



## ***PERFORMANCE DATA ANALYSIS OLYMPIC GAMES – TOKYO 2020: OVERVIEW OF THE MOST IMPORTANT TECHNICAL PARAMETERS OF THE TOKYO OLYMPIC GAMES***

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# PERFORMANCE DATA ANALYSIS OLYMPIC GAMES – TOKYO 2020 OVERVIEW OF THE MOST IMPORTANT TECHNICAL PARAMETERS OF THE TOKYO OLYMPIC GAMES

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## INTRODUCTION

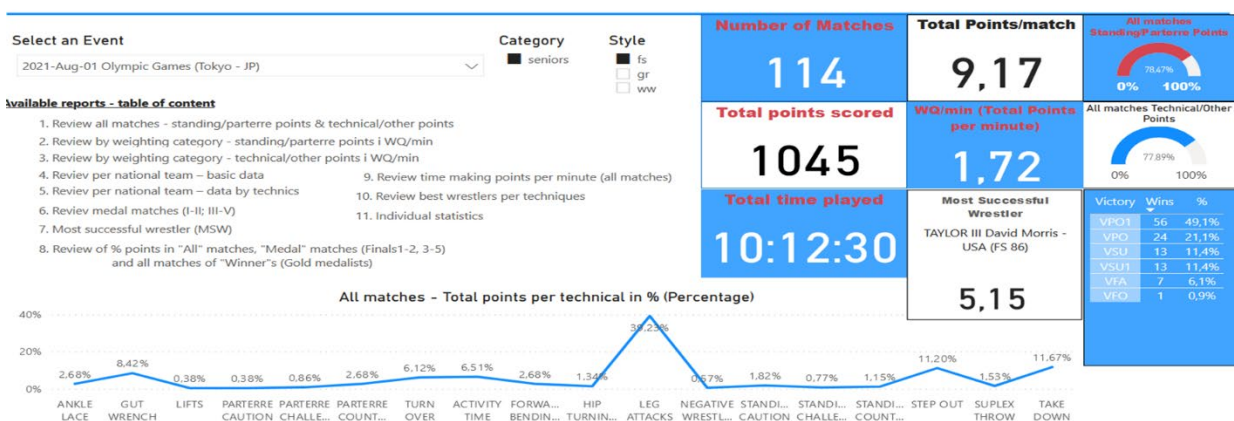
The next few pages will present the most important technical data from the Tokyo 2020 Olympic Games. All this data is available through the "performance data analysis" platform at the internet address <http://uww.io/wpar>. This analysis provides basic information about the current state of world wrestling. The disadvantage is that this type of analysis has not been done continuously in the past. A comparison with the European championship 2020 was made for the three most important data. It would be best to make a comparison of the last 3 world championships and the last Olympic games.

## Freestyle



United World Wrestling - Performance Analysis report

Interactive version of this report is available online at <http://uww.io/wpar>.

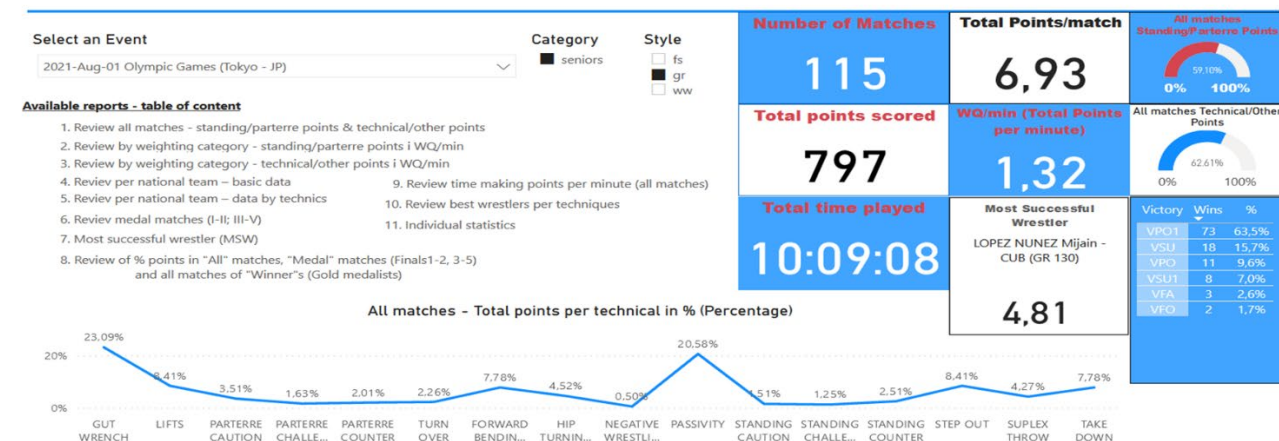


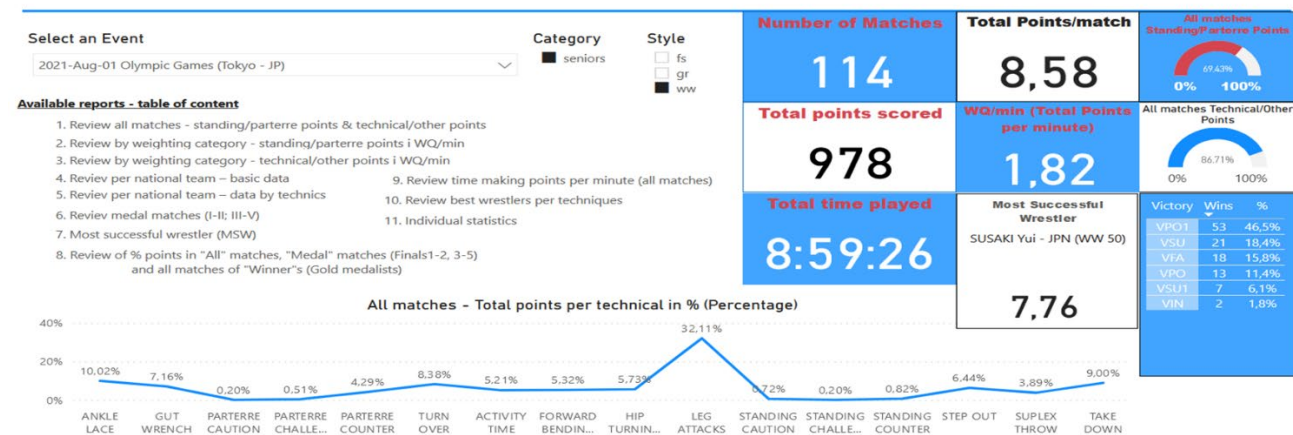
## Greco-Roman



United World Wrestling - Performance Analysis report

Interactive version of this report is available online at <http://uww.io/wpar>.





## OVERVIEW OF THE MOST IMPORTANT DATA FROM TOKYO OLYMPIC GAMES 2021 & EUROPEAN CHAMPIONSHIPS ROME 2020

### 1.1 ALL matches: STANDING/PARTIERE points in %

TOKYO Olympic Games 2021			ROME European Championship 2020		
Style	Standing	Parterre	Style	Standing	Parterre
FS	78.47	21.53	FS	75.38	24.62
GR	59.10	40.90	GR	56.87	43.13
WW	69.43	30.57	WW	68.57	31.25

Similar results are seen from OG and ECH when looking at percentage points in standing and parterre. In FS, the most points are made in standing, and in GR style, the number of points from the parterre is the highest compared to the other two styles.

### 1.2 WQ/min (Total points per minute)

TOKYO Olympic Games 2021		ROME European Championship 2020	
Style	WQ/min	Style	WQ/min
FS	1.72	FS	1.71
GR	1.27	GR	1.53
WW	1.81	WW	1.84

In GR style at the OG there are very few points per minute of the match (1.27) and significantly less than from the ECH (1.53). The best results were obtained from WW in both the OG and ECH. Anything below 1.5 points per minute of matches is considered a bad result, which means that there are not many technical points in these matches. The results in the GR style are especially bad, as there were only 797 points in 115 matches (in FS there are 1045 points).

In FS and WW, superiority is a 10-point difference and in GR style it is 8 points, which can have an impact on these results.

### 1.3 All matches: TECHNICAL/OTHER POINTS in %

TOKYO Olympic Games 2021			ROME European Championship 2020		
Style	Technical Points %	Other Points %	Style	Technical Points %	Other Points %
FS	77.89	22.11	FS	82.03	17.97
GR	62.61	37.39	GR	67.14	32.86
WW	86.71	13.29	WW	86.75	13.25

If one looks at the results from both the OG and ECH it is evident that in all three styles the results are worse. The situation is especially alarming in the GR style, where only 62.61% of points scored for wrestling techniques are observed in the Olympic Games, while 37.39% of points are awarded for passivity or other

penalties. There is also a negative tendency in FS to win less and less points from wrestling actions, and in OG, wrestlers receive over 22% of points as a gift from the judges. Only the situation in WW is very good and as many as 87% of the points are technical points.

## 2.0 OLYMPIC GAMES TOKYO 2021

### 2.1 The top three WRESTLING TECHNIQUES that are most performed in each style

	Leg Attacks	Takedown	Gut Wrench	Lifts	Ankle Lace
FS	32.23%	11.67%	8.42%	-	-
GR	-	7.78%	23.09%	8.41%	-
WW	32.11%	9.00%	-	-	10.02%

At the OG in FS and WW is the absolute dominance of wrestling technique leg attacks accounting for 1/3 of all points in these two styles.

In WW, a significant percentage of points is for the technique Ankle lace (over 10%) and in FS technique Take down exceeds 11% of all points.

In the GR style, the dominant technique is the Gut wrench with 23% of points. None of the other techniques exceed 10%.

### 2.2 Other Points by Style

	Step Out	Activity Clock	Standing Caution	Passivity	Parterre Caution	Parterre Challenge
FS	11.20%	6.51%	1.82%	-	-	-
GR	8.41%	-	-	20.58%	3.51%	-
WW	6.44%	5.21%	-	-	-	0.51%

The biggest problem in GR is the very large number of points decided by judges and not wrestlers, and it amounts to as much as 21% of all points in GR style for passivity. The second largest other points is from "step out" with 8.41% points.

In FS the largest part of other points is for Step out which amounts to 11.20% of points. Which is a rather high percentage for pushing a wrestler out of a circle.

In WW other points are very under represented compared to the other two wrestling styles (FS and GR).

### 2.3 Most points: Wrestling techniques (3 best) / by style and weight category

FS				GR				WW			
Category	Leg Attacks	Take down	Gut Wrench	Category	Gut Wrench	Lifts	Take Down	Category	Leg Attacks	Ankle Lace	Take down
57 kg	86	22	6	60 kg	32	4	26	50 kg	48	36	20
65 kg	70	20	14	67 kg	18	20	12	53 kg	56	22	14
74 kg	86	24	10	77 kg	10	27	2	57 kg	44	4	22
86 kg	72	20	20	87 kg	32	10	4	62 kg	48	8	16
97 kg	42	10	12	97 kg	40	4	14	68 kg	74	22	12
125 kg	54	26	26	130 kg	52	4	4	76 kg	44	6	4

In table 2.3, you can see which techniques are most represented in the different weight categories. These tables are of special importance for wrestling coaches. Based on this analysis, they can see which techniques are more and which are less important in relation to the weight category.

## 2.4 EFFICIENCY-WQ/min (by category)

FS		GR		WW	
Category	WQ/min	Category	WQ/min	Category	WQ/min
57 kg	1.90	60 kg	1.43	50 kg	2.69
65 kg	1.59	67 kg	1.57	53 kg	2.00
74 kg	2.01	77 kg	1.38	57 kg	1.51
86 kg	1.75	87 kg	1.25	62 kg	1.68
97 kg	1.40	97 kg	1.18	68 kg	1.82
125 kg	1.70	130 kg	1.13	76 kg	1.45
<b>Average</b>	1.72	<b>Average</b>	1.27	<b>Average</b>	1.81

Table 2.4 shows in which weight categories the most technical points were made per minute of wrestling (WQ/ min). In FS it is the weight category 74 kg (2.01). In the GR style, it is a weight category of 67 kg (1.57). In WW it is the 50 kg weight category (2.69). This category is the best of all 18 weight categories in the Olympic Games.

The weight category where the least points were made in the OG is the 130 kg in GR with a WQ / min of only of 1.13 points per minute of wrestling.

## 2.5 REVIEW BY WEIGHT CATEGORY- STANDING/PARTERRE POINTS IN %

FS			GR			WW		
Category	Standing	Parterre	Category	Standing	Parterre	Category	Standing	Parterre
57 kg	81.00	19.00	60 kg	67.38	32.62	50 kg	57.95	42.0
65 kg	80.57	19.43	67 kg	65.84	34.16	53 kg	64.20	35.80
74 kg	76.04	23.96	77 kg	53.49	46.51	57 kg	79.33	20.67
86 kg	78.82	21.18	87 kg	66.92	33.08	62 kg	69.74	30.26
97 kg	80.56	19.44	97 kg	54.84	45.16	68 kg	74.57	25.43
125 kg	73.78	26.22	130 kg	66.06	33.94	76 kg	75.00	25.00
<b>Average</b>	78.47	21.53	<b>Average</b>	59.10	40.90	<b>Average</b>	69.43	30.57

These three tables are very important for coaches. From these data, it is very clear in which categories more and in which less techniques are performed from the standing position, and in which more techniques are performed from the parterre position. Based on these data, trainers should make their training plans differently for weight categories.

## 2.6 REVIEW BY WEIGHT CATEGORY- TECHNICAL/OTHER POINTS IN %

FS			GR			WW		
Category	Technical	Other	Category	Technical	Other	Category	Technical	Other
57 kg	78.50	21.50	60 kg	67.38	32.62	50 kg	91.79	8.21
65 kg	70.86	29.14	67 kg	65.84	34.16	53 kg	88.64	11.36
74 kg	81.25	18.75	77 kg	53.49	46.51	57kg	83.33	16.67
86 kg	81.18	18.82	87 kg	66.92	33.08	62 kg	82.89	17.11
97 kg	75.00	25.00	97 kg	54.84	45.16	68 kg	89.60	10.40
125 kg	79.88	20.12	130 kg	66.06	33.94	76 kg	81.06	19.94
<b>Average</b>	77.89	22.11	<b>Average</b>	62.61	37.39	<b>Average</b>	86.71	13.29

Similar to the previous table, these are of great importance for coaches, to know in which weight categories wrestlers prefer to perform wrestling techniques, and in which categories they tactically wrestle with very few performed wrestling techniques.

There are two categories in the GR style where the number of other points (meaning for points where wrestling techniques are not performed) is almost the same as the scoring of technical points. These are in the GR style category 77 kg (46.51%) and 97 kg (45.16%). These data show that not many wrestling techniques have been seen in these weight categories, and that is certainly not attractive to spectators.

## 2.7 REVIEW BY POINTS FOR TOP NATIONAL TEAMS

### National Teams Performance - Points WIN

Team	ANKLE LACE	GUT WRENCH	LIFTS	PARTERRE CAUTION	PARTERRE CHALLENGE	PARTERRE COUNTER	TURN OVER	ACTIVITY TIME	FORWARD BENDING THROW	HIP TURNING THROW	LEG ATTACKS	NEGATIVE WRESTLING	STANDING CAUTION	STANDING CHALLENGE	STANDING COUNTER	STEP OUT	SUPLEX THROW	TAKE DOWN
USA	8	10			1	1	6	5	4		72		1		4	17		10
ROC	4	12			1	3	10	9	2		42	1	2	1		18	4	26
KAZ	6	12	4			2	4	4			28	2	2		2	6		14
IRI		10		2			2	10			28		1	1		16	4	8
IND						2	8	3	2		42		1		2	5		10

### National Teams Performance - Points LOST

Team	ANKLE LACE	GUT WRENCH	LIFTS	PARTERRE CAUTION	PARTERRE CHALLENGE	PARTERRE COUNTER	TURN OVER	ACTIVITY TIME	FORWARD BENDING THROW	HIP TURNING THROW	LEG ATTACKS	NEGATIVE WRESTLING	STANDING CAUTION	STANDING CHALLENGE	STANDING COUNTER	STEP OUT	SUPLEX THROW	TAKE DOWN
KAZ	4	2		1	1	5	6	2	4		40	1	5	1		5		4
CUB		10				2		3			20		1			5		16
IND	6	6			1	2	4	4			20		1	1		9		2
UZB	12					1	4	1	2		14			1	2	7		8
IRI		2		1		2	2	2			30		1			5		4

## GR

### National Teams Performance - Points WIN

Team	GUT WRENCH	LIFTS	PARTERRE CAUTION	PARTERRE CHALLENGE	PARTERRE COUNTER	TURN OVER	FORWARD BENDING THROW	HIP TURNING THROW	NEGATIVE WRESTLING	PASSIVITY	STANDING CAUTION	STANDING CHALLENGE	STANDING COUNTER	STEP OUT	SUPLEX THROW	TAKE DOWN
ROC	28	6	6	1		2	12	4		18			2	6		8
IRI	16	8	2	1		4	10		2	14	2	2	2	10	2	16
CUB	14	4					6		2	11			2	11		8
GER	12	12	2	2	2				10	2	1	2	2	3		2
UKR	6	8		1		2	4	4		10		1	2	1		6

### National Teams Performance - Points LOST

Team	GUT WRENCH	LIFTS	PARTERRE CAUTION	PARTERRE CHALLENGE	PARTERRE COUNTER	TURN OVER	FORWARD BENDING THROW	HIP TURNING THROW	NEGATIVE WRESTLING	PASSIVITY	STANDING CAUTION	STANDING CHALLENGE	STANDING COUNTER	STEP OUT	SUPLEX THROW	TAKE DOWN
IRI	14	9	4	3		2	4		10	4			2	7		2
EGY	6					2	8	4		6	2	4	4	5		8
TUN	12	16	2	1				4		4					4	2
ARM		2	8	1		2		8		9	2	1	2	3		2
ALG	18	4			2					7				3		4

## WW

### National Teams Performance - Points WIN

Team	ANKLE LACE	GUT WRENCH	PARTERRE CAUTION	PARTERRE CHALLENGE	PARTERRE COUNTER	TURN OVER	ACTIVITY TIME	FORWARD BENDING THROW	HIP TURNING THROW	LEG ATTACKS	STANDING CAUTION	STANDING CHALLENGE	STANDING COUNTER	STEP OUT	SUPLEX THROW	TAKE DOWN
JPN	28	12				8	10	4	6	38		1		11	4	20
USA	24	2	1	1	6	10	4	2		64	1		2	5		18
CHN	6	6			3	10	4		4	26				3	8	2
KGZ				1		12	3	16		32				2		6
MGL	18	4	1		3	2	1	4	8	14				1	12	2

### National Teams Performance - Points LOST

Team	ANKLE LACE	GUT WRENCH	PARTERRE CAUTION	PARTERRE CHALLENGE	PARTERRE COUNTER	TURN OVER	ACTIVITY TIME	FORWARD BENDING THROW	HIP TURNING THROW	LEG ATTACKS	STANDING CAUTION	STANDING CHALLENGE	STANDING COUNTER	STEP OUT	SUPLEX THROW	TAKE DOWN
MGL	2	16			2	6	2	8	2	32	3	1	2	13		14
ROC	4	8			6		5	16		24	1		2	5	16	4
CHN	12	2	1	1	4	4	5	10		30		1		4		2
UKR	6				4	12	1	4		22				1		6
USA	2	8			5	4	6		8	10				1	4	6

These three tables show where the points are won and lost are of great importance for all national wrestling coaches. From these tables, it can be clearly seen in which segments of technique their wrestlers were good and in which they were bad. Also, these tables can serve all coaches to be able to make a quality report on the championships where all the data on the performance of their national team is recorded.

## 2.8 REVIEW 3 ELEMENTS WITH THE MOST POINTS IN 3 PHASES OF THE COMPETITION- ALL MATCHES, MEDAL MATCHES, ALL MATCHES WINNERS

### TECHNICAL POINTS

<b>FS</b>	<b>Leg Attack</b>	<b>Takedown</b>	<b>Gut Wrench</b>
ALL MATCHES	39.23%	11.20%	8.42%
MEDAL MATCHES	38.03%	19.90%	2.82%
ALL MATCH WINNERS	42.06%	11.16%	7.73%
<b>GR</b>	<b>Gut Wrench</b>	<b>Lifts</b>	<b>Takedowns</b>
ALL MATCHES	20.58%	8.41%	7.78%
MEDAL MATCHES	21.14%	12.98%	4.58%
ALL MATCH WINNERS	21.05%	9.21	11.84%
<b>WW</b>	<b>Leg Attacks</b>	<b>Ankle Lace</b>	<b>Takedown</b>
ALL MATCHES	32.11%	10.02%	9.00%
MEDAL MATCHES	30.00%	17.14%	14.29%
ALL MATCH WINNERS	36.36%	16.27%	11.48%

### OTHER POINTS

<b>FS</b>	<b>Step Out</b>	<b>Activity Clock</b>
All Matches	11.20%	6.51%
Medal Matches	16.90%	9.15%
All Match Winners	11.16%	4.72%
<b>GR</b>	<b>Passivity</b>	<b>Step Out</b>
All Matches	20.56%	8.41%
Medal Matches	22.14%	9.92%
All Match Winners	21.05%	11.84%
<b>WW</b>	<b>Activity Clock</b>	<b>Step Out</b>
All Matches	5.21%	6.44%
Medal Matches	4.49%	4.29%
All Match Winners	7.66%	3.35%

Considering the results from the previous tables, scientists can make numerous scientific papers with different types of correlations between points won or lost at, different stages of the competition. They are not the same data for all matches from data for matches for medals or only matches that the winners had. In addition to scientists, coaches are the ones who need to draw certain conclusions from these data and prepare various types of tactics depending on the stage of the competition and whether it is a qualifying match or a medal match. As an example, we can take the results of other points in FS, where in medal matches as many as 16.90% of points were won due to the opponents exit from the mat and significantly differ from other matches in other phases of the competition at the Olympic Games.

## 2.9 MOST SUCCESSFUL WRESTLERS (MSW) FROM TOKYO OLYMPIC GAMES - FIRST 3 PLACES

<b>FS</b>				<b>GR</b>				<b>WW</b>			
Wrestler	Cat. Kg	Team	MSW Index	Wrestler	Cat. Kg	Team	MSW Index	Wrestler	Cat. Kg	Team	MSW Index
Taylor, D.	86	USA	5.15	Lopez, M.	130	CUB	4.81	Susaki, Y.	50	JPN	7.76
Sidakov, Z.	74	ROC	4.76	Geraii, M.	67	IRI	3.81	Mensa-Stock, T.	68	USA	4.55
Stevesson, G.	125	USA	4.25	Orta, M.	60	CUB	3.70	Mukaïda, M.	53	JPN	4.15

This should become the practice of declaring the most successful wrestler in every style at every championship. It is necessary to point out who is the most successful (most successful wrestler) of the 6 champions from the Olympic Games, or of the 10 champions from the World Championships. This is important for several reasons. If the most successful wrestlers are announced and rewarded, it will significantly increase the attractiveness, because the best wrestlers will always strive to make as many technical points as possible, or to win by technical superiority and not be satisfied with a minimal victory in the match. If the most successful wrestlers are proclaimed, it will mean a lot for all media to be able to present the heroes of the mat in a much more objective and efficient way.

## INDEX FORMULA FOR MOST SUCCESSFUL WRESTLER (IMS)

$$\text{IMS} = (\text{WQ}/\text{minW} - \text{WQ}/\text{minL}) + (\text{CPW}/\text{NM} - \text{CPL}/\text{NM})$$

### Where:

IMS – Index most successful (wrestlers)

WQ/minW– Number of (+) points scored per 1 minute

WQ/minL – Number lost (-) points per 1 minute

CPW – Classification points WIN (+)

CPL – Classification points lost (-)

NM – Number of matches

At the Olympic Games in Tokyo MSW (Most successful wrestlers) were: FS – David TAYLOR, {USA} winner of the 86 kg category; GR – Milian LOPEZ (CUB) winner in 130 kg category (none of his opponents scored any technical points in 4 matches) and WW – Yui SUSAKI (JPN) the winner in the 50 kg category, who had a total technical score of 41-0.

## 2.10 REVIEW OF ALL MATCHES WITH RECORDED POINTS AND TIME OF EXECUTION

FS		GR		WW	
Time	Points	Time	Points	Time	Points
00:00-01:00	83	00:00-01:00	49	00:00-01:00	141
01:00-02:00	194	01:00-02:00	281	01:00-02:00	201
02:00-03:00	229	02:00-03:00	92	02:00-03:00	191
03:00-04:00	163	03:00-04:00	160	03:00-04:00	130
04:00-05:00	186	04:00-05:00	132	04:00-05:00	147
05:00-06:00	190	05:00-06:00	83	05:00-06:00	168
Total points	1045	Total points	797	Total points	978

This is of great importance for coaches to have an overview of when and in which minutes more points are made and in which fewer points. Based on these data, coaches should make a plan of preparation for the competition, taking into account the time parameters shown. From these tables it can be seen that in FS the most points are in the 3rd minute of the fight, and in GR and WW in the second minute of the fight.

## 2.11 REVIEW OF BEST WRESTLER SCORING WITH TOP 3 TECHNIQUES

FS		
Technique	Wrestler	Points
Leg Attack	Kumar, R. (IND) 57 kg	30
Takedown	Niyazbekov, D. (KAZ) 65 kg	12
Ankle Lace	Gilman, T. (USA) 57 kg	8

GR		
Technique	Wrestler	Points
Gut Wrench	Kayaalp, R. (TUR) 130 kg	14
	Michalik, T. (POL) 85 kg	14
Lifts	Staebler, F. (GER) 67 kg	12
Takedown	Saravi, M. (IRI) 97 kg	10

WW		
Technique	Wrestler	Points
Leg Attacks	Mensa-Stock, T. (USA) 68 kg	20
Ankle Lace	Hildebrandt, S. (USA) 55 kg	18
Takedown	Kawai, Y. (JPN) 62 kg	14



These data are of great importance for both wrestlers and the media. After the end of the championship, it remains for the media to be able to write about the wrestling and to analyze the championship from several angles, and to represent not only the medal winners, but also specialists in certain wrestling techniques.

## 2.12 INDIVIDUAL PERFORMANCE FOR ALL WRESTLERS - POINTS WON AND LOST FROM ALL TECHNIQUES

This is one of the most important analyses of all that has been presented. In table 2.12 one sees all the wrestlers who performed at the Olympic Games, (290) with all of the techniques with which they won points and of all the techniques with which they lost points.

This review is of great importance for all coaches to have an overview of their wrestler's techniques in one place.

### An example: JAPAN National Women's Team

		Individual Performance - Points WIN											
Team		ANKLE LACE	GUT WRENCH	TURN OVER	ACTIVITY TIME	FORWARD BENDING THROW	HIP TURNING THROW	LEG ATTACKS	STANDING CHALLENGE	STEP OUT	SUPLEX THROW	TAKE DOWN	Total
☐	<b>JPN</b>	<b>28</b>	<b>12</b>	<b>8</b>	<b>10</b>	<b>4</b>	<b>6</b>	<b>38</b>	<b>1</b>	<b>11</b>	<b>4</b>	<b>20</b>	<b>142</b>
	DOSHO Sara					4		2	1				7
	KAWAI Risako		2	2	3					1		14	22
	KAWAI Yukako	8			3			12		2		2	27
	MINAGAWA SUZUKI Hiroe			2	2			2		6			12
	MUKAIDA Mayu	8	8		1		2	12		2			33
	SUSAKI Yui	12	2	4	1		4	10			4	4	41
	<b>Total</b>	<b>28</b>	<b>12</b>	<b>8</b>	<b>10</b>	<b>4</b>	<b>6</b>	<b>38</b>	<b>1</b>	<b>11</b>	<b>4</b>	<b>20</b>	<b>142</b>

		Individual Performance - Points LOST							
Team		ANKLE LACE	GUT WRENCH	PARTERRE CAUTION	ACTIVITY TIME	LEG ATTACKS	STEP OUT	Total	
☐	<b>JPN</b>	<b>6</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>24</b>	<b>1</b>	<b>38</b>	
	DOSHO Sara	6				8		14	
	KAWAI Risako				1	2		3	
	KAWAI Yukako				2	4	1	7	
	MINAGAWA SUZUKI Hiroe				1	4		5	
	MUKAIDA Mayu		2	1		6		9	
	<b>Total</b>	<b>6</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>24</b>	<b>1</b>	<b>38</b>	