



TC TWICE FEB'23

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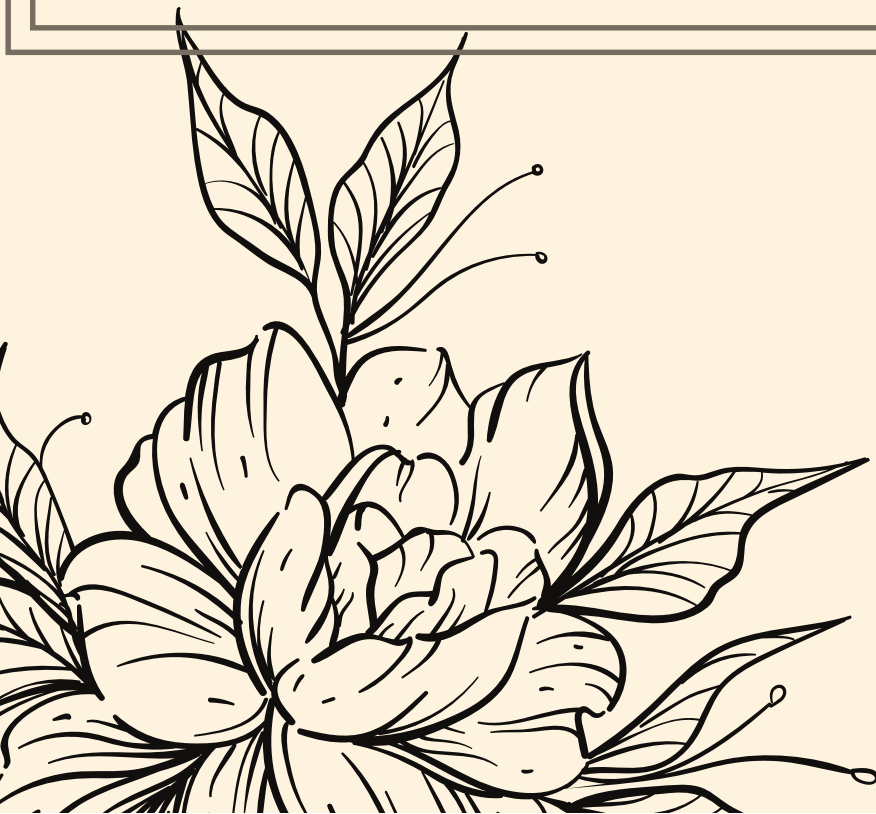
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Maryam
Fayyaz
Editor in Chief
Shazene
Hussain
Lead Editor

ChatGPT - Our Trojan Horse?

Meher Lalvani

Chat GPT is one of the world's largest growing AI text generation tools, reaching over 1,000,000 users in just 5 days. In comparison, Netflix took approximately 3.5 years to reach the same statistics, Facebook took 10 months, Instagram at a mere 5 months and the Iphone at 74 days.

Artificial intelligence is the base of most technological solutions nowadays, but what exactly is it? Essentially, AI is a software with the ability to learn. By gathering information and working experience, AI is able to gain knowledge and carry out its own solutions to given problems. This technology isn't new and has been at the forefront of technological advancements in the modern world.

So what makes ChatGPT different, and worthy of several news headlines?

Simple. Its proficiency. ChatGPT is so advanced that it can take a few lines of qualitative data and turn it into a full written piece of work. Whilst the concepts of text generation tools and chatbots have been around, none of them match up to ChatGPT's excellency.

But is its proficiency enough to conceal the darker truths that lie within AI?

To explain, the example of an AI programme, a cat recognition feature can be compared. In this supposed AI, the computer would deduce the number and types of cats in an image.

AI has the ability to learn with the promise of removing labor intensive and repetitive work.

However it is safe to say that it has been forgotten who initially provides the computer with its starting knowledge and teaches the computer. Humans are still at the base of teaching AI and this process in relation to our initial programme is called labeling. Someone would have to show the computer pictures of cats leaving some information out so that the AI has the ability to learn and grow in its understanding. Although this example paints a rather cute and fluffy picture, there are many side effects of labeling as a process.

How does this relate to ChatGPT?

The answer is derived from sensitive content. People use ChatGPT regulation free so what do we as a society deem as accepted and unacceptable? ChatGPT teamed with a company based in San Francisco called SAMA to provide them with the regulations for the software. Put simply this would involve a person doing the repetitive task of reading sensitive content and determining whether they deem it to be sensitive content or not. This is a simple task and large companies don't see fit to have experienced software developers to do and as a result, this gets passed onto workers in third world countries such as India, China and Uganda. Similar to workers in sweatshops, the workers get paid between 1-2 dollars a day and are exposed to large amounts of unsettling, graphic human content, which a lot of workers have expressed 'damaged them psychologically'. Measures of mental health consultations have been put in place but aren't regular due to the increasing demand of text generation websites and AI technologies. SAMA and the creators of ChatGPT no longer work together, fueling the other disadvantage of unemployment as a result of technological advancements. This begs the question of how far we're willing to go to have a technologically sound world, and much like the story of the trojan horse, comes in the form of a beautiful creation disguised within hours of manual labor and the loss of basic survival skills.

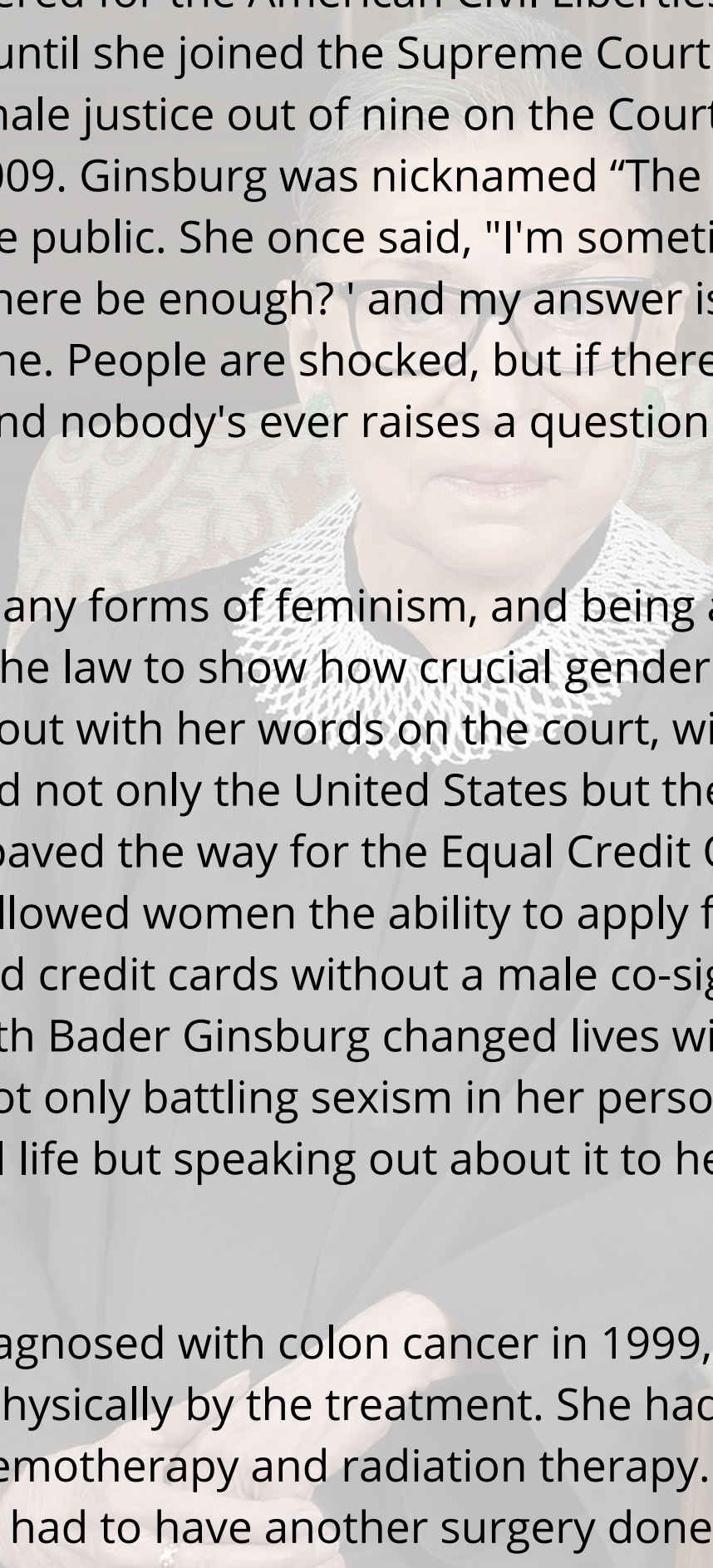
Ruth Bader Ginsburg: A Woman Who Fought For Rights

Lyla Khan

"Real change, enduring change, happens one step at a time."

Ruth Bader Ginsburg was born on March the 15th, 1933. She was a US Supreme Court justice and a feminist who fought for what she believed in the form of politics and law. She was also the first Jewish and second woman to serve on the Court.

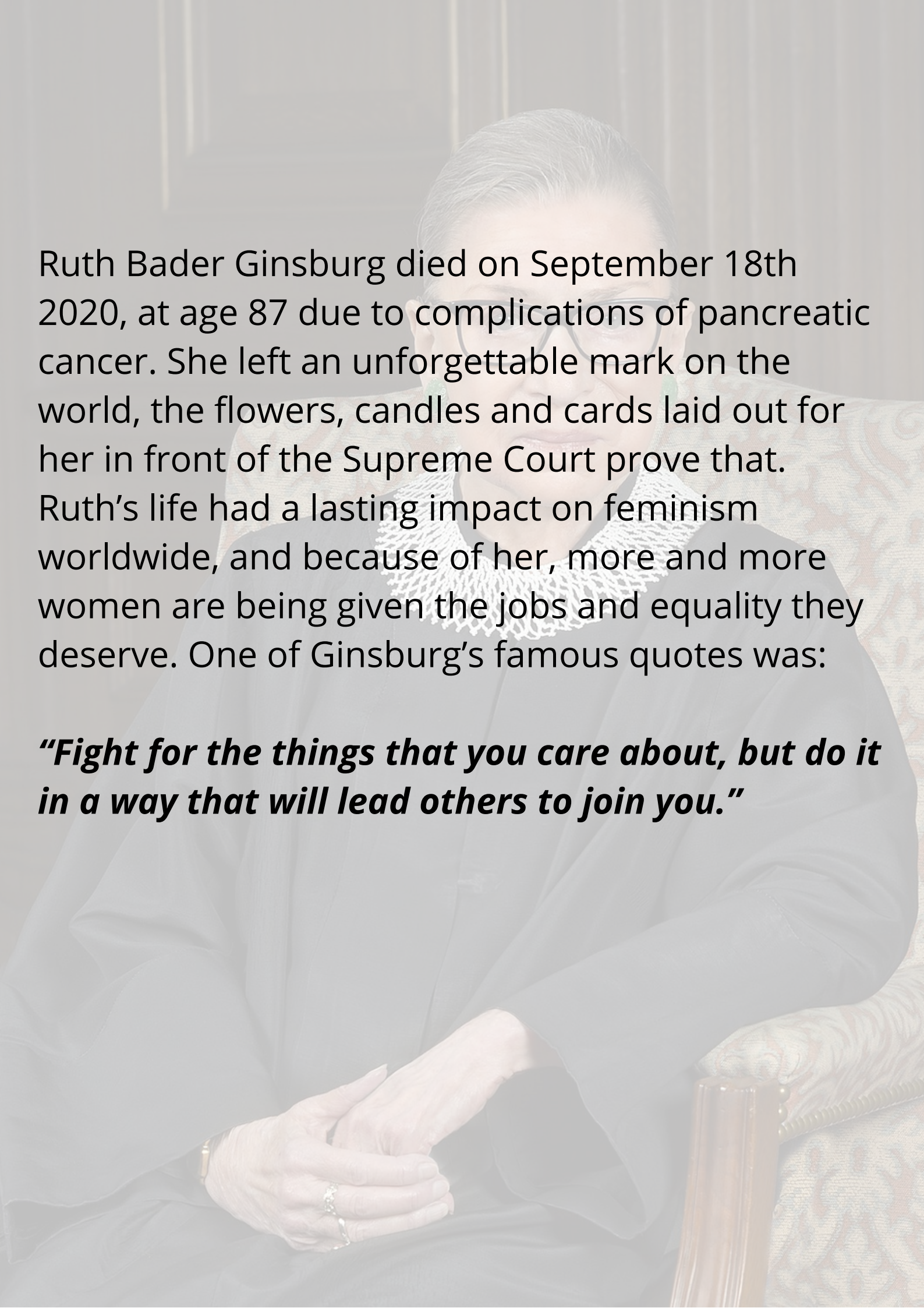
Ruth was born and raised in Brooklyn, New York. Her mother, who had died of cancer a day before Ruth graduated from high school, hadn't gone to college and had chosen to give her daughter the right to all education possible. After high school, Ruth earned a degree at Cornell University and went to Harvard Law School after she married and had children with Martin D. Ginsburg. She soon transferred to Columbia Law School, where she worked with the Columbia Law School Project, co-authored a book with Swedish jurist Anders Bruzelius, and learned the Swedish language. Ruth then became one of the few female professors at Columbia Law School and Rutgers Law School, teaching about Civil Procedure.

A portrait of Ruth Bader Ginsburg, a woman with short grey hair, wearing glasses and a white lace collar. She is looking directly at the camera with a slight smile. The background is a patterned fabric.

"An advocate for female rights and global gender equality, she volunteered for the American Civil Liberties Union. She served until she joined the Supreme Court and was the only female justice out of nine on the Court between 2006 and 2009. Ginsburg was nicknamed "The Notorious R.B.G" by the public. She once said, "I'm sometimes asked, 'When will there be enough? ' and my answer is when there are nine. People are shocked, but if there'd been nine men, and nobody's ever raises a question about that."

There are many forms of feminism, and being a lawyer, Ruth, used the law to show how crucial gender equality is. Ruth spoke out with her words on the court, with words that changed not only the United States but the whole world. She paved the way for the Equal Credit Opportunity Act, which allowed women the ability to apply for bank accounts and credit cards without a male co-signers consent. Ruth Bader Ginsburg changed lives with her words, by not only battling sexism in her personal and professional life but speaking out about it to help others as well.

Ruth was diagnosed with colon cancer in 1999, and was weakened physically by the treatment. She had to undergo chemotherapy and radiation therapy. Then, later, in 2009, she had to have another surgery done due to a case of pancreatic cancer. Ruth battled cancer for around 20 years.



Ruth Bader Ginsburg died on September 18th 2020, at age 87 due to complications of pancreatic cancer. She left an unforgettable mark on the world, the flowers, candles and cards laid out for her in front of the Supreme Court prove that. Ruth's life had a lasting impact on feminism worldwide, and because of her, more and more women are being given the jobs and equality they deserve. One of Ginsburg's famous quotes was:

“Fight for the things that you care about, but do it in a way that will lead others to join you.”

Lung Cancer - Women & Non-Smokers

Muhammad Salahuddin

In men, lung cancer rates peaked in 1984: 87 out of 100,000 men were diagnosed with lung cancer. Luckily, since then, lung cancer rates have declined. This is due to a variety of factors: increasing cigarette and nicotine prices, education and awareness of the dangers of smoking, improved medicine etc.

It's not exactly a surprise that lung cancer rates have decreased when cigarette packages look like this:



However, recently, there has been an abrupt rise of lung cancer rates in women. The American Cancer Society's estimates lung cancer rates in the US for 2023 are approximately 238,340: 117,550 in men and 120,790 in women.

Logically, this makes very little sense. Women have a 1 in 17 chance of developing lung cancer, whereas men have a 1 in 16 chance (this statistic includes smokers and non smokers). According to the American Lung Association, lung cancer rates have decreased by 43% for men, while they have increased by 79% for women over the last 44 years. This is a massive difference. Why is this happening now? Why is this happening specifically to women non smokers? And how do we get rid of it?

Lung cancer (as of the 20th February 2023) is the leading cause of cancer related death amongst women, beating out breast, ovarian and colorectal cancer. Although it is less common than breast cancer, it is significantly more deadly.

The only answers we have are speculation. The first being women are more prone to the substances in tobacco. Whilst this is currently a hypothesis and has yet to be proven, it would explain the drastic difference in cases between genders.

Furthermore, some researchers hold the belief that some women hold a mutation in their genes that makes them more susceptible to lung cancer, a mutation which men apparently do not have. This could be similar to the BRA1 and BRA2 gene mutations which make women more susceptible to breast cancer.

When there was a peak in women smoking in the 1900s, cigarettes used a filter system. While all types of cigarettes are potentially life-threatening, these filters were more dangerous than the current system. Some cigarettes were marketed specifically towards women: a chemical in these filtered cigarettes could have caused a gene mutation that was passed down and inherited. However, we must remember that this is only speculation - there is yet to be any concrete evidence to support any of these claims.

Hopefully, we'll have an answer soon. Until then, the question still remains. Why are lung cancer rates rising amongst women and non smokers?

Our Jurassic Park

Ridhan Mahanty

What first comes to our mind when we hear the words 'extinct animals'? Maybe the Dinosaurs, Dodo or the Woolly Mammoth. These animals have been extinct for a really long time, some even lived before humans came into existence. Well, there's now a research company which is finding solutions to resurrect those animals. You might be thinking, "resurrect the Dodo? That's crazy!" But science is progressing so fast that it might be actually possible.

The Company 'Colossal Biosciences' is a de-extinction company which was founded by 2021 by Ben Lamm and Harvard University geneticist, George Church. As a de-extinction company, their mission is not to change the world, but to heal the world. What do I mean by that? What I mean is that the company's goal is to successfully bring extinct animals back using CRISPR technology in the process, and thanks to the launch of new Avian Genomics, the company will also be able to bring the dodo back. But we need to look a bit further.

Why are they doing this anyway? You might think that they're doing this to surprise people that extinct animals can come back to life but no, they're doing this because when the dodo lived, extinction wasn't a major problem for the animals then it became a bigger problem until the present era so the company is trying to fix that problem and also, the reappearance of extinct animals will open a door to a new era of biodiversity. Now let's take a look at some extinct animals that Colossal Biosciences is trying to resurrect.

The Woolly Mammoth was an extinct species of the modern elephant that we see today in Africa. It had slightly different features to the modern elephant like longer tusks and brown fur, but surprisingly it was roughly the same size as the elephant. It lived in the cold tundra of Europe from about 300,000 years ago until 10,000 years ago. Presumably, the last mammoth family had gone extinct in 1650 BC. Scientists are still debating how the Mammoth went extinct, using theories such as viruses, meteor strikes or even vegetation scarcity.



The Tasmanian tiger (Also known as the Thylacine) is a carnivorous marsupial native to the Australian mainland and parts of New Guinea and Tasmania. The Tasmanian tiger is known for its stripes on its lower back. This animal was known to be shy and nocturnal and it had an abdominal pouch which is the same as a Kangaroo. Due to the feature that the Tasmanian tiger had, it has displayed anatomy and adaptations of the Tiger. It had gone extinct due to hunters hunting them, just like the dodo.

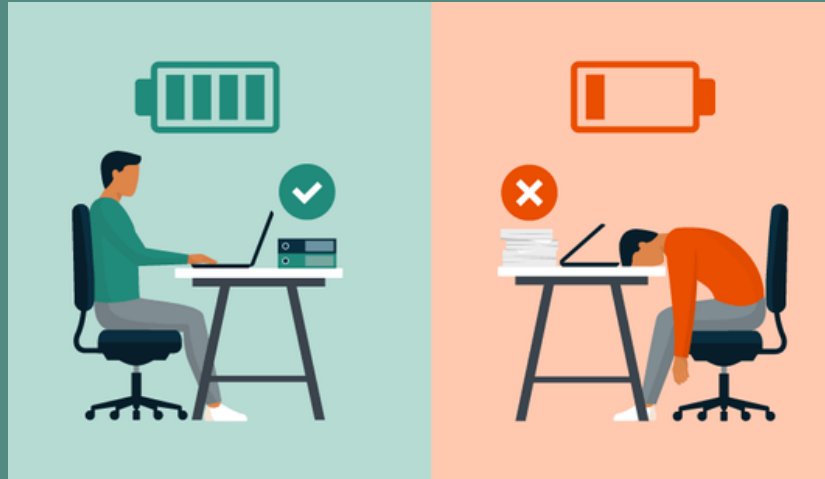
The Dodo, which lived on the island of Mauritius was a flightless bird-It weighed about 13-23 kg and it had a wingspan of 2 feet. Although it couldn't fly, it could run quickly. With ample food and no predators to live there, the Dodo slowly adapted to the conditions until the Dutch arrived. After this, the population of the Dodo reduced due to the Dutch killing them and some even died of starvation. Finally, in the 17th century, the Dodo had gone extinct.

Lastly, in my opinion, resurrecting the extinct animals could be a scientifically challenging experiment as these animals, such as Tasmanian tiger and Woolly Mammoth, have been extinct for hundreds or even thousands of years.

Additionally, it would be difficult for these animals to adjust to the environment of today's world which is very different to the environment that they lived in. But if the company is able to complete the project and if this research is proven successful, it will pave the way for new scientific progress on conservation of wildlife. As I am a strong environment supporter, I really am looking forward to seeing these extinct animals & many others back in their natural habitats.

The Ultimate Guide To Boost Your Productivity

Eshna Tripathi



Number 1: SELF LOVE

The first step towards boosting your productivity and avoiding burning out is to love yourself and create a balance in life. For example...

Yoga:

- Yoga helps to maintain a balance between mental and physical health. Imagine a having a stressful day at school, and only a few lessons in you feel like giving up. You decide to leave the piles of unfinished homework for tomorrow night, hoping you'll muster enough motivation to do it then. But instead, you face the same lack of motivation, and only maintain this tiresome sequence of work (or rather not working). This is where you need to include a physical stress buster like yoga in your life. Being a victim of this behaviour myself, I know how tiring it is. And although yoga sounds old school, its magic truly works!

- Alternatives to this could also include going to the gym, or on timed walks outside to your nearby park. You could walk and observe different places and people, relieving the stress of daily life (without being on your phone!). Any form of physical activity away from a screen will do!

Reading:

- People often only stick to reading the same genre of their favourite fictional books, but we must also consider reading self-help books and biographies! Our brain constantly looks for excuses to procrastinate and influences including social media or books we read contribute to the way our minds work. Now, I'm not saying we should all completely avoid going on social media or stop reading fiction...boycotting some of our favourite forms of entertainment is not the objective!
- But, reading educational books is one of the best ways to find the motivation to be productive as it helps alter our mindset from a lazy, tired one to a motivated, productive one. As well as that, depending on the books (make sure you do your research!), self help books usually talk you through the process and help you steadily shape your mindset towards the best one possible! Some great examples include: Atomic Habits by James Clear, The Motivation Manifesto by Brendon Burchard. Try one out and see for yourself!

Romanticizing your life:

- Completing tasks in an aesthetically pleasing yet productive way not only makes you more willing to finish off your tasks but also reduces anxiety and general day to day irritation from life. Eric B. Loucks, an associate professor of epidemiology, behavioral and social sciences at Brown University has proved with his research that each individual's productivity depends on which methods resonate with the them most. Romanticizing our lives helps us become more in tune with ourselves.
- Are you easily getting distracted while studying? Have you reached the point where you can't grasp any more information from your textbook no matter how many times you give it a read? Well, try out some new things; Join a study group, explore different places with an open mindset, try changing your study location, customize and clean your study table, light up a scented candle, and experiment with the maby other study methods out there. Anything that would attract you towards achieving your goals! If you feel going into a café will motivate you to study, then plan your day accordingly.
- Hypothetically, you know you need to study for an upcoming test and you're not getting it done, the time subsequently comes that you walk out of the exam hall realizing how easily you could have answered all questions if only you had made those notes or flashcards or simply paid attention in class. I can assure you that all of us have witnessed this more than once. The solution is not repenting over your mistakes and cribbing about it, but figuring out where you went wrong and how you can work your way through it. For me, using visual aesthetics while studying really helped. For you, it might be some of the ways I have listed above. Try to fall in love with the process.

Ask for help and organize:

- Talk to experienced people you trust like your mentors, teachers, parents or anyone you feel can help lighten your concerns. If you're worried about something and aren't sure what to do next, asking for help greatly relieves feelings of stress, as you're working towards finding a solution. You know what they say, a problem shared is a problem half solved!
- Review your goals and categorize them according to long term and short term goals. Having clarity in your goals and consistently keeping a track of what you've accomplished and have yet to greatly increases productivity. Make mini to-do lists and try to write down everything you need to finish during the day, rating them high urgency to low urgency (complete the tasks in that order). Your main goal should be finishing all the high urgency level tasks. Tick off everything you've done at the end of the day and if you haven't completed all your required tasks, do not make a new to-do list without finishing the old one!
- If you find yourself overthinking about something, write it down, focus on the tasks at hand and then take action to deal with the problem. Once you start focusing and organizing these seemingly 'extra' - yet often important - tasks, you will feel a greater sense of balance in your life and you won't feel like giving up (especially during trying exam seasons).

Number 2: STAYING FOCUSED

- Take small and timed breaks when you're studying. Ensure that you're not using your phone during these breaks as you're likely to exceed your time limit, and eventually break your study pattern. Instead, try having a quick snack at this time or closing your eyes for a few minutes until you know you are ready again. These breaks are important to avoiding burning out. But, don't be stressed if you exceed these time limits, especially if it's your first time. Just, increase your time limit for a short period and work towards reducing it slowly every week until you reach a time you are satisfied with.
- Avoid sitting in one place for too long as you could easily lose concentration. During your breaks, move away from your study space. Your brain needs a change of scenery to coordinate properly and understand you are resting. And then, upon returning to your designated study space, you should be able to instantly snap back into study mode.
- Keep away from your phone! One beneficial way to do this is by taking a time lapse video of yourself when you're studying. This will not only keep you away from your phone but also motivate you to keep working when you later rewatch the video
- Clear distractions from your study area. All it takes is one second to find something to daydream about, but possibly another 15 minutes to get back into your study pattern. If you minimize distractions in the first place, you are a lot less likely to lose focus. For me, I like clearing out anything on my study table until all that's left is a white space with a crystal clear wall in front of me.

- Read through topics before your lessons so you can pay attention in class. The easiest way to improve your productivity is through simply paying attention in class, and skimming through a topic before the teacher covers it can allow you to understand things quicker in class. It may also help get your questions answered before tests so you have more time for revision.
- When you're reading a text, try to highlight keywords that can help you summarize the entire topic easily. When you go back to that text during your exam, you can see those keywords instead of reading the entire text again. This will help you jog your memory quickly and maximize your productivity as it's less time consuming.


Number 3: MAKE STUDYING FUN

- Use apps and websites that are actually useful for you. For example, Notion (an online website) helped me track everything I had to each day, week and month. The visual aesthetics on notion also make tasks more engaging, and motivate me to finish them off.
- Nearly 75% of students listen to music while studying and this tip will be useful for you if you're in the 75%. Instead of just choosing random playlists, try associating different playlists with different subjects or different times of the day. I listen to lo fi music if I'm having a night time study session, but it isn't what I listen to during mornings. Music association is a very effective study technique as when you listen to a specific type of music, your brain automatically takes you into work mode, and makes it easier to recall what you learnt.

Will electric cars be the future?

Ansh Mandal

Overview

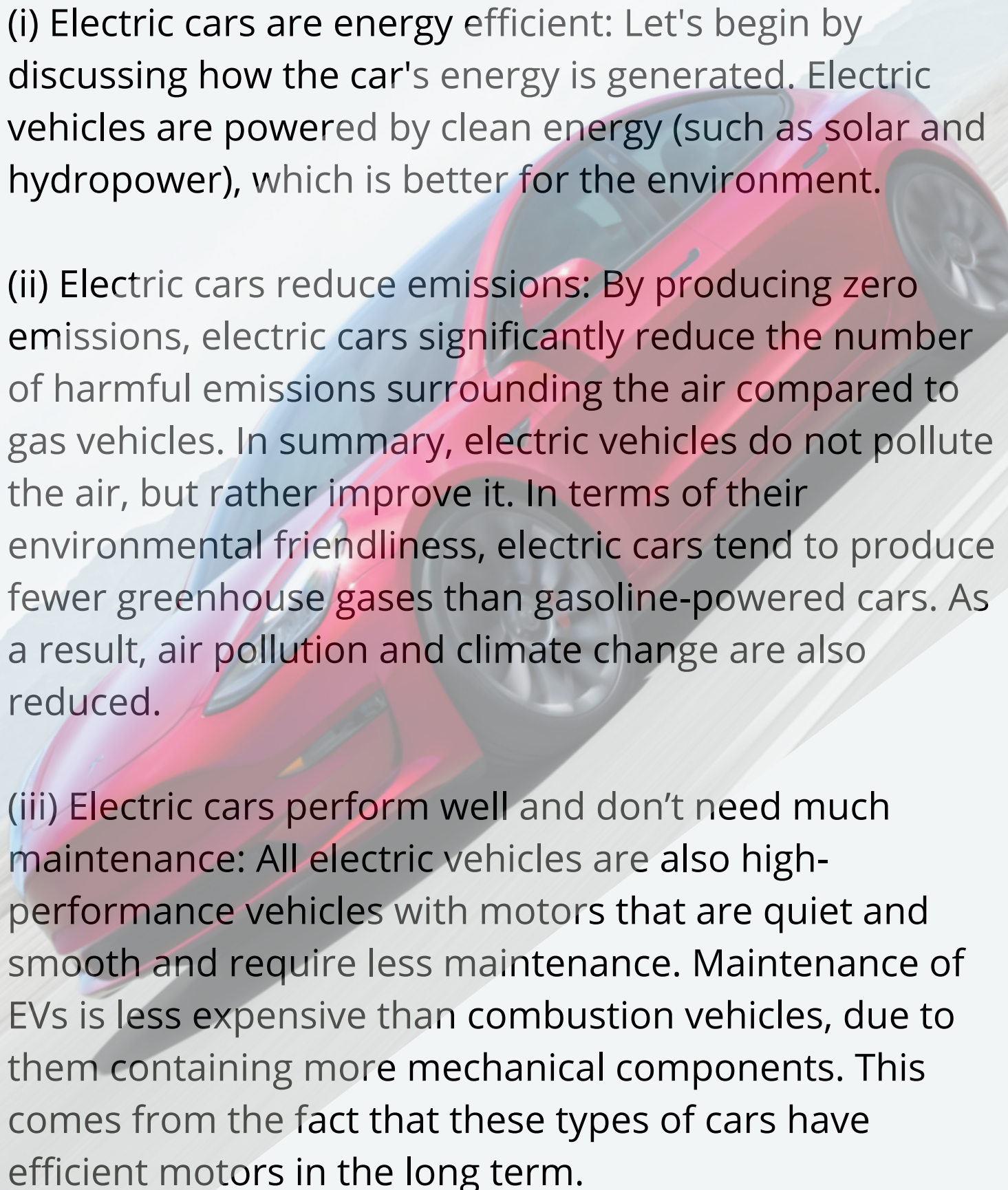


Electric car sales are not only growing, they are growing at a rapid rate. From 1 million in 2017, people believe that by the year 2025 (not far from now) car sales will skyrocket to more than 20 million. Within this article, we will examine the pros and cons of electric cars before reaching an overall conclusion. The fact of the matter is that many modern, popular car brands have begun producing electric cars, believing that these types of vehicles will be the future of transportation. Should we follow their expertise? Many believe we have already passed the tipping point where sales of electric vehicles (EVs) will very rapidly overwhelm petrol and diesel cars, as fossil fuels seem to be a declining trend, we won't have gas cars to drive, which is why many think electric vehicles will be sustainable in the future.

On the plus side, electric cars are energy efficient, and are very good for the environment, and additionally don't require as much maintenance as traditional gas-powered cars. On the negative side, you can't travel as far between refuelling, the actual refuelling process takes longer than filling a car at a gas station, and upfront costs are sometimes an issue. Let's explore these pros and cons in further detail.

Pros

Electric vehicles have their benefits, some of which most of us may already be aware of, for example:

- 
- (i) Electric cars are energy efficient: Let's begin by discussing how the car's energy is generated. Electric vehicles are powered by clean energy (such as solar and hydropower), which is better for the environment.
 - (ii) Electric cars reduce emissions: By producing zero emissions, electric cars significantly reduce the number of harmful emissions surrounding the air compared to gas vehicles. In summary, electric vehicles do not pollute the air, but rather improve it. In terms of their environmental friendliness, electric cars tend to produce fewer greenhouse gases than gasoline-powered cars. As a result, air pollution and climate change are also reduced.
 - (iii) Electric cars perform well and don't need much maintenance: All electric vehicles are also high-performance vehicles with motors that are quiet and smooth and require less maintenance. Maintenance of EVs is less expensive than combustion vehicles, due to them containing more mechanical components. This comes from the fact that these types of cars have efficient motors in the long term.


Cons

However, one cannot disregard the cons of electric cars, which are briefly explained below:

(i) Electric cars can travel less distance: EVs on average have a shorter range than gas-powered cars, as most models range between 100 and 200 km per charge and some luxury models reach a range of 500 km per charge. For comparison, gas-powered vehicles will average around 700 km on a full tank of gas, and more fuel-efficient vehicles get a much higher driving range. This may be a problem as the availability of charging stations can make EVs less suitable for activities like long road trips.

(ii) Electric cars can take a long time to recharge: Fully recharging the battery pack can take up to 8 hours, and even fast charging stations take 30 minutes to charge to 80% capacity. Electric car drivers have to plan more carefully because running out of power can't be solved by a quick stop at the gas pump.

(iii) Electric cars can be expensive: It goes without saying that EVs are quite heavy on the pocket. Contrastingly, one can save money owning an EV over time since there is generally less maintenance and it's less expensive to charge than fuel with gas. Further, battery packs are more expensive in EVs as they have limited life and come with 8-10 year warranties; whereas the conventional vehicle generally has a longer lifespan if maintained properly.



(iv) Battery production is harmful to the environment: Many believe that electric cars are bad for the environment, for the sole reason that battery production for the vehicle is worse in terms of affecting the environment as the batteries required to charge these vehicles are not necessarily produced from renewable energy sources. However, is this really as bad as constantly diminishing the environment with petrol? When it comes down to it, there really is no contest as to which is worse...

Conclusion

With the pros of electric vehicles heavily outweighing the cons, one can assume that electric vehicles are the future. However, manufacturing companies should manufacture EVs judiciously using the right resources without exploiting the environment. There are plenty of benefits to owning an electric vehicle with the right amount of functionality and infrastructure.

Russia vs International Sports

Sanjay Balaji

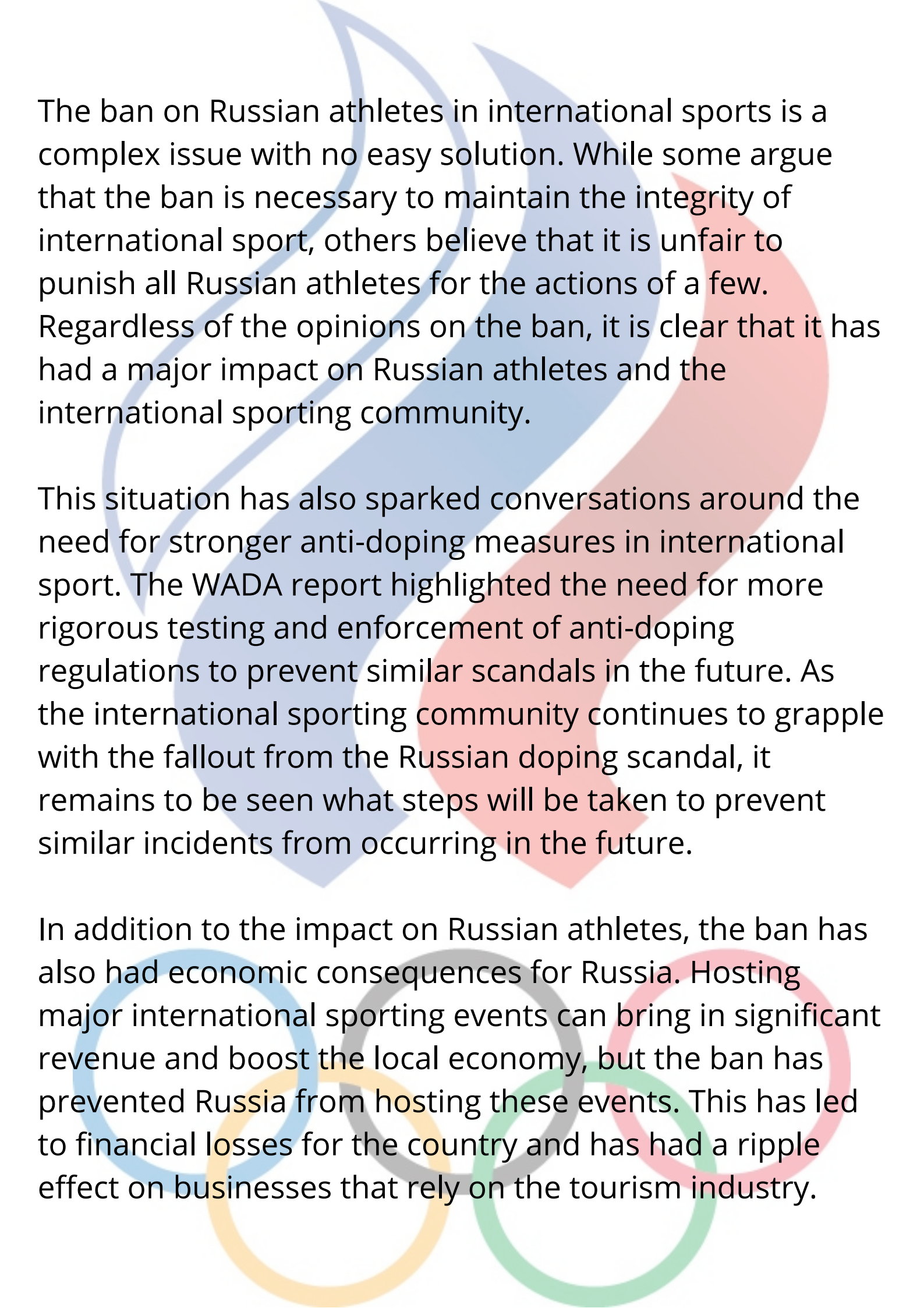
Russia, a country with a rich history of sporting achievements, had been hit with a major blow. In 2015, a report from the World Anti-Doping Agency (WADA) uncovered evidence of state-sponsored doping in Russian athletics. This led to a four-year ban on Russian athletes from competing in major international sporting events, including the Olympic and Paralympic Games.

The ban was put in place to punish Russia for its role in the doping scandal, which involved the use of performance-enhancing drugs by Russian athletes. The ban means that Russian athletes are unable to compete under their country's flag or anthem. Instead, they must compete as "neutral" athletes, without any national identity.

The ban has been a major source of controversy, with some arguing that it is unfair to punish all Russian athletes for the actions of a few. Others argue that the ban is necessary to maintain the integrity of international sport.

The ban has had a significant impact on Russian athletes, many of whom have been stripped of their medals and banned from competing in future events. It has also had an impact on the international sporting community, with Russia being a major player in many sports.


Despite the ban, some Russian athletes have been able to compete in international events under the neutral flag. However, this has been a controversial issue, with some arguing that it undermines the ban and sends the message that doping is acceptable.

The background of the image features a large, stylized graphic of the Olympic rings. The rings are rendered in a light, semi-transparent style, with the blue, yellow, and green rings on the left and the red and black rings on the right. The graphic is composed of thick, curved lines that form the iconic interlocking pattern of the rings.

The ban on Russian athletes in international sports is a complex issue with no easy solution. While some argue that the ban is necessary to maintain the integrity of international sport, others believe that it is unfair to punish all Russian athletes for the actions of a few. Regardless of the opinions on the ban, it is clear that it has had a major impact on Russian athletes and the international sporting community.

This situation has also sparked conversations around the need for stronger anti-doping measures in international sport. The WADA report highlighted the need for more rigorous testing and enforcement of anti-doping regulations to prevent similar scandals in the future. As the international sporting community continues to grapple with the fallout from the Russian doping scandal, it remains to be seen what steps will be taken to prevent similar incidents from occurring in the future.

In addition to the impact on Russian athletes, the ban has also had economic consequences for Russia. Hosting major international sporting events can bring in significant revenue and boost the local economy, but the ban has prevented Russia from hosting these events. This has led to financial losses for the country and has had a ripple effect on businesses that rely on the tourism industry.

The background of the image features a large, stylized graphic of the Olympic rings. The rings are composed of five interlocking loops in blue, yellow, black, green, and red. Behind the rings, there are large, flowing, flame-like shapes in blue and red, suggesting the Olympic torch. The overall design is modern and abstract.

Recently, there have been some developments regarding the ban on Russian athletes. In December 2020, the Court of Arbitration for Sport (CAS) reduced the ban from four years to two years. This means that Russian athletes will be able to compete in the upcoming Olympic and Paralympic Games in Tokyo and Beijing, but they will still need to compete as neutral athletes.

The decision by CAS has been met with mixed reactions. Some see it as a step in the right direction, while others argue that it still does not go far enough in holding Russia accountable for its actions. Regardless of the opinions on the decision, it is clear that the ban on Russian athletes will continue to be a topic of discussion and debate in the international sporting community for years to come.

EDITOR'S NOTE

Hi JC! We at the JC Juice team hope you've enjoyed reading this month's edition. Our writers and editors worked extremely hard to research and discuss relevant and interesting topics for you to enjoy!

If you have any suggestions or topics you would like to see in next month's article - or you would like to write an article yourself - please send us an email at jcjuice@jumeirahcollege.com and we will be in touch with you.

- Maryam Fayyaz and Shazene Hussain, Editor-in-Chief and Lead Editor

Thank you...

- To Mr Simpson, for all the support and advice!
- To this month's writers: Sanjay Balaji, Ansh Mandal, Eshna Tripathi, Ridhan Mahanty, Muhammad Salahuddin, Lyla Khan, Meher Lalvani
- To our editors: Hana Rizvi, Reyna Mehta, Ved Kedia, Wiktor Blazik, Joshua Stapley, Angelique Hill, Shazene Hussain, Aditi Karode

And lastly and most importantly to our readers, because without you, there would be no magazine.