



## Research Article

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### The Effect of Olympic Cancellation on Athletes Performance

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**Abstract:** This research was done in order to show the effects of COVID-19 and World War I and II on the Olympic performance of athletes in reference to the trend recorded in the previous 28 Olympics including the cancellation time of Olympics in 1916, 1940, 1944 during World War I and II. The title of this research is the effect of Olympic cancellation on Athletes performance. For this researcher consider a population of 28 sports registered in Olympic which comprises 303 events from this purposively athletics sport 15 events were selected to see their medalist athletes performance trends recorded in the previous Olympics .

Based on the data collected from the Olympic official data base the researchers were analyzed the trends of the medalist athletes in the previous 28 Olympics. These events were short distance running 100m sprint, 200m sprint, 400m, 4x110m hurdle, 4x400m hurdle, 4x100m relay, 4x400m relay, 800m, 1500m middle distance running, 5,000m and 10,000m field events long and high jumps discuss and shot put long distance running and marathon. Based on the data analyses with the trend method since the time of modern Olympic up to 2016 with the average medalist results of athletes performance with in the interval of consecutive 5 Olympics together show an improvement in performance but with the time before cancellation of Olympic due to world war I and world war II and the Olympic held after world war I and II show a slight decrement in performance of medalist athletes were recorded due to the effect of cancellation of Olympics in the first and second world war.

The finding of this research indicated that athletics events such as High jump, long jump, shot put, discuss throw, 4x400m relay, 10000m, 5000m, 1500m, 800m, 400m, 200m, 1500m, 110m hurdle, 400m hurdle, showed decrement in medalist athletes performance due to the cancelled Olympics. In general Short distance running middle distance running in general power need events specially discuss throw shot put, long jump, high jump should need special focus to achieve the 2016 Olympic medalist performance in 2020 Tokyo Olympics.

**Keywords:** COVID-19, Athletics event, Performance, World war.

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## INTRODUCTION

### Background of the study

The COVID-19 pandemic has caused the most significant disruption to the worldwide sporting calendar. Since World War I across the world and the varying degrees, sports events have been cancelled or postponed (BBC, 2020,) (Los Angeles Times, 2020).

Spectators have no games to watch and players no games to play. In response, players are being encouraged to "play for lives" rather than for points. (Fitzsimmons, Caitlin 2020).

Only a few countries, such as Turkmenistan (4) BELARUS, Nicaragua, and Tajikistan, have continued professional sporting matches as planned (Wagner and James, 2020).

Multiple event competitions the 2020 arctic winter games the 2020 Asian Para games the European leagues postponed the 2020 summer Olympics and Paralympics were scheduled to take place in Tokyo starting 24 July/2020 are postponed for one year.

The women world championship the American basketball tournament the 2020 archery world cup were postponed including the pan American archery

championships. In general all continental regional and National level sport tournaments were cancelled except which were completed before COVID-19 announced by WHO as a pandemic. This is the impact of the newly outbreak corona virus on sporting events.

The ongoing corona virus disease (COVID-19) Outbreak in china has become the world's leading health headline and is causing major panic and public concerns. On January 30, 2020 the world health organization (WHO) declared that the new corona virus outbreak is a public health emergency of international concern. The virus has already had a direct impact on more than 10million people in the city of Wuhan and has reached other parts of china as well, posing a health threat of unknown magnitude globally.

The outbreak has caused governments in various countries to take swift and protective measures. In china these included putting cities on lockdown implementing travel warnings/bans and cancellations, extending national holidays and closing schools and postponing classes. Currently the virus was highly transmitted throughout the world and countries are applying different preventive methods which are recommended by world health organizations (WHO) Suchlike regularly and thoroughly clean hands with an alcohol-based hand rub or wash them with soap and

water, maintain at least 1metre(3 feet) distance from others, avoid going to crowded places, avoid touching eyes, nose and mouth, follow good respiratory hygiene, stay home and self-isolate even with minor symptoms such as cough, headache, mild fever until to be recover.

Arguably, staying home while a safe measure, may have unintended negative consequences since such efforts to avoid human to human transmission of the virus may lead to reduced physical activity. It is likely that prolonged home stay may lead to increased sedentary behaviors, such as spending excessive amounts of time sitting, reclining, or lying down for screening activities(playing games, watching television using mobile devices) reducing physical activity(hence lower energy expenditure ) or engaging in avoidance activities that, consequently, lead to an increased risk for and potential worsening of chronic health conditions.(Owen N., Sparling P.B., 2010) there for, there is a strong health rationale for continuing physical activity in home to stay healthy and maintaining immune system function in the current precarious environment. In the same way it has an effect on the sports men/women who already in a peak training time for competition like those who were ready to participate in 2020 Tokyo Olympics, world women champion ships and different other world level competitions continental level competitions and national level competitions.

In this research a researcher need to assess the effect of Olympic cancellation on Athletes performance with selected athletics event by analyzing the average performance results of medalists recorded for five Olympic interval of the previous 28 summer Olympics by giving a special focus for the first and second world war time because that time also the time which made the Olympic not held so the researcher assumes during that time also an effect on the performance of the athletes.

## MATERIAL AND METHODS

### Design of the study

This quantitative research applied web based design in order to collect data from the Olympic data base.

### Sample size and sampling techniques

In order to analyze easily and assess the effect of Olympic cancellation on Athletes performance the researcher applied purposive sampling techniques to select the athletics sporting events out of 28 sports which contains 306 event competitions and from this the researcher used 15 events of athletics sport 4 field events 10 track events and marathon run historically they are contested in the first ancient Olympic games, and champions have been recorded from as far back as 776BC. Due to time and resource shortage the researcher used men medalist results.

### Data collection and method of analysis

The researcher used secondary data /Archival data/ from the Olympic database online portal which is web based data collection to evaluate the performance of the previous 28 Olympic medalist results. The data obtained from the online portal are divided in six intervals with 5 Olympics together to under consider the 1916, 1940, and 1944 cancelled and 2020 postponed Olympics due to World War I, II and Covid-19 cases. The average results of the medalists were calculated statistically and the trends were graphically represented by line and bar graph to show the trends of performance after and before cancellation of the tournament. Standard deviation also calculated in order to see the value difference from the mean. Correlational coefficient is also calculated in order to see the relationship between before and after World War I and II in order to predict the performance of athletes result for 2020 Tokyo Olympic after postponed due to covid-19.

## RESULTS AND DISCUSSION

### Medalist performance result difference during pre and post-world war I and II in Olympic

The result of medalist athletes in the previous Olympics shows an improvement from one Olympic to the other Olympic in general but sometimes the results or performance of athletes were affected with the cancellation of Olympics in 1916, 1940 and 1944 due to world war I, II, and under war countries around 1944. At that time the athletes were not compete with the Olympic forum due to the above cases that was affected the performance of medalist athletes performance when competed after the Olympic held after world war I and II. The detail of this was explained below with tables and graphs. The results recorded in time was analyzed with that the negative values have indicated an improvement and appositive values have shown the performance decrement. On the other hand, the performance result recorded in meter/km was analyzed with that the positive values have shown the improvement in performance and the negative values have shown the decrement in performance.

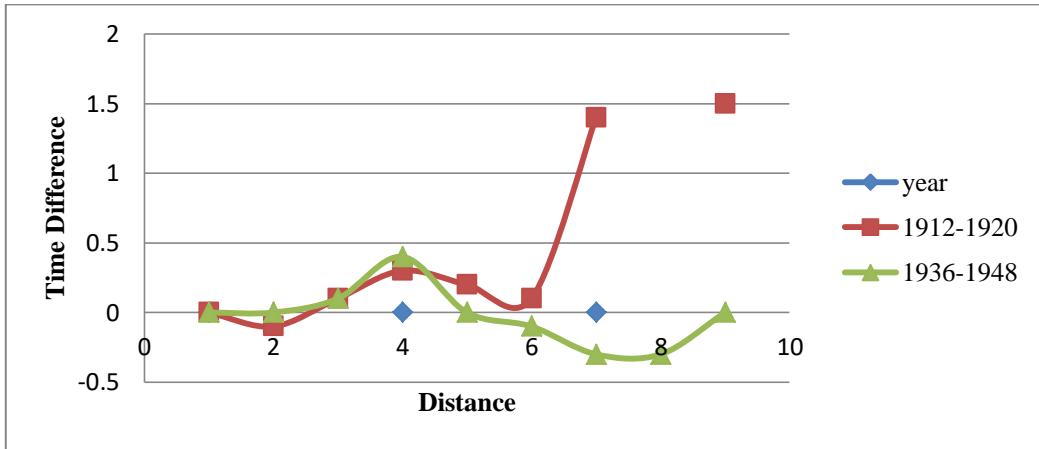
At the COVID-19 time the 2020 Olympic was postponed for 2021 at this time the government of Japan promised that the virus will get solution either vaccine or other controlling solutions. In the same way to World war I and II it will expect that the COVID-19 has an effect on the performance of the 2020 Olympic participant Athletes based on the trend analysis made from the cancelled Olympic during world war I and II as a result the athlete should take lesson from this analysis and should take their own effort to keep their performance on the Olympic 2020 forum. As stated also by Jayarman, 2018 on his study, the 2020 Olympic will took part in Japan at that time the temperature of the country will reach to more than 36 degree centigrade this was predicted if it was held on time by 2020 but it was postponed for one year. No one know what will

come but after a year it will also expected that the temperature will increased or expect to be the same

beside to the COVID-19 pandemic.

**Table 1:** Short distance medalist athlete's performance result difference in Olympics

Year	100m			200m			400m			
	Rank	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
1912-1920	0	-0.1	0.1	0.3	0.2	0.1	1.4	1.5		
1936-1948	0	0	0.1	0.4	0	-0.1	-0.3	-0.3	0	



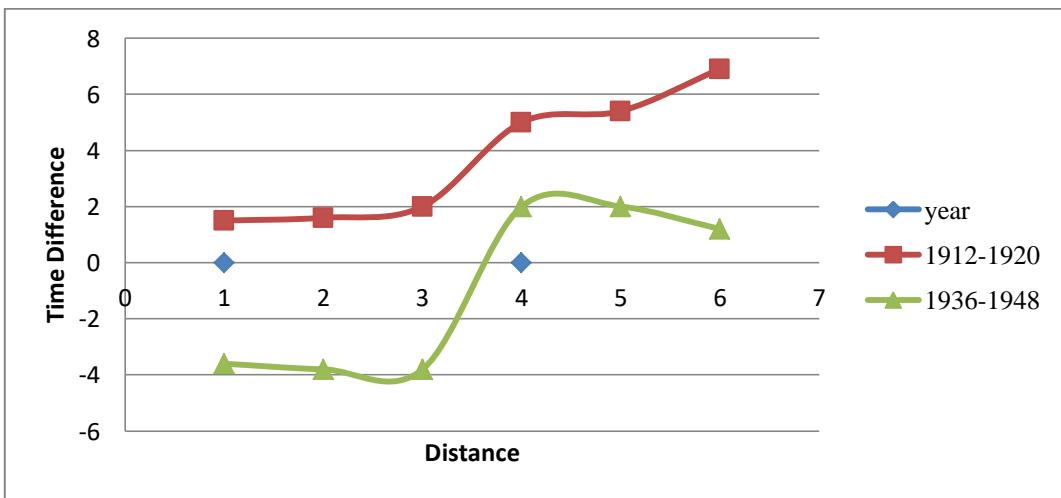
**Fig 1.** Short Distance Medalist Athletes Performance Result Difference in Olympics

As shown above in the table 1 and graph 1 the difference of short distance performance results of medalist athletes in pre-world war and post-world war I

and II in Olympic shown a decrement in performance in 100m, 200m and 400m Sprint run.

**Table 2:** Middle Distance Medalist Runner Performance Results Difference in Olympic

Year	800m			1500m			
	Rank	1st	2nd	3rd	1st	2nd	3rd
1912-1920		1.5	1.6	2	5	5.4	6.9
1936-1948		-3.6	-3.8	-3.8	2	2	1.2



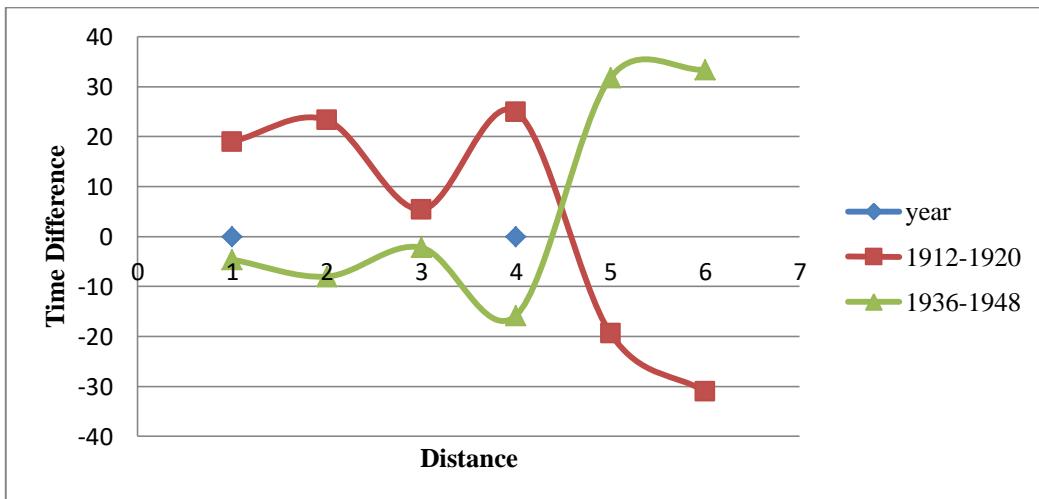
**Fig 2.** Middle Distance Medalist Runner Performance Results Difference in Olympic

The middle distance medalist runner performance results difference in the pre and post-world war I and II shown that there was a slight improvement

in 800m in the Olympic held after the end of world war II but it was not for 800m and 1500m Olympic result held after world war I and II.

**Table 3:** Long Distance Medalist Athlete's Performance Result Difference in Olympics

Year	5000m			10000m			
	Rank	1st	2nd	3rd	1st	2nd	3rd
1912-1920		19	23.3	5.4	25	-19.4	-31
1936-1948		-4.6	-8	-2.2	-15.8	31.8	33.4

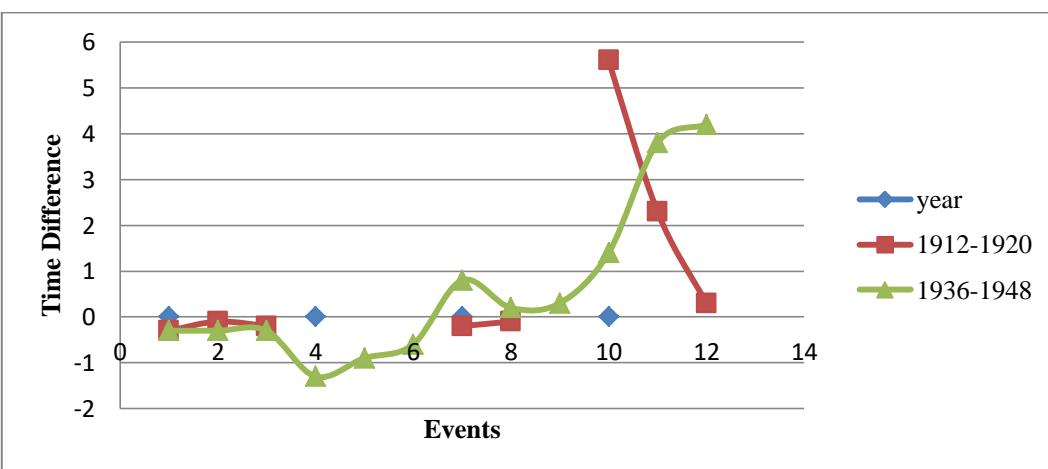
**Fig 3.** Long Distance Medalist Athletes Performance Result Difference in Olympics

Long distance running medalist result difference in Olympic held after Olympic I and II shown an improvement specifically in the Olympic held after world war II for both 5000m and 10000m but it was not improved for 5000m and 10000m in the

Olympic held after world war I except 2<sup>nd</sup> and 3<sup>rd</sup> ranked athletes in 10000m. This was shown that its effect is not significant for aerobic activities (Abdulaziz, 2020).

**Table 4:** 110m hurdle; 400m hurdle, 4x100m relay and 4x400m relay medalist athletes result difference in Olympics

Year	110m Hurdle			400m Hurdle			4x100m Relay			4x400m Relay			
	Rank	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
1912-1920		-0.3	-0.1	-0.2	-	-	-	-0.2	-0.1	-	5.6	2.3	0.3
1936-1948		-0.3	-0.3	-0.3	-1.3	-0.9	-0.6	0.8	0.2	0.3	1.4	3.8	4.2

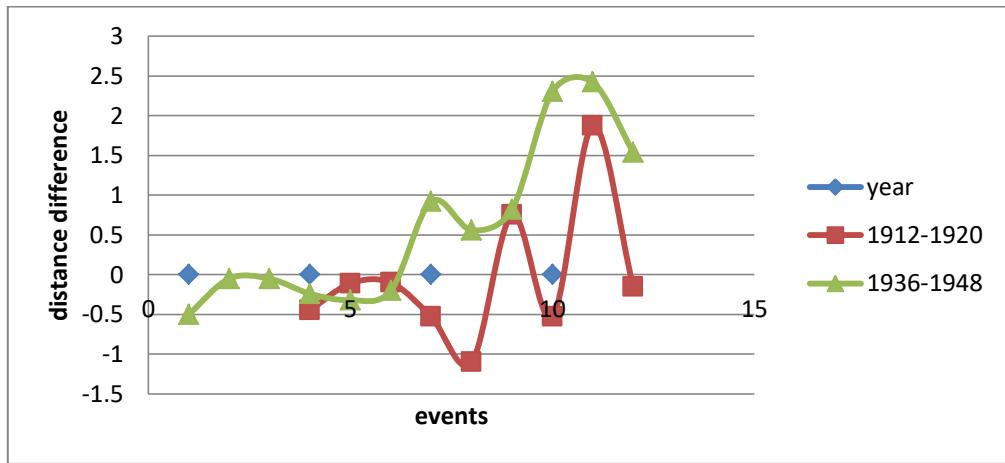
**Fig 4.** 110m Hurdle, 400m Hurdle, 4x100m Relay, 4x400m Relay Medalist Athletes Result Difference in Olympics

For hurdle and relay running events the effect of the cancellation of Olympic due to World War I and II was not significant all events of 110m hurdle, 400m hurdle shown improvement but 4x100m relay shown

improvement in the Olympic held at the end of the first world war but not after the end of second world war and 4x400m relay did not show improvement held after the end of I and II world war Olympics.

**Table 5:** High jump, long jump, shot put and discus throw medalist athletes performance result difference in Olympics

Year	High Jump			Long Jump			Shot-Put			Discus Throw		
Rank	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
1912-1920	-	-	-	-0.45	-0.11	-0.1	-0.53	-1.1	0.75	-0.53	1.87	-0.15
1936-1948	0.5	0.05	0.05	-0.24	-0.32	-0.2	0.92	0.56	0.82	2.3	2.42	1.54

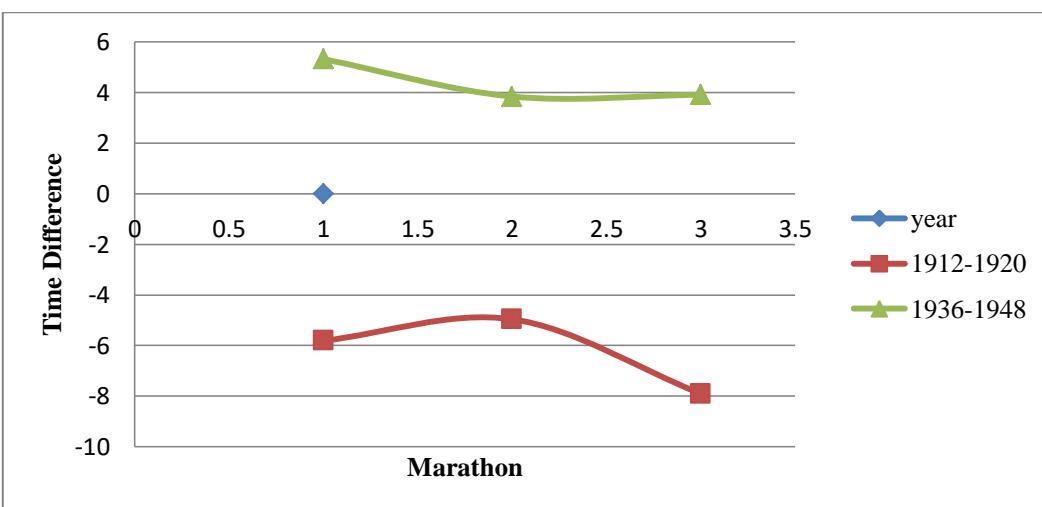
**Fig 5.** High Jump, Long Jump, Shoot Put and Discuss Throw Medalist Athletes Performance Result Difference in Olympics

The case of field events result in Olympic held before and after World War I and II shown that there were an improvement in shot put and discuss throw in the Olympic held after and before world war II but the

other events of long jump and high jump shown a decrement in performance results of Olympic held after and before world war I and II.

**Table 6:** Marathon medalist athlete's performance result difference in Olympics

Year	Marathon		
Rank	1st	2nd	3rd
1912-1920	-5.81	-4.96	-7.9
1936-1948	5.32	3.84	3.91

**Fig 6.** Marathon Medalist Athletes Performance Result Difference in Olympics

The difference of medalist athlete's result of marathon run held in Olympic before and after World War I and II shown that there was an improvement in both cases the effect of the cancelation of Olympic was

not significant on the performance of marathon medalist athletes. But due to the improvement of records through time it needs high effort to keep the peak performance in the 2020 Olympic.

## Recommendations

According to the summary and conclusions of this paper the researcher forwarded the following recommendations for athletes, coaches, sporting organizations Olympic committees and federations to be under considered during the COVID-19 Pandemic time to keep the performance of their athletes in a peak of competition beside to keeping their health.

- As it was observed from the trend analysis of the previous 28 Olympics, athletes performance were highly affected while the tournament was cancelled or postponed, world war I and II were a simple indicators for thus, athletes should work professionally in their home by keeping their intensity, duration, time type and frequency of their training in the COVID-19 Pandemic time.
- The federation of the sporting events should follow their athletes training condition through technology and give guidance counseling and hope to keep their peak performance and strong mentality
- Special emphasis should be given for short distance running middle distance running and power need events in general like shot put, discuss throw, long jump and high jump they are highly open for reversibility principles if the athletes were detraining they will have a high chance to loss their performance in a high range.
- Other things are constant but the only cancellation or postponed of tournament program has a great influence on the athletes performance for thus, athletes should aware of this and work with such time to win two prizes the medals and the fight against the situation that will made the Olympic to postponed.

## CONCLUSION

From the trends of the previous 28 Olympics by calculating the mean standard deviations and using graphs to indicate well the researcher concluded its result in the following ways. When we consider the first and second world war in 1916, 1940 and 1944 during that time Olympics were cancelled. The time had the influence on the performance of the athletes in different ways. In order to see only the trends of the performance of medalist athletes before and after World War I and II the researcher divided the Olympics in 6 intervals including 5 Olympics in one interval and want to see the average performance results. On the other hand the researcher also tried to see the performance results of a single Olympic medalist athlete before and after World War I and II.

- Based on the average results of medalist athletes 1500m, 400m relay, high jump, long jump events were indicated less performance in the interval between 2008-2016 compared with the interval of 1988-2004 average

Olympic results and 4x400m hurdle had no difference in the same Olympic interval results but the other events were improved form one interval to the next. This means not that there were decreased in performance it may be covered with the high performance value recorded in a single Olympics.

- The results of medalist athletes after world war I in 1920 decreased in High jump, long jump, shot put, discuss, 4x400mrelay, 10000m, 5000m, 1500m, 800m, 400m, 200m events while compared with that of 1912 Olympic. In the same way in 1948 Olympic after the end of second world war 400m, 800m, 1500m, 110m hurdle, 400m hurdle, discuss throw, shot put events had recorded less results while compared with that of 1936 Olympics. This shows that the cancelled time has their own influence on the performance of athletes other things to be constant.
- Short distance running middle distance running in general power need events specially discuss throw shot put, long jump, high jump should need special focus to achieve the 2016 Olympic medalist performance in 2020 Tokyo Olympics or else there will be a decrease in performance of medalist athletes result than the Olympic result of medalist athletes recorded in 2016.

## Acknowledgements

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## REFERENCES

1. Summer Olympics Results (1936). *Athletics*. Sports Reference. Retrieved from <https://www.sports-reference.com/>;
2. International Olympic Committee (IOC). (n.d.). Results Database. Retrieved from <https://www.olympic.org>
3. Summer Olympics Results. (1948). *Athletics*. Sports Reference. Retrieved from <http://www.sports-reference.com/>
4. Summer Olympics Results. (1952). *Athletics*. Sports Reference. Retrieved from <http://www.sports-reference.com/>
5. Summer Olympics Results. (1968). Sports Reference. Retrieved from http://www...sports-reference.com/Olympics/summer/1968/ATH/
6. Athletics Medal Standings. (2008). Archived from the original on 18 august 2008
7. Summer Olympics. (2016). *Athletics*. Retrieved from <http://www.Rio2016.com>
8. Olympics Official. (2016). *Athletics*. webpage