Preparation

Barry Crane Bsc Hons Physiotherapy HPC CSP

preparation (noun) · **preparations** (plural noun)

the action or process of preparing or being prepared for use or consideration.

"the preparation of a draft contract" · [More]New content will be added above the current area of focus upon selection

"the project is in preparation"

synonyms:

devising · putting together · thinking up · drawing up · construction · [More]New content will be added above the current area of focus upon selection

composing · composition · editing · fashioning · concocting · production · getting ready · making ready · arrangement · development · assembling · assembly · instruction · teaching · education · coaching · training · tutoring · pedagogy · andragogy · inculcation · grooming · disciplining · drilling · priming · briefing · guiding · direction

Marathon planning and preparation

- There are unlimited online plans, apps, coaching, guides, etc., etc.
- I have personally constructed innumerable individual marathon plans for patients, friends, family and myself over the past 20+years

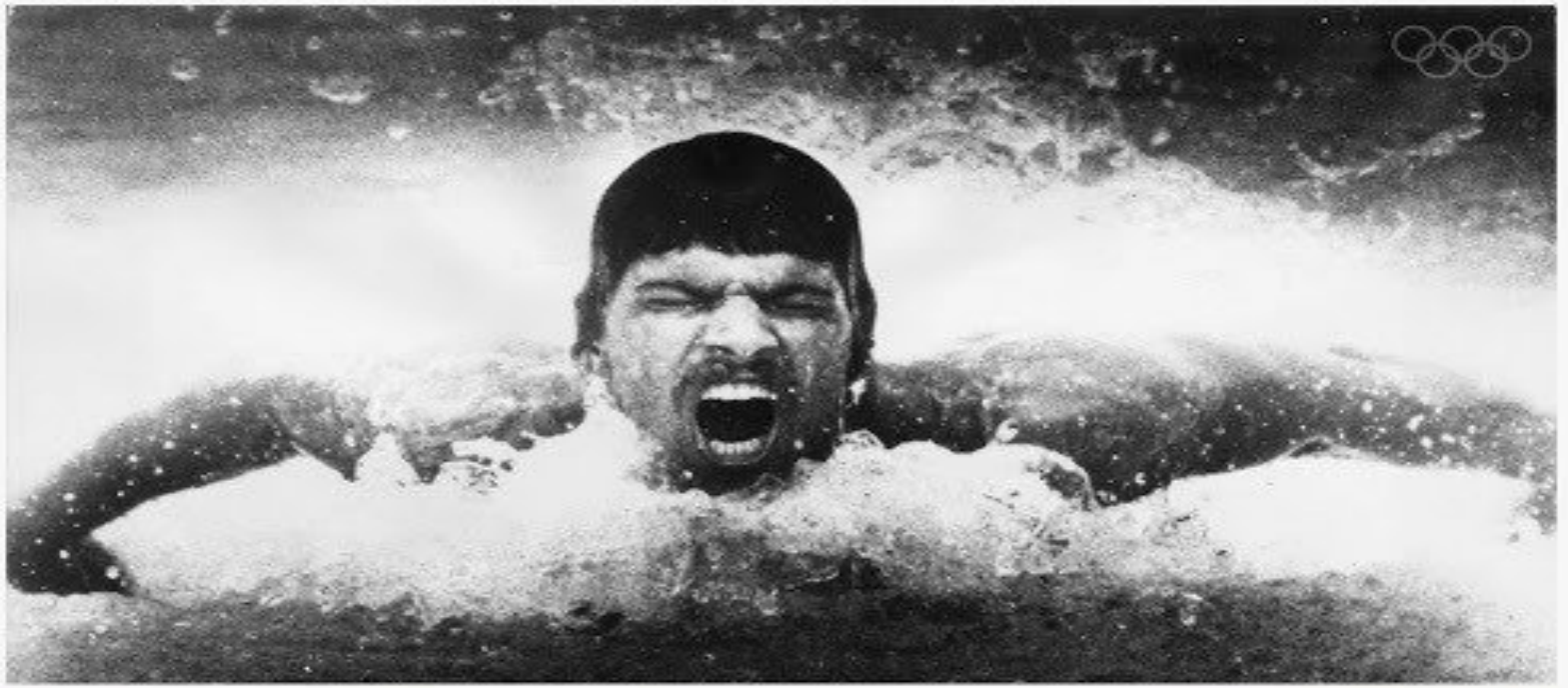

FLORA
2429
58867
58888

- But there is no London Marathon this year – only the virtual option.
- Will people still look to run a marathon this year?
- Or attempt another event/challenge?

Do we still need a marathon plan? Do we still need to prepare?

- My own recent learning
  - Since March lockdown and continued zoom/virtual appointments I've had physiotherapy interaction with over 200 ACL deficient and/or post-surgery ACL knee patients – mainly NHS patients but also several private patients.
  - Varying demographic but all seeking to return to wide ranging sports, hobbies and activities

- Major learning point with these patients has been the lack of an individualised plan, very limited progressive goal setting and very poor preparation on all aspects of their rehabilitation. Some patients as much as 18months to 2years post-surgery still struggling very badly with simple functional activities.

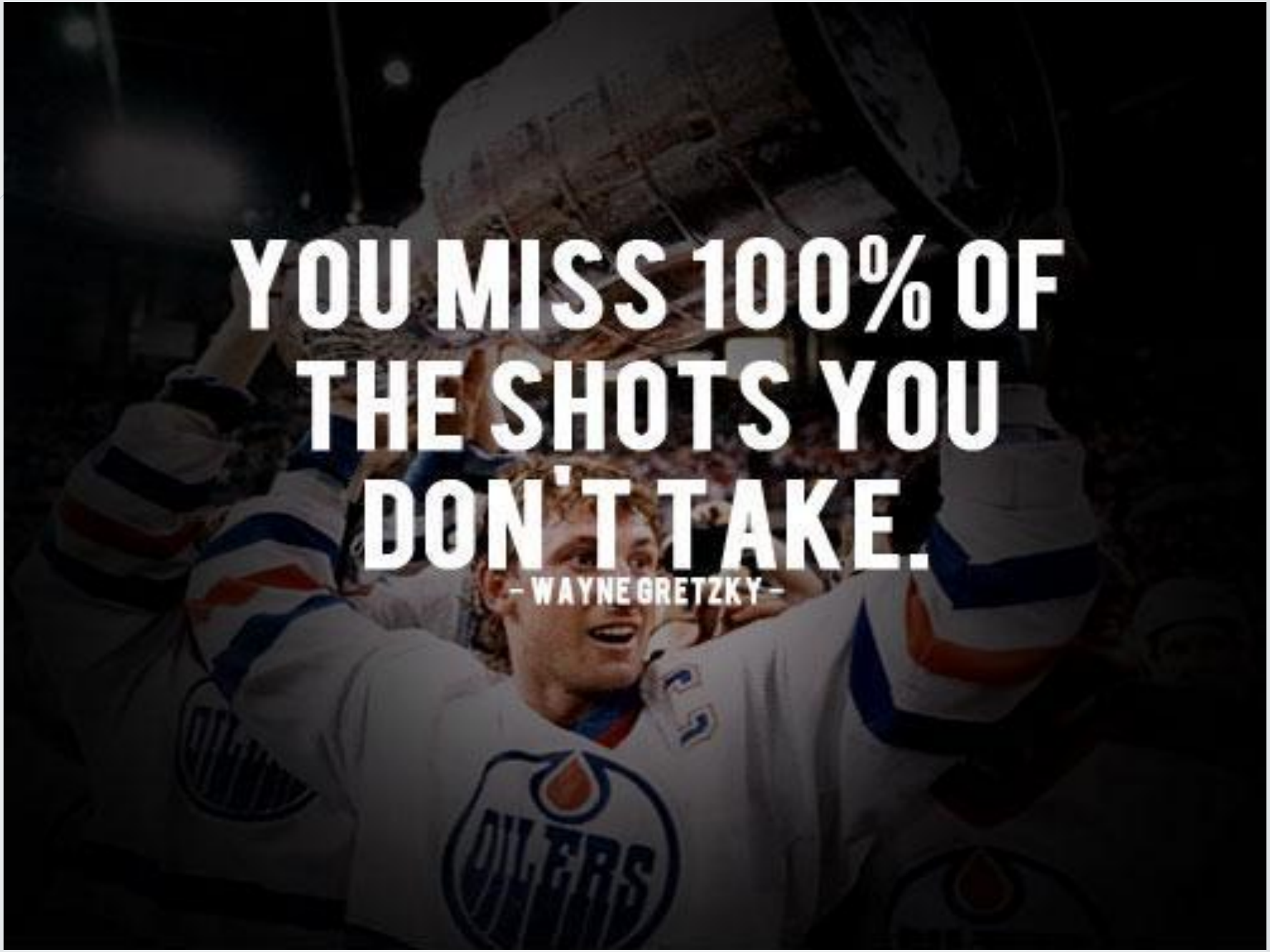


IF YOU FAIL TO PREPARE,
YOU'RE PREPARED TO FAIL.

MARK SPITZ

Are we getting worse at preparation/planning?

- Reliant on technology
- Reliant on equipment
- Reliant on clothing
- Reliant on footwear
- Reliant on online advice
- Lazier?


YOU MISS 100% OF
THE SHOTS YOU
DON'T TAKE.
- WAYNE GRETZKY -
OILERS

Can we prove that we're getting worse at planning and preparation for sport/activity?

- Is there an evident base for this theory?

- American Runners Have Never Been Slower (Mega Study). Posted on 03 April, 2020 by Vania Nikolova
- https://runrepeat.com/american-runners-have-never-been-slower-mega-study

- The study was led by Jens Jakob a former competitive runner and statistician from Copenhagen Business School. Jens Jakob is a fan of short distances with a 5K PR at 15:58 minutes. Based on 35 million race results, he's among the fastest 0.2% runners. Jens Jakob previously owned a running store, when he was also a competitive runner. His work is regularly featured in The New York Times, Washington Post, BBC and the likes as well as peer-reviewed journals. Finally, he has been a guest on +30 podcasts on running.

- Assisted by Vania Nikolova Vania. Ph.D. in Mathematical Analysis passionate about data, which allows her to dig deep to and uncover hidden trends. She is deeply passionate about Obstacle Course Racing (OCR), and has earned a Spartan Trifecta medal. With 10 years of experience in weightlifting and martial arts and over 200+ books read on nutrition and dieting, she brings unrivaled expertise and critical perspective on all things exercise and training. Her work has been featured on NPR, Washington Post, Shape, Prevention and many others.

American Runners Have Never Been Slower

- Mega Study analysed 34,680,750 results from 28,732 different races.
- Across all four major race distances - 5 Kilometer, 10 Kilometer, Half Marathon, and Marathon.
- This study also analysed how Americans' health influences their running performance.

Key Result

- The graph below shows the finish time trend of the marathon runners in the period from 1996 to 2016. And the year 2016 was the slowest in history.

Why this study?

- The deteriorating American health has been a popular topic for quite some time. Authors wanted to see if this trend is reflected in running race finish times.

The Amount Of Data

- This is the most exhaustive study of running race results in history. The key conclusions are at least 99% statistically significant for all of the most popular running race distances. Throughout this article, the primary focus will be on marathon results, though the results are confirmed through identical analysis of Half Marathon, 10 Kilometer, and 5 Kilometer race results.

Analyzed data distribution		
Distance	**Results**	**Races**
Marathon	5,704,281	3,828
Half Marathon	11,950,011	7,876
10 Kilometer	7,037,089	4,048
5 Kilometer	9,989,369	12,980
Total	**34,680,750**	**28,732**

Omitted Data

- The initial database includes results from 1902-2017 (May). Analysis was limited to 1996-2016.
- Included only races with an average number of finishers greater than 2,000 (for all four distances).
- For gender analysis, excluded entities without a valid gender entry.
- The dataset includes only finishers.
- The trimmed database (the foundation of our analysis) contains 24,763,389 results for the finish time trends (1996-2016) and 23,725,787 for the health correlations (2000-2016).

Basic Terminology & Methodology

- All results are at least 99% statistically significant.

- **Correlation coefficient (R)** - this coefficient shows the degree in which two variables have a linear dependency. R has values between -1 and 1. The closer the value is to either -1 or 1 the stronger the linear connection. For this analysis, we have used the Pearson Correlation Coefficient formula:

- **P-value** - a p-value, which is less than 0.01, means that our results are statistically significant with a confidence level of 99%.

- **Confidence interval (CI)** - an interval in which the error terms of the model lies with 99% certainty. If intervals don't contain the value 1, they are considered to be statistically significant. For this analysis, we have used Fisher's Z' score transformation, where Z' is by definition normally distributed.

Results from the analysis

- Americans are getting slower.
- Across all of the major race distances.
- The only ones not getting slower are the top elite runners.


MARATHON
WORLD RECORD PROGRESSION
THE WORLD RECORD MARATHON TIME
Men
Women

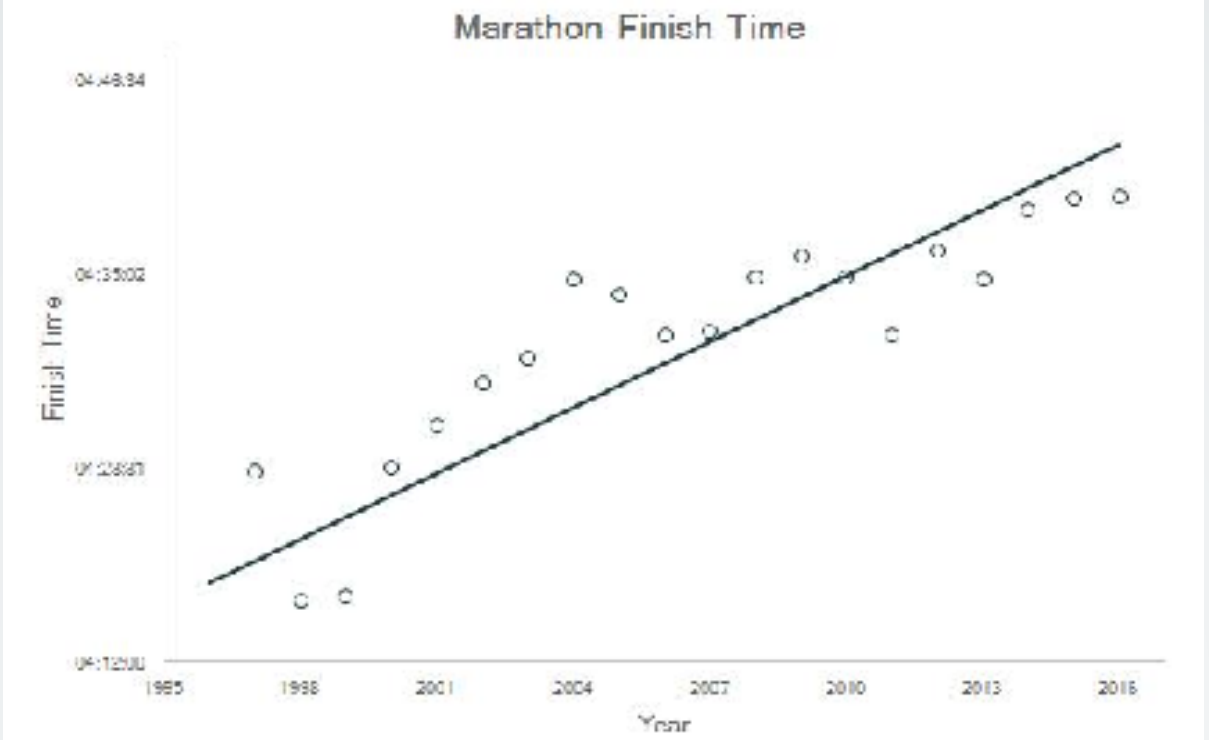
The progress over time in the world marathon record

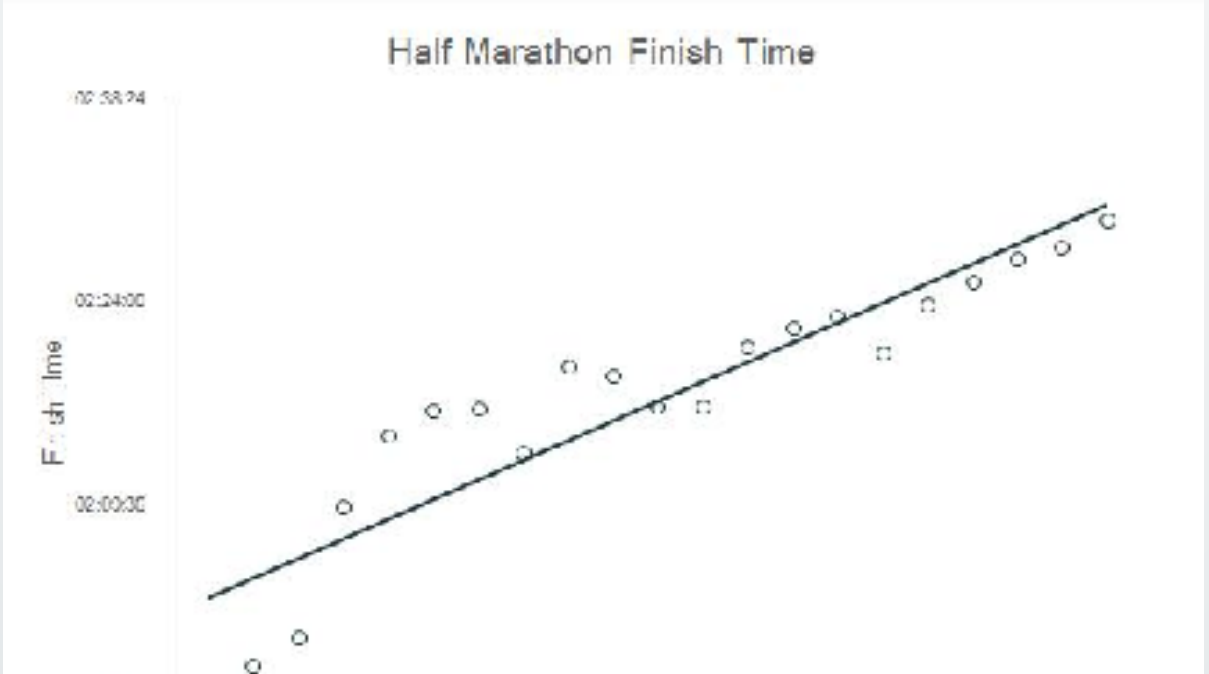
- Since the year 1900 the marathon record has been improved significantly. The first registered time was 2:55:18,4. Today the record is almost 1 hours faster. The record is 2:02:57 (2:55 min/km), only 2 minutes and 57 seconds from the magical 2 hours. Will the human body be able to run a marathon faster than 2 hours?

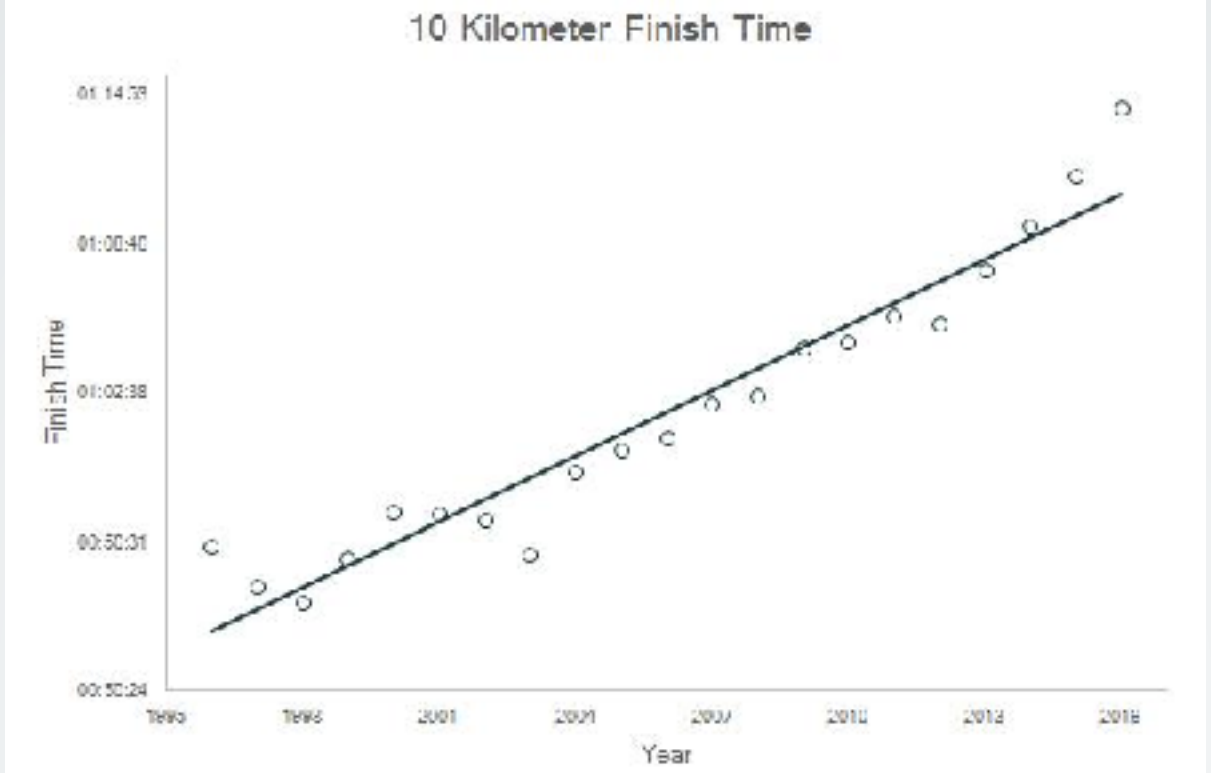
- Kipchoge!

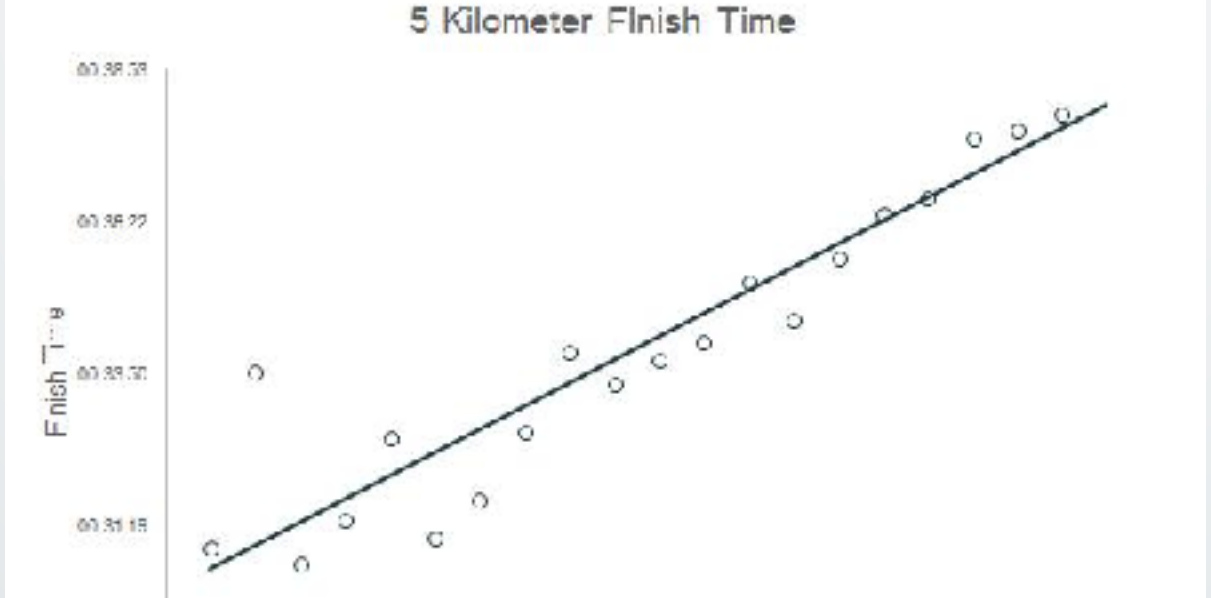
- Also, notice how the difference between mens and womens performance is only around 15 minutes. Women are catching up. Maybe that is correlated to the fact that the popularity of marathon running among women is increasing steadily faster than it is for men?


KENYA
Rio2016
KIPCHOGE
Rio2016
© EPA


Marathon Finish Time
Finish Time
1995
1998
2001
2004
2007
2010
2013
2016
Year


Half Marathon Finish Time


10 Kilometer Finish Time
Finish Time
Year

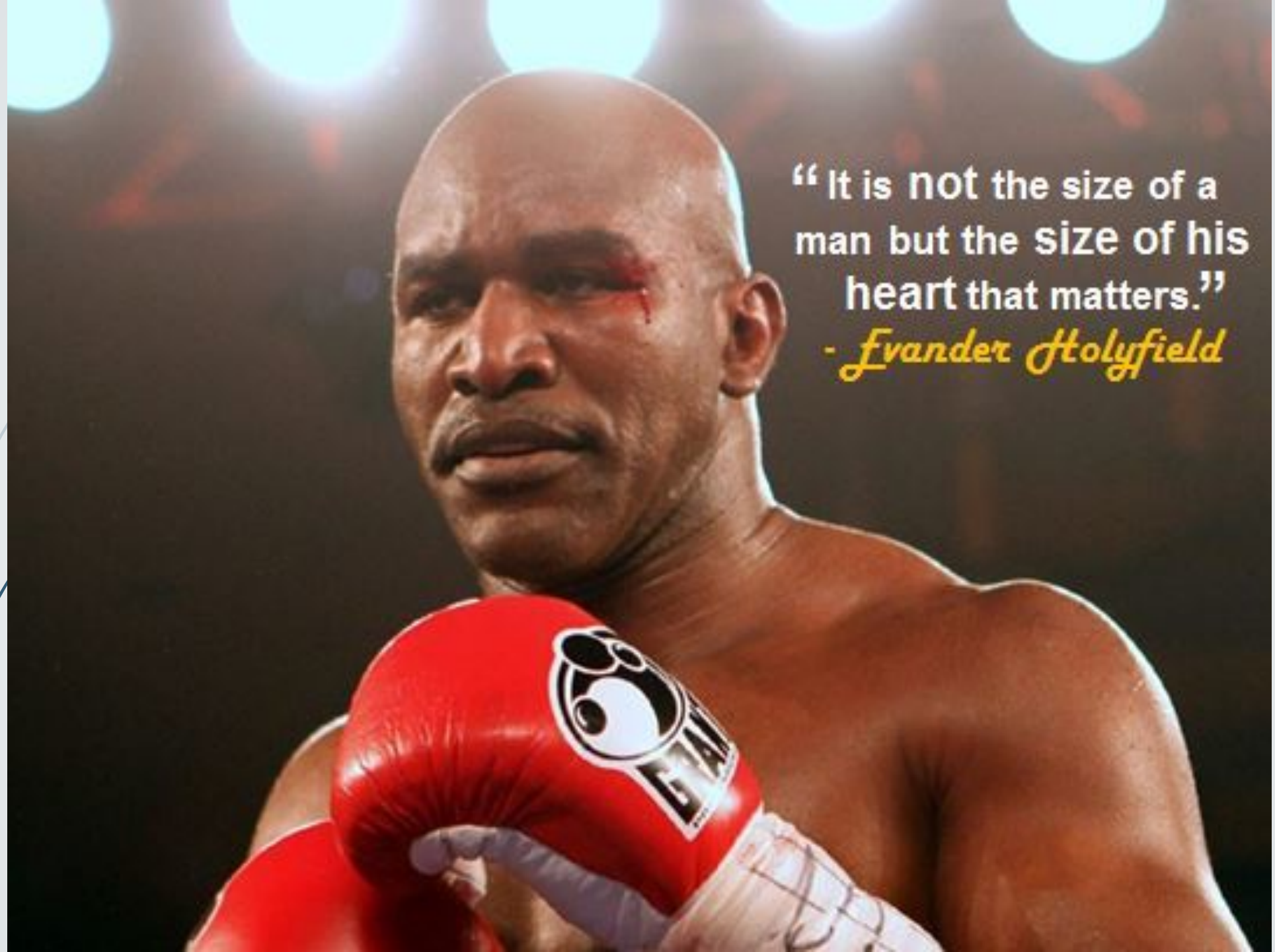

5 Kilometer Finish Time

Conclusions are presented with more than 99% statistical significance (see p-values below) and with very strong correlation (R) values

Model Parameters			
Distance	R	p-value	99% CI
Marathon	93.8%	0.0000008	(0.77,0.98)
Half Marathon	96.3%	0.0000000	(0.86,0.99)
10 Kilometer	91.1%	0.0000066	(0.69,0.98)
5 Kilometer	84.1%	0.0001683	(0.49,0.96)

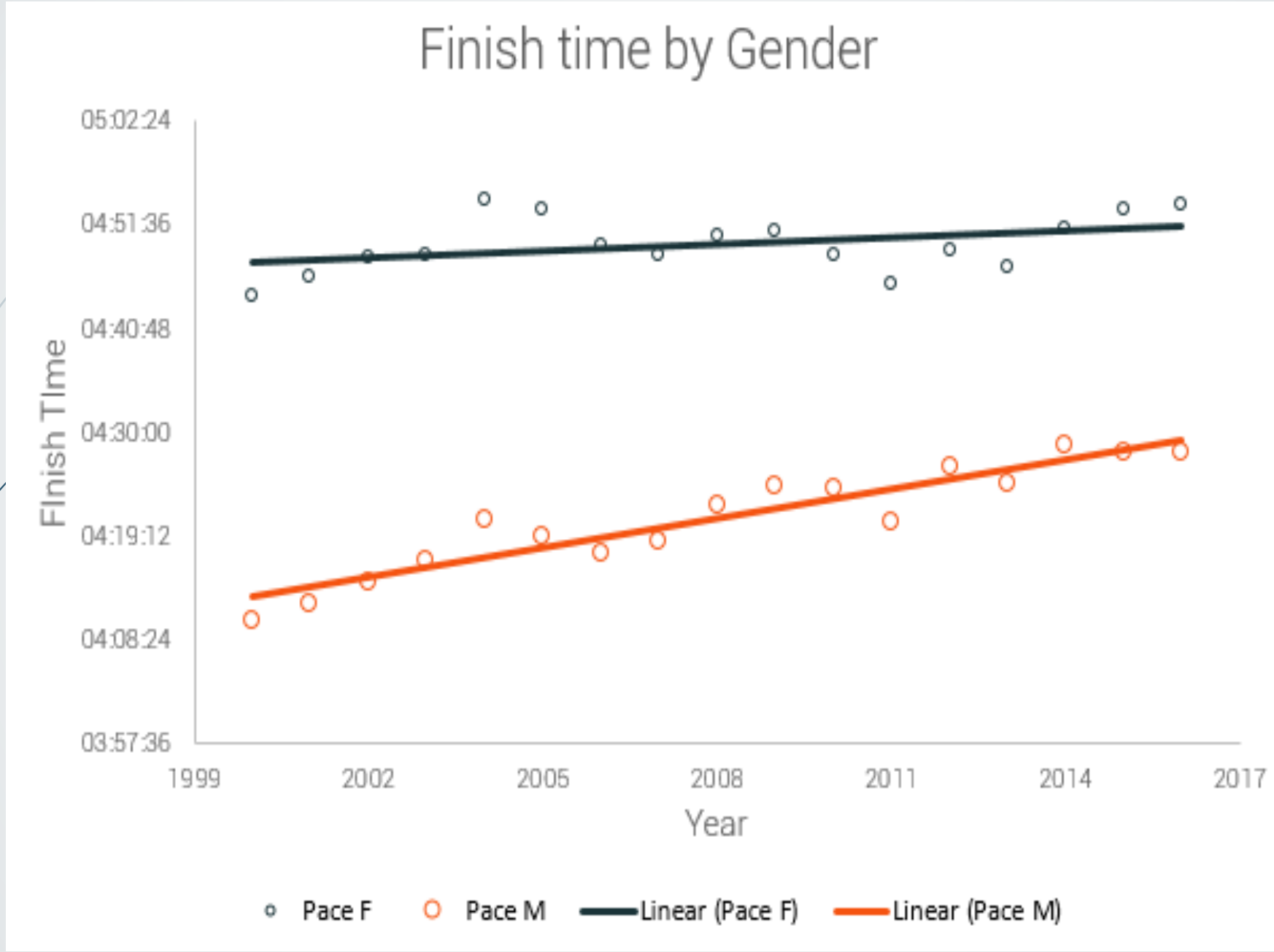
Myths On Why We Are Getting Slower

- It has been a popular belief that the increase of the average marathon finish time is due to the fact that participating in running competitions is gaining popularity. With the popularity increase, the number of not so fit participants rises, and the average finish time increases.
- This argument is not exhaustive.
- Let alone that in the last two years of this study (2015 and 2016) numbers of participants was declining and the finish time in all the four major race distances was still slowing.
- Nonetheless, there are some often used arguments to disprove.


" It is not the size of a man but the size of his heart that matters."
- Evander Holyfield

The proportion of women participants is increasing, and women are slower in general?

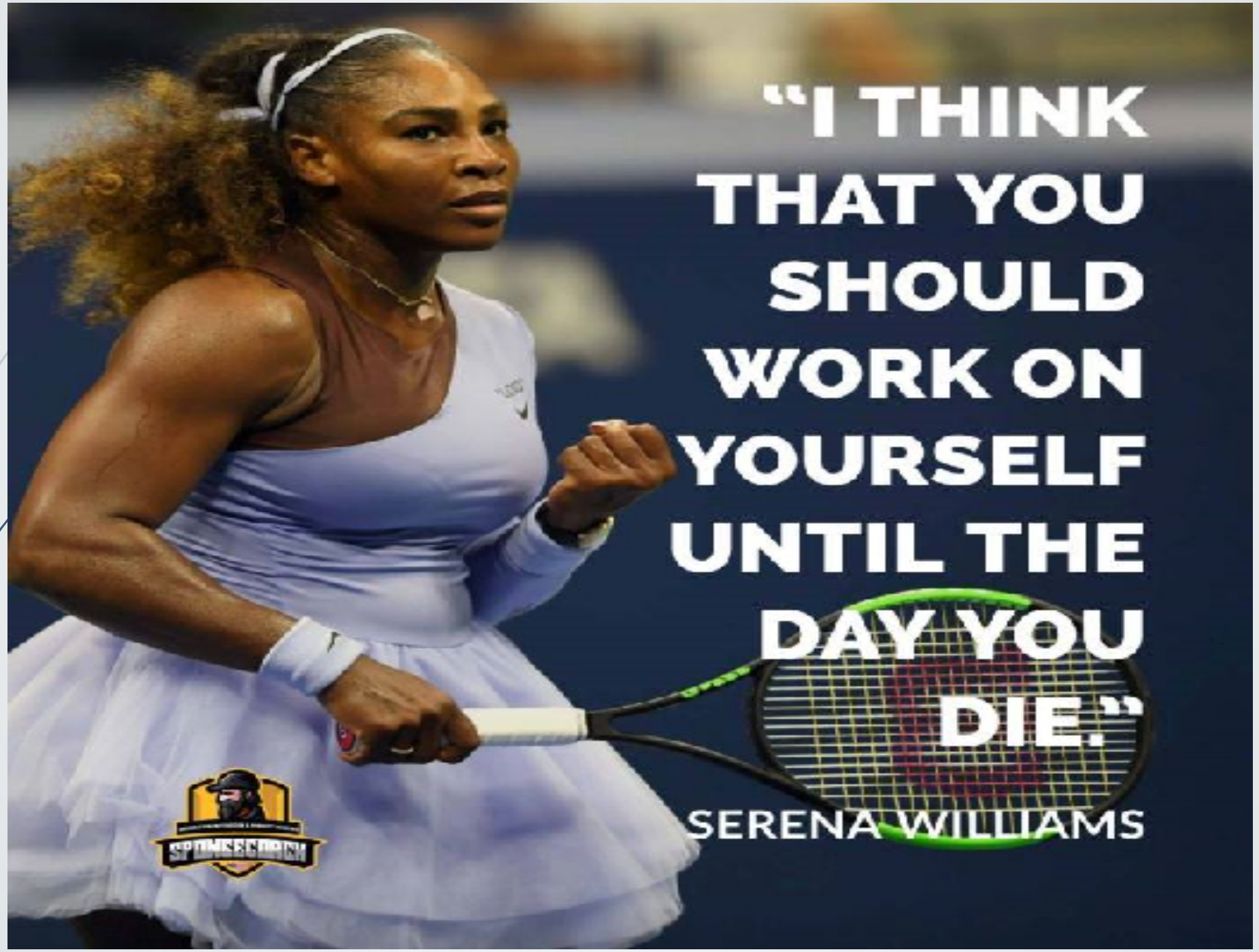
- Though this is a logically sound argument, the research shows that the rise in the numbers of female participants has less effect (46%), in the slowing of pace than the decrease in the speed of men (54%). This is so because men are becoming slower much faster than women's number of participants is rising.


Finish time by Gender
05:02:24
04:51:36
04:40:48
04:30:00
04:19:12
04:08:24
03:57:36
Finish Time
1999
2002
2005
2008
2011
2014
2017
Year
Pace F
Pace M
Linear (Pace F)
Linear (Pace M)

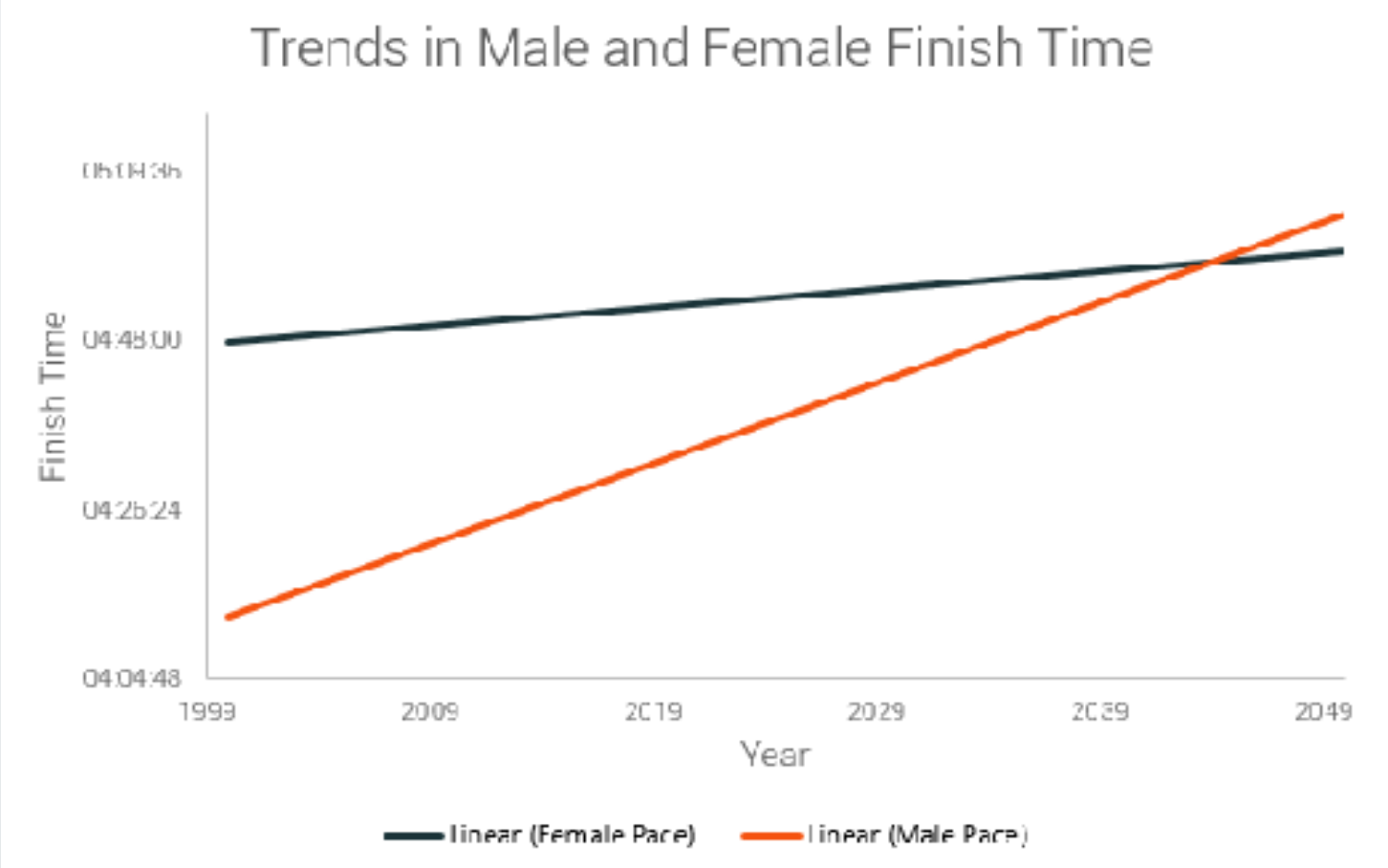
- For this piece of analysis, the Wald test for significance of the difference in slopes of two samples was used. The p-value obtained was 0.000074, which means that the slopes of the two trends are statistically different with more than 99% level of confidence.

- Therefore, this argument is *invalid*

Women are not to blame!


"I THINK THAT YOU SHOULD WORK ON YOURSELF UNTIL THE DAY YOU DIE."
SERENA WILLIAMS

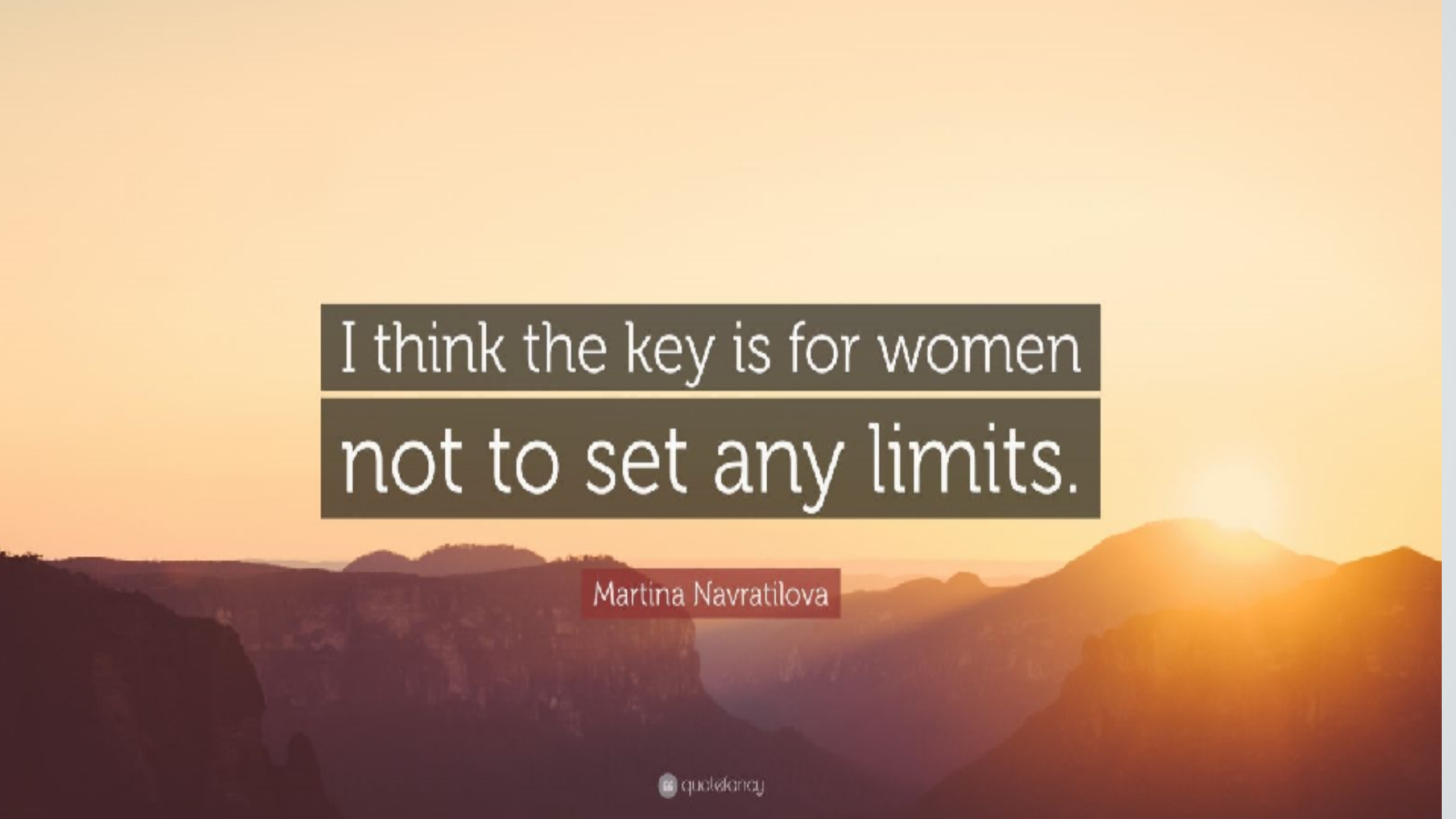
In connection with this finding we can estimate that if this trend continues, female and male runners will have the same pace by 2045.



However

- Due to physiological differences between men and women, this is not likely to happen.

- **The Trans Women Athlete Dispute with Martina Navratilova - BBC**
- *https://**www.bbc.co.uk/programmes**/m00069nr*
- 08/07/2019 · In this **one-off documentary special** for **BBC** One, **Martina** sets out to open up the debate and answer some of her own questions by meeting a range of athletes, trans women and scientists.


I think the key is for women
not to set any limits.
Martina Navratilova
quotefancy

BUT

- Although men are faster marathon runners than women (due to genetics) they are not the smartest.

- Women are 18.61% better at pacing.

People with inappropriate fitness levels just walk the race?

- With an average walking pace of about 19 and a half minutes per mile, one could walk 5 Kilometers in 1 hour, 10 Kilometers in 2 hours, a Half Marathon in 4 hours and a Marathon in 8 hours.
- If there is an increasing number of people who walk the race, the percentiles of the walking speed finishing time should decrease (i.e. smaller percentage finish for a lesser amount of time).
- Across all distances, the proportion of “runners” finishing slower than with the average walking pace is rather consistent. There’s no statistically significant difference.

Percentiles of finishers

Year	5 Kilometer 01:00:00	10 Kilometer 02:00:00	Half Marathon 04:00:00	Marathon 08:00:00
2000	97.1%	99.3%	99.4%	99.8%
2001	96.7%	99.9%	99.0%	99.8%
2002	99.5%	99.9%	98.5%	99.8%
2003	97.9%	99.8%	98.2%	99.9%
2004	96.8%	99.7%	99.2%	99.7%
2005	98.1%	99.7%	98.9%	99.7%
2006	98.3%	99.6%	98.5%	99.8%
2007	98.3%	99.1%	98.7%	99.8%
2008	97.0%	99.3%	98.7%	99.8%
2009	98.2%	99.3%	98.7%	99.1%
2010	97.9%	99.2%	98.9%	99.2%
2011	97.4%	99.2%	99.3%	99.6%
2012	97.3%	99.3%	99.3%	99.0%
2013	96.9%	99.4%	99.3%	99.0%
2014	96.9%	99.4%	99.2%	99.0%
2015	96.8%	99.2%	99.2%	99.7%
2016	96.1%	98.5%	99.2%	99.9%

- Therefore, this argument is *invalid*

"We've got this saying, '*performance by the aggregation of marginal gains*'...
It means taking the **1%** from everything you do; finding **a 1% margin for improvement** in everything you do. That's what we try to do from the mechanics upwards."

Sir David Brailsford

Just the slow are getting slower?

- We made a two-fold analysis on that claim. The main argument is that most of the new participants who enter the race are slower than the core competitors and they drag the average down.

- First, the main argument is that most of the new participants who enter the race are slower than the core competitors and they drag the average down.

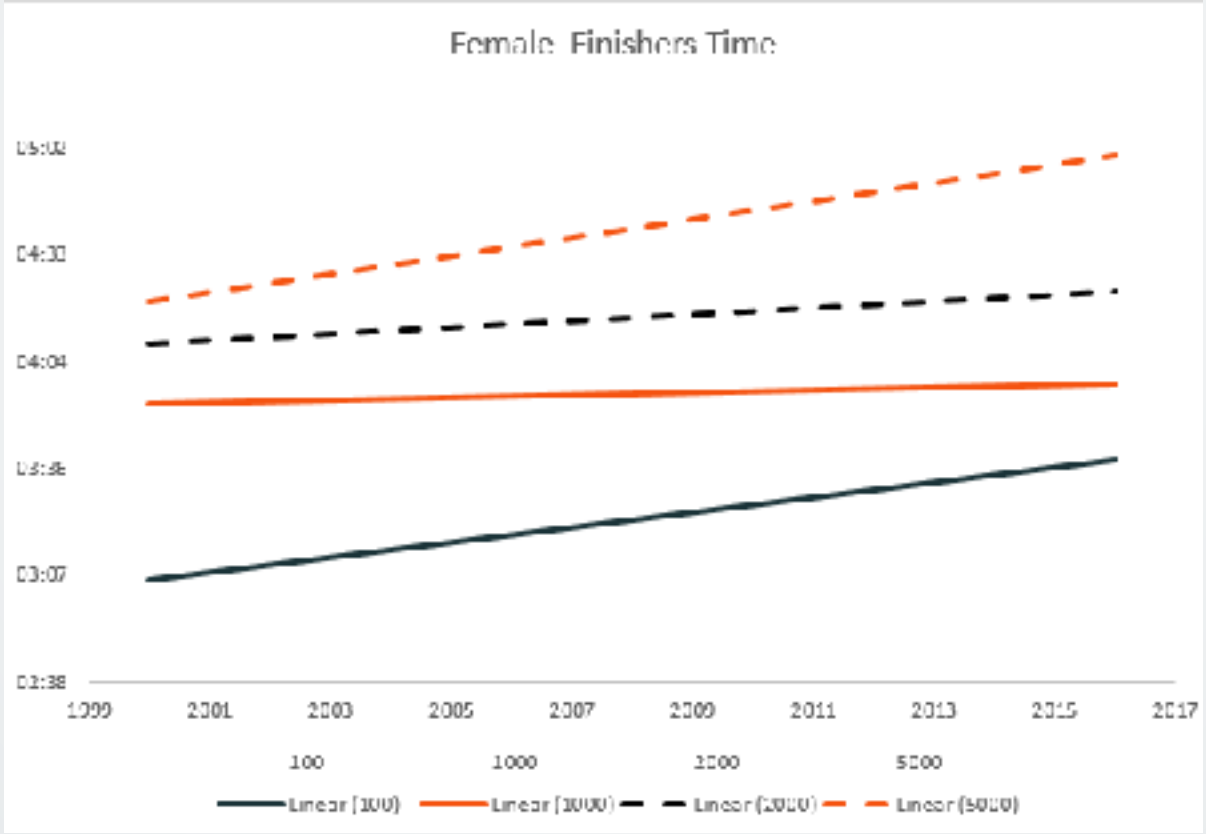
- This is a sensible argument, which is in sync with the trends. That is why we calculated the average finish times of the 100th, 1000th, 2000th and 5000th competitor in the races from our database. If the claim were true, then the finish time of the faster competitors shouldn't change much year after year and the time of the slower finishers should change a lot.

- We have made distinct analysis for men and women

Data and trends for female participants

Participant	100	1000	2000	5000
2000	03:09	03:50	03:49	04:18
2001	03:02	04:02	04:10	04:32
2002	03:02	04:13	04:15	04:26
2003	03:07	03:48	04:53	04:14
2004	03:27	03:48	04:12	04:58
2005	03:24	03:59	04:10	04:25
2006	03:19	03:39	03:49	04:11
2007	03:14	04:01	05:01	04:34
2008	03:25	03:48	04:00	04:39
2009	03:13	03:45	04:21	05:01
2010	03:20	03:42	03:58	04:37
2011	03:25	04:04	04:03	05:06
2012	03:48	04:04	04:05	05:03
2013	03:27	03:54	04:21	04:32
2014	03:26	04:13	04:03	04:29
2015	03:38	03:47	04:35	04:52
2016	03:39	04:08	04:50	05:25

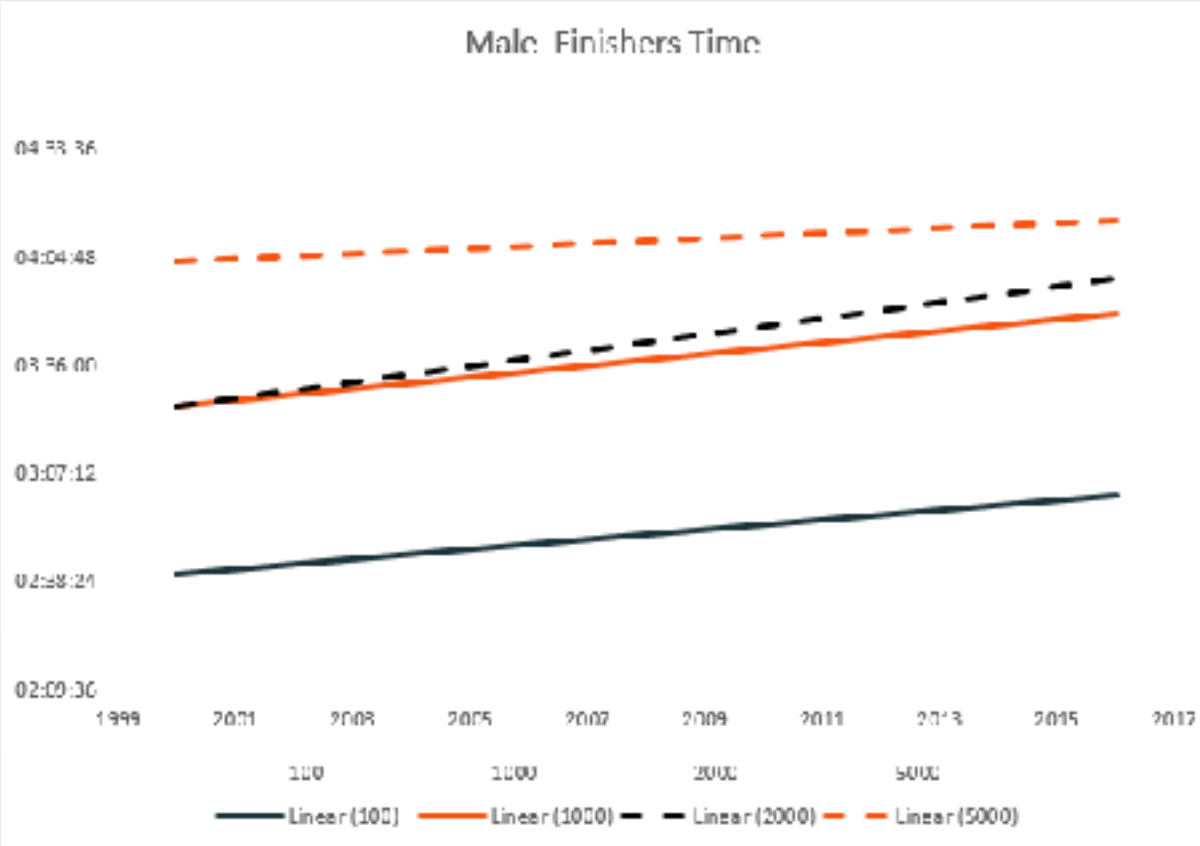
The fastest female participants have slowed down on average by 9.87% over the last 17 years.



Male participants data and trends

Participant	100	1000	2000	5000
2000	02:54	08:24	08:31	04:21
2001	02:38	08:09	08:40	04:04
2002	02:41	08:27	08:22	08:52
2003	02:40	08:57	08:11	08:42
2004	02:38	08:16	08:27	08:56
2005	02:41	08:46	08:41	04:31
2006	08:11	08:54	04:06	08:54
2007	02:28	08:20	08:22	08:49
2008	02:53	08:28	08:30	04:11
2009	02:54	08:45	08:41	05:11
2010	02:49	08:34	08:43	04:01
2011	02:50	08:41	04:06	04:11
2012	02:50	08:50	08:54	04:00
2013	08:04	08:38	08:38	04:07
2014	02:56	08:43	08:54	08:58
2015	03:06	09:52	04:12	04:12
2016	08:08	08:46	08:56	04:26

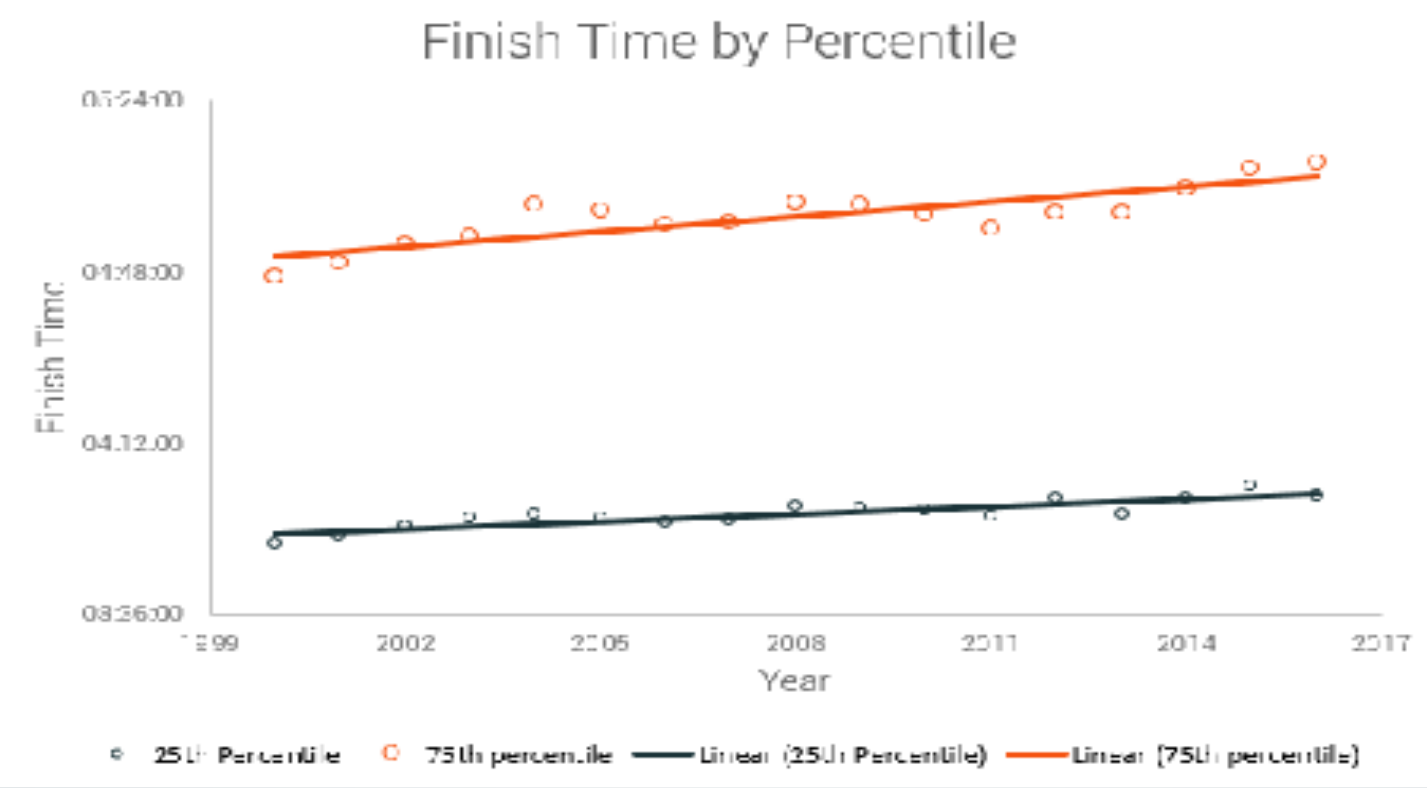
The male fastest participants have seen their finish time increase by 9.94% over the last 17 years.



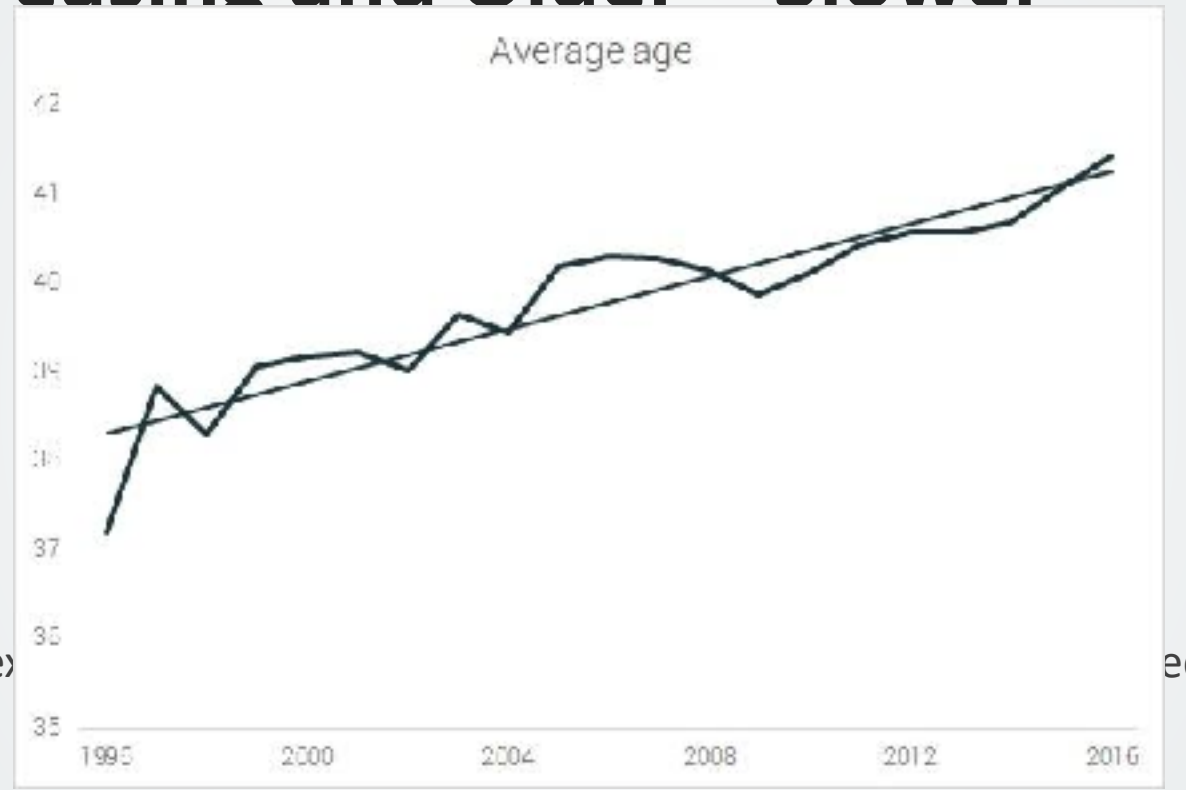
We can clearly see that the slowing down is on every level.

- Second, we've made a percentile analysis. If just the slow are getting slower than the participant in the lower percentiles (the faster finishers), should show much less change in their finish time than their slower counterparts. These are our findings

We see that everyone is slowing down. Moreover, when we performed a Wald test for the slopes of those two trends we discovered that they are not significantly different (with 99% level of confidence). P-value for this test is 0.0084.
Therefore this argument can also be considered *invalid*.



The average age of the participants is increasing and Older = Slower



- First, we ex ed in the last 20 years.

- It is indeed increasing. So, we dug deeper to see if this is the reason for the overall trend.

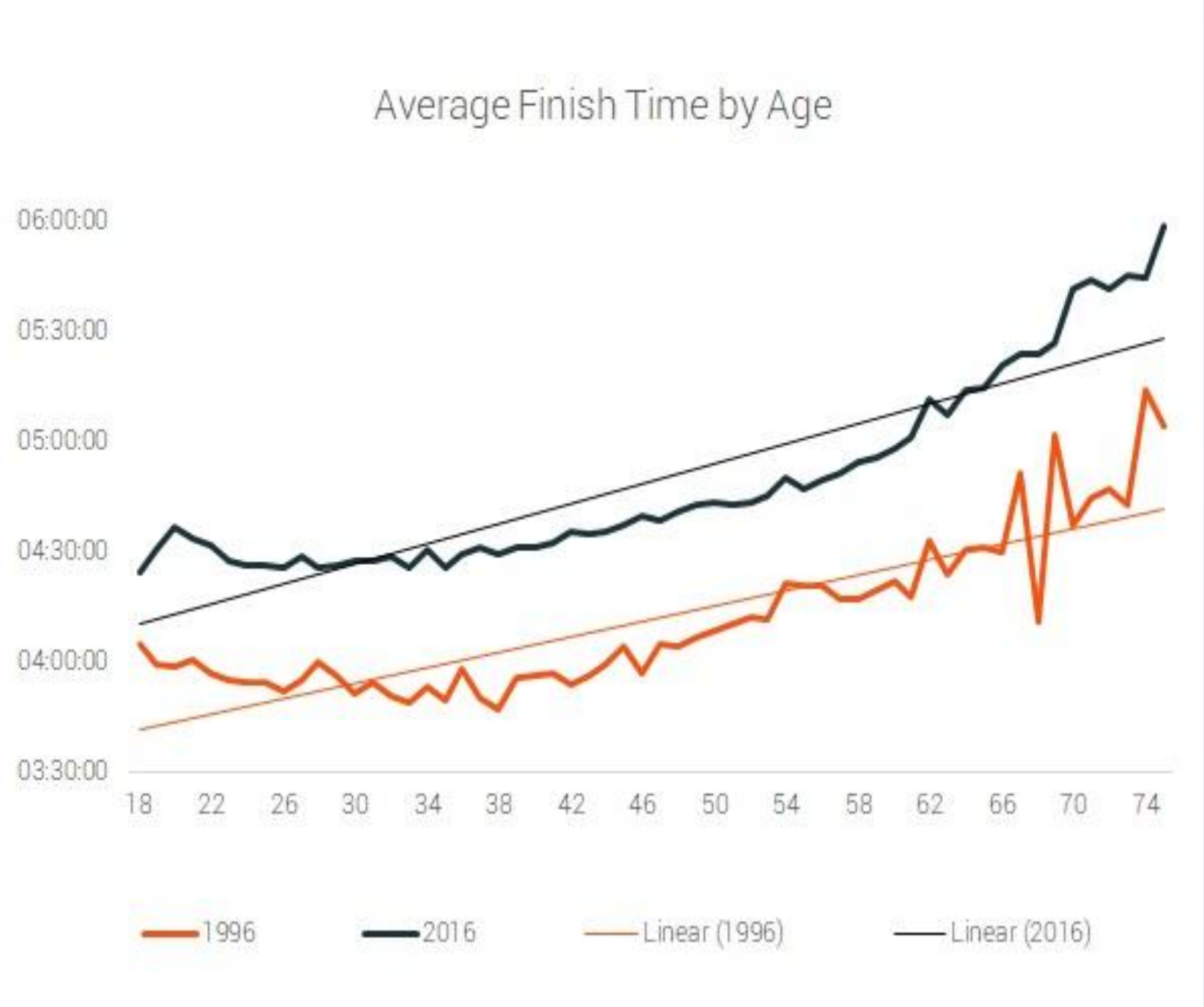
- As we see the average age has changed from around 37 to 41. So, what is the difference in speed of these two ages, or any two ages 4 years apart?

- We compared the average times of the participants with 4-year age difference - for all ages. Then we calculated the average slow down for 4 year period and it is only 1.43% in 1996 and 1.73% in 2016. So, **the average person loses less than 2% of their speed in 4 years due to aging**.

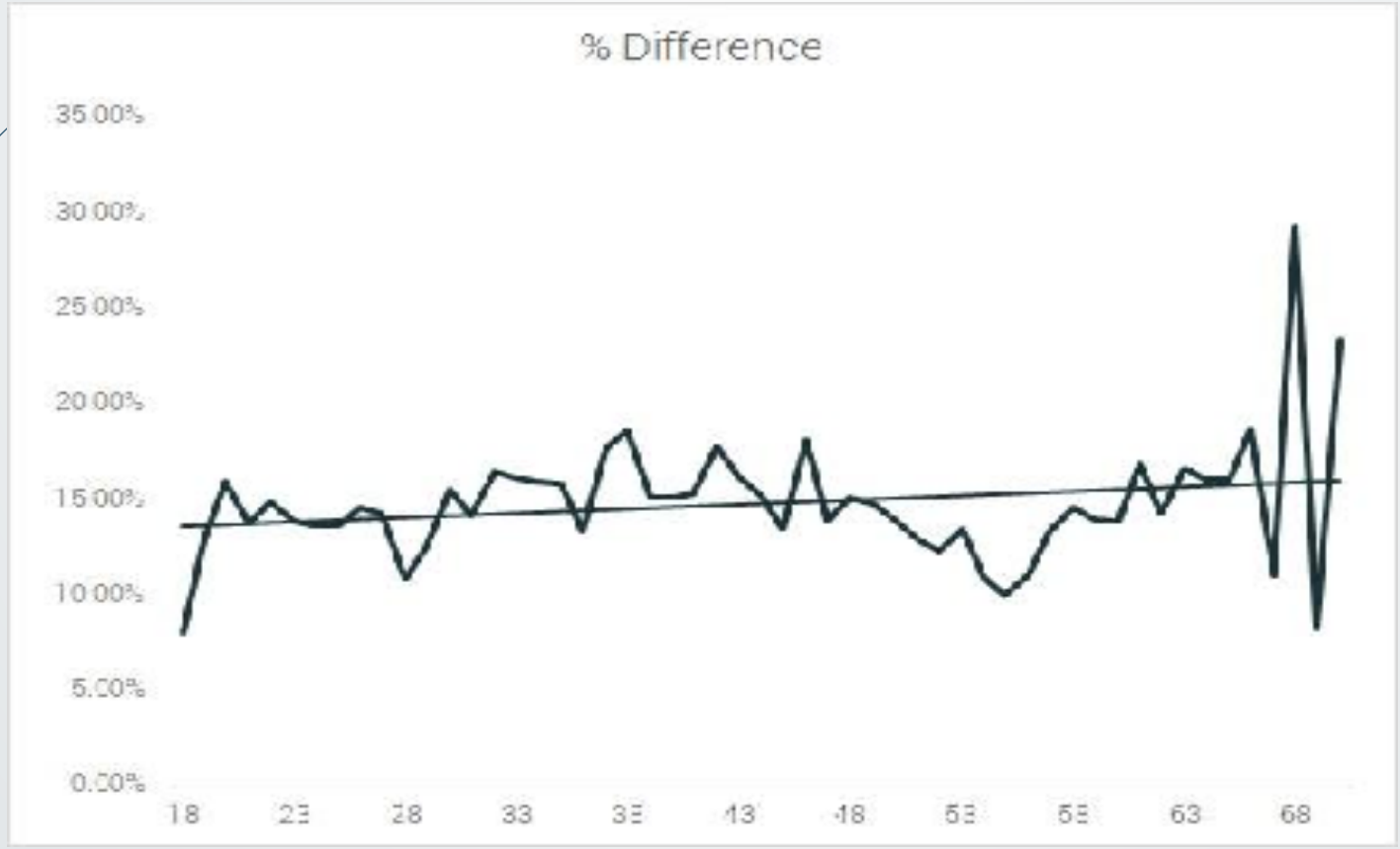
- We also did this precisely for the ages 41 and 37. In this specific case, the numbers are 2.7% in 1996 and 0.6% in 2016.

- ***Thus, the average age increase could not be the sole reason for the rate of slow down established.***

- We also analyzed the change in pace for each age. Not age group, but every age, to be as accurate as possible.


Average Finish Time by Age
06:00:00
05:30:00
05:00:00
04:30:00
04:00:00
03:30:00
18
22
26
30
34
38
42
46
50
54
58
62
66
70
74
1996
2016
Linear (1996)
Linear (2016)

As we see, all ages are slowing down. In the past 20 years, all ages have slowed down 10-20% with a fairly even average around 15%.



- ***Thus, while races have more elderly participants than before, they are not the main reason for the slow down.***

"Age is no barrier. It's a limitation you put on your mind."

-Jackie Joyner-Kersee

Olympic Heptathlon and long jump champion (1984-2000)

So, what is making us slower?

- We have examined and found some interesting correlations, but it is important to note the lack of evidence for a causal relationship. The study takes into account the number of participants and the national average rates of the following health parameters:

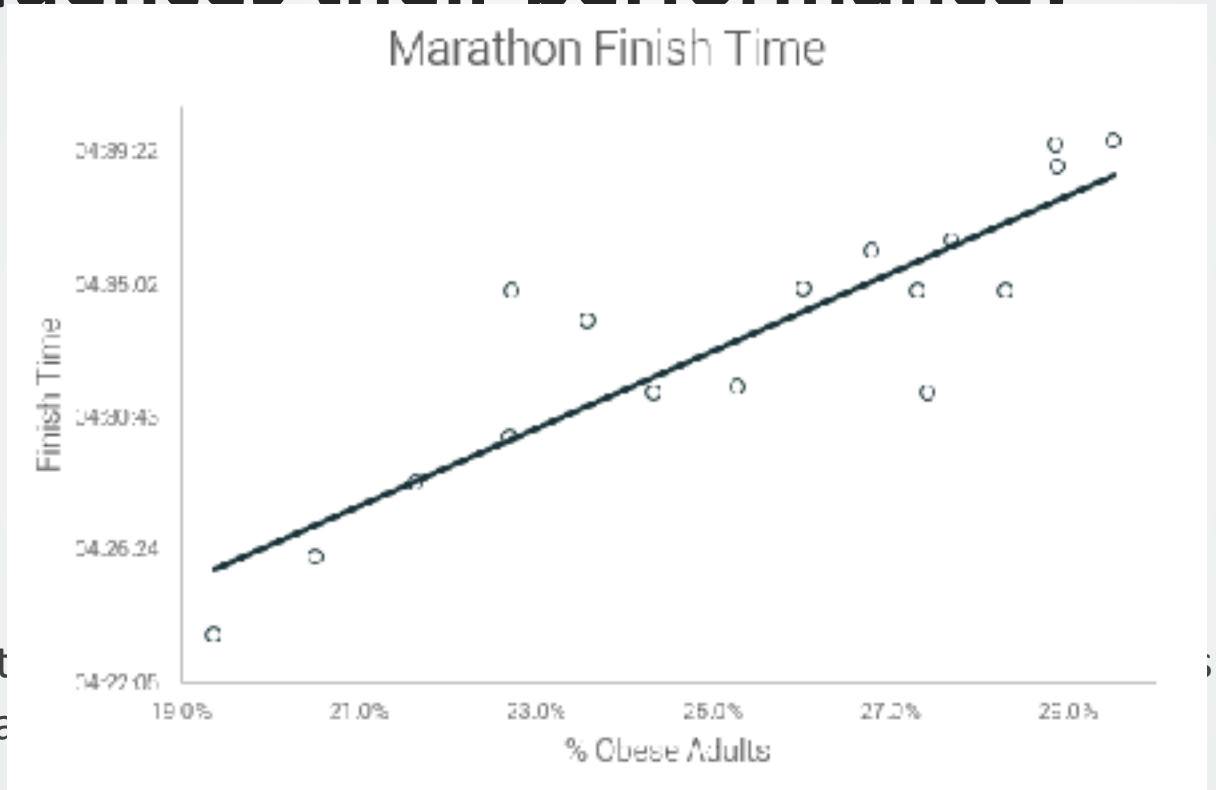
- Adult obesity;
- Teenage obesity;
- Diabetes and Hypertension;
- Average annual Medical expenditure

- The source of the data for the four health-related parameters is State of obesity, as confirmed by the Center for Disease Control and Prevention.

- We correlated the average race finish time with each of those parameters and saw clear trends. These correlations proved to be strong, 99% statistically significant, consistent, plausible, coherent and replicable in different circumstances.

- Nevertheless, these are just correlations. We can not infer from the national statistics the health condition of the race runners. Is it deteriorating or improving? Also, in no way we argue that these are the only possible explanations and reasons for the observed effect.

How does the % of obese Americans influences their performance?



- We won't
ship between obesity ra

This trend is valid for all distance's results, and even more so for the shorter ones:

Model Parameters			
Distance	R	p-value	99% CI
Marathon	88.3%	0.0000332	(0.52,0.96)
Half Marathon	88.3%	0.0000324	(0.61,0.97)
10 Kilometer	92.0%	0.0000036	(0.72,0.98)
5 Kilometer	93.9%	0.0000007	(0.78,0.98)

- We have confirmed this trend also by examining the effect of obesity rates to the finish time after 3 years - the results are similar. They are even more significant for the mid-range distances.

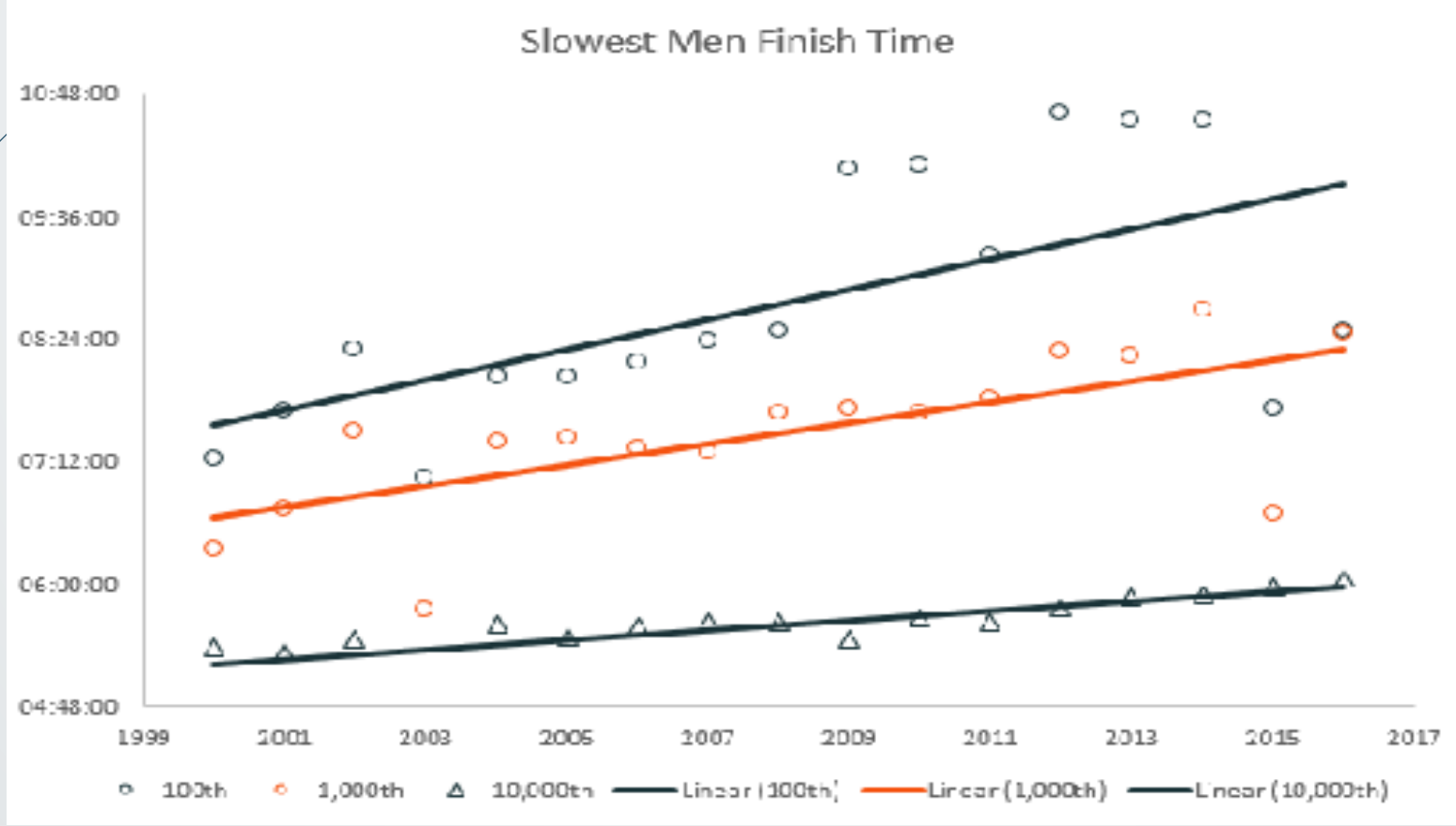
- This accounts for the coherence of the study and the lasting effects of obesity.

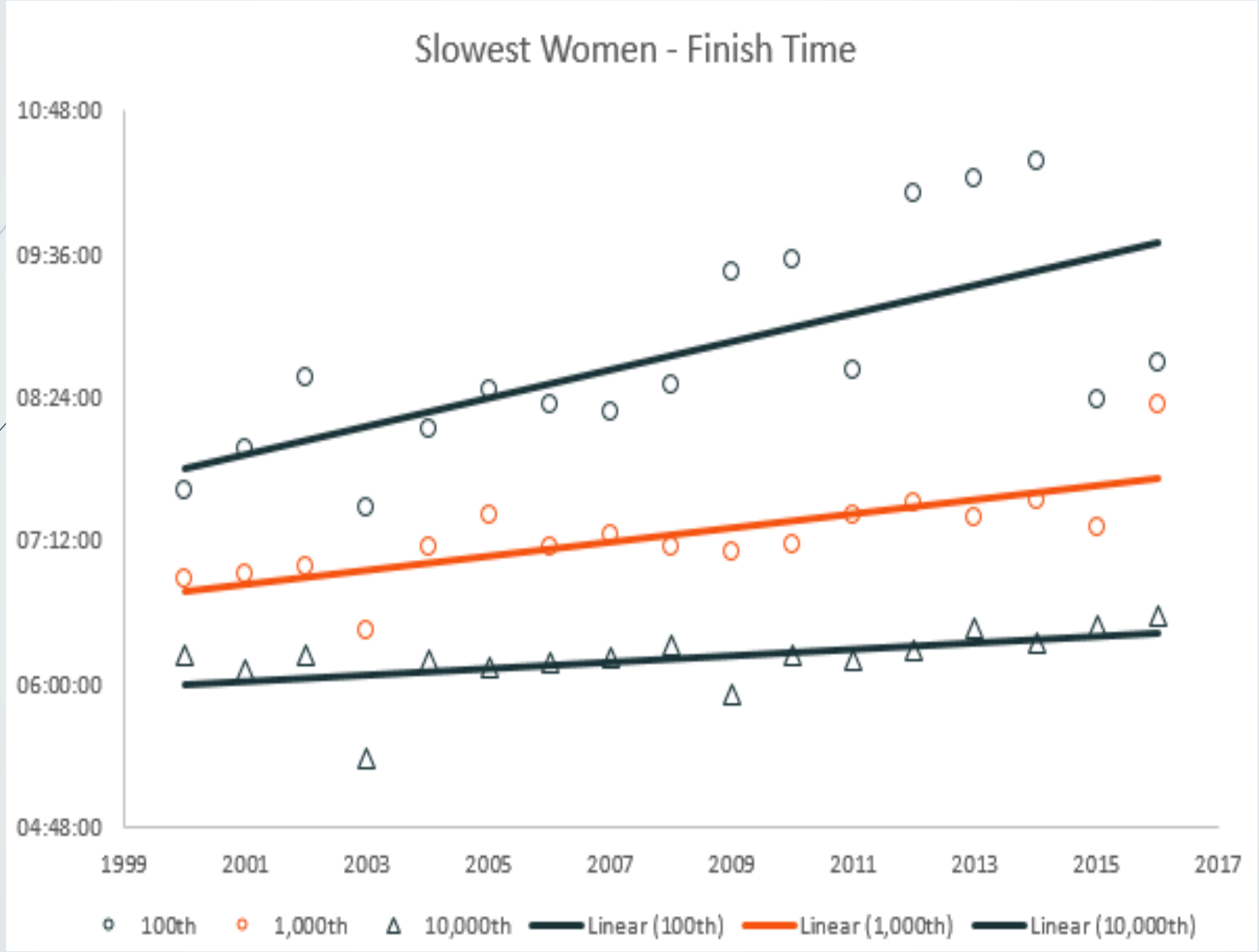
- We have obtained analogous results for all the up aforementioned parameters (in both time frames). All the relationships are statistically significant with more than 99% level of confidence.

Playing the Devil's Advocate

It would be convenient to leave things here and leave out all ambiguity. Nevertheless, it is important to examine and show the full picture. We analyzed the finish times of the 100th, 1,000th and 10,000th slowest participant (separately for men and women) for every year. Here are the results.

The slow participants are slowing down at a much higher rate than the faster ones. So the fast ones can not compensate.




Slowest Women - Finish Time
10:48:00
09:36:00
08:24:00
07:12:00
06:00:00
04:48:00
1999
2001
2003
2005
2007
2009
2011
2013
2015
2017
100th
1,000th
10,000th
Linear (100th)
Linear (1,000th)
Linear (10,000th)

- For the last 17 years the average rate of slowing down of the slowest men is 21.2% and for the women, this rate is 13.4%. Which means that there is some merit for blaming the newcomers for the trend that has been established.

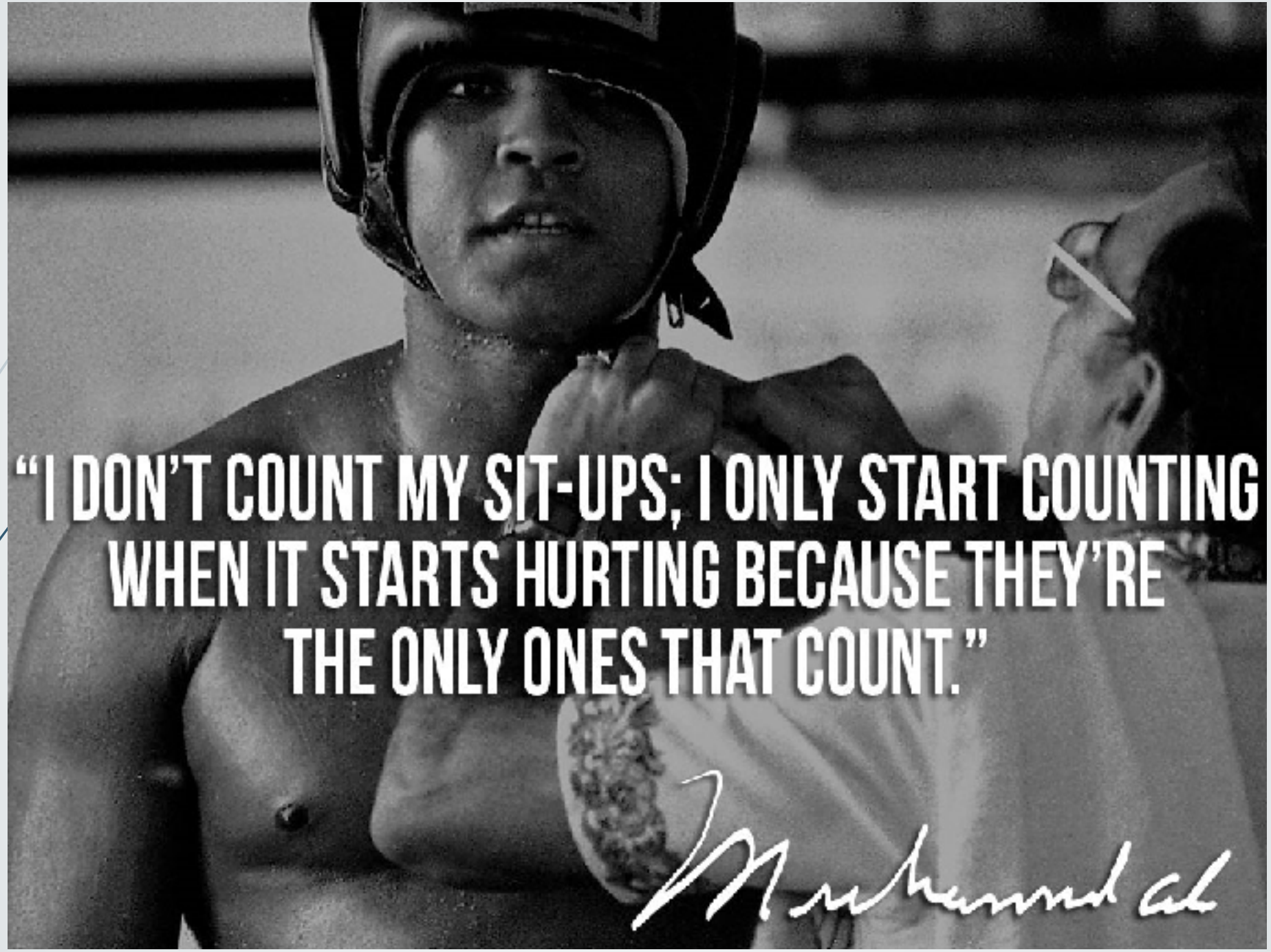
- We can not be sure, that the reason is that the individuals are slowing down. A very real possibility is that the rise in the number of participants is a downside for the faster runners. This might be a reason for them to explore other options and to turning to other types of endurance racing - ultramarathons, triathlons, cross fit or something else.

- Also, this trend might be a good thing as more and more people get involved in physical activity.

But there is also the argument that the popularity of marathon running and endurance racing is attracting people who are not healthy enough to meet the challenge. This is also a serious health risk.

Conclusions

- The average American runner has never been slower (across gender and distance);
- This effect is not due to the increase in female participants or "runners" - people who run slowly or walk the race;
- Signs of poor health are highly correlated to the decrease in speed. Though we cannot with certainty say that these are the causes for the slowdown. And if they have causal nature that they show the full picture.


"I DON'T COUNT MY SIT-UPS; I ONLY START COUNTING
WHEN IT STARTS HURTING BECAUSE THEY'RE
THE ONLY ONES THAT COUNT."
Muhammad Ali

Do we all need to run a marathon?

- Mental health benefit of exercise
- Personal goals and possibilities

“

NO HUMAN IS LIMITED.

ELIUD KIPCHOGE

SMART GOALS OF PHYSIOTHERAPY

- S – specific
- M – measurable
- A – achievable
- R – reasonable
- T- time-scaled


SMART GOALS
S
SPECIFIC
State exactly what you want to accomplish.
M
MEASURABLE
Use smaller, mini-goals to measure progress.
A
ACHIEVABLE
Make your goal reasonable.
R
REALISTIC
Set a goal that is relevant to your life.
T
TIMELY
Give yourself time, but set a deadline.

- 7 P’s of preparation?

- The 7 Ps is a British Army adage for **Proper Planning and Preparation Prevents Piss Poor Performance**. The 7 Ps are normally referred to as "the 7 Ps" rather than as an acronym: (i.e. PPPPPPP). Educators and trainers in military or civilian situations find it useful to first introduce the phrase, "the 7 Ps".

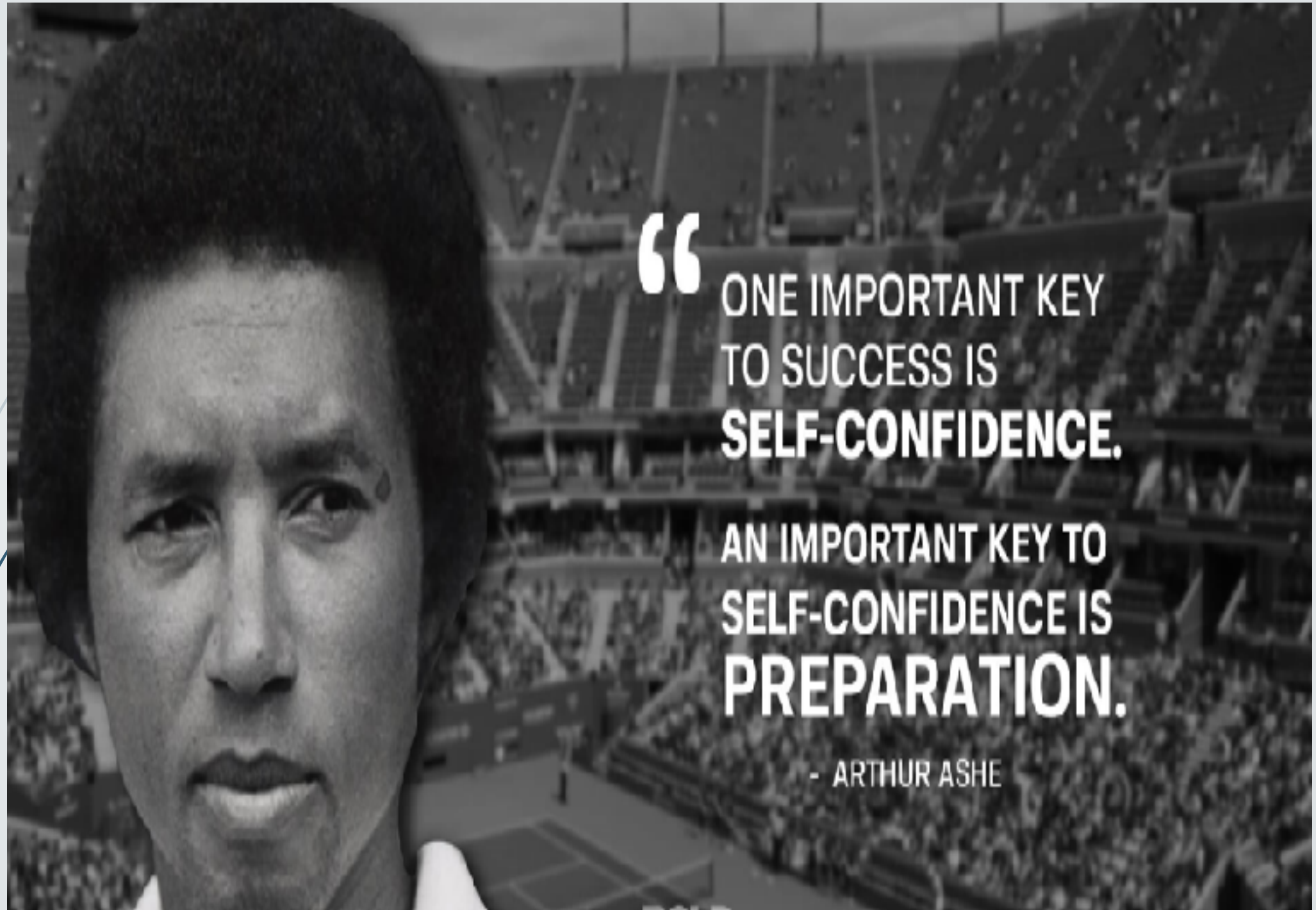
Mind your P's and Q's

The 7 P's

Proper
Planning and
Preparation
Prevents
Pitifully
Poor
Performance

The 4 Q's

Quantify and
Qualify
Quality
Quickly


“
ONE IMPORTANT KEY TO SUCCESS IS SELF-CONFIDENCE.
AN IMPORTANT KEY TO SELF-CONFIDENCE IS PREPARATION.
- ARTHUR ASHE

Preparing for what?

- Marathon
- Sporting event or return to competition/practice
- Couch to 5km
- Running
- Return to tennis – Andy Murray
- Walking again?
- Life!


Vittel
726
BARRY
M S4
edr

PREPARATION

- P – PROBLEM LISTS
- R – RECOVERY
- E – EQUIPMENT
- P – PLACEBO
- A – AID
- R – RESPIRATION
- A – ATTITUDE
- T – TRAINING
- I – INSPIRATION
- O – OPINION
- N - NUTRITION

PROBLEM LISTS

- VERY INDIVIDUAL
- KEY IN PHYSIOTHERAPY
- HEALTH PROFESSIONALS, COACHES, FRIENDS AND FAMILY CAN HELP TO COLLATE

“Decathlon training is easy, you just work harder on your weaker areas”
Daley Thompson

R - RECOVERY

- SLEEP
- MASSAGE
- COLD SHOWERS
- HOLIDAYS!

Injury Prevention Tips

- The formula for a healthy, successful triathlon includes thoughtful training, informed knowledge, and constant monitoring.
- Three easy ways to help you achieve better performance results and reduce injuries.
- **1. Warm up and cool down**
- **2. Hip is it!**
- **3. Listen to your body for warning signs**


"Only the disciplined ones in life are free."
-Eliud Kipchoge
1
KIPCHOGE

1. Don’t forget to warm up and cool down.

- Warming up and cooling down are essential parts of training and should not be skipped. By properly warming up and cooling down, you can prevent injuries while getting the most out of your workout or race.

  Warm Up -- During a warm up, you will gradually prepare your heart, lungs, muscles and tendons for the exertion of each training run or race. It can last at least 2 minutes with gentle loosening exercises and movements.

- Cool Down -- As soon as you finish a training session, you should begin your cool down, which both helps your body recover and prepares you for your next session. A cool down can include about 10 minutes of some easy exercised to encourage the heart and lungs to gradually return to their normal rates. This is also a good time for stretching and self-massage/foam roller while your muscles are loose. Stretching gets your muscles ready for the next day's workout. During stretching exercises, you should hold the position for approximately 30 seconds, and repeat two or three times per area.
- Ice baths and cold showers optional as part of cool down

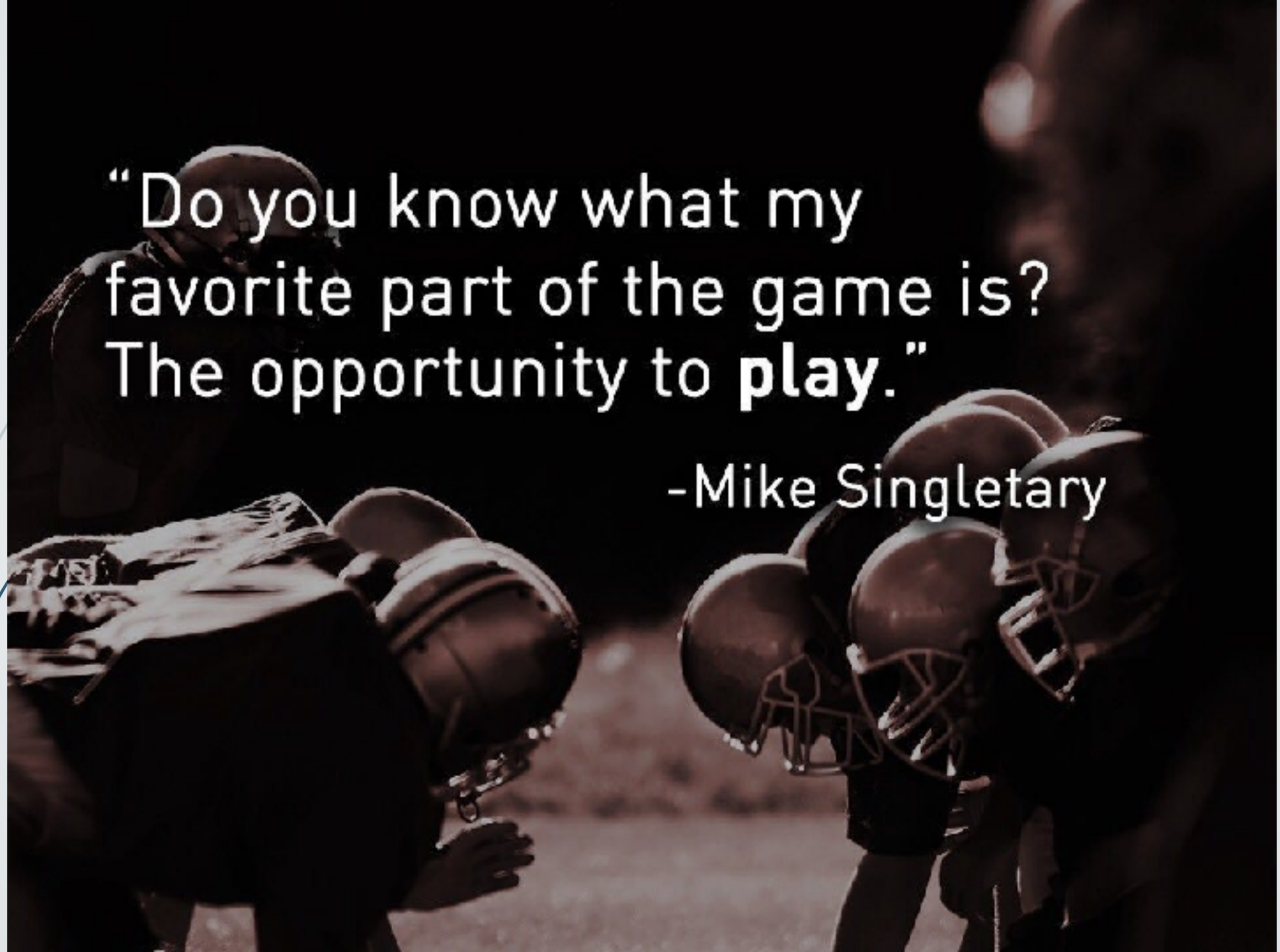
2. Plan hip and core stability exercises in your routine regularly.

- Solid core muscles provide a stable foundation for the limbs to perform efficiently no matter where you are on the course. Especially with running, hip muscles provide strength that can affect rotation and stresses around the knee. Hip abductor and rotator exercises are helpful to keep the pelvis and knee stable. Having a good program with front and side planks and trunk rotations help build the strong core. Work in ab crunches, hit a regular Pilates class, or make sure you have a core routine that you do with your cool down.


CRAVE
“A trophy carries dust.
Memories last forever.”
Mary Lou Retton

3. Listen to your body

- Although consistency is very important when training for a big triathlon, if your body feels particularly tired one day, heed the warning and take a rest. Triathlon training involves a lot of wear and tear on your body. Getting adequate sleep and rest during this period is essential so that you don't burn out before the race.


"Do you know what my favorite part of the game is? The opportunity to **play**."
-Mike Singletary

When should you get an injury checked out?

- "Three big signs you might want to get an injury checked out include:
- 1. Changing your technique when you're training. For example, you shorten your stride while running or you no longer swim with the your usual stroke due to pain. Seek help if these compensations continue on consecutive days and stop you from training.
- 2. Anytime you notice swelling in a painful joint or muscle. That could be a sign of tissue damage.
- 3. When you have pain several hours after you finish activity. Especially, if you have to take pain medications in order to train. Seeing someone early may prevent worsening the injury and improve your likelihood of making the race."

- - **Dr. Anthony Luke, MD,** *UCSF Sports Medicine, Medical Director for the 2019 Escape from Alcatraz Triathlon*


It's not the will to win that matters - everyone has that.
It's the will to prepare to win that matters.
Paul "Bear" Bryant

Important Injury Considerations

- When you change your technique and feel pain - don't try to push through it. Pain is your body telling you something's wrong and it needs attention.

- Take note of swelling in a joint or tissue. When a tendon or muscle is damaged or there can be something aggravating the joint and the body reacts with swelling. Be cautious to avoid aggravating this type of injury.

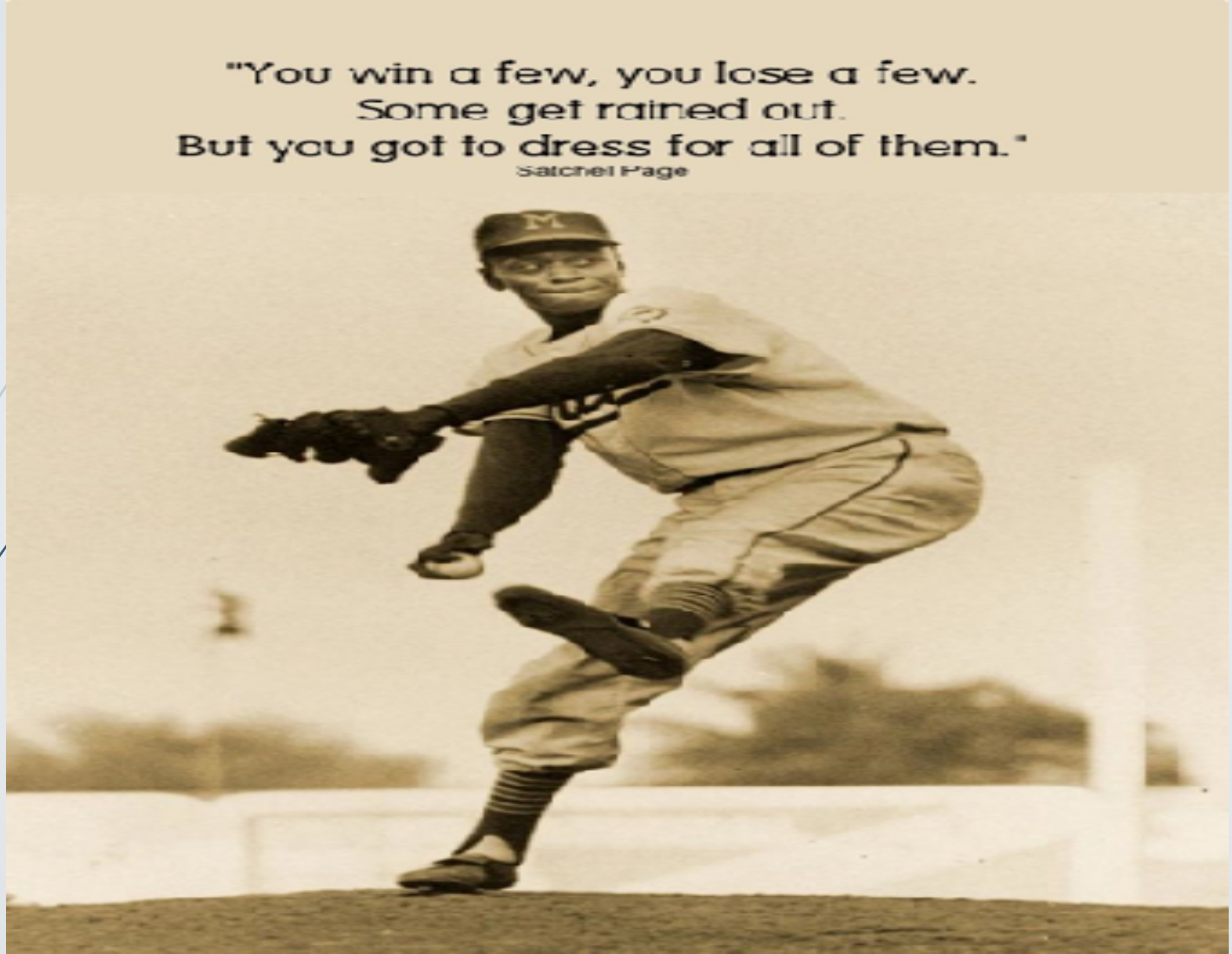
- Pain for more than 4 hours after you exercise is a warning sign. Taking an anti-inflammatory regularly may help you keep training, but that is not a good approach to fixing a problem. Always safest to have problems screened as early as possible with a health professional and understand where you are in your training. Cross-training or a day of rest in the right place in your schedule can make all the difference between worsening an injury or staying on track.


BET
NEWS
"CHAMPIONS
KEEP PLAYING
UNTIL THEY
GET IT RIGHT."
- Billie Jean King

EQUIPMENT

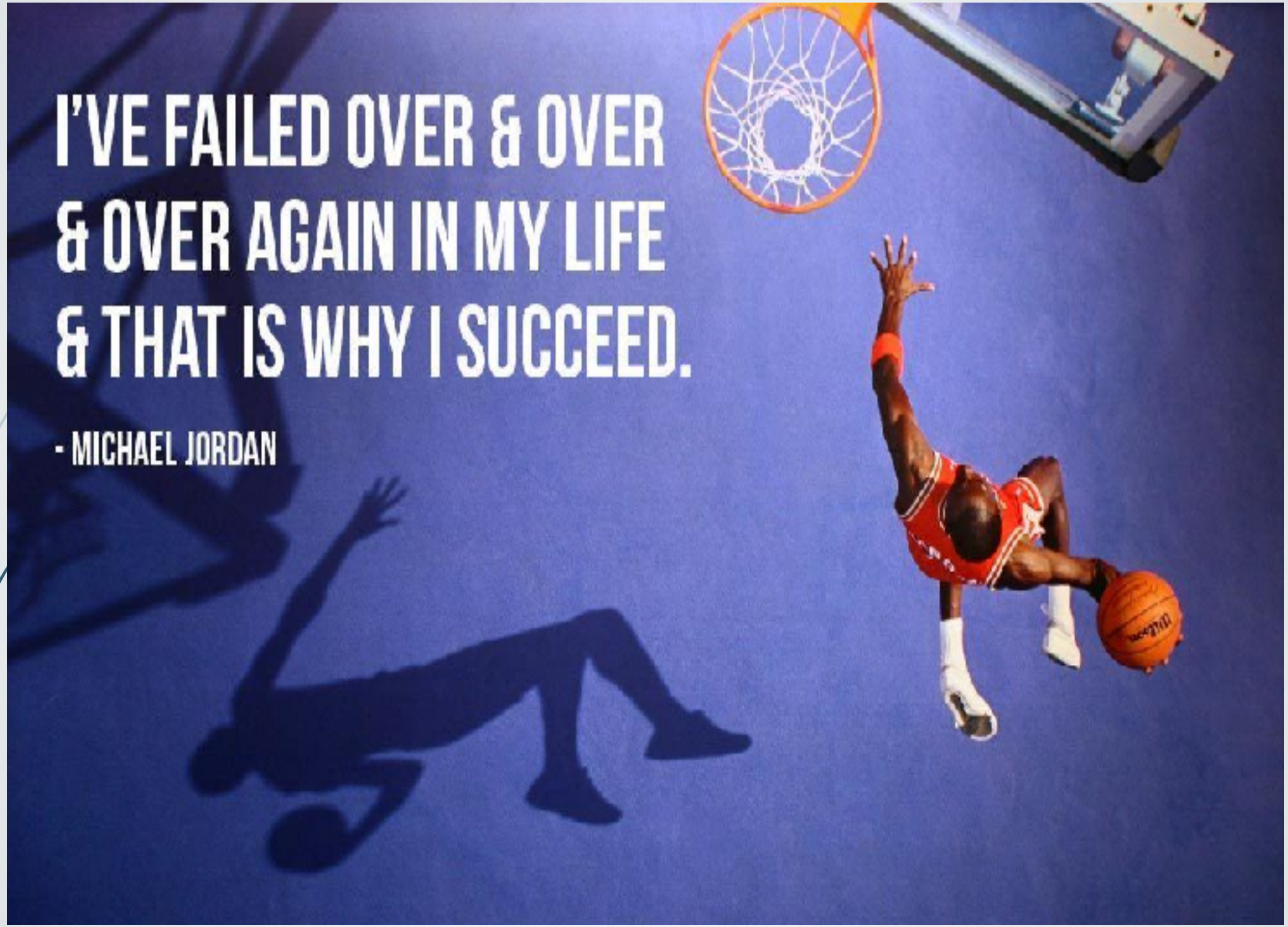
- FOOTWEAR
- CLOTHING
- SPORT SPECIFIC
- EVENT SPECIFIC
- MENTAL EQUIPMENT

"You win a few, you lose a few.
Some get rained out.
But you got to dress for all of them."
Satchel Page



PLACEBO

- ASPECTS OF PLACEBO IN EVERYTHING WE DO AND FEEL
- FROM TRAINING BELIEFS TO INJURY PREVENTION
- NOTHING IS FULLY EVIDENCE BASED 100%


I'VE FAILED OVER & OVER
& OVER AGAIN IN MY LIFE
& THAT IS WHY I SUCCEED.
- MICHAEL JORDAN

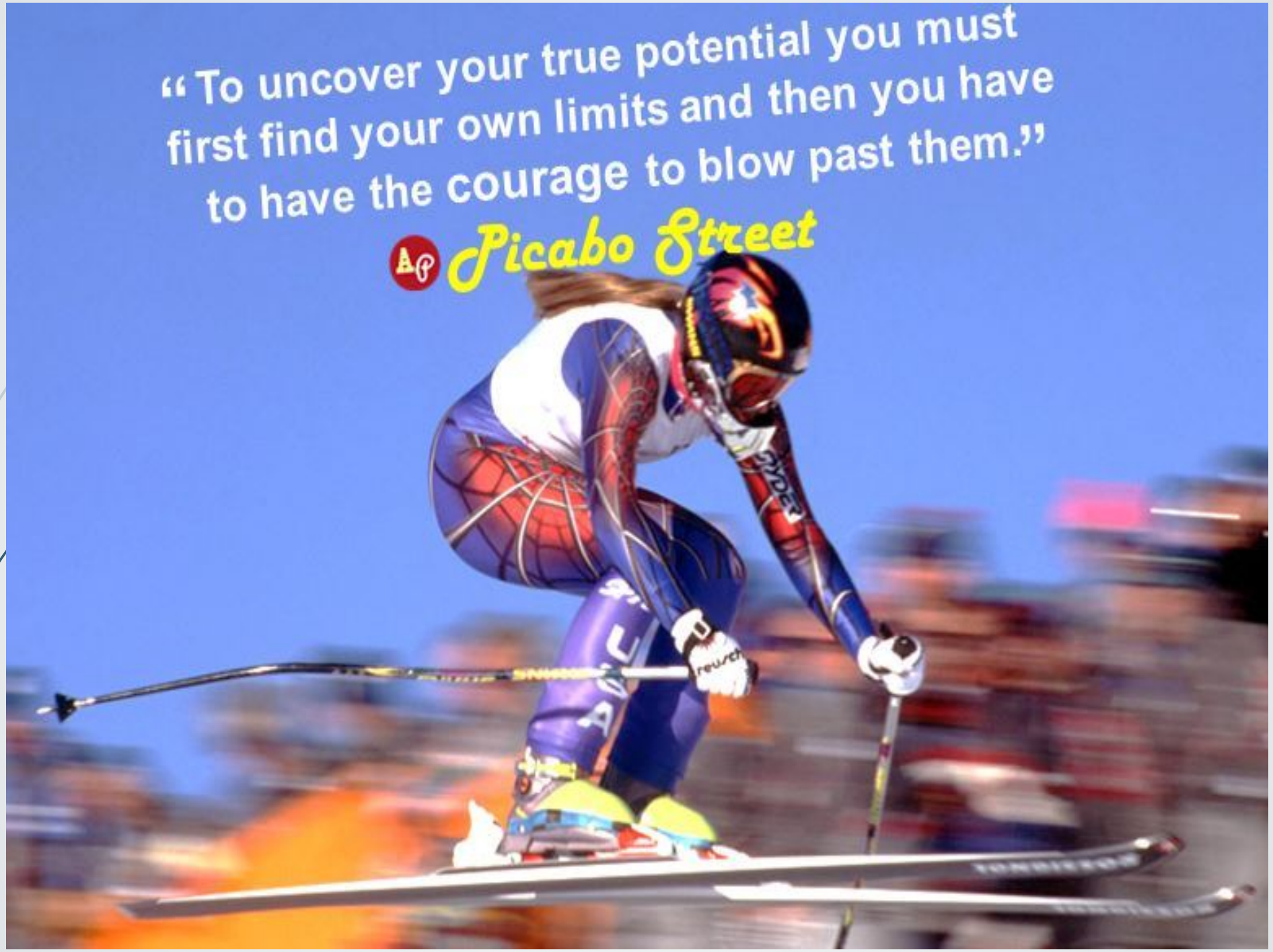
AID

- HELPING OTHERS FEELS GOOD
- CHARITY/SPONSORSHIP
- TRAIN WITH FRIENDS/HELP FRIENDS
- VOLUNTEER COACHES/SUPPORTERS/ORGANISERS
- MENTAL HEALTH AGAIN


LEUKAEMIA
RESEARCH

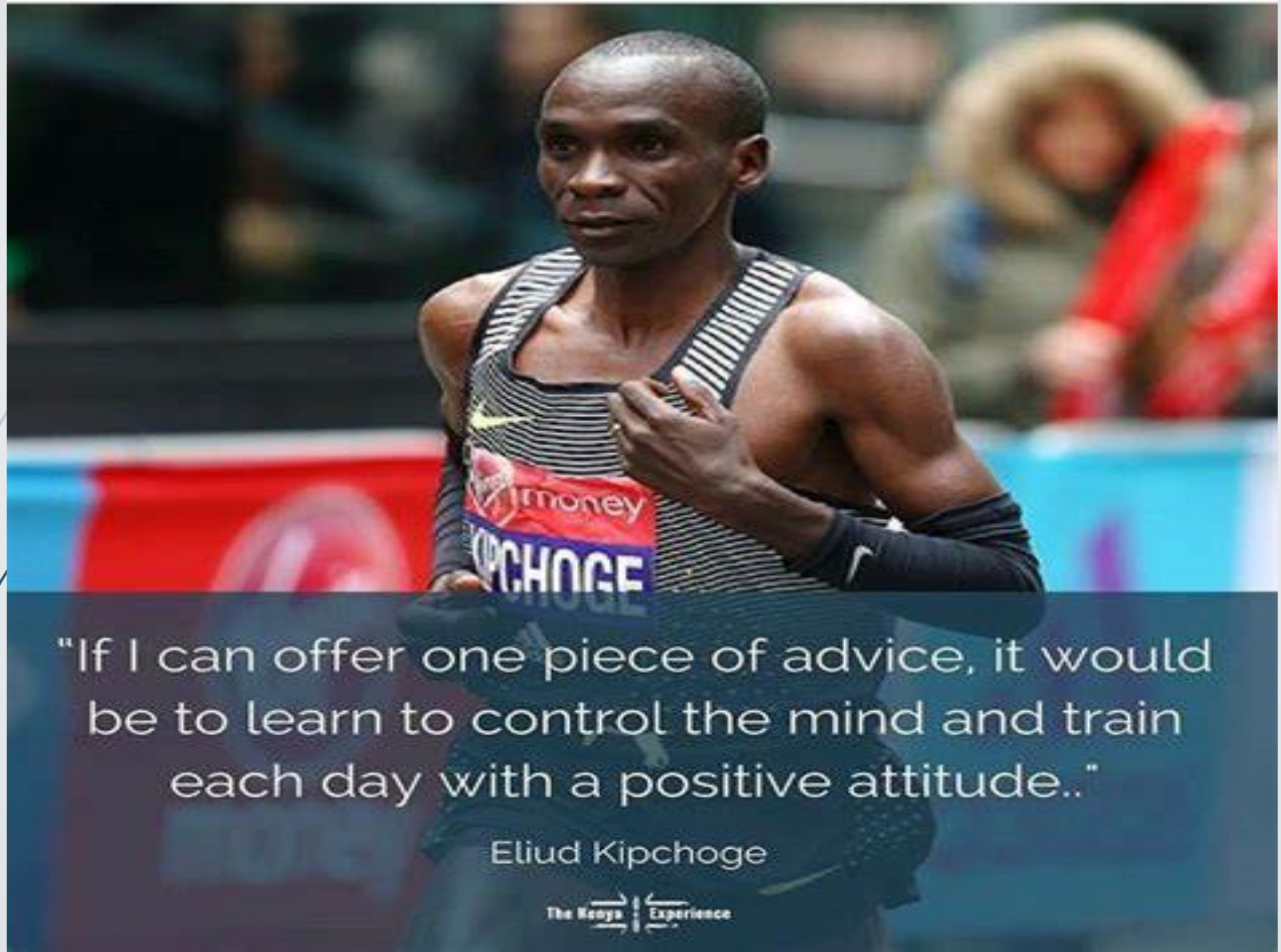
RESPIRATION

- THE VITAL BENEFITS OF BREATHING
- IMPROVING THE EFFECTIVENESS OF OUR RESPIRATORY SYSTEM
- MEDICAL CAUTIONS – ASTHMA, ETC
- ASSISTANCE – AEROFIT
- EVIDENCE


“To uncover your true potential you must first find your own limits and then you have to have the courage to blow past them.”
Picabo Street

ATTITUDE

- ENJOYMENT IS KEY
- IN TRAINING/EXERCISE AND EVENTS
- SMILE
- MENTAL HEALTH IS BIGGEST BENEFIT OF ANY EXERCISE

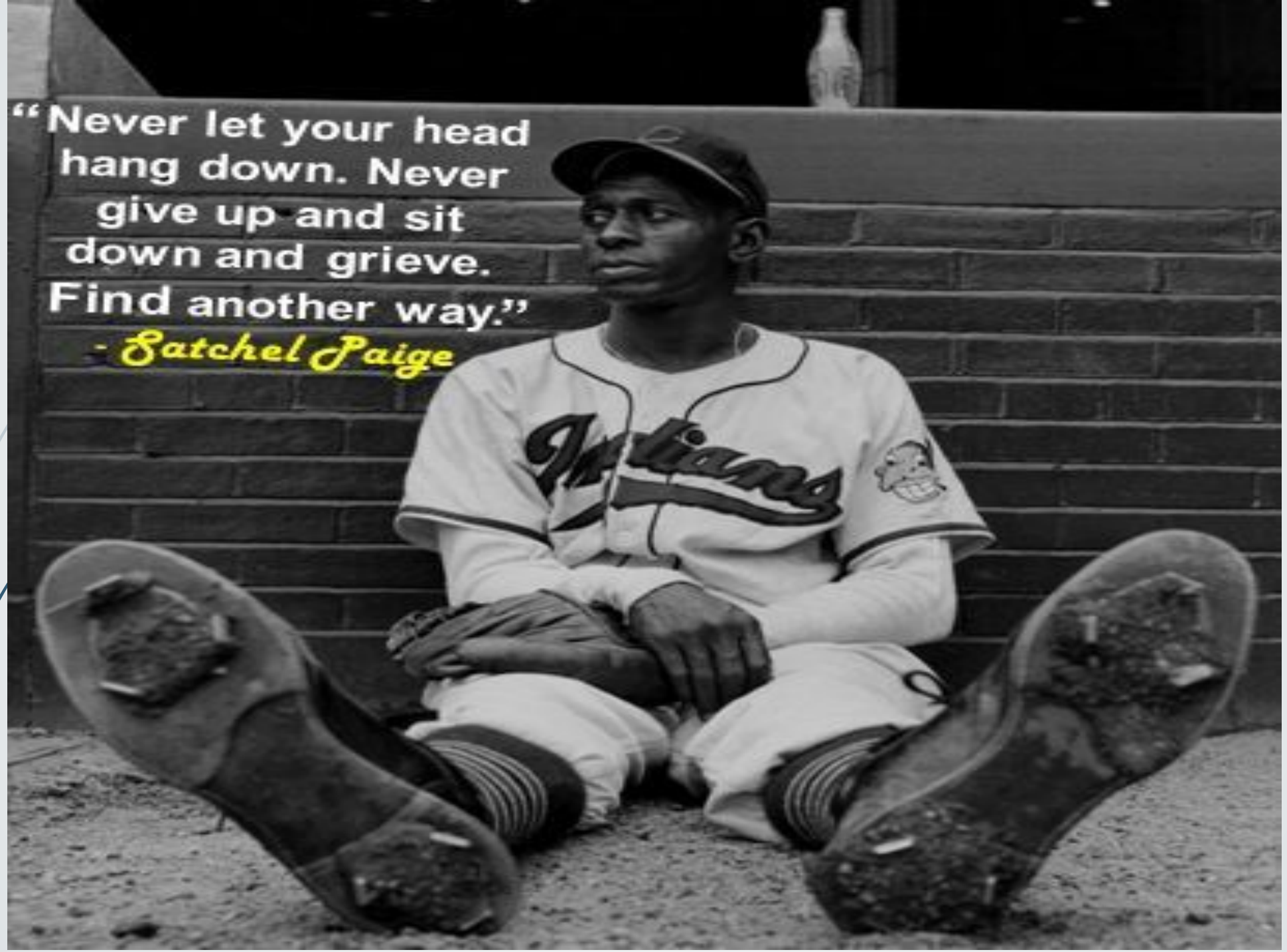

money
"If I can offer one piece of advice, it would be to learn to control the mind and train each day with a positive attitude.."
Eliud Kipchoge
The Kenya Experience

TRAINING

- SPECIFIC FOCUS?
- STRENGTH/FLEXIBILITY BIAS
- PILATES/YOGA
- ENJOYMENT AND MENTAL HEALTH AGAIN

INSPIRATION

- YOUR MOTIVATION
- MOTIVATING AND INSPIRING OTHERS


"Never let your head hang down. Never give up and sit down and grieve. Find another way."
- Satchel Paige
Indians

OPINIONS

- NEVER ENDING!
- “EXPERTS” TO EAGER AMATEURS
- DIFFER AT EVERY LEVEL
- DIFFER LIKE OUR SPORTING/ACTIVITY PARTICPATION AS WE GO THROUGH LIFE
- INDIVIDUAL AND PLACEBO AGAIN

Our approach – The aggregation of marginal gains

'you can achieve optimal performance by the aggregation of marginal gains. It means finding a 1 per cent margin for improvement in everything you do'

Dave Brailsford

Sir Dave Brailsford

"it's important to understand the 'aggregation of marginal gains'. Put simply….how small improvements in a number of different aspects of what we do can have a huge impact to the overall performance of the team."

GB Track Cycling

Olympics	Gold	Silver	Bronze
2000	1	1	2
2008	7	4	2

https://road.cc/content/news/219825-bradley-wiggins-claims-marginal-gains-are-rubbish?amp

ALTERNATIVE TO MARGINAL GAINS

- “ALL THE WEE BITS ADD UP!”


176
ead of the River 2005

PREPARE LIKE IT'S RACE DAY

- "Before the race, I would practice swimming in your wetsuit in cold water, if possible, to get used to the feel of swimming in those conditions before race day. If you don't live near a cold body of water where you have access to swim, I would definitely recommend doing the practice swim before the race. It helps so much to prepare the body to feel the conditions and temperature prior to race day. Also practice in all the gear you plan to race in and decide what works best for you. Good luck!“

- - **Sarah Haskins**, *2018 Escape from Alcatraz Triathlon Champion*

HILLS ON REPEAT

- "Hills, hills, hills. It’s not enough to practice climbing, but also descending for EFAT. Do a set of hill repeats, but find a technically challenging hill and push yourself just as much on the way down as you do on the way up. Being comfortable at speed can make all the difference in keeping your head in the game at this race.“
-

  - **Eric Lagerstrom,** *2015 Escape from Alcatraz Triathlon Champion*

KNOW BEFORE YOU GO

- "Pre-riding the bike course a few times really helps me feel mentally prepared and confident for this race. There are lots of steep descents, corners and rough roads on the course, so knowing what to expect and being able to visualize the ride before the start really helps with my preparation.“

- **Paula Findlay,** *World-Class Triathlete & Returning Pro*

DIG DEEP

- "Escape's run course is unique for both its distance (2 miles longer than a standard Olympic) and its varied terrain (packed dirt, asphalt, sand, a ladder?!). Escapees need to prepare for the variety of these on course challenges. Let go of "aiming to hold a certain pace" and instead focus your training efforts on being a versatile and resilient runner. This course will break you, so you need to be someone who gets broken and then keeps going! Flats, hills, roads, trails, grass...lace up and turn yourself into a 4WD vehicle. Enjoy the adventure :)"

- **- Joe Maloy,** *2016 Escape from Alcatraz Triathlon Champion*


ESCAPE
FROM ALCATRAZ TRIATHLON
699
BARRY
ESCAPE
FROM ALCATRAZ TRIATHLON

NUTRITION

- DIET
- HYDRATION
- SUPPLEMENTS
- ALL INDIVIDUAL AGAIN


GAS

THANK YOU FOR LISTENING