fewer passes (%)	55%	66%	49%
ACTIVITY	2020	2016	Series
BALL IN PLAY (%)	52%	51%	54%
PASSES (average per game)	77	63	78
5+ PASSING MOVEMENTS (rate)	1 in 12.5	1 in 9.6	1 in 9.6
RUCKS/MAULS (average per game)	25	18	25
RUCK/MAUL RETENTION (%)	87%	79%	86%
KICKS (average per game)	2.2	1.9	1.4
SET PIECE	2020	2016	Series
CONTESTABLE RESTARTS (%)	72%	59%	65%
CON.RESTARTS REGAINED (%)	29%	33%	28%
RESTART ERRORS (rate)	1 in 17	1 in 13	1 in 9
SCRUMS (average per game)	4.5	3.5	3.3
SCRUMS possession retained (%)	93%	94%	99%
LINEOUTS (average per game)	1.7	2.3	1.6
LINEOUTS possession retained (%)	86%	76%	84%
QUICK THROWS (rate)	1 in 9.5	1 in 15.6	1 in 22.5
SANCTIONS	2020	2016	Series
PENALTIES (average per game)	9.1	8.4	8.2
CARDS (total)	12Y	16Y	11Y .2R

## PERFORMANCE PROFILE

### FIJI

The table below outlines the seven preparation events staged prior to the Olympics and the teams that competed in each. The travel restrictions associated with Covid-19 that led to the postponement of the 2021 World Rugby HSBC Sevens Series, also impacted some teams' participation in multiple tournaments, while South Africa were unable to compete in any of the events.

Fijiana were only able to participate in one of the warmup events, that being the Oceania Sevens in Townsville. While this limited international build-up could have hindered their performance, it also meant other teams missed the opportunity to gain experience against Fiji's unique style of play.

OLYMPIC PREPARATION EVENTS							
TEAM	MADRID W1	MADRID W2	DUBAI W1	DUBAI W2	RED BULL UK	OCEANIA	QUEST4GOLD
AUSTRALIA						*	
BRAZIL			*	*			
CANADA			*	*			
CHINA							
FIJI						*	
FRANCE	*		*	*	*		
GREAT BRITAIN					*		*
JAPAN			*	*			
KENYA	*	*	*	*			
NEW ZEALAND						*	
RUSSIA	*	*					
USA	*	*	*	*			*

In their sole international warm up event, Fiji broke Australia's 16 match unbeaten run against them since the Rio 2016 Olympics, a feat they also repeated in the Tokyo Quarter Finals. They also pulled off an even greater upset with a 26-12 victory over Canada in the pool rounds, their first victory over the Canadians since Dubai 2016.

While Fiji were only the 4<sup>th</sup> best try scoring team, and conceded the 4<sup>th</sup> fewest tries, there were elements of the attacking and defensive play that separated them from other teams. Their contestable restarts regained figure of 42% was the highest of all teams, and despite conceding the most penalties of any team, they conceded the third least penalties in attack. Finally, Fiji's defence was a true standout, ranking 2<sup>nd</sup> in opposition ruck turnovers, and second again in fewest tries conceded per 22m entry. This defensive steel, paired with their attacking flair, saw Fijiana win their first Olympic medal.

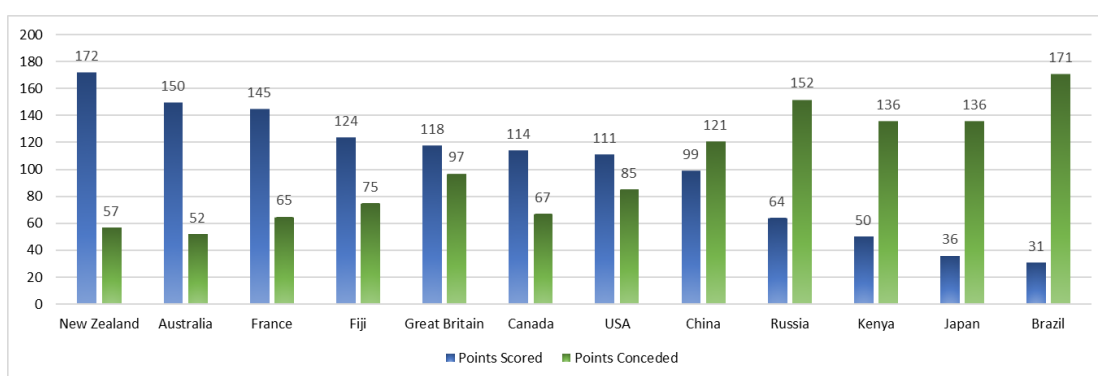
	Possession	Restarts Regained	Opp Ruck Turnover	Tackle/Ruck Turnovers Won	22m Entry Tries Conceded	% Attacking Penalties Conceded
<b>Fiji</b>	49%	42%	21%	14	52%	22%
<b>Olympic Average</b>	50%	29%	13%	9	64%	35%

## SHAPE OF THE GAME: SCORING

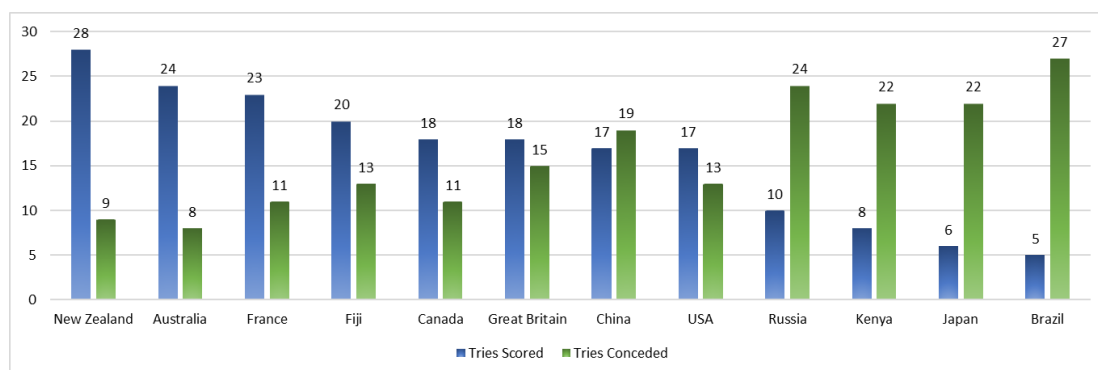
### TRY SCORING AND CONCEDED

The average number of points scored per match was **35.7**. The highest scoring match at the Olympics produced 48 points, with Australia scoring 48 points against Japan in their first pool game. The lowest scoring match produced a total of 17 points, when France defeated Fiji 12-5 in the very first pool match.

The below graph shows the **total points scored** and **conceded** by team. **New Zealand** scored the most points with **171** or an average of **28.7**. Along with having the second-best attack, Australia had the best defence conceding only 52 points in 6 games, or 8.7 on average. While silver-medallists France, had the third best attack and defence.



An average of **5.7 tries** were scored **per match** in Tokyo, with a 194 scored in total. The most tries scored in a match was 8, and the least was three. New Zealand scored the most tries and Australia conceded the least, while France again showed their strength by scoring the third most amount of tries and conceding the third fewest.



Overall, there was a try scored every **76 seconds of play**. **New Zealand** and **France** had the best try-scoring rate, scoring a try every **51 seconds** of their own possession. Australia had the lowest try-conceding rate, conceding a try every **168 seconds** of their opposition's possession.

Points Average	Tries Average	Scoring Rate
35.7	5.7	1 every 76s

## CONVERSIONS

The overall conversion success rate was **63%**. **Great Britain** had the highest conversion success rate with **78%** and **China** the lowest with **41%**. There were no penalty goal or drop goal attempts.

Team	Conversion Success
Great Britain	78
USA	77
Russia	70
Canada	67
France	65
Australia	63
Kenya	63
Brazil	60
Fiji	60
New Zealand	59
Japan	50
China	41

## TRY SOURCE

Prior to scoring a try, teams obtained possession of the ball from a variety of sources which are presented in the table below. The potential sources of possession are from a tap from a penalty or free kick, a restart kick, a turnover, a scrum, a lineout, or a kick in general play. The most fruitful source of tries was **taps from penalties and free kicks** (52%). These are broken into quick taps (38%) and set taps (14%). The chart also shows the value of the scrum as an attacking weapon, with 14% of all tries scored from possession originating at the scrum.

Team	Restart	Receipt	22m Receipt	Kick Receipt	Tap	Set Tap	Lineout	Opp Lineout	Scrum	Opp Scrum	Turnover	Total
Australia		3			7	5	1		6		2	24
Brazil		1			4							5
Canada	2				8		1		1		6	18
China		2	1	1	5	3	2		1		2	17
Fiji	2				9	2	2		1	1	3	20
France	2	2			11				3		5	23
Great Britain		1		2	11				3		1	18
Japan		1			1	4						6
Kenya		1		1	5						1	8
New Zealand		2			9	8	1	1	4		3	28
Russia					2	2	1		3		2	10
USA	1	3		1	2	2		1	5		2	17
TOTALS	7	16	1	5	74	26	8	2	27	1	27	194

As previously mentioned, one of Fiji's strengths was their restart with 10% of their tries coming from regaining their own restart kick, however it was the quick tap which proved their most fruitful try source, where they scored 9 of their 20 tries.

### TRY ORIGIN

Of all the tries scored, **39% originated in the try scoring team’s own half** and 61% in the opposition half. The team that scored the highest proportion of tries from their own half was **USA** with **65%**. The image below presents the proportion of tries scored from possession that originated in a team’s own half, from the halfway to the 10m line, from the 10m to the opposition’s 22m and from the opposition’s 22m to the try-line.



### TRY BUILDUP

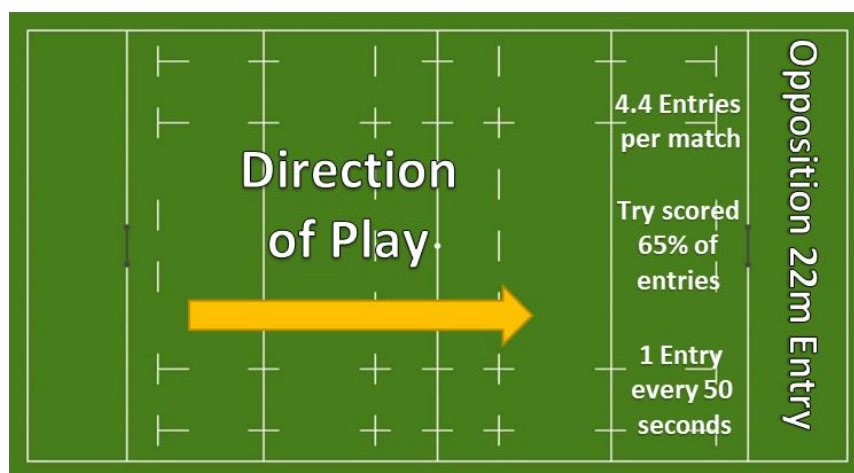
The table below shows how many rucks/mauls and the total number of passes that preceded each try scored at the Olympic Games. The table shows that **65%** of tries were preceded by no ruck or maul and that **55%** of tries were preceded by three or fewer passes.

Ruck/Mauls in Try Build Up			Passes in Try Build Up		
	%	Cumulative		%	Cumulative
None	65%	65%	None	9%	9%
1 Ruck/Maul	19%	84%	1-3 Passes	46%	55%
2 Ruck/Mauls	8%	92%	4-6 Passes	28%	83%
3+ Ruck/Mauls	8%	100%	7+ Passes	17%	100%



### TRY PER 22M ENTRY

Of all team possessions, an average of **4.4 possessions** per game resulted in entering the opposition 22m area, or **8.8 per match overall**. This equates to a rate of entry into the 22m area on average **once every 50 seconds of play**. Of these entries, an average of **65% resulted in a try** being scored from the possession.



**New Zealand** were the most clinical team when it came to converting possession to tries, converting **80%** of their visits into the opposition's 22m. **France** were the strongest defensive team, conceding on only 50% of entries into their 22m area.

### TMO TRY REFERRAL

The television match official (TMO) may be used if the referee and the assistants are unsure as to whether a try has been scored. The referee may only refer to the TMO in instances in the act of scoring such as ball grounding, touch in-goal or dead in-goal, and foul play in-goal in the act of scoring. At the Tokyo 2020 Olympic Games the **TMO** was referred to on **6** occasions, or **once every 5.7 matches**, with a try being awarded in **50%** of the referrals.

The average duration of a TMO referral was 37 seconds. The longest TMO referral took 55 seconds in the match between China and Japan.

## SHAPE OF THE GAME: ACTIVITY

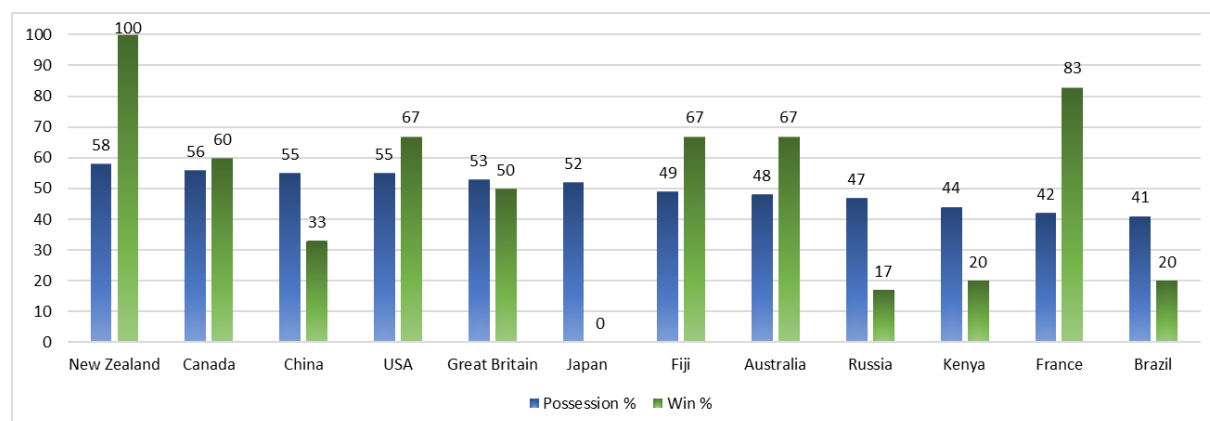
### BALL IN PLAY and POSSESSION

In Tokyo, the ball was in play for an average of **52%** of available time, or **7 minutes and 17 seconds** per match. There was a considerable variation in the ball in play time in each match. The highest ball in play time found in a match not involving extra time, was Japan vs Kenya with 9 minutes and 9 seconds. The lowest ball in play time was the match between New Zealand and Great Britain with 5 minutes and 41 seconds.

Ball in Play (BiP) Time				
Highest BiP	Average BiP	Lowest BiP	Average Activity Cycle	Longest Activity Cycle
9 min 09s	7 min 17s	5min 41s	22s	2 min 02s

The ball in play time in each match comprised repeated cycles of game activity. The average length of a cycle of play in a match was **22 seconds** and approximately **21** of these cycles occur per match. The longest cycle of play in Tokyo was 2 minutes and 2 seconds in the pool match between France and Canada.

The below graph shows each teams' match winning percentage in green, and their share of match possession in blue. In contrast to the men's competition, **gold medal winners New Zealand** had both the **highest match winning percentage (100%)** and the **highest average possession per match with 58%**. Silver medallists France on the other hand had the second highest win percentage with 83%, but the second lowest possession with only 42%, showing that possession is not necessarily an indicator of success. Japan was an interesting team in contrast, gaining the majority of possession in each match but they were unable to secure a win.



## PASSING

The average number of passes per match in Tokyo was **77**. Due to different playing styles of the teams however the incidence of passing in each match was highly variable. The highest number of passes in a game was 119 when Kenya played Japan, and the lowest was 56 when USA played China.

Overall, there was a pass made every **5.7 seconds of play**. Passing rates show how likely a team is to pass in relation to the possession that they obtained. Japan was the most likely team to pass on the series, with 59 passes per match on average, and Brazil was the least likely with 27 passes per match, or 1 pass every 6.7 seconds.

## RUCKS and MAULS

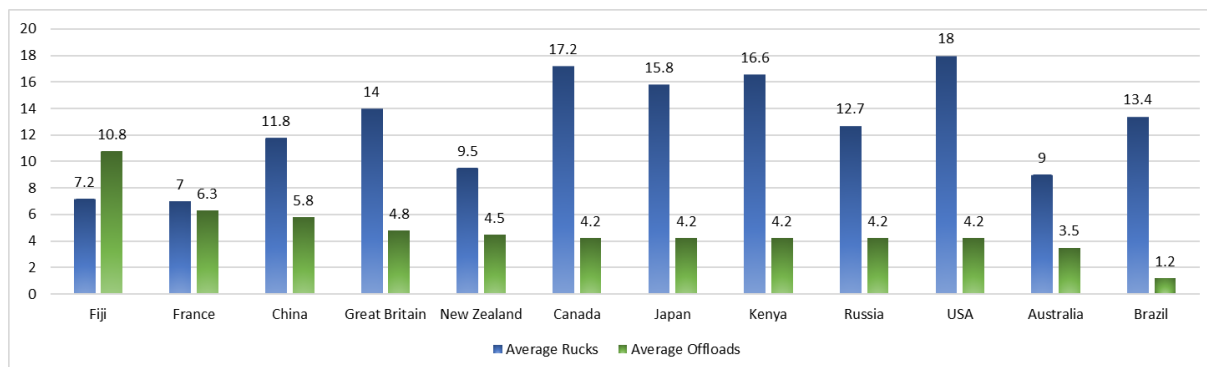
The average number of rucks and mauls in a game was **25** with the frequency of rucks occurring on average **every 17.5 seconds of play**. The game with the highest total number of breakdowns was Great Britain against USA with 47 rucks, interestingly there was not a single kick in general play. The match between Fiji and Brazil produced the least number of rucks with just 6 in total.

**USA were the most likely team** to take possession into contact, with an average of 18 rucks per match, while Kenya had the highest ruck rate forming a ruck every 12 seconds when in possession of the ball. **Fiji was the least likely team**, taking the ball into contact once every 31 seconds of play, which was 10% less often than the second least likely team, France.

At the breakdown, the team taking in the ball retained possession by either winning the ball or being awarded a penalty on **87%** of occasions. **New Zealand were the most consistent team at the breakdown**, retaining their **own ball 93%** of the time, while **China was the most dominant defensive team** winning **23% of the opposition breakdown**, as shown in the table below.

Team	Ruck Retention	Opp Ruck Turnover
New Zealand	93	17
USA	90	10
Great Britain	89	7
Kenya	88	11
Russia	88	16
Canada	87	17
France	86	10
Australia	85	16
Brazil	84	10
Fiji	84	21
China	82	23
Japan	81	10
Tournament	87	14

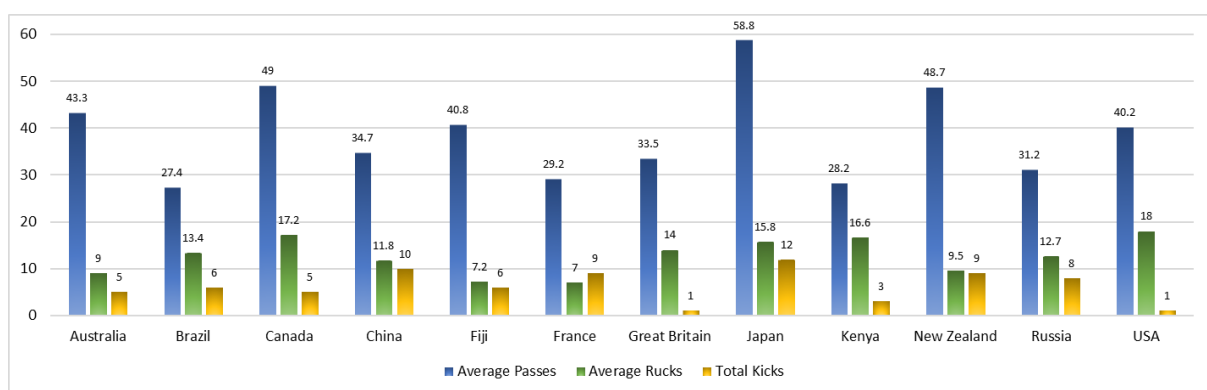
The playing style of teams can be further revealed by comparing the number of offloads in their game (passes in contact) compared to the number of rucks. The graph below shows the average rucks (blue) and average offloads (green) per team. Teams are ordered left to right based on how many offloads per game. **Fiji was the most likely team to offload with 10.8 per match**, followed by France and China with nearly 6 per match. Brazil was the team least likely to offload, with only 1.2 offloads on average.



### KICKING

Kicking activity comprises all kicks made in general play including punts, chips, ground (i.e., football kick) and grubber kicks. The **average number of kicks** in a game was **2.2**, with the **maximum of five (5) kicks** occurring in three matches, two of which involved New Zealand. **Japan was the most likely team to kick in open play with 12 in total**, whilst **Great Britain and USA were the least likely**.

The graph below shows the average passes (blue), average rucks (green), and total kicks (gold) per team in Tokyo. Teams are aligned alphabetically from left to right.



## TURNOVERS

Turnovers refer to the total number of events where possession is lost by one team and gained by the other. This includes general player errors such as a knock-ons, lineouts, scrums, ruck and maul, penalties and free-kicks and unplayable situations. The chart below presents the distribution of turnover by type and highlights that **56% of turnovers** occur through errors in **general play**, 38% at the **tackle/ruck**.

Fiji conceded the most turnovers during the tournament with 35 in total, while Great Britain and New Zealand conceded the least with 18 in total, or an average of only three per game.

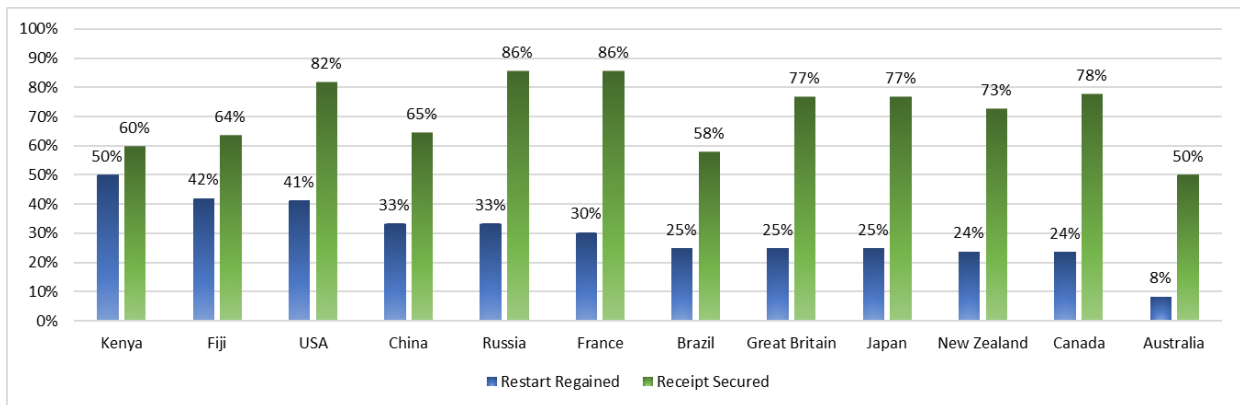
Team	General Play	Lineout	Scrum	Tackle/Ruck	T/R Penalty	Maul	Unplayable	Total
Australia	10		1	1	6		1	19
Brazil	20		1	7	3			31
Canada	14	1		1	11			27
China	15	3		6	7			31
Fiji	27	1		3	4			35
France	14			1	6			21
Great Britain	7		2	5	3	1		18
Japan	11	1		4	11			27
Kenya	6	1	1	1	9			18
New Zealand	14			3	1			18
Russia	15			1	7	1		24
USA	12	1			11			24
<b>TOTALS</b>	<b>165</b>	<b>8</b>	<b>5</b>	<b>33</b>	<b>79</b>	<b>2</b>	<b>1</b>	<b>293</b>

## SHAPE OF THE GAME: SET PIECE

### RESTARTS and RECEIPTS

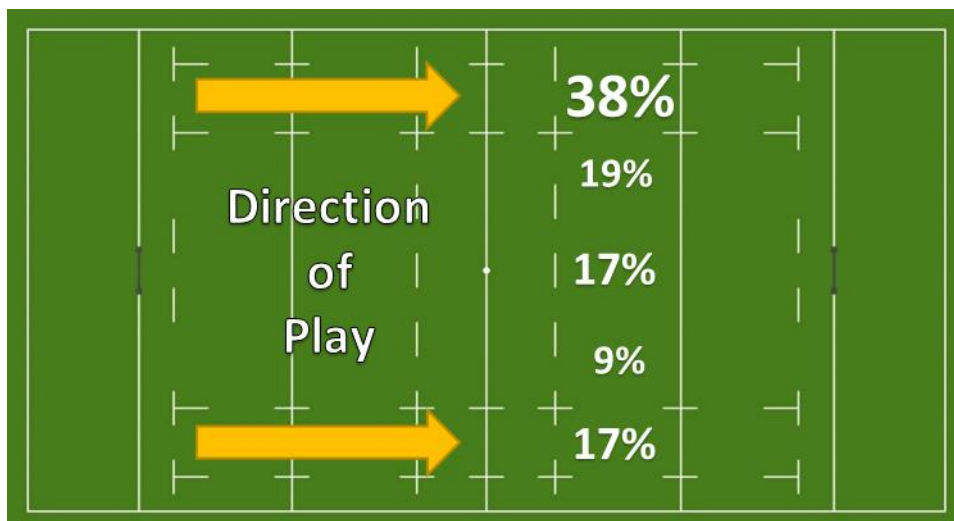
Restarts are the most common set piece in rugby sevens with an average of seven restarts per match. Restarts have been classified into two types, contestable and non-contestable (a long deep kick). **72%** of restarts kicks were contestable (kicked short) and **28%** were non-contestable (kicked long).

Retention rates reflect the number of times that possession was regained at contestable restarts. Overall, of all **contestable restarts**, the **kicking team regained possession 29% of the time**. France was the team most likely to kick a contestable restart with 23 in total, while **Fiji** was the most successful in regaining their own kick-off, winning 8 of 19. **Kenya** had a restart regained percentage of 50, but kicked only 2 contestable restarts, instead they kicked long on 75% of occasions.



The graph above shows a team’s restart regained percentage in blue, and their receipt retention in green. Receipt secured refers to the ability of a team to win an opposition’s contestable restart. As shown above the France and Russia were the most successful teams in securing their receipt, winning 86% of contestable restarts kicked to them.

Of the 47 restarts that were regained, the graphic below shows that **45%** were won in the **centre** of the pitch. **38%** were recovered down the left channel and **17%** down the right.



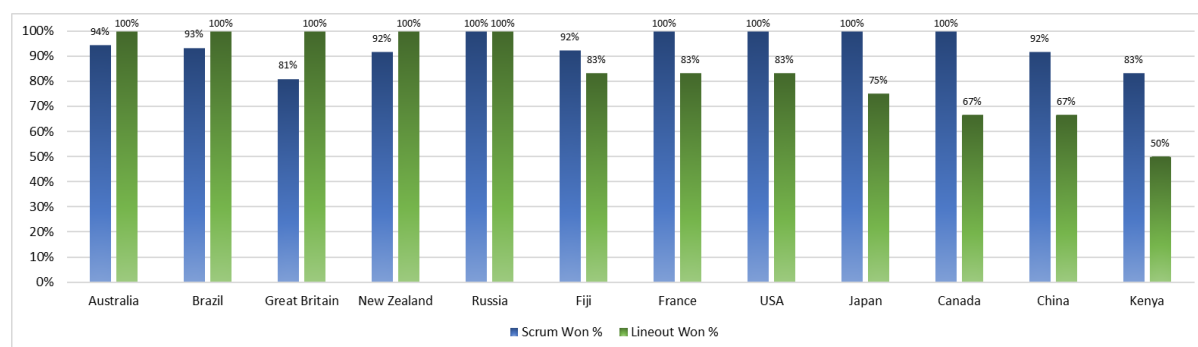
## SCRUMS

On average, there were **4.5 scrums** per match, and increase from 3.3 per match on the Sevens Series and 3.5 in Rio 2016. Scrums had the highest retention rates of all set piece with a **93% success rate**, lower than both Rio (94%) and the Series (99%). The most scrums in a match were 8, when Russia played China. And the match between Australia and Japan featured only one.

## LINEOUTS

**Lineouts** per match reduced on average in Tokyo 2020 to **1.7 per game**, down from 2.3 in Rio 2016. **Lineout success** from a teams' own throw rose to **86%** in Tokyo, compared to 76% in Rio. The match between Japan and China contained 4 lineouts, and there were three matches where there were no lineouts at all.

The graph below shows the success rate for each teams' scrum and lineout. Russia was the only team to win 100% of their own scrums and lineouts, while 5 teams won all their lineout throws, and 5 successful on 100% of scrum feeds.



One reason for the increase in scrums per match is the option a team chooses after being awarded a penalty. **Teams opted for a scrum on 29** occasions, compared to Rio where no team selected a scrum to restart play. Great Britain elected to take a scrum 13 times.

A **Quick Tap** was chosen **65%** of the time, while a **Set Tap** was run on **21%** of occasions. No team attempted a penalty kick for goal, and there were no penalty tries awarded.

Team	Kick to Touch	Quick Tap	Set Tap	Scrum
Australia		15	12	
Brazil		22		
Canada	1	21	5	
China		14	7	2
Fiji	1	23	4	
France	1	26		
Great Britain	3	19	1	13
Japan		16	11	1
Kenya	1	13	6	2
New Zealand	1	18	14	1
Russia	6	8	2	3
USA	1	7	2	7
<b>TOTALS</b>	<b>15</b>	<b>202</b>	<b>64</b>	<b>29</b>

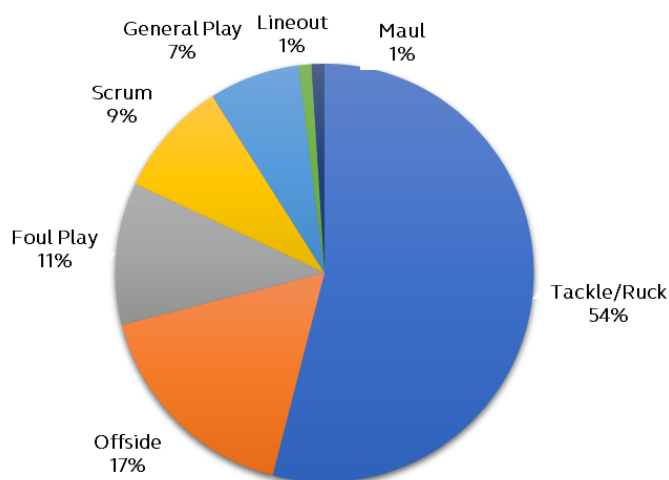
## SHAPE OF THE GAME: SANCTIONS

### PENALTIES, FREE KICKS and CARDS

The average **number of penalties and free kicks per game** was **9.1** and **average numbers of cards** given was **0.4**. The highest number of penalties awarded in a game was 16 which occurred when the Fiji defeated Australia in the Quarter finals. The minimum number of penalties awarded was 4 which occurred twice, when Australia played against China and against Russia. Fiji was the most penalised team conceding 41, and New Zealand were the least, conceding only 15. Brazil received the most yellow cards at Tokyo 2020 with 4, while there were no red cards.

Team	Penalties For	Penalties Against	Cards
Australia	27	18	
Brazil	21	29	4
Canada	27	26	1
China	24	22	1
Fiji	29	41	1
France	26	30	1
Great Britain	36	20	1
Japan	28	24	
Kenya	22	35	
New Zealand	34	15	
Russia	19	23	3
USA	17	27	
<b>TOTALS</b>	<b>310</b>	<b>310</b>	<b>12</b>

Of all **penalties** awarded **35% were against the attacking team** and 65% against the defending team. As the chart below shows, **54% of all penalties occurred at the tackle or ruck**, 17% were for offside, and 11% were for foul play.



At the ruck, **40% of penalties were conceded by the ball carrier**, 22% by the tackler, 28% by the jackler, and 11% by other arriving players.