Sex Selection for Family Balancing?
A Legal and Ethical Analysis.

Submitted by Gemma Tregenza-Parker to the University of Exeter as a dissertation for the degree of Masters by Research in Law<br>In September 2013

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#### Abstract

The development of pre-implantation genetic diagnosis (PGD) has allowed accurate sex selection to be possible both for medical and non-medical reasons. PGD is performed in conjunction with in vitro fertilisation (IVF). Currently, in the UK sex selection is only legal for medical reasons. The purpose of this dissertation is to analyse the legal and ethical arguments in permitting sex selection for family balancing to become legal.

Through extensive literature research and analysis this dissertation aims to show that allowing sex selection for family balancing will not have a detrimental effect upon society or the future sex selected child. Research has revealed that sex selection for family balancing will not distort the sex ratio of the UK, it will not be discriminatory against one particular sex nor will it be the beginning of the slippery slope towards designer babies. Sex selection for family balancing will not be a drain upon the NHS resources as it would have to be funded privately and neither will it disregard the status of the embryo.

The conclusion drawn from this research is that the current regulation on sex selection in the UK is inadequate. Many UK parents want access to PGD and possibly other sex selective technology, such as sperm sorting, as they want to be able to select the sex of their baby for family balancing reasons. The main reasoning behind this is that these parents want the opportunity to experience the rearing of children of both sexes. As long as there are strict rules and regulations in place and the welfare of the future child and any existing children are considered, it is recommended that the law on sex selection should change to allow parents to select the sex of their baby but only for family balancing reasons.


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## Introduction

For centuries, couples have tried to determine the sex of their children through a number of dubious tricks for example in Sweden men hung their pants on the left bedpost if they wanted to father a girl and on the right if they wanted to father a boy. ${ }^{1}$ Now in the twenty-first century, with a better understanding of reproduction, it is no longer necessary for parents to resort to these dubious tricks which do not work.

The practice of sex selection in the twenty-first century finds its roots in medical science. There are a variety of sex selection techniques, including, pre-natal diagnosis and abortion, sperm sorting and pre-implantation genetic diagnosis (PGD). "Each type of technology carries with it a different level of intrusion, expanse, health risk, and most importantly, a different rate of accuracy in selecting each gender."2 In the early days of sex selection there were two options available: amniocentesis and chorionic villus sampling (CVS). ${ }^{3}$ Both of these techniques are post-implantation sex selection methods as the embryo is already implanted into the mother. Even though these tests are used to determine whether the potential foetus will have any serious medical conditions once it is born, these tests can also discover what sex the foetus is. If these tests reveal that the foetus is of the opposite sex to which the parent's desire, then the mother could try and obtain an abortion. During amniocentesis, a small sample of amniotic fluid, which surrounds the foetus in the mother's womb, is removed for testing in a laboratory in order to obtain information about the baby. ${ }^{4}$ This includes the sex of the foetus. Amniocentesis is generally considered safe and effective but it does involve approximately .5 per cent chance of the pregnancy resulting in miscarriage. ${ }^{5}$ "In CVS the doctor inserts a suction tube transcervically or transabdominally during the first trimester of pregnancy and aspirates sloughed-off

[^0]cells." ${ }^{6}$ The cells' DNA are then analyzed for indication of gender. ${ }^{7}$ CVS is more advantageous than amniocenteses for prospective parents because it provides them with critical information, including the sex of the foetus as early as ten to twelve weeks of pregnancy whereas with amniocentesis it is not recommended to be carried out prior to 15 weeks as there is the potential danger of miscarriage or birth defects. ${ }^{8}$ The disadvantage of CVS is that approximately one to three pregnancies in one hundred ends in miscarriage. ${ }^{9}$ While both of these methods can determine the sex of the foetus, they are extremely intrusive. However, there is a third postimplantation sex selection technique which is less invasive than amniocentesis and CVS. This is ultrasound. "The expanded use of ultrasound technology in the late 1970s gave would-be parents a faster, less invasive means of determining the sex of the foetus. By using ultrasound imaging technology, health care providers were able to discern the sex of the foetus in the early months of pregnancy. The relatively low cost, simplicity and accessibility of ultrasounds have made it an integral part of most non-medical sex selection decisions."10

Unlike, prenatal diagnosis and abortion, sperm sorting is a method which is used prior to conception. Sperm sorting is the least technically complex method of directed procreation. ${ }^{11}$ This technology has the advantage of working prior to conception and thus eliminating the concerns regarding the moral status and ethical dispositions of the human embryo. ${ }^{12}$ "Exploiting the fact that X-bearing sperm have more DNA than Y-bearing sperm, MicroSort uses flow cytometric separation technology to separate out the sperm, which is then used for intrauterine insemination or IVF."13 It has been revealed that the MicroSort technique is more effective in selecting girls at a success rate of $91 \%$, than for boys, with a success rate of only $76 \%$. ${ }^{14}$ Artificial insemination is less burdensome and less costly than IVF because no eggs need to be harvested

[^1]and fertilization and implantation occur naturally inside the woman's body. ${ }^{15}$ Additionally, because the sorted sperm can be stored, shipped and used for insemination anywhere in the world, residents of rural and less developed areas could utilize the situation. ${ }^{16}$

In the twenty-first century the most accurate method of sex selection is PGD. PGD is a procedure which is performed upon embryos created through in vitro fertilisation (IVF). There are three main categories of disease which PGD is used for; sex linked disorders such as Tay Sachs ${ }^{17}$ or Duchenne muscle dystrophy ${ }^{18}$; single gene defects, for instance cystic fibrosis ${ }^{19}$; and chromosomal disorders such as translocations, inversions and chromosome deletions. ${ }^{20}$ Parents who carry these genes and are likely to pass them on to their children can use PGD in conjunction with IVF in order to have a child free from the disease as only unaffected embryos will be implanted into the mother.

PGD was first developed in 1989 and was used in order to avoid creating a child with a genetics based disorder. ${ }^{21}$ However, in 1992 PGD was used in conjunction with IVF in order to create Chloe O'Brien, a child free of the cystic fibrosis gene. Her parents, Michelle and Paul were both asymptomatic carriers of the cystic fibrosis gene, which meant a 1:4 chance that any child conceived "naturally" would be affected by the disease (and a 1:2 chance that the child would, like its parents, be an asymptomatic carrier); in fact they had already had a son affected with the disease. ${ }^{22}$ This case is crucial because it was the start of a new reproductive era where children

[^2]could be born without suffering from deadly diseases and without being carriers of these diseases and thus not passing them onto their children.

During PGD the unfertilised eggs are removed from the mother which are then fertilised by the father's sperm in a test tube. When the fertilised eggs have divided into eight identical cells, they are analysed for undesired genetic defects. It is at this point where testing for sex is performed. ${ }^{23}$ PGD prevents parents from being faced with the difficult decision of whether to terminate a pregnancy because the foetus will suffer from a potential life threatening disease. A termination can be physically and emotionally stressful and PGD prevents parents from having to go through this. People seeking PGD have different requirements than those seeking IVF as they are not necessarily infertile they just wish for their child to be born without a severe illness or disability. Prior to receiving treatment for PGD, parents should understand that the potential child will only be free of conditions for which the testing was done. PGD does not guarantee that the potential child will be free from all genetic or congenital disorders. ${ }^{24}$

It is argued that PGD does not give parents the power to select every characteristic of their children. "Not all diseases or non-health related traits (such as intelligence or strength) have a clearly diagnosable genetic component; many result from the interaction of multiple genetic or environmental factors and cannot be detected by genetic testing."25 PGD does not create new genetic characteristics in those embryos that neither parent possesses, nor does it allow parents to pick and choose among characteristics present in different embryos. ${ }^{26}$ PGD does not involve genetic engineering. At the moment PGD can give parents the option not only to have a child free of severe disease but also the option to have a child of a particular sex in order to balance their family. This dissertation will focus primarily on sex selection through PGD as it is the most accurate method of performing sex selection.

Sex selection invokes various ethical, religious, social and political issues. While there is disagreement among various doctors, ethicists and the general public regarding the level of medical necessity that should justify sex selection, most would

[^3]agree that sex selection for medical reasons is ethically and morally acceptable. ${ }^{27}$ However, there is wide and varied disagreement regarding sex selection for nonmedical reasons. Firstly, sex selection brings into question the status of the embryo and when does life begin. For those who believe that life begins at conception such as the Catholic Church, sex selection whether for medical or non-medical reasons would be wrong as all life is sacred and the taking of any life is morally and ethically wrong. For those who believe that life begins at some later point may allow that sex selection would be ethically acceptable but within a time limit. Secondly, there are concerns that sex selection will impact upon the sex ratio dramatically which may have various consequences for the UK. There is a fear that male children would be selected more often than female children which may lead to more violence, more men may remain single, less reproduction or men may have the higher paid jobs. However, it will be argued that unlimited sex selection should not become legal, only sex selection for family balancing where parents could only select the sex of a future child which is opposite to the sex of existing children. Thirdly, sex selection raises concerns that parents will treat children as commodities in order to satisfy their own desires. Parents' who use sex selective technology may expect a child of a certain sex to behave in a certain way and to meet their gendered expectations and failure to do so may have a detrimental effect upon the parent-child relationship. It will be argued in this dissertation that parents' want to select the sex of their children for family balancing reasons for the varied rearing experiences. Fourthly, if sex selection for family balancing did become legal within the UK it would have to be decided how it should be funded. It will be argued that sex selection for family balancing should not be funded by the NHS as it is not a medical condition that needs treating. Rather it is a desire that parents' have which they want fulfilled and so should be funded by them privately.
"Sex selection has long been desired by many different cultures and societies for a variety of reasons, and a number of clinics advertise and perform PGD for non medical reasons, although not in the UK. ${ }^{28}$ PGD for non medical reasons appeals especially to two types of groups: those who want a first born of a particular gender

[^4]and those who already have children and want a more "balanced family" of males and females. ${ }^{29}$

This dissertation will critically analyse the issue of whether UK parents should be legally allowed to select the sex of their children for family balancing. It will be argued in this dissertation that this should be changed to allow parents the freedom to select the sex of their children for family balancing reasons as most couples wanting access to sex selective technology do so because of the different rearing experiences. It is now recognised by psychologists that there does exist biological differences between male and female children and this is what parents' desire and not because they have discriminatory or stereotypical attitudes. Chapter one will begin by explaining the issues of family balancing and reproductive autonomy. It will be argued that parents should be given the reproductive freedom to select the sex of their children for family balancing reasons as long as strict conditions are set in place. Reproductive freedom should not be limited unless there is a danger to citizens or society and it is up to those who wish to restrict a person's reproductive freedom to show why. It will be argued in this chapter that sex selection for family balancing should not be a danger to either citizens or society. Firstly, selection for family balancing will not cause the sex ratio to rise and even if there was a fear of there being a dramatic increase in the sex ratio of the UK then certain conditions could be set in place to ensure the sex ratio remains constant. Secondly, it is suggested that sex selection for family balancing would not enhance or support sex discrimination. It will be shown in this dissertation that most parents want access to sex selection technology because they have children all of one sex and would like a child of the opposite sex in order to experience the different rearing experiences. Many may think that this will enhance gender stereotypical views but this is not the case as it is now recognised that there are biological differences between male and female children. Further, there would the welfare of the child condition in place which would ensure that if there was a risk to the future child or to any existing children then parents would be denied treatment. Thirdly, it will be shown using Kant's and Parfit's theories that sex selection for family balancing is not treating children as commodities and that parents could still love their children unconditionally. Parents' are allowed to select against unhealthy embryos or pose a threat by drinking and

[^5]taking drugs through pregnancy which does not imply unconditional acceptance, so why should parents be prevented from selecting the sex of their children for family balancing? Fourthly, sex selection for family balancing would not be the beginning of the slippery slope towards designer babies as selection would be based upon sex alone and then parents would only be allowed to select the sex of the child which is opposite to the sex of existing children. At the moment selection for any other trait is not possible and if it did become a reality in the future then it would be appropriately regulated then. Sex selection for family balancing should not be prevented from becoming legal because there is a fear of designer babies in the future.

Chapter two will discuss and analyse the socio-economic factors of allowing sex selection for family balancing. Parents who wish to select the sex of their children for family balancing reasons and can afford to, can travel abroad to a country where sex selection for family balancing is legal. This could imply that the current regulation of sex selection in the UK is not effective but penalising couples would be difficult to implement as it would be hard to prove that they travelled abroad for sex selective treatment. However, if sex selection for family balancing did become legal within the UK, then how should it be funded? It is argued that sex selection for family balancing should be funded privately as NHS resources should not be directed away from those with medical conditions.

Chapter three will finish with a discussion on the legal issues involved in sex selection for family balancing. Reproductive treatment is regulated by the Human Fertilisation and Embryology (HFE) Act and states that sex selection for all nonmedical reasons is illegal (section 3 of Schedule 2 of the 2008 Act). The HFE Act created the Human Fertilisation and Embryology Authority which ensures that all clinics abide by the HFE Act and do not carry out any activities without a license. Over the years the HFEA has carried out various consultations regarding sex selection but they have all concluded that sex selection for non-medical reasons should remain illegal. While it is important to consult with the public regarding such controversial issues as sex selection, it must be remembered that there should be a presumption in favour of reproductive liberty and that it is for those who oppose such practices to show why it should be illegal.

Article 8(1) of the European Convention of Human Rights protects the right to a private and family life and raises a number of complex issues of autonomy and rights within the debate of sex selection. Couples' reproductive choices clearly comes
within the remit of article 8 but does that include allowing parents' the freedom to choose the sex of their children for family balancing reasons? It could be argued that it does as sex selection for family balancing is concerned with intimate family life where couples should be free to make decisions without interference. However, article 8(1) must be read in conjunction with article 8(2) which legally allows that state to interfere in a person's private life in certain circumstances. The interference by the state must be for the protection of society or citizens and must be necessary and proportionate as well as balancing all the competing interests involved. It will be argued that the best response the state could take would be to allow parents' their reproductive freedom in choosing the sex of their children for family balancing reasons, as it is a proportionate response and it does balance all the competing interests. Further, at the moment there is no overriding objection why sex selection for family balancing would be detrimental to either UK citizens or to society as a whole.

## Chapter One

## The Potential Consequences of Allowing Sex Selection for Family Balancing the UK

With the advancement of PGD it is now possible for parents to select the sex of their children with amazing accuracy for both medical and non-medical reasons. The foremost reason that parents want to select the sex of their children for non-medical reasons is for family balancing. The aim of this chapter is to explain and analyse whether parents should have the freedom to select the sex of their baby for family balancing reasons and what the potential consequences will be for UK society as a whole.

## Family Balancing and Reproductive Liberty

One of the most persuasive arguments for allowing sex selection for non-medical reasons is that of family balancing. Particularly, in Western Societies parents wish to have a well balanced family in terms of sex. Ideally, a balanced family implies an equal number of boys and girls. Family balancing is when parents have children predominantly of one sex and would like to have a child of the opposite sex to complement their family, for example, when a couple already have three girls and would like to use PGD in order to have a boy. ${ }^{30}$ A case which clearly describes family balancing and accurately represents the UK's position is the Masterton case. The Mastertons' wanted to use sex selection technology to have a daughter but were refused by the HFEA. ${ }^{31}$ This decision by the HFEA raises a number of arguments regarding parents' reproductive autonomy rights and the selection of children based upon sex.

On the one hand there are those who believe that parents should have unlimited reproductive freedom. This is where people should have the freedom to make any decision concerning their reproduction without state interference. This would not only

[^6]include the right to select the sex of children for family balancing but also the right to select any characteristic of children if it were possible. On the other hand there are those that believe that reproductive freedom should be totally restricted. This is where people should have no freedom over their reproductive choices. Then there are those in between who believe that parents should have some control over their reproductive choices but that it should not be unlimited. This is the current position the UK has taken by making sex selection only legal for medical reasons. This right or entitlement to reproductive liberty is found in all the principle conventions or declarations of human rights. "Sometimes it is expressed as the right to marry and found a family, sometimes as the right to privacy and the right to respect for family life. ${ }^{, 32}$ In the UK it is mainly expressed through Article 8 of the European Convention of Human Rights as the right to privacy and family life. The legal aspect of Article 8 will be discussed in more detail in chapter three, at page 75.

It could be argued that allowing parents' reproductive liberty to choose the sex of their children for family balancing reasons may result in having a profound effect upon the definition of what a family should or should not consist of. Wilkinson argues that:
"The worry is that such language is pejorative and implies that families not containing boys and girls in roughly equal numbers are somehow defective. And while many parents (and prospective parents) do desire sex 'balance it is difficult to see how one could justify any suggestion that families with all girls or all boys are objectively inferior". ${ }^{33}$

This is crucial because it produces a particularly narrow definition of what and what not a family should consist of. Will families which do not contain children of both genders be somehow defective? However, it could be argued that allowing unlimited access to sex selection technology might have a profound effect upon the sex ratio of the UK and enhance sex discriminatory attitudes instead of combating them (see the following two sections for a discussion on the sex ratio and sex discrimination).

[^7]If sex selection for family balancing were to become legal within the UK then the definition should be interpreted strictly. In the 2002-2003 consultation document the HFEA suggested two ways in which the definition of family balancing could be narrowed. The first suggestion was to make having no existing children of the desired sex a condition; so parents' could only select to have a girl if they had three boys and no girls. The second suggestion was to have a requirement where there was a sex differential of two or more; so selecting a girl would be allowed if the family had four boys and one girl but not if the family had four boys and three girls. ${ }^{34}$ । suggest that if sex selection for family balancing were to become legal within the UK then it is should only be allowed in cases where couples have no existing children of the desired sex because it reduces the risk that parents have sexist attitudes towards their children. This then leaves the question of how many existing children of one sex should a couple have before they can present themselves at a clinic for family balancing. It is suggested that PGD for family balancing should not be used for the first child because in order for a family to be unbalanced there would have to exist at least two children of the same sex for there to be an imbalance. By just having one chid there is no bias. However, it could be argued that if parents wish a perfect family balance of two children consisting of one boy and one girl then they should be given the reproductive liberty to do so. Clearly, this debate raises complex issues of how much reproductive autonomy parents' should be given in selecting the sex of their children.

An important aspect of reproductive liberty is that it should not be limited without very good reason. As Alghrani and Harris state:
"The presumption is that citizens should be free to make their own choices in the light of their own values, whether or not these choices and values are acceptable to the majority. Only serious danger, either to other citizens or to society, is sufficient to rebut this presumption. And the seriousness has of course at least two axes, one regarding the magnitude of danger, the other concerning probability or proximity - how real and present it is. If anything less than this high

[^8]standard is accepted liberty is dead."35

This is supported by John Stuart Mill and his argument of the 'tyranny of the majority'. In order to avoid the tyranny of the majority it must be shown that the exercise of freedom infringes either the liberty of others or poses a danger of significant harm to individuals or society. ${ }^{36}$ It is not enough that people simply do not agree with how a person chooses to exercise their reproductive freedom or that they are made uncomfortable by it. This argument indicates that parents should automatically be given the freedom to choose to have two children consisting of one boy and one girl if that is what they desire and it is for those who oppose it to show why this freedom should be limited. However, I disagree with this and think that parents should only be able to select the sex of their children after they have three children consisting all of the same sex as to use sex selection after one child reinforces the idea that there exists a specific definition of a family and this is not the case within the UK. Furthermore, it is suggested that at two an imbalance is beginning to form which may be rectified by the third child. At three it can be said that parents whose children are all of the same sex have been cheated by nature and are playing with a loaded dice. ${ }^{37}$ This idea may be reinforced by a form of gambler's fallacy: the conviction that the probability of having a boy after three girls is higher than the probability of having a girl as a first child. ${ }^{38}$ This could indicate that couples who want children of both sexes should just keep trying because eventually they will have a baby of the opposite sex to which they have. But at what point does a couple say that enough is enough and to stop trying as it is not just as simple as having one child after another. Other considerations should be taken into account such as money, the physical and mental health of the woman, and the other existing children of the family who will be affected by each pregnancy etc.

The UK has a society and culture which contains varying types of family which may present two difficulties in the debate concerning sex selection for family

[^9]balancing. The first issue which may arise is whether the sex of children from previous relationships should be taken into account when considering whether a couple are eligible for sex selection for family balancing. A suggested solution to this problem is to refer to the guidelines for couples who apply for IVF. Some Primary Health Care Trusts (PCTs) make the requirement that there "should be no living children from the current relationship or from previous relationships or no children under a specified age living with the couple". ${ }^{39}$ The regulations regarding access to IVF treatment is demonstrated by an IVF case which hit the media headlines in 2011. ${ }^{40}$ Mrs Ghevaert, a solicitor acting on behalf of the couple seeking the IVF treatment stated that:
"it is unfair to deny a childless woman access to IVF funding on the NHS if her partner has a child from a previous relationship. This actively discriminates against women and denies them the opportunity to bear their own children and become mothers. ${ }^{41}$

This could indicate that children from previous relationships should not be taken into account as each parent should have the experience of rearing children of both sexes if they so wish. Also, if couples are privately funding their sex selection treatment, then children from previous relationships should not be taken into account. The Marshalls' were told that they could have IVF if they funded it themselves. The second issue is why should parents be able to select the sex of their children for family balancing reasons but not for other non-medical reasons? For example, why should parents not be able to use PGD in order to select their children to be all of the same sex, if that is what they desire? As will be discussed in the next section, most couples who want to use sex selection methods do so because they want to have children of both sexes and allowing sex selection for family balancing will not have

[^10]such a dramatic impact on the sex ratio as might other non-medical sex selection reasons.

## Sex Ratio

By allowing parents to select the sex of their children, there is the fear that it will have a dramatic effect upon the sex ratio of the UK. However, as this section aims to show allowing sex selection only for family balancing reasons will not alter the sex ratio of the UK. The sex ratio is defined as the number of male live births for every 100 female live births. Exact sex ratio figures are hard to obtain because of the inadequacy of vital statistics of registration across many populations. ${ }^{42}$ The sex ratio tends to be consistent with 105-107 male births for every 100 female births. However, this may change if sex selection technology were allowed for non-medical reasons. This slight excess of male births than female births was first documented in 1710 by John Graunt and colleagues for the population of London. ${ }^{43}$ Some alterations in the sex ratio do occur naturally; for example it has been documented that a small excess of male births has been reported to occur during and after war. ${ }^{44}$ In Europe and the U.S there have been findings of a small but significant increase in male births during and after the First and Second World War, and in the U.S or the Korean and Vietnam Wars. The Balkan Wars and the Iran-Iraq War did not produce similar findings. ${ }^{45}$ There have been many proposed biological reasons why there could be an increase in the sex ratio during and after war which include, stress to adult males affecting the viability of XY - bearing sperm vs. XX-bearing sperm or higher frequency of intercourse, leading to conception earlier in the menstrual cycle. ${ }^{46}$ These increases in males during and after war do not last for long but would sex selection for non-medical reasons has a more lasting effect upon the sex ratio.

It is suggested that sex selection for family balancing is less likely than other forms to cause population sex imbalance. ${ }^{47}$ There is the argument that if you were concerned about the sex ratio rising than you would only allow sex selection for

[^11]family balancing which should have no effect upon the sex ratio. ${ }^{48}$ If this argument were to succeed then three conditions would have to be established. Firstly, that population sex differential is a bad thing. ${ }^{49}$ Secondly, that unfettered sex selection would allow the sex ratios to rise dramatically and thirdly, that family balancing alone would not cause population sex differentials to rise. ${ }^{50}$

In regard to the first condition, would population sex differentials be a bad thing within the UK? Literature has tended to focus on the consequences of having a more male dominated society, rather than a more female dominated society because it is presumed that given the opportunity, parents would opt to select male children. This is supported by the Mirror's health expert Miriam Stoppard who has warned that:
"given that most parents opt for boys, we would end up with a society heavily biased towards men and all that comes with that-more crime, more hooligans, more drunken aggression, more wars. There would be more room for tyrants and despots, religious fundamentalists and incitors of hatred. The prospect is so blood chilling; I hope it remains in the realm of science fiction". ${ }^{51}$ However, it must be remembered that many consequences such as increased levels of violence, are likely to be multifactorial in causation and therefore impossible to attribute simply to gender imbalance. ${ }^{52}$

The potential consequence for women of having a more male dominated society is that they may only be valued for their "reproductive capacities" which may lead to women being forced into more traditional roles which are centred around the home and the family. ${ }^{53}$ This argument is supported by Rowland who maintains that "women will be valued for their sexual and breeding purposes rather than for their intrinsic worth as a person". ${ }^{54}$ On the other hand, if males were selected more often it may

[^12]lead to there being fewer female births in one generation which would mean that there would be fewer overall births when these girls reach reproductive age. ${ }^{55}$ The potential consequence for men is that they will become rivals for the attentions of the relatively scarce available women. This was prophesied by the American sociologist, Amitai Etzioni, in 1968 when he stated that:
"if a safe and effective preconception method were to become available, sex selection will cause a severe imbalance of the sexes in the United States of America. The practice of social sex selection, he predicted, will condemn millions of men to a life of misery in which they will not find mates and will have to avail themselves of prostitution, homosexuality, or be condemned to enforced bachelorhood" ${ }^{56}$

As there will be fewer women available, men will have a lower chance of ever finding true love and settling down to marriage and children. This is what is currently happening in India, where there is a distorted sex ratio in favour of men and the consequences of this are now being realised because prenatal sex determination only began to be available in about 1985 and the resulting large cohorts of "surplus" young men are only now reaching reproductive age. ${ }^{57}$ When there is a shortage of women in the marriage market, it leaves women with the potential option of being able to "marry up" and leaving the least desirable men with no marriage prospects and a life of bachelorhood. For example, $94 \%$ of unmarried people aged between $28-49$ are male and $97 \%$ of them have not complete high school. ${ }^{58}$ Women may benefit from a society with more men because as Mary Anne Warren' notes:
"there is no empirical data to support the belief that a high ratio society would be detrimental to women. She suggests that a high sex ratio might actually create social conditions in which men would value women more highly within the social

[^13]spheres that women would occupy". ${ }^{59}$

However, how many women would be happy in a world where men would only value them for their reproductive capacities.

A distorted sex ratio would have a bad effect upon society. Assuming that males would be selected it may enhance sex discrimination and gender stereotyping as women would not have the political power or economic resources to change their status and there may even be an increase in oppression and violence against women because men may feel the need to possess a limited resource and to ensure fidelity. ${ }^{60}$ There is a chance that in the UK women will outnumber men, but there is no eviden ce of this. However, it could be suggested that a predominantly female human world would be preferable as men are responsible for more than their fair share of crime and violence.

With regard to the second condition, would unfettered sex selection cause the sex ratio to rise dramatically? A UK survey conducted at the Centre for Family Research of the University of Cambridge found that of 2359 pregnant women surveyed, $6 \%$ preferred a boy, $6 \%$ preferred a girl, $12 \%$ quite liked a boy, $19 \%$ quite liked a girl, and $58 \%$ said they had no preference for a child of a particular sex. ${ }^{61}$ These results imply that most parents do not have a preference over the sex of their children. However, in another UK survey a slightly higher number of respondents indicated that they would prefer a boy (16\%) rather than a girl to be their first-born child, a large majority ( $73 \%$ ) expressed no preference and $10 \%$ preferred a first-born girl. ${ }^{62}$ An increase in the percentage of male firstborns may leave more females with psychological and economic damage commensurate with "second child syndrome" and the disempowerment this yields. ${ }^{63}$ It could be argued that males may know that because they have been selected more often than girls that they are the more

[^14]desired gender by their parents and society and thus increasing their feelings of selfworth and self-importance and diminishing the self-esteem of their younger sisters and other girls. ${ }^{64}$ Data, such as these surveys, seem to imply that most parents have no preference to the sex of their first child but in order to prevent these potential consequences of having more first born sons, only sex selection for family balancing should be allowed.

In regard to the third and final condition, it is suggested that family balancing alone would not cause population sex differentials to rise. Allowing sex selection for family balancing implies that the intended outcome is to make a family well balanced not the country as a whole. This is because at least the first two or three children of the family will be determined by nature and not by science and it will only be when there is imbalance, for example, a family already has three boys and would like a girl, would family balancing come into play. There is a small risk that certain areas of the country could result in one sex being noticeably outnumbered. However, if there were concerns about the alteration of the sex ratio of the UK then certain conditions could be put in place to ensure the sex ratio stayed constant. These may include setting up waiting lists for couples who wanted a child of the more frequently chosen sex, always pairing couples who wanted a boy with a couple who wanted a girl, taxing parents of the preponderant sex more heavily or couples could even be encouraged or made to donate their viable spare embryos, thus almost completely eliminating any unbalancing effects. ${ }^{65}$ Not all these suggestions would be viable options within the UK in order to maintain a population balance. Firstly, waiting lists could be set up but this may lead to couples having to wait years before they could be offered sex selection and as the HFEA stated in its post-consultation paper that:
"... recent studies in the UK showed no significant overall preference for one sex over the other although a disproportionately high percentage of those actively seeking sex selection were from ethnic populations originating from outside Europe. Amongst these there was a marked preference for male children although this was from families who already had more than one female child and

[^15]were nearing the end of their reproductive lives". 66

Also, it is argued that it could result in there being bigger gaps between children than parents would like which may end in siblings not having a strong bond.
Secondly, while the pairing system does seem to be the best way to ensure that the sex ratio is maintained, it is suggested that it would have to be tightly regulated as there would be nothing to prevent clinics from swopping allowances, for example, if one clinic was experiencing a high demand for girls and another was experiencing a high demand for boys than they may swop their allowances and while this would not result in a differing of the sex ratio of the country overall it would affect the sex ratio in the particular areas. Thirdly, it could be argued that taxing parents of the preponderant sex more heavily would not work, as if parents desperately wanted a child of a certain sex and are willing to pay the fee of PGD and sex selection, then they would be willing to pay a higher tax. This would not then maintain the sex ratio. Fourthly, while couples could be encouraged to donate spare embryos to infertile couples, it would be difficult to force them to do so and thus not maintaining the sex ratio.

It is argued that sex selection for family balancing would not cause the sex ratio of the UK to rise dramatically as most couples who want to use sex selection technology do so because of family balancing reasons. There is a small chance that in countries where there is a strong socio-cultural preference for one gender then widespread family-balancing may lead to skewed population sex ratios. ${ }^{67}$ The UK is a multi-cultural society which tends to favour men and women equally so it is unlikely that there will be a dramatic impact on the sex ratio if there was unlimited sex selection. Further, for a dramatic distortion of the sex ratio to occur then two conditions must be met. Firstly, there must be a marked preference for children of a certain sex and secondly, there must be a considerable demand for a reproductive service for social sex selection. ${ }^{68}$ While historically most cultures have preferred to

[^16]have male children, this is no longer the case in the UK. It is suggested that parents with children of both sexes are much more content with their family composition as couples with two boys and couples with two girls are more likely to have a third child than couples with one boy and one girl. ${ }^{69}$ This is supported by data collected from the Gender Clinic of New York City which reported that all of 120 American couples seeking sex selection did so because of family balancing reasons: they selected girls when they had boys at home and boys when they had girls at home. ${ }^{70}$ While this data is based upon American preferences the results can be applied to the UK as both the UK and the US share a similar culture. This data shows that couples wanting to take advantage of sex selection techniques do so because of family balancing reasons. However, while sex selection for family balancing will not alter the sex ratio, will it enhance gender stereotyping because parents would expect a child of a certain sex to behave in a certain way?

## Discrimination

There is the belief that non-medical sex selection, even for family balancing, is discriminatory. Tabitha Powledge argues that couples should not be allowed to select the sex of their children either through pre - or post - conception technologies because to do so is one of the most sexist acts to engage in and it makes the most basic judgement about the worth of a human being rest first and foremost on its sex. ${ }^{71}$ However, as this section aims to show, sex selection for family balancing is not sexist and there are legitimate reasons why parents should be allowed to select the sex of their baby which are not discriminatory and which do not rely solely upon sex.

There are two types of sex discrimination. The first is sex-supremacism, which is the belief that one sex is better than the other. One of the main problems with this type of discrimination is that there is a difference between preferring to have a child of a particular sex and believing that sex to be superior. ${ }^{72}$ People may prefer to have a child of a certain sex not because they believe that sex to be superior but because they feel that they will have more in common with them. For example, a mother and

[^17]daughter might enjoy going shopping together or the same films. This can be contrasted with the disability debate where parents wish to have a child who is also deaf in order to share the same experiences. ${ }^{73}$ Mary Anne Warren has observed that
"women may have a rational reason for preferring daughters: A son might be able to share most of their particular interests and activities, but he could not share the basic experience of being female in a society which still values males more highly. However much he may sympathise with the plight of women, he will still be a member of the more privileged sex". ${ }^{74}$

While this is a valid argument, is it relevant to the UK? It is assumed that in the UK women are treated equally to men. However, it could be argued that this is not always the case. This can be demonstrated by the area of employment law, which is extensively regulated. For example, "the Sex Discrimination Act applies when a woman is discriminated against because of her sex, either directly or indirectly". ${ }^{75}$ The Act also applies to men (section 2) but only one in twenty sex discrimination cases are bought by men. ${ }^{76}$ This is crucial because it implies that if the majority of cases are being brought by women then even though the law is in place for women to be treated the same as men this is not happening. Women are still struggling for equality, even in the West, and women may prefer to have a daughter in order to share the experience of this fight. Furthermore, parents may want to have a child of the same sex in order to enjoy and share the same experiences. Parents may feel strongly about the sort of relationship they would like to have with their child and this may only be achieved by having a child of a certain sex. ${ }^{77}$ This is not because parents feel that children of one sex are superior but because sexes do differ and may offer different parent-child relationships. ${ }^{78}$ However, this is not necessarily going to happen. A daughter might prefer to play football instead of going shopping. "Unlike

[^18]the inability of men to become pregnant, there are no genetic barriers to girls fishing or boys shopping". ${ }^{79}$ Everyone is different and have different tastes and these do not necessarily conform to gender or parents expectations which are closely linked to stereotyping.

The second form of sex discrimination is sex-stereotyping which involves an exaggerated opinion of the difference sex makes to a person's personal characteristics and behaviour. ${ }^{80}$ Parents may want a child of a certain sex in anticipation of the social roles the child will perform in the future. For example a man may want a son with whom he could play football or rugby with or a woman may want a daughter because she would like a daughter to go shopping with. These assumptions presume that one sex is more appropriately suited to certain social tasks which perpetuate and foster stereotypical social roles. ${ }^{81}$ However, when parents want to select the sex of their children, do they because they want their children to have characteristics determined by biology or because of characteristics determined by society mainly in the form of gender roles?

It is now recognised by psychologists that there are many biologically based differences between male and female children including different patterns of aggression, learning, and spatial recognition, as well as hormonal differences. ${ }^{82}$ It then may not be sexist then to want a child of a certain sex especially if a couple has two or more children of the same sex at home. This is further supported by the Jack-in-the-box experiment. This experiment documented the responses of young children to a startling stimulus (a Jack-in-the-box). It was revealed that the same responses were deemed to be 'fear' when the child in question was believed to be female, and 'anger' when it was believed to be male. ${ }^{83}$ While these arguments show that some parents may want to select sex based upon biological factors, it is suggested that there may be some parents who may want to select the sex of their children based upon the anticipated gender roles that they will fill because of their sex.

The emphasis placed on 'family balancing' arguments in the West suggest that what is desired by families is not children with different genitals but children who

[^19]conforms to the opposite gender roles to children they already have. traditional gender roles. ${ }^{84}$ Gender roles tend to describe the difference between males and females in respect of behaviour, attitudes, and dispositional traits which leads to gender stereotyping. ${ }^{85}$ Traditionally, men have been warriors, hunters, breadwinners and women have tended to do the cooking, cleaning and raising the children. As a result of this differentiation men have been in a better position to acquire and control the valuable resources of society and consequently power, privilege, and status has always tended to be controlled mainly be men. ${ }^{86}$ However, the UK is country which in theory values men and women equally and a culture is beginning to form where male and female roles are interchangeable. Women no longer have to give up their careers to raise the children, men can be nurses and midwives while women can be plumbers and electricians. Whether the preferred sex is male or female, many argue that a preference of a male or female child amounts to an expectation of what a boy or a girl will be like. For example, parents might choose a male embryo expecting their son to love sports and cars but he may well prefer traditionally "female" activities such as playing with dolls. In some cases children do not always develop gender identities to match the gender roles to which they were raised. "Tomboys" may conform to the more male gender roles than the female stereotypes would allow while "sissies" may conform more to the female gender roles than the male stereotypes would allow. Children who display these behaviours are accepted by society but many assume that they will "outgrow" these tendencies after puberty. ${ }^{87}$ It could be suggested that sex selection may result in disappointment and strained parent-child relationship if the child does not conform to the gender stereotypes. ${ }^{88}$ When couples are choosing the sex of their children, they may be making their decisions in an environment which may be sexist and which may impact upon the children's future whether the parents like it or not. There is nothing in a girl's biological makeup which makes her more inclined to shop and there is nothing in a

[^20]boy's which makes him more likely to fish but it still may be true that parents who select a girl are more likely to end up a girl who shops instead of fishes and a boy who fishes instead of shops. ${ }^{89}$ While sex selection for family balancing may enhance parents' desire for a child who behaves in a certain way and with specific characteristics, there is evidence that some characteristics are of biological origin which supports the argument that parents should be allowed to select the sex of their children for family balancing in order to experience the rearing of children of both sexes. As Steinbock suggests: "The desire for a son ... might be based on the recognition that the experience of parenting a boy is different from that of parenting a girl". ${ }^{90}$ Furthermore it has been suggested that it is socially unhealthy for a child to grow up with siblings all of the same sex as society involves people of both genders interacting together, both at work and play. ${ }^{91}$ There is a risk that children who do exhibit certain traits associated with the gender the parents' have chosen may suffer from parental disappointment. Parents' who have gone to great lengths to select the sex of their children may have heightened expectations of how girls should behave and how boys should behave". ${ }^{92}$ However, prior to being allowed access to PGD for sex selection for family balancing the welfare of the future child will have to be considered (this will be discussed in Chapter 3, page 72). "Also, as Judith Daar has argued, in cases where parents deeply prefer a child of one gender, both the child and parents may be better off if the parents are able to pursue their wish ${ }^{93}$

A complex issue which has to be addressed prior to sex selection for family balancing becoming legal in the UK is how will parents react to having a sex selected child who has gender dysphoria. According, to the NHS choices website the definition of gender dysphoria is "a condition in which a person feels that there is a mismatch between their biological sex and their gender identity". ${ }^{94}$ The biological sex is assigned to people at birth by their appearance but gender identity is the gender they feel they can identify with or feel themselves to be. ${ }^{95}$ Gender dysphoria is not a

[^21]mental illness. When people have gender dysphoria they sometimes feel the need to undergo surgery in order for the physical appearance to match their gender identity. People with ordinary (i.e. nonpathological) physiologies feel the need to go through intensive and invasive medical treatment including lifelong hormone therapy so their bodies match their gender identities indicates that sex is not the determining factor for gender. ${ }^{96}$ Allowing sex selection for family balancing may enforce traditional gender roles and may not allow children to ascertain which gender identity they most identify with. This could possibly lead to parents having expectations of the qualities a girl should have and qualities a boy should have and failure to show these traditional qualities may lead to disappointment and rejection.

It is argued that sex selected children who have gender dysphoria may feel pressured into conforming to the gender identity which reflects their biological sex because of the time and money that their parents have invested in order to have a child of a certain sex. The more time and money that parents invest in order to have a child of a certain sex the more entitled they may feel about the qualities the child should have, for example, girls should wear dresses and like pink and boys should like sports and wear trousers. ${ }^{97}$ The child may feel guilt ridden into acting according to traditional gender roles and may not feel that they can develop their own identity and be honest with society and more importantly with themselves about who they really are.

However, does the small chance that a sex selected child will be born with gender dysphoria justify the banning of all non-medical sex selection and limiting parents' reproductive autonomy? It is argued that UK couples who will want access to sex selective technology do so for family balancing reasons and to experience the rearing of children of both sexes. Prior to a clinic providing reproductive services to a couple they must consider the welfare of the potential future child they will create as well as the welfare of any existing children. ${ }^{98}$ If the clinic legitimately believes that there is a risk of harm, whether physical or psychological, to the future child or to any existing children then they can refuse to provide treatment to the couple. The welfare of the child requirement will be discussed in greater detail in chapter three at page 72. As with sex discrimination, if there was a risk, no matter how small, that parents

[^22]would not accept a child with gender dysphoria or if they would not allow that child to develop their own identity then they can be refused treatment.

It is assumed that by allowing sex selection for non-medical reasons, females will be discriminated against. This danger was outlined in the Consultation Document as: "to permit sex selection for non-medical reasons is implicitly to condone sex discrimination - for example, the kind of discrimination whereby male children are favoured heirs when questions of inheritance are considered."99 It is assumed that sex selection will be used more often to select boy rather than girl children but without this assumption it is impossible to see how sex selection could be regarded as devaluing women. ${ }^{100}$ On the other hand, in some countries sex selection for males may not be sexist. Warren argues that sex selection may not necessarily be sexist by women who live in sexist cultures. ${ }^{101}$ In some cultures, such as India, there is a burden on women to produce sons and they may feel that it is in her and her child's best interest if it was male. This would be the case if Savulescu's theory of procreative beneficence was followed.

Julian Savulescu principle of procreative beneficence asserts that couples should select the child, out of all the possible children they could have, who is expected to have the best possible life based on the information available. ${ }^{102}$ "Procreative beneficence is different from eugenics because eugenics is selective breeding to produce a better population. A public interest justification for interfering in reproduction is different from procreative beneficence which aims at producing the best child, of the possible children, a couple could have. That is an essentially a private enterprise." ${ }^{103}$ Savulescu makes us consider a case where a couple is having IVF in order to have a child. It produces two embryos. A battery of tests for common diseases is performed. Embryo A has no abnormalities on the tests performed. Embryo $B$ has no abnormalities on the tests performed except its genetic

[^23]profile reveals it has a predisposition to developing asthma. ${ }^{104}$ According to Savulescu the couple should choose the child who will start life with the best opportunity of having the best life, even if no one has the right to impose this choice on them. For Savulescu having a disabled child would be wrong not because it would harm the resulting child but because it is to bring about a worse life than could have been the case. ${ }^{105}$ For Savulescu, the couple should select embryo A to be implanted. However, there are many objections to this theory.
A common objection to procreative beneficence is that you could be discarding an embryo like Mozart or an Olympic swimmer. So in the above example there would be no good reason to select embryo A. However, it could also be true that by selecting A you could be choosing someone like Mozart but without a predisposition to asthma. On the information available $A$ and $B$ are equally likely to be someone like Mozart but B is more likely to have asthma. ${ }^{106}$ While it is understandable that parents would want to select against embryos who do have diseases, especially life threatening diseases, but what about those embryos who do have a disease albeit not a life threatening? Should they be selected against because they have a disease and it is automatically assumed that they will not have the best possible life? Are we not discriminating against those who do have these diseases? Many people who do have a disability have amazing talents also, for example, Stevie Wonder, who has a unique career as a singer, composer and instrumentalist but who is also blind. ${ }^{107}$

For the procreative theory to work, it must be possible to rank possible lives as better or worse, not only in the sense that a "hearing" embryo will be more likely to grow into a child who can hear better than one who is deaf but also in relation to concepts involved in the understanding of a life as the best possible life. ${ }^{108} \mathrm{How}$ do we determine who will have a better life? Just by considering our own lives or lives of friends it is difficult with any precision as to what makes a life go well or what will make one have the best possible life. Is a life free of troubled interpersonal relationships or free of suffering and disease, or loneliness is a happier life than one which does not have any of these experiences in it. ${ }^{109}$ "It would be extremely difficult if not impossible to produce a list of qualities that would reliably lead their owner to

[^24]live a better life than he/she would in their absence."110 But how do you determine which embryo will have the best possible life?

Conflict can arise between procreative beneficence and procreative autonomy. To illustrate this problem, Savulescu uses an example of two dwarfs who want to use IVF in order to have a child who is also a dwarf because their house is set up for dwarfs. ${ }^{111}$ They also wish the child to be a girl because they live in a society where discrimination against women is prevalent and they wish to have a girl to reduce this discrimination. ${ }^{112}$ "These choices would not harm the child produced if selection is employed. But they conflict with the principle of procreative beneficence."113 In this situation, there should be a presumption in favour of reproductive for the purposes of public policy and so couples should be allowed to make their own decisions about which child they want. ${ }^{114}$

Sex selection for family balancing is not as vulnerable to the charge of sexism because the aim is to balance rather than at a particular sex. ${ }^{115}$ With family balancing, couples will not be able to use sex selection for their first couple of children and when they do take advantage of PGD for sex selection for family balancing they can only select the sex of the future child which is of the opposite sex to the existing children. Couples would not be selecting the sex of their children because of sexism or the belief that one sex is better than the other. They would be selecting the sex for a variety of rearing experiences. ${ }^{116}$ This is supported by academics such as Savulescu and Dahl who have argued that "since their choice is simply based on the gender of already existing children and not on the absurd assumption that one sex is 'superior' to another, the claim that these couples are making a sexist choice is an unjustified accusation". ${ }^{117}$ Some feminists find that choice of a child based upon sex is morally acceptable as long as the intentions and consequences of the practice is not sexist which is the case with sex selection for

[^25]family balancing. ${ }^{18}$ This implies that couples who want a child of a certain sex for family balancing reasons and for the different rearing experiences are not being sexist or believe that one sex is superior than the other.

It is argued that sex selection for family balancing will not be discriminatory. There is evidence, such as the Jack-in-the-box experiment, that there does exist biological differences between the two sexes and parents tend to only want to use sex selection techniques in order to experience the rearing of children of both sexes. It is suggested that there is a risk that sex selection for family balancing will reinforce gender stereotyping but if there were concerns that parents did have unreasonable expectations then they would be refused sex selection as one of the requirements of the process is that the welfare of any child born through reproductive technology will be considered. That sex selection for family balancing is discriminatory is not the only risk.

## Do Parents Love their Children Unconditionally?

It is argued that sex selection for family balancing should not become legal because parents should love their children unconditionally. This section will analyse this argument and show that this is not strong enough to justify the banning of sex selection for family balancing in the UK. It assumes parents have unconditional love for their children which is not true as when parents select against unhealthy embryos they are already putting conditions on which children they want to have.

The metaphor that children are gifts is used to convey something important about how the speaker believes parents should relate to their children, and the responsibilities this relationship involves. ${ }^{119}$ "In one study, Scully and her colleagues discovered that most people see their newborn child as a gift and not as a commodity. Many parents accept that they have little control over the foetus' main characteristics and show love when the child is born."120 But this might not always be the case. As reproductive technology advances will parents put more conditions on the child they want, such as, through gender, through sex, through health?

[^26]In the traditional pattern of gift giving in the Western Europe culture, when someone gives you a gift you do not quibble about its specifications: you accept it unconditionally with gratitude. ${ }^{121}$ The notion of a gift then implies a lack of control over what is received. ${ }^{122}$ This argument is crucial because it implies that parents should accept and love their child no matter what and any interference by technology would be wrong because people do not reject gifts when they are not to their liking. They accept them graciously. However, according to this argument PGD should not be used in order for parents to have a healthy child, free of disease, because children are gifts and when parents use PGD in order to have a healthy child they are refusing a gift which nature has given them. Yet, most people would agree that PGD for medical reasons should be allowed and is ethically acceptable but sex selection for family balancing is not. The difference is that "parents may believe that they have a responsibility to prevent their children from suffering and living with an intolerable quality of life. Therefore, in this situation, there may be a tension between moral responsibility and unconditional acceptance." ${ }^{123}$ Michael Sandel, an eminent Harvard political philosopher argues for reproductive choice to be limited as he firmly believes that it is a woman's right to choose but objects to that choice being extended into the area of genetic selection. He claims that no parent has the right to choose their child even if that choice involves health instead of sickness. ${ }^{124}$ Because to choose a child is to deny that child its dignity and to give parents a mastery that defies "the giftedness of life". ${ }^{125}$ Here Sandel's meaning of the word choice is critical because he is saying that while it is right that a woman should choose whether she should carry a child to term or to have an abortion and hence whether a particular child is to have a life that choice does not extend into the area of choosing which child she carries based on certain requirements. It could be argued that most parents would disagree with Sandel's view of not allowing parents to select embryos based on medical reasons because parents want the best for their children which means selecting embryos based on their health. It is suggested that most parents do not want to see their children suffer from a deadly disease and not have the ability to live life to the full and so sex selection should at least be legal for medical reasons.

[^27]"Using reproductive technologies, such as PGD, involve selecting a particular human entity and discarding the others, an act which reflects conditional acceptance." ${ }^{126}$ The love parents convey their children should have no condition. The child should not have to satisfy any condition to merit the parent's love and if parents demand that their children should exhibit certain characteristics then their love is not genuinely unconditional. ${ }^{127}$ This is supported by Davis who expertly argues that:
"just as we should love existing children unconditionally, so we should unconditionally accept whatever child we get in the course of things. If we set conditions on which child we get, we are setting conditions on our love for whatever child we get". ${ }^{128}$

However, if after three girls a couple has another girl, that does not necessarily mean that they will love that child any less because she was a girl, they just want to have the experience of rearing children of both sexes. ${ }^{129}$

Parental love should not be based upon the characteristics and talents the child exhibits. While we choose our friends and partners based on the qualities we find attractive in them, we do not choose our children. Their qualities are unpredictable and parents cannot be wholly responsible for the kind of children they have. ${ }^{130}$ While children must find their own path in life, it does not mean that parents must shrink from shaping and supporting the development of their children. As May points out, "parents give their children two kinds of love: accepting love and transforming love. Accepting love affirms the being of the child, whereas transforming love seeks the well-being of the child. ${ }^{, 131}$ However, parents who are so fixated on having a girl or shops or a boy who fishes may find it difficult to leave the child to find their own interests and natural direction. Parents who go to great deal of trouble to have a boy who plays football may find it difficult when the child spurns the football pitch for a

[^28]dancing hall. ${ }^{132}$ Parents who have invested a great amount of physical, emotional and financial energy into having a child who conforms to their ideal may find it hard to let go and allow that child to make their own decisions about their life, especially so if they wish to go down a different path to that which their parents wished for them. Will the parent-child relationship suffer because the child does not conform to their parent's gendered expectations? While there is a chance that parents have gendered expectations, as has been discussed at page 25, there is evidence which suggests that some characteristics are of biological origin and that parents wishing to use PGD for sex selection within the UK do so because they wish to experience the rearing of children of both sexes. Furthermore, prior to being allowed PGD for sex selection for family balancing parents will have to go through counselling and the welfare of the future child would have to be considered. If it was thought that parents had unreasonable expectations about having a child of a certain sex then they would be refused the treatment.

As Kant's second part of his categorical imperative states: "act that you use humanity, whether in your own person or in the person of any other, always at the same time as an end, never merely as a means." ${ }^{133}$ This could be interpreted to mean that all humans are valuable in themselves and should never be used as a means to achieve something else i.e. they should never be treated as mere commodities. The saviour sibling's cases can be used in order to show that parents selecting children for family balancing reasons is not treating children as commodities. There is a big difference between 'saviour siblings' and sex selection for family balancing which is that 'saviour siblings' are selected for a medical reason - to help save an existing ill child- and sex selection for family balancing is a nonmedical reason. But some of the arguments can be applied to sex selection for family balancing also.

A 'saviour sibling' case is that of Zain Hashmi. ${ }^{134}$ The HFEA gave permission for the Hashmi's to have a saviour sibling in order to save Zain. This decision was

[^29]overturned in the High court but was eventually reinstated by the Court of Appeal in 2003 declaring that tissue typing can be authorised under current legislation. ${ }^{135}$ "Mrs Hashmi has stated herself that 'Far from being made for spare parts these babies will be loved even more'.."136 This case raises a number of complex issues regarding how an embryo can be selected for an ulterior motive but can still be loved and cherished for themselves as well. However, how would the selected child feel knowing that they have been selected purely for the sake of saving another child?

It could be said that by selecting a saviour sibling it is saddled with the burden of knowing that they were created purely to save the life of an existing sibling. However, if the saviour sibling is loved and cherished for themselves then the saving of an ill sibling is positive. What is better than be able to save a life? ${ }^{137}$ If a child was selected at random or deliberately which was not a compatible donor the how would the resulting child feel that they were unable to save their sibling's life? How would they cope with the guilt? ${ }^{138}$ While both of these arguments are valid, based upon Kant's theory of 'treating people as an ends' selection for 'saviour siblings' should be allowed as long as the future child is seen as an end in themselves as well. If parents could not select a 'saviour sibling' in order to save an existing child then the risk is that they will continue to try naturally and if a child is born and is not a match then parents may resent that child for not being a match which could lead to a strained parent-child relationship. This argument could be applied to the issue of sex selection for family balancing. If parents cannot choose the sex of their children for family balancing reasons then they may continue to try naturally until they have a child of the desired sex. It could be argued that children born who are not of the desired sex may feel unloved and resented because they are not of the 'right' sex. The risk is that if parents did have access to this technology then existing children may feel unloved because they were not of the 'right' sex. However as Professor John Harris has stated:
'It is difficult ... to find evidence or even persuasive anecdotes that if people are

[^30]treated as means, or exclusively as means or solely as means ... even if that were to be the case, even if we could make sense of this idea, the children would be also unloved and treated so unacceptably badly that it would cause psychological damage is a piece of reckless speculation for which there is no evidence." ${ }^{139}$

Even if it was thought that parents had unreasonable expectations and who would only see their child as a commodity to further their own gendered expectations they would be refused treatment under the welfare of the child principle.

Kant has no objection to using people as a means. As the Kant scholar H. J. Paton points out that when we post a letter we use a post-office official but we do not use them simply as a means. ${ }^{140}$ There is a big difference to using people as a means and using them solely as a means. In regard to reproduction, couples often have children for a variety of reasons; to save a marriage or to strengthen a relationship or to carry on the family business or to provide an existing child with a sibling. Is deliberately having a child for whatever reason better than accidently conceiving as more often than not, people have children for no reason at all, many pregnancies being unplanned. ${ }^{141}$ Parents who conceive naturally can do so for whatever reason they choose. Those who go through PGD have to have a valid reason and at the moment the only valid legal reason in the UK is a medical one. Having a child to save another child may be a better reason than most but yet we do not prevent reproduction for the above reasons. It would be wrong to create a saviour sibling and then to just discard it when it has saved the life of the existing child but this is not what is being suggested. ${ }^{142}$ Arguably while sex selection for family balancing is not as valid a reason as having a child to save a child, the Kantian reasoning could still be applied to allow sex selection for family balancing because as long as parents see the child as an end in themselves as well, then sex selection for family balancing could be ethical from the Kantian perspective.

[^31]The disadvantage to this theory is that as long as parents see their child as an end in themselves and not as a mere commodity, then this theory would sanction selection of embryos for anything parents desire in their child. It does not distinguish between having a child to save the life of another child and saving a marriage. ${ }^{143}$ If technology advances and designer babies became a reality then this theory would sanction the selection of eye colour, hair colour, intelligence, sporting ability etc. Designer babies will be discussed at page 44. It could be argued that allowing parents this freedom to select these kinds of characteristics would effectively result in allowing them to design their own child to their own satisfaction. Parents may lose sight of the fact that the child is a means in itself also. With sex selection for family balancing, parents only choose which embryos should be implanted because they want to experience the rearing of both sexes and if they did have unreasonable expectations of their future child they would be refused treatment. Parent's selection of characteristics such as intelligence or hair colour is going too far.

Kant's theory can be compared to Derek Parfit's non-identity principle which holds that selection for any trait whether for medical or non-medical reasons would be ethical, even if the potential child is not seen as an end it itself. Parfit's theory hold that as long as the child which is conceived does not have a life worse than if they had not been created than the child can be said not to have been harmed. It is called the Non-identity principle because it is about the inability to identify the relevant individual which has been harmed. We have not harmed the specific child by our pre-conception decisions and actions because a change in our decisions or actions would have resulted in a different child being conceived. ${ }^{144}$ In order to explain his theory Parfit used an example of a pregnant 14 year old girl:
> "This girl chooses to have a child. Because she is so young, she gives her child a bad start in life. Though this will have bad effects throughout the child's life, his or her life will, predictably, be worth living. If this girl had waited for several years, she would have had a different child, to whom she would have given a better start in life." ${ }^{145}$

[^32]The question would then be whether the child of the 14-year-old girl is likely to be born into a life so terrible that it would have been better for that child never to have been born. As Parfit suggests, we should ask "if someone lives a life that is worth living, is it worse for this person than if it had never existed?" concluding that inevitably 'our answer must be "No"". ${ }^{146}$ This is Parfit's famous non-identity problem

This principle essentially relies on the basis that if this girl had waited and got pregnant later in her life then the embryo would be different and would grow up to be a different person because it would result from different gametes and so the future embryo cannot blame her mother for giving her a bad start to life as if her mother had waited she would never have been born. Bernard Williams refers to this as the zygote principle because the identity of human beings lies in the union of two given gametes: if either the sperm or the ovum or both had been different, a different human being would have been created and born. ${ }^{147}$ "There can be no claims to anyone having been harmed by any genetic choices that are made pre-conception, so long as one has a life worth living, because any variation in genetic origin would have resulted in an entirely different person being conceived." ${ }^{148}$ However, what is meant by a 'life worth living'?

In normal cases where the woman's actions have negatively affected the already existing foetus, the wrong is straightforward as the woman violates the child's rights in a harmful way but in the non-identity case, if the woman violates the right of the future child, she has seemed not to have harmed him or her. ${ }^{149}$ Conditions which could be classed as a life not worth living include being permanently unconscious in a persistent vegetative state, having life prolonging treatment withdrawn on the basis that continued treatment would not be in their best interest. Children born through sex selective technology cannot complain because to do so would mean that they have a life worse than death and this is not the case. This theory does not take into account the welfare of the child. Any sex selection no matter what reason would be ethical as long as the child did not have a life worse than death. However, the welfare of the child born is an important consideration when dealing with genetics and reproductive technology. It cannot just be dismissed. It could be argued that

[^33]parents who have unreasonable expectations for their children and want to use reproductive technology to achieve those expectations need to be screened out or else it may result in the first step being taken towards treating children as commodities and allowing parents too much control over their children.

The non-identity principle is best reflected in the current debate about whether parents should deliberately select an embryo which will have a disability. Imagine the scenario that there are two embryos: embryo $A$ and embryo $B$. If embryo $A$ is implanted it will be born deaf, but will be healthy in every other aspect. If embryo $B$ is implanted it will be born healthy and with the ability to hear. There is no way that embryo $A$ can be born without being deaf due to its genetic makeup. If embryo $A$ is implanted it would not have been harmed by being deaf because it has not been made worse off. ${ }^{150}$ Existence as a deaf child is generally not considered to be worse than non-existence. ${ }^{151}$ This can be compared to the case of a hearing child who has been deliberately deafened as he/she would have been able to continue to live as a hearing child and consequently he/she has been harmed as they have been made worse off by the choice to make them deaf. ${ }^{152}$

Parents who seek to provide the best for their children and spare no effort in order to help them achieve happiness and success are usually admired. Some parents confer advantages on their children by sending them to expensive schools or providing them with piano lessons, ballet lessons or swimming lessons. If these actions are permissible by parents and admired by others then why is it not equally admirable for parents to use whatever genetic technologies may emerge (provided they are safe) to enhance their children's talents? ${ }^{153}$ Where do we draw the line between parents supporting and developing their children's talents and choosing their children's talents? It is argued that we allow parents to make huge decisions on their children's behalf when they are young, from deciding which immunisations they have to deciding which extracurricular activities they go to but yet we find it ethically wrong for parents to choose which non-medical characteristics their children should have prior to birth. Genetic manipulation is somehow worse and more intrusive than

[^34]other ways parents seek to enhance their children's talents. However, morally speaking, the difference is less significant than it seems as bioengineering makes us question the low-tech, high-pressure child-rearing practices we commonly accept. ${ }^{154}$

However, are parents choosing the sex of their children for family balancing reasons preventing those children from having an open future and depriving them of their autonomy? A party which is affected by parents' reproductive decisions and should be taken into account is the future child. 'Choice' is always considered as belonging to the parents rather than any future child which is understandable as in assisted reproduction the child does not yet exist and so cannot by definition have a voice and it seems reasonable to assume that the option of being born outweighs in all situations to the alternative. ${ }^{155}$ It could be argued that sex selection for family balancing does affect the child once it is born because there is a risk that parents want a child of a certain sex because of gendered expectations and may not allow the child to develop their own interests and hobbies. However, in the UK clinics have to consider the welfare of the future children before parents can proceed with the fertility treatment. This will be discussed in greater detail in chapter three, page 72.

Sex selection for family balancing may result in "prospective parents seeing their future child as a vehicle for fulfilling their own life goals without seriously considering the relationship they will have with the child." ${ }^{156}$ Parents may have strong expectations that the future child will join the family business or attend the mother's school or be a "chip off the old block" but assisted reproduction is startling "wake up call" for a more critique of our current high pressure rearing experiences. There are many ways in which parents attempt to narrow their children' right to an open future such as encouraging a child to specialise early in one sport or taking piano lessons. ${ }^{157}$ It is argued that if we allow parents these high-pressure child-rearing practices, why do we not allow parents the freedom to select the sex of their children for family balancing reasons? Just because parents choose to implant certain embryos based upon the sex does not mean that the future child will not have an open future and be able to have their own wishes and desires. The same cannot be said for some of these child-rearing practices, for example from an early age they

[^35]know they will have to take over the family business and so cannot choose a career for themselves.

It is automatically assumed that all parents have unconditional love for their children. This may not always be the case. "In the context of reproduction, there are prospective parents who do not want their child at all, or who pose a threat to the health of the future child, for example, by smoking, drinking alcohol or consuming drugs." ${ }^{158}$ Parents attempt to correct anti-social behaviour or bad manners displayed by children and failure for children to follow their parents' moral guidance may result in a tension building in the parent-child relationship which could cause alienation and separation. ${ }^{159}$ The UK allows sex selection for medical reasons and "when there is a risk that the future child will be born with a serious illness or disability many parents prefer not to have the child. Does this not suggest conditional acceptance?" ${ }^{160}$ It is argued that parents' may feel not only responsible for the quality of life their child could have but also for the range of opportunities available to them and for other existing children of the family. If this is correct the tension may arise between moral responsibility and unconditional acceptance. ${ }^{161}$

It is argued that children cannot choose their parents' characteristics, such as sex, but children still accept them for who they are and show love and affection for them so why should parents' be allowed to select their children's characteristics? ${ }^{162}$ However, if parents cannot select the sex of their children then this can have long term affects for the parent-child relationship. "If the parents already have a number of children of the same sex, their sense of frustration, disappointment and even anger when a fifth of the same sex is born may adversely influence not only the relationship with the newborn child but with the older children as well." ${ }^{163}$ Would it not be better for a child to be wanted and to be born into a loving and stable environment? It could be suggested that with sex selection for family balancing this would be the case whereas if parents continued to try naturally there is no guarantee that this would happen.

The unconditional love objection is a strong argument against sex selection for family balancing because it implies that parents should love their children regardless

[^36]of their characteristics or disabilities. This is not always the case. In the UK we allow parents to select against unhealthy embryos which suggests conditional acceptance. Yet, parents may want to ensure that they can give a child the best quality of life and not just a life which is tolerable. This is not the only way parents put conditions on their children. Some parents do not want their children at all or pose a threat by smoking or drinking through pregnancy. This does not suggest unconditional love. Further, it is argued that sex selection for family balancing prevents those children from having an open future. Parents only select which embryos to implant based upon the sex, when those children are born they can still choose their own future. Sometimes children who are born naturally do not have an entirely open future because of high-pressure child-rearing practices but we do not stop these so why should sex selection for family balancing be prevented. It is argued that children who are born through sex selection can still be loved unconditionally, even though they are selected because of an ulterior motive.

## Slippery Slope

There is the belief that allowing sex selection for family balancing is the beginning of the slippery slope towards designer babies. The phrase "designer baby" is often used to describe children who have been created through genetic technology to their parents' specifications. Opponents morally condemn designer babies because they assume that parents are more concerned with fashion and pleasing themselves then they are with valuing and loving the child for its' own sake. ${ }^{164}$

The issues and concerns of designer babies were clearly presented in the film Gattaca. This film, Gattaca, presents a future where parents have used technology to select every possible trait for their children before they were born. "One of the most memorable lines of the film is that "people used to say that a child conceived in love has a better chance of happiness. They don't say that anymore.""165 There are various issues and concerns which arise from the selection of non-medical traits in

[^37]embryos and these will be discussed and analysed within this section and will show that the notion of designer babies should not be allowed to affect whether sex selection for family balancing should become legal within the UK.

The phrase designer babies is inaccurate to describe children who have been born through PGD as Chloe O'Brien was not 'designed' by her parents. Rather she or was selected from a number of candidates, but nothing at all was done to alter her genetic disposition. ${ }^{166}$ Chloe was selected out of a number of potential embryos based upon the fact that she did not carry the cystic fibrosis gene. At the moment it is not possible to alter an embryo's genetic disposition, but what about the technology of the future?

It is thought that changes in technology will soon permit whole genome embryo screening as a routine part of in vitro fertilization and may allow parents' who are testing their embryos for conventional reasons to test for other traits at a little additional cost. ${ }^{167}$ Parents who have the financial resources may become increasingly selective about which non-medical traits their children should have leading to higher levels of perfection. ${ }^{168}$ At the moment it is not possible to screen for most behavioural and physical traits. ${ }^{169}$ However, the potential does exist. Reproductive technology is a fast moving area and new things are being discovered every day. Just a few days ago there was a breakthrough in human cloning which allowed scientists to produce early embryos which marks a significant step for science. ${ }^{170}$ "The cloned embryos were used as a source of stem cells, which can make new heart muscle, bone, brain tissue or any other type of cell in the body."171 "Stem cells are one of the greatest hopes for medicine. Being able to create new tissue might be able to heal the damage caused by a heart attack or repair a severed spinal cord." ${ }^{172}$ This breakthrough shows that new things are being discovered all the time and selection for non-medical traits such as intelligence or sporting ability may not be too far in the future.

A major concern is genetic enhancement will not allow us to act freely and undermine our capacity succeed and fail on our own. It is one thing to score $95 \%$ on

[^38]a test but it is completely different if we scored $95 \%$ because our parents paid for us to have a higher level of intelligence. As genetic enhancement increases, our admiration for achievement will fade or even shifts towards the doctors who have ensured that we have certain traits. ${ }^{173}$ The concern is that human nature is being remade to suit our own desires and it may destroy our appreciation of the gifted character of human powers and achievements. ${ }^{174}$ Achievements will no longer be down to natural ability but how much money parents have invested in their children. Children who were created naturally may pale into comparison to genetically enhanced children. They will have no hope of ever winning a race, or being top of the class etc. Two classes of people will start to form, the enhanced and the merely natural. ${ }^{175}$ Furthermore, it may widen the gap between the wealthy and the poor because it will only be the wealthy which will be able to afford to select non-medical traits in their children. "Selection of embryos based on intelligence, physical, or psychological traits would contribute to inequality in society by circumventing the natural random process of evolution."176 This will be discussed in further detail in the following chapter at page 55.

It could be argued that children may suffer from psychological and self-esteem issues because their parents oversaw every part of them. Parents may choose traits in their children which makes them more competitive in society but success in competition and actual contentment may be dramatically different. ${ }^{177}$. Children will begin to feel like commodities instead of human beings with their own feelings and desires. It is said that cloning is ethically unacceptable because it violates the right to autonomy; by choosing a child's genetic makeup in advance, parents deny the child's right to an open future. This can be compared to genetic enhancement where parents have chosen their children's characteristics. Selection for musical talent or athletic prowess, would point children toward particular choices, and so designer children would never be fully free. ${ }^{178}$ Directed procreation has the potential to turn into virtual entitlement. At the moment parents can hope that they have a child of a certain sex or have a boy who will play football but if those parents pay huge sums of money and invest a great deal of time and effort into ensuring that they definitely

[^39]have a child of a certain sex or a boy who has above average talent in the football field then they are more likely to feel entitled to the desired result or find it more difficult to allow their child to develop their interests. ${ }^{179}$ By selecting which nonmedical traits their children will have parents may be putting those children under a great pressure to conform to their ideal child. If genetically manipulated children should ever wish to defer from their parents' life plan, they may be constantly reminded that their parents have paid a vast amount of money for them to have these specific characteristics. This could cause a lot of frustration and arguments between the parties involved especially if they decide not to pursue the career which their parents have chosen for them or even, if they do not make it. Resentment and pressure may be the main emotions involved in the parent-child relationship instead of love and compassion. However, an argument against this is that if parents do not choose their children's characteristics then the children are free to choose their own characteristics for themselves but none of use chooses our genetic inheritance. ${ }^{180}$ To inherit genetic characteristics is one thing but for parents to pay money and genetically alter their children's make-up are two different things.

It is assumed that unrestrained access to PGD would result in blonde-haired, blueeyed children but this is most often encountered in newspaper letters pages and radio phone-ins than in serious bioethical discourse, but the spectre of eugenics haunts most discussions of this topic." ${ }^{181}$ This is supported by Professor Philip Kitcher, who has suggested that, "interfering with prenatal decisions about which foetuses to keep and which to lose would amount to a centrally-directed eugenics programme comparable to Nazi Germany." ${ }^{182}$ Eugenics was once a term which suggested scientific promise, public health improvements but now it represents injustice and an abrogation of basic liberties. To say that a practice is eugenic is to deem it morally problematic and abusive. ${ }^{183}$ However, the crucial point is that "couples without the requisite genes for blue eyes or blond hair will quite simply be unable to pass those traits on to their offspring, however many embryos they

[^40]conceive." ${ }^{184}$ Parents will only be able to pass genes onto their children which they themselves carry. They will not be able to sit down with a catalogue of characteristics and be able to pick and choose which characteristics they would like their future children to have. Design in this sense is not possible. Tests will be performed on the embryos created in order to determine what characteristics each embryo will have if it is born. Parents will only be able to choose which embryos are implanted based upon the results of the tests. However, there is speculation that some genes may be enhanced or manipulated in the future creating 'designer babies'.

In the 1990s scientists managed to manipulate memory-linked genes in fruit flies and more recently scientists have produced smart mice by inserting extra copies of memery-linked genes into mouse embryos resulting in photographic memories. The result is that mice have learned more quickly and remember things longer than normal mice can and extra copies were programmed to remain active even in old age, and the improvement was passed on to offspring. ${ }^{185}$ Human memory is more complicated but if it did become possible to have memory-enhancing drugs for humans then there would be potential life altering changes. It could be used for people who suffer from Alzheimer's or encounter memory loss which comes naturally with old age but it could also have non-medical uses, for example, helping a lawyer cram for an upcoming trial or a business executive eager to learn Mandarin on the eve of his departure for Shanghai. ${ }^{186}$ This could be a huge development for science and reproduction and may result in both good and bad consequences for society. On the one hand, it would enable people suffering from Alzhimer's and dementia to retain their memory but on the other hand it would allow people to memorise a vast amount of information in a short space of time which may have terrible as well as unforeseen consequences, for example, memorising classified information and using for it for illegal gains. However, can sex selection for family balancing be compared to genetic manipulation for intelligence or for any other non-medical trait? The answer is no. Selection for sex will not have the same consequences for society as would selection for intelligence. Parents may choose which embryos to implant based upon their sex but that would be the extent of their choice. The embryo is not altered to suit parents' desires and wishes which may have life altering

[^41]consequences which are not yet realised, for example, take the birth of Dolly the cloned sheep who died a premature death. ${ }^{187}$ Allowing parents to choose characteristics of their children may have long term consequences which are as yet unknown - do we really want to take that risk? These consequences could be dangerous and irreversible and alter the biology of life forms, the ecology and natural evolution. ${ }^{188}$

The UK allows sex selection for medical reasons but not for non-medical reasons. Why is it that as a society we find it ethically and morally acceptable to select the sex of children based on medical reasons but not for non-medical reasons? PGD is ethically controversial whether it is for medical or non-medical reasons as it involves the screening and likely destruction of embryos, and the selection of children on the basis of expected traits. ${ }^{189}$ At one end of the scale there are those who believe that all sex selection is wrong, and should be illegal. These opinions are mainly driven by how many potential lives will be lost and that humans should not "play God". At the other end of the scale there are libertarians who may either favour a 'free market' in sex selection, or perhaps a lightly regulated market: one controlled just enough to ensure technical competence and fair dealing. ${ }^{190}$ In between there are various other ideas. One of these is the present regulation of sex selection in the UK.

Sex selection for medical reasons may lead to parents to start selecting against diseases which are mild in nature. Davis uses the term "selection drift" which is the drift towards the mild end of a spectrum that has very severe medical problems at one end and very mild conditions, or even above average traits, at the other. Those who believe that parents should have unconditional live for their children believe that selection is wrong anywhere along the spectrum (except perhaps when the condition is worse than death). ${ }^{191}$ We should love and accept any child unconditionally no matter what their characteristics are. If we start setting conditions on which children we want then we are setting conditions on our love for those children. ${ }^{192}$ This could

[^42]be compared with the recent debate on prenatal testing and termination for Down syndrome which shares similar ethical concerns for the use of PGD for the selection of deadly and mild diseases. Those who have Down syndrome often have mild or manageable mental and physical impairments. ${ }^{193}$ This may result in pressure being put onto parents which may lead to a high rate of termination of Down Syndrome pregnancies which reduces the number of individuals living with Down Syndrome and in turn may lead to the stigmatization of those living with Down Syndrome. ${ }^{194}$ This can be compared with the disability debate. "Many disability rights activists and those with disabilities oppose sex selection, fearing that the smaller population of persons born with disabilities would face increased stigmatization. Disability activists also dispute the basic assumption that disabilities are so undesirable as to require their complete elimination". ${ }^{195}$ "Asch argues that the same arguments apply to PGD: "As currently practiced and justified, prenatal testing and embryo selection cannot comfortably coexist with society's professed goals of promoting inclusion and equality for people with disabilities. ${ }^{196}$ Based upon this argument it would be wrong to select for sex or disability but yet we find it acceptable to select against disability and thus not promoting inclusion and equality and its unacceptable to select the sex of children for family balancing because it would not be promoting equality.

It could be argued that sex selection for medical reasons may also lead parents to select against embryos where there is only the potential that the disease will develop. People can have a genetic mutation which is associated with a particular disease, such as hereditary breast cancer, does not automatically mean that the disease will develop. Children who have these mutations may remain healthy for decades and if symptoms did begin to appear then a cure or treatment could have been discovered in the meantime. ${ }^{197}$ PGD could be used to screen embryos carrying the p53 or BRCA1\&2 mutations which could result in the destruction of embryos who would have a greatly increased chance of developing cancer. PGD for these mutations or for Alzheimer's prevents the birth of children who would remain healthy until their 40s or 50s before they will experience symptoms leading to an early

[^43]death. ${ }^{198}$ Parents who select against embryos who will have these conditions later in life reflect the desire of parents to have children with good prospects for healthy and long life. But if PGD is used to test for early onset genetic disorders then it should be accepted that testing should be done for later onset conditions as well. ${ }^{199}$ However, if we rely on the argument that sex selection for family balancing is wrong because it will lead to healthy embryos being discarded, then selection for certain diseases should also be wrong because there is no certainty that the disease will develop if the embryo lived.

It is argued that sex selection for medical reasons is justified because we are selecting for children who will be free from disease and who will have a healthy and long life whereas sex selection for non-medical reasons is satisfying parents' desires and whims. However, the medical risks are the same for both medical and nonmedical sex selection. If a woman is willing to undergo the physical and emotional burdens of PGD and IVF, then she should be allowed to select the sex of the child for family balancing reasons. Robertson has argued that it is sometimes acceptable for parents to choose the sex of their children when there is a good reason to believe that the parents are fully informed about the procedure and counselled about having unrealistic gender expectations. ${ }^{200}$ As parents are allowed to select the sex of children to be free from mild diseases and even from diseases which may not develop until later in life and in certain cases may not even develop then should parents not be allowed to select the sex of their children for family balancing reasons. Not all the embryos which are discarded will be unhealthy and yet we find this acceptable for medical reasons but not for family balancing reasons?

At the moment designer babies are not possible. It is claimed that there is evidence which suggests that at some point in the future, science will evolve and technology will be created which allows parents to pick which characteristics their children will have. But we should be more concerned about the here and now and currently parents who want to take advantage of sex selection technology do so because of family balancing reasons. It is argued that sex selection for family

[^44]balancing should not be illegal because there is the possibility of designer babies in the future.

## Conclusion of Chapter

It is suggested that sex selection for family balancing reasons should become legal within the UK as most couples wanting access to PGD for sex selection do so because of family balancing reasons. It is believed that parents want to be able to experience the rearing of children of both sexes. Psychologists now recognise many biologically based differences between male and female children, including different patterns of aggression, learning, and spatial recognition, as well as hormonal differences. Sex selection for family balancing will not alter the sex ratio because parents will have to have at least two or three children before they can access the technology and they will only be able to select the sex which is opposite to the sex of the child they already have. However, there are many concerns with allowing sex selection for family balancing. Firstly, it may be discriminatory against females. Secondly, there is the risk that any child born may have gender dysphoria. Thirdly, sex selection for family balancing does not conform to the idea that parents should love their children unconditionally. Fourthly, allowing sex selection for family balancing may be the beginning of the slippery slope towards designer babies. It could be argued that these risks could produce the conclusion that sex selection for family balancing should be banned. However, it may be suggested that these risks are not strong enough to justify the limiting of parents' reproductive liberty in selecting the sex of their children for non-medical reasons. I suggest that the UK should take the position that parents should allow parents the freedom to select the sex of their children for family balancing reasons only. This position takes into account both sides of the argument by allowing parents' some control over the sex of their children but that it is not totally unlimited. This would allow parents to have reproductive autonomy within a set of strong rules and regulations which will enable the state to ensure that reproductive technology advances at an appropriate rate and does not lead to the conclusion of designer babies. If parents do have unreasonable expectations of any children they may have through assisted reproduction then they can be prevented from using the technology for sex selection because of the welfare of the future child. However, the socio-economic factors do need to be taken into account also.

## Chapter 2

## The Socio-Economic Factors

Allowing sex selection for family balancing may have social and economic consequences for the UK. Continuing to ban sex selection for family balancing could result in couples travelling abroad to seek the treatment they require but to legalise sex selection for family balancing may result in questions regarding how it should be funded and if it is funded privately will there be a widening of the gap between the rich and the poor. This chapter will analyse these issues and aim to show that sex selection for family balancing should be privately funded and it will not result in a widening of the gap between the rich and the poor because parents will only be choosing which embryos to implant based upon sex. They would not be able to choose which characteristics their future children will have, such as a higher intelligence or sporting ability, which will give them a head start on children born naturally.

## Reproductive Tourism

Reproductive tourism is the willingness of citizens to travel abroad in order to seek assisted reproductive technology. ${ }^{201}$ Couples take advantage of reproductive tourism because of the restrictive law in their own country or because of the cost. ${ }^{202}$ Some say that the internet plays a huge role in reproductive tourism. Clinics abroad which offer sex selection techniques often have websites which can be found by couples by simply typing "clinics offering sex selection" into a search engine. ${ }^{203}$ A simple Google

[^45]search returns $16,300,000$ results. These websites are also written in various languages which makes it easier for say English prospective travellers to find clinics in Greece which offer sex selection services. ${ }^{204}$ Traditional word of mouth has played a significant role in facilitating reproductive tourism but digital word of mouth has dramatically increased the speed and scope of patient information sharing. ${ }^{205}$

In the past few years reproductive tourism has increased which has been highlighted in the media. In 2011 the Daily Mail published an article concerning the lengths parents will go to in order to select the sex of their children. ${ }^{206}$ As sex selection for non-medical reasons is illegal within the UK, parents wishing to select the sex of their children have to do so by travelling abroad to another country, such as the United States, where PGD is easy to arrange without even a medical referral. ${ }^{207}$ In 2010 the Guardian published an article detailing the facts of two instances where parents have travelled abroad in order to select the sex of their baby. The first case involved a couple named the Gunns' who had three small boys and wanted a girl. ${ }^{208}$ The second case involved a couple named the Trathens who had four boys and wanted a girl. ${ }^{209}$ Both these cases imply that there are couples in the UK who seek sex selection for family balancing reasons and if they have the resources they will go to extreme lengths to have a child of a certain sex. They do so even though there is a risk that they will not have a baby at the end of the treatment as couples are still subject to the same percentage of IVF working as couples who are receiving IVF for fertility reasons. Despite this risk couples are willing to pay and this is realised by the assisted reproductive community. Fertility doctors have become influential stakeholders who use a combination of medical and commercial

[^46]practices to enhance their market positions. ${ }^{210}$ Cross-border movements are sometimes facilitated by clinics or brokers at home who have partnerships abroad". ${ }^{211}$ Even though sex selection for non-medical reasons is illegal in the UK there are clinics, such as the Rainsbury Clinic, which help couples travel abroad for sex selective treatment. ${ }^{212}$ Clinics like these find effective ways in order to help couples to overcome issues of distance and minimise time and travel costs. ${ }^{213}$ This not only promotes sex selection abroad but also allows couples to exercise their reproductive autonomy which they may not be able to in their own country because of restrictive laws. ${ }^{214}$

The question which then arises is whether the UK can prevent couples from travelling abroad to select the sex of their baby? While prosecuting couples travelling abroad for treatment has been unknown, Turkey has recently announced that it would imprison women up to three years if they seek to become pregnant through IVF abroad and that regulations would be in place to prevent Turkish clinics from serving as agents for foreign infertility clinics. ${ }^{215}$ This principle is called extraterritoriality and simply refers "to the application of the laws of one country to persons, conduct or relationships outside of that country". ${ }^{216}$ However, prosecuting couples travelling abroad to select the sex of their baby would be quite difficult. Firstly, there would be no signs when the couple are travelling that they are on route to select the sex of their baby through PGD. Secondly, clinics abroad would have no incentive to inform the couple's authorities in their home country. ${ }^{217}$ Thirdly, when the couple arrive back in the UK and find out that the woman is pregnant they can just inform their doctor that they have conceived naturally. Support against penalising British couples travelling abroad for reproductive treatment has come from Professor Margaret Brazier who has argued that no system could eliminate procreative tourism

[^47]and this was supported by the House of Commons who has stated that any attempts to prevent reproductive tourism would not be justified by the seriousness of the offence. ${ }^{218}$ It could be argued that penalising couples travelling abroad for reproductive treatment would be a waste of time and resources as prohibition of reproductive tourism would not prevent couples who are determined to select the sex of their baby from doing so. They may view the risk is worth taking and prosecution of these couples would be difficult due to the lack of evidence.

The willingness of couples to seek sex selective treatment abroad rather than abide by the law in their own country suggests that prohibition of sex selection for non-medical reasons is not that effective. ${ }^{219}$ It is argued that if parents are going to access sex selective technology anyway then it might as well be in their own country where there is a properly regulated health care system rather than allow them to suffer the cost, inconvenience and risk of treatment abroad. ${ }^{220}$

Those who have the money and resources like the Trathens and Gunns do exercise their reproductive autonomy by travelling abroad and selecting the sex of their baby, mostly for family balancing reasons. The advantage of travelling abroad for sex selection is that it allows couples to be private about the treatment they are seeking. "Disguising an absence from work for treatment abroad as a 'holiday' can be helpful for those who did not wish to divulge treatment to employers or family members". ${ }^{221}$ The disadvantage is that reproductive tourism is only an option for those who can afford it. Allowing sex selection for family balancing in the UK may slightly reduce the cost of treatment which may allow more couples a better chance to access the technology and not just the very wealthy.

## Inequality between the wealthy and the poor

A crucial social consequence of allowing non-medical sex selection is that it may result in there being an inequality between the rich and the poor because of the expensive nature of PGD and a gap is already beginning to form between those who

[^48]can afford to select the sex of their baby for non-medical reasons and those who cannot. According to the UK Cypriot Fertility Association website the cost of PGD with your own eggs is approximately $£ 12,485$. $£ 200$ for a consultation, $£ 685$ for screening (both male and female), $£ 1,300$ for medication depending on need, $£ 1,300$ for treatment and $£ 9,000$ for the Cyprus fee. ${ }^{222}$ This shows that for most being able to select the sex of your baby is out of reach and the only course of action left is to continue to 'try' naturally until they get the result which they wish for. This is just the beginning and as reproductive technology advances there is a high possibility that doctors will be able to test for more and more characteristics and thus widening the gap between the rich and the poor even more because it will probably only be the wealthy who can afford it. ${ }^{223}$ However, should non-medical sex selection be banned because it is the first step on the slippery towards designer babies which may enhance the gap between the rich and the poor? This section will show that sex selection for family balancing will allow more couples the opportunity to access the technology and allow them to experience the rearing of children of both sexes if they so wish.

Through genetic enhancement "parents will not only be able to produce an athletic superstar, but they could also create a physically attractive child, a theatrical prodigy, a strong wrestling champion, or a mathematical genius". ${ }^{224}$ It is assumed that parents want to give their children the best start in life and if that was achieved through the use of genetic enhancement technology then they would use it if given the opportunity. ${ }^{225}$ However, this may lead children to be treated as commodities and not be loved unconditionally by their parents. The more characteristics parents select the less likely children will have of an open future. Even without genetic enhancement technology children born to rich parents would probably have more opportunities than children born to poor parents. This can be seen through George Monbiot's analogy between 'choosing your children's genes' and 'choosing to

[^49]educate them privately,. ${ }^{226}$ Parents who send their children to fee-paying schools attempt to give their children a better start in life than their peers. As fee-paying schools are only open to those children whose parents can afford them and some only to the affluent minority it might be thought that these schools seek to reinforce the privileged position of those who attend them by giving them a high-quality education as well as a potentially lucrative network of contacts for later in life. ${ }^{227}$ It is believed that in the same way that rich parents can afford to give their children a head start in life by sending them to private schools, rich parents will be able to afford to select which characteristics they would like their children to possess. Children will not only be born with silver spoons in their mouths but also with 'golden genes in their chromosomes'. ${ }^{228}$ This may effectively allow parents to give their children an even bigger advantage over those who are less fortunate. Tamara Garcia and Roland Sandler say that:
> "Those who can afford the technology when it first becomes available will enjoy a compounding benefit: the increased capabilities that the technology provides [...] will further advantage the individual (who is already advantaged in virtue of their position and resources, which provided them access to the technologies) in pursuit of competitive and positional goods that are relevant to one's quality of life". ${ }^{229}$

While this would give children born to rich parents an even bigger advantage over those born to poorer parents, could we prevent parents from giving their children the best possible start in life, even if it means widening the gap between the rich and the poor?

As was discussed in the previous chapter, Savulescu's principle of procreative beneficence maintains that "parents should select the child of the best possible

[^50]children they could have, who is expected to have the best life, or at least as good a life as the others, based on the relevant, available information". ${ }^{230}$ Savluescu argues that based upon this principle parents should select non-medical traits in their children even if it causes social inequality. ${ }^{231}$ However, while non-medical sex selection only causes inequality between those who can afford it and those who cannot, allowing selection for non-medical traits may have far reaching effects because it not only effects those who can afford the technology but it also has social and economic consequences. It is assumed that children selected for non-medical traits would have the better careers and lifestyle while those who were not selected would do the menial jobs and may even struggle financially. It is argued that eventually a cycle will form where rich parents will select to have the best children possible and when those children grow up and have children they will select to have the best children possible also and the cycle continues. This may result in a barrier forming where those from the lower-classes will never be able to have the higher paid jobs or the best sporting ability. They may be viewed as lacking the socially desirable traits. ${ }^{232}$

Still, at the moment it is not possible to screen for non-medical traits such as intelligence and there is no clear link between such traits and particular genes. ${ }^{233}$ But research does continue in this area and there is the possibility that in the future scientists will find the link and designer babies will be a reality. If this is so, an important fact needs to be remembered and that is that the wealthy will only be able to select the traits in their children that they themselves carry.PGD is not genetic modification as it does not add or remove anything from the genes possessed by the couple's embryos. ${ }^{234}$ Even though the rich may have the resources to select these traits they cannot do so unless they themselves carry the genes they wish to select for. For example, if a wealthy couple wish to select a child with a high aptitude for maths unless they themselves have the gene for a high aptitude for maths they will be unable to select that gene in their children.

[^51]A crucial argument against selection for non-medical traits including sex selection is that "social equality demands that each citizen be treated equally and has equal access to goods. There can be no social justice when enhancement procedures are not available to all citizens". ${ }^{235}$ While this may be true for parents selecting enhancement characteristics it could be argued that by banning non-medical sex selection we are further restricting those who can afford to use PGD and sex selection. At the moment those who want to select the sex of their baby and can afford to do so have the possibility to travel abroad. If sex selection for family balancing were to become legal then it may result in opening up opportunities for those who want to select the sex of their baby but could not necessarily afford to travel abroad to do so. While allowing sex selection for family balancing in the UK would not give everyone equal access to the technology it may not have the same effects as allowing genetic enhancement technology because there would be no selection for characteristics such as intelligence which would give the wealthy a bigger advantage. Those who could afford sex selection for family balancing would be able to exercise their reproductive autonomy and select the sex of their baby unless the NHS decides to fund the treatment which would seem unlikely.

## Who Pays?

Prior to allowing sex selection for family balancing to become legal within the UK, it must be decided who will pay for couples to select the sex of their baby. There are two options. On the one hand the NHS could pay and on the other couples, themselves, could pay.
"The NHS is funded by the central government, but it is divided into local units, called Primary Care Trusts (PCTs), each of which has substantial control over the spending of resources". ${ }^{236}$ The NHS is financed out of general taxation and so should be available for patient without any extra costs but while there is no "blanket ban" on excluding a medical procedure from funding not all areas of health care are

[^52]equally funded. PCT's in different areas may decide to fund different treatments. ${ }^{237}$ The result is known as the "postcode lottery" which describes "seemingly random countrywide variations in the provision and quality of public services". ${ }^{238}$ In 1999, NICE was established in an attempt to put an end to unequal access to treatments in different localities. NICE seeks to establish clinical and cost effectiveness of treatments. ${ }^{239}$ Despite the establishment of NICE patients still receive different types of treatments in different areas as PCTs are under no obligation to follow NICE guidelines and each PCT makes different decisions about how healthcare should be distributed.

Paying for sex selection could be contrasted with how IVF is paid for. According to NICE guidelines on IVF, it is stated that
"in women aged under 40 years who have not conceived after 2 years of regular unprotected intercourse or 12 cycles of artificial insemination (where 6 or more are by intrauterine insemination), offer 3 full cycles of IVF, with or without ICSI. If the woman reaches the age of 40 during treatment, complete the current full cycle but do not offer further full cycles". ${ }^{240}$

For women aged 40-42 the guidelines are different. If a women between 40 and 42 has not conceived after two years of regular unprotected intercourse that 1 full cycle should be offered with or without ICSI, provided the following 3 conditions are met:

- they have never previously had IVF treatment
- there is no evidence of low ovarian reserve (see recommendation 1.3.3.2)
- there has been a discussion of the additional implications of IVF and pregnancy at this age. ${ }^{241}$

[^53]If a woman under the age of 40 has had IVF treatment before, no matter whether it was funded by the NHS or privately it should count towards the total of 3 full cycles offered by the NHS. ${ }^{242}$ As can be seen these recommendations are strict and the PCT's are under no obligation to follow them exactly. Even though the NHS covers fertility treatments many couples do end up having to go private and the assumed consequence is that access to fertility treatment is dependent on wealth and not the NHS. ${ }^{243}$

Funding non-medical sex selection can also be contrasted with how PGD for medical reasons is funded within the UK. According to Guy's and St Thomas' Centre for Pre-implantation Genetic Diagnosis the cost of sex selection through PGD per cycle is approximately $£ 8,000$ plus drug costs which is approximately $£ 1,000$ $£ 1,200 .{ }^{244}$ The website states that once the centre knows whether a couple is eligible for PGD they apply to the couple's local PCT for funding. ${ }^{245}$ The PCT will take into account the couple's circumstances, for example, the woman's age or the success rate of providing the treatment. If they decide they will not provide the funding then it is down to the couple whether or not to pay for the treatment themselves. As with IVF, the funding for PGD could depend on whether the couple can financially afford to pay for the treatment themselves.

In September 2012, the Telegraph published an article about the number of patients going private for their healthcare needs. ${ }^{246}$ The article found that a poll carried out by ComRes for the firm BMI Healthcare, discovered that 70 per cent of GPs are unable to refer patients for treatment on the NHS at least once a month as the patient does not qualify under the criteria issued by the local PCT. ${ }^{247}$ Rationing is a vital aspect of any healthcare system and decisions about who receives what treatment is taken 24 hours a day and to some may seem unfair. "Rationing is said to occur when there is only a limited resource of health care and the decision is made to offer it to some people, but not others". ${ }^{248}$ In determining the costeffectiveness of treatments, NICE uses the concept of Quality Adjusted Life Years

[^54](QALY). The QALY is a unit used to measure the cost-effectiveness of different treatments for the same condition or across treatments for different conditions. The QALY's system has two parts to it. Firstly, there is the length of life - months or years- that the patient can expect following treatment and secondly, there is the quality of life. The quality is measured on a scale ranging from 0 (death) to 1 (perfect health) and takes into account the mobility, pain and discomfort, anxiety or depression and the ability to pursue usual activities in daily life. ${ }^{249}$ The final part is to work out the cost. "A treatment which offered a large number of QALY for a small amount of money would be highly cost effective, while one that produced a low number of QALY for a large amount of money would not be". ${ }^{250}$ It is argued that it would be difficult to assess whether a person should be given non-medical sex selection on the NHS through the QALY system as non-medical sex selection has nothing to do with a person or future person. This could be seen as a major problem when deciding who should fund non-medical sex selection. While the NHS does fund IVF and PGD for medical reasons there are strict requirements which couples do have to meet and the aim is to fix a medical problem. People have IVF because they cannot have children naturally and so medicine and the NHS steps in to help. With PGD and medical reasons there is a risk that a child will be born with a potential lifethreatening illness and again medicine and the NHS steps in to help. But even the NHS cannot guarantee funding all requests for IVF and PGD which leaves couples with the three options. The first option is for the couple to go private and pay for the treatment themselves. The second is to continue to try naturally for a child and in some cases hope the resulting child is not affected by a genetic disease and the third is to not have any children.

If any non-medical sex selection were to become legal within the UK then unfortunately it does not seem justified to allow the NHS to fund the treatment. This is because the reasoning behind the treatment is not medical but just parental preference. It is not because they cannot have any children but because they wish to have a child of a certain sex. The NHS resources are not unlimited and unfortunately harsh decisions do have to be made regarding who receives what treatment. Access to certain treatments have already been restricted by raising the threshold of how ill

[^55]or disabled a patient has to be before they can receive treatment. It is argued that The NHS is already struggling without adding to its burdens and so if non-medical sex selection was to become legal within the UK it should not be funded by the NHS. In a perfect world everyone would have the same access to the same treatments but regrettably that is not possible and it could not be justified allowing a couple to receive sex selection for family balancing on the NHS but not a pensioner who needs their cataracts' removed. If couples could afford to select the sex of their baby then the issue which arises is what happen if parents disagree over the sex they want or what to do with spare embryos?

## Parents Who Disagree Over the Sex

If sex selection for non-medical reasons were to become legal within the UK then certain dilemmas may arise where parents disagree over what to do with the spare embryos. I argue that only sex selection for family balancing should become legal within the UK and because of this it is not possible for parents to disagree over the sex of the child they wish to have. This is because with family balancing parents will be required to select the sex of the child which is opposite to any existing children they already have. However, the situation may arise where parents are in disagreement over what to do with any spare embryos, which may cause the problem of who decides what should happen to them. There are various options open to couples of what to do with the spare embryos. Firstly, embryos could be donated to research. Secondly, embryos could be frozen but there is a time limit on this. Thirdly, embryos could be destroyed or donated to infertile couples. If parents do disagree over what is to happen to the spare embryos then the question becomes who gets to decide? In order to answer this we need to look towards the case of Evans v the United Kingdom.

In this case Evans was diagnosed with having a serious pre-cancerous condition of the ovaries. Prior to treatment Evans had some of her eggs removed which were then fertilised with her partner's J's sperm and frozen. Both Evans and J were informed that either could withdraw their consent up until the time that the fertilised
eggs were implanted into Evans. Unfortunately the relationship broke down and J withdrew his consent for the embryos to be kept frozen. ${ }^{251}$ It was stated that:
> "Respect for human dignity and free will, as well as a desire to ensure a fair balance between the parties to IVF treatment, had underlain the legislature's decision to enact provisions permitting of no exception, to ensure that every person donating gametes for the purpose of IVF treatment would know in advance that no use could be made of his or her genetic material without his or her continuing consent. The absolute nature of the rule also served to promote legal certainty and to avoid the problems of arbitrariness and inconsistency inherent in weighing, on a case-by-case basis, "entirely incommensurable" interests". 252

It was also stated that "it was not appropriate for the applicant's right to respect for the decision to become a parent in the genetic sense to be accorded greater weight than J's right to respect for his decision not to have a genetically related child with her". ${ }^{253}$ The result of this case was that the frozen embryos had to be destroyed and Evans lost her last chance to have a biological child. This implies that if a couple disagreed over what happens over spare embryos or embryos of the opposite sex to which they desire then based upon this case the embryos would have to be destroyed. This is because the principle of consent is paramount and prior to treatment both people are informed that embryos will only be kept as long as their consent is valid.

## Conclusion

It is argued that despite the potential economic and social issues, sex selection for family balancing should become legal within the UK. Couples who want to use sex selection technology do so because of family balancing reasons, as evidenced by the Trathens' and Gunns' cases. It is assumed that those who can afford to, travel abroad to countries where sex selection technology is legal often combining it with a holiday. Allowing sex selection for family balancing to be legal within the UK may

[^56]allow fairer access to the technology by cutting cost as they will not have to travel abroad. Even though couples may have to fund the treatment privately they will not have to find the money to travel abroad also. Unfortunately, the NHS does not have unlimited resources and tough decisions do have to be made about who should receive treatment. Parents who want to select the sex of their children for family balancing reasons do not have a medical condition. It is a personal preference and therefore the NHS resources will be used to help people who have medical conditions before those who want to have access to technology for sex selection for non-medical reasons. It is argued that there is a fear that sex selection for family balancing will be the beginning of the slippery slope towards designer babies and consequently a gap will begin to form between the wealthy and the poor. This will not be so as parents will not be able to select for characteristics such as intelligence or sporting ability. It is argued that while there will be a gap between those who can afford the technology and those who cannot, it will give low-earning couples a better chance of funding the treatment if it was allowed in the UK than if sex selection for family balancing was illegal. Parents will not be able to disagree over which sex they want their child to be because with sex selection for family balancing, couples can only select the sex which is opposite to that which they already have. So far, this dissertation has shown that there are no ethical or social economic issues standing in the way of sex selection for family balancing becoming legal within the UK. However, are there any legal barriers preventing sex selection for family balancing becoming legal

## Chapter Three

## A Legal Analysis

With sex selection technologies evolving and becoming more available regulation is essential. However, regulation of sex selection and reproductive technologies are far from straight forward. The UK is a multi-cultural society with ranging views and opinions on sex selection making regulation difficult. Society is composed of a variety of people with a variety of beliefs and the law attempts to reflect the common moral position of all these beliefs. It attempts to provide a framework of what is morally acceptable and unacceptable in society. ${ }^{254}$ However, finding a common moral position within society on sex selection will be near non-existent. This leaves the problem of how to regulate sex selection. This section aims to analyse the legal principles involved in sex selection and to find the best position the UK can take which takes into account both sides of the argument.

## The current law in the UK

The law on assisted reproduction and sex selection is heavily regulated in the UK through the HFE Act. The HFE Act was passed in response to the recommendations of the Warnock Report 1984. ${ }^{255}$ The Warnock Report 1984 was a response to the speed at which reproductive technologies were advancing and also to the birth of Louise Brown in 1978. ${ }^{256}$ "The committee concluded that the human embryo should be protected but that research on embryos and IVF would be permissible, given appropriate safeguards". ${ }^{257}$ It was proposed by the committee that a regulatory committee should be set up to license the treatment, storage and research of human embryos. ${ }^{258}$ This regulatory committee was to be the HFEA and in many ways the report formed the basis of the HFE Act. ${ }^{259}$ Consequently, the area of assisted

[^57]reproduction and sex selection became regulated through the Human Fertilisation and Embryology Act (HFE Act) 1990 as amended in 2008.

The Act divides reproductive treatments into three categories. Firstly, there are those treatments which are illegal, for example, it is unlawful to place a non-human embryo in a woman (s 3(2)). ${ }^{260}$ Secondly, there are those treatments that are illegal unless performed by a licensed clinic, for example, the storage of an embryo is only legal if carried out by a license $(\mathrm{s} 3(1 \mathrm{~A}))^{261}$. Thirdly, there are treatments which are not covered by the Act and can legally be carried out without a license, for example, "do it yourself insemination" using fresh sperm and a turkey baster. ${ }^{262}$ Sex selection falls within category two - it is illegal unless the clinic is licensed to perform sex selection by the HFEA. If a clinic performed any type of sex selection whether medical or non-medical without a license from the HFEA then it would be acting illegally. If sex selection for family balancing were to become legal within the UK, the HFEA would act as the relevant regulatory body to ensure the implementation of the new law.

## The role of the HFEA and Sex Selection

The HFEA was created by section 5 of the HFE Act 1990 and is an executive nondepartmental public body sponsored by the department of health and began operating on the $1^{\text {st }}$ August $1991 .{ }^{263}$ The role of the HFEA is to investigate all clinics in the UK whether private or public which offer reproductive services. ${ }^{264}$ This ensures that no clinic can carry out unlicensed activities, such as sex selection for family balancing, without the HFEA knowing of it.
Despite non-medical sex selection being illegal in the UK, the HFEA does not have the power to punish UK clinics for recommending to couples clinics abroad which

[^58]offer sex selection technologies without legal restriction. ${ }^{265} \mathrm{~A}$ clinic could legally carry out assessment, drug therapy in preparation for IVF and even egg retrieval, as long as licensed clinic handles embryology and embryo replacement. This is known as 'Transport IVF' and could help clients reduce the cost of overseas treatment. ${ }^{266}$ PGD is expensive so if part of the treatment could be performed in the UK it could act as an incentive to parents to use PGD for sex selection in the UK instead of travelling abroad because it will be cheaper. From the view of medical ethics, non-medical sex selection allows a healthy woman with no fertility problems to undergo the pain, expense and danger of egg collection and embryo transfer for the sole purpose of complying with parental desire. ${ }^{267}$ However, if a woman is willing to undergo the great physical, emotional and financial burden of having a child of a certain sex for family balancing reasons, then why should she be prevented from doing so?

A scenario could arise where an NHS doctor could recommend a potentially harmful though extremely lucrative procedure which has no medical benefit for either the mother or the child which he has a financial interest in. ${ }^{268}$ Lord David Alton, a cross-bench peer and a member of the ali-party Parliamentary Pro-Life group has argued that "if you have a doctor with a vested interest in organising treatment that's illegal in the UK, that raises enormous moral issues", he further argued that "its deplorable that there are these ways to circumvent the law in Britain". ${ }^{269}$ It is argued that this is where the law on sex selection fails magnificently. It does not allow sex selection for non-medical reasons to be legal within the UK but neither can it prevent doctors helping couples to travel abroad to select the sex of their child or from couples acting on their own accord. It is suggested that the law on sex selection is ineffective with no consequences for those disregarding the law and travelling abroad to select the sex of their children. However, unlike international surrogacy where parents can run into problems with obtaining passports in order to bring the children home, it would be extremely difficult to prove that a woman has become

[^59]pregnant through IVF and PGD abroad, which is illegal in their own country. ${ }^{270}$ One might argue that if couples can access these sex selective technologies abroad then why not just allow sex selection for non-medical reasons to become legal in the UK where there is a properly regulated healthcare system which also reduces the cost, inconvenience and risk of treatment abroad. ${ }^{271}$ However, while the reproductive tourism argument is persuasive, it is ultimately not the decisive factor in determining whether sex selection for family balancing should become legal within the UK. This is because the ban on sex selection for non-medical reasons may be partially effective as some couples may be discouraged from travelling abroad to seek sex selective treatment. ${ }^{272}$

When the HFEA was created reproductive technology was still quite new and controversial. The existence of the HFEA has allowed reproductive technology to advance with credibility and has reassured the public that scientists are not creating 'Frankenstein's children'. ${ }^{273}$ Despite the credibility that the HFEA has given the advancement of reproductive technology it has recently been announced that the government plans to abolish the HFEA and to give their powers and responsibilities to other institutions mainly the Care Quality Commission. ${ }^{274}$

## Code of Practice

An important activity of the HFEA is that it publishes a Code of Practice which all licensed clinics must comply with. The Code of Practice "allows the HFEA to monitor and control the practices which take place in all clinics". ${ }^{275}$ The advantage of the HFEA in publishing a Code of Practice in which to regulate assisted reproduction is that it can respond quickly to advancing technology unlike legislation passed by Parliament which can take a while. In the original HFE Act 1990 sex selection was

[^60]not mentioned which resulted in the HFEA regulating this area through Codes of Practices prior to the 2008 amendments. Sex Selection is now codified at Section 3 of Schedule 2 of the 2008 Act which reaffirms that sex selection is only legal where there is a risk that any resulting child will suffer from a serious, sex-linked disorder. When sex selection is performed it must be ascertained that the illness affects only one sex or disproportionately affects one sex. ${ }^{276}$ This section effectively prevents couples from exercising their reproductive freedom and selecting the sex of their children for non-medical reasons. It is argued that parents who want access to this technology do so for family balancing reasons in order to have the experience of raising children of both sexes. However, should the law evolve and allow sex selection to become legal for family balancing? To answer this question, the HFEA has carried out consultations.

## Consultations

Over the years there have been various consultations produced on the debate of sex selection for non-medical reasons. In 2002 the HFEA was asked by the Minister for Public Health to conduct a review of sex selective techniques, including their safety, reliability and arrangements for their regulation. ${ }^{277}$ The report was entitled "Sex Selection: Options for Regulation". The purpose of the consultation was to provide the UK government with a report detailing opinions of sex selection and how it should be regulated in the UK. It would include an analysis of whether legislation is truly benefiting patients and how sex selection should be regulated which protects the interests of patients, the public and the welfare of any future child born as a result. ${ }^{278}$

The consultation concluded that sex selection was only legal for medical reasons. On the day of the release of their recommendations the HFEA's press release stated:
"The HFEA has to balance the potential benefit of any technique against potential harm. We are not persuaded that the likely benefits of permitting sex selection for

[^61]social reasons are strong enough to outweigh the potential harm that might be done". ${ }^{279}$

From the responses of the participants, the HFEA felt that there was a concern for non-medical sex selection and the deterioration of moral standards within society and even those who had no feeling on a personal level in regard to sex selection felt that by allowing a large number of individuals to choose the sex of their children would result in a sewing of the sex ratio and would reinforce discriminatory attitudes. ${ }^{280}$ However, as chapter one has argued these consequences will probably not occur if sex selection for family balancing become legal. It is argued that parents should not have unfettered control over the sex of all their children. Before parents can select the sex of their child using PGD they would have to have at least two or three existing children all of the same sex and they would be required to select the sex which is opposite to the sex of their existing children. If there was a change in the sex ratio then certain conditions could be put into place, for example pairing couples who wanted a girl with couples who wanted a boy, to ensure that the sex ratio remained constant. Sex selection for family balancing should not enhance sex discrimination because it is believed that most parents want to have children of both sexes in order to experience the differences in rearing a girl to a boy. Experiments, such as the Jack-in-the-box experiment, have shown that there are biological differences between girls and boys such as different patterns of aggression, learning, and spatial recognition, as well as hormonal differences. There are other potential consequences of sex selection for family balancing such as the slippery slope to designer babies or the widening of the gap between the rich and the poor. Many believe that sex selection is the beginning of designer babies but it is argued that it is not the case as when parents select the sex of their children through PGD, they are only selecting which embryos should be implanted based upon their sex. They are not designing their children. Sex selection for family balancing should not be illegal for fear of what is possible in the future. If the possibility of designer babies does

[^62]become a reality in the future, then it will be regulated accordingly then. As sex selection for family balancing should not be funded by the NHS, it would have to be funded privately thus limiting who will have access to this technology. It is argued that it will only be the rich who will be able to afford sex selection for family balancing but this should not prevent it becoming legal. There are various treatments, such as cosmetic surgery, which are only available privately and these are not illegal because they are essentially only available to the rich. It is suggested that these potential consequences of sex selection for family balancing do not outweigh the potential benefits for those parents who want to select the sex of their children for family balancing reasons.

In its report the HFEA made clear that an important part of the consultation was consulting with public opinion. A survey was conducted by MORI (Market and Opinion Research International) of 2615 UK citizens and more than $80 \%$ of respondents did not want sperm sorting or PGD to be made available for nonmedical reasons. ${ }^{281}$ It must be remembered that the HFEA conducted a consultation and not a survey. A survey is representative of the population as a whole and a consultation is not about matching the views of the population in proportion to who thinks what. It is argued that the HFEA should perform another consultation in order to ascertain the publics' feelings towards sex selection for non-medical reasons. In the 2002-2003 consultation it was stated that "But there would need to be substantial demonstrable benefits of such a policy if the State were to challenge the public consensus on this issue". ${ }^{282}$ While it is important to consult with the public on public policy matters such as the legality of sex selection for non-medical reasons, it must be remembered that reproductive autonomy is a fundamental right which can only be limited for very good reason. It is argued that there should be a presumption in favour of reproductive liberty. It should be for those opposing sex selection for nonmedical reasons to show that there is a risk to either citizens or society. As has been argued parents who want access to sex selection technology do so because they wish to have children of both sexes. However, a major concern of the consultation which should be addressed before sex selection for family balancing can become legal within the UK is the welfare of the child requirement.

[^63]
## Welfare of the Child

When considering parents for the use of fertility treatment, clinics must take into account the welfare of any child born as well as any existing children as a result of the treatment (s13(5)HFE Act 1990). This is not a new idea as the notion of taking into account the welfare of the child preceded the HFE Act and Codes of Practices, for example, in The Children Act 1989, section 1(3). ${ }^{283}$

Section 13(5) does not specify how a clinic should approach the welfare of the child condition. However, support does come from the HFEA's code of practice. Section 8.10 is crucial as it gives guidance on which factors should be taken into account when dealing with the welfare of the child requirement. These factors include past or current circumstances that may lead to any child experiencing serious physical or psychological harm or neglect, past or current circumstances that are likely to lead to an inability to care throughout childhood for any child who may be born, or that are seriously impairing the care of any existing child of the family. ${ }^{284}$ Section 8.15 gives guidance on when a centre should refuse treatment, for example, where they conclude that any child who may be born or any existing child of the family is likely to be at risk of significant harm or when the centre cannot obtain enough information to conclude that there is no significant risk. ${ }^{285}$ Despite the guidance which has been issued by the HFEA over the years, the welfare of the child requirement is not a straightforward procedure. While clinics can be reasonably reassured that any child born will not suffer from physical harm, psychological harm is another issue. It cannot easily be assessed. The 2002-2003 consultation focused on the welfare of the child requirement for non-medical sex selection. The HFEA weighed a number of factors in regard to the welfare of the child, for example, the psychological harm if a child does find out that they have been sex selected, the possibility of preferential or prejudicial treatment to fit parental expectations, or the potential of favouritism and neglect of existing children. ${ }^{286}$ It is suggested that the problem with these risks is that they are theoretical and hard to prove and that without data on the impact of sex selection upon the sex selected child these risks

[^64]and benefits remain speculative. ${ }^{287}$ The "HFEA produces no evidence, nor indeed could it produce any evidence that children would be selected for their sex alone". ${ }^{288}$ As has been argued parents who want access to sex selective technology do so, not because of sex alone or because they believe that one sex is superior to the other but because they want to be able to experience the rearing of children of both sexes. If sex selection just for family balancing were to become legal then it could significantly reduce the risk of psychological harm and may even enhance the parent-child relationship. This may be because parents would not have the emotional, physical and psychological pressure to continue to 'try' for a child of a certain sex naturally nor would the child feel unwanted or unloved because they were of the 'wrong' sex. Importantly, parents may not inform their existing children or future child that they used sex selective technology to ensure that they had a child of a certain sex and thus it may reduce the psychological harm as all the children would believe that they have been created in the same way. Further, one of the requirements is that clinics are sure that any child will be born into a stable and supportive environment. ${ }^{289}$ This would imply that if parents want to use sex selection techniques for family balancing and did have very unusual motivations, such as believing that one sex is superior to the other, then there would be reasonable grounds for the clinic to ask hard questions and possibly even to deny them treatment. ${ }^{290}$

Some would argue why should there be the welfare of the child requirement. We do not interview and test parents who have children naturally. So why is children born through reproductive technologies any different? The answer is that couples presenting for PGD can have ulterior motives, especially for non-medical reasons but this does not present a strong enough justification for banning all non-medical sex selection. The HFEA has already produced significant requirements to ensure the welfare of any child born as a result of reproductive technologies which goes a long way to ensure that sex selection for non-medical reasons would be dealt with appropriately. ${ }^{291}$ It is understandable that the HFEA wants to take a cautious approach in this area but it is suggested that to ban something because of potential

[^65]risks which could arise when parents have children naturally is going too far. It is argued that allowing sex selection for family balancing is a cautious approach and it reduces the risk that children would not suffer from psychological harm and the HFEA could provide strict regulation and guidance through their code of practice.

Based upon the non-identity principle it would be ethically acceptable to allow parents to choose the sex of their child without regard for the welfare of that child because any life is surely better than non-existence. However, it is argued that this is not legally acceptable and for most would not be morally acceptable. It is suggested that if sex selection for family balancing did become legal within the UK, a solution needs to be found which would take into account both the parents' reproductive autonomy and the welfare of the child and any existing children.

A critical part of section 15(3) wording is that 'account has been taken of the welfare of the child'. This implies that even though the welfare of the child requirement is an important consideration in assisted reproduction, it is not the overriding consideration. Other factors, such as parents' reproductive freedom, can be taken into account and given the same or even more importance than the welfare of the child requirement. As has been argued in chapter 1 at page 14 reproductive freedom is a prima facie right that cannot be limited except for very good reason. If there was a risk that that the child born from assisted reproductive technology or any existing children would be in danger or harmed than parents' reproductive freedom should be limited. However, it is argued that if parents want to exercise their reproductive freedom to have a child of a certain sex for family balancing reasons, such as experiencing the rearing of both sexes, then as long as there is no physical or psychological risk to the future child or of any existing children then their reproductive autonomy should prevail.

## European and International Law on Sex Selection

The Human Rights Act (HRA) 1998 gives effect to all the rights contained in the European Convention on Human Rights (ECHR). The most relevant and important article relating to sex selection for family balancing is that of Article 8. Article 8(1) of the ECHR protects a person's right to a private family life.

The case of S.H. And Others v Austria ${ }^{292}$ states that the right of a couple to conceive a child and to make use of medically assisted procreation for that end comes within the ambit of Article 8, as such a choice is clearly an expression of private and family life. ${ }^{293}$ This indicates that procreation including any natural or assisted reproduction comes within the remit of Article 8(1).

However, Article 8(1) must be read in conjunction with Article 8(2) which states that:

> "There shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic wellbeing of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others". ${ }^{294}$

This provision allows the State to legally interfere in a person's private life but only for the legitimate reasons stated above. Article 8(2) would be used to legally allow the UK to ban sex selection for family balancing. There are no reported cases of sex selection and Article 8 but there are cases where the facts are different but the principles that have been discussed can be used to ascertain the remit of Article 8 and more importantly Article 8(2).

## "Necessary in a Democratic Society

In the case of Olsson v. Sweden (No. 1) ${ }^{295}$ the court established that the notion of necessity implies that the interference corresponds to a pressing social need and, in particular, that it is proportionate to the legitimate aim pursued; in determining whether an interference is "necessary in a democratic society", the Court will take into account that a margin of appreciation is left to the Contracting States. ${ }^{296}$ This is supported by the case of Campbell v MGN ${ }^{297}$ where it was emphasised that the phrase "necessary in a democratic society" contained in Article 8(2) means not just

[^66]convenient or reasonable but that there is a pressing social requirement. ${ }^{298}$ The case of $K$ and $T v$ Finland ${ }^{299}$, stated that "in determining whether the impugned measures were "necessary in a democratic society" the Court will consider whether, in light of the case as a whole, the reasons adduced to justify them were relevant and sufficient for the purpose of Article 8 of the Convention., ${ }^{300}$

This dissertation has shown that the banning of sex selection for family balancing is not necessary for moral or ethical reasons. Most UK couples would like access to sex selective technology for family balancing reasons and to experience the rearing of children of both sexes. Studies, such as the-jack-in-the-box experiment, have shown that there does exist a biological difference between the sexes. This reinforces the argument that sex selection for family balancing would not be discriminatory. It is suggested that banning sex selection would be necessary if it altered the sex ratio of the UK. However, there is no evidence that this would happen in the UK, as sex selection would only become legal for family balancing reasons and parents would only be able to choose the sex which is opposite to the sex they already have and it is generally thought that UK parents value both girls and boys equally. If there were concerns about sex selection for family balancing altering the sex ratio then certain conditions, such as pairing couples who wanted a girl with those couples who wanted a boy, could be put in place to ensure that the ratio stayed constant. There are concerns that sex selection for family balancing may be the beginning of the slippery slope towards designer babies or that it may widen the gap between the rich and the poor because only the rich would be able to afford it. It is argued that while these are crucial arguments they are not strong enough to justify the state's necessary interference. At the moment, designer babies are not possible and sex selection for family balancing should not be banned because there is the chance that designer babies may or may not become a reality in the future. It is suggested that sex selection for family balancing should be funded privately and thus would only be available to those who can afford it and consequently it is not enough to prevent sex selection for family balancing becoming legal because many treatments, such as cosmetic surgery for non-medical reasons, are privately funded and thus only available to the wealthy. It is argued that the state banning all non-

[^67]medical sex selection is not necessary in the UK and there is no pressing social requirement which justifies interference. Based upon the UK's society and culture, banning all non-medical sex selection is not a proportionate response, it is not in the public's best interest and it does not balance all the competing interests.

## Proportionality

Article 8(2) states that any interference by the state into a person's private life must be proportionate. This is shown in the case of $Z v$ Finland ${ }^{301}$ where a husband was being prosecuted and the police used his wife's medical records to determine when he became HIV positive. The wife complained to the European Court of Human Rights that her human rights had been breached. She was unsuccessful. "The court indicated that the more intimate the information the stronger the countervailing interests had to be to justify revealing it". ${ }^{302}$ This principle is further supported by the case of Olsson v. Sweden (No. 1). This raises the question of whether banning all non-medical sex selection in the UK is acting proportionately? The answer to this is twofold. On the one hand it could be seen that the UK is acting proportionately as they have not banned all sex selection. Sex selection for medical reasons is legal. On the other hand, it could be seen that it is a disproportionate response to the case of sex selection for non-medical reasons. It is proposed that most would agree that sex selection for medical reasons is ethical but sex selection for non-medical reasons is contentious. There are many worthy arguments both for and against sex selection for family balancing. "However, should the position not be that absent a convincing case to the contrary those who wish to use sex selective technology should be at liberty to do so, even if they wish to use them in unusual or unpopular ways? ${ }^{303}$ This is not the case with the UK. It is for those wishing to use sex selective technology to convince others to share, or even empathise with, those values and priorities. ${ }^{304}$ This goes against the supremacy of the theory of reproductive freedom which should only be limited for very good reasons.

The legal approach taken by the UK is to ban all sex selection for non-medical reasons which can be seen as not only being disproportionate but it also goes

[^68]against the ethical theory of reproductive autonomy. A more proportionate and ethical response could be to only allow sex selection for family balancing to be legal. This would allow parents some reproductive choice over the sex of their children as well as allowing them the opportunity to experience the rearing of children of both sexes if that is what they wish and it would also prevent parents from having children of a certain sex because of ulterior motives, such as wishing to have all boys because boys are superior. Also, it could prevent the UK from going down the slippery slope towards designer babies.

## The Public Interest

Sex selection for non-medical reasons could legitimately be banned if it is in the publics' best interest. However, whose best interests are we suppose to be protecting? This is best illustrated through the disability debate. There are two main perceptions of disability. There is the "medical model" and the "social model". The medical model is supported by John Harris who defines disability as "a physical or mental condition which we have strong preference not to be in". ${ }^{305}$ Harris prefers to call this the medical model, "the harmed condition". The social model is defended by Tom Shakespeare and distinguishes between an impairment as a medical condition of the body, and disability, as a social prejudice and discrimination. Whether an impairment will lead to a disability is dependent upon the nature of the social environment that the individual lives in. ${ }^{306}$ The difference between the two can be best illustrated by the deafness and disability debate. Deafness under the medical model would be classed as a disability but under the social model deafness would be classed as a cultural group who form a linguistic minority, not people with a disability. For them, deafness is viewed as culture which should be celebrated and conserved and one that is not understood by the hearing world. ${ }^{307}$ This has been a contentious debate, especially in the US, where a lesbian couple who were deaf themselves, wanted to have a baby who would also be deaf. In 2002, deaf couple Sharon

[^69]Duschesneau and Candice McCullough wanted to have a baby which was also deaf. The couple approached their deaf friend who had five generations of deafness in his family to be the biological father of their child through sperm donation and IVF. The chances that the potential baby would be born deaf was 50\%. At three months their baby was diagnosed with being partially deaf and that without the early use of a hearing amplification they would have speech impediment. The couple decided not to fit their baby with the hearing device and argued that it was not their choice to make but their sons. ${ }^{308}$ This case implies that people who are afflicted with deafness do not see themselves as having a disability. They view deafness as a "culture that should be celebrated and conserved," which is not understood by the hearing community. ${ }^{309}$ It could be seen that deaf couples seeking to select for a deaf child draw attention to their right to reproductive autonomy rather than to the quality of life of a deaf person, arguing that those in the wider community should respect their decision and the reproductive choices they choose to make. However, there is a widely held view that the right to reproductive autonomy is limited and does not extend to choosing to create a child whose life will be more difficult or have fewer options than would otherwise have been possible. ${ }^{310}$ A person need not be deaf to participate in the deaf community - many people learn more than one language and can move between languages easily. A hearing child could learn sign language and could participate in both the hearing and deaf community. ${ }^{311}$ Preventing deaf parents from being able to select a deaf child may amount to discrimination because they want the same opportunity as hearing parents to have a child like themselves. ${ }^{312}$ The crucial point for this section is that the deaf community do not see themselves as having a disability rather it is how the rest of society views them. They want a child who will be able experience their culture and have the same experiences they have had. In this view, they do not see themselves as a minority that needs protecting.

A similar situation arises in the debate concerning sex selection for non-medical reasons. A public interest which may need protecting with non-medical sex selection

[^70]is the affect non-medical sex selection has on people with gender dysphoria. It has already been discussed previously in this dissertation in chapter one, page 27, that parents who want a child of a certain sex may end up with a child who suffers from gender dysphoria. There is the assumption that gender is easily characterised and this is problematic for society as it may make people less tolerant of diversity. Those who do not meet the gender norms established by society, may suffer from feelings of self-worth, self confidence, psychological stability, bodily comfort, personal safety and personal relationships. ${ }^{313}$ By allowing non-medical sex selection there may be a risk that society will view sex as meaning the same as gender when this is untrue. Parents may want a girl and expect the girl to grow up and conform to stereotypes and gender roles. But this is not always the case. Sex selection for family balancing should not be banned solely on this basis. It is argued that while it is a vital issue with sex selection, banning all non-medical sex selection should be the last resort. This is shown in the case of Enhorn $v$ Sweden $^{314}$ and although it is a HIV case the judgement is relevant here. The court found that the compulsory isolation of the applicant was not a last resort in order to prevent him from spreading the HIV virus because less severe measures had not been considered and found to be insufficient to safeguard the public interest. ${ }^{315}$ While sex selection techniques may reinforce gender stereotypes and roles, it may be more appropriately combated through the views of society not regulation. Less severe measures should be tried and tested first. Banning all non-medical sex selection should be the last resort. It could be seen that sex selection for family balancing allows couples to exercise their reproductive rights while protecting society's interests. Couples will be able to experience the rearing of children of both sexes if that is what they wish while not encouraging gender stereotypes and roles. It is argued that the welfare of the child requirement will play a crucial role in ensuring that children are not treated as commodities and that any sex selected child who is born with gender dysphoria or who does not conform to the conventional gender norms will be still be brought into a loving and stable environment. Couples who have unusual motivations for wanting to select the sex of their children can be refused treatment by the clinic. The welfare of the child

[^71]requirement is set at a high standard to ensure the protection of the couples wanting access to sex selection technology, the future child, any existing children of the family, the doctors performing the procedure and society in general. Society's interest can still be protected without having to ban all sex selection for family balancing.

## Balancing Competing Interests

If the State relies on Article 8(2) to interfere in a person's private life then there must be a balancing of competing interests in order for the interference to be legal. In the case of Dickson v The United Kingdom ${ }^{316}$ the Court considered that even if the applicants' Article 8 complaint was before the Secretary of State and the Court of Appeal, the policy set the threshold so high against them from the outset that it did not allow a balancing of the competing individual and public interests and a proportionality test by the Secretary of State or by the domestic courts in their case, as required by the Convention. ${ }^{317}$ In the cases of Odièvre v. France, ${ }^{318}$ Godelli v. Italy, ${ }^{319}$ and Evans $v$. the United-Kingdom it was conformed that a fair balance must be struck between the various competing interests. Case law implies that all interests in the sex selection debate must be balanced. In regard to sex selection this would involve balancing the parents' right to reproductive freedom and to choose the sex of their children against the interests of society as a whole. Allowing sex selection for family balancing may be seen as the solution to balancing all the competing interests. It allows couples their reproductive freedom to choose the sex of their children as long as it is for family balancing reasons as well as preventing reproduction becoming commercialised by treating children as commodities. It is argued that banning all non-medical sex selection is not taking into account all the competing interests, all it does is support the view that all sex selection for nonmedical reasons is unethical and should be illegal. An interest which also needs to be taken into is the future embryo that will be born. According to the non-identity theory, the best interest for the embryo is to always be born otherwise they would never exist and this would only be a better option if their life was worse than death. In most cases this is not the case. The UK does not adopt this black and white

[^72]approach but it does consider the embryo's interest through the welfare of the child requirement which holds that if the clinic believes that parents have unusual motivations for selecting the sex of their child they will be refused treatment. It is proposed that sex selection for family balancing provides a solution which takes into account all the competing interests and arguments and is a reasonable solution to the problem of sex selection in the UK.

## Protection of the rights and freedom of Others

Sex selection for non-medical reasons can be banned if it protects the rights and freedoms of others. At first light one thinks that allowing parents to choose the sex of their baby does not interfere with the rights and freedoms of others. Unfortunately, the answer is not that straight forward. Parents who choose the sex of their children affects the rights of the future child who will exist also. The European Commission of Human Rights has stated:
> "For numerous Anglo-Saxon and French authors, the right to respect for 'private life' is ... the right to live, as far as one wishes, protected from publicity ... the right to respect for private life does not end there [but includes also the right to] ... the development and fulfilment of one's own personality" ${ }^{320}$

The most relevant part of this definition for this section is "the development and fulfilment of one's own personality". Does allowing parents to choose the sex of their child prevent that child from developing their own personality? While sex is not indicative of personality the problem which might arise is that parents who select the sex of their children may have high expectations for them to behave in a certain way, for example girls are suppose to like pink and dresses where as boys are interested in playing in the mud and sports. If parents put these expectations onto their children, will they be pressurized into behaving this way and not develop their own personality. However, to a certain extent parent's influence on their children at an early age can be reversed. So even if parents put pressure on their children to adhere to gender roles, when they start to mature they can start to make their own decisions and preferences. This should not prevent sex selection for family balancing

[^73]becoming legal as the same scenario could arise when parents have children naturally. Further, as has been discussed earlier in the chapter at page 72 the UK has extensive regulation to ensure the welfare of any child born though reproductive technology.

It could be argued that allowing parents to select the sex of their children interferes with an embryos right to life. Embryos will be created and destroyed because of their sex. (Whether embryos have a right to life will be discussed later in this chapter at page 90). As embryos are purposely created for research and for medical sex selection and thus interfering with embryos potential right to life before the 14 days is not a sufficient reason for banning sex selection for family balancing.

## Wide Margin of Appreciation

Case law has revealed that countries have a wide margin of appreciation over the regulation of assisted reproduction. This is shown in the case of S.H and Others v. Austria where the Grand Chamber overturned the judgment of the Chamber and decided that the margin of appreciation to be given to Austria had to be a wide one, given that the use of in vitro fertilisation treatment gave rise to sensitive ethical issues against a background of fast-moving scientific developments. ${ }^{321}$
The Court also underlined that the field of artificial procreation, being subject to a particularly dynamic development in science and law, had to be kept under review by the member States. The case of Evans v. the United-Kingdom concluded that since the use of IVF treatment gives rise to sensitive moral and ethical issues against a background of fast-moving medical and scientific developments, and since the questions raised by the case touch on areas where there is no clear common ground amongst the Member States, the Court considers that the margin of appreciation to be afforded to the respondent State must be a wide one. ${ }^{322}$ Both of these cases are further supported by Keegan v. Ireland ${ }^{323}$, Funke v France ${ }^{324}$ and Olsson v. Sweden (No. 1).

[^74]The case law shows that as reproductive technology is an area where states have differing views, they are consequently left with a wide margin of appreciation on the regulation of assisted reproductive technology. Given that the UK has this wide margin of appreciation it is probable that they will not be challenged by EC law if they decided to make sex selection legal for family balancing or if they continue to ban all non-medical sex selection.

It has been shown that the reasons stated in Article 8(2) are not sufficient for banning sex selection for family balancing within the UK. The UK could legitimately allow sex selection for family balancing without conflicting with Article 8(2) and without being in conflict with international law. Article 14 of the Council of Europe Convention on Human Rights and Dignity of the Human Being with Regard to the Application of Biology and Medicine: Convention on Human Rights and Biomedicine (Oviedo Convention) states that "the use of techniques of medically assisted procreation shall not be allowed for the purpose of choosing a child's sex except where serious hereditary sex related disease is to be avoided". ${ }^{325}$ What is vital though is that the UK has not signed and ratified this convention. It is argued that banning all non-medical sex selection is not a proportionate response and neither does it balance the competing interests proportionately. It is proposed that sex selection for family balancing should become legal as it is a proportionate response to the debate and it balances parent's right to reproductive freedom, the public's interest and the interest of the future embryo. Reproduction whether natural or assisted is a private, family matter and should be treated as such. It should be for those opposing sex selection for non-medical reasons to show the adverse affects it will have on society. So far this dissertation has shown that allowing sex selection for family balancing will not have any adverse impacts for society. It can be seen to take into account all the competing interests and it is a proportionate and legitimate response to the sex selection debate. A further argument which may support the view that sex selection for family balancing should be legal within the UK is that it may be legally possible for a woman to obtain an abortion based on the fact the she is carrying a foetus which is of the wrong sex to which she wants.

[^75]
## Sex selection through Abortion

"The mainstream media regularly condemn sex selective abortion and use the language "gendercide" and calls for countries where sex selective abortion is most prevalent to do more about it". ${ }^{326}$ In February 2012, news broke out in the UK that doctors had been filmed offering to falsify paperwork in order that a woman could have an abortion because the foetus which she is carrying is of the wrong sex. ${ }^{327}$ While sex selection through PGD for non-medical reasons is illegal in the UK, the question becomes whether sex selection through abortion is illegal.

Section 58 of the Offences against the Person Act 1961 makes obtaining an abortion in the UK illegal. However, the Abortion Act 1967 makes a defence to the illegality of abortion. Section 1 of the Act describes the four grounds for which a woman could have an abortion. For the purposes of this discussion, there is only one ground which is relevant. This ground is sometimes referred to as the "social ground" and states that "the pregnancy has not exceeded its twenty-fourth week and that the continuance of the pregnancy would involve risk, greater than if the pregnancy were terminated, of injury to the physical or mental health of the pregnant woman or any existing children of the family". ${ }^{328}$ If a woman wanted to obtain an abortion based upon the sex of the foetus for non-medical reasons then she would have to rely on this ground. Section 1 of the Act also states that for a termination of a pregnancy to be legally performed two medical practitioners, are of the opinion in good faith that one of the grounds contained in the Act apply. Also, "the doctor can take into account the pregnant woman's actual or reasonably foreseeable environment, including her social and economic circumstances in coming to this decision (s1(2))". ${ }^{329}$

While, sex selection for non-medical reasons is not an official ground for termination of a pregnancy, in certain circumstances it can be argued that a termination of a pregnancy based on the gender of the foetus is lawful. ${ }^{330}$ "We may find gender related abortions morally repugnant but this does not mean that a

[^76]gender-related abortion cannot 'fit' within the grounds for abortion permitted under the Abortion Act 1967" ${ }^{331}$

If a woman wanted an abortion because of the sex of the foetus she would have to prove that having a child of a certain sex would affect her emotional or mental health. If a woman is forced to continue with a pregnancy of a foetus which is of the 'wrong gender' and who is fearful of the consequences for herself, her unborn child or her existing children then she may be far removed from a state of mental and social wellbeing, even if the underlying reasons may be felt to be unacceptable. ${ }^{332}$ We may find this immoral but is it fair to force a woman to continue with a pregnancy which will impact greatly on her life and which she does not want? A woman may request an abortion because it interferes with her career or she wants to go travelling - why are these reasons any different from women who want a boy after three girls?

Williams makes an excellent defence of sex-selective abortion. He begins his argument by considering the following women:

1. "Jane has been raped. She cannot cope with the emotional costs involved in carrying in her body and bringing into the world a reminder of her attacker.
2. Sasha is single and on a low wage. Faced with a lack of affordable childcare, and other form of support for her lone parents she decides that she cannot have the child.
3. Sophie is married and has three children. Due to the combined weight of their work and childcare commitments, she and her husband are highly stressed and rarely manage to spend "quality" time together. Sophie fears that, if she has another baby, it could destroy her marriage.,"333

Williams states that pro-choice advocates would have no problem with allowing the women to have an abortion in these three cases. Williams then goes on to discuss three more cases and contrasts them pairwise (e.g. comparing case 1 with 1 , case 2 with 2 etc):

1. "Tamsin is told that any child she conceives will have a $25 \%$ chance of a mental impairment. Such a child would require round the clock care, would

[^77]never be independent and would manifest distressing behaviours such as compulsive self-mutilation. Tamsin believes that she could not cope with the emotional costs of having such a child but believes she could cope with having an unimpaired child.
2. Anna is told that any child she conceives will have a $25 \%$ chance of having a physical impairment. Owing to the lack of support in her community for disabled people and their carers, she decides that she cannot afford to have such a child. However, she can afford to have a non-disabled child and wants to do so.
3. Belinda and her husband are considering having their first baby which they believe they can afford, without compromising their relationship or their careers to which they are deeply committed. Belinda is told that there is a $25 \%$ chance that any child of hers will have a serious disability. She fears that the additional strain which this outcome will place upon her and her husband could destroy their marriage., 334

Williams argues that it would be wrong to allow the women in the first set of examples to have an abortion and not in the second set of examples if it is found out that the foetus will have a disability. In each pair of cases they are motivated to try and avoid the same bad outcome: serious emotional suffering (cases 1 and 1), increased vulnerability to poverty (cases 2 and 2), and increased risk of relationship breakdown, with all that entails materially and so on (cases 3 and 3). ${ }^{335}$ Williams then continues to another set of scenarios involving sex-selective abortion.

1. "Chen was sexually abused by her mother as a child and finds it difficult to this day to have relationships with other females. She becomes pregnant but comes to believe that she could not cope with the emotional costs involved in having a girl, including both the feeling of estrangement from the child and guilt if she were to give up her daughter for adoption. However, she wants a boy and feels capable of raising a boy.
2. Parminder and her husband live under cultural conditions in which girls are more costly to raise than boys. Females are largely discriminated against in the labour market, and so cannot contribute significantly to the family

[^78]economy. A daughter will continue to be a financial drain upon the family until a husband can be found for her. And even when a husband is found, the parents are expected to provide a substantial dowry for her. Parminder believes that she cannot afford to have a daughter but believes a son would be an asset and wants one.
3. Susan is married and has four daughters. Her husband is becoming increasingly frustrated and unhappy living in an all-female household and desperately wants a boy to "balance" the family. Susan wants a boy and believes that a boy will strengthen her marriage. She becomes pregnant and believes that another girl would destroy her marriage.,"336

Once again Williams argues that if we contrast these cases pairwise with the previous set of cases we see that the women are trying to protect the same interests. He points out that if we believe that the individuals in the second set of cases provide a compelling case for abortion of a disabled foetus then it would be hard to deny that the individuals have an equally compelling case in the third set of cases for a sex selective abortion. ${ }^{337}$

Williams makes an excellent argument in defence of sex-selective abortion. He is correct in arguing that if we agree that an individual can have an abortion because of the financial or emotional strain involved in having a child which is disabled then why cannot the same reasoning be applied to sex-selective abortions? The parents can suffer the same financial and emotional burdens in both cases but yet most would instinctively agree that abortion because of disability is morally acceptable and abortion because of sex is morally unacceptable.

Sex-selective abortion is strengthened by the fact that there is nothing in the Abortion Act 1967 that states that abortion based upon sex is illegal. The only piece of legislation that refers to sex selection is the Human Fertilisation and Embryology Act 1990 which states embryos can be chosen for sex only where there is a risk that any resulting child will suffer from a gender-linked condition. ${ }^{338}$ As long as the doctor

[^79]is acting in "good faith" and believes that having a child of a certain sex would put a burden on a woman's emotional and mental health, and taking into account a woman's economic and social circumstances sex-selective abortion is legal.

Sex selection through abortion is something that we as a society may not be able to prevent. As long as a woman can prove to two medical practitioners that continuing with a pregnancy based upon the sex of the foetus will affect her mental well being then she should legally be granted one making sex-selective abortion technically legal within the UK. Based upon this reasoning, if sex-selective abortion is legal then why should sex selection through PGD for family balancing be banned? It seems unreasonable that a woman could obtain an abortion because of family balancing reasons but a woman could not use sex selection through PGD for the same reason. However, what is the difference between allowing sex selection to be legally performed through abortion but not through PGD?

John Harris points out that the destruction of embryos in IVF need no legal justification:
"The fallacy is that a decision to abort must ...be endorsed by two medical practitioners and comply with the requirements of various Acts of parliament ...

On the other hand, a decision not to implant embryos requires no legal justification whatsoever. The decision not to implant embryos in vitro is within the unfettered discretion of any woman.,339

Based upon this argument it should be within the woman's discretion whether embryos should be implanted because of their sex. If a woman can obtain an abortion because of the sex of the foetus, should it not follow that women should be able to have access to PGD to select the sex of their children for family balancing reasons? Would it not be more ethically and morally acceptable for sex selection for family balancing reasons to be performed through PGD instead of abortion because the embryo has not developed as much as would be the case with abortion. This argument is closely linked to the status of the embryo and will be discussed in the following section.

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## Status of Embryo

A strong opposition to sex selection is that it involves the possible creation and destruction of numerous embryos which brings into question what status do embryos have? This section will discuss the legal status of the embryo in English law and the effect it has on sex selection for non-medical reasons. Although, this section will be focused mainly on embryo research, the same principles can be applied to the legal status of embryos for sex selection.

There are those who believe that life begins at the moment of fertilization. For them PGD is not ethically preferable to abortion because both are forms of murder. It could be said that PGD is worse than prenatal diagnosis and abortion because PGD requires the creation and destruction of numerous embryos. ${ }^{340}$ This theory would hold that all sex selection whether for medical or non-medical reasons is wrong as embryos are human beings from the moment the egg is fertilized and consequently destroying any embryos would amount to murder. However, there are biological reasons to believe that humans start to exist at some point after the beginning of fertilization. ${ }^{341}$ Fertilization does not occur at a precise moment. ${ }^{342}$ "The process of conception is not completed until syngamy, when the chromosomes from the egg and the sperm have merged, sometime after the sperm has penetrated the egg". ${ }^{343}$
The HFE Act does not follow the argument that life begins at fertilisation. Rather it takes a pragmatic approach which seems to balance all interests. On the one hand it allows PGD and research to take place on embryos but on the other hand it puts in place strict regulation for the treatment of embryos, during their creation, lifespan and possible destruction. It is argued that this solution is similar to the one that could be adopted in regard to sex selection for non-medical reasons. It takes into account both sides of the argument and comes to a reasonable solution which allows research to proceed but within strict regulation. The same could be done for sex selection for non-medical reasons in the UK. Sex selection for family balancing should be legal although within strict regulation. This will allow parents some reproductive freedom and choice over their children without going too far and treating them as mere commodities. If there is any chance, no matter how small, that

[^81]parents will have unreasonable expectations on their sex selected child, then they would be denied treatment.

The HFE Act accords embryos a "special status" and was influenced by recommendation 42 of the Warnock Committee Report, which was intimately linked to concerns about embryo research rather than concerns about assisted reproduction. The Committee stated that:
"...we are agreed that the embryo of human species ought to have a special status and that no-one should undertake research on human embryos for the purposes of which could be achieved by the use of other animals or in some other way. The status of the embryo is a matter of fundamental principle which should be enshrined in legislation."344

Not everyone on the Warnock Committee agreed with this. Their view was that embryos should be treated with a special status because of their potential to develop to a stage where everyone would agree that it would be accorded a status of a human person. ${ }^{345}$

Five years later when the Human Fertilisation and Embryology Bill was introduced into the Lords, the then Lord Chancellor (Lord Mackay of Clashfern) stated that a system of legal controls were necessary:
> "...because of the need to show proper respect to the gametes and human embryos, whether used for treatment, storage, or research. Whether or not an embryo is to be treated as a child or a person, it clearly has the potential for human life and should be treated with dignity such status deserves". ${ }^{346}$

It is clear that one of the main purposes of the HFE Act 1990 was to ensure that embryos were given the respect and dignity they deserve. Allowing sex selection for family balancing may mean that numerous embryos would be created and not all of

[^82]these embryos would be implanted into the women and thus would not have a chance of survival. However, whether embryos are implanted or surplus, they will be treated with the same respect and dignity that is given to embryos created through IVF or specifically for research purposes.

The HFE Act regulates the use of embryos and assisted reproduction strictly and one of the roles of the HFEA is to ensure that clinics are abiding by these rules. Firstly, a crucial provision of the HFE Act is that it allows a clinic to perform research upon an embryo up until the formation of the primitive streak. The primitive streak occurs 14 days after fertilization. Baroness Warnock, whose report formed the basis of the HFE Act stated that:
"before 14 days, the embryos, or pre-embryo as it was scientifically known, was a loose cluster of first two, then four, then sixteen cells, undifferentiated. An undifferentiated cell could develop into any of the types of cell that go to make up the human body, and some of them would not become part of the embryo at all, but would form the placenta or the umbilical cord. After fourteen days, there begins to appear the first traces of what will become the central nervous system of the embryo, the primitive streak.,347

The 14 day limit is essential the assisted reproduction because by 14 days it will be clear whether the embryo will split into two and thus forming twins or whether it will stay as a single embryo. It is at this stage that a person has been identified, in genetic terms at least. ${ }^{348}$ The 14 day limit is reflected in the HFE Act at section 3(3a) which states that no license can authorise the keeping or use of embryos after this time limit. Secondly, the HFE Act lays down absolute prohibitions for the use of embryos, for example, no embryo can be stored, used or researched upon without a license from the HFEA or can a human embryo be placed in an animal. Thirdly, the 2008 amendments sets out the circumstances in which embryo testing may be authorised (para $1 \mathrm{ZA}(1)$ of Sch 2). ${ }^{349}$ This is not an absolute list of all the restrictions the HFE Act has in place in regard to embryos, it is just a few examples. It is argued

[^83]that by having these strict rules in place it assures the public that embryos are to be treated with the respect and dignity they deserve as well as allowing medical advances and parents to have healthy children free of disease. Furthermore, the HFEA has issued the following guidance on the destruction of embryos:
"the centre should take account the special status of the human embryo when the development of the embryo is to be brought to an end. Terminating the development of embryos and disposing of the remaining material should be approached with appropriate sensitivity having regard to the interests of the gamete providers and anyone for whose treatment of the embryos were being kept" ${ }^{350}$

This guidance implies that while it is legally possible to destroy spare or unwanted embryos, when doing so the embryo should be treated with respect and humanely destroyed. This should be done for those embryos which are created for sex selection purposes. Unfortunately, the destruction of embryos would be a consequence of sex selection for family balancing but if couples receive sex selective treatment in the UK at least it cans be ensured through strict regulation that the destruction of the embryos will be done humanely and with dignity. When couples travel abroad we do not know what sort of treatment they receive or how they treat discarded embryos.

These laws the HFE Act sets in place implies that while embryos can be used for human purposes they do have this special status which clinics and scientists need to respect. If embryos can be specifically ${ }^{351}$ created for the purposes of research with no intention of ever being implanted into a woman, why cannot embryos be created specifically for sex selection for family balancing? Embryos created for sex selection for family balancing would be treated in the exact same way as any other embryos created for medical reasons. They would be treated with dignity and respect and would be implanted into the woman before the 14 day limit which is when the first traces of a nervous system will appear.

[^84]If the UK did allow sex selection for family balancing then there should be no disagreement from Europe over the status of the embryo. In the case of Vo $v$ France ${ }^{352}$ the Grand Chamber held that, in the absence of any European consensus, considers that the States enjoy a wide margin of appreciation. This decision is central to the scientific and legal definition of the beginning of life. The issue of when the right to life begins comes within the margin of appreciation which the court generally has on assisted reproduction because it means that although no protection of the foetus was not contrary to the convention, if another country decided to protect the foetus from the moment of conception it would not be contrary to the convention either. Also, the argument that the foetus and thus the embryo has no right to life under Article 2 of the convention is supported by the case of Evans where it was made clear by the domestic courts that under English Law an embryo does not have any independent rights or interests and cannot claim - or have claimed on its behalf - a right to life under Article 2. This is supported by the case of Boso v. Italy ${ }^{353}$.

Embryos do not have a right to life in the UK but they do have this "special" status. It is argued that creating embryos specifically for non-medical sex selection will not diminish this special status which they hold. It is proposed that clinics and scientists would continue to treat embryos with the respect and dignity that they are accorded under the HFE Act and the HFEA would continue to inspect clinics to ensure that they are abiding by the HFE Act. Regulating a contentious area such as the status of the embryo can be difficult as it is an area which cannot reflect the morals and values of everyone. It is an area with no definitive answer. No-one knows the exact point at which life begins. Despite this, the UK has adopted the middle ground and allows embryos to be researched upon and tested prior to implantation on the one hand but on the other it does not allow a too liberal approach by ensuring that the area is tightly regulated and controlled. Allowing sex selection for family balancing should not jeopardise this approach and does not bring into question a right to life. It is argued that the middle ground is allowing sex selection for family balancing because it allows parents to exercise their reproductive autonomy and to select the sex of their children in order to experience the rearing of both sexes within a tightly

[^85]regulated and controlled system which does not treat children as commodities and travel too far down the slope to designer babies.

## Conclusion

Currently, all non-medical sex selection is illegal within the UK. However, this chapter has shown that there are no legal obstacles in the way to sex selection becoming legal for family balancing. Article 8 of the ECHR protects the right to privacy which suggests that it would allow parents the freedom to select the sex of their children. However, Article 8 must be read in conjunction with article 8(2) which allows the state to legally interfere in citizens' private lives in certain situations. It is argued that the reasons in Article 8(2) are not a strong enough justification to ban sex selection for family balancing. Allowing sex selection for family balancing would be a proportionate response as it balances the reproductive rights of parents to select the sex of their children on the one hand while protecting society and the embryo on the other. Also, if a woman is able to obtain an abortion legally because of the sex of the foetus then should it not follow that sex selection for family balancing should become legal through PGD.

A main objection to sex selection for non-medical reasons is the welfare of the child requirement. Before couples can undergo reproductive treatment the clinic must be assured of the welfare of the child born as well as the welfare of any existing children. This includes the physical and psychological welfare. Allowing sex selection for family balancing may cause the selected child to suffer prejudicial treatment by its parents to fit parental expectations or an existing child may suffer from feelings of neglect because they are of the wrong sex. However, the HFEA has put in place strict guidelines and requirements to support clinics in protecting the welfare of any selected child. It is proposed that if the clinics have any suspicion that parents have ulterior motives to wanting a child of a certain sex the clinic would have the right to investigate further or to refuse treatment. There is no guarantee that clinics abroad will take into account the welfare of the future child or any existing child which may allow couples to have children of a certain sex because they have sexist and stereotypical views which may be forced upon their children. Also, the HFEA has the ability to respond quickly to issues which are unforeseen through their code of practice and consequently while the welfare of the child is a fundamental requirement it is not a strong enough basis to ban sex selection for family balancing.

If the HFEA is unsure of public opinion on sex selection for family balancing or that they feel that certain risks need to be further investigated before allowing sex selection for family balancing to become legal they could undertake a consultation. This consultation would need to be more in depth and researched more thoroughly so that accurate figures of how the country feels towards sex selection can be ascertained and that any consequences that may arise because of sex selection will not do so within the UK. However, it must be remembered that there should be a presumption of reproductive autonomy and that it is for those wishing to ban sex selection for family balancing to show that it will have an adverse affect upon society and not those wishing to use sex selective technology for family balancing. This dissertation has shown that while there are potential consequences and risks of allowing sex selection for family balancing to become legal within the UK, these are not strong enough to justify banning all non-medical sex selection and limiting reproductive autonomy.

## Conclusion

The advancement of PGD has allowed sex selection to be performed with amazing accuracy. While sex selection for medical reasons is legal within the UK, sex selection for non-medical reasons is not. This leaves parents who wish to choose the sex of their children for non-medical reasons with two options: to either travel abroad to a country which permits sex selection for non-medical reasons or to continue to 'try' naturally. This dissertation has argued that sex selection for family balancing should become legal within the UK.

Most couples wishing to access sex selective technology in the UK do so for family balancing reasons ${ }^{354}$. Various surveys have been conducted to determine how UK parents feel about the sex of their children. Results have shown that the majority of couples surveyed wish to have children of both sexes. ${ }^{355}$ However, should UK parents be given the freedom to choose the sex of their children? At one end of the scale there are those who believe that parents should be given unlimited reproductive freedom and at the other end of the scale there are those who believe that parents' reproductive freedom should be totally limited. It is argued that a middle ground should be adopted - one that tries to take into account both ends of the scale. It is proposed that sex selection for family balancing should become legal within the UK but only if there were certain conditions put in place. Firstly, it is argued that parents should only be able to use sex selection for family balancing when they have children all of one sex, for example they have three boys and would like a girl. Parents should not be allowed to sex selection for family balancing when they have children of both sexes, although not in equal number, for example when they have three boys and one girl. Secondly, parents should not be allowed to select the sex of their child for the first, second or even third child. This is because at two it could be said that an imbalance is beginning to form which may be rectified by a third child but by three it could be said that parents have been cheated by nature. Thirdly, it is argued that if sex selection for family balancing were to become legal then parents should pay for the treatment themselves. Sex selection for family balancing should not be provided by the NHS. This is because the NHS has limited resources and unfortunately cannot treat everyone. Sex selection for family balancing is not a

[^86]medical condition and consequently, it would seem unethical to divert resources away from those with medical needs and towards those who can have children but wish to have a child who is of a certain sex. Fourthly, it is argued that if sex selection for family balancing did become legal within the UK and parents did have to privately fund sex selective treatment then children from previous relationships should not be taken into account.

It is suggested that there is a strong belief among the UK public that permitting sex selection for family balancing would result in having an adverse effect upon society. ${ }^{356}$ These effects could be in the form of a distortion of the sex ratio, sex discrimination and stereotyping of boys and girls, a detrimental effect upon those who have gender dysphoria, treating children as commodities and the beginning of the slippery slope towards designer babies. This dissertation has argued that this would not be the case if sex selection for family balancing were to become legal within the UK.

Firstly, it is argued that sex selection for family balancing would not distort the ratio in favour of one sex as parents who want access to sex selective technology do so because they have children all of one sex and they would like a child of the opposite sex to 'balance' out their family. This is evidenced by the Gunns' and the Trathens' cases. They had children all of one sex and travelled abroad in order to use PGD to select the sex of their next child for family balancing reasons. ${ }^{357}$ It is argued by Savulescu that if you were concerned with the sex ratio then you would simply allow sex selection for family balancing. If this was to work then three conditions would need to be established. Firstly, that population sex differential is a bad thing. Secondly, that unfettered sex selection would allow the sex ratios to rise dramatically and thirdly, that family balancing alone would not cause population sex differentials to rise. A distorted sex ratio would have a bad effect upon society. Literature has focused predominately on a more male dominated society which may lead to more violence and drunken aggression and push women may become more valued for their reproductive capacities. A potential consequence if unfettered sex selection were to become legal may mean that many men will be condemned to a life of

[^87]bachelorhood without a hope of finding love and companionship because of the scarcity of available women. It is thought that unfettered sex selection would not cause the sex ratio to rise as UK parents want children of both sexes. However, if there were concerns regarding unfettered sex selection causing sex ratios to rise then only sex selection for family balancing should become legal and certain requirements could be set in place, such as the pairing system, in order to prevent this. ${ }^{358}$

Secondly, it is argued that the UK is a multi-cultural society which values men and women equally and sex selection for family balancing would not prevent this. It is thought that it would not lead to sex discrimination and gender stereotyping. Some argue that parents who choose the sex of their child will expect that child to behave in a certain way which conforms to gender stereotyping. They will expect boys to like sports and fishing while girls will like pink and shopping. However, it is suggested that in the twenty-first century this is no longer the case and that there is the fear that permitting sex selection for family balancing in the UK will enhance discrimination and gender stereotypes rather than combating it. However, it is argued that this will not be the case as it is now recognised that there are biological differences between male and female children. These include different patterns of aggression, leaning, and spatial recognition as well as hormonal differences. ${ }^{359}$ Parents who want to choose the sex of their children do so for family balancing reasons and to experience the rearing of children of both sexes. Sex selection for family balancing is based upon the sex of existing children and not upon the assumption that one sex is superior to the other. Further, there is a risk that any child born, whether naturally or through reproductive technology, may have gender dysphoria. It is suggested that children who have been selected because of their sex and who have gender dysphoria may feel more pressure to conform to more traditional gender roles in order to please their parents who have invested a great deal, financially, physically and emotionally, into having a child of a particular sex. ${ }^{360}$ Feelings of guilt may make them not be able to develop their own identity. However, it is argued that the risk that a sex selected child may be born with gender dysphoria is not a strong enough justification to limit parents' reproductive autonomy and to ban sex selection for

[^88]family balancing within the UK. If parents do have sex discriminatory attitudes or will not love and support a child with gender dysphoria then they can be refused treatment based upon the welfare of the child requirement. ${ }^{361}$ This will be of a high standard and if the clinic feels that there is a risk to the potential future child or to any existing children, whether physically or psychologically, and no matter how small, parents will be prevented from choosing the sex of their children.

Thirdly, it could be argued that children could be treated as commodities and would not be loved unconditionally if sex selection for family balancing were to become legal within the UK. Children should not have to satisfy any requirements in order to merit the parents' love. As Davis argues if we set conditions on which child we get, we are setting conditions on our love for whatever child we get. This implies that parents should not select against unhealthy embryos but this is not the case in the UK. Parents' are permitted to select healthy embryos and for unhealthy embryos do be discarded which does not follow that parents should love their children unconditionally. Selection for sex may imply that those children may be prevented from having an open future, especially if they do not meet their parents' gender stereotypical views, for example a girl may want to become a professional footballer instead of a ballet dancer or a boy may want to become a nurse instead of a builder. However, it is argued that children who are born naturally are sometimes subjected to high-pressure child-rearing practices which may prevent children from determining their own future but we do not prevent them. ${ }^{362}$ If we allow these high-pressured child-rearing practices, why should we not allow sex selection for family balancing? Experiments, such as the Jack-in-the-box experiment has shown that there are biological differences in boy and girl children, which could lead to the conclusion that parents should be allowed to select the sex of their children for family balancing reasons so that they experience the rearing of children of both sexes. It is suggested that children who are selected because of their sex can still determine their own future and have their own dreams. Parents are selecting which embryos to implant based upon sex, they are determining hair or eye colour, intelligence or sporting ability. Kant's second part of his categorical imperative implies that humans are valuable in themselves and should never be used only as a means to achieve something else, for example as mere commodities. Kant had no objection to using

[^89]people as a means but the difference is using humans merely as a means and using them as a means and at the same time as an end. This could imply that parents' could select the sex of their children in order to achieve their own desire of raising a child of a certain sex as long as the future child is valued for themselves as well.

Fourthly, it is believed by some that permitting sex selection will be the beginning of the slippery slope towards designer babies. However, it is argued that this is not the case either. Parents will only be able to choose which embryos are implanted based upon sex and that will be the extent of their choice. At the moment it is not possible to select children based upon hair or eye colour, sporting ability or level of intelligence but if it become possible to select for these characteristics in the future then parents should not have that choice. Allowing parents' to select these characteristics may undermine our ability to succeed on our own merit. It is one thing to hit seventy home runs as a result of disciplined training and effort but it is something else to hit them as a result of genetically enhanced muscles.

Achievements would no longer be down to natural ability but how much money parents invested in having a particular child. Two classes of people may begin to form - the enhanced and the merely natural. This may lead to a widening of the gap between the wealthy and the poor as probably it will only be the wealthy that will be able to invest in selecting children with the best characteristics. Although, it is thought that parents will only be able to pass genes onto their children which they themselves carry. If they do not carry a gene for high sporting ability then they should not be able to select it in their children. It is argued that the embryo should not be altered to suit parents' wishes and desires. ${ }^{363}$

While there are many detrimental consequences for society that could happen if unfettered sex selection did become legal in the UK, it is argued that this would not be the case if only sex selection for family balancing became legal and there were strict regulations put in place, such as parents have children all of one sex and would like a child of the opposite sex, they have at least three children all of one sex, that parents would have to pay for the treatment themselves and clinics could adopt the pairing system in order to maintain the sex ratio and that the welfare of the child was implemented to a high a standard. At the moment sex selection is only legal for medical reasons but it is argued that this should change to allow parents to select
${ }^{363}$ See chapter 1, page 46.
the sex of their children for family balancing reasons. Article 8(1) protects the right to a private family life must be read in conjunction with article 8(2) which allows that state to interfere when it is in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well-being of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others. ${ }^{364}$ This allows the state to legally interfere in a person's private life for certain reasons. It is argued that banning sex selection for family balancing is not necessary in the UK as it would not distort the sex ratio or enhance sex discrimination or be the beginning of the slippery slope towards designer babies. Further, any interference by the state must be proportionate. It is suggested that banning all non-medical sex selection is not a proportionate response. Allowing sex selection for family balancing would be a proportionate response as it allows parents some control over the sex of their children without distorting the sex ratio and enhancing sex discrimination. It also attempts to balance all the competing interests involved in the sex selection debate, including the welfare of the future child as if parents' have unusual motivations for wanting a child of certain sex then they would be refused treatment. Furthermore, it is argued that if a woman could obtain an abortion based upon the sex of the foetus then why should parents' be prevented from selecting the sex of their child through PGD or sperm sorting techniques? If a women could prove to two medical practitioners that having a child of a certain sex would affect her mental well-being then she could legally be granted an abortion. If this is the case, then could it not follow that sex selection performed through PGD or sperm sorting for family balancing reasons could become legal.

I conclude that sex selection for family balancing should become legal within the UK. This is because research has revealed that it would not have a detrimental effect upon society and that it is a proportionate response which balances the parents' right to reproductive freedom, the public's interest and the interest of the future embryo. I would recommend that strict rules and regulations should be set in place to ensure that sex selection for family balancing is performed legitimately and ethically.

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    ${ }^{31}$ Their 3 year old daughter Nicole suffered severe burns and died after a gas balloon fell onto a bonfire in their garden. The Mastertons' were left with four surviving sons. Following their daughter's death the Mastertons were keen to have another daughter and applied to the HFEA to allow then to use sex selection to ensure that they had a daughter. The HFEA refused and the Mastertons' travelled to Rome to receive sex selective treatment. The treatment was unsuccessful as it only resulted in a male embryo which they decided to donate to an infertile couple.

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    ${ }^{128}$ Davis, J, ‘Selecting Potential Children and Unconditional Parental Love', 2008, Bioethics, Vol.22, No.5, page 259.
    ${ }^{129}$ <www.guardian.co.uk/lifeandstyle/2010/apr/03/sex-selection-babies> accessed $28^{\text {th }}$ May 2013.
    ${ }^{130}$ <www.theatlantic.com/magazine/archive/2004/04/the-case-against-perfection/302927/>accessed 28th May 2013.
    ${ }^{131}$ May as quoted in <www.theatlantic.com/magazine/archive/2004/04/the-case-againstperfection/302927/>accessed 28th May 2013.

[^29]:    ${ }^{132}$ Davis, D, 'The Parental Investment Factor and the Child's Right to an Open Future', 2009, The Hastings Center Report, Vol.39, No.2, page 24.
    ${ }^{133}$ Kant as quoted in Wright, R. George, 'Treating Persons as an Ends in Themselves: the Legal Implications of a Kantian Principle', 2002, University of Richmond Law Review, Vol.36, page 271. Also see Gavaghan, C, 'Defending the Genetic Supermarket: Law and Ethics of Selecting the Next Generation', 2007, Routledge-Cavendish, page 155.
    ${ }^{134}$ Zain suffered from beta thalassaemia major. This is an autosomal recessive genetic disorder, which causes an abnormally high rate of breakdown of red blood cells, and leads in turn to severe anaemia.

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    ${ }^{136}$ Alghrani, A, 'Suitable to be a Saviour Sibling: R (Quintavalle) v Human Fertilisation and Embryology Authority', 2006, Child and Family Law Quarterly, Vol 18, No 3, page 419.
    ${ }_{137}$ Alghrani, A, and Harris, J, 'Reproductive Liberty: Should the Foundation of Families be Regulated?',2006, Child and Family Law Quarterly, Vol.18, No.2, page 208.
    138 ibid 209.

[^31]:    ${ }^{139}$ Professor John Harris as quoted in Alghrani, A, 'Suitable to be a Saviour Sibling: R (Quintavalle) v Human Fertilisation and Embryology Authority', 2006, Child and Family Law Quarterly, Vol 18, No 3, page 419.
    ${ }^{140}$ H. J. Paton as quoted in Wright, R. George, 'Treating Persons as an Ends in Themselves: the Legal Implications of a Kantian Principle', 2002, University of Richmond Law Review, Vol.36, page 277. Also, see Gavaghan, C, 'Defending the Genetic Supermarket: Law and Ethics of Selecting the Next Generation', 2007, Routledge-Cavendish, page 156. Also, see footnote 135, page 534.
    ${ }^{141}$ See footnote 136, page 418.
    ${ }^{142}$ ibid 419.

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    ${ }^{144}$ Parfit as quoted in Wrigley, A, ‘Genetic Selection and Modal Harms', 2006, The Monist, Vol.89, No. 4, page 505.
    ${ }^{145}$ Parfit as quoted in Gavaghan, C, 'Defending the Genetic Supermarket: Law and Ethics of Selecting the Next Generation', 2007, Routledge-Cavendish, page 71.

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    ${ }^{149}$ McBrayer, J, 'Rights, Indirect Harms and the Non-Identity Problem', 2008, Bioethics, Vol. 22, No. 6 page 299.

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    ${ }^{151}$ ibid.
    152 ibid.
    ${ }^{153}$ See footnote 130.

[^35]:    154 ibid.
    ${ }^{155}$ See footnote 124, page 491.
    ${ }^{156}$ Gilbar, R, 'Between Unconditional Acceptance and Responsibility: Should Family Ethics Limit the Scope of Reproductive Autonomy', 2009, Child and Family Law Quarterly, Vol.21, No.3, page 315.
    ${ }^{157}$ See footnote 132, page 25.

[^36]:    ${ }^{158}$ See footnote 156, page 318.
    ${ }^{159}$ ibid 319.
    ${ }^{160}$ ibid 313.
    ${ }^{161}$ ibid.
    162 ibid 318.
    163 ibid 316.

[^37]:    ${ }^{164}$ Vacco, L, 'Preimplantation Genetic Diagnosis: From Preventing Genetic Disease to Customizing Children. Can the Technology be Regulated Based Upon the Parent's Intent?', 2004-2005, 49 St. Louis U. L.J. page 1194. See Harmon, S, ‘The Significance of UNESCO’s Universal Declaration on the Human Genome and Human Rights', 2005, SCRIPTed, Vol. 21, page 21 for a brief discussion on the technological advancement of genetics and its potential consequences.
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    ${ }^{167}$ See footnote 132.
    ${ }^{168}$ See footnote 165, page 1193.
    169 ibid 1194.
    170 <www.bbc.co.uk/news/health-22540374>accessed 3rd June 2013.
    171 ibid.
    172 ibid.

[^39]:    ${ }^{173}$ See footnote 130.
    174 ibid.
    ${ }^{175}$ ibid.
    ${ }_{176}^{176}$ See footnote 165, page 1196.
    177 ibid 1195.
    ${ }^{178}$ See footnote 130.

[^40]:    ${ }^{179}$ See footnote 132, page 25.
    ${ }^{180}$ See footnote 130.
    ${ }^{181}$ See footnote 83, page 7.
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    ${ }^{185}$ See footnote 130.
    ${ }^{186}$ ibid.

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    ${ }^{191}$ Davis, J, 'Selecting Potential Children and the Unconditional Parental Love', 2008, Bioethics, Vol.22, No.5, page 259.
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    ${ }^{194}$ ibid.
    ${ }^{195}$ See footnote 53, page 240.
    ${ }_{196}^{196}$ See footnote 88, page 261.
    197 ibid 256.

[^44]:    ${ }^{198}$ See footnote 82.
    199 ibid.
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[^45]:    ${ }^{201}$ Ikemotot, L, 'Reproductive Tourism: Equality Concerns in the Global Market for Fertility Services', 2009, Law and Inequality: A Journal of Theory and Practice', Vol. 27, Issue 2, page 277. Also see George, Babu P. and Nedelea, Alexandru, 'Medical Tourism: The Next Big Thing to Come', (September 8, 2008). Available at SSRN: http://ssrn.com/abstract=1264925 or http://dx.doi.org/10.2139/ssrn. 1264925 page 1 about medical tourism. Also see F. Shenfield, J. de Mouzon, G. Pennings, A.P. Ferraretti, A. Nyboe Andersen, G. de Wert, V. Goossens, 'Cross Border Reproductive Care in Six European Countries', 2010, Human Reproduction (Oxford, England), Vol. 25. Isuue. 6, page 1361.
    ${ }^{202}$ F. Shenfield, J. de Mouzon, G. Pennings, A.P. Ferraretti, A. Nyboe Andersen, G. de Wert, V. Goossens, 'Cross Border Reproductive Care in Six European Countries', 2010, Human Reproduction (Oxford, England), Vol.25. Isuue. 6, p1362. Also see L. Culley, N. Hudson, F. Rapport, E. Blyth, W. Norton, and A.A. Pacey, 'Crossing Borders for Fertility Treatment: Motivations, Destinations and Outcomes of UK Fertility Travellers', 2011, Human Reproduction, Vol. 26, No.9, page 2374. Also see Ikemotot, L, 'Reproductive Tourism: Equality Concerns in the Global Market for Fertility Services', 2009, Law and Inequality: A Journal of Theory and Practice, Vol. 27, Issue 2, page 278.
    ${ }^{203}$ Ikemotot, L, 'Reproductive Tourism: Equality Concerns in the Global Market for Fertility Services', 2009, Law and Inequality: A Journal of Theory and Practice, Vol. 27, Issue 2, page 287.

[^46]:    ${ }^{204}$ ibid 288.
    ${ }^{205}$ ibid.
    ${ }^{206}$ Moult, J, 'How Far Would You go to Choose the Sex of your Child', MailOnline, 16 March 2011, available at <www.dailymail.co.uk/femail/article-1366672/How-far-YOU-choose-sex-child.html> accessed 15th February 2013.
    207 ibid.
    ${ }^{208}$ They trawled the internet and found a clinic in Los Angeles who was offering sex selection for nonmedical readons. At the time the article was printed in the Guardian newspaper the Gunns were all set to travel the following week to receive treatment at this clinic. They were taking their three boys and making a holiday of it by visiting Disneyland between the egg harvesting and the implantation. Their trip cost approximately $£ 25,000-£ 30,000$.
    ${ }^{209} \mathrm{Mr}$ Trathen had a vasectomy as they decided that they were not going to have anymore children. While feeding her fourth child Mrs Trathen caught the end of a documentary discussing the ability for couples to select the sex of their baby which was a 100\% guaranteed. Although, Mr Trathen had had a vasectomy they were able to extract sperm and Mrs Trathen started treatment at a clinic in London before travelling to Spain to receive PGD. The treatment was successful and Mrs Trathen fell pregnant with twin girls.

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    ${ }^{211}$ Storrow, R, 'Travel into the Future of Reproductive Technology', 2010-2011, UMKC LAW REVIEW, vol. 79:2, page 299.
    ${ }^{212}$ ibid.
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    ${ }^{219}$ Wilkinson, S, and Gerrard, E, 'Eugenics and the Ethics of Selective Reproduction', 2013, Keele University, available at <www.keele.ac.uk/media/keeleuniversity/ri/risocsci/eugenics2013/Eugenics\%20and\%20the\%20ethics \%20of\%20selective\%20reproduction\%20Low\%20Res.pdfSex, page 31.
    ${ }^{220}$ ibid.
    ${ }^{221}$ L. Culley, N. Hudson, F. Rapport, E. Blyth, W. Norton, and A.A. Pacey, ‘Crossing Borders for Fertility Treatment: Motivations, Destinations and Outcomes of UK Fertility Travellers', 2011, Human Reproduction, Vol. 26, No.9, page 2376.

[^49]:    ${ }^{222}$ <www.ukcfa.co.uk/index.php/costs-explained.html>accessed 2 ${ }^{\text {nd }}$ March 2013.
    ${ }^{223}$ Stankovic, B, '"It's a Designer Baby!" - Opinions on Regulation of Preimplantation Genetic Diagnosis', 2005, (February 7, 2005). UCLA Journal of Law \& Technology, Vol. 3, 2005. Available at SSRN: http://ssrn.com/abstract=1756573, page 4. Also see Steinbock, B, 'Designer Babies: Choosing our Children's Genes', 2008, The Lancet, Vol.372, page 1295.
    ${ }^{224}$ Markwood, S, 'Creating a Perfect Human Is Not So Perfect: The Case for Restricting Genetic Enhancement Research', 2005-2006, Penn State Law Review, Vol. 110, Issue 2 (Fall 2005), page 474.
    ${ }^{225}$ ibid 483.

[^50]:    ${ }^{226}$ George Monbiot as quoted in Gavaghan, C, 'Defending the Genetic Supermarket: Law and Ethics of Selecting the Next Generation', 2007, Routledge - Cavendish, page 178.
    ${ }^{227}$ Gavaghan, C, 'Defending the Genetic Supermarket: Law and Ethics of Selecting the Next Generation', 2007, Routledge - Cavendish, page 179. Also see McConnell, B, 'Quality Control: the Implications of Negative Genetic Selection and Pre-Birth Genetic Enhancement', 2006, UCLA Women's Law Journal, Vol. 15, Issue 1, page 50
    ${ }^{228}$ See footnote 226, page 179.
    ${ }^{229}$ Tamara Garcia and Roland Sandler as quoted in Czerniawski, M, 'Human Enhancement and Values', 2010, Available at SSRN: http://ssrn.com/abstract=1633938 or http://dx.doi.org/10.2139/ssrn. 1633938 page 24.

[^51]:    ${ }^{230}$ Savulescu, J, 'Procreative Beneficence: Why we should select the best children', 2001, Bioethics, Vol.15, No.5/6, page 415.
    ${ }^{231}$ ibid.
    ${ }^{232}$ See footnote 224, page 484.
    ${ }^{233}$ Stoller, S, 'Why We are Not Morally Required to Select the Best Children, a Response to Savulescu', 2008, Bioethics, Vol.22, No.7, page 365.
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[^52]:    ${ }^{235}$ See footnote 224, page 484.
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    ${ }^{239}$ Ford, A, 'The Concept of Exceptionality: A Legal Farce?', 2012, Medical Law Review, Vol.20, No.3, page 2.
    ${ }^{240}$ 1.11.1.3 of the assessment and treatment of people with fertility problems. See at <www.nice.org.uk/nicemedia/live/14078/62769/62769.pdf.>accessed $15^{\text {th }}$ March 2013.
    ${ }^{241}$ 1.11.1.4 of the assessment and treatment of people with fertility problems. See at <www.nice.org.uk/nicemedia/live/14078/62769/62769.pdf.> accessed $15^{\text {th }}$ March 2013.

[^54]:    ${ }^{242}$ 1.11.1.6 of the assessment and treatment of people with fertility problems. See at <www.nice.org.uk/nicemedia/live/14078/62769/62769.pdf.>accessed 15h March 2013.
    ${ }^{243}$ See footnote 236, page 408.
    ${ }^{244}$ <www.pgd.org.uk/referral-funding/funding.aspx>accessed $10^{\text {th }}$ March 2013.
    245 ibid.
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    ${ }^{248}$ Herring, J, 'Medical Law and Ethics', 2008, $2^{\text {nd }}$ Edition, OUP, page 52.

[^55]:    ${ }^{249}$ Klein, R, and Maybin, J, ‘Thinking about Rationing', 2012, the Kings Fund. Available at http://www.kingsfund.org.uk/sites/files/kf/field/field_publication_file/Thinking-about-rationing-the-kings-fund-may-2012.pdf page 11.
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    ${ }^{252}$ Evans v United Kingdom (2008) 46 E.H.R.R. 34 H17.
    ${ }^{253}$ See above case, H18.

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    ${ }^{255}$ ibid. Also, McMillan, J, 'Sex Selection in the United Kingdom', 2002, The Hastings Center Report, Vol 32, No.1, page 28. Also, see http://www.hfea.gov.uk/2070.html.
    ${ }^{256}<$ www.hfea.gov.uk/2068.html> accessed $20^{\text {th }}$ January 3013 . Also, see footnote 278, page 2.
    ${ }^{257}<$ www.hfea.gov.uk/2068.html>accessed $20^{\text {th }}$ January 2013.
    ${ }^{258}$ ibid.
    ${ }^{259}$ ibid. Also, see Sweet, J, 'Safety and Access is the UK Regulatory Model Right for America', 2010, 4 Health L. \& Pol'y Brief 54, page 56 which states that the Warnock Report 1984 lays the groundwork for a robust regulatory framework.

[^58]:    ${ }^{260}$ McMillan, J, 'Sex Selection in the United Kingdom', 2002, The Hastings Center Report, Vol. 32, No. 1, page 29. See the HFE Act s3(2) and s3(3).
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    ${ }^{264}$ Sweet, J, 'Safety and Access is the UK Regulatory Model Right for America', 2010, 4 Health L. \& Pol'y Brief 54, page 57. Also, see Alastair v Campbell, 'Britain's HFEA Caught in the Middle', 2005, The Hastings Center Report, Vol.35, No. 3, page 8 states that "the HFEA holds a unique place in Europe providing a template for other regulatory regimes and yet representing a liberal position on key issues, such as the creation of embryos for research and the use of embryonic stem cells, including those coming from cloned embryos".

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    ${ }^{266}$ ibid. Also see Erik Aarden, Ine Van Hoyweghen, Rein Vos, and Klasien Horstman, 'Providing Preimplantation Genetic Diagnosis in the United Kingdom, The Netherlands and Germany: a Comparative In-Depth Analysis of Health-Care Access', 2009, Vol.24, No.7, page 1543.
    267 See footnote 265.
    ${ }^{268}$ ibid.
    269 Blackburn-Starza, A, Liverpool Hospital to Investigate 'Sex Selection' Claims', 2011, available at <www.bionews.org.uk/page_89606.asp>accessed $29^{\text {th }}$ January $2013 .^{2}$

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    ${ }^{271}$ Wilkinson, S, and Gerrard, E, 'Eugenics and the Ethics of Selective Reproduction', 2013, Keele University, available at
    <www.keele.ac.uk/media/keeleuniversity/ri/risocsci/eugenics2013/Eugenics\%20and\%20the\%20ethics \%20of\%20selective\%20reproduction\%20Low\%20Res.pdfSex, page 31.
    ${ }^{272}$ ibid.
    ${ }^{273}$ Herring, J, 'Medical Law and Ethics', 2008, $2^{\text {nd }}$ Edition, OUP, page 326.
    ${ }^{274}$ Starr, S, 'New Law Empowers UK Government to Transfer HFEA's Functions', 19 December 2011, available at <www.bionews.org.uk/page 115729.asp>accessed $29^{\text {th }}$ January 2013. The Public Bodies Act has received royal assent which makes it possible for the HFEA's powers to be transferred to other bodies. ${ }^{274}$ The reasoning behind this is to increase transparency and accountability. If this does happen, the regulation of assisted reproduction and sex selection will continue to be the same but it just means that the regulation will be carried out by a different body.
    ${ }^{275}$ Kanellopoulou, N, ‘Sex Selection Options for Regulation', 2004, Vol.1, Issue 1, page 218.

[^61]:    ${ }^{276}$ Sweet, J, 'Safety and Access is the UK Regulatory Model Right for America', 2010, 4 Health L. \& Pol'y Brief 54, page 58.
    ${ }_{278}^{277}$ <www.hfea.gov.uk/517.html>accessed 20 th January 2013.
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    ${ }^{280}$ A report on the HFEA's 2002-2003 review of sex selection, "Sex Selection: Options for Regulation", available at [http://www.hfea.gov.uk/docs/Final_main_report.pdf](http://www.hfea.gov.uk/docs/Final_main_report.pdf)accessed $19^{\text {th }}$ February 2014, para 63.

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[^65]:    ${ }^{287}$ See footnote 282, page 293.
    ${ }^{288}$ ibid.
    ${ }^{289}$ McMillan, J, 'Sex Selection in the United Kingdom', 2002, The Hastings Center Report, Vol 32, No.1, page 30.
    290 ibid.
    ${ }^{291}$ ibid.

[^66]:    ${ }^{292}$ S.H. And Others v Austria, Application no. 57813/00, (ECtHR, 3 November 2011).
    ${ }^{293}$ See above footnote, para 82.
    ${ }^{294}$ Article 8(2) of the European Convention on Human Rights.
    ${ }^{295}$ Olsson v Sweden (No. 1), Application no.10465/83, (ECtHR, 24 March 1988).
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    ${ }^{297}$ Campbell v MGN [2004] UKHL 22.

[^67]:    ${ }^{298}$ The case of Campbell v MGN [2004] as quoted in Herring, J, 'Medical Law and Ethics', 2008, 2 ${ }^{\text {nd }}$ Edition, OUP, page 199.
    ${ }^{299}$ K. and T. v Finland, Application no. 25702/94, (ECtHR, 12 Jul 2001).
    ${ }^{300}$ See above footnote para 154.

[^68]:    ${ }^{301}$ Z v Finland (1997) 5 BMLR 107.
    ${ }_{302}^{302}$ Herring, J, 'Medical Law and Ethics', 2008, $2^{\text {nd }}$ Edition, OUP, page 199.
    ${ }^{303}$ Gavaghan, C, 'Defending the Genetic Supermarket: Law and Ethics of Selecting the Next Generation', 2007, Routledge - Cavendish, page 12.
    304 ibid.

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    ${ }^{306}$ Scott, R, 'Prenatal Testing, Reproductive Autonomy, and Disability Interests', 2005, Cambridge Quarterly of Healthcare Ethics, Vol. 14, Issue 1, page 66.
    ${ }^{307}$ C Mand, R E Duncan, L Gillam, V Collins and M B Delatycki, 'Genetic Selection for Deafness: the Views of Hearing Children of Deaf Adults', 2009, Journal of Medical Ethics, Vol.35, No. 12, p723. Also, see Moahapatra, S, 'Global Legal Responses to Prenatal Gender Identification and Sex Selection', 19 December 2012, Nevada Law Journal, Forthcoming. Available at SSRN: http://ssrn.com/abstract=2191683, page 34 for a brief discussion on abortion and disability.

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    ${ }^{314}$ Enhorn v Sweden, Application no.56529/00, (ECtHR 25 January 2005).
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[^72]:    ${ }^{316}$ Dickson v The United Kingdom [GC], Application no.44362/04, (ECtHR 4 December 2007).
    317 ibid para 82.
    ${ }^{318}$ Odievre v France, Application no. 42326/98, (ECtHR, 13 February 2003).
    ${ }^{319}$ Godelli v. Italy, Application no. 33783/09 (ECtHR, 25 September 2012).

[^73]:    ${ }^{320}$ The European Commission of Human Rights as stated in Beyleveld, D, 'Data Protection and Genetics: Medical Research and the Public Good', 2007, 18 K.L.J. 275, page 282.

[^74]:    ${ }^{321}$ See footnote 292.
    ${ }^{322}$ Evans v United Kingdom (2008) 46 E.H.R.R.34. para 59.
    ${ }^{323}$ Keegan v. Ireland, Application no. 16969/90, (ECtHR 26 May 1994). While a certain margin of appreciation is left to the Contracting States, the exceptions provided for in paragraph 2 of Article 8 are to be interpreted narrowly and the need for measures in a given case must be convincingly established (see Funke v. France, Application no. 10828/84, (ECtHR 25 February 1993)).

[^75]:    ${ }^{324}$ Funke v. France, Application no. 10828/84, (ECtHR 25 February 1993). The Court has consistently held that the Contracting States have a certain margin of appreciation in assessing the need for an interference, but it goes hand in hand with European supervision.
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    ${ }^{328}$ Section 1(1a) of the Abortion Act 1967.
    ${ }^{329}$ Section 1(2) of the Abortion Act 1967. Also, see footnote 325, page 628.
    ${ }^{330}$ See footnote 325 , page 628.

[^77]:    ${ }^{331}$ Swift, K, and Ribson, M, 'Why Doctors Need Not Fear Prosecution for Gender-Related Abortions', 2012, Journal of Criminal Law, Vol. 76, No. 4, page 348.
    ${ }^{332}$ ibid 350.
    ${ }^{333}$ See footnote 326, page 130.

[^78]:    334 ibid 131.
    ${ }^{335}$ Ibid 132.

[^79]:    ${ }^{336}$ ibid 133.
    ${ }^{337}$ ibid 134. Also, see Savulescu, J, 'Is There a "Right Not to be Born"? Reproductive Decision Making, Options and the Right to Information', 2002, Journal of Medical Ethics, Vol. 28, No. 2, page 66 which makes a similar argument. Savulescu argues that if we accept that it will harm parents to have a child with downs syndrome then we should also accept that it is harmful to parents to have a child of a certain sex.
    ${ }^{338}$ See footnote 331, page 354.

[^80]:    ${ }^{339}$ John Harris as quoted in Scott, R. 'Choosing Between Possible Lives: Legal and Ethical Issues in Preimplantation Genetic Diagnosis', 2006, Oxford Journal of Legal Studies, Vol. 26, No.1, page 159.

[^81]:    ${ }^{340}$ Walker, M, ""Designer Babies" and Harm to Supernumerary Embryos', 2008, American Philosophical Quarterly, Vol. 45, No. 4, page 350.
    ${ }_{342}$ Steinbeck, B, 'The Morality of Killing Human Embryos', 2006, 34 J.L. Med. \& Ethics 26, page 27.
    ${ }^{342}$ ibid.
    ${ }^{343}$ ibid.

[^82]:    ${ }^{344}$ The Warnock Committee as quoted in Gomez, D, ‘The Special Status of a Human Embryo in the Regulation of Assisted Conception and Research within the United Kingdom', 2011, Medico-Legal Journal of Ireland, Vol. 17, No.1, page 8.
    ${ }^{345}$ Gomez, D, ‘The Special Status of a Human Embryo in the Regulation of Assisted Conception and Research within the United Kingdom', 2011, Medico-Legal Journal of Ireland, Vol. 17, No.1, page 8.
    ${ }^{346}$ ibid.

[^83]:    ${ }^{347}$ See footnote 302, page 366.
    ${ }^{348}$ ibid 287. Also, see Lara, F, 'Should We Sacrifice Embryos to Cure People', 2012, Human Affairs, vol 22, page 624. Also, see De Grazia, 'Moral Status, Human Identity and Early Embryos: A critique of the President's Approach', 2006, J.L.Med. \& Ethics. Vol. 24 page 51.
    ${ }^{349}$ See footnote 345, page 7.

[^84]:    ${ }^{350}$ ibid 11.
    ${ }^{351}$ Research on embryos in the UK is not limited to supernumerary embryos (spare embryos).
    Embryos can be created specifically for research purposes. See ibid 13.

[^85]:    ${ }^{352}$ Vo v France, Application no. 53924/00, (ECtHR 8 July 2004).
    ${ }^{353}$ Boso v Italy (no. 50490/99, decision of 05.09.2002).

[^86]:    ${ }^{354}$ See chapter 1, page 12 for a more in depth explanation of family balancing.
    ${ }^{355}$ See chapter 1, page 20.

[^87]:    ${ }^{356}$ See chapter 3, page 71 on the discussion of consultations. In 2002 the HFEA carried out a consultation to determine the publics' feelings on sex selection for non-medical reasons. Most respondents felt that sex selection for non-medical reasons would have adverse effects in the form of a skewing of the sex ratio, discrimination, treating children as commodities etc.
    ${ }^{357}$ See chapter 2, page 64 which explains the details of these cases.

[^88]:    ${ }^{358}$ See chapter 1, page 21 for a discussion on the advantages and disadvantages of these suggestions for maintaining the sex ratio of the UK.
    ${ }^{359}$ This is supported by the Jack-in-box. See chapter 1, page 25.
    ${ }^{360}$ See chapter 1, page 27 for the discussion on gender dysphoria.

[^89]:    ${ }^{361}$ See chapter 3, page 72.
    ${ }^{362}$ See chapter 1, page 40.

[^90]:    ${ }^{364}$ See chapter 3, page 75.

