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Scoring Analysis of the Wrestling from the 2016 Rio Olympic Games

Harold Tünnemann¹ and David G. Curby²

ABSTRACT. The videos of all wrestling matches from the 2016 Olympic Games in Rio were analyzed for scoring and technique. Summaries were compiled for all three styles—Men's Freestyle, Women's Freestyle, and Greco-Roman. The performance of the top countries and the champions are presented. Attack efficacy, represented by points scored per minute, is presented for the style as a whole for the top countries and for the weight-class champions. The technical structure of the champions, with scoring by type of technique, is also presented. This was done for all three styles—Men's Freestyle, Women's Freestyle, and Greco-Roman. Trends observed during the Olympic cycle between London 2012 and Rio 2016 are discussed.

Keywords: rules, scoring analysis, competition, history, Olympics

PRELIMINARY REMARKS

The extremely fair and enthusiastic crowds in the Carioca Arena 2, along with the numerous volunteers, who were always polite and enthusiastic, made the Rio Games ones of hope and glory. For fans, young and old, the games were a fantastic festival of sport. Credit must be extended to our friend Pedro Gama Filho, president of the Brazilian wrestling federation, who prepared the wrestling competition in the Carioca Arena with “body and soul.”

United World Wrestling (UWW) made some serious changes during the Olympic Cycle of 2012–2016 with positive effects and reestablished the value of wrestling in the Olympic family. Changes were seen in the following:

- The scoring system;
- The ratings of technical-tactical actions;
- Overall presentation of the competition; and
- Multimedia presentation.

The most successful medal collectors were Russia and Azerbaijan (9), Japan (7), Turkey and Iran (5), and Cuba, the United States, Georgia, Belarus, Kazakhstan, and

Uzbekistan (3). If we take into consideration the quality of medals, the most successful nations were Russia, Japan, Cuba, the United States, Turkey, Iran, Armenia, Georgia, Canada, and Serbia (see [Table 1](#)). Turkey showed remarkable development (Rio: five medals; London: one medal) and Tunisia as a representative of Africa won its first Olympic wrestling medal.

The stars of the games were of course the athletes. In female wrestling, we must certainly emphasize Kaori Icho (Japan) who became the first ever wrestler in Olympic history to win four Olympic Gold medals, while, in Greco-Roman Wrestling, Mijain Lopez Nunez (Cuba) celebrated being a three-time Olympic Champion.

ANALYSIS OF THE RIO OLYMPIC GAMES 2016 IN FREESTYLE WRESTLING

Country-Specific Aspects

In freestyle wrestling, Azerbaijan, Iran, Russia, the United States, Turkey, Georgia, Uzbekistan, Cuba, Belarus, and Japan were the 10 most successful nations (see [Figure 1](#)).

When we compare the nations' rankings from 2012 to 2016 (see [Figure 2](#)), we can see that Azerbaijan was the best nation and had six more points than in London. Turkey showed great success with their freestyle wrestlers gaining 11 points since London, with Cuba improving by 10 and Belarus by 4 points. The following nations suffered losses: India (-18), Georgia (-15), Japan (-14), Kazakhstan (-12), Russia (-9), and the United States (-6).

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TABLE 1 Medal Standings from the 2016 Rio Olympic Games

Place	Country	GOLD	SILVER	BRONZE	Total
1	Russia	4	3	2	9
2	Japan	4	3	—	7
3	Cuba	2	1	—	3
4	United States	2	—	1	3
5	Turkey	1	2	2	5
6	Iran	1	1	3	5
7	Armenia	1	1	—	2
8	Georgia	1	—	2	3
9	Canada	1	—	—	1
	Serbia	1	—	—	1
11	Azerbaijan	—	3	6	9
12	Belarus	—	1	2	3
	Kazakhstan	—	1	2	3
14	Ukraine	—	1	1	2
15	Denmark	—	1	—	1
16	Uzbekistan	—	—	3	3
17	China	—	—	2	2
	Sweden	—	—	2	2
19	Bulgaria	—	—	1	1
	Germany	—	—	1	1
	India	—	—	1	1
	Italy	—	—	1	1
	Norway	—	—	1	1
	Poland	—	—	1	1
	Romania	—	—	1	1
	Korea	—	—	1	1
	Tunisia	—	—	1	1
Total		18	18	36	72

State of Performance and Development of Freestyle Wrestling

The technical and tactical quality of wrestling depends also on the number of pins. The pin always goes ahead of a demanding and attractive technical/tactical action. Indeed, in Rio in freestyle wrestling, we had seven pins or 5% of all bouts (London had 4 pins or 2.5%). We have a clear increase in the points per minute as a measurement of the wrestling quality (WQ): 1.1 in London compared to 1.6 in Rio. This is a clear indication of successful rule changes adopted by UWW 2013 (see Figure 3). This is also confirmed by a long-term analysis of data since 1976 (see Figure 4).

On closer examination of the quality of points, we observe an increase in the points per bout from London (6.2) compared to Rio (9.2), an increase of two-point actions (see Figure 5). However, it must be taken into account that a comparison of these factors is difficult because of the different point evaluations between London and Rio.

Combat Behavior of the Nations

The performance index is a very good description of the technical–tactical abilities of a given nation or athlete. In this case, the points scored are set in relation to the points given away to the opponent (see Figure 6). If we have a

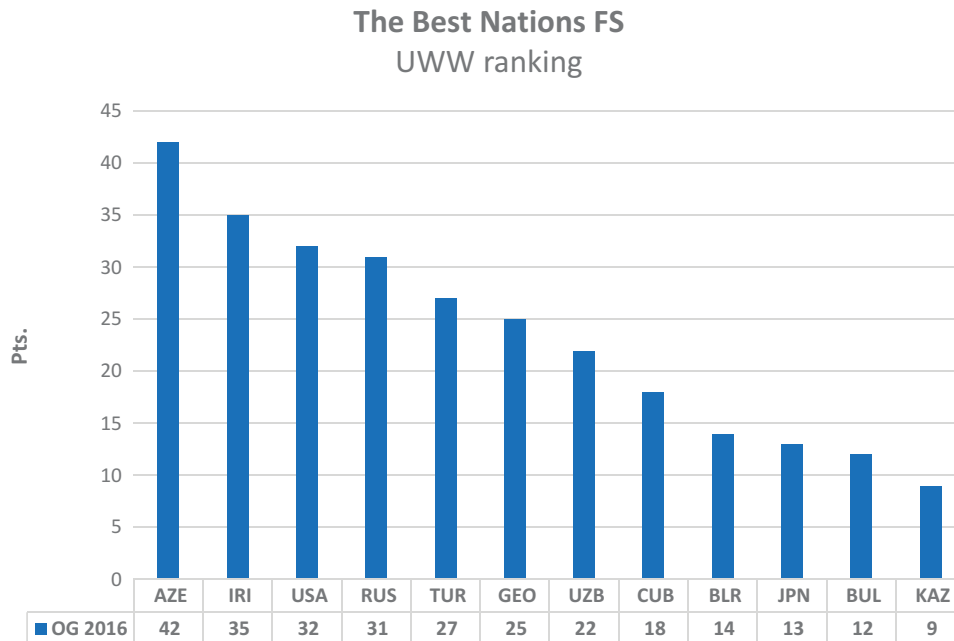


FIGURE 1 The best nations in men's freestyle. FS = men's freestyle.

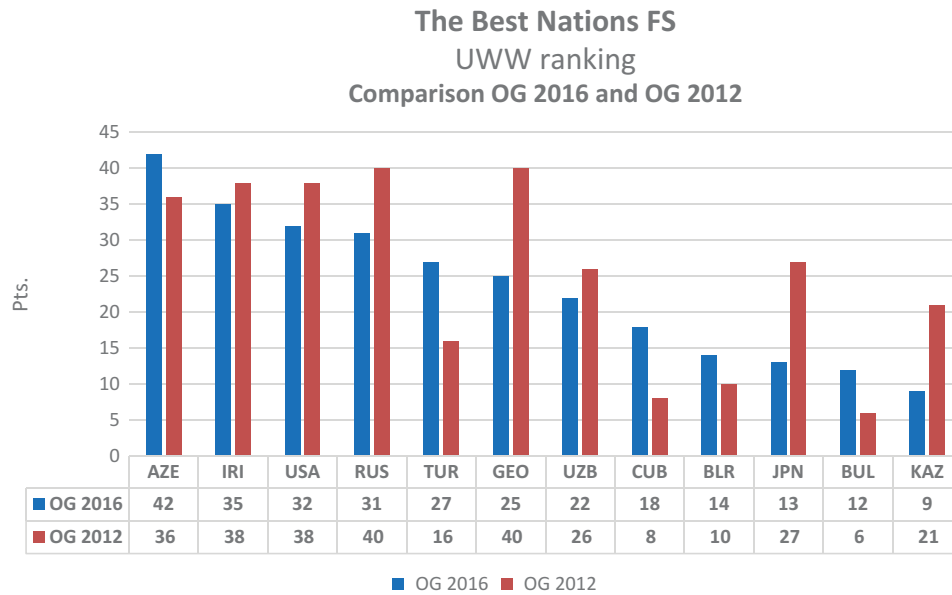


FIGURE 2 The best nations from Rio and their scores from London. FS = men's freestyle.

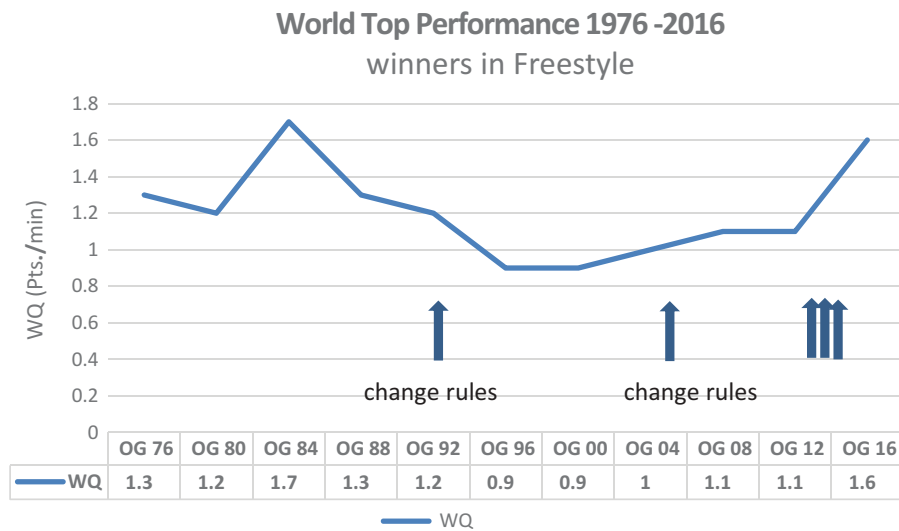


FIGURE 3 Quality of men's freestyle wrestling from London and Rio. FS = men's freestyle.

look at the performance index, an index of the wrestling efficacy, one sees the highest values of Japan, Iran, Russia, and Azerbaijan, followed by Turkey and Georgia. Negative values are seen for the United States, Uzbekistan, Cuba, Belarus, Bulgaria, and Kazakhstan. This negative result means that these countries gave up more points to their opponents than they scored.

The increase or decrease of this wrestling efficacy since 2012 can be an indicator of the quality of the national training concepts and the how well it has succeeded in implementing the rule changes in effective combat concepts (see Figure 7). Seen from this point of view, the wrestlers

from Azerbaijan, Japan, Iran, Russia, and Turkey improved their quality of wrestling dramatically. The United States, Uzbekistan, and Cuba lost their positive attacking values and Belarus, Bulgaria, and Kazakhstan could not turn their negative combat behavior to positive values.

If we take a deeper look into the quality, we can see the reasons for the technical-tactical advantages and disadvantages of the various nations (see Figure 8). The look at the attack efficacy from 2012 and 2016 makes it clear that, with the exception of the United States, all countries considered had in 2016 a better attack efficacy than in 2012 (see Figure 8).

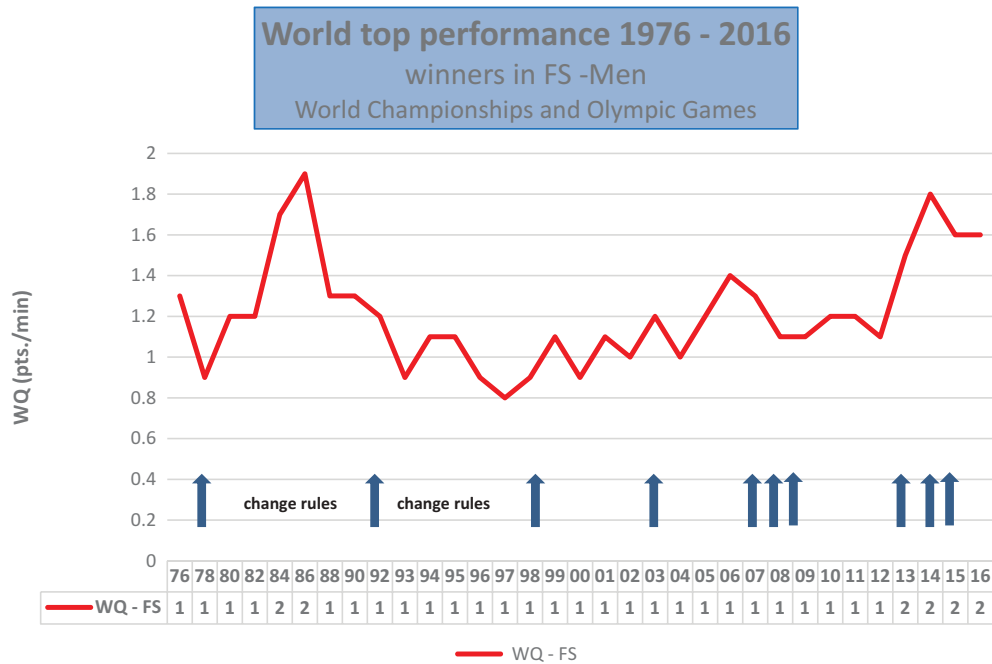


FIGURE 4 Development of the points per minute made by the winners since 1976. FS = men's freestyle.

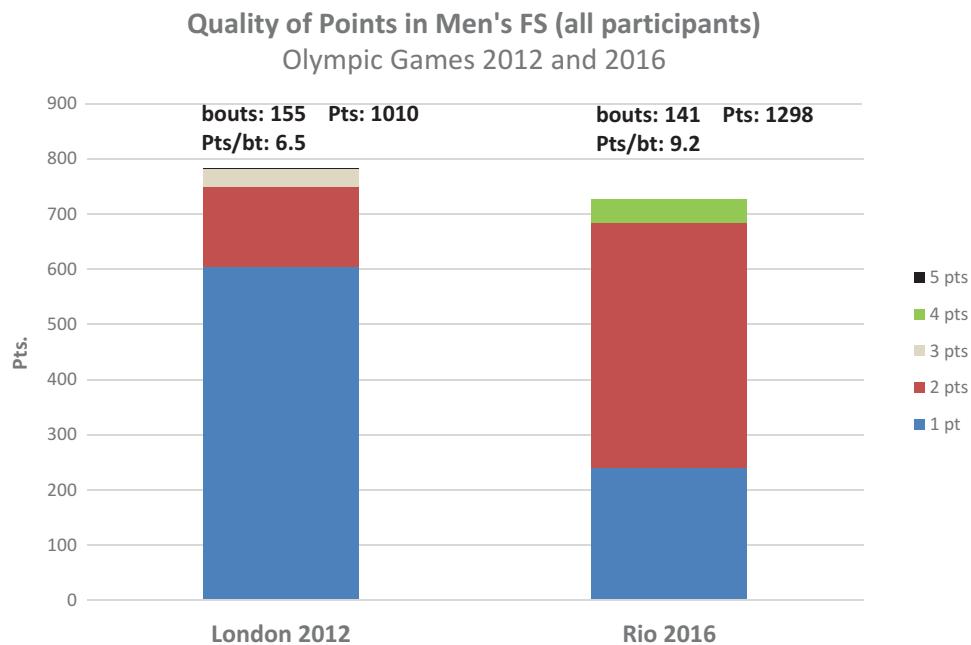


FIGURE 5 Development of the quality of points in freestyle wrestling from London to Rio. FS = men's freestyle.

The improvement in the values of attack effectiveness also results from the rule-driven increase in the evaluation of technical actions but does not explain the values of the U.S. wrestlers. On the other hand, there must be another winning factor if a lot of wrestlers were successful with a

good attack efficacy and others were not. And this becomes clearer if we also examine defensive abilities (see Figure 9). We see a good balance between attack and defensive ability in Azerbaijan, Iran, Russia, Turkey, and Japan, and the problems with defense in the other countries.

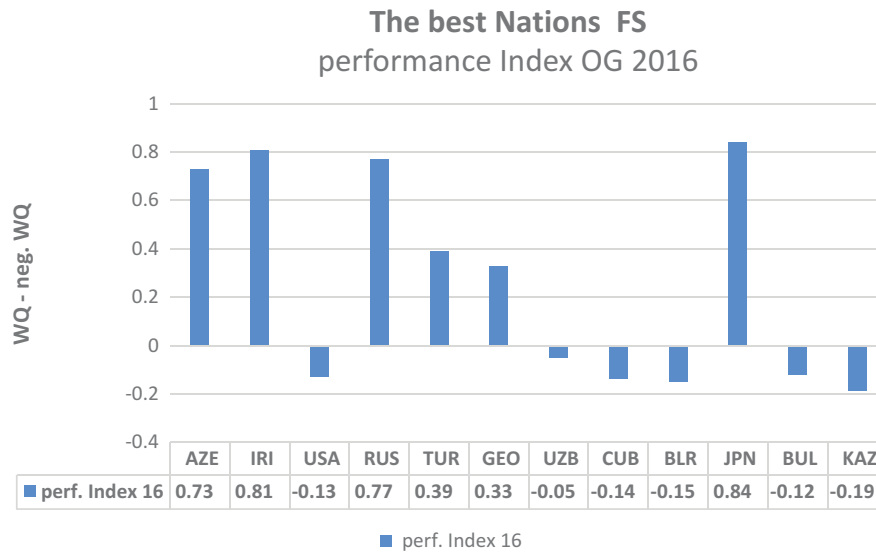


FIGURE 6 Best values of the performance index (wrestling efficacy) of nations. FS = men's freestyle.

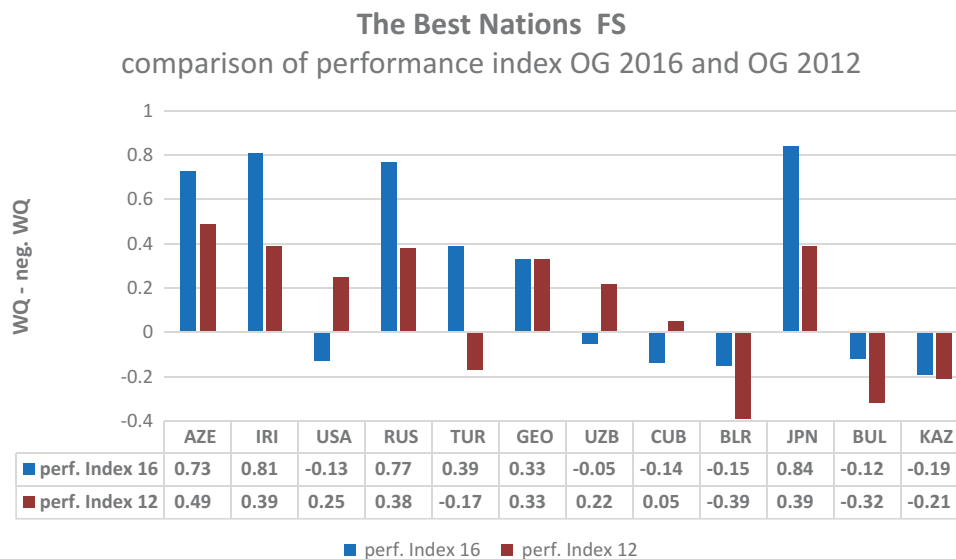


FIGURE 7 Comparison of the wrestling efficacy of nations for 2012 and 2016. FS = men's freestyle.

Combat Behavior of the Winner

The Olympic cycle analysis of 2012–2016 shows the rule-driven increase in wrestling performance since 2013 with the effectiveness of the defense remaining at a high level (see Figure 10).

When we look at the attack efficacy, the domination of the Olympic champions Soslan Romanov (Russia, 65 kg), Hassan Yazdani (Iran, 74 kg), and Taha Akguel (Turkey, 125 kg) becomes evident (Figure 11). They surpass the average 1.59 points per minute of the Olympic champions. By the way, the average for the London Olympic champions was only 1.1. This is evidence for the successful offensive strategy during the Olympic Freestyle Wrestling tournament

that filled the spectators in the Olympic Carioca Arena with so much enthusiasm.

We also have to consider the outstanding defensive abilities of the 2016 Olympic champions, Abdurashid Sadulaev (Russia, 86 kg) and Taha Akguel (Turkey, 125 kg). All the other Olympic champions are far from their level (see Figure 12).

The analysis of the complex wrestling performance of the Olympic champions shows the superiority of Soslan Romanov (Russia, 65 kg), Hassan Yazdani (Iran, 74 kg), and Taha Akguel (Turkey, 125 kg). Not to be forgotten in this respect is Abdurashid Sadulaev (Russia, 86 kg), who is very stable in the defense but does only as much as necessary in the attack (see Figure 13).

Attack efficacy of the best nations FS

Comparison attack efficacy OG 2016 and OG 2012

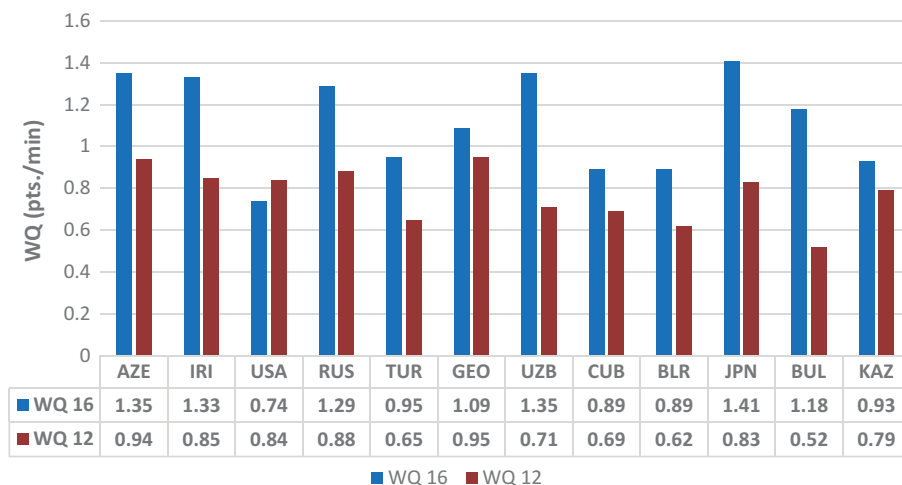


FIGURE 8 Best values of the attack efficacy during the Olympic Games 2012 and 2016. FS = men's freestyle.

Wrestling efficacy of best nations FS

OG 2016



FIGURE 9 Wrestling performance of the best nations in 2016 in Rio. FS = men's freestyle.

It is very important for coaches to analyze the technical-tactical structure of the winner. They must look at the technical capacity of their athletes and compare this with the top athletes of their weight class. It is also very important for the planning of the technical-training process as well as for the training concepts of the promising young talent. Just as in Greco-Roman wrestling, the freestyle wrestlers are also starting their final bouts

with a "safe strategy" (see Figure 14). In the final bouts for gold medal, this tendency of the relatively late first-point score is clear (average after 2.6 minutes). This is especially true for Akguel (Turkey, 125 kg), Yazdani (Iran, 74 kg), and Khinchegashvili (Georgia, 57 kg).

We see in Rio, in general, leg attacks as the dominating techniques followed by the gut wrench, counter, take down,

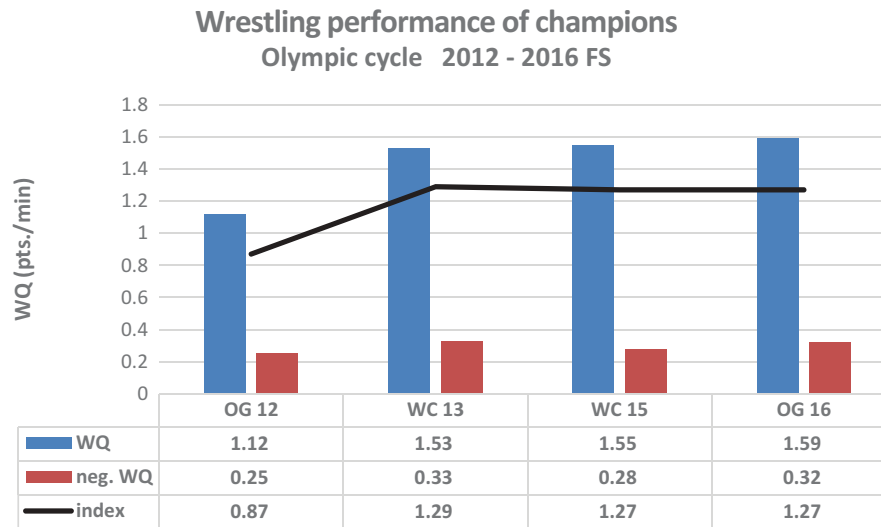


FIGURE 10 Comparison of the wrestling efficacy during the Olympic cycle 2012 and 2016 FS. FS = men's freestyle.

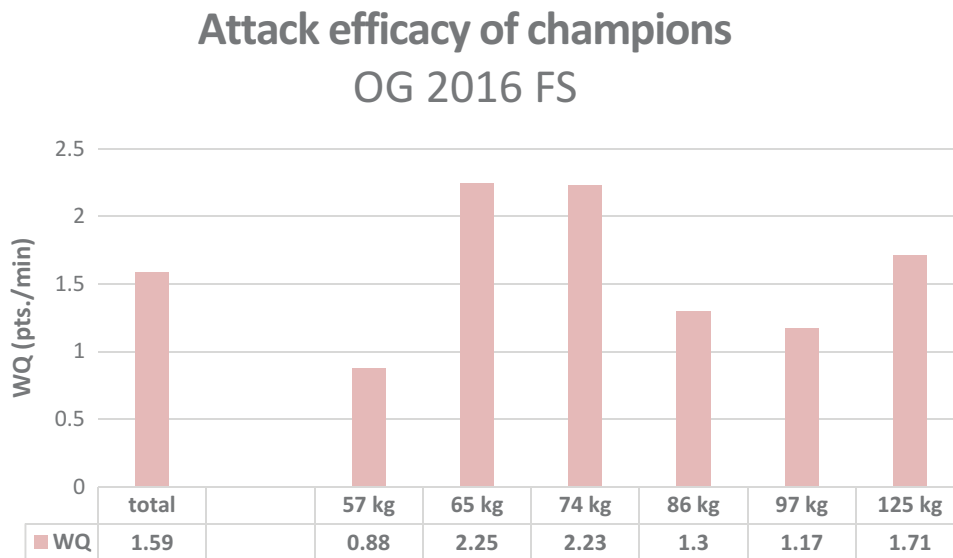


FIGURE 11 Attack efficacy of the Rio Olympic champions in freestyle wrestling. FS = men's freestyle.

and “push out” (see Figure 15). Leg attacks are very popular because after rule changes you can get for one attack four points. Of course, even under the Olympic champions, there are individual differences within the technique profile. So Sadulaev (Russia, 86 kg) and Akguel (Turkey, 125 kg) are very strong with the gut wrench while Khinchegashvili (Georgia, 57 kg) does not prefer this technique. Snyder (United States, 97 kg) is the specialist for “push out” techniques and Yazdani (Iran, 74 kg) is versatile besides leg attacks with ankle lace and take downs.

With a look at the technical structure within the Olympic cycle 2012–2016, it becomes clear that leg attacks are the dominant techniques with a rule-driven

increase since 2013 (see Figure 16). Take downs, gut wrench, and counter also belonged to the most important techniques with different peaks in the different years. Overall, there is a high technical–tactical versatility in the cycle 2012–2016.

ANALYSIS OF THE RIO OLYMPIC GAMES 2016 IN WOMEN'S FREESTYLE

Country-Specific Aspects

In women's freestyle wrestling, Japan was once again the measure of all things with 49 nation points. The

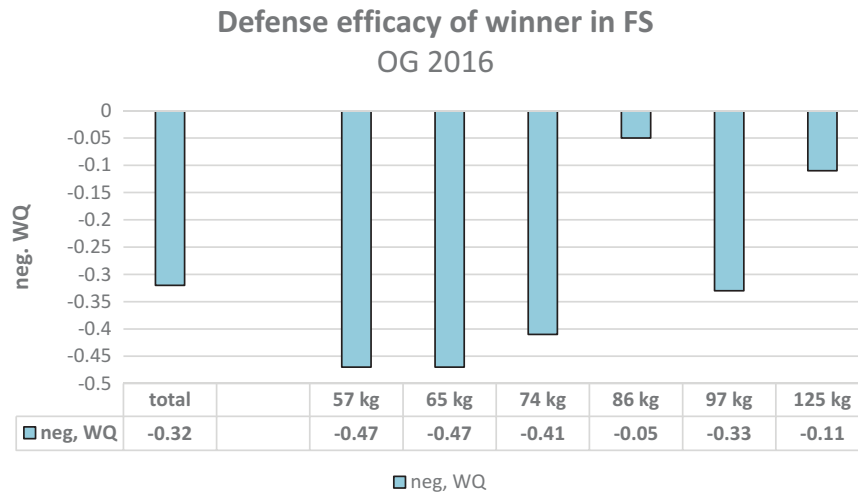


FIGURE 12 Defense abilities of the Olympic champions 2016 FS. FS = men's freestyle.

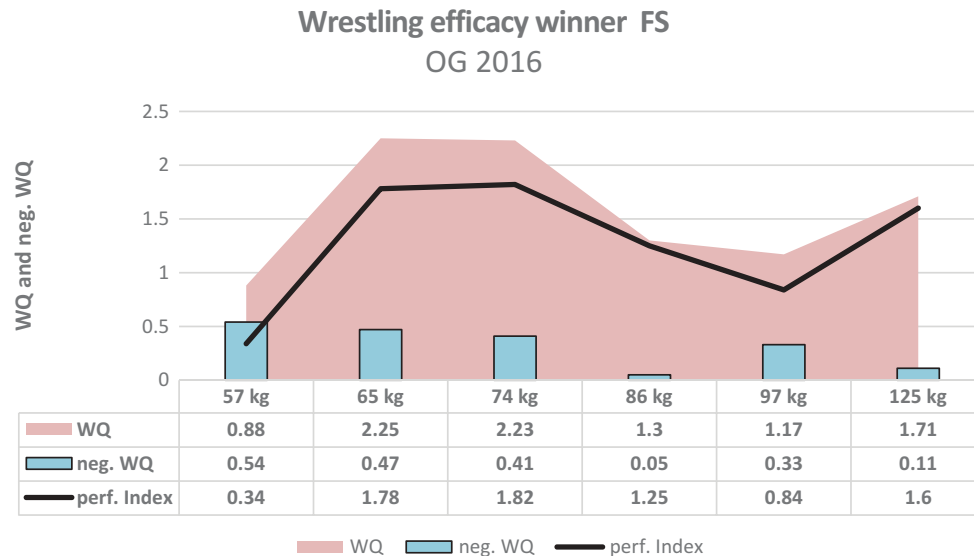


FIGURE 13 Wrestling performance of the Olympic champions 2016 FS. FS = men's freestyle.

women from Russia and Kazakhstan were also very strong. Congratulations also to the success of Azerbaijan, China, and the United States, followed by Sweden, Canada, Belarus, Poland, and Turkey (see Figure 17).

The comparison with the Olympic Games in London shows the enormous performance increase of Japan, Kazakhstan, the United States, Sweden, Turkey, and India while, in particular, Canada had to suffer losses (see Figure 18). In this evaluation, however, it must be taken into account that two weight classes were additionally carried out in Women's Freestyle Wrestling in Rio.

State of Performance and Development of Women's Freestyle Wrestling

In general, we note a dynamic development of the attack behavior in women's freestyle wrestling during the Olympic Cycle 2012–2016 (See Figure 19). With 1.4 points per minute women's freestyle wrestling is almost going down to the level of the Olympic Games 2012 in London. This is the level before the 2013 rule changes and a loss of one point per minute in comparison to the World Championships 2015 in Las Vegas!! In addition, it should be noted that the technical assessments have been significantly increased in connection with the rule changes made during the Olympic cycle. It is a serious reference for the

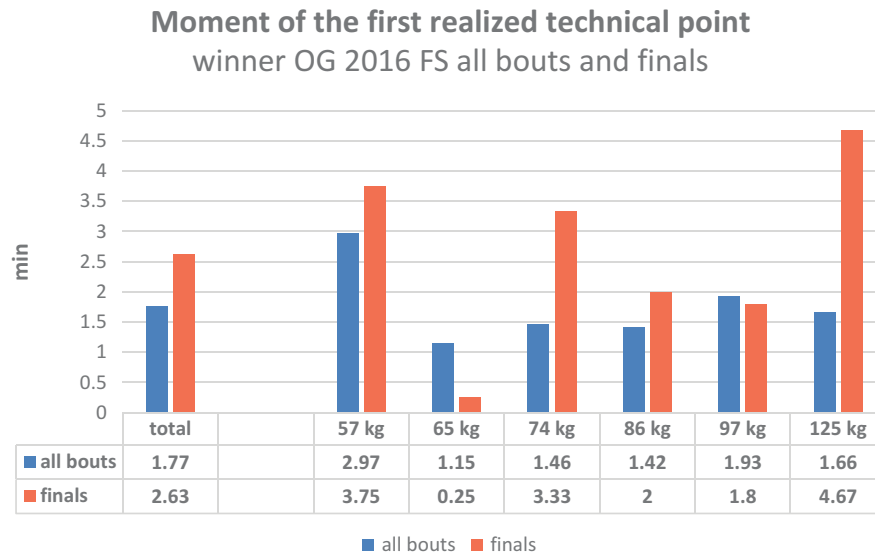


FIGURE 14 Time of the first technical point during the final bouts. FS = men's freestyle.

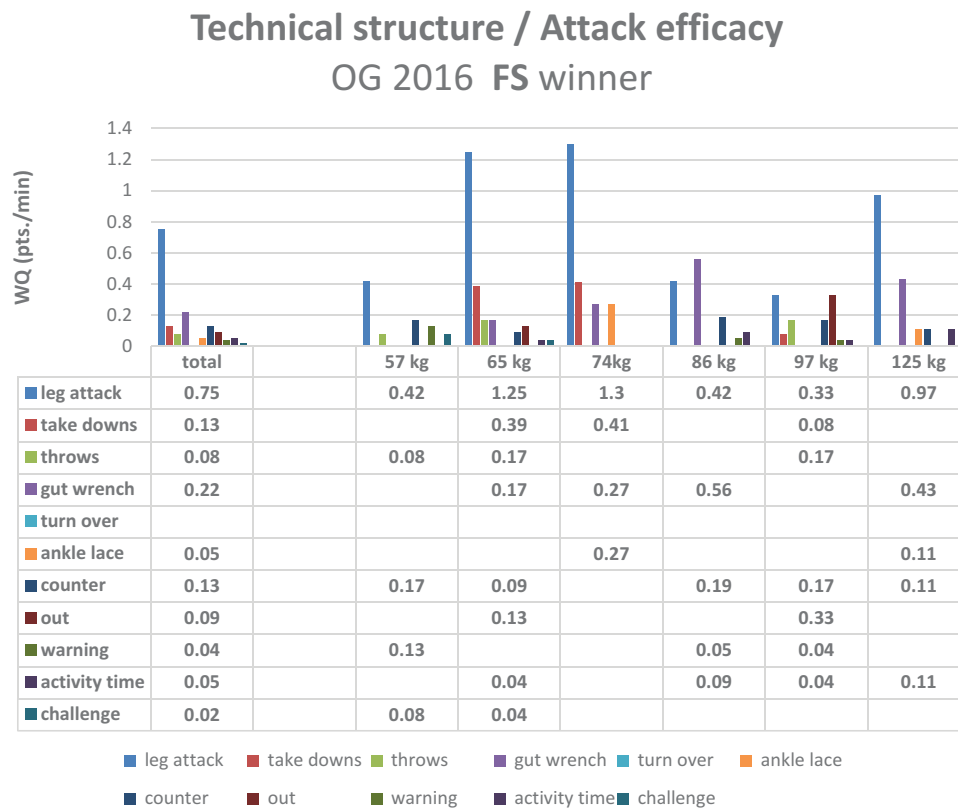


FIGURE 15 Technical structure of the Olympic champions 2016. FS = men's freestyle.

coaches to change their training and competition concepts more strongly to attractive technical-tactical actions. The increase in the number of weight classes at the Olympic Games in Rio by one third also contributed to an increase in the technical points achieved (see Figure 20, all participants).

Another possibility to assess the quality of wrestling is to note the number of pins during the competition, because you can only get a pin with perfect technical-tactical abilities. In women's freestyle wrestling, there were 20 pins (15%) in 133 bouts (in London 19 pins [21%] within 89 bouts).

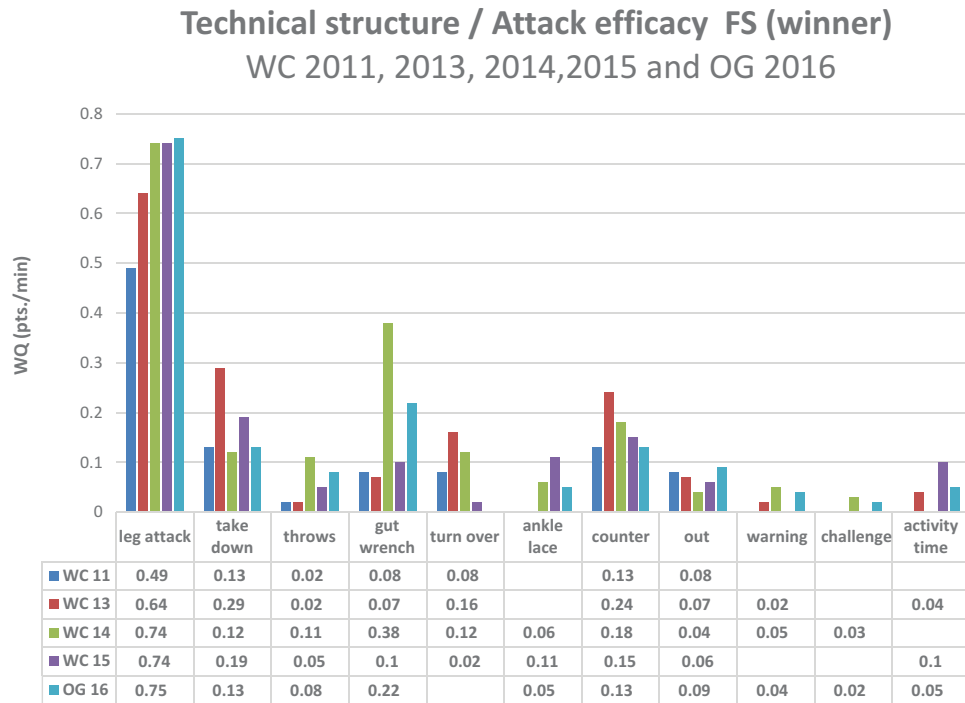


FIGURE 16 Comparison of the technical structure during the Olympic cycle 2012 and 2016. FS = men's freestyle.

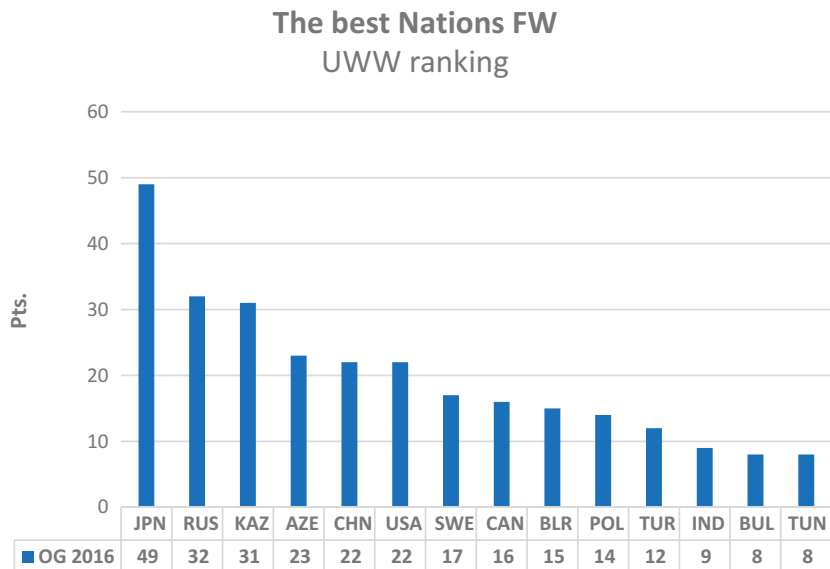


FIGURE 17 The most successful nations in women's freestyle wrestling in Rio. FS = men's freestyle.

Combat Behavior of the Nations

With the performance index, you can well describe the technical-tactical abilities of a given nation or athlete. In this case, the points achieved will be set in relation to the points given away to the opponent (see Figure 21).

We see in Figure 22 the absolute technical-tactical superiority of the female athletes from Japan, Sweden, and the

United States, followed by Azerbaijan, Russia, and China. The coaches from Tunisia, Poland, Turkey, and Canada should go deeper into the analysis because of their negative values. This also becomes clear if we look at the quality of wrestling in 2016 and 2012. We see Japan increased their best values from 2012, a great step forward for the United States and Sweden concerning the quality of wrestling,

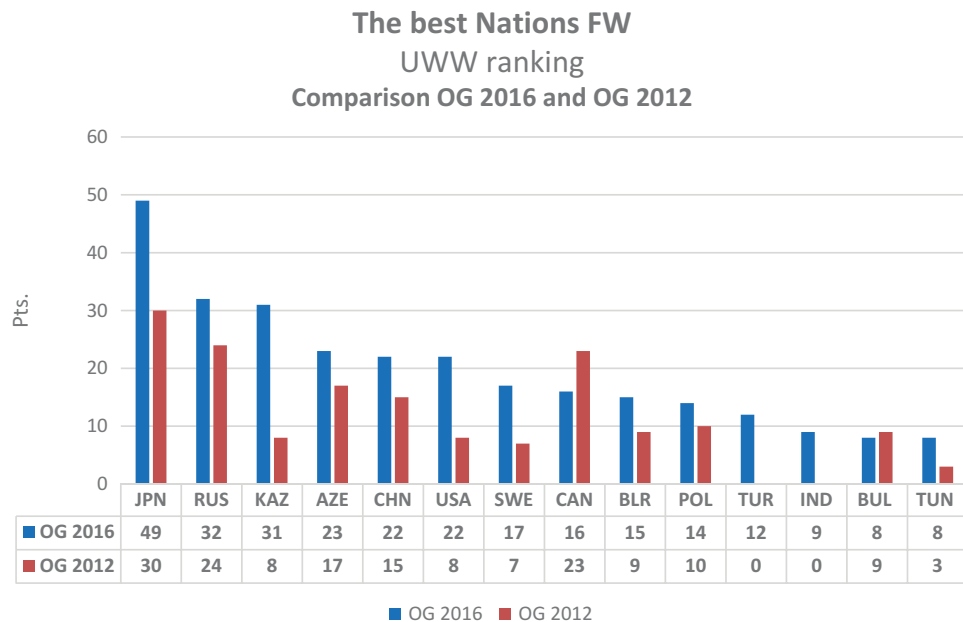


FIGURE 18 Comparison of the best nations 2012 and 2016. FS = men's freestyle.

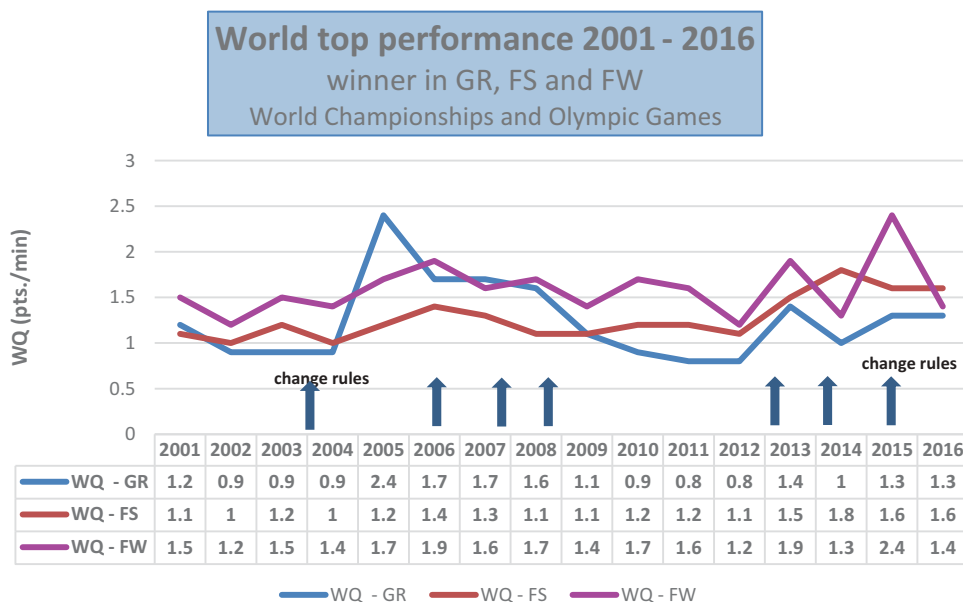


FIGURE 19 Development of the three wrestling disciplines since 2001. FS = men's freestyle.

while Azerbaijan, Kazakhstan, Poland, and Bulgaria suffered losses since 2012.

If we take a deeper look into the quality, we can see the reasons for the technical-tactical advantages and disadvantages of various nations (see Figure 23).

An examination of the attack efficacy makes it clear that Japan, China, Sweden, and the United States are in front concerning this factor. Kazakhstan, especially, has reserves

in the quality of attacks because they lost their good attack behavior from 2012. The overall technical and tactical performance also depends on the quality of the defense capability. In this regard, apart from Japan, we see major weaknesses in many countries in 2016 (see Figure 24). The Japanese ladies are extremely stable in the attacks of their opponents. Japan is the only country that can point to a stable balance with both the best attack scores (1.19) and the

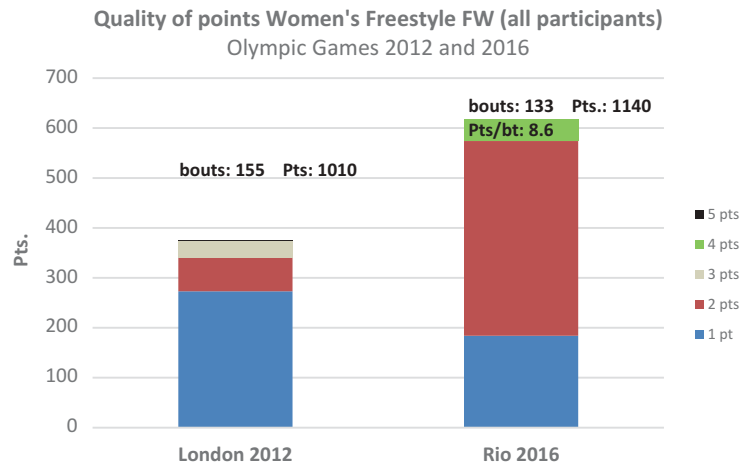


FIGURE 20 Quality of points Rio FW (all participants). FW = women's freestyle.

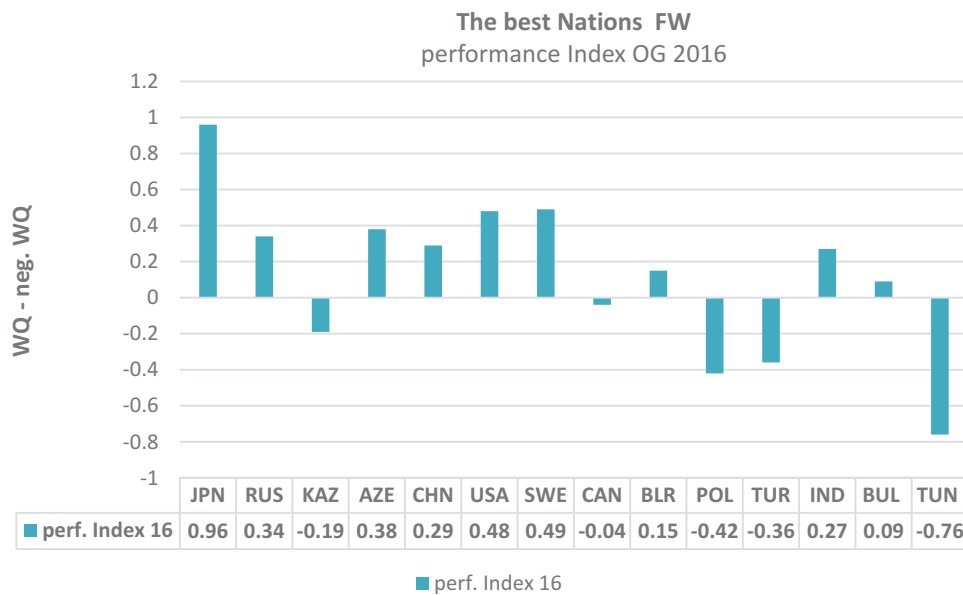


FIGURE 21 Wrestling efficacy of the best nations in women's freestyle in Rio. FW = women's freestyle.

best defense scores (0.23). With a better defensive performance, countries such as China, Kazakhstan, Canada, Poland, and Turkey could realize better results.

Combat Behavior of the Winners

We consider a different picture concerning the performance index, which describes the technical-tactical abilities of the winners (see Figure 25). As already described, we had a rule-driven positive performance increase in the Olympic cycle 2012–2016, in particular, with regard to attack behavior. But there is a significant decline in the Olympic Games in Rio while the defensive capability of the winners remained at a high level in the cycle.

If we have a look at the attack efficacy, the dominating roles of Helen Maroulis (USA, 53 kg), Risako Kawai (Japan, 63 kg), Sara Dosho (Japan, 69 kg), and Kaori Icho (Japan, 58 kg)—the four-time Olympic champion—becomes evident for the Olympic Games 2016 (see Figure 26). During the 2012 Olympic Games, the heavyweight wrestler Natalya Vorobieva was the best attacker with 1.56 points per minute; in Rio, the same best value was reached by Helen Maroulis.

In Figure 27, we can see the unbelievable defensive stability of all female champions. The average value is 0.19, which is lower than in London with 0.22. Summarizing the wrestling efficacy, all women Olympic champions have demonstrated excellent performances (see Figure 28). Especially, Helen Maroulis (1.37), Risako

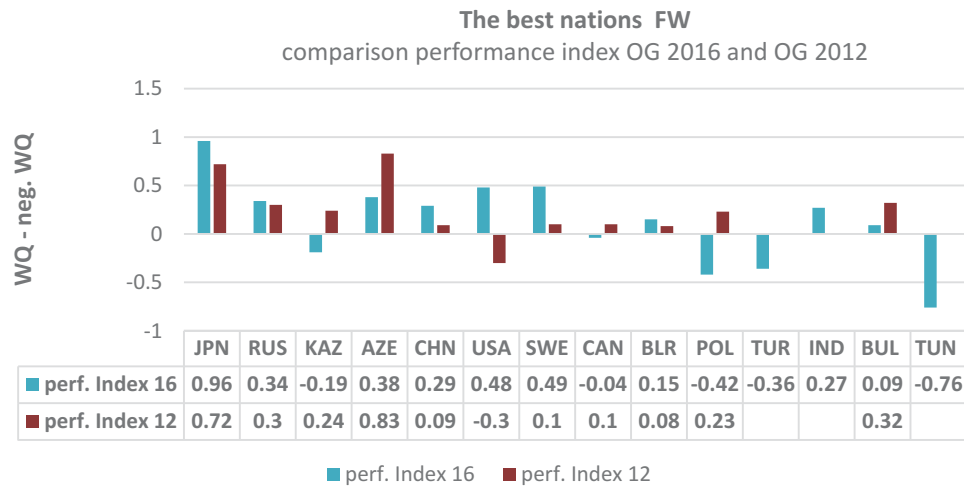


FIGURE 22 Comparison of the wrestling efficacy 2016 and 2012. FW = women's freestyle.

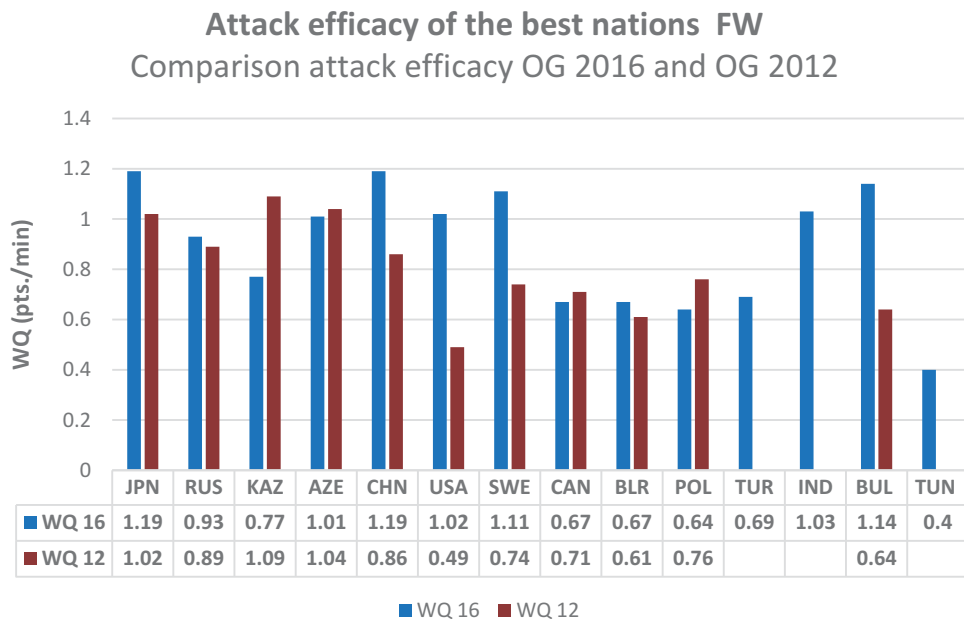


FIGURE 23 Attack efficacy Olympic Games 2012 and 2016 FW. FW = women's freestyle.

Kawai (1.34), and Kaori Icho (1.2) had the best technical-tactical performances during the Olympic Games in Rio.

It is very important for the coaches to analyze the technical-tactical structure of the winners. Then they can compare the technical capacity of their athletes with the top athletes of the weight class. It is also very important for the planning of the technical-training process as well as for the training concepts of the promising young talents.

As in the Greco-Roman wrestling and men's freestyle wrestling, the women's freestyle wrestlers are also starting their final bouts with a "safe strategy" (see Figure 29). In the final bouts for a gold medal, this tendency of the relatively late first-point realization is clear (average after 3.75 minutes). This

is especially true for Eri Tosaka (Japan, 48 kg), Sara Dosho (Japan, 69 kg), and Kaori Icho (Japan, 58 kg). They scored their first technical point in the grand finale during the last minute of the bout but after the scoring of an activity point. This seemed to be a typical "Japanese strategy" in Rio, and it bears witness to the tremendous physical, psychological, and technical-tactical strength of the Japanese women. This is underpinned by the fact that both Eri Tosaka and Kaori Icho made their victory points in the final 10 seconds of the bout, after they had been behind in points.

As with the men's freestyle wrestling, the women's wrestling bouts are dominated by leg attacks (see Figure 30). It is interesting but understandable because of the high value of

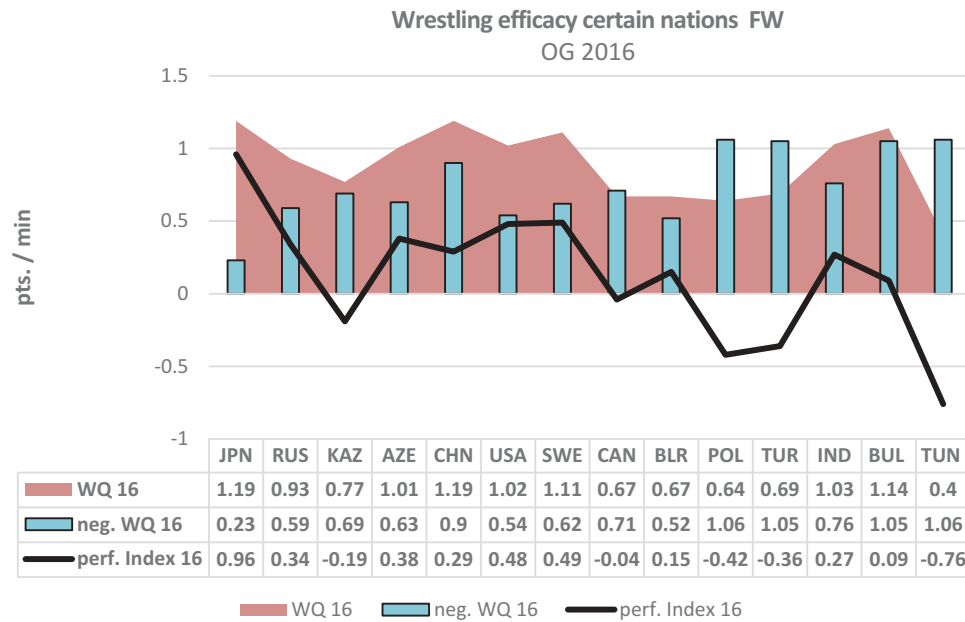


FIGURE 24 Wrestling efficacy of the best nations Olympic Games 2016. FW = women's freestyle.

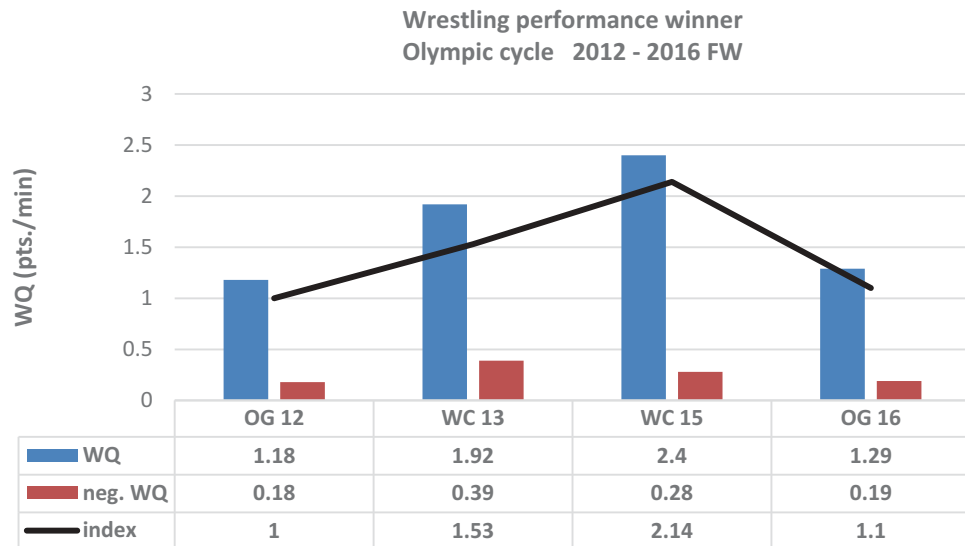


FIGURE 25 Wrestling efficacy of the Olympic champions 2016. FW = women's freestyle.

the counterattacks. The technical and tactical versatility is reflected in the further application of take downs, turn overs, and ankle lace. There are clear differences in the technical profile of the individual Olympic champions. In addition to the already mentioned dominance of leg attacks, the decline of take downs, throws, turn overs, ankle laces, and “push outs” techniques is noticed when looking at the Olympic cycle (see Figure 31). The gut wrench has completely disappeared and Warning and Challenge points were almost meaningless. The decline of throws, since the rule changes, should find special attention with the coaches.

ANALYSIS OF THE RIO OLYMPIC GAMES 2016 IN GRECO-ROMAN WRESTLING

Country-Specific Aspects

In Greco-Roman wrestling, Russia, Cuba, and Azerbaijan had been the most successful nations, followed by Iran, Armenia, Germany, and Turkey (see Figure 32). In a comparison of the nations' points from London and Rio de Janeiro, the fact that in Rio only six weight classes were contested, with seven in London, is taken into account. Under these conditions, the

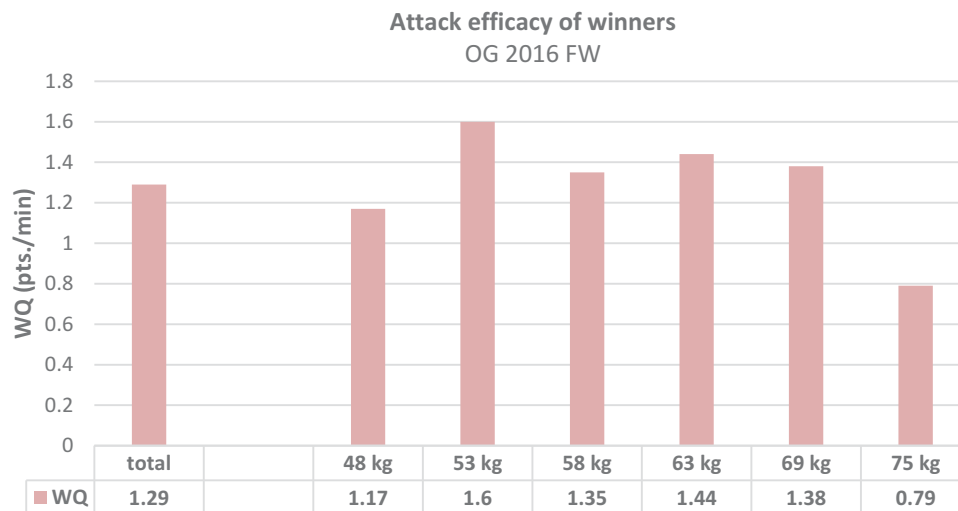


FIGURE 26 Attack efficacy of the Olympic Champions 2016 FW. FW = women's freestyle.

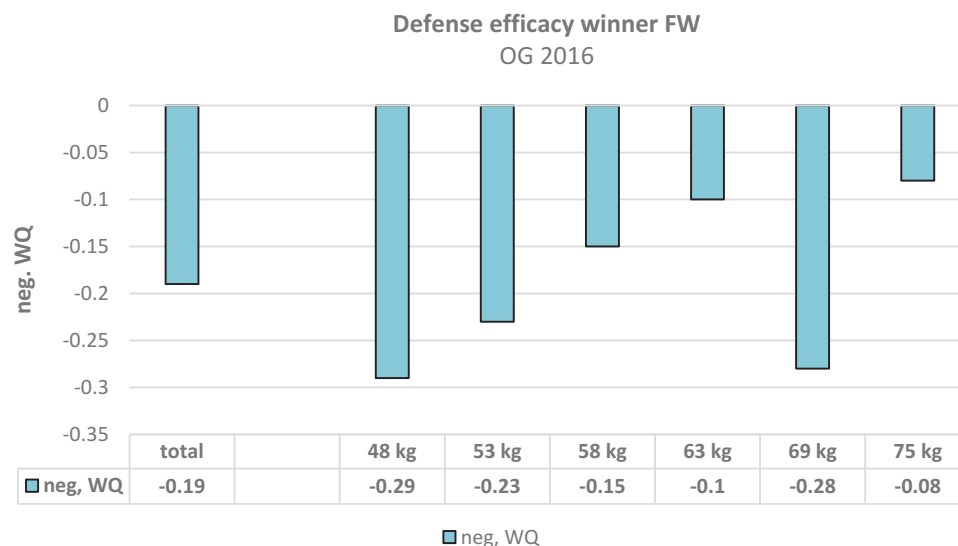


FIGURE 27 Defensive efficacy of the Olympic champions 2016. FW = women's freestyle.

increase in the performance of Germany, Turkey, Japan, and Serbia must be emphasized since London (see Figure 33). Russia, Iran, and Georgia could not repeat their extremely good performances from London in Rio.

Qualitative Analysis of Combat Behavior

State of Performance and Development of Greco-Roman Wrestling

The number of pins can be used as an indicator of the technical and tactical quality of wrestling. The pin is a demanding and attractive technical and tactical action. Indeed, we had in London in Greco-Roman wrestling only two pins (2%). The first indication of increased quality of

technical and tactical performance after the 2013 rules changes is found at the Olympic Games in Rio, where the number of pins totaled eight (5.9%) and the number of bouts with technical superiority was 30 (22%). The next indication of increased quality of the Greco-Roman wrestling at the Olympic Games in Rio is given by the technical points per minute. During the Olympic Games in London, we had the deepest value of this quality factor since the games in 1980. The quality increase during the games in Rio is clearly a result of extensive rule changes (see Figure 34).

The increase in the technical points achieved per bout from 4.8 (London) to 5.9 (Rio) is also indicative of quality improvement of Greco-Roman wrestling in this Olympic cycle (see Figure 35). It must, of course, be taken into account that, in principle, previous technical one-point

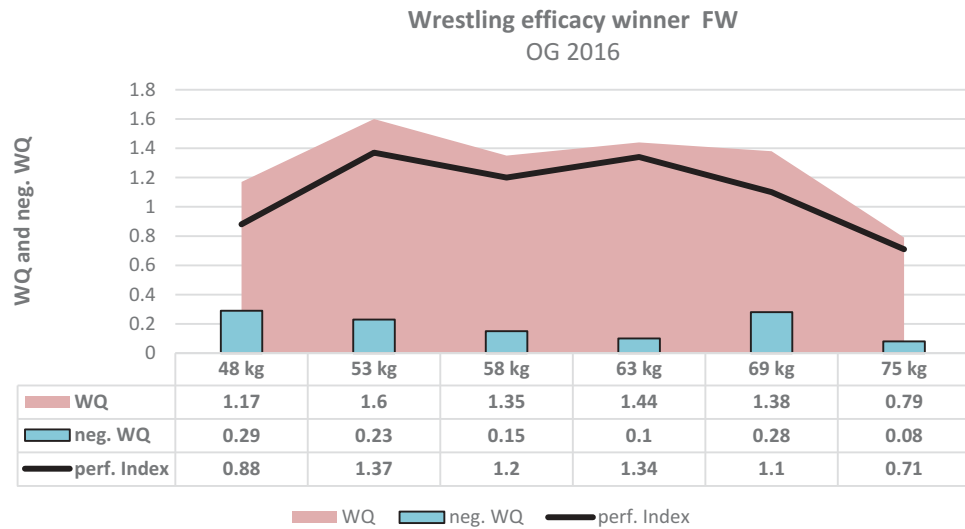


FIGURE 28 Wrestling efficacy of the Olympic champions 2016. FW = women's freestyle.

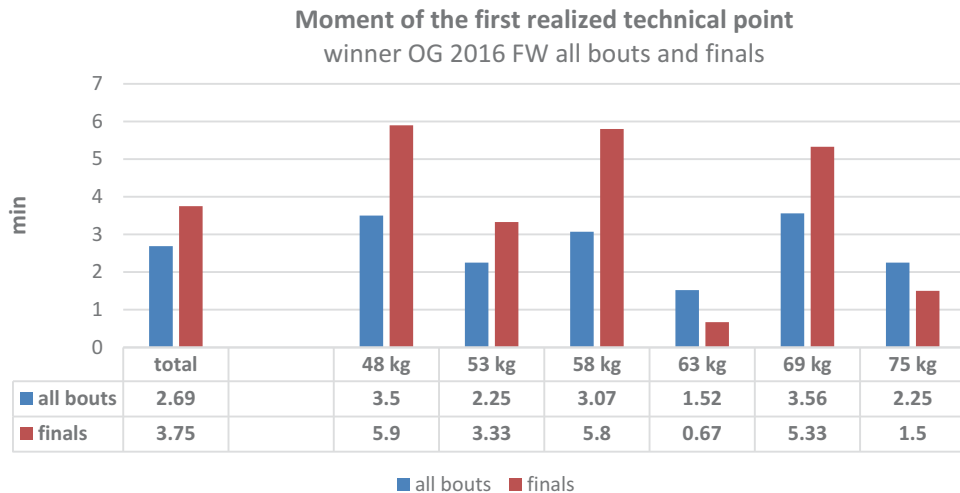


FIGURE 29 Time of the first technical point scored in FW. FW = women's freestyle.

evaluations were evaluated with two points in Rio. The analysis of the current rules (as of December 2016) points to a dramatic decline in the technical-tactical quality of the combat behavior. This is accompanied by the unacceptable loss of attractiveness, especially of the final bouts.

Combat Behavior of the Nations

With the performance index, you get a very good description of the technical-tactical abilities of a given nation or athlete. In this case, the points scored will be set in relation to the points given away to the opponent. The performance index, an index of wrestling efficacy, shows that the best values were achieved by Armenia, Russia, Cuba, and Azerbaijan (see Figure 36).

Taking into account the amendments of the rules since 2013, it is obvious to see the increase in the performance quality in general (see Figure 37), in particular, Armenia, Cuba, Azerbaijan, Turkey, and Serbia, who most clearly improved their technical-tactical performance. Iran, Georgia, and Korea also had better values than in 2012.

If we take a deeper look into the quality, we can readily see the typical indications of strategies in Greco-Roman wrestling (see Figure 38). Azerbaijan, Armenia, Russia, Serbia, Turkey, and Hungary achieved superior attack-oriented values than the average of all wrestlers (0.42 points per minute), *but all of the best countries are below one point per minute in the attack efficacy!* Azerbaijan, Russia, Armenia, Turkey, and Serbia made the biggest progress between 2012 and 2016, concerning the attack efficacy, while Georgia, in particular, had clearly worse

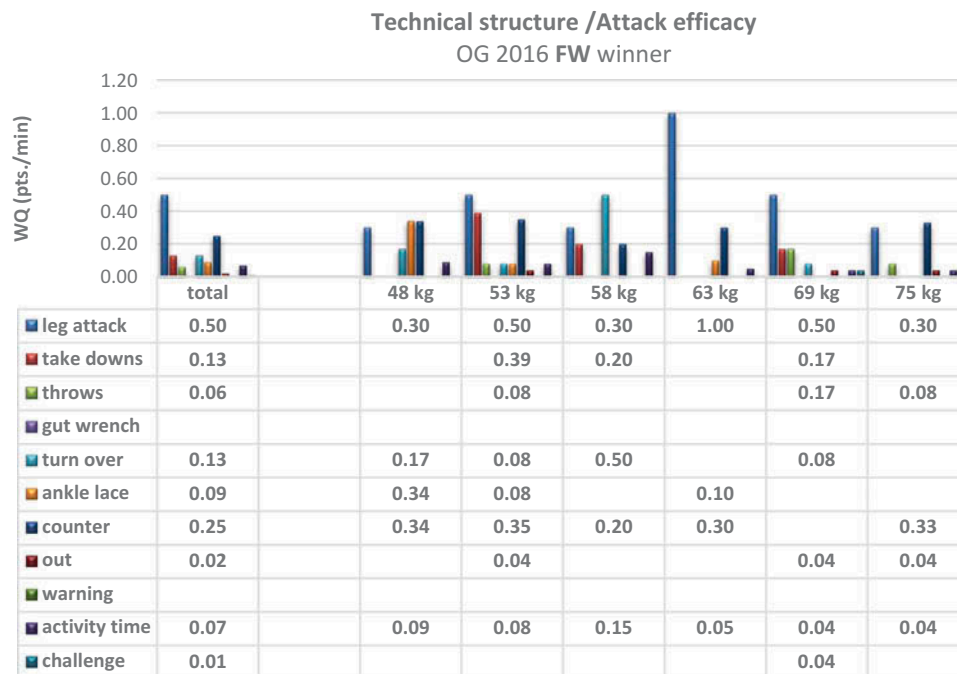


FIGURE 30 Technical structure of the winners in women's freestyle. FW = women's freestyle.

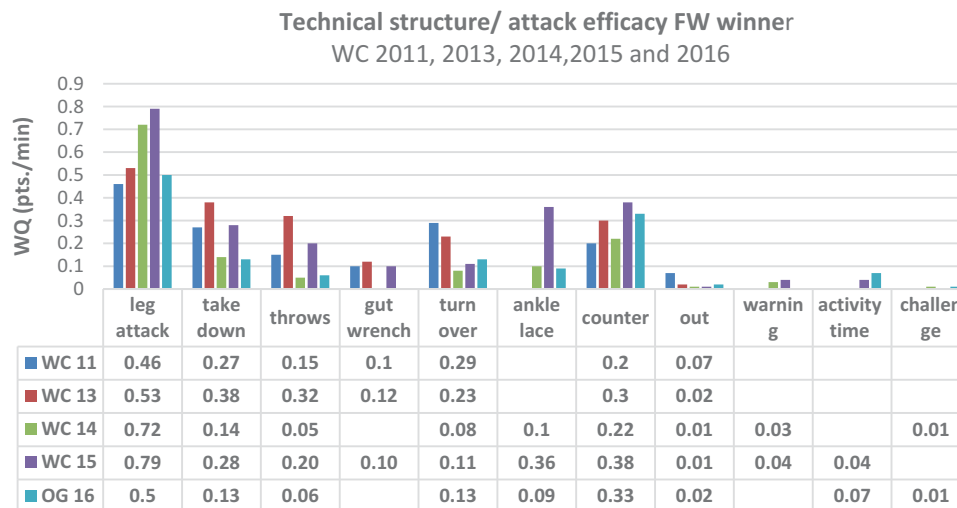


FIGURE 31 Technical structure during the Olympic Cycle 2012–2016. FW = women's freestyle.

values (see Figure 39). Cuba, Armenia, Russia, and Georgia are among the best “Defenders” (see Figure 40), while Japan, Germany, Korea, and Turkey show some problems with their defensive abilities.

Summarizing the wrestling efficacy of the Greco-Roman wrestlers (see Figure 41), we consider the best performance wrestlers to be from Armenia, Russia, Cuba, and Azerbaijan while Japan, Germany, and Korea had some problems with their defensive abilities in comparison to the attack efficacy. Most remarkable were the defense abilities of the wrestlers of Cuba

and Armenia. With a better performance of their defense, the wrestlers of Azerbaijan and Iran could be even more successful.

Combat Behavior of the Winner

Looking at the peak performances of the Olympic Games since 1976, the sharp rise since 2012 has been noticeable. (The aberration of the 2005 rule changes, which had led to the high value of 2008, has already been described in other analyses). We consider a different picture concerning the

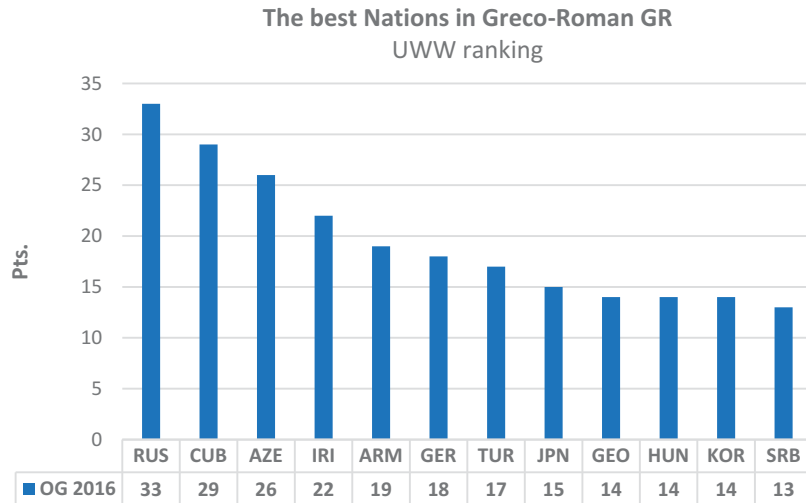


FIGURE 32 The 12 best nations in Greco-Roman wrestling in Rio. GR = Greco-Roman.

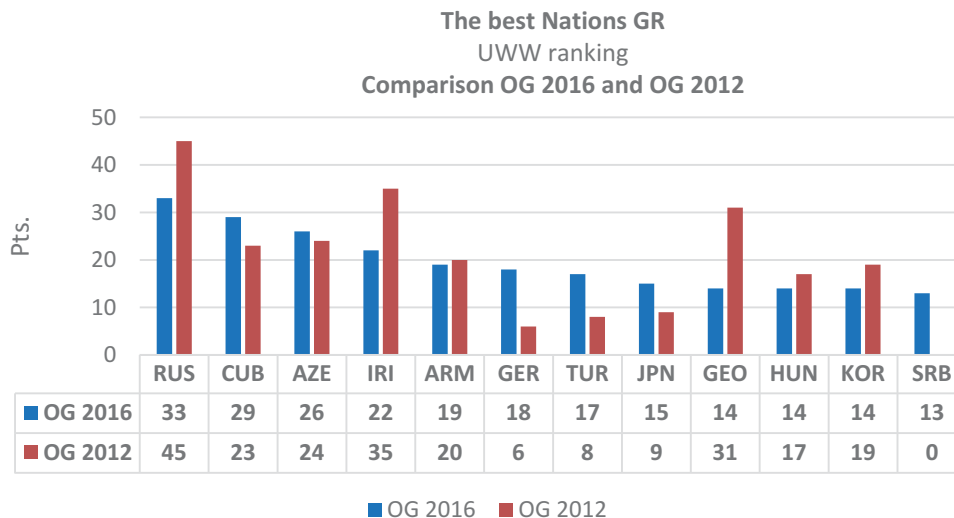


FIGURE 33 Comparison of the 12 best nations in Greco-Roman in 2012 and 2016. GR = Greco-Roman.

performance, which is described by the technical–tactical abilities of the winners (see Figure 42).

The positive development in the Olympic cycle of 2012–2016 is also clearly evident when considering the ability to attack and defend (see Figure 43). This also leads to a more accurate analysis of the attack efficacy of the Olympic champions (see Figure 44). Regarding the ability to defend, it is worth mentioning the particularly weak value of Roman Vlassov (75 kg). On the other hand, it is noteworthy that Mijan Lopez (130 kg) did not allow any of his opponents any technical points (see Figure 45). Summarizing the wrestling efficacy as a measure of the technical–tactical attractiveness, Alexanian (98 kg), Stefanek (66 kg), and Borrero (59 kg) showed the best performance of the Olympic champions (see Figure 46).

If we assume that, due to television broadcasts, the world takes a picture of the attractiveness of our sport from the finals, we must put the finals at the center of our analysis. For the coaches, however, the opponent-related analyses of the bouts and other technical and tactical details are of particular importance.

Relationship Between Standing and Parterre Wrestling

This relationship has always been of great interest in the past. Even with the current rule discussions, this aspect plays an important role. Eighty-two percent of the technical points are coming out of the ordered parterre situation and 18% out of the standing position (see Figure 47). Compared to the World Championships 2015 in Las Vegas, the further increase in parterre wrestling compared to standing wrestling is clear.

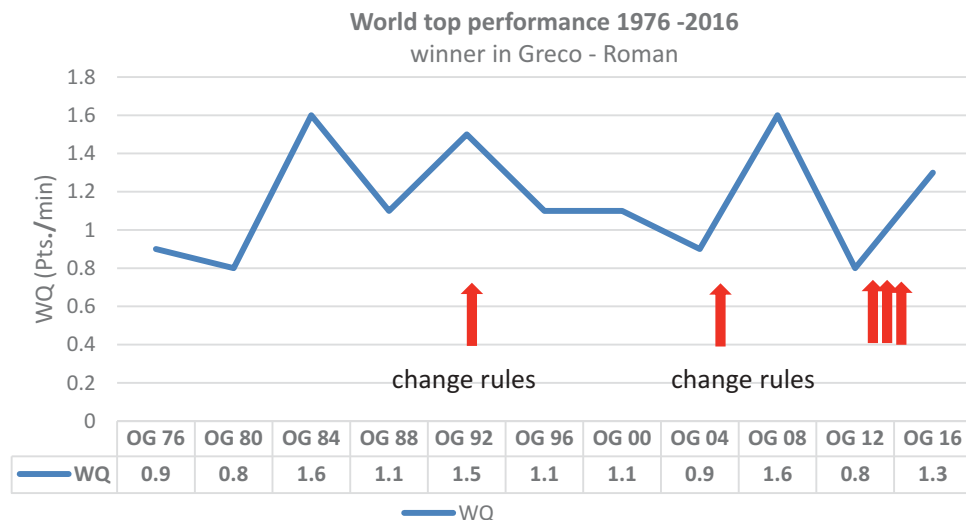


FIGURE 34 Development of the points per minute made by the winner since 1976 (Olympic Games).

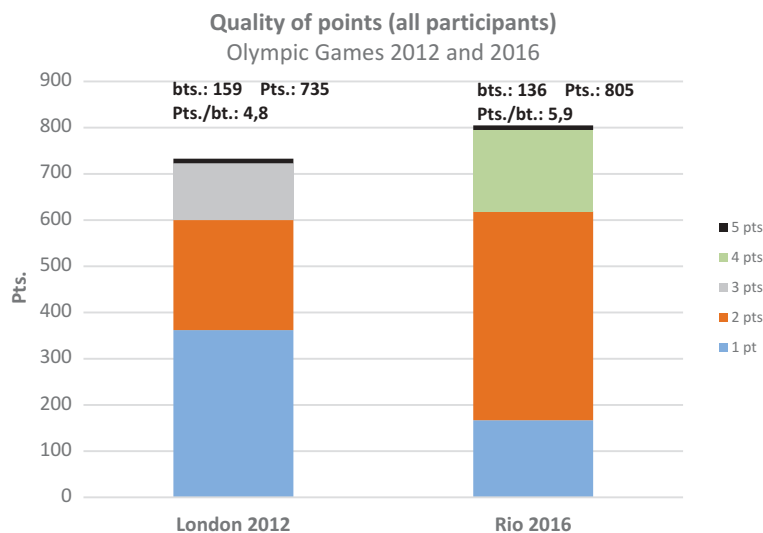


FIGURE 35 Quality of points (all participants).

Moment of the First-Scored Technical Point

To find out the general strategy of activity, we analyzed all bouts of the champions. It is obvious that the Greco-Roman wrestlers are concentrating during the first 2 minutes on a “warning behavior,” respectively using at first the “Push Out” techniques (see Figure 48).

The average value is about 2 minutes if we are looking at all bouts of the winners. The wrestlers want to impress the referees to send the opponents into the parterre position. Even more defensive are the final bouts for first place. On average, the first technical point takes place after approximately 3 minutes (the high value of Stefanek results from the fact that he could not win a technical point in the final match).

“Caution Strategy”

The “Caution Strategy” leads us to the question of what is the relation between caution points and technical points. Therefore, we analyzed the relation between caution points, points after ordered parterre situation, and “normal technical” points. We analyzed all finals because they are the advertisement for our sport (see Figure 49).

If we take a look at the championship finals, the importance of the points of the ordered parterre position has increased versus 2015. Fifty percent of the technical points are coming from the ordered parterre position (2015: 45%), 22% are caution points (2015: 8%), and 28% are “normal” technical points (2015: 47%). The decrease of technical points and the upgrade of the technical points after the

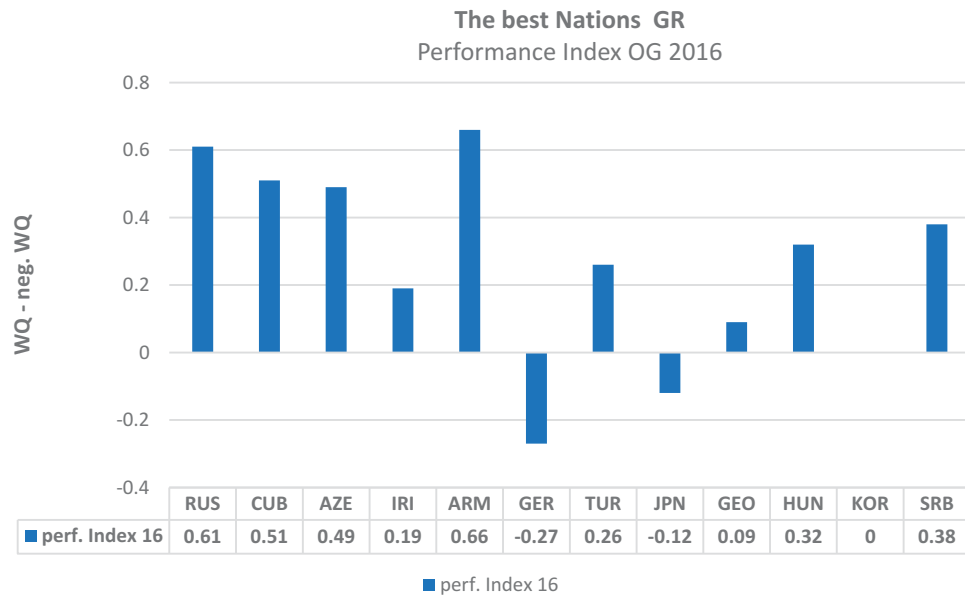


FIGURE 36 Quality of wrestling in Greco-Roman Style in Rio de Janeiro. GR = Greco-Roman.

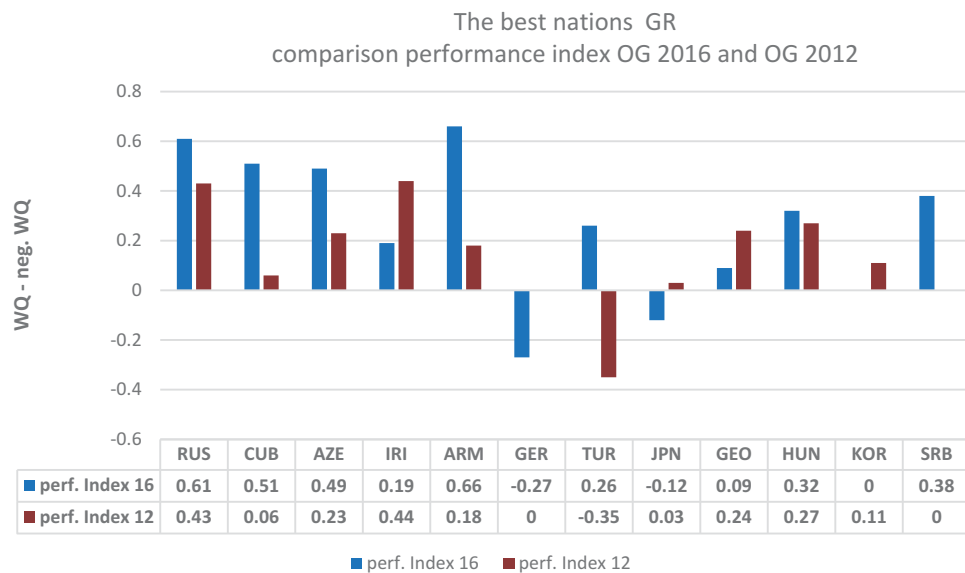


FIGURE 37 Quality of Wrestling comparing 2012 to 2016 in Greco-Roman wrestling. GR = Greco-Roman.

ordered parterre position during the Olympic Games in Rio is clear proof of the tendency for passive wrestling in Rio.

Technical Structure

In general, there is a different development of the technical structure during the span of years from 2011–2016, especially in the 2011 World Championships (old rules) and 2016 (new rules) (see Figure 50). In general, gut wrench, throws (mainly from parterre situation) and take downs with a distance were the dominating techniques. When looking at

the last two years, the prominence of throws and the gut wrench becomes clear. Especially in Rio the technical–tactical variety was very poor (see Figure 51). We have had throws—predominantly from ordered parterre situation—and gut wrench and nothing more. The significant increase of throws and gut wrench as dominant techniques in 2015 and 2016 requires a deeper analysis (see Figures 52 and 53).

In Rio, 79% of the technical–tactical actions are throws and gut wrench and 78% in Las Vegas. The most throws and gut-wrench actions are coming after warnings that means from the parterre position (76%). In Las Vegas, the value

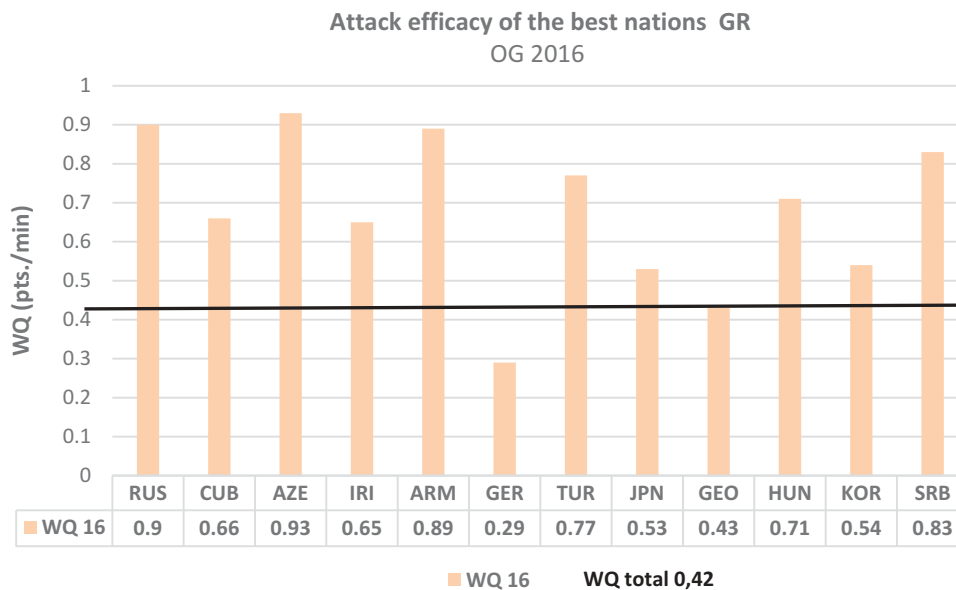


FIGURE 38 Best values of the attack efficacy (nations). GR = Greco-Roman.

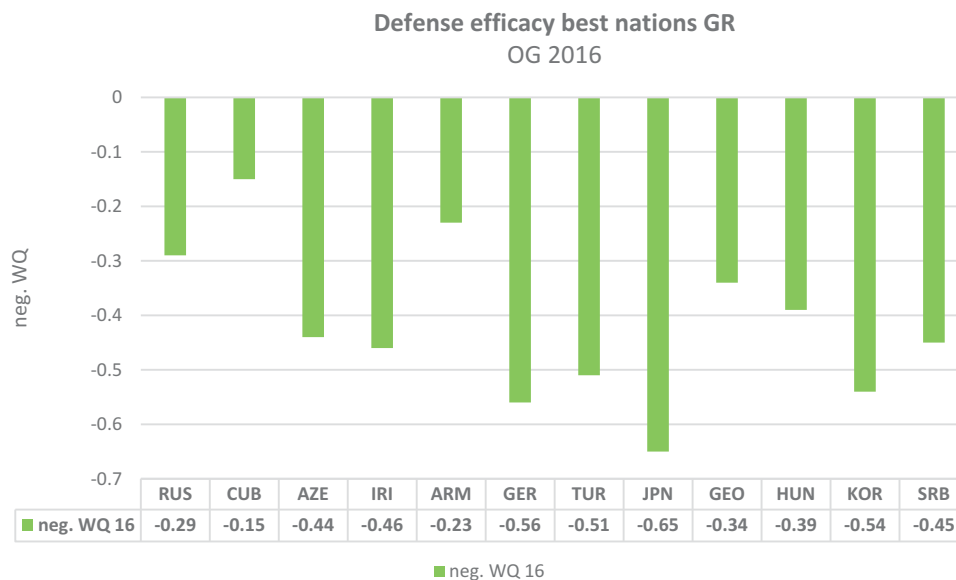


FIGURE 39 Quality of attack efficacy 2012 and 2016 (nations). GR = Greco-Roman.

was 47% (an increase of 31%)! Only 3% of the technical points are coming from dynamic situations. In Las Vegas, the value was 31% (a decrease of 28%). When looking at the last two years, the prominence of the throws and the gut wrench will become clear. During the Olympic Games, the main strategy was organizing or waiting for the ordering parterre situation. And together with the fact that only 21% of the techniques are not throws and gut wrench seems to be a problem of the technical-tactical versatility.

After further changes of the rules (December 2016) and subjective assessments of the competitions in November and December, the necessity of thoroughly improving the attractiveness of Greco-Roman wrestling is confirmed. As a technique-oriented sport, the technical-tactical factor must be reevaluated and the responsibility of the referees for the attractiveness of wrestling has to be devalued. Otherwise, we will cut the branch on which we are sitting.

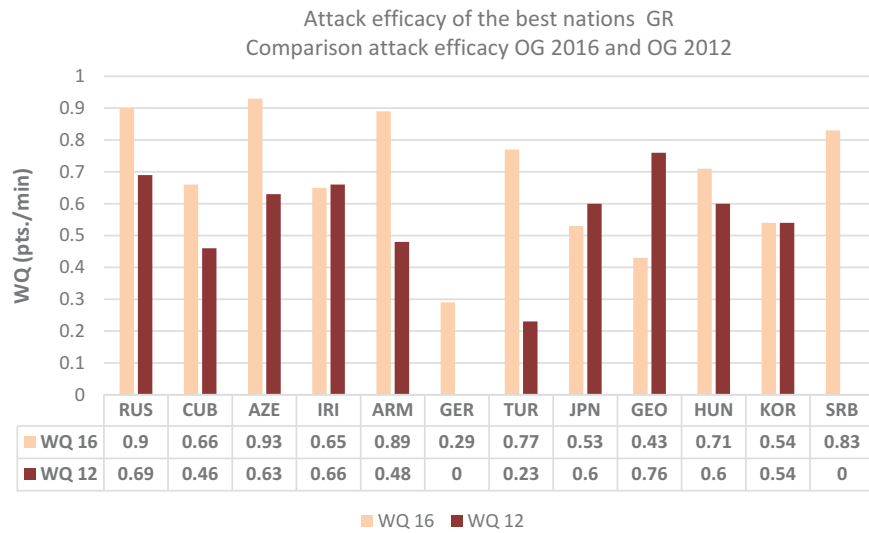


FIGURE 40 Best defense efficacy values in Greco-Roman in 2016. GR = Greco-Roman.

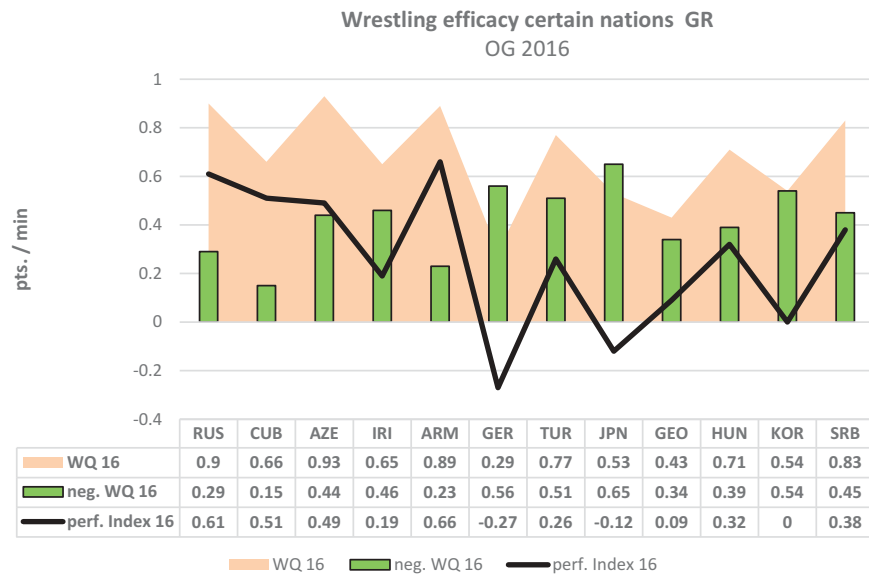


FIGURE 41 Wrestling efficacy of the 12 best nations in Greco-Roman wrestling 2016. GR = Greco-Roman.

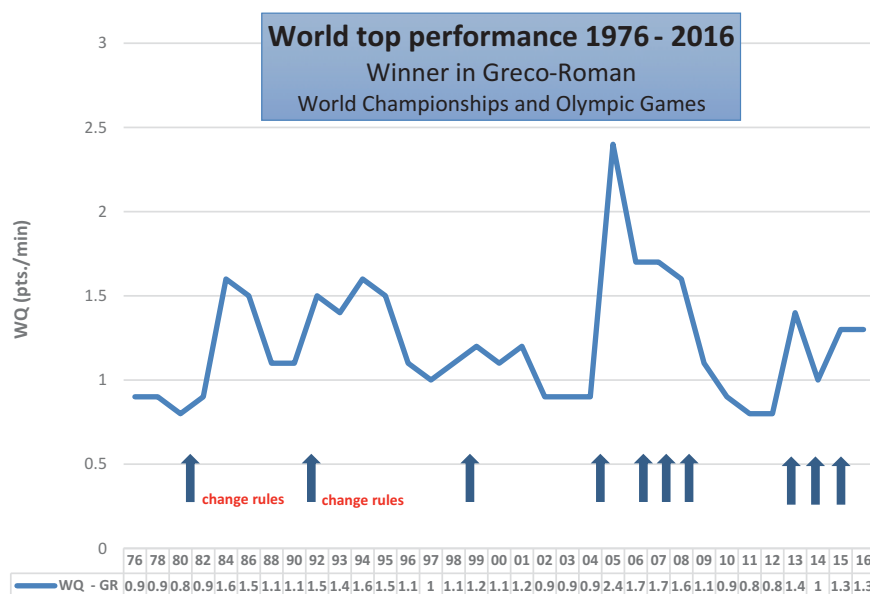


FIGURE 42 Top performance since 1976. GR = Greco-Roman.

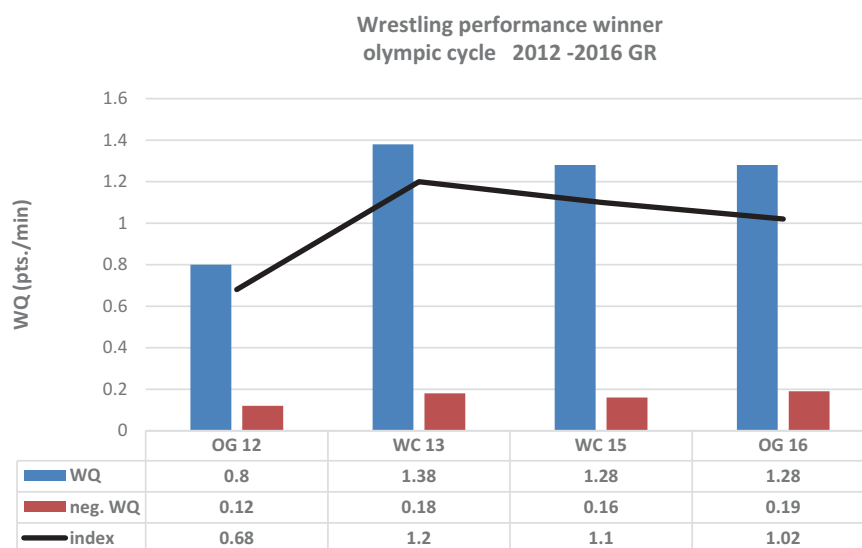


FIGURE 43 Top performance during the Olympic cycle of 2012–2016. GR = Greco-Roman.

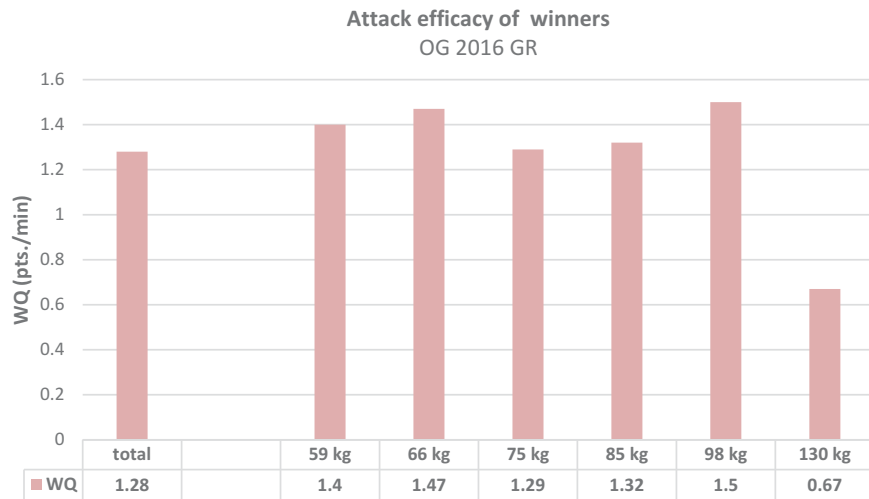


FIGURE 44 Attack efficacy of the Olympic Champions of 2016. GR = Greco-Roman.

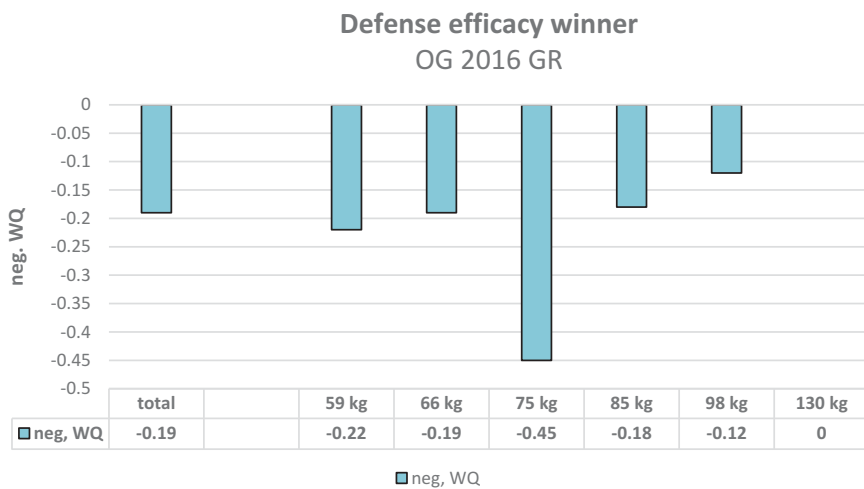


FIGURE 45 Defense abilities of the Olympic champions of 2016 in Rio. GR = Greco-Roman.

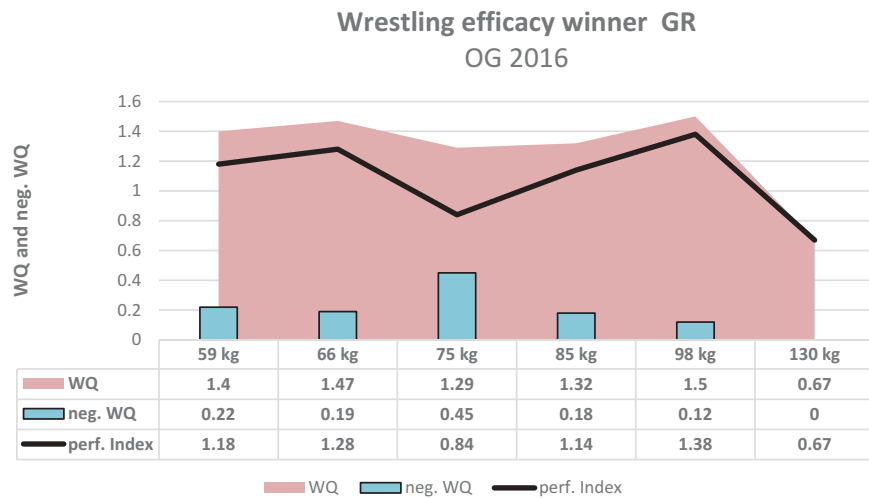


FIGURE 46 Wrestling performance of the winners of Greco-Roman in 2016. GR = Greco-Roman.

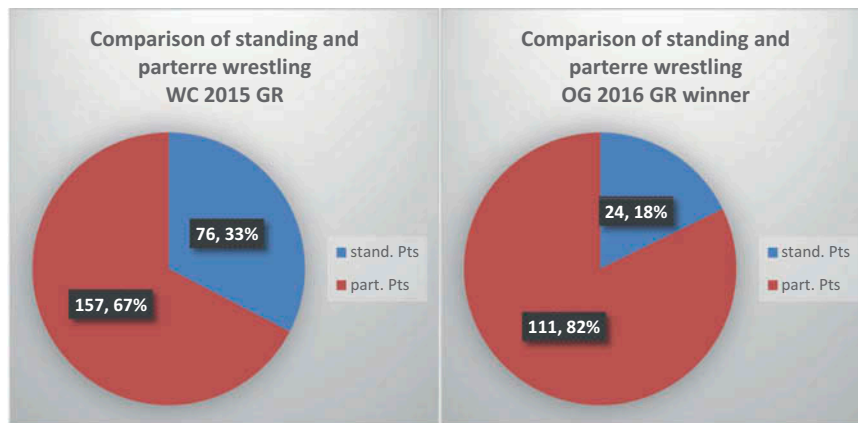


FIGURE 47 Comparison of standing and parterre wrestling Olympic Games 2016 and World Championships 2015. GR = Greco-Roman.

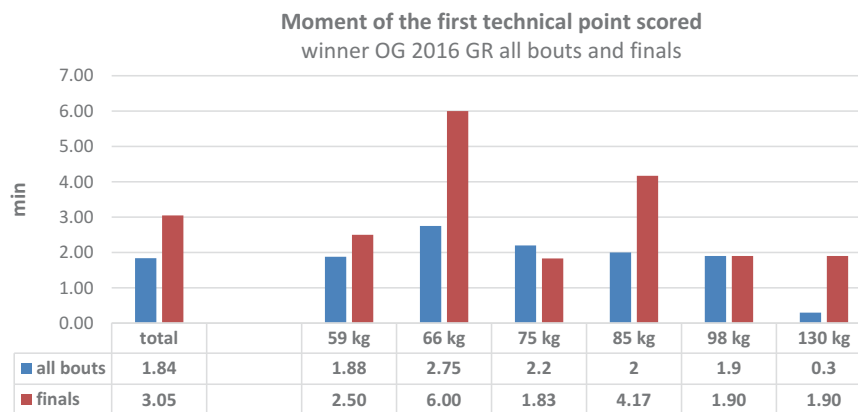


FIGURE 48 Moment the technical point was scored by the winner of all bouts and finals 1/2. GR = Greco-Roman.

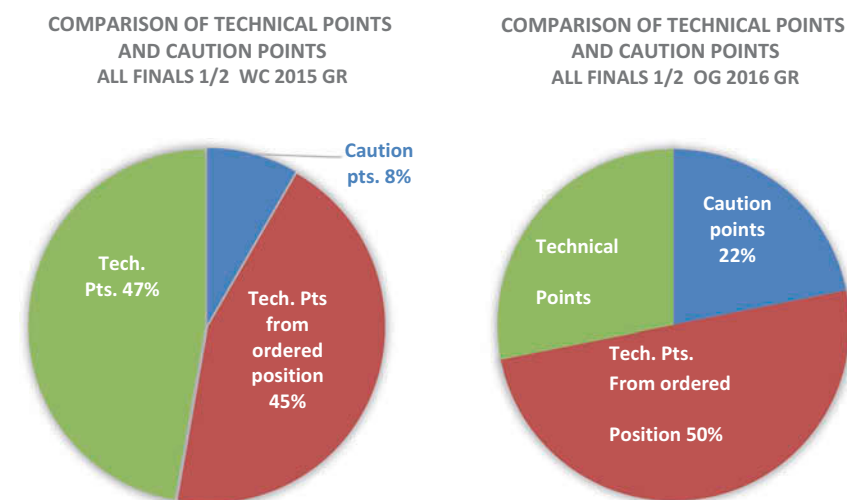


FIGURE 49 Relation between realized technical and caution points (Gold-medal finals) in comparison to Olympic Games in Rio and World Championships of 2015. GR = Greco-Roman.

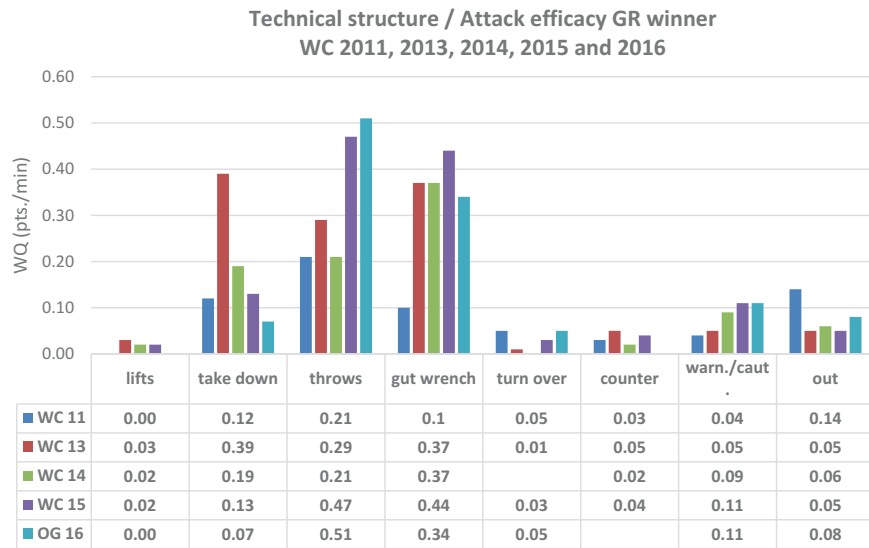


FIGURE 50 Development of the technical structure during the Olympic Cycle 2012–2016. GR = Greco-Roman.

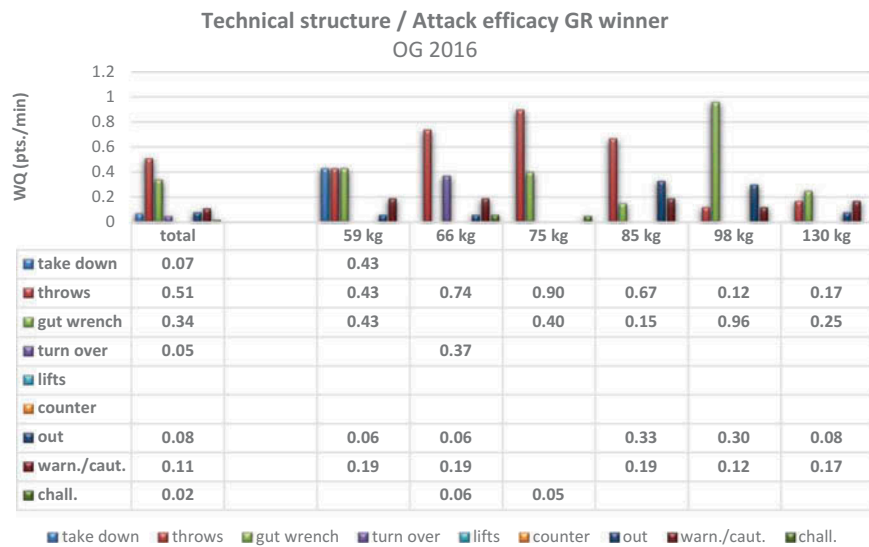


FIGURE 51 Technical structure of the Olympic champions in 2016. GR = Greco-Roman.

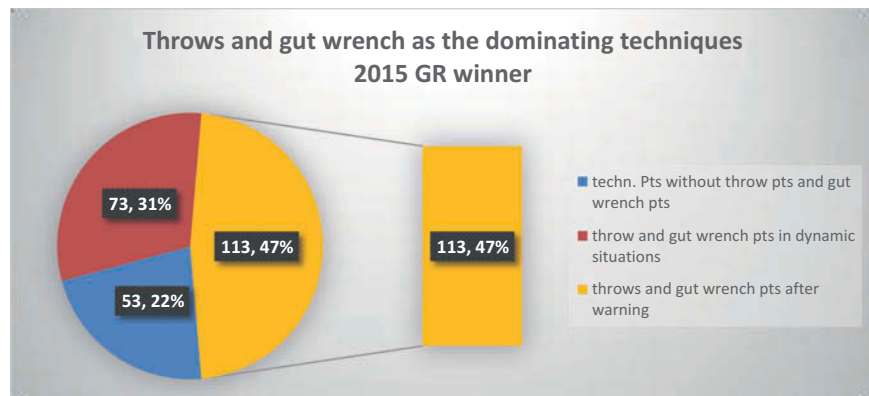


FIGURE 52 Throws and gut wrench scoring in Las Vegas 2015. GR = Greco-Roman.

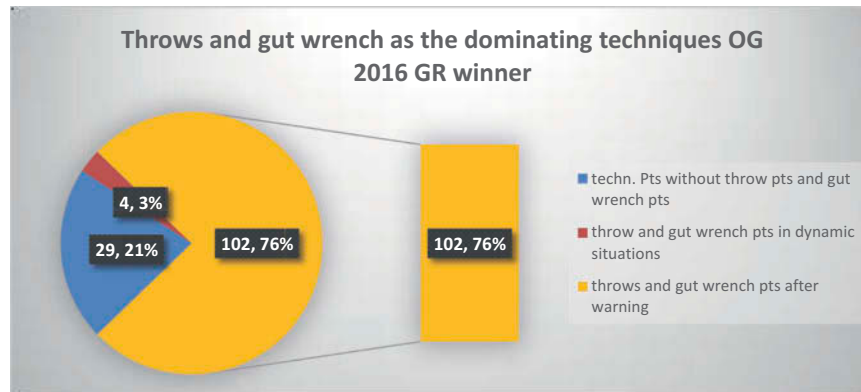


FIGURE 53 Throws and gut wrench as the dominating techniques in Rio. GR = Greco-Roman.