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## Sociological analysis of modern sports: A case study of marathon runners

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### Abstract

Researcher summarise the international Marathon running top performers were from African countries like Ethiopia, Kenya and Uganda. These countries are a monopoly in the marathon and long distant players. Though their geographical size is small or mini, their performance is major. This study found the main reasons for the high performance in the Marathon event from these countries. Some major findings were Genetic predisposition, Development of a high maximal oxygen uptake as a result of extensive walking and running at an early age, relatively high haemoglobin and hematocrit, development of good metabolic efficiency based on somato type and lower limb characteristics, favourable skeletal-muscle-fibre composition and oxidative enzyme profile, traditional Kenyan/Ethiopian diet, living and training at altitude and their fitness with having a low BMI, with also having a high max VO<sub>2</sub>. Studying these reasons, others can learn from their training strategies and could implement if wants to achieve high in Marathon running.

**Keywords:** Marathon runners, high performance

### Introduction

The marathon is a long-distance running event with an official distance of 42.195 km (26.22 miles), ([https://en.wikipedia.org/wiki/Marathon#cite\\_note-IAAF-1](https://en.wikipedia.org/wiki/Marathon#cite_note-IAAF-1)) usually run as a road race. The event was instituted in commemoration of the fabled run of the Greek soldier Pheidippides, a messenger from the Battle of Marathon to Athens. The marathon was one of the original modern Olympic events in 1896, though the distance did not become standardized until 1921. More than 500 marathons are held throughout the world each year, with the vast majority of competitors being recreational athletes as larger marathons can have tens of thousands of participants.

### Modern Olympics marathon

When the modern Olympics began in 1896, the initiators and organizers were looking for a great popularizing event, recalling the ancient glory of Greece. The women's marathon was introduced at the 1984 Summer Olympics (Los Angeles, USA) The Olympic men's record is 2:06:32, set at the 2008 Summer Olympics by Samuel Kamau Wanjiru of Kenya (average speed about 20.01 kilometres per hour). The Olympic women's record is 2:23:07, set at the 2012 Summer Olympics by Tiki Gelana of Ethiopia. The men's London 2012 Summer Olympic marathon winner was Stephen Kiprotich of Uganda (2:08:01).

**Table 1:** Olympic marathon distances

Year	Distance (km)	Distance (miles)
1896	40	24.85
1900	40.26	25.02
1920	42.75	26.56
1924 onward	42.195	26.22

### Objectives of the study

1. To find top performing marathon running players and their nation.
2. To find the reasons behind the top performance marathon running event.

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**Method of the study**

This paper was the descriptor type of the study, which conceptualizes the marathon running and its high performing nations. The researcher used the information from the web and discussed the major findings. Data was secondary.

**Findings**

According to the IAAF, the following men and women are among the top ten fastest at the marathon distance. ([https://en.wikipedia.org/wiki/Marathon#cite\\_note-IAAF-1](https://en.wikipedia.org/wiki/Marathon#cite_note-IAAF-1))

**Table 2: Men top ten fastest marathon runner**

Rank	Time	Athlete	Country	Date	Location
1	2:02:57	Dennis Kimetto	 Kenya	28 Sep 2014	Berlin
2	2:03:13	Emmanuel Mutai	 Kenya	28 Sep 2014	Berlin
3	2:03:23	Wilson Kipsang	 Kenya	29 Sep 2013	Berlin
4	2:03:38	Patrick Makau	 Kenya	25 Sep 2011	Berlin
5	2:03:59	Haile Gebrselassie	 Ethiopia	28 Sep 2008	Berlin
6	2:04:00	Eliud Kipchoge	 Kenya	27 Sep 2015	Berlin
7	2:04:15	Geoffrey Mutai	 Kenya	9 Sep 2012	Berlin
8	2:04:23	AyeleAbshero	 Ethiopia	27 Jan 2012	Dubai
9=	2:04:27	Duncan Kibet	 Kenya	5 April 2009	Rotterdam
9=	2:04:27	James Kwambai	 Kenya	5 April 2009	Rotterdam

We could see from above table 2 that, eight top players from Kenya and two were Ethiopian players. So the dominance was of these two countries only in Men section.

**Table 3: Women top ten fastest marathon runner**

Rank	Time	Athlete	Country	Date	Location
1	2:15:25	Paula Radcliffe	 UK	13 April 2003	London
2	2:18:37	Mary Keitany	 Kenya	22 April 2012	London
3	2:18:47	Catherine Ndereba	 Kenya	7 Oct 2001	Chicago
4	2:18:58	TikiGelana	 Ethiopia	15 April 2012	Rotterdam
5	2:19:12	Mizuki Noguchi	 Japan	25 Sep 2005	Berlin
6	2:19:19	Irina Mikitenko	 Germany	28 Sep 2008	Berlin
7	2:19:25	Gladys Cheronno	 Kenya	27 Sep 2015	Berlin
8	2:19:31	AselefechMergia	 Ethiopia	27 Jan 2012	Dubai
9	2:19:34	Lucy Kabuu	 Kenya	27 Jan 2012	Dubai
10	2:19:36	Deena Kastor	 US	23 April 2006	London

Table 3 gives information that, four top players from Kenya and two were Ethiopian players. So the dominance was of these two countries only in Women section also.

**Table 4: Top nation's medal tally in Marathon running**

	Olympic medallists		World Championships medallists		Total Medallist
	Men	Women	Men	Men	
Ethiopia	4	2	1	1	8
Kenya	1	-	4	4	9
USA	3	-	-	-	3
France	3	-	-	-	3
Japan	1	-	1	2	4
Uganda	1	-	1	-	2
Morocco	-	-	1	-	1
Eritrea	-	-	1	-	1

Table 4 stated that major medalist players in an Olympic event and World Championship event were from African countries like Kenya, Ethiopia and Uganda. (Green coloured countries are from Africa)

**Discussion**

Robinson researched and stated “The Ethiopia/Kenya Running Phenomenon: -How running has responded to East African dominance” is a credit to the sport (Robinson, 2014) [2]. One absolutely safe prediction is that almost all the top places will go to Ethiopia and Kenya. One small geographical area, about 1/60th of the total of Africa, will be utterly dominant in a major sport practiced ardently all around the globe.

In 2013, there were 149 male marathon performances faster than 2 hrs. 10 min. Eighty of those were by Kenyans, 47 by Ethiopians, plus eight by Eritreans and Ugandans, from the same region and similar ethnicity. That's 134 out of 149, and leaves only 15 sub 2:10s done by other runners. The same ratio prevails until you go quite deep. In the 2013 merit rankings compiled by All-Athletics.com, only nine of the top 100 men are not East African. Of the best 300 men in the world today, 246 are East African. With the women, while the ratios are less extreme, they are moving closer to the men's every year.

This may be stating the obvious, but that doesn't mean the obvious is not worth thinking about. These are statistics without parallel or precedent. No globally popular human activity has ever been so dominated at the elite level by people

from such a relatively small region. This extraordinary state of affairs has come about in less than fifty years. In the 1964 Boston marathon, the top ten men came from five nations on three continents – Belgium, Finland, Canada, USA and Argentina. In that year's Olympic marathon, five continents were represented in the top ten finishers. It's impossible that the 2014 spring season will see any such range in the top placing.

The Kenyans, and more recently Ethiopians, generation after generation of them now, have been accepted entirely on their merits. They have been welcomed, admired, and rewarded, as people who do something that we love (run fast for a long way) better than we ever dreamed. Every effort has been made in our specialist media to give them the attention they deserve, led by *Running Times*, with profiles, analysing their training for us all to learn from, and putting a good many on the cover, always striving to present them to our readers as distinct human beings. The account of the working life of Haile Gebrselassie in the March issue is the latest example. If the very talk of African elites makes you switch off - and there are runners for whom these talented and hard-working individuals are only "some Kenyan" - well, that has not been the response of the sport as a whole.

Among committed runners and people involved in running – coaches, race directors, agents, media, the running-travel business – there has been a huge effort to climb the steep learning curve of knowledge about the African runners, their personalities, training, home environment, social backgrounds, languages, and cultures. Every major running writer I can think of has been to East Africa at least once. Some have become deeply expert. Interviews and conversation in media centres now are of a different order from fifteen years ago.

Last month, a world-class running track was opened in Iten, Kenya, donated and maintained by the Virgin-Money London Marathon. For five years, British runners, including Mo Farah have been attending a winter endurance altitude training program in Iten, also funded by the London Marathon. They go to Kenya to train with and learn from the world's best, to test and extend them in the Kenyan environment. Now they will have access to a top-class facility, one that is intended also to help Kenyan runners get even better, as well as being used by the girls who attend the Lornah Kiplagat Sports Academy, many from underprivileged backgrounds.

Study on "Kenyan and Ethiopian distance runners: what makes them so good?" (Wilber RL) stated that, since the 1968 Mexico City Olympics, Kenyan and Ethiopian runners have dominated the middle- and long-distance events in athletics and have exhibited comparable dominance in international cross-country and road-racing competition. Several factors have been proposed to explain the extraordinary success of the Kenyan and Ethiopian distance runners, including

- (1) Genetic predisposition
- (2) Development of a high maximal oxygen uptake as a result of extensive walking and running at an early age
- (3) Relatively high haemoglobin and hematocrit
- (4) Development of good metabolic "economy/efficiency" based on somatotype and lower limb characteristics
- (5) Favourable skeletal-muscle-fibre composition and oxidative enzyme profile
- (6) Traditional Kenyan/Ethiopian diet
- (7) Living and training at altitude, and
- (8) Motivation to achieve economic success.

Some of these factors have been examined objectively in the laboratory and the field, whereas others have been evaluated from an observational perspective. The purpose of this article is to present the current data relative to factors that potentially contribute to the unprecedented success of Kenyan and Ethiopian distance runners, including recent studies that examined potential links between Kenyan and Ethiopian genotype characteristics and elite running performance. In general, it appears that Kenyan and Ethiopian distance-running success is not based on a unique genetic or physiological characteristic. Rather, it appears to be the result of favourable somato typical characteristics lending to exceptional biomechanical and metabolic economy/efficiency; chronic exposure to altitude in combination with moderate-volume, high-intensity training (live high + train high), and a strong psychological motivation to succeed athletically for the purpose of economic and social advancement.

#### **In the article, "Why are Kenyan distance runners so fast?"**

([www.runnersworld.com/peak-performance/why-are-kenyan-distance-runners-so-fast](http://www.runnersworld.com/peak-performance/why-are-kenyan-distance-runners-so-fast)). It's the Kenyans' low BMIs that really stand out (see table below). When you're fit and have a low BMI, you also have a high max vo<sub>2</sub>, as the two are inversely related. The young Rift Valley subjects were tested for vo<sub>2</sub> max through a tough, interval-running routine at a makeshift (and undulating) 400-meter track. According to Jack Daniels's "Oxygen Power" tables, the untrained Kenyan youth who attended a school not known for producing track champions may have the potential to run a 2:18 marathon (males) or a 2:39 (females). And those are the "average" scores; the paper did not report the full range of observed vo<sub>2</sub> max scores, so we don't know how the fittest boys and girls performed.

#### **Conclusion**

By analysing the international Marathon runners in the view of sociology, researcher is concluding that from African countries like Ethiopia, Kenya and Uganda are playing and vital role in the field of sports. These countries are a monopoly in the marathon and long distant players. Though their geographical size is small or mini, their performance is major. So, the other can learn from their training strategies and could implement if wants to achieve in Marathon running. The talent hunt procedure could be formulized based on these players. Also other countries players can go there and have training. But still, these countries will dominate this event for many forth coming years.

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