ASPIRE MAGAZINE

The King's School

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Exploring big questions and ideas

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Table of Contents

Foreword

Step-up and Aspire is an integrated partnership between King's "Aspire" programme and the "Step-up" programme that is run by New College, Oxford. The Year 12 Aspire side of the programme is primarily designed to provide a vehicle for 'super-curricular exploration' - that is delving more deeply into a subject of interest - within a school community of like-minded individuals.

At the heart of this super-curricular exploration is the concept of "big questions". Big questions tackle complex ideas and reflect the kind of critical thinking students undertake at university. They aim to challenge students with debates and ideas that go beyond what is covered in the classroom – both in a subject-specific and more general sense – as well as promote broader thinking and encourage intellectual curiosity. By regularly engaging with big questions students will develop fluency in expressing ideas with clarity and thinking through unexpected problems.

This journal therefore reflects some of the big questions that our Year 12 Aspire students have been wrestling with so far this year. To help them tackle these questions, students have been developing skills relating to academic research, extended writing and dialectical reasoning. Dialectical reasoning is a method of reasoning that firstly develops a thesis and then develops a contradictory antithesis, both with rationales, and then combines and resolves them into a coherent synthesis, with the ultimate goal being the search for truth.

You will see this process of dialectical reasoning in the articles contained within this journal, with some of the articles being streamlined "think pieces" and others being more in-depth pieces of research. But, whatever the case, we can assure you that no AI was used! All articles were fully researched and written by students who not long ago were sitting their GCSEs and who are currently undertaking their A-Level studies alongside the Aspire programme. In addition, the final journal was compiled and edited by the students themselves and a special thank you for this should go to Katherine W, Abigail W, Emily W, Rosa O and Georgina T.

Finally, whilst the students were instructed to advance a line of argument in their articles, we are of course aware that their conclusions do not represent "right answers". Indeed, big questions very rarely have an answer that everyone can agree on. Instead, we hope that the pieces get you thinking and talking about a wide range of super-curricular topics....

Mr Harris

Should organ donation be compulsory?

There are compelling arguments for and against organ donation being compulsory for everyone. Doctors, for example, may argue that organ donation should be mandatory as it ensures there are enough transplants for the high demand of patients in need. By contrast, religious believers may argue that their bodies are a gift from God and that individuals do not own them, meaning organ donation should be forbidden.1 Ultimately, having reviewed the arguments on both sides, this essay will acknowledge that this emotive topic does not have a simple answer. However, it does appear we are now at a tipping point in terms of demand and the opportunity to preserve life and therefore organ donation should now be a legal requirement.

As stated, there are some powerful arguments as to why organ donation should not be compulsory. Firstly, religion plays a key role: some Muslims for example believe that their bodies get resurrected after death and they would need their bodies whole and intact for them to go to heaven. Because of these beliefs, most Muslims do not currently donate since it would be haram (meaning forbidden). Secondly, the Human Right Acts states that: “If an act might affect the exercise by a religious organisation, of the Convention right to freedom of thought, conscience and religion, it must have particular regard to the importance of that right.” 2 This states that people have their own rights to their own beliefs and choices, so it would not be right for there to be a law stating they had to go against their beliefs. And, thirdly, it is argued that it can be distressing for the organ donator’s family for compulsory donation to be enforced upon their deceased loved one.

However, despite the seemingly convincing nature of these arguments, there are several flaws in the reasoning. For instance, the argument about the Human Rights Act is where the grey areas begin to fall. Yes, it is stated that people have free will whilst alive, but when dead it could be argued that humans have no free will, which could in turn suggest you do not have a choice after you die as to whether you give organs or not. Similarly, the arguments relating to religion appear increasingly outdated: In 1995, the Muslim Law (Sharia) Council UK issued a fatwa – a religious edict – saying organ donation is permitted. 3 And finally, there are ways to facilitate a normal presentation of the deceased even after organ donation has happened, so families can still remember their loved one as they were.

It is therefore more convincing to argue that organ donation should be compulsory. Firstly, seventeen people die every day waiting for an organ transplant, which is a figure that is increasing each year. 4 Secondly, it is obvious that people do not need or use their organs after death, so giving them to someone to save their life appears to be a more powerful ethical argument. Allowing a piece of biological matter to be extracted from a lifeless body could mean the difference of another person keeping the gift of life or not. And thirdly, the NSPCC argues that “as people, generosity is in our genes. From the earliest times, society could only function by us working together. Selfless acts let us look after those who need it the most, and the urge to help those around us is always inside us.” 5 Therefore, giving organs helps create a better world and a more selfless environment for everyone.

Furthermore, the arguments here are particularly convincing, especially those relating to just how many people die from needing a new organ. In total about 6,700 people die each year waiting for a transplant, which is of course extremely sad. 6 As the number of people living in the UK rise each year, the number of organs needed will only increase. The nature of a high demand for organs, should automatically trigger people to understand just how much it would mean for someone to be able to carry on living. This is further enhanced by the pragmatic reasoning that, when people are dead; they have no need for their organs.

In conclusion, it is clear that organ donation should be made compulsory in the UK. It is of course controversial to say that the state should take control of a deceased body rather than their family or loved ones but as stated, the current volume of unmet demand suggests we are now at a tipping point. Not only would compulsory organ donation save lives, but it could also make the world a more compassionate place, without going against the Human Rights Act.

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By Molly B

Are controlled substance rooms now the best way to prevent deaths from illegal drugs?

The National Library of Medicine describes drug consumption rooms as ‘healthcare settings, which provide a safe and clean environment for the consumption of drugs under the supervision of medically trained staff and alongside provision of clean injecting equipment.’7 There are strong arguments for and against creating consumption rooms for illegal drugs to be taken under supervision. Some, for example, would encourage the availability of consumption rooms as a way to prevent those who might take drugs recklessly becoming seriously ill, which in turn might save precious money for the NHS. By contrast, others would discourage consumption rooms as they represent a waste of valuable NHS resources that might be spent on more deserving candidates. Similarly, it may be a better use of money and time to address the root cause of overdose and addiction rather than providing resources for the consequences. Ultimately having reviewed the arguments on both sides, this essay will argue against the widespread opening of consumption rooms.

As stated, there are some powerful arguments for opening consumption rooms. Firstly, it would give people a place to go and take the illegal drugs meaning they wouldn’t be taken in public places. Officials from the NHS and Glasgow City Council said their consumption rooms aimed to tackle the problems of "approximately 400 to 500 people injecting drugs in public places in Glasgow city centre on a regular basis".8 In turn, this would not only make the general community a safer place to be but could also reduce the incidence of illegal drug consumption as it would become less normalized in public.

Secondly, more widespread use of consumption rooms could free up hospital wards such as those in intensive care and Accident and Emergency. This would have a positive impact on the local community and for an already overrun NHS as admittances for drug misuse and overdoses would, in theory, be less frequent.

Thirdly, some people would argue that consumption rooms would save the NHS money in the long run as they wouldn’t have to treat as many people in hospital who have overdosed or misused drugs. There would be an upfront cost to open the consumption room, but this money would be quickly recouped through savings in treatment.

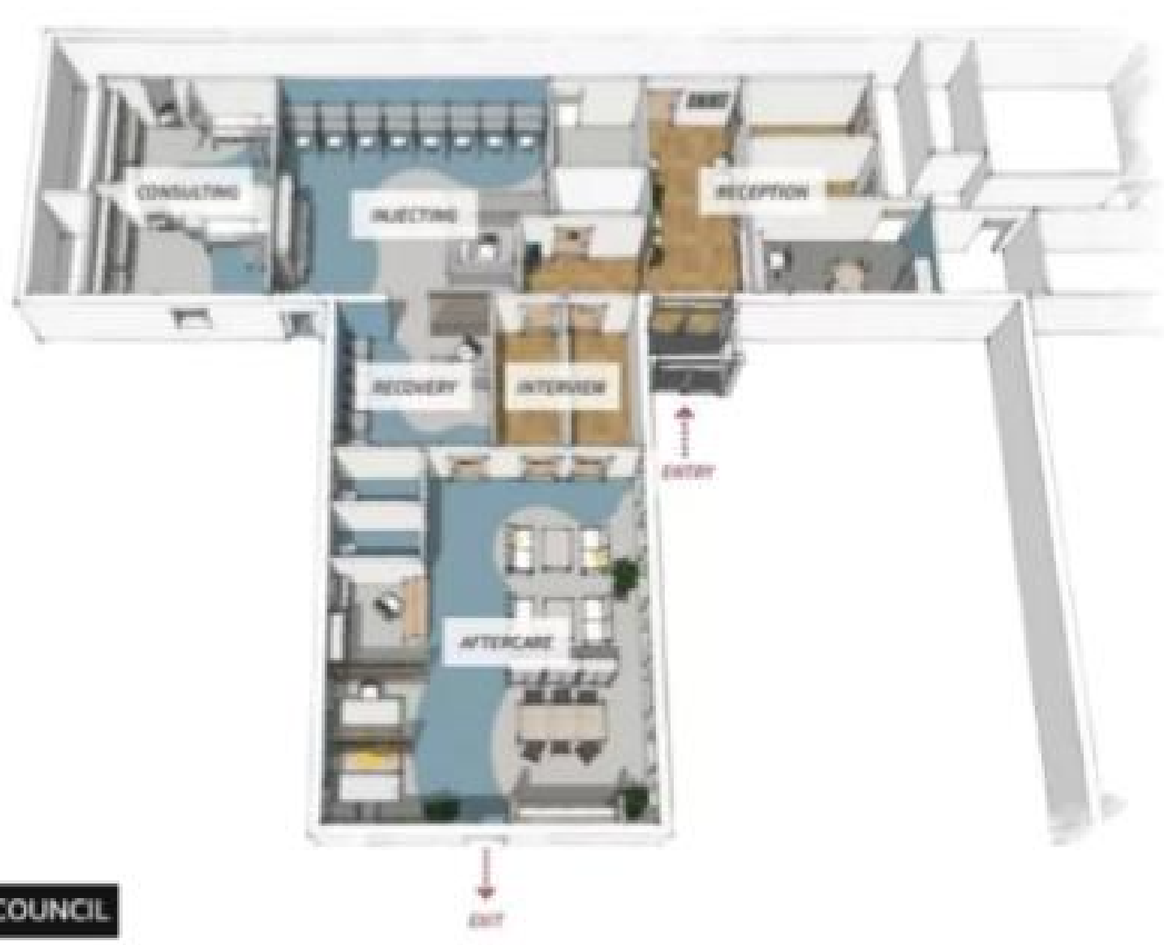
However, despite the seemingly convincing nature of these arguments, there are several flaws in the reasoning. For example, the argument about saving the NHS money is flawed in my opinion as the cost of enrolling the scheme for three years in Glasgow alone is estimated to be £7M.9 This money could potentially be better spent tackling the root causes of drug addiction, such as through improved drugs education and rehabilitation programs.

Similarly the argument about consumption rooms discouraging other from trying drugs as it becomes less normalized is also weak. In fact, consumption rooms could project the message to the younger generations that there is opportunity to try illegal drugs in a safe environment. Indeed, the National Library of Medicine stated, where consumption rooms were available, there was a ‘concurrent 30% increase in the uptake of detoxification services.52" 10, which could suggest a link with a higher drug use uptake.

It is therefore more convincing to argue that we should not open consumption rooms in the UK for illegal drugs. Firstly, the fact that those using consumption rooms face ‘no prosecutions’11 could create a gateway for people to take illegal drugs without fear of legal consequences. Secondly, you could argue consumption rooms in some ways glamourize the act of taking illegal drugs. As demonstrated in the proposed plan - Figure 1 -, the consumption rooms are intended to be pleasant environments preferable to the streets. This may in turn attract those who might recognize the consumption centre as a better option for them in comparison to their current circumstances.

In conclusion, whilst the opening of drug consumption rooms in the UK could positively benefit communities, there is the potential for unintended negative consequences that need to be strongly considered. The encouragement, normalization and glamorization of drugs that may come with consumption rooms could strongly encourage a new generation of drug users as they are given the opportunity take illegal drugs in apparently safe conditions without risk of being prosecuted. At a time when the resources of the NHS are so stretched the evidence suggests that consumption rooms represent a gamble that the NHS cannot afford at this time.

Figure 1 – Consumption room floor plan



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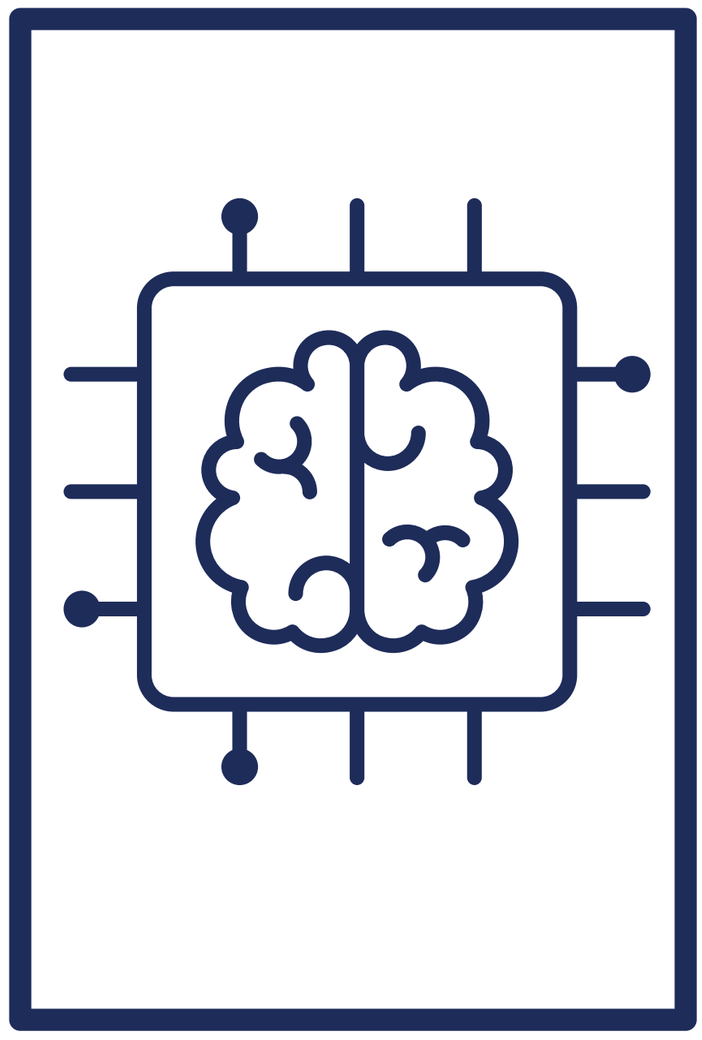
9 https://www.bbc.co.uk/news/uk-scotland-66929385#:~:text=The%20consumption%20room%20is%20part,fifth%20in%202022%20to%201%2C051. Same article taken from BBC news
10 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8604650/
11 https://www.bbc.co.uk/news/uk-scotland-61569777 12 https://www.bbc.co.uk/news/uk-scotland-66929385 Glasgow city council- a draft design of the facility that has been submitted for consideration

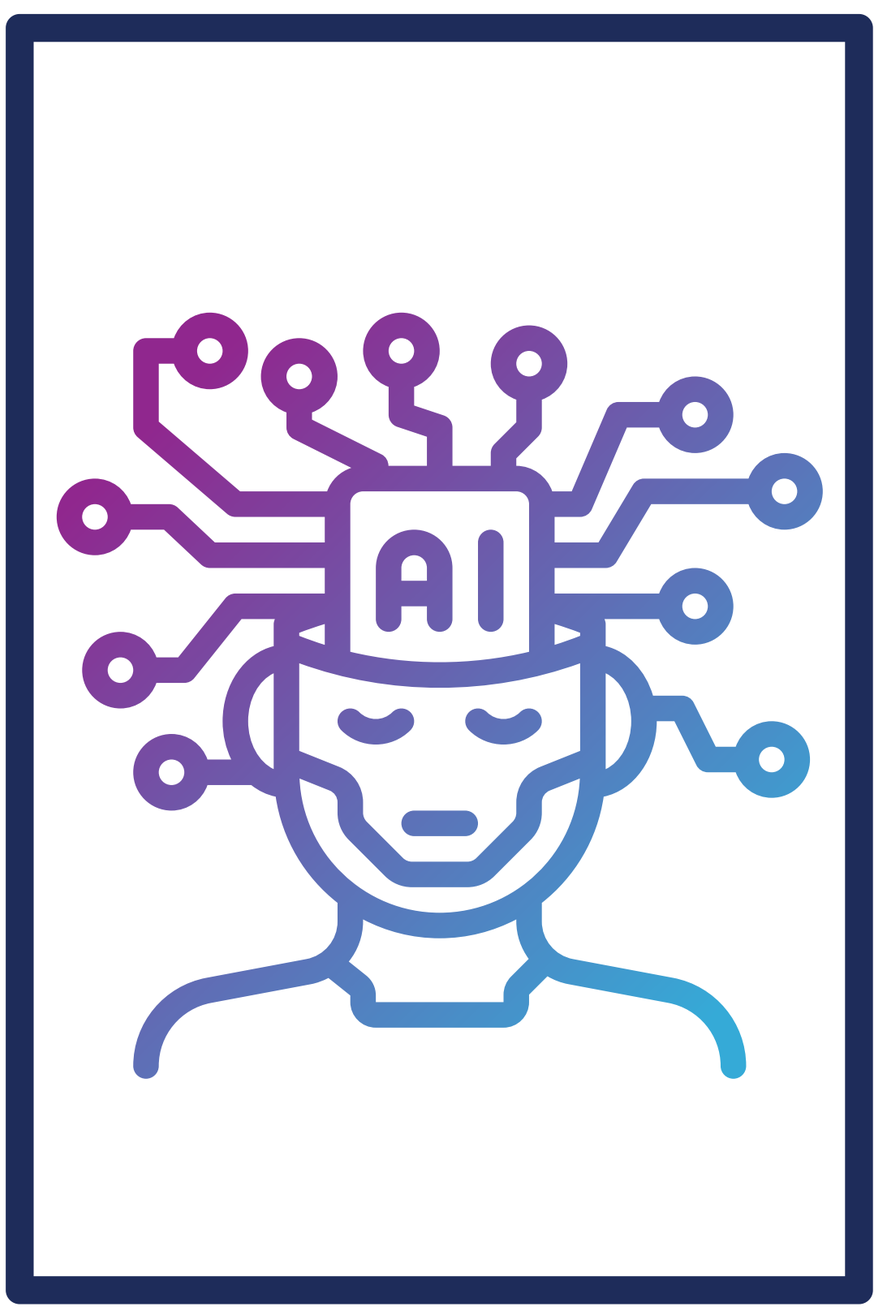
By Amelie F

Should AI replace your GP?

Medicine is a field which is constantly developing. Whether it be in surgical techniques or drug testing, we are always trying to find new ways to do old things and one such way which has been hitting headlines as of late is with the use of AI. Some believe this is the best way to revolutionise the healthcare industry, implementing AI into every nook and cranny to allow patients to get the fastest, most cost-effective treatments more efficiently. On the other hand, others believe there may be unintended consequences to the widespread use of AI in health services: AI, some argue, could bring down the world, let alone the medical industry. Overall, after considering both sides, this essay will argue that AI is not yet ready to replace the brilliantly flawed humans within our healthcare system.

As mentioned earlier, some people believe AI will revolutionise healthcare. One reason for this belief might be due to the current issues with funding and wait times, people waiting months to call their GP, older citizens not getting the care they need, and many more issues could be solved with a bit of AI. Secondly, training an algorithm to quickly diagnose patients, allowing doctors to just review the work afterwards, could shave hours off the time it takes to properly diagnosed a patient. A bot could simply look through the databases of waiting patients and sort them by urgency automatically. That way doctors can spend more time fixing and less time finding. Finally, by adding AI to calling or “front end” services, it could free up people to do more human task, allowing for faster processing and communication when dealing with patients.

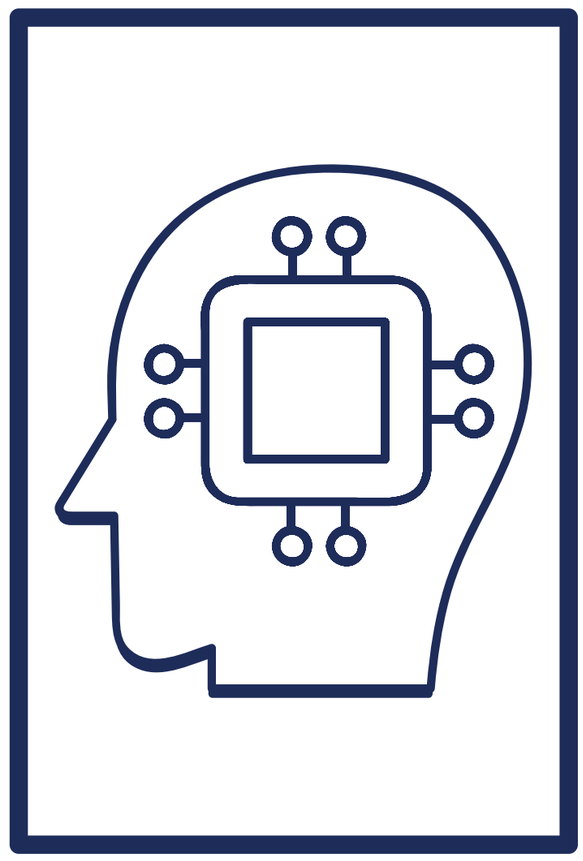




However, despite the surface level logic of these points, there are some flaws in their reasoning. For example, the argument about funding can easily be flushed when we realise that this would only work if the NHS employed people to develop the AI systems themselves. Otherwise, the NHS risks being a hostage to expensive outsourcing, which would put even more strain on the already stretched budget. Similarly, removing front ends – something that has happened in many banks – could cause people to feel more vulnerable when going somewhere which is supposed to be approachable, not to mention the loss of jobs that such a transition would entail.

A more convincing argument is against the use of AI at this moment in time. First of all, the current technology is unreliable: if it were to misdiagnose a patient, the consequences could be devastating and, on the legal side of this, the ability to pinpoint accountability for such an error may be so complex that it prevents the impacted individuals from achieving justice. Another point is that AI lacks emotion: when, for example, someone has been admitted to hospital, they need an appropriate bedside manner and not simply cameras watching over them 24/7. Thirdly, with new tech, comes new vulnerabilities, which could lead to confidential information being leaked or deleted leading to people being blackmail or ignored or deliberately harmed by Dr AI. Last, but certainly not least, is a fundamental part of medicine which AI would make near impossible: monitoring. Due to how AI works, we cannot know how it is coming to its conclusions and hence, it may be diagnosing from all the wrong things.

In turn, it is clear that this side of the argument is much more convincing. For example, the point on AI's ethics feels particularly poignant because of the feelings of helplessness we can sometimes experience in a healthcare setting would be much worse if there wasn't a nice healthcare worker to guide you through the situation. Even if this guidance is to a lower standard than AI, it would feel more personal and like someone tangible was watching out for you. Similarly, the argument about security is particularly relevant as people are getting more and more conscious of data vulnerabilities. It feels like implementing AI into healthcare at a rapid pace into our medical system would significantly magnify the risks we are already facing.



In conclusion, AI, in its current state, is not fit to replace general practitioners. Held back by cost, comfort and security, we may never develop software advanced enough for our ever-expanding needs. On the other hand, this is only looking at current potential. Perhaps in future iterations of GPT, we could find many of these issues solved, in which case this argument hold much less integrity. So, on the off chance that the technology delivers, I look forward to a world free of medical bills, waiting rooms and heartless robots. But, until then, it appears our GPs will have to suffice.

To what extent is intelligence inherited?

Was Einstein a legendary brainiac due to his genes or his experiences? There is a strong argument on each side of this question as to whether or not intelligence is down to nature or nurture. Hard determinists such as Chorley et al strongly argue that intelligence is inherited and beyond our control. By contrast soft determinists such as Enrich Fromm and Nick Heather have argued that intelligence is not inherited and is generated by other factors such as experiences and livelihood. In turn, this essay will argue that – like so many things – the truth lies somewhere in the middle.

As stated, there are some powerful arguments suggesting intelligence is inherited. Firstly, a psychological theory called hard determinism is the idea that free will is an illusion and that our behaviour is purely governed by biological forces that are beyond our control. Experiments by Libet et al supported the criticism of free will as they discovered that motor regions of the brain become active before the person registers conscious awareness of the decision. This suggests that our brains behave in a way that is often out of our control and therefore the brain we are given from birth decides our IQ score.

Secondly, there is some powerful evidence suggesting biological influence on intelligence. The research from Hill et al (1999) discovered that gene IGF2 has an in involvement in intelligence. Further research by Chorley et al discovered gene IGF2r has a significant association with IQ score and can greatly influence someone's intellectual ability. Similarly, a meta-analysis of data from over 78,000 individual researchers have found 40 genes that are associated with intelligence. These genes are given to us from our parents and we cannot change them, which suggests we therefore cannot change our IQ score.

Thirdly, many twin studies have been used to try and settle this argument. One of the most famous studies was the research done by Dr Thomas Bouchard Jr (1979). This was a longitudinal study that went on for approximately 10 years. The study looked at identical and non-identical twins and triplets and compared their IQ scores. The results from the research discovered that 70% of the difference in IQ scores between the non-identical twins was because of inheritance.

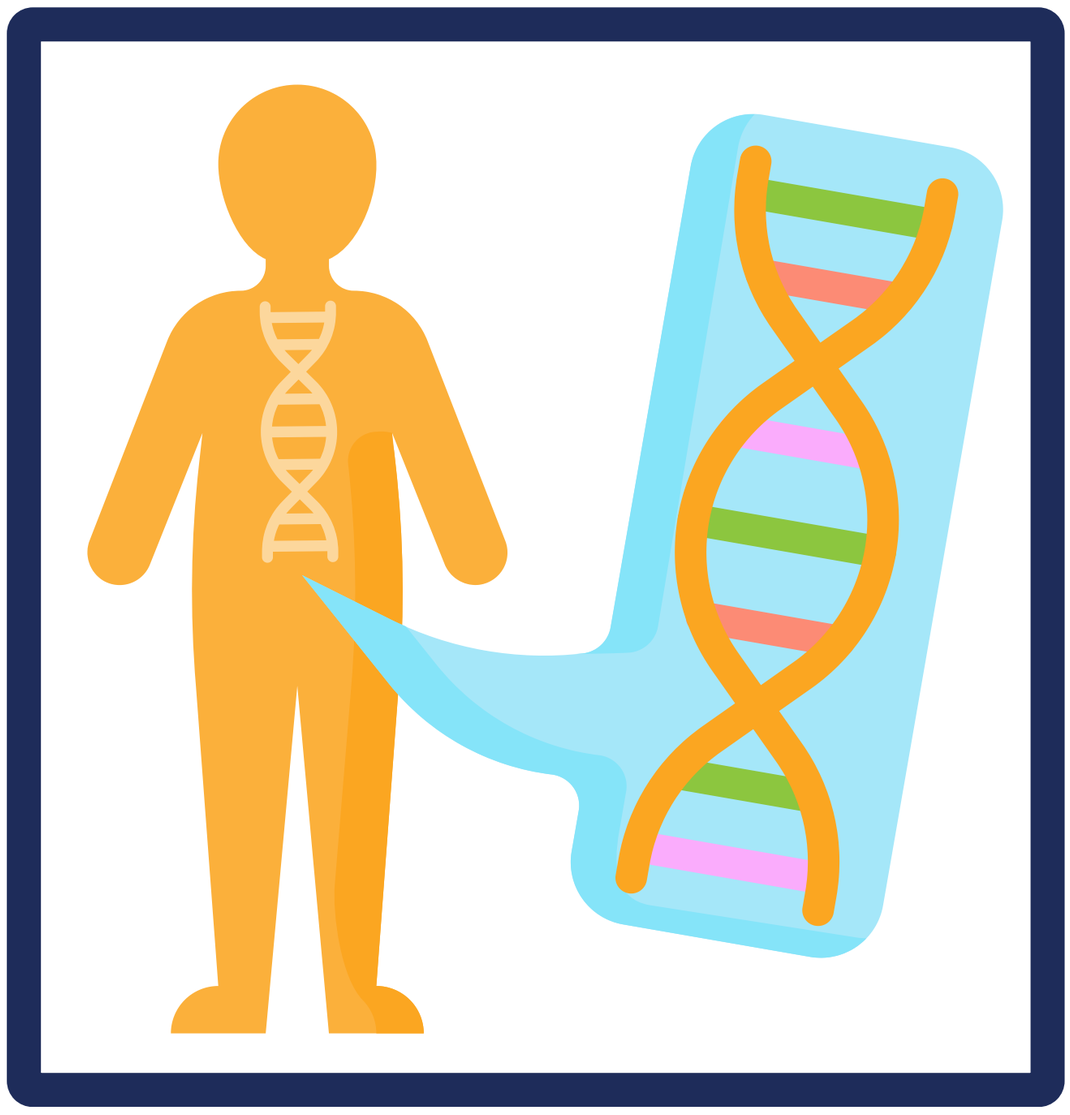
However, despite the seemingly convincing nature of these arguments, there are arguably flaws in the reasoning. For example, the argument that the similar IQ scores of twins proves

that intelligence is inherited would be seen as flawed by humanistic psychologists who argue against determinism. Identical twins share 100% of their genes but only have a 70% similarity in IQ scores therefore the remaining 30% must be caused by external factors which may link to our parents rewarding certain behaviours, which suggests nurture overriding nature. Enrich Fromm argues that we have the potential to control our lives and dictate these external factors, but many people are too submissive leading them to abandon free will and be governed by circumstance.

It is therefore possibly more convincing to argue that intelligence is not inherited. Outside factors such as culture can be what impacts intelligence. Culture manipulates children's early life experiences and cultures that don't emphasise western schooling result in children who are not adapted to types of intelligence testing we recognise, such as GCSEs and A-levels. Chaotic family environments also negatively influence intelligence as children can struggle with cognitive development as factors such as insufficient intellectual and emotional support play a large role in IQ. Similarly, parents are large influencers of intelligence not due to the genes they passed on to their children but due to their socioeconomic situation. Typically, research has shown that higher income parents' children have higher IQ scores – a difference of around 10-15 points – compared to low-income families, which can be due to accessing education and other opportunities.

This all said, both sides of this argument are particularly convincing which makes it difficult to conclude the nature verses nurture debate. For example, the argument about genetics influencing intelligence is powerful because due to advancing technology in our modern society we are discovering how our body's structure influences its function and our behaviour. Similarly, the argument about socio-economic influence on intelligence is strong because the large financial differentiation over the world could be the direct cause of the differentiation in intelligence: someone in poverty who is focused on survival is likely to be perceived as less intelligent than a child educated at a private school with unlimited access to the internet to research topics and expand their knowledge.

To conclude, intelligence is a complex topic and difficult to define. Therefore, it seems more multifaceted than simply your genome. The argument that alludes to the idea that intelligence is affected by inheritance does have some merit as genes clearly have a big role in defining who we are. However, I would argue that Einstein wasn't simply born a ground-breaking scientist, but rather his genes provided him with a level of potential that was fulfilled through exposure to experiences that ultimately emerged as extreme intelligence.



Is it ethical to allow editing of our children's genomes?

Gene editing is described as 'a precise change of a patient's DNA using site-specific, targeted nucleases'.25 There are strong arguments as to whether we should edit our children's genomes or leave them be. Many are incredibly impressed with the scientific progressions in this area and believe we should seize the opportunities these developments have given us. Others, however, question the ethics of changing who someone could be and are also concerned by the possibilities of exploitation. Ultimately, after reviewing both sides of the argument, this article will argue why it is in fact ethical to edit our children's genomes - or at least give people the option to edit their children's genomes - as long as it is done responsibly.

As stated, there are some compelling arguments against genome editing. Firstly, there is the concern of not fully knowing what the side effects could be of removing some genes and leaving the others. From Tufts University – a private research university in the USA – Krimsy says 'you can try to maximise one quality and you may affect another one.'26 Perhaps genome editing hasn't been researched thoroughly enough to ensure safety and minimal side effects.

Potential risks could include certain types of cancer, allergic reactions, or damage to organs or tissues if an injection is involved.27 Secondly, some people are worried that, by eliminating many conditions, those born with genetic conditions are 'less likely to be accepted in society'.28 As society has become more inclusive in more recent times, by diminishing most genetic conditions, people may become less aware, potentially leading to a decline of inclusivity in society as a whole. Thirdly, in many places where healthcare is free - such as the UK - embryo gene editing is not funded, only the research of it is.29 This leads to the possibility of further separation of society if genome editing becomes more widespread, with potentially only the wealthy having access to the preventative measures on behalf of their unborn child. Additionally, there is the religious argument as to whether or not it is right for people to, in effect, "play God". Similarly, there is the concern that altering genomes for medical reasons may only be the thin edge of the wedge and inadvertently open the door for procedures driven by cosmetic motives.

However, despite the seemingly convincing nature of these arguments there are several flaws. For instance, as long as gene editing continues to be researched safely and responsibly and within existing legal structures, then doctors will be able to minimise the risks as much as possible. It will then depend on individuals if they are content to carry on with the procedure after being fully informed of any risks involved. As well as this, society has contestably progressed due to the increasingly accepting and educated nature of societyrather than an increased exposure to people with genetic conditions.

There have after all always been around the same proportion of people suffering with genetic conditions as there are now but only more recently have people become more accepting, which suggests education and awareness are the key factors rather than simply volume. Additionally, the argument regarding the separation in society due to economic wealth could be applied to many areas of medicine. It would therefore remain the duty of the NHS and government policy to provide more resources and assure fair access to gene editing.

It is, therefore, more convincing to argue why it is ethical to allow editing of our children's genomes. Firstly, the University of Cambridge conducted a study in which they interviewed both the families of and the people suffering with genetic conditions. Unsurprisingly, many relatives voiced their deep concerns for their loved ones, with one stating 'I worry...about the pain he is experiencing'. 30 If we were able to alleviate the pain that people are suffering as well as the distress of others through preventative action, this would surely be a positive thing for everyone. Furthermore, the Cambridge study also states how genome editing could also improve lives by helping those who feel as though the risk is too great for them to have children as they do not want to pass on their genetic disorder.

Secondly, the demand on health organisations like the NHS could be significantly lowered for the future as we would, in theory, see a considerable decrease in those born with genetic conditions. At a time when the NHS is at breaking point, genome editing offers an opportunity to safeguard our free healthcare service for generations to come. Additionally, not all of the benefits of editing our children's genomes will be delayed. Genome editing can in fact help 'responsibly treat, prevent and cure' genetic diseases found in young children today, such as sickle-cell disease and heart conditions.31 As of right now, there are many seemingly incurable genetic diseases that people are suffering with. If we can safely research these, we can potentially change the circumstances of those suffering, significantly helping the whole of humanity.

Furthermore, the arguments presented here are particularly convincing. The final argument is especially powerful because if we can responsibly make people's lives better by treating, curing and even preventing genetic diseases, this would be the most ethical thing to do for humanity. By using our knowledge for good we stay true to the consistent cornerstone that has helped drive forward medical progress across the history of humankind. Indeed, it is arguable that preventing a genetic disorder through genome editing is built on the same ethical principle as vaccines, which are now repeatedly used all over the world to prevent or reduce the impact of numerous illnesses.

In conclusion, seemingly the most ethical choice to make is to allow people to responsibly edit their children's genomes for medical purposes; like preventing incurable genetic diseases. There is of course the possibility that this could be dangerous, especially with not fully understanding all the side effects.

However, if science keeps ethically and responsibly developing their knowledge on genome editing, they can help thousands of people with seemingly incurable conditions, heart problems and more, as well as being able to entirely prevent them. Surely it is the most humane thing to do if we can help treat and prevent suffering for all?

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Is animal testing still justifiable in medical research?

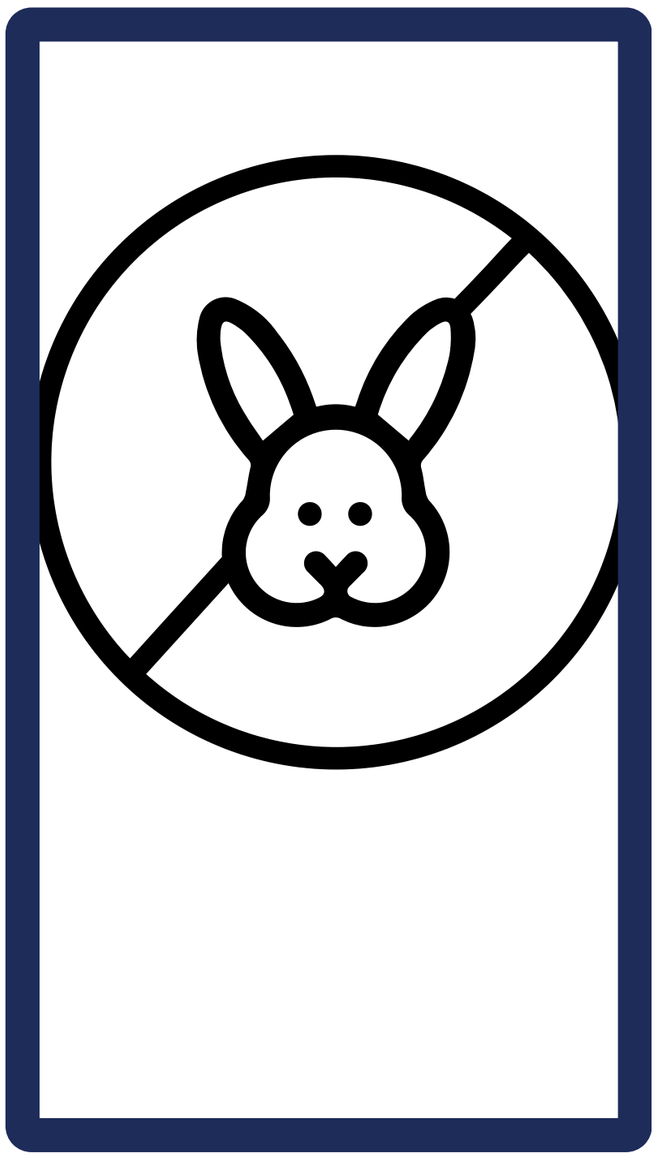
There are numerous strong arguments for and against animal experimentation in medical research. Some, for example, claim that testing on animals for medical advances is justifiable as it allows us to test medicines on animals to ensure they are safe for human use. Animal testing enables the advancement of medical procedures and treatments, potentially saving millions of lives. By contrast, others argue that animal experimentation is not justifiable in medical research as it is morally wrong. Animal testing takes away animal rights, inflicting pain and suffering onto the test subjects. They instead point to other methods that can be used to test medicines and medical research instead of using animals. As such, having reviewed the arguments on both sides, this essay will argue that animal testing is no longer justifiable in medical research.

As stated, there are some powerful arguments as to why animal experimentation is justifiable in medicine. Firstly, this is evident in the many surgical advances humans have made as a consequence of animal experimentation. One such medical advance is heart surgery. In the 20th century, surgeons operated on the hearts of animals such as dogs and developed this procedure to the point where it was successful on a 12-year-old girl. Through further experimentations using animals, this surgery has advanced to go on to save countless lives. Without animal testing, this surgery could not have been developed. Secondly, animal testing permits humans to establish many treatments for medical conditions by observing how animals with these conditions react to different treatments. For example, drugs that treat anxiety are developed through animal testing. Additionally, experimenting on animals avoids the need to subject humans to drug testing and medical research which may cause injury, damage, or death. In order to save many lives, animals are sacrificed to ensure that treatments are safe before being approved for humans. If a new medicine does not undergo the vital step of animal testing, humans who try these drugs have no indication of their toxicity or if the drug may cause a severe reaction. Nor will scientists know whether or not the drug will effectivelytreat a certain condition.

Despite this, the argument discussing how testing on animals prevents the need for humans to be blindly tested on at the early stage of medical development is not particularly strong. Currently, there are other methods that can be used for medical research, such as the increased use of computer modelling to test if a new medicine is safe. After this, scientists are able to test these medications on human tissue samples and investigate any side effects they may have on people. In all new drug trails, there is always a stage where live patients and human volunteers are used. Hence, regardless of whether animals are used for medical research or not, humans will still be required to ensure the drug is truly safe and to calculate the optimum dose of the medication for human use. Therefore, it can be argued that we should eliminate the stage of animal experimentation as human testing will be necessary irrespectively

Thus, there are more convincing arguments as to why animal testing within medicine is wrong. Primarily, animals have no rights in animal experimentation. Animals are not given a choice whether or not they want to be subjected to experimentation.

They are exploited by being tested on by an array of drugs and for medical research, many of which could have serious side effects. Moreover, the experiments that animals are exposed to in the name of research cause pain and suffering and, in some cases, death. Not only do animals die whilst undergoing these tests, animals are often euthanized after experimentation as they cannot cope with the outside environment. As previously mentioned, animal experimentation can often be avoided when other methods to test drugs and conduct medical research are feasible. For instance, scientists are able to conduct in vitro testing, in which drugs can be tested on lab grown human cells and tissue in order to examine their toxicity and whether they would be safe for human use. With other methods such as computer analysis also viable for drug testing, the practice of animal experimentation is clearly outdated and immoral in the 21st century.



Overall, whilst the arguments both for and against animal experimentation are compelling and complex, it is clear that the practice can no longer be justified in medical research. This said, the perspective that animal testing is still justifiable is convincing given the many human lives saved by treatments and medications initially developed through animal experimentation. However, this argument now appears increasingly outdated, with many modern methods now existing to test drugs and advance medical research, which, in turn, can prevent the need to sacrifice animal lives and rights whilst still achieving the same benefits for humanity.

Is it ever ethical to allow patients to refuse lifesaving treatment?

On the contentious topic of consent within the medical profession, there are arguments both supporting and opposing whether it is ethical for doctors to allow patients to refuse lifesaving treatment.32. Established in the Mental Capacity Act of 2005, the current law discloses that if a patient wishes to refuse treatment with the potential to extend their life, this decision is to be respected by doctors as long as patients satisfy the criteria. An example of when a patient might refuse lifesaving treatment could be to express a wish not to be resuscitated in the event of developing certain medical conditions in the future. In this case, you must be over 18, have sufficient capacity to make these decisions, and the statement must be in writing.33. These legally binding decisions are typically observed by medical professionals, however in an emergency, treatment may be delivered if it is unclear that your advanced decision covers the treatment in question. In the case that the stance of patient and doctor differ, some may argue the patient's wishes should be conformed to, whilst others might believe a doctor's decision is better informed and more objective.34. Having debated this controversial issue, this article will advance the proposal that it is, in fact, ethical for patients to refuse lifesaving treatments, despite the duty of a doctor to save lives.

To some degree, it is unethical for doctors to allow patients to refuse treatment which has the potential to save their life when the individual lacks capacity to do so. To influence the outcome of the situation, the patient must have "capacity",35, which can be defined as an ability to understand, weigh up and retain information.36. In the case that a patient is unable to demonstrate understanding of the situation and communicate their wishes, by law, their doctor is responsible for making a collaborative decision on behalf of the patient.37.The Mental Capacity Act of 2005 states that 'people who lack capacity to make decisions about their care and treatment should be involved in such decisions "so far as practicable"'.38. This law supports the ethics that a doctor can proceed with lifesaving treatment, regardless of whether or not it contradicts a patient's refusal of treatment.39. Several further exceptions surrounding advance decision include: If you've asked for a certain type of medical treatment, if it is unclear which treatment you wish to refuse, if you have cancelled your advanced decision since making it, if you have named an attorney under a lasting power of attorney, if you have regained capacity, if

circumstances have changed, or if you're detained under the Mental Health Act and receiving treatment for your mental health problem . Under these circumstances, it is not necessary for a doctor to follow the advance decision you have stated.40.

To further the argument that it can be ethical for doctors to proceed with treatment in a different circumstance; despite retaining ‘capacity’, a patient may be in such a state of suffering where their thinking is influenced by the present moment.41.42. If this is reversible, it is acceptable for a doctor to proceed with the lifesaving treatment, as this will ultimately benefit the patient.43. As qualified professionals in their field, it could be argued that a doctor’s opinion takes priority, holding the patient's best interest at heart.44. Therefore, this argument supports the notion that it is unethical for doctors to allow the patient to make this crucial decision in the circumstances of them not having capacity or their outlook on life is temporarily distorted.

This all said, when we consider the patient’s quality of life during and after the lifesaving treatment, ethical issues occur when a doctor takes authority over the decision to continue lifesaving treatment, particularly if the patient is unhappy during and after the treatment process.45. Is the extended period of suffering from the treatment worth a temporarily extended life or is the dying process merely prolonged? Patients who lack capacity must endure the recommended lifesaving treatment; this process could degrade their quality of life to a point where they will never be content with the life they have post-treatment.46. Alternatives such as euthanasia might be unavailable to many patients, confining them both physically and mentally to their own declining body. Contestably, the patient is therefore enduring a form of torture. Financial strains placed on the NHS to fund these lifesaving treatments could be reduced in allowing patients to refuse, with the money then being redirected to support research towards current medical challenges that benefit the wider population.

Considering this, what if the patient’s refusal of lifesaving treatment is rooted in their deprivation of treatment? In some cases, patients who openly desire the treatment which could save their life can be made to wait long periods of time in which their body continues to decline at an increasing rate. This is an all too real crisis born from the understaffing and economic struggles faced by the NHS.47. As Patricia Marquis, a regional director at the Royal College of Nursing in England, stated: “when they suffer delays… patients are bound to ask themselves whether the wait has had an impact if they’re diagnosed with cancer.”48. If a patient is aware of the wait time, this may influence their decision to refuse treatment and opt for a more comfortable end of life.

Religious reasoning also plays a significant role in the refusal of treatment, often dictated by practises observed by a patient or certain beliefs within a religion. As the base of their moral code, Jehovah’s witnesses believe that God has forbidden them to willingly accept a blood transfusion49, as this would be considered a sin. Witnesses are willing to absolve doctors of responsibility by signing forms with appropriate wording such as: “... I categorically refuse the use of foreign blood or blood components during my surgery.”50. This argument has strong

associations with The Human Rights Act in which it states: "The right to adopt a religion or belief, to practise it without hindrance, to share your faith and to change your religion or beliefs are all key freedoms that everyone should be able to enjoy.”51. As such, it is therefore more convincing to argue that it is ethical for doctors to allow patients to refuse lifesaving treatments; patients with capacity have autonomy over their body and life, therefore if they refuse lifesaving treatment, a doctor should respect this.

To summarise, where a patient lacks capacity, doctors must act in the patient's best interest - multidisciplinary team input is required to confirm a decision. In the case of a patient with capacity, fundamentally, what they want is what should happen. With an ever-increasing scope of treatment options, it can be argued that patients should be given more control over the options they have. In allowing individuals to decide for themselves whether they want to undergo lifesaving treatment, doctors are acknowledging the concept of free will. Shared decision making goes beyond simple information exchange: it emphasises collaborative, often iterative, deliberation between patients, family, and clinicians, to advance the desired outcomes identified by the patient, even if this results in the death of a patient at the end of their life.52.

[32] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3995268/
[33] https://www.mind.org.uk/information-support/legal-rights/mental-capacity-act-2005/advance-decisions/
[34]https://scholar.google.com/scholar_lookup?title=No+Place+for+Dying:+hospitals+and+the+ideology+of+rescue&author=H+Stanton+Chapple&publication_year=2010&
[35] https://www.nhs.uk/conditions/consent-to-treatment/capacity/
[36] NHS - health research authority. 2021. Mental Capacity Act. [Online]. [21 October 2023]. Available from: https://www.hra.nhs.uk/planning-and-improving-research/policies-standards-legislation/mental-capacity-act/
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[40] https://www.mind.org.uk/information-support/legal-rights/sectioning/my-rights/
[41] https://www.gmc-uk.org/-/media/documents/gmc-guidance-for-doctors---decision-making-and-consent-english_pdf-84191055.pdf
[42] https://www.bma.org.uk/advice-and-support/ethics/medical-students/ethics-toolkit-for-medical-students/autonomy-or-self-determination
[43] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4914708/
[44] https://www.scie.org.uk/mca/practice/best-interests
[45] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3430007/
[46] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1764519/
[47] https://www.health.org.uk/publications/long-reads/nhs-performance-and-waiting-times#:~:text=Longer%20waits%20are%20a%20symptom%20of%20more%20people,coupled%20with%20growing%20and%20changing%20population%20health%20needs.
[48] https://www.theguardian.com/society/2019/jan/10/nhs-england-misses-multiple-targets-for-cancer-treatment
[49] Genesis 9:3 – 4 and Acts 15:19 – 21
[50] Bbc online. 2009. Jehovah's Witness ethics. [Online]. [22 October 2023]. Available from: https://www.bbc.co.uk/religion/religions/witnesses/witnessethics/ethics_1.shtml
[51] https://www.gov.uk/guidance/freedom-of-religion-or-belief-understanding-this-human-right

To what extent does sleep deprivation increase the risk of obesity?

Globally, obesity rates have been increasing for the last three decades.53. If this continues, it is expected that 1 billion adults, 12% of the world population, will be living with obesity by 2025. World Obesity Atlas 2022 have estimated that obesity will be a complication for 1 in 5 women and 1 in 7 men by 2030.54. Sleep deprivation also pervades developed nations with, for example, the USA being one of the most highly affected countries with 1 in 3 adults reporting lack of sleep or rest every day.55.56. In the UK 25.9% of adults are obese and 51% are not obtaining adequate sleep.57.58. These statistics beg the question, is there a link between sleep deprivation and obesity? There is mounting evidence that people who are deprived of sleep are prone to a higher rate of weight gain than people who get the recommended seven to eight hours of sleep a night.59.60. In turn, this review will ultimately argue that sleep has a significant but often overlooked impact on our risk of obesity.

Before exploring the answer to this question, it is important define both sleep deprivation and obesity and explain why each is important in their own right. Beginning with sleep deprivation, we can - based on epidemiological studies - characterize it as obtaining less than 7 hours of sleep per night.61. All humans need sleep to function; for adults this is 7-8 hours and for adolescents it is 10 hours minimum.62. During sleep the brain organizes itself, preparing for the information load for the following day. In this sense, sleep can be viewed as a deep cleaning process. Indeed, during the first phase of sleep, sleep-inducing chemicals such as adenosine and melatonin induce a light sleep; this stage of sleep is when DNA is repaired, and the body replenishes .63. During the day, waste products build up in our brain, one of the most common being amyloid-beta proteins which the brain persistently generates. During sleep, brain cells decrease in size allowing cerebrospinal fluid (CSF) to seep through and clear toxic waste into the blood stream. This is then filtered by the kidneys and flushed out of our body. This can be labelled as the glymphatic system. Lymphatic vessels serve as a pathway for immune cells and have recently been discovered in the brain as they may also play a role in clearing waste products. This ‘cleaning process’ is sufficiently more active during sleep than in the daytime so when humans gain less than 6 hours sleep consistently, this cleaning is absent resulting in an overloaded, malfunctioning.64.65.

Regarding obesity, below is the body mass index (BMI) scale that is typically used as a measure of obesity in adults. For most adults, a BMI (Body mass index) of:

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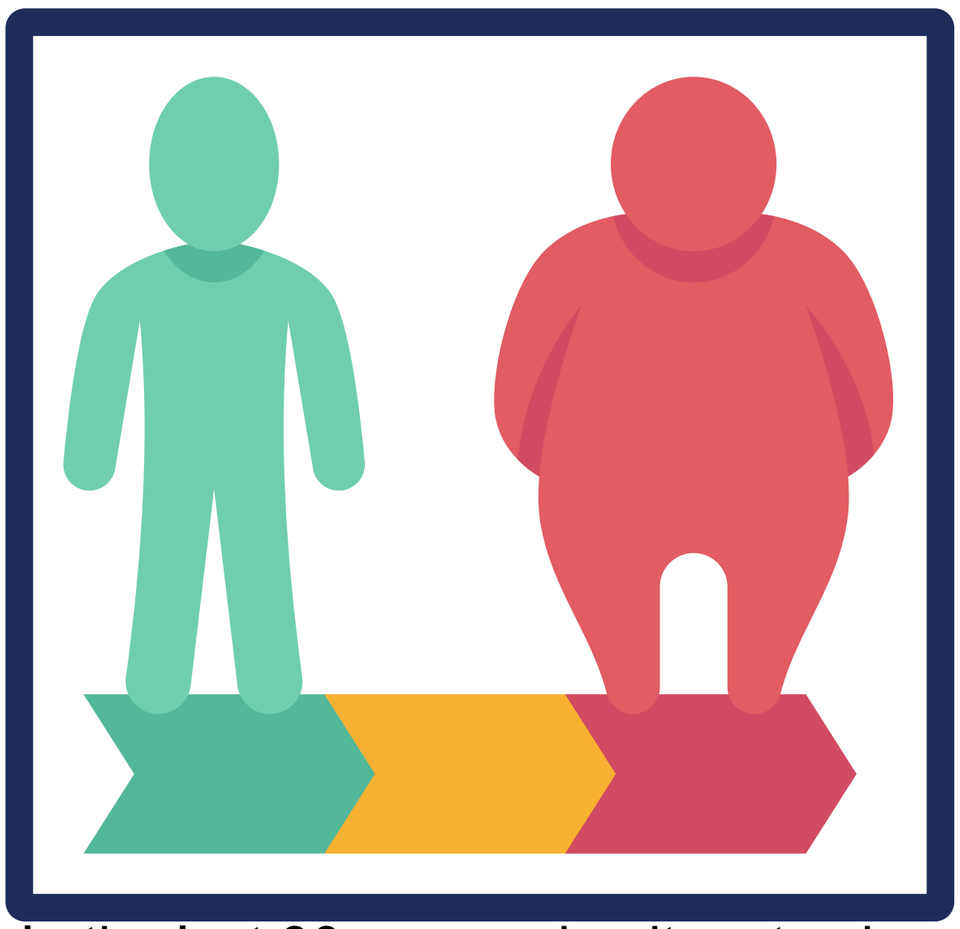


- 18.5 to 24.9 equates to a healthy weight
- 25 to 29.9 being overweight
- 30 to 39.9 being obese
- 40 or above means severe obesity.66.

In the last 30 years, obesity rates have doubled in adults, tripled in children, and quadrupled in adolescents.67. In turn, the impact of obesity on health is beyond question. For example, nutrition and obesity-related diseases such as heart disease, cancer, and type 2 diabetes culminate in approximately 678,000 deaths each year in the US.

Moving in to link between sleep and obesity, sleep is one of several abounding factors that contribute to obesity: we can consider eating and exercise patterns, urban development and lifestyle habits as large components that determine whether a person becomes obese.68. In the UK, the greatest risk factor for obesity is the imbalance of the number of calories consumed and expended.69. Over the past 60 years, technological advances and shifts in the types of occupations prominent in industrialized as well as developing countries have resulted in well-documented decreases in energy expenditure.70. This has led to increasing weight not only in the UK, but on a global scale too.

Changes in diet have also contributed to this weight gain, as the food we eat is different from what humans ate hundreds of years ago. In the UK, results show that on average 54% of the calories consumed by UK adults come from ultra-processed foods (such as ready meals, breakfast cereals, sausages, biscuits and cakes), 31% from unprocessed or minimally processed food, 10% from processed foods and 5% from culinary ingredients (such as oil and table sugar).71. Processed foods are more easily digested than foods in their natural state. The body therefore burns fewer calories when digesting processed foods leading to rapid weight gain.72.

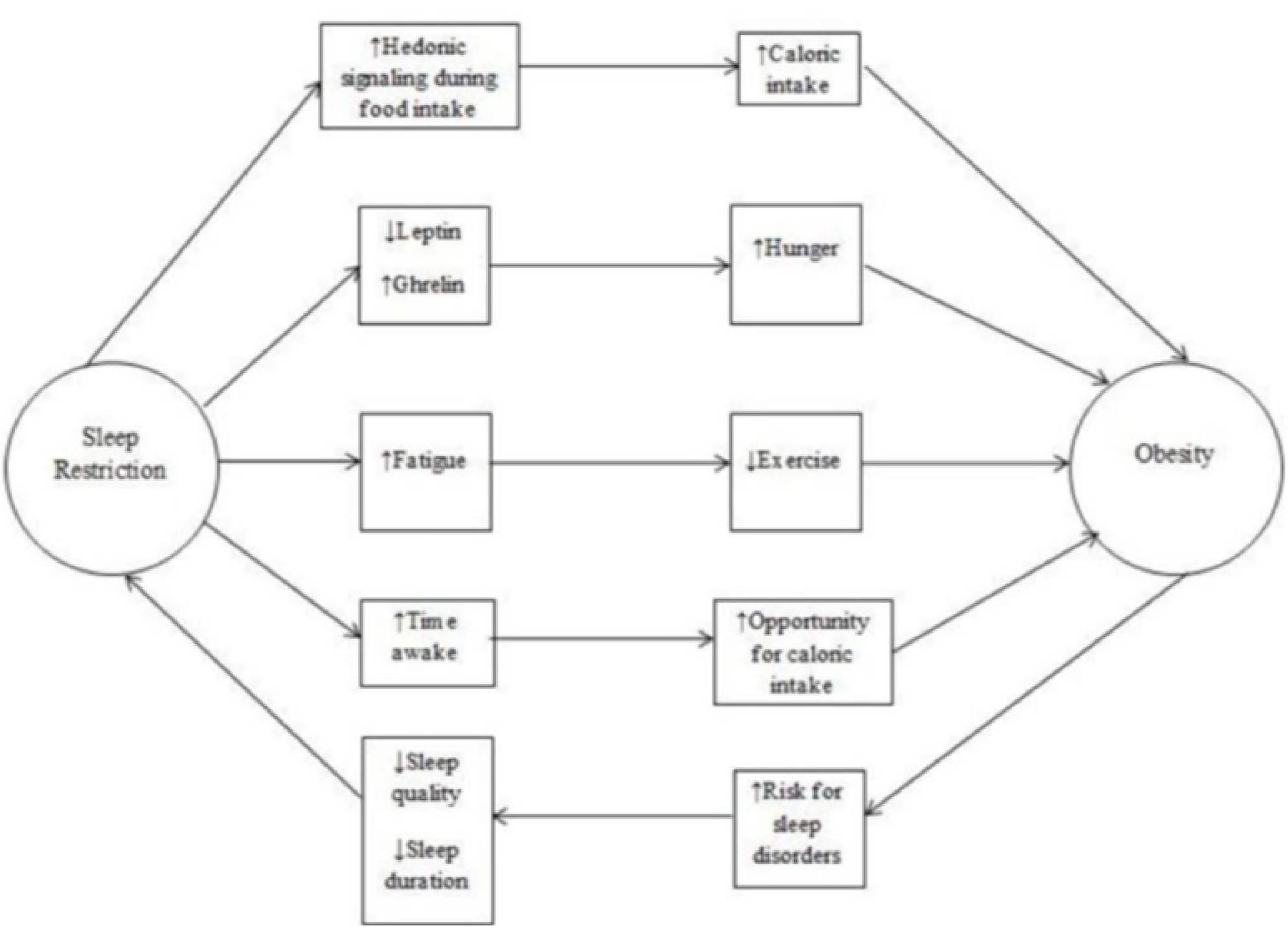
In addition, there are other factors that play a significant role in risk of weight gain. A study conducted by Inside Health BBC Podcast draws attention to the fact that the pace we eat can extensively affect the volume of food consumed. Over time, excess calorie intake can lead to weight gain. One study in children found that 60% of those who ate rapidly also overate. The fast eaters were also 3 times more likely to be overweight.73.

However, despite the clear significance of other factors, it is also apparent that sleep patterns also make a significant contribution to maintaining a healthy weight. The circadian rhythm is the regulation of sleep processed by homeostatic physiology. A circadian rhythm is the 24-hour

internal clock in our brain that regulates cycles of alertness and sleepiness by responding to light changes in our environment. If we sleep at irregular times or very late, our circadian rhythm is interrupted, leading to hormone imbalance. Melatonin is a hormone secreted at night by the pineal gland and is well known to exhibit circadian rhythms, with high levels at night and low during the day.

When circadian rhythms are interrupted, lots of hormones are affected and essentially confuses when they are supposed to be released. For example, lack of sleep links to an imbalance of two key appetite related hormones: leptin and ghrelin. Leptin sends a signal of fullness to the brain, inducing a feeling of satiety while ghrelin sends a signal of hunger. The levels of these two hormones go in opposite directions when not getting enough sleep. Specifically, lack of sleep decreases levels of leptin and ghrelin levels will increase. In addition to wanting to eat more, there is a tendency to crave higher calorie, sugary carbohydrate foods. Interestingly, eating a lower fibre, higher sugar diet then leads to a lower quality and quantity of sleep. Lack of sleep is associated with inflammation, high blood pressure and poor immune system function. Sleep deprivation is linked to factors such as social media, age, genetics, stress and poor mental health. The image below represents the relationship between obesity and sleep.

Figure 1 – Summary of proposed mechanisms that stimulate the relationship between sleep deprivation and obesity



The diagram shows the effects of sleep restriction and how they lead to problems like hedonic signaling during food intake. The homeostatic pathway, which controls energy balance by increasing the motivation to eat following depletion of energy stores, is overridden by hedonic or reward-based regulation during periods of relative energy abundance by increasing the desire to consume foods that are highly palatable (foods that usually increase body weight).74. The diagram then displays how these consequences relate to behaviours in everyday life which all lead to obesity.

In addition, insulin is another example of a hormone affected when sleep is disrupted. Even partial sleep deprivation over one night increases insulin resistance, which can result in an increase of blood sugar levels. As a result, a lack of sleep has been associated with diabetes, although more research is arguably needed to better understand the connection between sleep and blood glucose levels.

In conclusion, it is clear that sleep is a contributing factor to the risk of obesity. Absence of sleep can promote obesity-related conditions such as diabetes mellitus, cardiovascular disease, hypertension, and hyperlipidaemia. Although mechanistic relationships are not yet completely clear, if metabolic changes resulting from sleep restriction lead to an increase in body weight, imbalance in hormones and a weakened immune system, then interventions designed to increase the amount and improve the quality of sleep could serve as treatments and as primary preventative measures for these metabolic disorders. In turn, further research is needed to determine the quantitative difference in the amount of risk sleep deprivation adds opposed to other risk factors such as imbalance in calories consumed and expended, genetics and pace of eating for example. This said, though further research is needed, there is enough currently available for us to acknowledge that sleep is a largely important yet underestimated risk factor. More education is required for us to make others aware of this and take a step forward in improving our sleep schedules and minimize the risk factors we have control over. For an act so universal, sleep has enormous benefits, not least in helping us respond to the obesity epidemic that is spreading rapidly across the globe.75.

[53] https://www.worldobesity.org/news/economic-impact-of-overweight-and-obesity-to-surpass-4-trillion-by-2035#:~:text=1%20in%204%20people%20(nearly,rapidly%20among%20children%20than%20adults.
[54] https://world-heart-federation.org/what-we-do/obesity/
[55] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6196958/

[56] https://www.nhlbi.nih.gov/health/sleep-deprivation#:~:text=According%20to%20the%20Centers%20for,at%20least%20once%20a%20month.
[57] https://commonslibrary.parliament.uk/research-briefings/sn03336/#:~:text=Adult%20obesity%20in%20England,is%20classified%20as%20'overweight'.
[58] https://www.aviva.com/newsroom/news-releases/2023/10/nearly-half-of-brits-are-kept-awake-at-night-by-cost-of-living/
[59]https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6196958/#:~:text=These%20changes%20were%20associated%20with,foods%20with%20high%20carbohydrate%20content.&text=Both%20the%20decrease%20in%20leptin,and%20contribute%20to%20weight%20gain.
[60] https://www.nhlbi.nih.gov/health/sleep/how-much-sleep#:~:text=Experts%20recommend%20that%20adults%20sleep,or%20more%20hours%20a%20night.
[61]https://www.ncbi.nlm.nih.gov/books/NBK19961/#:~:text=The%20studies%20discussed%20in%20this,Cardiovascular%20disease%20and
[62]https://pubmed.ncbi.nlm.nih.gov/29073412/#:~:text=For%20teenagers%2C%208%20to%2010,of%20sleep%20for%20older%20adults.
[63] https://www.ted.com/talks/claudia_aguirre_what_would_happen_if_you_didn_t_sleep/transcript

[65] https://www.ted.com/talks/jeff_iliff_one_more_reason_to_get_a_good_night_s_sleep
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[67] https://www.cspinet.org/eating-healthy/why-good-nutrition-important
[68] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8998286/
[69] https://www.who.int/health-topics/obesity#tab=tab_1
[70] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5983083/
[71] https://tabledebates.org/research-library/ultra-processed-food-consumption-and-obesity-uk#:~:text=The%20results%20show%20that%20on,as%20oil%20and%20table%20sugar).
[72] https://www.webmd.com/diet/what-are-processed-foods
[73] https://www.healthline.com/nutrition/eating-fast-causes-weight-gain#:~:text=When%20you%20eat%20fast%2C%20it's,to%20be%20overweight%20(%202%20).

[74]https://pubmed.ncbi.nlm.nih.gov/19176746/#:~:text=The%20homeostatic%20pathway%20controls%20energy,foods%20that%20are%20highly%20palatable.
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Can archaeology ever cross the ethical line?

Throughout the course of gathering scientific evidence, there have been multiple strong arguments for and against archaeological excavations. Many argue the choices taken should be defined by science, ethics and religious parameters, with all carrying equal weight. By contrast, defenders of archaeological science argue that precautions are met when exhuming the ruins that belonged to indigenous people or animal remains. Ultimately, having reviewed the arguments on both sides, this essay will argue that archaeological science is in need of urgent review to ensure that it does not habitually cross the ethical line.

As stated, there are some powerful arguments to agree with archaeological excavations. Firstly, archaeology gives us the tools to examine and understand human behaviour and the development of the human race, including both our flaws and our highlights. Secondly, excavations offer us knowledge of the past which can ultimately define our future by giving us an insight and an understanding of potential catastrophic mistakes made throughout history. Thirdly, it is recognised that excavations have the potential to unlock knowledge of lost or hidden technologies that may spark innovative solutions to today's challenges.

However, despite the seemingly convincing nature of these arguments, there are several flaws in this reasoning. For example, the modern advancements in technology mean that we have little to learn from ancient machineries, therefore raising flaws in the latter argument. Similarly, the argument about archaeology giving us the tools to examine human behaviour is similarly weak because today's world is now so far removed from the primordial societies in question.

It is therefore more convincing to argue that the time is now right to question the ethics of archaeology. Firstly, there are some strong ethical arguments concerning disturbing the remains of the dead purely for the sake of intrigue. Secondly, the treatment of the remains found during excavations could be seen as highly disrespectful, especially to those who represent the ancestors of the indigenous people concerned. Thirdly, some archaeological evidence could undermine certain religious beliefs that are held today, which in turn could cause great divide and potential conflict within our societies.

Furthermore, the arguments presented here are particularly convincing. For example, the argument about disturbing the remains of the dead is powerful because it is unlikely that archaeologists know with certainty the cultural values and beliefs of the deceased that they are exhuming. Archaeologists may therefore be using their values as a justification for intrusion upon the dignity of the deceased.

In conclusion, it is clear that archaeological science is routinely in danger of crossing the ethical line by disrespecting the cultural values of the deceased and their ancestors. This is not however to say that archaeological science should be abandoned altogether; This is because by excavating, archaeologists not only learn about new cultures and societies within their work, but they also potentially help to save graves that would have either ultimately been destroyed in the course of a construction or deteriorated by nature. However, it is clear that a strict international ethical code that all archaeologists agree on needs to be established to ensure that the ethical line is never crossed either accidently or intentionally.

Should all primary children learn a second language?

There are compelling arguments for and against whether all primary-aged children should learn a second language. For example, those who support this education of a second language may argue that this linguistic ability would have neurological benefits for young people, as their brains are more adaptable and able to learn another language better than adults. Furthermore, in a socio-cultural context, children will be able to envisage a future offering the option to travel and work in different countries, without fear of a linguistic communication barrier restricting them. By contrast, those who disagree with teaching all children a second language advocate against this as children can often feel pressure when having to attempt to communicate in a foreign language which can lead to feelings of confusion and frustration. As children begin to reach adolescence, those who study a second language and struggle fear social judgement from other students in the classroom, potentially leading to a negative attitude towards all education. This is known as ‘linguistic insecurity’, which comprises feelings of anxiety, self-consciousness, or lack of confidence in the mind of a speaker surrounding their use of language.13 Ultimately, having reviewed the arguments on both sides, this essay will argue for the education of a second language to all primary children, helping them improve their bilingual capabilities and confidence.

As stated, there are some powerful arguments in opposition to teaching all children a second language. Firstly, the mental health of children in contemporary society can be largely impacted in some cases as some feel immense pressure when attempting to communicate with others in a foreign language as they occasionally lack confidence in themselves because they are doubtful in their linguistic abilities. Furthermore, in an educational setting, some students are apprehensive to even attempt to learn a second language as they fear social judgement and ridicule from other students in their class; this is especially perpetuated by those who have dyslexia.

To make matters worse, once a child reaches adolescence, at around 12 years old, many struggle more when forming accents and pronouncing words, which makes language acquisition even more difficult as they feel conscious of how they sound to others.14 Therefore, this makes them more likely to avoid being in this situation. Secondly, language learning and retention can be confusing and frustrating for children to adopt due to their cognition still developing; the distinction between two different languages can cause an additional ‘language barrier’.

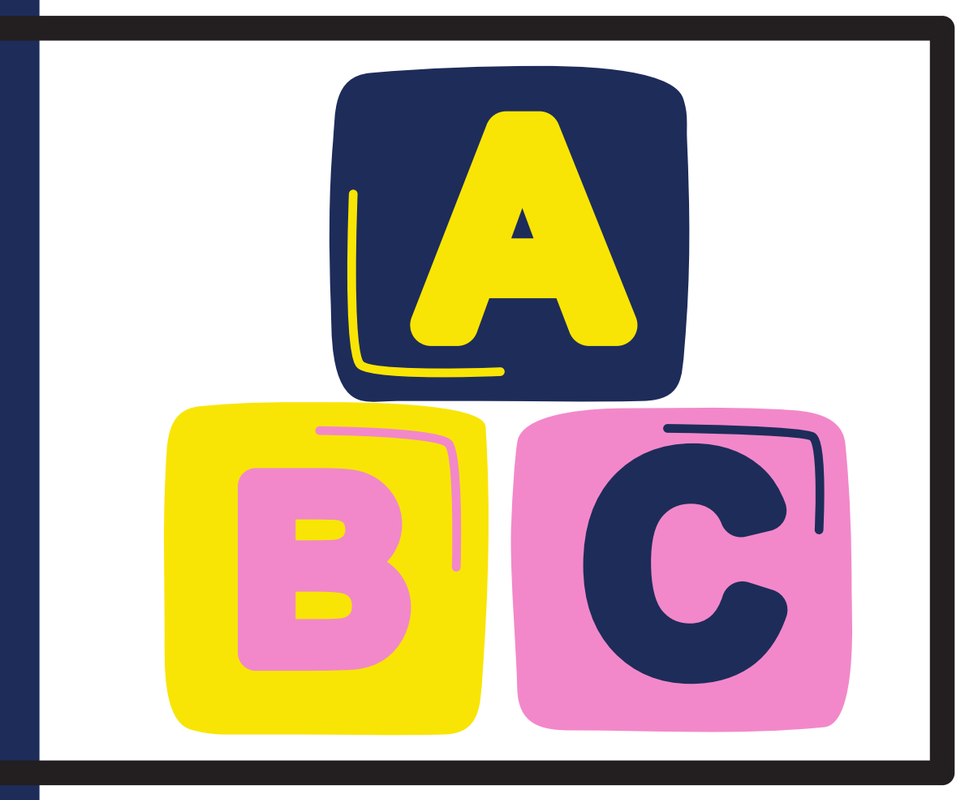
A ‘language barrier’ is a figurative barrier of communication between people who are unable to speak in a common language.15 This communication gap can be proceeded by ‘perceptual barriers’ and ‘cultural barriers’ as some children may be unable to comprehend the traditions of a particular community, therefore restricting their acceptance of diversity as well as limiting the cultural expression of others.16 Thirdly, many young people who study a foreign language suffer with communication apprehension; this implies that individuals could have numerous ideas and thoughts which cannot be successfully translated and output in a second language as they lack the vocabulary to deliver their points to other people17. This can evoke frustration and anxiety in many young people, especially when communication is a critical part of their lives.

However, despite the seemingly convincing nature of these arguments, there are several flaws in the reasoning. For example, the argument about the confusion felt by children when attempting to cohesively understand two languages simultaneously is flawed because not every child experiences this; many would benefit in the long-term by having an adept comprehension of a language, rather than not even attempting to gain this ability in the first place.

Similarly, the argument about social pressure is certainly an issue, however it is weakened as allowing children to immediately drop their linguistic studies when they find it difficult fully negates the idea of teaching them to persevere through their difficulties and create academic stamina; if a child found English studies difficult, it is unlikely that they would be allowed to stop learning it. All languages are difficult initially, however if all children were properly taught the basics from an early age, they would have a strong understanding of the language once they reach adolescence. This could alleviate some of the social anxiety and pressure that creates a stigma around the difficulty of learning a second language.

It is therefore more convincing to argue that it is crucial to educate all children in an additional language from a young age. Firstly, the brain regions and neural networks involved in learning a second language become stronger, adaptable, and quicker to respond which could help them improve their acceptance of diversity18, additionally enhancing their academic capabilities in all subjects. Furthermore, the brain of a child is more elastic and has rapid neural formation so they can learn languages faster19. In combination, these two factors mean that the language acquisition of children is easier than that of teenagers and adults, making it a prime opportunity to introduce a child to the fundamentals of a foreign language. These factors are not only beneficial for educational purposes, as they can also have positive neurological effects once a child grows up. An example of this is that the symptoms of dementia are slower to develop in bilingual individuals versus monolingual people.

This does not necessarily prevent this syndrome ; however, an affected person may fall into mental decline later rather than earlier in life - researchers from Iowa State University have discovered that the symptoms of Alzheimer’s disease are halted by up to 5 years.20



Secondly, learning a second language can: improve a child's brain and memory functions; boost creativity and self-esteem; help in career opportunities; and increase their comprehension of the language they already speak. All aforementioned aspects are important to ensure a child can have the self-motivation and talent to excel both academically and socially. It could be argued that if these attributes were shown by a larger proportion of teenagers, exam results would likely increase, as more adolescents would show better academic potential, even if they would just have an improved work ethic and resilience, for example.

If teaching all young children the basics of a language in Primary School gives them a multitude of other qualities which would amplify their intelligence, then it seems evident that the education of a secondary language should be made a priority in primary educational systems.

Thirdly, when they grow up and explore different career opportunities, children would be able to visualise a future where they can travel and work in different countries without language being a barrier for them21. Immediately, this creates more opportunities and allows them to comprehend, respect and appreciate diverse cultures and have empathy for others with different social backgrounds. If all children had the capability to interact with those from other cultures, our societies could integrate and become more accepting of diversity and tradition22. In addition to this, rates of unemployment in the future would decrease, as a much higher majority of the world would have more employment opportunities because they are able to bridge any linguistic gaps in communication, as well as having a sought-after appreciation and consideration for those with alternate customs and lifestyles.

Furthermore, the arguments presented here are particularly convincing. For example, the argument about improved cognitive functions is powerful because the academic ability of young people is a factor that is highly disputed in contemporary society due to strenuous factors such as increased exam anxiety, and mental health issues such as depression which are now more prevalent, caused by social media and peer pressure.

If self-esteem, confidence, and faith in the capabilities of today's young people are magnified, much of this frustration and disquietude can be assuaged, creating a new generation who are much more content, with more liberated futures ahead of them. Similarly, the argument about increased cultural acceptance is strong because with an increasingly divided society, it is important to be able to accept each other's cultures, to become universally respectful of global customs and traditions. In the microcosm of our primary educational systems, it is important for children to begin to learn a second language so they can be prepared to accept others and find it easier to communicate with them.

In conclusion, all primary-aged children should learn a second language because it would construct a society of young people who are more likely to excel at school and at work, with a higher tolerance for diversity and culture. Admittedly, the mental health and anxiety of children is a crucial factor to consider, however this discontent could be avoided if all children were in the same situation, and if languages were easily incorporated into their lives. Once children begin to comprehend the basic structure of a language – as they would in their first language – this anxiety can be diminished and be less of a problem as children reach adolescence. If a foreign language was introduced to all children, then it is likely that they would embrace it as part of their everyday lives, creating abilities and opportunities which would greatly benefit their future prospects.

13 Wikipedia – Linguistic Insecurity https://en.wikipedia.org/wiki/Linguistic_insecurity 14 https://greatspeech.com/at-what-age-is-an-accent-permanent/#:~:text=Research%20has%20shown%20that%20accents,an%20extended%20period%20of%20time. Can you Change your Accent? At What age is an Accent Permanent?
15 Definition is a combination of sources from 'Oxford English Dictionary' and 'Wikipedia' https://www.oed.com/search/dictionary/?scope=Entries&q=language%20barrier https://en.wikipedia.org/wiki/Language_barrier 16 Impact factory: The Seven Barriers to Communication https://www.impactfactory.com/resources/the-seven-barriers-to-great-communications/ 17 Department of Education, https://files.eric.ed.gov/fulltext/EJ1136575.pdf
18 Real Simple Magazine Article https://www.realsimple.com/cognitive-benefits-of-learning-second-language-7109650 19 https://tessais.org/children-learn-languages-faster-adults/#:~:text=Babies%20and%20children%20form%20neural,accent%20of%20a%20native%20speaker. 20 https://news.las.iastate.edu/2021/01/28/study-shows-learning-a-second-language-thwarts-onset-of-dementia/ 21 https://www.gov.uk/government/publications/curriculum-research-review-series-languages/curriculum-research-review-series-languages 22 https://drexel.edu/soe/resources/student-teaching/advice/importance-of-cultural-diversity-in-classroom/

Should companies use offshoring to maximise profits and minimise costs?

Offshoring is defined as transferring activities or ownership of a complete business process to a different country from the country (or countries) where the company receiving the services is located.23 The use of offshoring allows for many positive aspects that are primarily seen to help the country that the company was originally based. By contrast, there are some unethical practises that follow this tactic like the potential violation of human rights in the country to which the company is offshored. Ultimately, this article will argue that offshoring should be used providing that legitimate concerns raised by critics are addressed.

As stated in the previous paragraph there are some key issues that underlie this practise such as the potential violation of human rights. For example, a study of offshoring in Vietnam details that their laws for protecting workers are poor with conditions inside the factories putting many workers at risk of serious injuries. Furthermore, the workers' pay is not protected or proportionate to the work being undertaken; they are paid extremely low wages and working long hours, which significantly degrades their quality of life and keeps them in a poverty trap.

Secondly, it can be argued that offshoring promotes corporate greed. Indeed, US CEOs get paid 351 times more than the average US worker and yet, despite the potential savings to be had through offshoring this role; it is the jobs typically taken by the working and middle classes that are offshored. 24 And so it seems the considerable profits to be made from offshoring are retained by the rich, while the less advantaged lose their income and purchasing power.

Thirdly, offshoring can potentially drain the economy of the country that the company originated from. This is because the people that worked for the company in the country of origin will lose their job to offshoring and the people working the offshored jobs do not pay any tax in the country of origin. Companies will try to argue that they must pay more tax due to their increased revenue. However, this is not proportionate to the amount of money lost from the taxation of people's salaries.

Despite the convincing nature of these arguments, there are some flaws which undermine this side of the argument. For example, the argument about offshoring the job of the CEO is not realistic as the company will inevitably want to retain final control in their country of origin. Quite simply, CEOs will never be the turkeys that vote for Christmas and so this reasoning is not strong.

On the other side of this debate is the idea that offshoring should be allowed. One convincing argument here is that due to the low labour costs and low taxation the price of the goods will be driven down by vast amounts, thereby benefitting consumers whilst still allowing the company to make a profit. This argument is particularly convincing when one considers the cost-of-living crisis that the UK and many other countries are facing. Furthermore, whilst the offshore labour costs may seem low to someone living in a developed country, it is still possible to pay a fair wage to someone in India or China for instance whilst still driving down costs. This means that the practice of offshoring can potentially remain ethical through principle of mutual benefit.

Another benefit is that more sophisticated jobs will fill the void created by the loss of low-paid jobs in the country where the company was originally based. This will allow for new opportunities for the people that were originally working in these factories. These new opportunities could mean a better work environment, higher wages and, in time, higher tax revenues that can be used to benefit all of society.

Finally, offshoring can help improve weaker economies in developing countries. This is due to more of the population being able to work, salaries increasing, and expertise being transferred. There is also the potential than offshoring provides a way into previously closed nations, which can in turn open up a conversation about improving human rights and workplace practices.

To conclude, it is clear that the practice of offshoring should be used as the positive factors can potentially outweigh the negative. However, it is clear that nations still need to develop robust laws to guide this practice in order to avoid some of the most negative side-effects, especially those relating to breaches of human rights.

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23 What is Offshoring? Definition and Benefits | TTEC EMEA (8/11/23)
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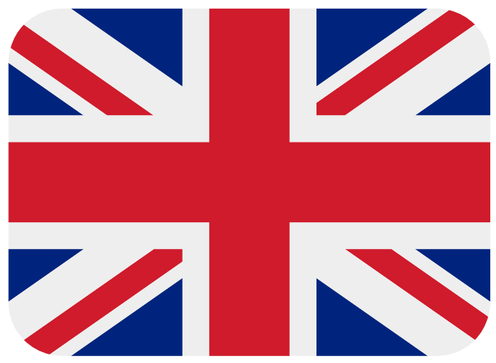
Is the British high street dead?

As demonstrated in the Clarke-Fisher model, the British high street is primarily made up of the tertiary sector, which saw a steady increase through the industrial era but has since flattened out in the post-industrial age. The Portas report suggested that “the model of the high street is outdated”, which is evident locally in Exeter high street, with its boarded-up shops and empty windows giving a profound sense of decline. Ultimately, this essay will argue that, whilst the British high street is currently suffering, all hope is not lost.

On the one hand, it can be suggested that the high street is dead due to out-of-town shopping centres, such as Rydon Lane in Exeter which has eleven retail units. Out of town shopping centres are evidently more convenient than travelling into the Central Business District as they are closer to the suburbs. This means that they have better transport links like, in the case of Rydon Lane, the A38, A30 and M5. So, the catchment area increases as a higher number of customers and consumers can access the site, such as those living in remote rural areas. This results in an increased footfall in out-of-town shopping centres but a decrease in the high street. On top of this, the revenue that the companies receive will potentially be greater than what they would have if they were on the high street.

This is due to the land in the Central Business District being of greater value than the out-of-town land, which is often located primarily in residential areas known as peak land value intersections. So, the retail companies will pay lower rent, operating costs and interest rates, meaning the net profit is likely to be significantly greater. This positive feedback mechanism inevitably leads to companies investing in out-of-town shopping centres rather than a seemingly dying high street.



Another argument that supports the idea that the British high street is dead is due to the impact of Covid-19. Due to Covid-19, Britain was put under lockdown restrictions, limiting the opportunities people had to go shopping, particularly in the retail sector. This meant that many shops – especially independent retailers – closed due to a severe loss of revenue which in turn left high streets primarily with chain stores. Indeed, Exeter was recently cited as the “worst clone town in Britain” with the country’s blandest high street. The implications of chain stores has a negative impact on the high street as it increases the likelihood of ‘showrooming’, which is defined by a narrow range of predictable products at less affordable prices. Therefore, after Covid restrictions were lifted, people would, at best, look in store before buying online for better variety and sometimes lower prices. This, in turn, resulted in a cycle of reduced footfall on the high street that meant some chain stores were closed down, such as Debenhams, providing a flagship store in Exeter. Therefore, the implications of Covid-19 had an extreme negative multiplier effect and support the idea that the high street is dead.

On the other hand, some may argue that the high street is not dead and has been regenerated by the use of “quarters”. By having quarters, it means the city is divided, with each area having its own identity and something different. For example, in Exeter the food and dining quarter is in Queen’s Street and the quarters that hold the big brands are Princesshay and Guildhall. This means that there are close knit relationships between the various business owners and managers. So, these businesses work together as opposed to competing to regenerate and increase footfall in their areas.

This interdependence results in a welcoming atmosphere as the environment is cared for and looked after, ultimately encouraging customers to spend their money in person and instore on the high street, as opposed to online. Therefore, the concept of quarters is helping to revive town centres and mitigate the problems surrounding a dying high street.

Another idea that suggests the high street is not dead is the use of business improvement districts. A business improvement district (BID) is a business-led and business-funded body formed to improve a defined commercial area. For example, In Exeter BID plays a vital role in ensuring the cleanliness and vibrancy of the streetscape. As a result, they have invested heavily in landscaping, planting, and greening initiatives, as well as improving other areas. Indeed, in 2022, In Exeter's cleaning service completed 6895 cleaning visits and 5461 cleaning tasks, thereby helping to create a cleaner and more inviting environment and an better shopping experience. In turn, the seven footfall cameras that In Exeter have recently provided evidence that the high street is not dead, as well as helping to communicate with the businesses what adaptations are necessary. Therefore, Business Improvement Districts have helped to improve the representation of the high street and suggests the high street is still fighting for its life.

Alternatively, it can be argued that the high street is neither dead nor improving but in fact undergoing a change in its functions; whilst many shops are being left vacant with no other shops in the retail sector to take them over it is clear that other types of outlets are able to, such as coffee shops. Evidence of this blooming café culture can be seen in the fact that ten years ago there were fewer than 10,000 places in the United Kingdom to buy coffee. However, by the end of last year, there were more than 22,000 coffee shops, and branded outlets such as Starbucks and Costa had doubled in numbers. This is linked to the idea that as the urban density increases, cities are becoming more vertical. So, people need places to eat and drink as well as other services near to or within their place of work. Other relevant examples here also include hairdressers, nail salons, barbers, and restaurants. This could therefore imply that, whist the retail sector of the high street is dying, other aspects such as cafes are helping to regenerate and reimagine the high street as experiential service centres.

In conclusion, there is clear evidence to suggest that the British high street is dead from a retail perspective, with store numbers declining and online retail sales rising exponentially. This said, it can be argued that the high street is merely undergoingfunctional changes as opposed to being completely dead and many would rightly point to the burgeoning 'café culture' that helps to satisfy the innate human desire to come together with others. However, it is clear that the high street is currently severely wounded, and coffee shops alone will not save it. The company Citi highlights that "only four to five years of structural growth remain in the UK coffee market" and it is predicted that 27,638 stores will be lost in the next five years. Therefore, the onus is on businesses, councils and policy makers to come up with innovative ways to maintain town centre footfall and avoid the statement "the British high street is dead" becoming a reality.

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