Vol. 2

DECEMBER
2024

HALF TIME

The PE Journal



"The articles in this year's edition of Half Time encompass a variety of sports and delve into some hotly-contested debates. The ability of our Year 12 students to go beyond the taught curriculum and write about topics close to their own interests is testament to their love of learning and desire to communicate this to future generations of A Level PE students."

Mr M. Powell
Curriculum Leader, Sport and Health

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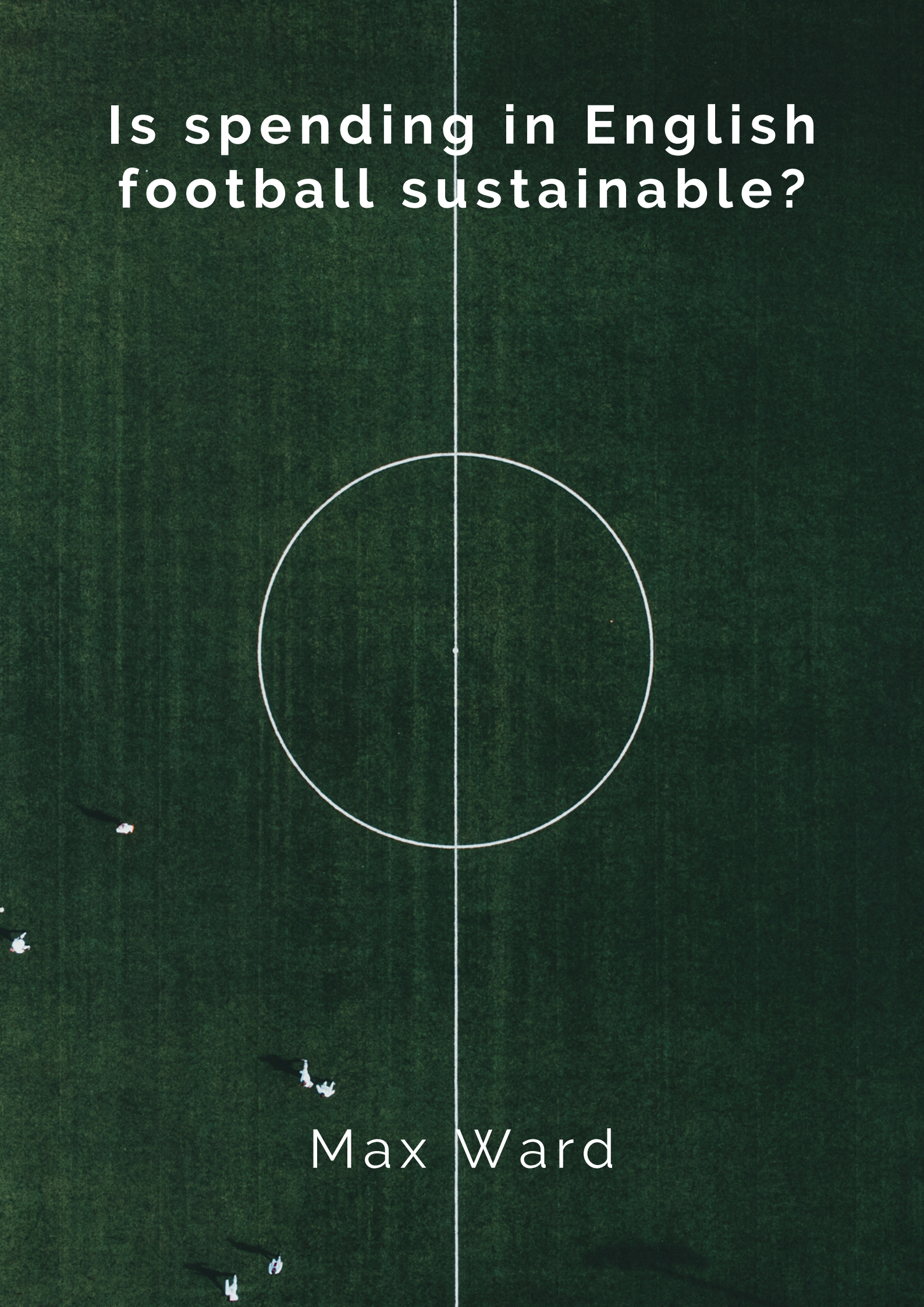
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Is spending in English football sustainable?



Max Ward

IS SPENDING IN ENGLISH FOOTBALL SUSTAINABLE?

Max Ward

Introduction

Every so often, the same question arises amongst football fans: is spending in English football sustainable? With Chelsea spending over £2 billion under the ownership of Todd Boehly (and yet still making a profit), and the outrageous amounts of money spent by top flight clubs in recent years, there is a debate as to whether Premier League clubs are financially stable, why some clubs overspend, and how clubs end up falling out of the Premier League.

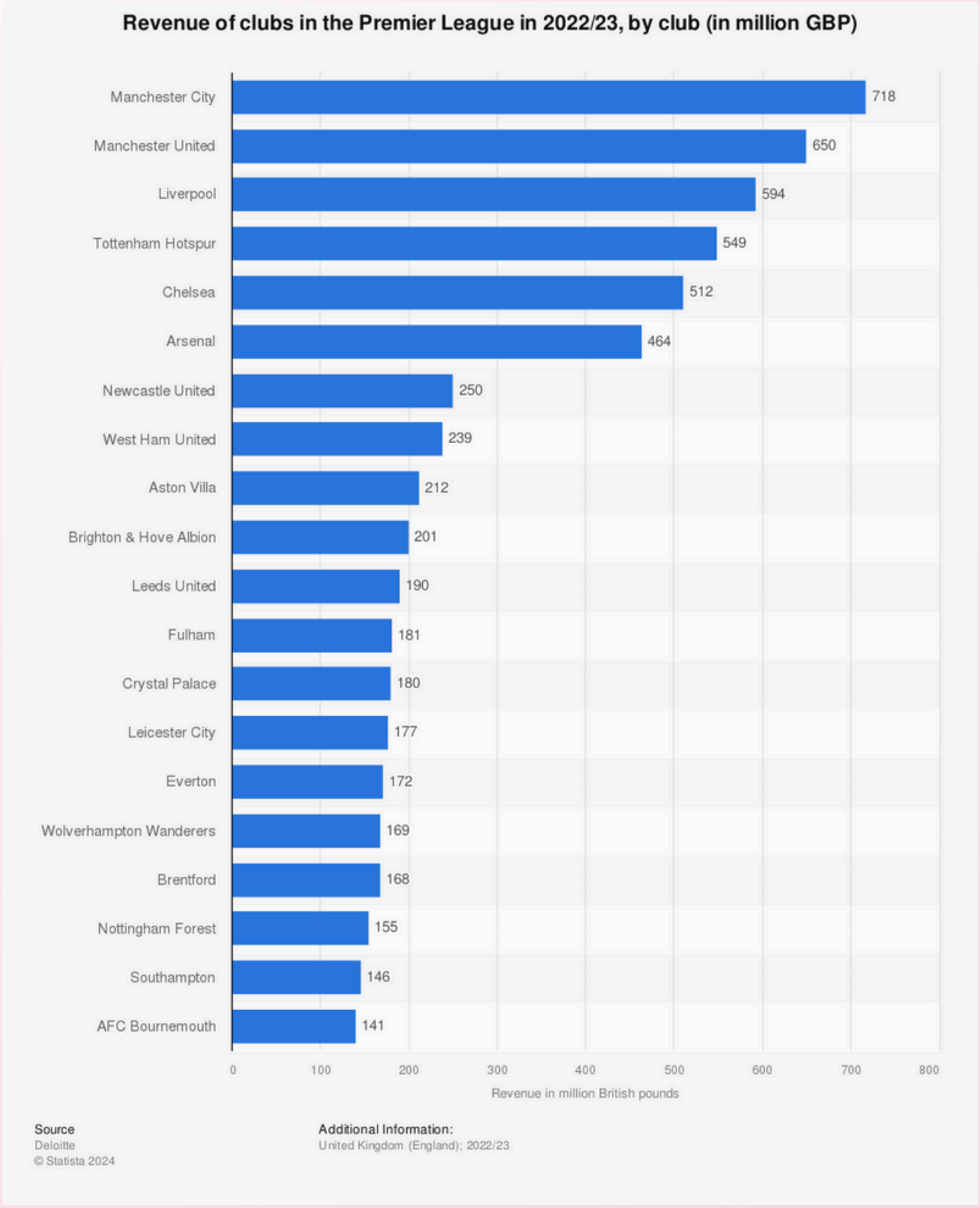
Spending caps and salary caps

Throughout the football pyramid, there are instances of the Football Association (FA) creating salary caps to dissuade football clubs from spending exorbitant amounts of money on transfers, wages and agents' fees. New salary caps being introduced to the Premier League at the start of the 2025/26 season will limit the spending on squad costs of Premier League clubs that compete in UEFA (European) competitions, such as the Champions League, Europa League and Europa Conference League, to 70 per cent of their annual revenue. Meanwhile, clubs that do not compete in UEFA competitions, and therefore do not benefit from the prize money awarded in European competitions, will be restricted to spending a maximum of 85 per cent of their revenue on squad costs.

However, if you can only spend a maximum of 85 per cent of your revenue on your squad and you are a relatively rich club (such as Chelsea), then you will always be able to spend more on your squad than clubs that do not have as much money (such as Brentford or Brighton). This means that the 'big' clubs will always be able to outspend 'smaller' clubs in the Premier League, widening the gap between the 'Top 6' (Manchester City, Manchester United, Arsenal, Chelsea, Liverpool and Tottenham) and the rest of the division. This means that clubs outside the 'Top 6' will find it harder to break into European competition.

Differences in revenue streams

The Premier League's dominance over the rest of English football is shown by the enormous difference in the amount and variety of their revenue streams. This is underlined by the Premier League's income from broadcasting deals. These deals offer up the potential



The gap in revenue between the "Top 6" clubs and 7th (Newcastle) is significant (Source: Statista)

for huge investment into both players and facilities. Correspondingly, they have placed Premier League clubs at the mercy of any fluctuation in the value of TV rights. Match-day revenue, once a staple of any club's finances, has become less critical for larger teams, but remains vital for their smaller brethren. On the other hand, commercial revenues for the biggest clubs continue to grow, with smaller clubs being left without a chance of catching up. The appeal of Manchester United or Chelsea makes it possible to negotiate multi-million pound deals with international brands (Manchester United once famously had an official tractor partner and even an official noodles partner), whereas clubs from lower down in the football pyramid cannot access the same commercial revenues. Their limited international presence and, correspondingly, smaller followings, make landing high-dollar sponsorships or merchandise revenues very hard, exaggerating the financial disparities between the leagues (and within the Premier League).

However, it is worth noting that clubs like Wrexham have been able to bring in larger sponsors, such as TikTok and United Airlines, as a result of being promoted through the leagues (and their worldwide exposure following their takeover by two Hollywood actors, Ryan Reynolds and Rob McElhenney). These cases, though, are remarkably rare.

Ownership and risk

The influx of wealthy owners, particularly from sovereign wealth funds and private investors, has further fuelled spending. While this investment enhances the league's competitiveness, it also creates a reliance on external funding that may not be sustainable.

"COMMERCIAL REVENUES FOR THE BIGGEST CLUBS CONTINUE TO GROW, WITH SMALLER CLUBS BEING LEFT WITHOUT A CHANCE OF CATCHING UP"

Max Ward



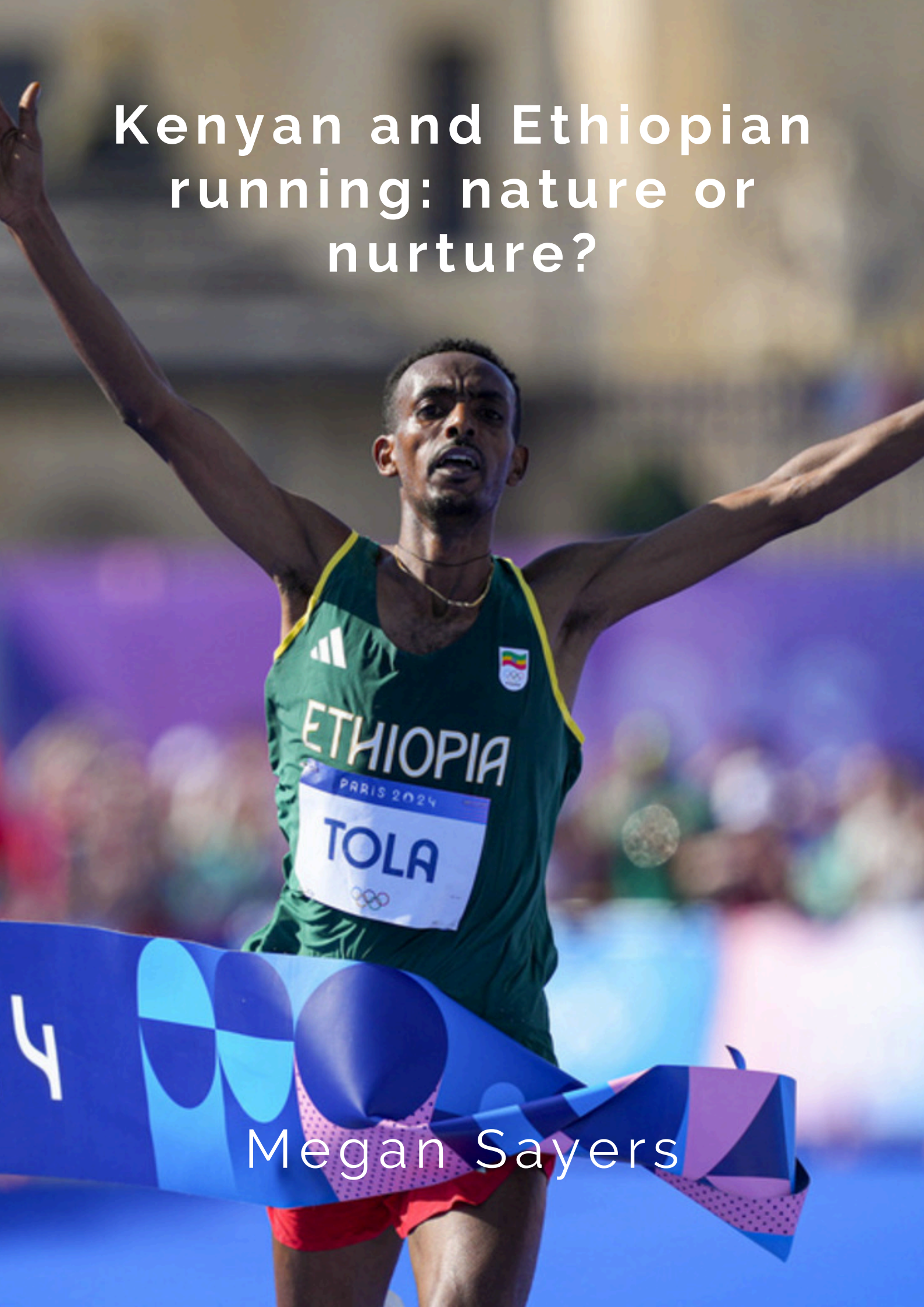
Todd Boehly, Chelsea's owner (Source: Creative Commons)

Clubs outside the top financial tier often overspend to achieve success, illustrating the dangers of chasing promotion or maintaining Premier League status. Portsmouth won the FA Cup in 2008 thanks to high levels of spending on talented footballers, but five years later they found themselves in England's fourth division, having entered administration twice in that time period. This is in contrast to better-established Premier League teams like Chelsea, who in their first season under new owner Todd Boehly spent over £2 billion without any consequences from the FA. This dynamic suggests that while sovereign wealth and private investment can elevate football, they can also amplify risks, especially for clubs outside the top financial tier. Without robust financial regulations, the gap between the "haves" and "have nots" is likely to widen, potentially undermining the long-term economic health of the sport.

Conclusion

In conclusion, while English football enjoys significant financial success, its sustainability depends on prudent management and stricter regulation. The reliance on external funding, coupled with the pressures of maintaining competitiveness, poses ongoing risks. A focus on innovative revenue generation and cost control is essential to ensure the long-term health of the game.

Kenyan and Ethiopian running: nature or nurture?



Megan Sayers

KENYAN AND ETHIOPIAN RUNNING: NATURE OR NURTURE?

Megan Sayers

Introduction

Kenya and Ethiopia produce the fastest marathon runners of all time. The top 10 marathon runners for both men and women are all from Ethiopia or Kenya (apart from the incredible anomaly of Britain's Paula Radcliffe). Middle and long-distance runners from Ethiopia and Kenya hold over 90 per cent of all-time world records. But why is this the case?

Both countries are located next to each other, so is this to do with the environment? Is it due to the fact that both populations have biological advantages? Or is it due to the cultures in both countries?

Environment

Both Ethiopia and Kenya sit at high altitudes. This means that athletes train

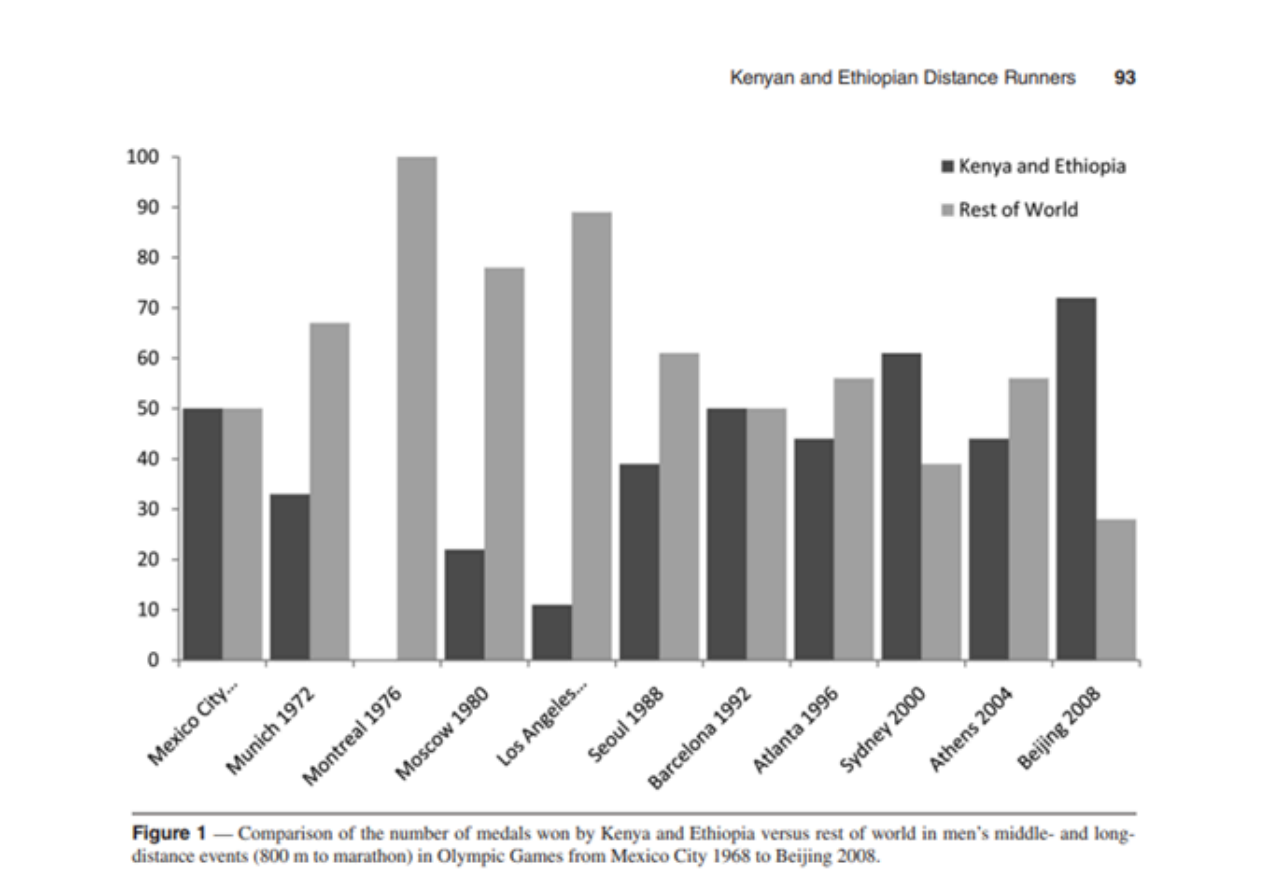


Figure 1 — Comparison of the number of medals won by Kenya and Ethiopia versus rest of world in men's middle- and long-distance events (800 m to marathon) in Olympic Games from Mexico City 1968 to Beijing 2008.

GEORGE SPENCER ACADEMY

and live with lower oxygen levels. Kenya is a mountainous country with the Great Rift Valley running through it from north to south. With plateaus reaching an average height of 1,500 metres above sea level, Kenyans experience high-altitude training daily. The majority of successful runners come from the three mountainous districts that run beside this valley.

Ethiopia's central plateau ranges from 4,200 feet to 9,800 feet. At high altitudes, the air is thin and oxygen is scarce. The human body adapts by producing more red blood cells to capture and deliver the limited oxygen available. This leads to an increase in lung capacity and efficiency.



Kenya's Great Rift Valley (Source: Canva)

Culture

Both Ethiopia and Kenya have high rates of poverty among their populations. This leads to children being forced to walk or run many miles each day. At Mwagangala Primary School in Mombasa County, Kenya, 70 per cent of students have to walk between 7 and 10 kilometres to school. This improves the population's fitness and endurance from a very early age.

Furthermore, many children are forced to run barefoot. Daniel Leiberman, an evolutionary biologist and Professor of Biological Science at Harvard, created a study that found athletes who ran in cushioned trainers struck the ground harder, giving Ethiopian and Kenyan athletes an advantage. Ethiopian athlete Abebe Bikila even won the 1960 Olympic Marathon running barefoot.

Kenyan and Ethiopian routine diets are low in fat and high in carbohydrates, which could play a significant role in their success. Staples include **ugali** (stiff porridge made from maize or millet flour), green leafy vegetables, milk, kidney beans and eggs. Due to high rates of poverty in these countries, Kenyan and Ethiopian athletes may have increased motivation to pursue a professional running career, to build a better life for themselves and their families. Young Kenyans and Ethiopians may have seen others leave their village and escape poverty, winning international races, increasing their interest in competitive sport and pushing them to train harder in order to succeed themselves in future competitions.

History

Kenya won its independence from Britain in 1963. Before then, athletics was implemented as part of the colonial rule system and therefore became a large part of Kenyan society. Both Ethiopians and Kenyans feel a need to uphold the history of athletic greatness for their countries.

Biological advantages

Partially due to poverty and partially due to genetic factors, Kenyans and Ethiopians are extremely skinny. The average Kenyan's leg is 400 grams lighter than their European competitors, which means 8 per cent more energy is saved when running. This can become significant over long distances. Having a lightweight body is also ideal when competing in high temperatures, as it is easier for the body to dissipate heat. This is most commonly seen in summer Olympic running events.

Psychology

Marathons could be considered as much of a mental sport as well as a physical one. Young athletes in Ethiopia and Kenya grow up believing that history is on their side and that long-distance runners from their countries are superior to those from elsewhere. According to sports psychologists, East Africa's supremacy in long-distance running is partly due to the stereotype that East Africans are good at it.

Training and preparation

Ethiopians tend to train early in the

"THE AVERAGE KENYAN'S LEG IS 400 GRAMS LIGHTER THAN THEIR EUROPEAN COMPETITORS, WHICH MEANS 8 PER CENT MORE ENERGY IS SAVED WHEN RUNNING"

Megan Sayers

morning to take advantage of the roads before they get busy with cars. They also warm up extensively thoroughly and slowly, which helps to prevent injury and ensures muscles perform at their best ability, as well as cooling down. Ethiopian culture has great emphasis on discipline, giving athletes greater motivation and determination.

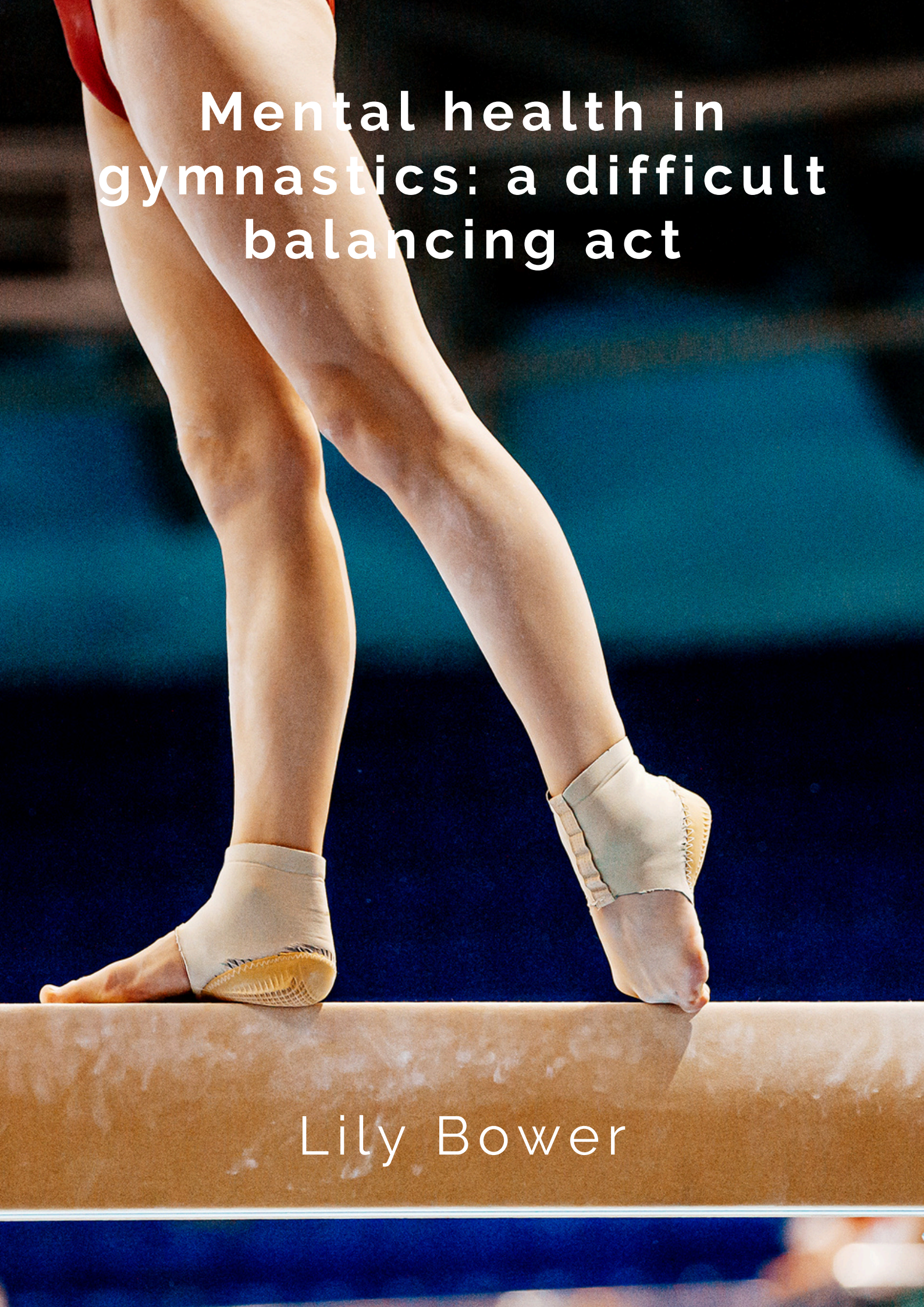
Another important training technique is that athletes train as a team and often run in a line, which allows athletes to match each other's pace in order to maintain the running formation. Sometimes, athletes do not run in straight lines: instead, they train in a forest environment, weaving through trees, which allows athletes to become more flexible. This is partly due to the fact that athletes in Ethiopia don't often train on a track due to the significant lack of tracks in the country.

Conclusion

Ethiopian and Kenyan athletes are significantly superior to athletes from other nations for a variety of reasons. Nature and nurture both play a significant role in the development of these superhuman athletes, and these factors will continue to be highlighted in world athletic events until other countries can figure out why Kenyan and Ethiopian athletes are so good at running.



Kenya's Alexander Munyao wins the London Marathon, 2024 (Source: Creative Commons)



Mental health in gymnastics: a difficult balancing act

Lily Bower

MENTAL HEALTH IN GYMNASTICS: A DIFFICULT BALANCING ACT

Lily Bower

Introduction

Gymnastics is a sport that demands high levels of perfection. Athletes begin training from a young age, often dedicating 30 hours per week to navigate the elite pathway. While this allows gymnasts to achieve success within the sport, it simultaneously cultivates a relentless pressure to win competitions due to the sacrifices gymnasts and their parents make throughout childhood.

Furthermore, sport psychologist Dr Emily Carter states that gymnastics can create a “perfectionist mindset”, which can contribute to depression and anxiety. This is a breeding ground for mental disorders as the constant desire to be perfect and the expectation of flawless performances often leads to burnout, as the gymnast is no longer able to meet both the physical and mental demands placed on the body.

High-profile examples

Recently, several international elite gymnasts have spoken out about their own mental health struggles within gymnastics. The most recent occasion of this was Simone Biles at the Tokyo Olympic Games in 2021. During the team finals, Biles withdrew from the competition as she was unable to



Simone Biles (source: BBC)

complete her vault safely, due to something called the “twisties”. This is where the athlete has a lack of spatial awareness, increasing the chance of an injury as the gymnast could land the somersault without fully competing the rotation. However, from an outsider’s perspective, this was perceived as Biles quitting, as she was able to complete the skill easily a few weeks before. This meant she received backlash and scrutiny from the press and social media, leading to her saying “I have to focus on my mental health. We are not just athletes - we are people”.

Furthermore, at the 2024 Olympic Games in Paris, Biles sustained a tear in her gastrocnemius during the team final. Nevertheless, she still continued to perform the most difficult and dangerous skills in the sport in four more rounds of competition. She then told a former teammate, Alexandra Raisman, that she just couldn’t have people calling her a quitter again. This highlights the fear of judgements that is still prominent within the culture of gymnastics.

Similarly, a gymnast called Kerri Strugg was competing at the 1996 Olympic Games in Atlanta. She was the last competitor and needed to execute a good vault for the team to take the title. However, she fell on her first vault, jeopardising the chances of her team winning. She then completed another vault and stuck the landing perfectly. Afterwards, she collapsed to the floor and it was concluded that she sustained a third degree lateral sprain and tendon damage, and had to be carried onto the podium. This shows just how constantly the pressure to win is placed on gymnasts.

“[BILES] TOLD A FORMER TEAMMATE, ALEXANDRA RAISMAN, THAT SHE JUST COULDN’T HAVE PEOPLE CALLING HER A QUITTER AGAIN”

Lily Bower

The impact of gymnastics throughout childhood

Most children participate in some form of sports throughout their childhood. This is a great way of making friends, developing motor skills and understanding the link between generation and success. A study shows that when optimising training and within a positive learning environment, sport can consistently and significantly improve mental health and relationships with coaches, family members and teammates. Also, particularly within gymnastics, children have a higher level of resilience as they have the ability to push through mental barriers and have less worries and fears as they have been taught skills to deal with fear when learning a new skill.

However, there are also links between participating in gymnastics and childhood eating disorders. According to an article by Jennifer A. Harriger, "women experience their own bodies in terms of what they look like instead of what they are capable of doing". This could be linked with the body-shaming some gymnasts receive from coaches or selection committees, emphasising the desire to be small and lean. Furthermore, gymnasts are judged on how they execute and how gracefully they present a skill. However, some gymnasts may interpret this as how their body looks whilst performing the skill. This may cause them to become self-conscious and fixated on how skinny they are.

Conclusion

In conclusion, it is important to prioritise mental health within gymnastics as by addressing these issues, an environment can be created which benefits both psychological and physical well-being. In a high-performance discipline, where gymnasts work themselves extremely hard, it is easy to neglect individual physical and mental health, but the people supporting gymnasts (friends, family and coaches) should seek to protect them and intervene when stress, anxiety and burnout becomes likely.



Source: Creative Commons

Why is there no respect for referees in football?



Ben Easton

WHY IS THERE NO RESPECT FOR REFEREES IN FOOTBALL?

Ben Easton

Introduction

Referees are mistreated at all levels of football, from the Premier League to children's grassroots football. One reason referees are not respected is because a team is unhappy with a decision and they protest it in a disrespectful way. Once this starts happening at a higher level, such as the Premier League, then children at grassroots level will mimic this, thinking it is appropriate and acceptable. Players also feel as though complaining about a decision not going their way can lead to them gaining the benefit of the doubt for the next decision. This then leads to an increased level of abuse for referees.

Statistics

BBC Radio 5 Live conducted a questionnaire of 927 referees and found:

- 908 had experienced verbal abuse from spectators, players, coaches or managers (98 per cent of respondents);
- 293 had been physically abused by spectators, players, coaches or managers (32 per cent);
- Of 122 referees aged 17 and under who responded, more than 100 had been verbally abused by coaches/ managers (105), spectators (109) or players (102);



Players from Borussia Dortmund, Germany, confront a referee (Source: Creative Commons)

- 60 per cent of referees still experience abuse every couple of games, and 19 per cent have experienced some form of physical abuse;
- 57 referees had received a death threat against them or their loved ones.

These are just some of the reasons why there is a shortage of referees in football, and why many new referees under 18 give up the profession. 10,000 teenage football officials have hung up their whistles in the last five years, and 13 per cent of referees who are no longer in refereeing mention aggression as the cause of their dropout.

Real life examples of referees' experiences

Ryan, age 30: "Every week when you go out as a referee, you think about what's going to happen this week. I sometimes don't want to turn up. It's freezing cold and you're going to stand there for 90 minutes to be abused, for £30, which is what you get paid.

Megan, age 18, had a parent come onto the pitch with raised fists after she sent a child off. "He was yelling abuse at me and saying this is why girls shouldn't be in football. I think he got a six-match ban and fined, but that isn't enough."

Joe, age 18: "I've been assaulted by a grown adult player when I was 16 and threatened multiple times by managers and parents. A player at under-14 level threatened to have me stabbed and 'get his gang on me'. Managers have threatened to see me in the car park. Players have also said this."

These are just three of many examples of shocking encounters that referees experience every week. These examples came from a BBC article on referee abuse: Referee abuse: Hundreds tell of safety fears at grassroots level.

"10,000 TEENAGE FOOTBALL OFFICIALS HAVE HUNG UP THEIR WHISTLES IN THE LAST FIVE YEARS"

Ben Easton

How to stop referee abuse

One solution to change these statistics and real-life examples would be to change the attitudes at the top level of football, because their influence might carry down the football pyramid. Grassroots footballers, especially children, look up to professionals as role models and emulate their actions, so if they modelled fairness and respect, it would influence more footballers.

Referees at all levels should also be stricter on backchat and attitudes towards referees when footballers disagree with their decisions. For example, in rugby, only the captains can speak to the referee, and they must speak respectfully else they could be sin binned. In fact, temporary dismissals of this nature have already been implemented across all levels of grassroots football.

Conclusion

Changes to football at the highest level, such as sin bins for backchat and only allowing the captain to approach the referee, could have a significant impact on football at the grassroots level. Elite footballers serve as role models for all footballers, especially children, and should model good behaviour on the pitch. Solutions need to be found since referees are hanging up their whistles as a result of the abuse they face.



England rugby players in the sin bin (Source: The Guardian)

Please scan the QR code to give your feedback on **Half Time**. Let us know what you enjoyed about this edition, and what you would like our students to write about in the future. Thank you!