MORAL BIOENHANCEMENT:
AN ETHICO-LEGAL EXPLORATION OF THE
MOTIVATIONAL ROLE OF MONEY, HEALTH, AND DUTY

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International Conventions

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Cases

*Nevmerzhitsky v Ukraine* (2005) 54825/00 Judgment 5.4.2003 [Section II]


*Re T (An Adult) (Consent to Treatment)* [1992] 4 All ER 649 at 652-653, CA
Abstract

The University of Manchester

Sarah Carter

PhD in Bioethics and Medical Jurisprudence

Moral Bioenhancement: An Ethico-Legal Exploration of the Motivational Role of Money, Health, and Duty

February 2017

This thesis provides a detailed analysis of the feasibility of voluntary moral bioenhancement through an ethico-legal exploration of three motivators: money (and financial incentives in general), health, and duty. These motivators are explored in turn over the course of three papers and it is concluded that while none offer a motivator that could encourage broad participation in voluntary programmes of moral bioenhancement, they do provide insight into things that will be important to note in advance of the advent of such an intervention and (especially) of attempts to promote it. In addition, this thesis identifies and explores areas of discussion not previously addressed in the literature, including issues such as: taboo trade-offs in the use of financial incentives to promote participation in programmes of moral bioenhancement, the use of medical definitions in order to classify moral bioenhancement interventions as medically indicated, and the question as to whether there could be a duty to undergo moral bioenhancement interventions.

Moral bioenhancement, though currently a hypothetical notion, is considered by many to be a desirable endeavour due to its potential to bring about good consequences and to avoid instances of significant and even ultimate harm. However, unlike other enhancements, moral bioenhancement is something that does not seem to directly benefit the enhanced individual and so there are concerns that people would be disinclined to undergo the intervention. Some writers have proposed that this therefore demonstrates a need for compulsory approaches to the endeavour, but in the introductory chapters of this thesis I demonstrate that such an approach would be ethically and legally problematic and, therefore, a voluntary approach would be required. If moral bioenhancement is considered as something that is good to have (and it seems that such a case can be made, certainly on a societal level), then a method of encouraging participation in programmes of the endeavour will be required. This thesis aims to identify that method by exploring the three possible motivators already mentioned and, in doing so, to analyse the feasibility of voluntary moral bioenhancement in a broader sense.
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Dedication

My beloved Grandma was a force of nature: sharp, funny, kind, and unapologetically Yorkshire. Hell had no fury like my Grandma mildly inconvenienced on a Tuesday.

She was always my greatest supporter. At my graduation from Leeds, she was the proudest person there, and when paper one was accepted, she marched around the local pub so as to make sure that everyone in the village knew about it. Whenever I was worried about my thesis, or was dangerously close to throwing in the towel, she would always be the one to tell me “don’t be daft” and to get on with it.

It is to this brilliant woman that this thesis is dedicated.

For Joyce Carter

06/03/1933 – 26/07/2016
Chapter One

The Introduction

1.1 The Problem

My research focuses on moral enhancement, and specifically on motivators which might encourage people to undergo such an intervention. As I will explain shortly, there has so far been one particularly influential argument offered as reason for people to undergo moral enhancement interventions: the argument from ultimate harm. I give a more thorough account of this argument in the Ethical Context section,¹ but in its briefest formation, the argument can be summarised as follows: with the technology that we have today, we could end all life on this planet at the flick of a switch or the push of a button, and yet – Persson and Savulescu claim² – due to the social history of our species, we still possess the same moral psychology as we did when our destructive capabilities were far more limited – when we had the capacity to wipe out only a town, rather than to extinguish much of the life on Earth. Therefore, they argue, we require moral enhancement, because “a heightened moral sensitivity is necessary to reverse this descent of humanity down a spiral of ever-increasing existential risks.”³ Person and Savulescu argue further that traditional methods of moral enhancement – such as law and education – will likely prove insufficient in our aim to avoid an instance of ultimate harm and that therefore we must “explore the possibility of biomedical means of moral enhancement to change

¹ Chapter Two (section 2.2.2).
³ P.666 ibid.
our nature.”4 However, as I will explain below, acceptance of this argument leads to calls for universal programmes of the endeavour that are practically and ethically (and indeed legally) problematic.5 Therefore, this thesis will question if there is a motivator that could serve to encourage people to undergo moral enhancement; it will do so by exploring three things that are typically considered to be strong motivators for people: money,6 health, and duty. I will explain my reasoning for choosing these motivators in more detail below (in the ‘background’ section) and also in Chapter Three.

Identifying motivators which would encourage people to undergo moral enhancement is an important endeavour, for despite the issues that come about with the position, the argument from ultimate harm does provide us with a reason as to why the endeavour is nevertheless desirable, generally speaking. Also, one could imagine the benefits of a morally enhanced society in terms of a reduction in crime and violent behaviour.

It may also be prudent at this juncture to note that in speaking of moral enhancement I am discussing moral bioenhancement in particular. Non-biomedical moral enhancement (or ‘traditional’ moral enhancement) is characterised by things that we recognise in our lives today, such as moral education (which can be anything from teaching children right from wrong through to awareness campaigns for moral issues – for example the Kick it Out campaign against racism in football) and even the threat of punishment provided by structures such as the legal system.7 My reason for discussing moral bioenhancement specifically, rather than moral enhancement in the

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4 P.667 ibid.
5 See Chapter Two.
6 Or financial incentives more generally.
7 Though whether this second example constitutes moral enhancement is disputed by some writers (see Harris, J (2012) ‘Ethics is for Bad Guys!’ Putting the ‘Moral’ into Moral Enhancement’, Bioethics; Vol. 27(3); pp.169-173).
traditional sense, is because, first, the former is that which could be said to be more morally problematic (and so open to more interesting ethical questions). Further, one could argue (as Persson and Savulescu do⁸) that the progress made by the more traditional means of moral enhancement might be too slow to take effect, especially on a wider scale, than we might want or indeed need.⁹

Moral bioenhancement¹⁰ does not yet exist,¹¹ but if the predictions of writers such as Persson and Savulescu¹² come to pass, it may be that those who undertake it then go on to behave in a more moral manner.¹³ This seems to be a positive outcome from a common sense point of view;¹⁴ however, one could conceivably see governments tempted to employ moral bioenhancement interventions as a ‘quick fix’ to deal with crime rates and anti-social behaviour. As moral bioenhancement interventions do not yet exist, this thesis will therefore be principally theoretical and speculative; nevertheless there is a general need to consider ethical and legal questions that are raised by moral bioenhancement before any such technology becomes available for public consumption. Further, given the sizeable body of literature and large amount

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⁹ It would perhaps be prudent to clarify here that moral education and law would not be neglected in favour of exclusive use of moral bioenhancement. Rather, it would be used to complement it in the hopes that such a combination would prove far more effective than moral education and law taken by themselves (or indeed together). See Persson, I and Savulescu, J (2012) ‘Moral Enhancement, Freedom and the God Machine’, Monist; Vol. 95(3); pp.399-421.
¹⁰ Hereafter I use the terms moral enhancement and moral bioenhancement interchangeably throughout the rest of the thesis (unless otherwise stated).
¹¹ At least not in the way that it is discussed here; however evidence suggests that moral emotions (such as empathy) can be modulated by everyday interventions (see Chapter Four (section 4.4) for more details) and so there is evidence to suggest that we are not far from the existence of moral bioenhancement interventions as they are considered here.
¹³ Although there are disagreements over what exactly this would entail, as noted in the following section (section 1.2).
¹⁴ Although there are criticisms levelled against it, as noted throughout the Ethical Context in Chapter Two (section 2.2)
of debate regarding this topic,\textsuperscript{15} even though it is still very much an emerging area of research, it is clear that the academic community consider moral enhancement to be an area worthy of discussion despite its hypothetical nature. Indeed, the writings of some researchers, such as Persson and Savulescu\textsuperscript{16} and Douglas,\textsuperscript{17} indicate that they do not consider this discussion to be entirely hypothetical as they believe that the endeavour will eventually come into being.

Further, it is important to note that for the purposes of this thesis, I will not be focusing on the question as to what moral enhancement should involve. I feel that to actively take a position would require a great deal of defending and would distract from the areas where I would prefer to direct my attention. There is already a significant amount of ongoing debate regarding what should or should not constitute moral bioenhancement, and while I recognise that this is an important area of discussion and that my own research cannot exist in a vacuum, I feel that to engage too thoroughly with this topic will prove a distraction from those areas that I want to look at, which (unlike the debate in question) are not so enthusiastically attended to in the literature. This being said, I do identify a working definition of moral bioenhancement in order to provide a point of departure and reference for this thesis; however it is not my aim in this thesis to offer a robust defence of that definition, nor

\textsuperscript{15} I explore some of the topics raised in the literature in the Ethical Context section (Chapter Two; section 2.2) but meta-analyses have been written on moral bioenhancement as well which indicate the breadth of the literature on the subject at that time (and of course far more work on moral enhancement has been published since the publication of these analyses). See Raus, K, Focquaert, F, Schermer, M, Specker, J, & Sterckx, S (2014) ‘On Defining Moral Enhancement: A Clarificatory Taxonomy’, \textit{Neuroethics}; Vol. 7(3); pp.263–273 and Specker, J, Focquaert, F, Raus, K, Sterckx, S, & Schermer, M (2014) ‘The ethical desirability of moral bioenhancement: a review of reasons’, \textit{BMC Medical Ethics}; doi: 10.1186/1472-6939-15-67.
indeed to argue (with any great vigour) that it is the ‘correct’ definition of the
endeavour. The working definition of (and an accompanying introduction to) moral
bioenhancement for the purposes of this thesis is provided in detail in the next
section of this chapter.18,19

Background

Discussions of moral bioenhancement interventions were first brought to the fore in
2008 by Douglas20 and Persson and Savulescu.21 Douglas introduced the possibility
of such an intervention in a general sense, considering what moral bioenhancement
could involve in this context, and exploring possible arguments both for and against
the endeavour.

Meanwhile, the work by Persson and Savulescu focused on their concerns with
discussions in the wider enhancement literature regarding the possibility and indeed
desirability of cognitive enhancement.22 They argued that mankind already has an
alarming capacity for causing harm and that advances in science and technology
have made such destructive power even easier to come by, and further:

A further expansion of scientific and technological knowledge — let alone an
acceleration of this expansion by novel means — is problematic because we
are already on the brink of acquiring — if we have not already acquired —

18 Section 1.2.
19 I will also approach the thesis from a hypothetical point of departure wherein I assume that a
specific moral bioenhancement intervention has been discovered, created, and perfected ready for
public consumption. Therefore this thesis engages in something of a thought experiment, which will
serve not only to avoid getting overly distracted by questions of what moral enhancement should
involve (which, as I have already mentioned, is a question that represents an almost saturated area of
research) but also by questions surrounding possible (medical) side effects.
20 Ibid.
21 Persson, I & Savulescu, J (2008) ‘The perils of cognitive enhancement and the urgent imperative to
enhance the moral character of humanity’, Journal of Applied Philosophy; Vol. 25(3); pp.162–177.
22 Ibid.
knowledge which enables small groups, or even single individuals, to kill millions of us.\textsuperscript{23}

Therefore, they argue, cognitive enhancement interventions could lead to disastrous consequences as scientific and technological knowledge would be further accelerated by the endeavour, bringing about the risk of catastrophic disaster, or as they put it, ‘ultimate harm’. It is this argument from ultimate harm\textsuperscript{24} which provides perhaps the strongest and most influential call for implementing programmes of moral enhancement.\textsuperscript{25}

However, Harris argues that if our aim is to avoid these instances of ultimate harm to which Persson and Savulescu refer then we would require a programme of moral enhancement on a massive scale: one that was “universal and exceptionless”.\textsuperscript{26}

Further, Harris notes that a universal\textsuperscript{27} programme of moral enhancement would simply not be possible for practical reasons.\textsuperscript{28,29} In the following chapter I note further that even if we were to put this concern to one side, the implementation of a compulsory account of moral bioenhancement could still prove to be both ethically and legally problematic. Therefore, it becomes clear that implementation of any

\textsuperscript{23}P.166 ibid.
\textsuperscript{25}This account was briefly summarised above and a more detailed explanation can be found in Chapter Two (section 2.2.2).
\textsuperscript{26}P.2 Harris, J (2012) ’Moral Progress and Moral Enhancement’, \textit{Bioethics}; Vol. 27(5); pp.285-290.
\textsuperscript{27}In speaking of universal programmes of moral enhancement, I take it as read that such a programme would also be compulsory as it would be impossible to have a universal programme of anything if we were to rely entirely on volunteers.
\textsuperscript{28}Harris offers the example of the lack of success in offering universal coverage of the polio vaccination as evidence of this impossibility. See Harris, J (2012) ’Moral Progress and Moral Enhancement’, \textit{Bioethics}; Vol. 27(5); pp.285-290.
\textsuperscript{29}There are also further ethical arguments posited against the idea of implementing a universal programme of moral enhancement; the most prominent examples of these will be noted in the Ethical Context of Chapter Two (section 2.2).
universal and (therefore) compulsory programme of moral bioenhancement would be morally and legally unpalatable.

This conclusion brings about its own issues, as it would be fair to assume that very few people would be likely to volunteer themselves to undergo moral bioenhancement as the vast majority of people would, one might argue, be unlikely to see the point in undertaking the endeavour, as they might not consider themselves to need such an intervention. Further, it could be that people who we might argue do not need to undergo moral enhancement are likely to volunteer to do so and, perhaps most troubling of all, the people who we might consider to most need the intervention could be said to be the least likely to volunteer. As Person and Savulescu write: “those who should take them are least likely to be inclined to use them.” This could be because they do not necessarily consider themselves to need the intervention, either because as they are unaware of how immoral or harmful their behaviour is, or because they simply do not care. It could indeed be the case that they find their lack of empathy to be beneficial to them as it makes it easier to behave immorally, or even helps them with their careers (as I explain in more detail in Chapter Two; section 2.2.3). Further, people could be concerned that participating

30 Or indeed want, for as will be explored in more detail in paper one (Chapter Five; section 5.2.3), lay persons could have concerns regarding the impact of moral bioenhancement (via empathy modulation) on their identity. See also Riis, J, Simmons, JP, & Goodwin, GP (2008) ‘Preference for Enhancement Pharmaceuticals: The Reluctance to Enhance Fundamental Traits’, *Journal of Consumer Research*; Vol. 35; pp.495–508.

31 This view is somewhat challenged by Douglas’ example of the ordinary man who wants to be moved by the plight of people in the third world (Douglas, T (2008) ‘Moral Enhancement’, *Journal of Applied Philosophy*; Vol. 25(3); pp.228-245); but this could be seen as something that is unlikely to be particularly common.

32 Such as people who want to move themselves to do even more good than that which they already do.


34 See also Wasserman, D (2014) ‘When bad people do good things: will moral enhancement make the world a better place?’, *Journal of Medical Ethics*; Vol. 40(6); pp.374-375.
in a programme of moral bioenhancement could lead to other harms such as empathy burnout.\(^{35}\)

Given these concerns that people would be disinclined to undergo moral bioenhancement, the question could then be raised as to whether there is a way to encourage participation in any voluntary programme of the endeavour.\(^{36}\) In short: Is there a motivator that could be used to encourage participation in voluntary programmes of moral bioenhancement (if the argument for compulsory bioenhancement (to save us from ultimate harm) has been put to one side)? It is this question, through consideration of the three motivators already mentioned (money, health, and duty), which this thesis hopes to explore and to answer. I will now briefly explain my reasoning behind the motivators that I have chosen.

Vojin Rakić suggested in 2014\(^ {37}\) that financial incentives could be used to encourage participation in voluntary programmes of moral bioenhancement. This appeared to be an intuitively reasonable idea, one that seems to be backed up by evidence which suggests that financial incentives are a commonly-used\(^ {38}\) and often successful\(^ {39}\) tactic.\(^ {40}\) As such, it seems that money – or financial incentives more broadly – could perhaps move people to undergo moral bioenhancement. However, in paper one (Chapter Five), I will demonstrate that this seemingly reasonable idea might in fact

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\(^{35}\) This is explored in more detail in Chapters Four and Seven. See also Young, E (2016) ‘How sharing other people’s feelings can make you sick’ in New Scientist. Internet WWW page at URL: https://www.newscientist.com/article/mg23030732-900-how-sharing-other-peoples-feelings-can-make-you-sick/ (accessed 07/06/2016).

\(^{36}\) Something which we could still consider desirable in the hopes of avoiding – or at least reducing – instances of serious harm (even if the argument from ultimate harm is put to one side).


\(^{40}\) As I will note in Chapter Three (section 3.2.1).
lead to moral outrage when presented to the wider public.

The second motivator, health, was in part inspired by Paula Casal\(^{41}\) who wrote that moral enhancement interventions could, under certain circumstances, be considered as a therapy or treatment.\(^{42}\) Research suggests that people are much more comfortable with the use of interventions in order to bring people up to a given baseline rather than to push people beyond that point.\(^{43}\) As such, people might therefore be more positively inclined towards the idea of medically-induced moral bioenhancement interventions – which bring people up to a given baseline – as opposed to the use of such interventions as enhancements that push them beyond that point; this inclination could perhaps, in turn, affect motivation to undergo moral bioenhancement. Paper two (Chapter Six) will demonstrate, through reference to the DSM-5, that moral bioenhancement interventions can indeed be brought into the medical domain and so could be open to the use of health as a motivator.

Regarding the final motivator of duty, John Harris\(^{44}\) has previously written on the idea that there could be a duty to enhance, or to undergo enhancement, within the context of human enhancement more generally. However, far less has been said regarding duty in the context of moral bioenhancement. Pustovrh and McCollister-Pirc have written briefly on this,\(^{45}\) however their account was vague and non-committal in its conclusion, whereas I seek to consider this concept (within the


\(^{42}\) A position also taken by Agar; see Agar, N (2015) ‘Moral Bioenhancement is Dangerous’, *Journal of Medical Ethics*; Vol. 41(4); pp.343-345.


context of Kantian ethics). Further, research suggests that people are at times moved by duty, for instance a study by Galais and Blais found that, within the context of elections “there is strong evidence of a causal effect from civic duty to subsequent turnout”. Clearly this suggests a link between duty and motivation in at least one instance. This being said, it isn’t entirely clear to what extent people are motivated by duty, nor in what contexts the idea of duty is likely to move them to action. But the fact that there does seem to be a connection in at least some circumstances suggests that it is something worth exploring for our purposes as well.

In this thesis, I will explore these three motivators and will determine whether any of these could indeed move people to undergo moral bioenhancement interventions.

1.2 Moral Bioenhancement: An Introduction and Working Definition

Raus and colleagues note that: “Existing definitions [of moral enhancement] can differ to such a degree that a particular intervention would constitute or result in moral enhancement according to one definition, but not according to another.” Therefore, in this section I will identify and describe the account of moral bioenhancement on which I will be focusing in this thesis in order to provide some clarity going forwards. To date, much of the literature on moral bioenhancement has been concerned with what the endeavour should involve, and a large focus of this area of debate has centred on discussions as to whether moral bioenhancement

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should be achieved by way of cognitive enhancement or through emotional modulation.⁴⁸ In this section, I will give a brief explanation of both approaches and will identify the account of moral bioenhancement which will be the focus of this thesis. Before this, I will also note two other considerations in presenting a working definition of moral bioenhancement.

First, it would be prudent to consider what moral bioenhancement would aim to affect in more general terms. As Douglas notes, there are many ways in which we could interpret the idea that we morally enhance ourselves: "To name a few, we could take it as a suggestion that we make ourselves more virtuous, more praiseworthy, more capable of moral responsibility, or that we make ourselves act or behave more morally."⁴⁹ So then some writers,⁵⁰ as I shall note, argue that the effectiveness of moral enhancement can be measured only in terms of its effect on moral reasoning (in order for it to be moral enhancement so-called), however it seems to be more widely suggested⁵¹ that the efficacy and success of the endeavour would be measured by its impact on people’s moral behaviour.⁵² However, despite a nod from Persson and Savulescu to a piece of ultra-futuristic (and equally unlikely)

⁴⁸ This could of course be said to mirror the historical conflict within theoretical ethics: the sentimentalist Humean view that reason is slave to the passions, incapable of moving to action, set against the Kantian rationalist account that the only true moral action is that which is born of reason (as noted in Chapter Eight; section 8.2.1).
⁵⁰ Particularly Harris in Harris, J (2012) 'What It's Like to Be Good', Cambridge Quarterly of Healthcare Ethics; Vol. 21(3); pp.293-305.
⁵² Indeed it could be argued that behaviour is the only true measure of moral bioenhancement that could be objectively obtained as it would be impossible to see the inner workings of a person’s mind to gauge whether their capacity for moral reasoning has improved, but their behaviour is of course external and so can be objectively observed.
technology called the ‘God Machine’;\textsuperscript{53} the consensus as to how moral
bioenhancement would or should alter behaviour seems to be in favour of doing so
indirectly by altering motives. It is this account to which Douglas subscribes,
explaining that he understands: "motives to be the psychological – mental or neural –
states or processes that will, given the absence of opposing motives, cause a person
to act."\textsuperscript{54} Indeed, adopting a motive-central approach to moral enhancement has the
benefit of having an impact on behaviour,\textsuperscript{55} but also of being both far more
scientifically plausible\textsuperscript{56} than proposed methods of moral bioenhancement that are
directly action-affecting (such as the God Machine), whilst retaining a strong
element of freedom in action – as agents are free to reject their motives if they wish
to do so.\textsuperscript{57}

It is this account – that moral bioenhancement would be best understood as an
intervention that aims to affect motivation, and so causes enhanced individuals to
have “morally better motives”\textsuperscript{58} (which will then hopefully lead to morally better
behaviour) to which this thesis will subscribe and from which it will consider the
motivators already mentioned.

\textsuperscript{53} The God Machine is a hypothetical mechanism \textit{invented} by Persson and Savulescu as a thought
experiment; it could detect a \textit{risk} of grossly immoral behaviour (such as murder or rape) and could
then alter the would-be perpetrator’s thought pattern so that she ’forgets’ to commit the crime. See
95(3); pp.399–421. However, Persson and Savulescu have since clarified that they do not consider the
God Machine to be a true example of moral enhancement. See Persson, I & Savulescu, J (2016)
014-9274-7.

\textsuperscript{54} P.229 Douglas, T (2008) ’Moral Enhancement’, \textit{Journal of Applied Philosophy}; Vol. 25(3); pp.228-
245.

\textsuperscript{55} As it would be fair to assume that an individual that is more motivated to perform a given action
would therefore be more likely to go on to actually perform that action.

\textsuperscript{56} The evidence of our ability to affect motives can be found in the research on the impact of empathy
on helping behaviour, which is explored in Chapter Four (section 4.2.1), and also briefly below.

\textsuperscript{57} If we accept free will, of course.

\textsuperscript{58} P.229 Douglas, T (2008) ’Moral Enhancement’, \textit{Journal of Applied Philosophy}; Vol. 25(3); pp.228-
245.
Second, I have noted above that this thesis will regard moral bioenhancement in particular, as opposed to moral enhancement generally (as this term can incorporate more traditional means such as, for example, moral education). It would be important to note further that this thesis will also be operating from the assumption that the intervention in question would be pharmaceutical in nature (as opposed to, for instance, the use of genetic enhancement techniques). This is for two main reasons: first, emerging research suggests that certain pharmacological interventions can impact on empathy, suggesting that there is grounds for research into the use of such a means for the purposes of moral bioenhancement. Second, pharmacological interventions could be considered as less invasive than other forms of intervention, and so may appear less intimidating to people already unsure as to whether to undergo moral bioenhancement.

**Emotional Modulation & Cognitive Enhancement**

The use of emotional modulation as a method of moral bioenhancement was first suggested by Douglas and Persson & Savulescu in 2008 as part of a special edition of the *Journal of Applied Philosophy* on the Ethics of Enhancement. Douglas suggests that negative moral emotions, such as racial bias and aggression, could perhaps be attenuated as a form of moral enhancement. As he puts it: “there

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60 I emphasise the biomedical aspect here as there had been some discussion previously questioning the manipulation of emotions by other, non-biological means; for example by Douglas (See Douglas, T (2008) ‘Moral Enhancement’, *Journal of Applied Philosophy*; Vol. 25(3); pp.228-245) and even by Immanuel Kant (See p.196 Baron, MW (1995) *Kantian Ethics Almost Without Apology*; Cornell University Press: New York also Chapter Eight).


63 *Journal of Applied Philosophy*; Vol. 23(3).
are some emotions such that a reduction in the degree to which an agent experiences those emotions would, under some circumstances, constitute a moral enhancement.”

Persson and Savulescu, however, take a different tack from Douglas. Rather than claiming that moral bioenhancement should involve attenuation of so-called countermoral emotions, they instead suggest that the endeavour should involve increasing levels of positive moral emotions such as empathy and altruism. As they write:

If it is right that women are more altruistic than men, it seems that we could make men in general more moral by making them more like women by biomedical methods, or rather more like the men who are more like women in respect of empathy and aggression.

It is this approach on which I will focus throughout this thesis. In particular, I will focus on the idea that moral bioenhancement involves an increase in levels of the positive moral emotion empathy, as extended definitions of empathy incorporate altruism as it is meant by Persson and Savulescu (as I will note in Chapters Four and Six, Persson and Savulescu define empathy as being a component of altruism, which in turn has the motivational component of sympathetic concern for the

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feelings and well-being of others. Further, psychological research suggests that empathy is strongly connected to altruistic (and ‘helping’) behaviour.

Many of the criticisms of the emotional modulation approach to moral enhancement come from the argument from freedom, which is explored in the next chapter; however some writers such as Harris, argue that the endeavour simply would not qualify as a case of moral bioenhancement, as morality – he believes – has far more to do with cognition than emotion. Harris writes:

To believe that emotions can deliver answers to moral dilemmas or generate moral judgements is like believing that the gut is an organ of thought, or one that can answer complex, combined theoretical and empirical, questions... Ethical judgements cannot, literally cannot, be felt. There is no sense organ for such a feeling.

This, taken together with his concerns about the impact of amplified moral emotions on agents’ freedom to choose or to reason morally, lead Harris to reject the idea of an account of moral bioenhancement which centres on emotional modulation. Instead, Harris stresses the need for rationality in morality and in moral decision-making and so favours cognitive enhancement as a method of moral bioenhancement.

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68 P.116 ibid.
70 Chapter Two (section 2.2.5).
72 See Chapter Two (section 2.2.5).
However, it has been argued that the use of cognitive enhancement as a means of moral bioenhancement could prove to be less effective than the use of emotional modulation. This is due to the fact that while cognitive enhancement could enable an agent to better assess a situation and to reason what would be the best course of action morally, this knowledge is not necessarily enough to then move the agent to perform that action. Referring to people who have received moral education and yet still exhibit racial aversions, Persson and Savulescu (who first levelled this criticism) write:

...Harris himself concedes that we are 'lamentably bad' at doing what we see as good and right, i.e., we are weak willed... It is this sort of motivational insufficiency that we are hoping could be addressed by bioenhancement of our moral dispositions. It is unclear how cognitive enhancement could be an effective remedy in this respect, since we are here dealing with people who are assumed to know what is good and right.76

In defence of cognitive enhancement, one might reply here that moral thought and reason (strengthened by cognitive enhancement) could lead an agent to realise that his proposed (or indeed desired) course of action is in fact morally wrong, so that he will then refrain from performing that action. However, it could then be argued that

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74 As moral bioenhancement by emotional modulation was initially discussed by Persson and Savulescu as part of an argument regarding the dangers of cognitive enhancement (as I note above, and will explain in greater detail below), the two are technically separate, but as many have written of cognitive enhancement as enhancing morality – alongside, or independently of, emotional modulation – then it seems reasonable to consider cognitive enhancement to be a proposed method of moral enhancement, just as much as the emotion-central account. That being said, emotional modulation is still presented as being moral enhancement, with cognitive enhancement being suggested as a separate field that could have (or does have) something to contribute in this area.

75 Interestingly, as noted above, this ongoing debate does seem to echo in some ways the classic debate between Hume and Kant on the nature of morality and what moves us to moral behaviour. I explore this in more detail in paper three (Chapter Eight; section 8.2.1).

while an enhanced capacity for moral reasoning could lead an agent to acknowledge that the action in question is wrong, it does not then necessarily follow that this will affect the likelihood of his performing that action. It may give him cause to feel more guilt and regret afterwards, and it may help him to learn lessons from his actions, but it is questionable whether an enhanced capacity for moral reason would mean that he would refrain from performing that action entirely. After all, it is not unheard of for people to admit that they knew that an act was wrong but that they ‘just couldn’t help themselves’. So then it could be argued that the use of cognitive enhancement would perhaps not be effective as a method of moral bioenhancement if it is indeed the case that even with enhanced reasoning to better enable agents to conclude what would be the morally right (or indeed wrong) thing to do in a given situation, they would not necessarily then be moved to act on that information. They still might not be motivated to perform the morally good action, or to refrain from the morally bad. Indeed, it could be the case that even when moral reason and judgement has informed an agent of the morally right course of action, he finds that it is not one that he wants to take – be it because of the difficulty of the act in question, or even because he would simply prefer not to – and so he does not perform the right action.

To date, there has been no consensus reached as to whether moral bioenhancement would principally involve emotional modulation or cognitive enhancement (or indeed some combination of the two). It is not the purpose of this thesis to establish a

77 It could perhaps be argued further that much may also depend on the nature of the act in question, for cognitive enhancement might even better enable an agent to perform an immoral act by giving her the means to plan and prepare for that action, or it could enable an agent to assess that performing a certain immoral act would bring about consequences to her benefit which she had not previously considered.
final definition of the endeavour, and it beyond the scope of the work to attempt to
do so now.

As noted above, this thesis will use the account of moral bioenhancement that is
provided by Persson and Savulescu. There are four principal reasons which have
informed my decision to focus on this account. First, quite simply, the account
presented by Persson and Savulescu, while by no means uncontroversial, is one that
is typically most referred to throughout the literature on moral bioenhancement (even
if only to attack the account). Second, as noted in the previous section of this chapter
(and as I shall explore in further detail in Chapter Two\textsuperscript{78}), this thesis uses Persson
and Savulescu’s argument from ultimate harm as its point of departure. It would
therefore promote consistency and clarity to use their account of moral
bioenhancement as well as their principal argument in favour of it. Third, research
on empathy demonstrates that it has a neurological basis\textsuperscript{79} which can be affected by
pharmacology.\textsuperscript{80} Further, and rather importantly, evidence which is explored in
Chapter Four demonstrates that empathy has motivating properties and can
courage altruistic (or ‘helping’) behaviour.\textsuperscript{81} Given the issues surrounding
motivation and weakness of will encountered by cognitive-central accounts of moral
bioenhancement, this evidence provides further reason to favour an emotion-centred
account instead. Taken together, such research suggests as well that there is the
potential to one day create interventions that could impact on levels of empathy

\textsuperscript{78} Section 2.2.2.
\textsuperscript{80} As I note in Chapter Four (section 4.4). See also Mischkowski, D, Crocker, J, & Way, BM (2016)
within the enhanced individual, and that this could in turn lead to these individuals finding themselves more motivated to perform altruistic behaviours. Finally, speaking generally, discussions of emotion-central, rather than cognitive-central, accounts of moral enhancement (such as that provided by Persson and Savulescu) raise interesting and rather unique questions because of the altruistic nature of its use. The use of cognitive enhancement clearly provides direct benefits for the enhanced individual\textsuperscript{82} regardless of its impact on their moral motives or behaviour, but direct benefits for those who have undergone moral bioenhancement by emotional modulation are few and far between, if they could be said to exist at all.\textsuperscript{83} This means that, unlike moral enhancement by cognitive enhancement, the emotional modulation approach favoured by Persson and Savulescu could be said to be a far more altruistic endeavour and in turn raises questions as to why a person should feel inclined to undergo such an intervention without the appeal of direct benefit to entice them – a question which is at the heart of this thesis.

\textbf{Conclusion}

In sum, this thesis will operate from the following working definition of moral bioenhancement: that it is pharmacological in nature (as opposed to one that employs the use of either more traditional methods, or methods such as genetic engineering), that its focus concerns affecting motives, and that it accepts the account put forward

\textsuperscript{82} Although this assertion is not entirely without debate; see Krutzinna, J (2016) ‘Can a Welfarist Approach be Used to Justify a Moral Duty to Cognitively Enhance Children?’, \textit{Bioethics}; Vol. 30(7); pp.528–535.

\textsuperscript{83} Throughout this thesis, there are nods made to possible benefits to those who undergo moral bioenhancement by way of emotional modulation, such as social benefits (Chapter Four), indirectly benefitting from a more peaceful society brought about through widespread use (Chapter Six), and indeed self-preservation (Chapter Eight). However, these benefits may not extend to all enhanced persons, or may not do so to the same extent or in the same way, and so (perhaps with the exception of the third of these) these generally still involve some amount of altruistic behaviour.
by Persson and Savulescu: that moral bioenhancement involves the amplification of certain ‘moral emotions’ – in this case, empathy.
Chapter Two

Background and Ethical & Legal Contexts

2.1 Introduction

Kantian ethicists might question the need to use bioenhancement interventions to promote moral behaviour, for, as Kant asserted very strongly, the drive to do good and to be moral comes from within, and so requires no external factors. As Kant wrote:

Two things fill the mind with ever new and increasing admiration and awe, the more often and steadily we reflect upon them: the starry heavens above me and the moral law within.\textsuperscript{84}

The categorical imperative alone, as the expression of the moral law, is therefore, for Kant, enough to move us to moral behaviour. However, in her seminal essay \textit{Morality as a System of Hypothetical Imperatives}, Philippa Foot famously made the case that “moral judgements have no better claim to be categorical imperatives than do statements about matters of etiquette”.\textsuperscript{85} In short, Foot argues that the understanding that moral judgements carried a “special dignity and necessity”\textsuperscript{86} that separated them from all other non-hypothetical imperatives (such as those regarding matters of etiquette) is false and has only been entertained for so long because of “the relative stringency of our moral teaching”.\textsuperscript{87} She argues further that we believe

\textsuperscript{86} P.308 ibid.
\textsuperscript{87} P.310 ibid.
that moral judgements have this special importance because we have been taught that moral judgements have this special importance. She claims that there is nothing else to suggest that moral judgements are categorical imperatives any more than other statements referring to non-hypothetical matters (again such as etiquette or, for example, club rules).

However, she argues further that this does not mean that there is no room for persons to be considered truly moral, even where people accept “moral principles as hypothetical rules of conduct, as many people accept rules of etiquette as hypothetical rules of conduct” – this is because of the devotion that moral ends such as liberty and justice inspire.

Perhaps we should be less troubled than we are by fear of defection from the moral cause; perhaps we should even have less reason to fear it if people thought of themselves as volunteers banded together to fight for liberty and justice and against inhumanity and oppression.

So in the absence of categorical imperatives, Foot notes, some might find themselves raising the question: why should I be moral?

However, I am inclined to disagree with Foot’s assertion that moral rules are indistinguishable from those of etiquette principally due to the results of research by Blair, who found that young children are able to distinguish moral rules from social conventions. As I explain in Chapter Six (paper two):

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88 P.314 ibid.
89 P.315 ibid.
Blair tested preschool children to see whether they could distinguish between social conventions (e.g. wearing outdoor clothes indoors) and moral rules (e.g. hitting another pupil); he found that the children saw moral transgressions as more serious than social ones. Further, when asked to explain why an action was wrong, children said “those are the rules” in regards to social conventions, but when speaking of moral rules the children made reference to the wellbeing of others.91

Blair then repeated this study with incarcerated psychopaths.92

Blair found that, unlike the children, the psychopaths did not consider moral transgressions to be more serious than those against social conventions (or vice versa). Also, when asked to explain why an action was wrong the psychopaths made reference to “the rules” for both moral and social transgressions and did not seem to consider the welfare of others in their reasoning.93

Blair’s findings suggest that there is more to moral rules (in contrast to conventions and etiquette) than simply the way that they are taught. Nevertheless, the question could still be said to remain: why should I be moral? For even if moral rules do indeed possess something which distinguish them from more ordinary conventions and rules of etiquette, the fact remains that we still might not be moved to follow them.

92 Blair also used an equivalent number of non-psychopathic incarcerated offenders as a control.
93 Ibid.
But where people decide not to follow moral rules, or where they find that they cannot bring themselves to do so, harm can soon follow closely behind. Therefore, moral bioenhancement would serve an important purpose: preventing harm by motivating moral (or by preventing immoral) behaviour. As I mentioned in Chapter One (and as I will expand upon below), the consequences of people undergoing moral bioenhancement are likely to be positive; there is a lot to be said for avoiding instances of harm generally and indeed for avoiding ultimate harm in particular. So then the question comes: how can we encourage people to undergo moral bioenhancement interventions? Indeed, how do we get people to join Foot’s band of volunteers?

In the previous chapter, I stated the problem that this thesis hopes to explore and resolve: is there a motivator that could serve to encourage people to participate in programmes of moral bioenhancement if the argument from ultimate harm has been put to one side? In this chapter I will focus principally on the latter part of this question and, over the course of the following sections, I will demonstrate that the argument from ultimate harm fails to provide an effective reason to give people to undergo moral bioenhancement. This is because (as I explain in greater detail below), the use of this argument is inextricably linked to a call for a universal – and therefore compulsory – account of the endeavour, something which would not only be practically impossible, but also ethically and legally problematic. This chapter will explore these issues and so demonstrate that the argument from ultimate harm, when used as an argument to encourage the use of moral bioenhancement, falls flat. From there, Chapter Three will then outline the papers that will form much of the body of this thesis and that will consider the motivators noted previously (money, such people would likely be an example of those persons in whom moral bioenhancement interventions would be medically indicated – see Chapters Six and Eight.)
health, and duty), exploring whether they could indeed serve to encourage people to undergo moral bioenhancement interventions, and whether they could – as I say – get people to join Foot’s band of volunteers.
2.2 Ethical Context

2.2.1 Introduction

Having described what moral bioenhancement might involve\(^{95}\) in the previous chapter,\(^ {96}\) one might then be moved to ask why we would want such an endeavour in the first place. As previously noted, Douglas writes that the use of moral bioenhancement might bring about good consequences by way of bringing about better motives.\(^ {97}\) In this sense, it could seem desirable from a ‘common sense’ perspective: it is an enhancement that would prove beneficial for those around the enhanced, that could lead to a reduction in crime and violence, and could therefore lead to more peaceful, quiet lives overall. However while this is certainly an appealing notion, it is perhaps Persson and Savulescu who offer the stronger (certainly more dramatic) argument in favour of the use of moral enhancement: the argument from ultimate harm. While Douglas defends the theoretical use of moral enhancement from the perspective of increasing the likelihood of good consequences, Persson and Savulescu instead take the view that moral enhancement’s greatest virtue is that it may (although they hope that it will) decrease the likelihood of bad consequences – especially those that we would consider to be particularly catastrophic.

\(^{95}\) And how it will be defined for the purposes of this thesis.
\(^{96}\) Chapter One (section 1.2).
2.2.2 The Argument from Ultimate Harm

Persson and Savulescu explain that throughout history, “humans have lived in societies small enough for everybody to know each other, with simple technology which permitted them to affect only their immediate surroundings, and only in the immediate future.” As this has been the case for most of the time that human beings have existed, our species has adapted to these conditions psychologically and morally. However, bolstered by advances in science and technology, humans have dramatically altered their living conditions in the last century or so. Where once humans tended towards maintaining communities of around 150 people, many now live in societies amongst millions of others – and do so “with an advanced scientific technology that enables them to exercise an influence that extends all over the world and far into the future.”

Persson and Savulescu hypothesise that the moral psychology of humans is adapted for the past conditions of smaller societies with limited technologies, and it has not adapted to the current state of affairs. As they put it: “human beings are not by nature equipped with a moral psychology that empowers them to cope with the moral problems that these new conditions of life create.” They explain further that the

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98 I have already noted this argument briefly in the previous chapter; however I will give a more detailed account here.
101 It is worth noting, however, that terror attacks in recent years have demonstrated that advanced technology is not always necessary to cause disaster; 9/11 involved the use of aeroplanes and recent attacks in Nice and Berlin made use of trucks. Of course these are not non-technical means, but they demonstrate that advanced scientific knowledge is not necessarily needed to cause harm on a massive scale. This being said, it is not clear that technologies such as these would (or indeed could) constitute ultimate harm in the manner of which Persson and Savulescu speak (as I will explain). Certainly these means have been used to cause significant harm, but that is not the issue with which Persson and Savulescu are concerned here.
combination of this out-dated human psychology in a world of technological
advances and far-reaching effects leads to serious moral issues such as intentional
misuse of science (especially with regards to weapons of mass destruction) and the
degradation of the environment. 103 Further, Persson and Savulescu argue that it is far
easier for humans to harm rather than to benefit others (for example, it is, practically
speaking, easier to take a life than it is to save one 104), and that our ability to harm
others has been magnified by scientific and technological advances. As they put it:
“During the last century our power to harm reached the point at which we can cause
what might be called Ultimate Harm, which consists in making worthwhile life
forever impossible on this planet.” 105 So how then are we to deal with a prospect as
dire as that of ultimate harm? Persson and Savulescu claim first that this argument
provides us with a strong reason against implementation of programmes of cognitive
enhancement, lest we are led even further down this path and bring an instance of
ultimate harm even closer. 106,107,108 However, even without further scientific

103 Caused by our inability to cooperate on a wider scale.
104 Although this would of course depend on the circumstances – Persson and Savulescu use the
example of mass shootings to illustrate this point. Referring to the 2007 Virginia Tech shooting, they
write: “The actual killings took place in a matter of minutes. It is almost never possible to save 32
lives in the same period of time. People can be killed at any point in their lives, but it is only in
exceptional circumstances, such as when we can save them from death, that we can benefit them as
much as we harm them when we kill them” (p.173 Persson, I & Savulescu, J (2008) ‘The perils of
cognitive enhancement and the urgent imperative to enhance the moral character of humanity’,
Journal of Applied Philosophy; Vol. 25(3); pp.162–177).
to enhance the moral character of humanity’, Journal of Applied Philosophy; Vol. 25(3); pp.162–177.
107 Although it is important to note that Persson and Savulescu do not seem to make as strong a claim
in later papers; instead they tend more towards using this as an argument for implementing moral
enhancement alongside a programme of cognitive enhancement, rather than eliminating the latter
of Moral Bioenhancement’, Bioethics; Vol. 27(3); pp.124–131.
108 It could be argued at this juncture that this could even constitute an argument in favour of
‘dumbing down’ society in the hopes of preventing an instance of ultimate harm. However I feel that
this might be something of a straw man view of Persson and Savulescu’s argument. They are certainly
not suggesting that we go backwards or even that we halt scientific progress, only that we take other
steps – such as moral enhancement – to counteract the risks produced. Further, as noted above, we
already have tools that could be used to cause an instance of ultimate harm (more or less) at our
disposal and so while dumbing down might prevent us from inventing new such tools, it could in fact
discovery, mankind still finds itself in the precarious position wherein the tools that could bring about an event catastrophic enough to be considered an ultimate harm are already more or less at our disposal.

As I noted in the previous chapter, the argument from ultimate harm can be summarised as follows: with the technology that we have today, we could end all life on this planet with the flick of a switch, and yet – Persson and Savulescu claim – due to the social history of our species, we still possess the same moral psychology as when our destructive capabilities were far more limited. Therefore, they argue, we require moral enhancement, because “a heightened moral sensitivity is necessary to reverse this descent of humanity down a spiral of ever-increasing existential risks.” They argue further that traditional forms of moral enhancement – such as education, for example – is unlikely prove efficacious in reversing this descent and thus avoiding an instance of ultimate harm, and so they claim that it would be worthwhile instead to “explore the possibility of biomedical means of moral enhancement to change our nature.” Persson and Savulescu note on numerous occasions the genetic and biological bases of many of our moral dispositions and traits – meaning that such a biomedical approach to moral enhancement is no impossibility – and make plain their position that any effective and safe method of

simply lead to disasters caused by accidents with the ones that we already have. Harris makes a similar argument where, referring to ‘village idiots’, he notes that “danger comes not simply from the malevolent, but from another important category of disastrous individuals.” (See pp.108-109 Harris, J (2011) ‘Moral Enhancement and Freedom’, Bioethics; Vol. 25(2); pp.102-111).

110 Chapter One (section 1.1).
111 P.667 ibid.
113 I also note further scientific research in Chapter Four (section 4.4) which suggests that emotional modulation (including through biomedical means) could be possible.
biomedical moral enhancement that is discovered ought to be considered for public consumption on a wider scale.\textsuperscript{114} As they write: “In our view, moral enhancement is necessary if human civilisation is to have a reasonable chance of surviving not merely the present century but also following centuries.”\textsuperscript{115}

However, Harris notes that if we are to avoid negative consequences on the scale to which Persson and Savulescu refer, a wide-scale programme of moral bioenhancement would be required: one that would have to be (as Harris puts it) “universal and exceptionless”.\textsuperscript{116} This assertion is by no means denied by Persson and Savulescu; in fact they concede that the efficacy of moral enhancement to avoid ultimate harm rests on having such a programme in place,\textsuperscript{117} and indeed that such a programme would have to be compulsory in order to be effective. As they write:

If safe moral enhancements are ever developed, there are strong reasons to believe that their use should be obligatory, like education or fluoride in the water, since those who should take them are least likely to be inclined to use them.\textsuperscript{118}

However, Harris goes on to argue that such a universal programme of moral bioenhancement would not be practical, for even if there were an extremely simple method of implementing moral bioenhancement (such as, for example, by way of a


single, easily-administered dose), history has shown us\textsuperscript{119} that universal coverage simply is not possible.\textsuperscript{120} However, while I concede that universal moral enhancement throughout the entire world is rather unlikely, in the case of many developed nations (which themselves have the capacity to cause ultimate harm through their ownership of nuclear weapons\textsuperscript{121}) universal coverage \textit{within} those nations, could be a possibility, practically speaking.\textsuperscript{122} However, even if the practical issues around compulsory programmes of moral bioenhancement can be put to one side, the endeavour could still be considered ethically problematic, as this section shall demonstrate. Further, the use of compulsory programmes of moral bioenhancement would prove legally problematic as well, if not outright impossible (especially in instances where the intervention would not be considered medically indicated); I shall demonstrate this in the following section\textsuperscript{123} within the context of the law in England and Wales.

Since Harris’ assertion that moral enhancement would have to be “universal and exceptionless” to have the effect desired by Persson and Savulescu, more writers have made reference to the possible ethical implications of such an endeavour, as I shall now explain. While the topics broached have been relatively far-ranging, there are three areas in particular which have attracted a great deal of attention in the literature: doubts regarding the efficacy of moral bioenhancement both generally and

\textsuperscript{119} Through programmes such as polio vaccination.
\textsuperscript{120} Harris, J (2013) ‘Moral Progress and Moral Enhancement’, \textit{Bioethics}; Vol. 27(5); pp.285-290.
\textsuperscript{121} Though perhaps it is wrong to focus on nuclear nations when considering the capacity to commit an instance of ultimate harm. As noted above, modern terrorism has demonstrated quite readily that such atrocities do not necessarily require weapons of mass destruction to cause just that – take for example the 9/11 attacks, committed without any advance weaponry, using instead otherwise innocuous pieces of machinery. However, this might not necessarily constitute an example of \textit{ultimate} harm (as noted in footnote 101), but it is important to note nonetheless.
\textsuperscript{122} This is not least because such developed nations would be more likely to have (or to be able to implement) the infrastructure that would be necessary for such a programme.
\textsuperscript{123} The Legal Context (section 2.3).
as a way of avoiding ultimate harm in particular (the ‘blunt tools’ argument), the argument from pluralism (which also incorporates elitism) against universal accounts of moral bioenhancement, and finally the argument from freedom. I will now briefly consider these topics.

2.2.3 The ‘Blunt Tools’ Argument

An issue that has appeared in many texts within the field of moral enhancement – though not always in great depth – is that which I shall call the ‘blunt tools’ argument. The blunt tools argument questions the likely efficacy of moral enhancement both generally (that is, in terms of making people more moral) and with regards to avoiding ultimate harm in particular.\(^\text{124}\)

Most of these arguments are made with reference to moral enhancement by emotional modulation, as a way to indicate (or to indicate further) the need for cognitive enhancement instead of, or alongside, moral enhancement via emotional modulation. For instance, a key argument is made by Robert Sparrow with his acknowledgement that morality and moral behaviour are context-dependent and so an automatic, visceral reaction to a moral dilemma or stimulus might not lead to the correct moral action – even if the action in question is motivated by positive moral emotions.\(^\text{125}\) As Sparrow writes: “It would be a good drug, indeed, that made us feel

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\(^{124}\) The latter point is enthusiastically made by Vijon Rakić in his argument against the use of compulsory moral enhancement, and in favour of the use of a voluntary approach instead. I shall explain this argument below when I come to consider the current literature on moral enhancement and freedom (see section 2.2.5; see also Rakić, V (2014) ‘Voluntary moral enhancement and the survival-at-any-cost bias’, *Journal of Medical Ethics*; Vol. 40(4); pp.246-250).

love only for what is worthy of love and brave only in the service of a just cause.”

Harris seconds this, asserting that no one can rely on their “moral nose” and using it as further proof of the need for rationality in morality.

Even if more general concerns regarding the impact that emotional modulation may have on the cognitive aspects of moral decision making are put to one side, other concerns which fall into this ‘blunt tools’ category still remain. For instance, Wasserman makes the case that a lack of empathy, while (arguably) a recognisable moral defect, is nonetheless something that we need some people in our societies to have. He references the work of Kevin Dutton, who found that many surgeons scored highly on tests used to diagnose psychopathy. Dutton notes:

The most important thing when you’re conducting a dangerous operation, a risky operation, is you’ve got to be very cool under pressure, you’ve got to be focused. You can’t have too much empathy for the person that you’re operating on, because you wouldn’t be able to conduct that operation.

Further, Harris makes the case that negative moral emotions such as aggression are often vital to moral behaviour. Harris illustrates this claim by making

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126 P.25 ibid.
128 Wasserman, D (2014) ‘When bad people do good things: will moral enhancement make the world a better place?’, Journal of Medical Ethics; Vol. 40(6); pp.374-375.
130 Although not non-surgical medics.
131 As Lockwood and colleagues note: “Psychopathy is a disorder characterized by a lack of empathy, shallow affect, and manipulation of others for own gain” (p.21 Lockwood, PL., Bird, G, Bridge, M, Viding, E (2013) ‘Dissecting empathy: high levels of psychopathic and autistic traits are characterized by difficulties in different social information processing domains’, Frontiers in Human Neuroscience; doi: 10.3389/fnhum.2013.00760).
132 As quoted in Wasserman, D (2014) ‘When bad people do good things: will moral enhancement make the world a better place?’, Journal of Medical Ethics; Vol. 40(6); pp.374-375.
reference to the real-life example of Jason Schuringa who attacked a would-be hijacker and so saved the lives of those on the plane; a feat that required a degree of aggression – which is identified by Douglas as being a negative moral emotion. Douglas, whose own account of moral enhancement involves attenuating negative moral emotions, concedes this point – lamenting that “given the bluntness of the instruments (likely to be) available”, any application of an emotion-centred account of moral enhancement would rely on a great deal of luck to produce the desired results. This is of course problematic, and while the introduction of cognitive enhancement to emotion-centred accounts of moral enhancement could perhaps go at least some way to rectifying these issues, Harris and Wasserman’s concerns as to the effect that moral emotions such as empathy could have on these other important emotions (or indeed lack thereof) remain valid. One could perhaps disregard these concerns not on the grounds of validity, but by claiming that they pale into insignificance against the need to avoid ultimate (or even significant) harm.

It could be argued in turn that Schuringa’s aggression prevented an instance of significant, perhaps even ultimate harm when it moved him to attack the terrorist and prevent the hijacking. But it could then be replied that such a situation would not have arisen had universal moral bioenhancement been in effect, for it would not occur to a morally enhanced person to attempt such an atrocity in the first place.

However, this defence does not seem to work quite so well against Wasserman’s argument, for if a lack of empathy is necessary to provide society with the kind of

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138 Ibid.
139 Although this is less likely; see footnote 101.
psychopaths that it needs (that is, those kinds that can perform surgery, run a FT 500 company, and so on), then clearly any universal, compulsory programme of moral bioenhancement may prove problematic for society as a whole in this manner. That said, one could argue that the need for security and safety against the threat of significant or ultimate harm far out-strips the need for surgeons and CEOs, but while most people would perhaps be willing to part with ruthless company directors, the prospect of losing effective surgeons would probably prove to be a much harder sell.

Further, the blunt tools argument could be considered contextually: that moral bioenhancement may prove to be inefficacious not due to any fault with the enhancement itself (or due to any related effects, such as those noted by Harris and Wasserman), but due to the circumstances in which they are implemented. For example, Sparrow points out that if human beings currently lack the requisite moral psychology needed to avoid ultimate harm, then there is perhaps a risk that a compulsory programme of moral enhancement could be implemented for morally problematic reasons. He notes that this is a particularly important point, taking into consideration the fact that drugs impacting on motivation and behaviour could have further applications beyond moral enhancement – for example, authoritarian regimes could use them to make citizens more sympathetic to their leaders’ goals and ideals. In order to avoid such an outcome, Sparrow suggests implementing measures to avoid corruption of this kind and to ensure that moral enhancers are used for the purpose for which they were designed. As he puts it:

Before it would be wise to trust governments with this power we would first need to ensure that we have stronger democratic institutions to limit abuses of power, mechanisms for regulating the application of technologies both nationally and internationally, and a citizenry that is sufficiently educated and
inclined to respect the rights of others so as to be able to resist the efforts of
demagogues who might argue there was an urgent need to suppress their
depolitical enemies. Yet, if we have all this, one wonders if Savulescu and
Persson’s pessimism about our ability to confront our precarious existential
situation without moral enhancement is justified.\(^{140}\)

2.2.4 The Argument from Pluralism

The argument from pluralism states that it is a matter of fact that many cultures – and
indeed many people within those cultures\(^ {141}\) – differ in their view as to what counts
as ‘moral’. This is problematic for moral enhancement because just as the blunt tools
argument notes that it would be unlikely to have an enhancement that “made us feel
love only for what is worthy of love and brave only in the service of a just cause”,\(^ {142}\)
so too would it be unlikely that there could be any one, single form of moral
bioenhancement that could satisfy each approach to morality equally. John Shook
illustrates this by drawing an analogy with a fictional ‘etiquette pill’:

> Cultures notoriously disagree on many moral matters. For starters, try to
> conceive of an “etiquette pill” and wonder how it could work the same in
> Bombay, Baghdad, and Boston. A single morality pill could hardly be less
> improbable.\(^ {143}\)

\(^{140}\) P.28 Sparrow, R (2014) ‘Better Living Through Chemistry? A Reply to Savulescu and Persson on
\(^{141}\) For instance, different groups of thought in Western philosophy, such as consequentialists and
deontologists – as noted by Sparrow in ibid.
\(^{142}\) P.25 ibid
\(^{143}\) P.4 Shook, JR (2012) ‘Neuroethics and the Possible Types of Moral Enhancement’, AJOB
Neuroscience; Vol. 3(4); pp.3-14.
However, this analogy is problematic – for while there are clearly understandable and acceptable differences in etiquette, this does not then mean that this extends as well to moral and immoral acts. For instance, belching loudly after a meal is considered a great compliment to the host in some cultures while in the West it is taken as rude and disrespectful – however the act of killing an innocent person is considered abhorrent everywhere.

Nonetheless, Shook’s point remains: there is no one ‘morality pill’ that could complement all the world’s moral viewpoints equally, and so in choosing one particular form of moral enhancement, we are choosing to uphold one particular view of morality above all others.\textsuperscript{144} Sparrow acknowledges this point, and argues that this demonstrates that “[t]here is, inevitably, a certain amount of elitism implicated in the very idea of moral enhancement.”\textsuperscript{145} This is because, as noted, a decision would have to be made as to which moral position would be favoured by the moral enhancement. As Sparrow explains:

\begin{quote}
Despite the best efforts of its advocates to make only the most minimal claims about the benefits of altruism, a sense of justice, and the absence of distorting emotions or cognitive biases, such as racism, any actual program of enhancement would inevitably require taking a position on controversial questions about the relative importance of each of these and the desirability of different combinations of dispositions. Thus, any state that embarked upon
\end{quote}


moral bioenhancement would thereby be committed to moral perfectionism.\textsuperscript{146}

An attempt to allay these concerns is made by writers such as DeGrazia,\textsuperscript{147} Douglas,\textsuperscript{148} and indeed Shook,\textsuperscript{149} who suggest that we aim to create moral enhancement interventions that would appeal to, as DeGrazia puts it, “points of overlapping consensus among competing, reasonable moral perspectives.”\textsuperscript{150} Both DeGrazia and Douglas then espouse the view that the simplest way of finding a point of overlapping consensus is to focus on the negative: on those areas that people will hope to avoid; and so DeGrazia speaks of eliminating “moral defects”, while Douglas suggests attenuating counter-moral emotions. Both of these of course fall foul of the criticisms levelled by Wasserman and Harris in the previous section, but their point can still be taken. There is generally consensus to be found with regards to the avoidance of certain morally wrong acts (such as murder and rape, for instance), and while talk of moral defects can prove problematic,\textsuperscript{151} positive changes (such as increased empathy and altruism\textsuperscript{152}) could perhaps help to avoid those acts which all reasonable persons would hope to avoid.

\textsuperscript{146} Ibid.
\textsuperscript{152} As evidence suggests that empathy can temper aggression; as noted in Persson, I & Savulescu, J (2013) ‘Getting Moral Enhancement Right: The Desirability of Moral Bioenhancement’, \textit{Bioethics}; Vol. 27(3); pp.124-131.
2.2.5 The Argument from Freedom

The argument from freedom initially took prominence in the literature as part of Harris’ attack on Persson and Savulescu’s emotion-centred account of moral enhancement. Harris argued that adopting such an approach to the endeavour would put at risk our capacity to reason about the moral situations in which we find ourselves, and essentially taking our freedom away along with it. As he puts it: “Emotional modulation is unlikely to leave us free to do what our intellect tells us is right if feelings of repugnance or emotional aversion are too strong to be routinely overridden.”

That said, it is not exactly clear that emotional modulation would have such a potent effect as to interrupt moral reason. And even if we were to accept Harris’ claim (for the sake of argument), then we might be (as Douglas was) moved to question whether the freedom to act on bad motives really could have any intrinsic value. However, Harris claims further that not only is such a freedom valuable, but indeed it is vital to morality. As he explains: “Without the freedom to fall, good cannot be a choice; and freedom disappears and along with it virtue. There is no virtue in doing what you must.” By ‘freedom to fall’, Harris is referring to the freedom to have and to act upon bad motives, and he argues that we need such freedom in order to be able to consider ourselves moral for having done the right thing when the opportunity to do wrong was available to us. By enhancing our moral emotions, Harris claims, we would lose this freedom to fall. However, one could appeal to the acknowledgement of the freedom of those who already have greater levels of moral

emotions by virtue of an accident of birth. Writers such as DeGrazia,\textsuperscript{156} Drake,\textsuperscript{157} Rakić,\textsuperscript{158} and Persson and Savulescu\textsuperscript{159} have all made the case that where a person demonstrates behaviour which seems to indicate naturally (comparatively) high levels of empathy, we do not consider them to be less free, less able to rationalise their moral choices, than their less-empathetic counterparts. As Rakić explains:

…for people with a heightened level of altruism or empathy, some types of conduct towards others would be out of the question because they consider them morally inappropriate, whereas for people with a lower level of altruism, such behaviour might be perfectly acceptable. But that does not lead to the conclusion that people with a higher level of altruism are less free than people with a lower level of altruism.\textsuperscript{160}

In a similar vein, Levitt and Manson\textsuperscript{161} make the point that even in cases where it is acknowledged that an offender has (or may have) a genetic disposition towards criminal or violent behaviour, he is still considered to have acted freely and so is still held accountable for his actions.

While the effect of moral enhancement on metaphysical freedom continues to appear in the literature, the focus seems to have shifted more towards freedom in a more general, political sense: questioning the role of freedom in morally enhancing oneself – or in being enhanced – \textit{at all}. If we deny (as I am inclined to, mainly for the reason


noted above) that moral bioenhancement through emotional modulation would be inherently freedom-reducing, then this more political approach to the problem from freedom may pose a much more meaningful threat to the defensibility and legitimacy of compulsory programmes of moral bioenhancement.

The first nod to this area perhaps came from Douglas in his 2008 paper ‘Moral Enhancement’ wherein he lists a number of assumptions regarding a situation in which it would be morally acceptable for an agent to choose to morally enhance himself, the fifth of which stating that it should be the agent’s (Smith’s) own free decision to do so (“I take it that… there is no physical or legal constraint on Smith’s morally enhancing himself.”) However, this point is only briefly stated, and not explored in any depth. Since then, others (such as DeGrazia) have written on this issue, often appearing to be more sympathetic to the idea that while moral bioenhancement may not necessarily be inherently freedom-limiting, it could nevertheless pose a threat to freedom through the way that it is implemented.

Writers without exception acknowledge that any form of compulsory moral enhancement would be freedom-affecting in a political sense (as the very use of the term ‘compulsory’ demonstrates immediately), but they differ with respect to the amount of freedom that they believe would be limited by such a programme, and the acceptability of such limitations in the first place. For instance, writers such as DeGrazia and Persson and Savulescu draw an analogy between compulsory moral bioenhancement and moral education and legal systems – neither is freely

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164 Ibid.
chosen to be undertaken or instigated by the individual, both affect the freedom of the individual to some extent, but we accept both as valuable and worth the imposition. This view is contested strongly by Harris and Sparrow; of law, Harris argues that we are free to commit crimes if we so wish and so the law does not truly restrict our freedom if we don’t want it to.\textsuperscript{166} Of the comparison with moral education, Sparrow argues that moral bioenhancement proves disanalogous as an important part of education is “a fundamental moral equality between educator and educated”\textsuperscript{167} wherein the former is able to justify the norms shaping her lessons and the latter is able to respond and create a dialogue that may change the educator’s viewpoint. With moral bioenhancement, Sparrow claims, there is no such dialogue available and no such relationship: educator and educated becomes enhancer and enhanced. So then rather than analogous with education, Sparrow instead views compulsory moral bioenhancement to be more-closely analogous with indoctrination.

Rakić also does not consider moral bioenhancement to be intrinsically freedom-affecting, instead considering its negative impact to be constrained to implementations of programmes of \textit{compulsory} moral bioenhancement. Therefore, Rakić claims, we could undergo moral bioenhancement without diminishing our freedom as long as we have \textit{voluntarily} chosen to do so.

The reason why this is possible is that our free judgement will always remain the adjudicator of the morality of our actions – even if it has been effectively subjected to moral bioenhancement. We are free to decide whether we wish

\begin{footnotesize}
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to be morally bioenhanced. If we wish to be, we do not give up our freedom.

We only use our freedom to decide to be morally bioenhanced.\textsuperscript{168}

So then while he rejects the notion of the use of compulsory programmes of moral enhancement on the grounds of freedom, Rakić instead promotes the introduction of a voluntary programme of the endeavour. So, for Rakić, a programme of voluntary moral enhancement would provide us with the moral bioenhancement of which he agrees that humans are in need,\textsuperscript{169} but without posing a threat to our freedom. “Our motives might change if we undergo effective moral bioenhancement (as do our motives change for a variety of other reasons), but our freedom will not be curtailed by it.”\textsuperscript{170}

Rakić argues further in support of a voluntary approach to moral bioenhancement by noting that, even if a compulsory approach to the endeavour were to be used, the risk of ultimate harm still would not be eliminated.\textsuperscript{171} Instead, we can only aim to keep the likelihood of ultimate harm at a minimum, which, Rakić argues, seems insufficient to justify the use of a compulsory approach to moral bioenhancement. Instead, he proposes a voluntary approach which would be complemented by offering financial incentives to encourage participation. It is this approach which of course constitutes the ‘money’ motivator which (as I have mentioned) this thesis will consider as a possible means to encouraging participation in programmes of moral bioenhancement.\textsuperscript{172}

\textsuperscript{169} P.2 ibid.
\textsuperscript{170} P.3 ibid.
\textsuperscript{171} Ibid.
\textsuperscript{172} See Chapter Five.
2.2.6 Conclusion

These arguments demonstrate (in addition to issues with moral bioenhancement more generally) that any universal, compulsory programme of moral bioenhancement would be ethically problematic.\(^{173}\) Given as well the practical issues with such an approach (as noted by Harris\(^{174}\)), and the legal issues which will be addressed in the following section, it seems increasingly reasonable to agree with Rakić’s assessment that a compulsory approach to moral bioenhancement cannot be justified and that we should, instead, consider a voluntary programme of the endeavour.\(^{175}\)

However, we are still then met with the issue that people would perhaps be unlikely or even unwilling to volunteer themselves for such a course of moral bioenhancement.\(^{176}\) As appealing to the notion of ultimate harm becomes a particularly weak option given the issues with universal, compulsory moral enhancement (to which it is inextricably linked), the question then could be raised: how could we encourage people to undergo moral bioenhancement interventions? It

\(^{173}\) It would be prudent to acknowledge that there were also arguments levelled against moral bioenhancement (by emotional modulation) in general in this section. However, as I stated in the previous chapter, I will not seek to suggest that the account of moral bioenhancement with which this thesis operates is without its failings, nor is it the purpose of this work to defend it with much vigour. Instead, this thesis will operate from the hypothetical assumption that issues with this account have been largely resolved, so as to allow better focus on the central research question.


\(^{175}\) Even in the absence of the argument from ultimate harm, moral bioenhancement could still be considered desirable, both from a common sense view (as noted at the beginning of this section) and also from the desire to avoid significant harm. For instance, many people are worried about the risk of a major attack (be it nuclear or terrorist), but they are concerned as well about things such as being attacked whilst on a night out or being mugged – things that also have the potential to ruin or indeed end their lives. Perhaps then the desire to avoid random individual assault could be considered almost as much a reason to call for a programme of moral bioenhancement as the desire to avoid an instance of ultimate harm.

\(^{176}\) As Persson and Savulescu noted at the start of this section (see Persson, I & Savulescu, J (2008) ‘The perils of cognitive enhancement and the urgent imperative to enhance the moral character of humanity’, *Journal of Applied Philosophy*; Vol. 25(3); pp.162–177).
is this question that this thesis seeks to answer and does so by consideration of three possible motivators: money, health, and duty.\textsuperscript{177}

\textsuperscript{177} As I have explained in Chapter One and will note again in Chapter Three.
2.3 Legal Context

2.3.1 Introduction

In this section, I will consider the legal implications of implementing a hypothetical programme of compulsory moral bioenhancement (including instances where the intervention would be considered medically indicated). First, I will consider a universal\textsuperscript{178} programme of the endeavour\textsuperscript{179} and demonstrate that such a programme would not be viable in a legal sense given the current law in England and Wales. Following this, I will consider the legalities of hypothetical programmes of compulsory moral bioenhancement when targeted at specific groups within society (rather when than universally applied).

Given that moral enhancement interventions do not yet exist, there has therefore been no legislation passed in reference to it; as a result, this section is speculative in nature and represents an issue that is unexplored in the legal literature. However, there are analogies and comparisons to be made in areas of both mental health law and criminal justice, as this section will demonstrate.

Assuming that the moral bioenhancement intervention was licensed\textsuperscript{180} and its use was voluntary, the law would not be concerned with its use; as such, it would instead be the involuntary, non-consensual use of the intervention that would alert the law. Non-consensual treatment is only lawful on mental health grounds\textsuperscript{181} or in a person’s

\textsuperscript{178}It would be prudent to reiterate here that in speaking of universal programmes of moral enhancement (or moral ‘therapy’), I am, in the same instance, speaking of a compulsory programme of the intervention (for the reasons described in footnote 27 in Chapter One; section 1.1).

\textsuperscript{179} Such as that which is inextricably linked to the argument from ultimate harm, as noted in the previous section of this chapter (section 2.2).

\textsuperscript{180} I deal with this in Chapter Seven.

\textsuperscript{181} Mental Health Act 1983, s 63
best interests if they lack capacity.\textsuperscript{182} Given that medically-indicated use of the endeavour would be within the domain of mental health,\textsuperscript{183} it would of course therefore be open to legislation such as the Mental Health Act 1983 (as amended 2007) which permits for non-consensual treatment in certain circumstances. I have chosen to focus on the Mental Health Act (MHA) rather than the Mental Capacity Act 2005 (MCA) here, owing to the key purpose of the former aiming at protecting others rather than concern over the best interests of the individual.\textsuperscript{184} Furthermore, in speaking of the people in receipt of medically-indicated moral bioenhancement interventions, I will be assuming that they are otherwise healthy adults\textsuperscript{185} with capacity. This is to simplify the discussion and to further focus on the MHA rather than the MCA. It would be prudent to note that with regards to the European Convention on Human Rights (ECHR), article 3 ("Prohibition of torture… No one shall be subjected to torture or to inhuman or degrading treatment or punishment")\textsuperscript{186} and article 8 ("Right to respect for private and family life")\textsuperscript{187} could both be considered relevant here. However, due to the interpretive flexibility of ECHR, coupled with the speculative nature of my enquiry, I have opted to discuss moral bioenhancement interventions (both as an enhancement and as a medically-indicated) and the possible application of mental health law and criminal justice and rehabilitation within the context of English and Welsh law.\textsuperscript{188}

\begin{itemize}
  \item \textsuperscript{182}Mental Capacity Act 2005, s 2
  \item \textsuperscript{183}As I explain in more detail in Chapters Three and Six.
  \item \textsuperscript{184}Of course the Mental Health Act also considers the best interests of the patient, but unlike the Mental Capacity Act, the MHA aims to protect others, whereas the MCA is principally concerned with the welfare of the patient.
  \item \textsuperscript{185}In paper two (Chapter Six, and also in Chapter Seven) I briefly discuss diagnosis in children, however this is principally to note that diagnosis of mental disorder (and in particular disorders that could be treated by moral bioenhancement interventions) in children would be an inexact science and that we should therefore focus such discussions to treatment of adults.
  \item \textsuperscript{186}Convention for the Protection of Human Rights and Fundamental Freedoms (European Convention on Human Rights, as amended) (ECHR) art 3
  \item \textsuperscript{187}Ibid, art 8
  \item \textsuperscript{188}Although I will briefly consider article 3 of the ECHR below; see pages 66-67 of this thesis.
\end{itemize}
2.3.2 Universal Interventions

In discussing legislated universal programmes of given interventions, arguably the closest analogy available to us is that of vaccination programmes. While universal uptake of vaccinations is not currently mandated in English law, there is historical precedent in the form of The Vaccination Act 1853, which until 1907\textsuperscript{189} legislated for compulsory vaccination of children against Smallpox. Further, while there is no current legislation in English law to mandate compulsory vaccination, Glover-Thomas and Holm note that there are indeed arguments to be made in support of such legislation:

...reliance on voluntariness has left such systems vulnerable to controversy, latent mistrust and scaremongering. With the shape of global travel and distribution networks changing, disease control is increasingly difficult. On balance, a wholly voluntary vaccination programme may no longer be tenable, and reflection is needed about whether coercion may offer the way forward.\textsuperscript{190}

Some other jurisdictions do legislate for compulsory vaccination; for instance, as Walkinshaw notes:

Slovenia has one of the world’s most aggressive and comprehensive vaccination programs [for certain diseases]... While a medical exemption

\textsuperscript{189} The Vaccination Act 1907
request can be submitted to a committee, such an application for reasons of religion or conscience wouldn’t be acceptable, and isn’t allowed...\textsuperscript{191}

However, even here – where uptake is mandated and noncompliance can result in a heavy fine – full and universal vaccination coverage is not achieved;\textsuperscript{192} further, Walkinshaw notes that “for nonmandatory vaccines, such as the one for human papilloma virus [(HPV)], coverage is below 50%.”\textsuperscript{193,194} It would be difficult to identify the exact reasons behind this discrepancy,\textsuperscript{195} but it could well be connected to the lack of individual choice as to whether to have the vaccinations that are mandated by the state. As Glover-Thomas and Holm write: “vaccination programmes are often voluntary, relying upon the individual to recognise the value of vaccination for his own health and that of the collective. A community is more likely to perceive voluntary measures positively.”\textsuperscript{196}

Other analogous examples also come from the domain of public health, such as the use of fluoride in tap water in some areas of the UK (which is explored below). This being said, it could be argued that moral bioenhancement does not necessarily

\textsuperscript{192} Compliance rates instead reach 95% (ibid) - this is of course an extremely respectable percentage of the population, but still it is not full and universal coverage.
\textsuperscript{193} Ibid.
\textsuperscript{195} Indeed cultural issues could be involved with the example of the HPV vaccine, as HPV is a sexually transmitted disease and Slovenia is predominantly Roman Catholic; but it is not clear that this is the issue here, for example Italy is also predominantly Roman Catholic and there the average uptake of the HPV vaccine was around 70% in 2012-2014 (Bonanni, P, Ferro, A, Guerra, R, Iannazzo, S, Odone, A, Pompa, MG, Rizzuto, E, & Signorelli, C (2015) ‘Vaccine coverage in Italy and assessment of the 2012-2014 National Immunization Prevention Plan’, Epidemiologia e prevenzione; Vol. 39(4); pp.146-158).
constitute a public health matter. Paper two (Chapter Six) demonstrates that moral bioenhancement interventions can be medically indicated, but only in certain circumstances, and so it becomes less clear that programmes of the intervention can be discussed in quite the same way as programmes of vaccination or fluoridation of tap water. In this part, I will demonstrate that whether the intervention is considered as a treatment or an enhancement, that universal coverage still would not be legally acceptable.

**Treating a Disorder**

If, as I argue in Chapter Six, we were to consider moral bioenhancement interventions to constitute medical treatment in certain circumstances, the law demonstrates that compulsory universal programmes of the intervention would prove legally problematic, whether we considered it to be a treatment for a physical or a mental disorder.

The right of a competent patient to refuse treatment for a physical disorder is enshrined in law. This was made particularly clear by Lord Donaldson’s remarks in *Re T (Adult: Refusal of Medical Treatment)* when he declared:

> An adult patient who…suffers from no mental incapacity has an absolute right to choose whether to consent to medical treatment, to refuse it, or to choose one rather than another of the treatments being offered … This right

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to choose … exists notwithstanding that the reasons for making the choice are rational, irrational, unknown or even non-existent.\textsuperscript{198}

Even in cases of protection of the public, the right of a competent patient to refuse treatment of a physical disorder is still upheld. The Public Health (Control of Disease) Act 1984 states that people with a notifiable disease can be examined without their consent if suspected of having, or even carrying, such an infectious illness,\textsuperscript{199} and can be removed from their homes and detained in quarantine in a hospital or other such therapeutic environment.\textsuperscript{200} However, even then there is still no legislation allowing the patient to be forced to have treatment – including for the illness in question – which he has competently refused.\textsuperscript{201}

In contrast, for persons suffering from mental disorder the right to refuse treatment is not so clear.\textsuperscript{202} Those detained under the Mental Health Act can be forcibly treated for their mental disorder (with the exception of certain treatments such as psychosurgery (e.g. Electro-convulsive therapy))\textsuperscript{203} while detained.\textsuperscript{204} But detention of a person under the MHA requires first and foremost that he be suffering from a mental disorder, and further that the disorder in question must be “of a nature or degree which makes it appropriate for him to receive medical treatment in a hospital”.\textsuperscript{205} Even if we were to consider the entirety of the population of the UK to suffer from a mental disorder (specifically something that moral bioenhancement
interventions could be used to treat), then we would be hard-pressed to demonstrate that the entire nation suffered from a mental disorder that “makes it appropriate for [them all] to receive medical treatment in a hospital”, and that therefore there were grounds for universal compulsory treatment. However, while this rules out the use of moral bioenhancement interventions on a universal scale for these purposes, the law here still clearly provides grounds for compulsory treatment on a smaller, more targeted scale – as I will explain later in this section.

Enhancement

With regards to using moral bioenhancement as an enhancement rather than a treatment, the law becomes even less clear. The closest thing that could be considered analogous here would perhaps be the fluoridation of drinking water as legalised by the Water (Flouridation) Act 1985. The Act states:

Where a health authority have applied in writing to a statutory water undertaker for the water supplied within an area specified in the application to be fluoridated, that undertaker may, while the application remains in force, increase the fluoride content of the water supplied by them within that area.\textsuperscript{206}

However, this is therefore a \textit{wide-spread} programme of enhancement rather than a universal programme. Further, the purpose of putting fluoride into the water supply is to improve oral health, and so constitutes a legitimate public health measure, whilst the purpose of a universal programme of moral enhancement would be to indirectly affect the behaviour of all persons. As a result, political leaders may be

\textsuperscript{206} Water (Flouridation) Act 1985, s 1(1)
less inclined to vote in favour of legislation that would have such an effect, perhaps due to public reaction that may result from such legislation.\textsuperscript{207,208}

\section*{2.3.3 Targeted Interventions}

\textbf{Mental Health}

It would perhaps be prudent at this juncture to question whether a disorder that would be treated by moral bioenhancement interventions (such as that which I will term ‘Moral Deficiency Disorder’ or MDD\textsuperscript{209}) could be said to be a mental or physical disorder. However, the answer to this question is not so clear; even in the Mental Health Act, the only definition of mental disorder offered is one that is extremely wide, defining it simply as meaning “any disorder or disability of the mind”.\textsuperscript{210} So the law does not clearly define what a mental disorder actually is. In Chapter Six, I make the case that any condition for which moral bioenhancement interventions would constitute a treatment would most likely fall under the classification of mental disorder by making reference to the DSM-5 definition of mental disorder.\textsuperscript{211}

\textsuperscript{207} At the risk of sounding particularly cynical, one could conceive that the politicians would be unhappy to consider any legislation that would affect all persons as such a law would affect them as well.\textsuperscript{208} Also, people could simply avoid any moral bioenhancement pharmaceuticals in the tap water by buying bottled water, which would demonstrate again the practical impossibility of implementing universal programmes of moral enhancement. Given as well that this option would principally be open to wealthier persons (who would be better able to afford bottled water on such a regular basis), this would then result in greater socio-economic inequality.\textsuperscript{209} See Chapter Six; also Carter, S (2016) ’Could Moral Enhancement Interventions be Medically Indicated?’, \textit{Health Care Analysis}; doi: 10.1007/s10728-016-0320-8.\textsuperscript{210} Mental Health Act 2007, s 1(2)\textsuperscript{211} See Chapter Six for more details (particularly sections 6.2.3 and 6.2.4).
As noted above, the Mental Health Act allows for the forcible treatment of mentally disordered persons under certain circumstances. The Act states that an admission for assessment\(^{(212)}\) may be made under section 2 of the MHA if the patient in question

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\text{“(a) …is suffering from mental disorder of a nature or degree which warrants the detention of the patient in a hospital for assessment (or for assessment followed by medical treatment) for at least a limited period; and}
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\[
\text{(b) …ought to be so detained in the interests of his own health or safety or with a view to the protection of other persons.”}^{(213)}
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But one may be moved to ask whether a person diagnosed with Moral Deficiency Disorder (MDD) would meet such requirements. With regards to (b), a person with MDD could perhaps be detained with “a view to the protection of others”, but it is not clear that all persons with MDD could be considered a genuine threat to other people. Furthermore, with regards to (a), even if it had been established that MDD was considered a mental disorder, it does not then necessarily follow that it would be such a disorder “of a nature or degree which warrants the detention of the patient in a hospital for assessment”. But while it is now less certain that persons suffering from MDD will be forced to undergo moral bioenhancement interventions, those suffering from the disorder who have committed a crime could still be made to undergo such an intervention. Indeed even those without the disorder could perhaps find themselves sentenced by the courts to undergo moral bioenhancement interventions, as I shall explain below.

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\(^{(212)}\) Which authorises detention of the patient for up to 28 days and forced treatment for that disorder as well.

\(^{(213)}\) Mental Health Act 1983, s 2(2)
Criminal Justice

Another area where programmes of compulsory\textsuperscript{214} moral enhancement could be implemented if targeted at specific groups within society (as opposed to universally) is within the arena of criminal justice. This could be considered both in terms of the endeavour as an enhancement more generally (that is, without the individual in question having been diagnosed with MDD\textsuperscript{215}) or again as a treatment.

Moral Enhancement in the Context of Criminal Justice

If we were to move away from talk of medically-indicated interventions for a time and consider moral bioenhancement interventions within the context of enhancement, then one might be able to argue that there is room in the law for compulsory\textsuperscript{216} enhancement of offenders. For instance, it could perhaps be argued that moral enhancement could be considered a “rehabilitation activity requirement” such as those outlined in the Offender Rehabilitation Act 2014. The Act states that “Any instructions given by the responsible officer must be given with a view to promoting the offender's rehabilitation”\textsuperscript{217} and given that the hypothetical moral bioenhancement intervention would improve the empathy of the enhanced offender, therefore reducing the likelihood of his reoffending, then it could clearly be argued that moral enhancement would fulfil this requirement. An analogy could perhaps be

\textsuperscript{214}In this context, use of the intervention would not be necessarily be considered strictly compulsory (in the way that it would be under the treatment condition), but would instead constitute a condition with which an offender must comply in order to (for instance) avoid a longer sentence. This being said, it could still be considered to be compulsory in a broader sense in the same way that we might consider it to be compulsory to follow the law (insofar as we are free to choose not to do so, but will nevertheless face the consequences).

\textsuperscript{215}Or indeed any disorder for which moral bioenhancement interventions would constitute a treatment.

\textsuperscript{216}In a broader sense; see footnote 214.

\textsuperscript{217}Offender Rehabilitation Act 2014, s 15(3)(3) – also Criminal Justice Act 2003, s 200A(3) (as amended)
made here with the use of drug\textsuperscript{218} and alcohol\textsuperscript{219} rehabilitation and treatment requirements; under the Criminal Justice Act 2003 these requirements can be made as part of a community order or suspended sentence order when dealing with an offender that has such a dependency.\textsuperscript{220} These requirements are also aimed at rehabilitation of the offender and at reducing the likelihood of his reoffending; as guidance on the requirements notes: “Drug users are estimated to be responsible for between a third and a half of acquisitive crime and treatment can cut the level of crime they commit by about half.”\textsuperscript{221}

Furthermore, it could perhaps also be claimed that we could consider moral bioenhancement to be a restorative justice activity on the grounds that one requirement of such an activity – that “the aim of the activity is to maximise the offender's awareness of the impact of the offending concerned on the victims”\textsuperscript{222} – would be fulfilled by moral bioenhancement as the increased empathy would help the offender to consider events from the victim’s perspective. However, a restorative justice activity must also include participation from the victim(s)\textsuperscript{223} and must provide “a victim or victims an opportunity to talk about, or by other means express experience of, the offending and its impact”.\textsuperscript{224} Therefore, taken by itself, it is less clear that moral enhancement could be administered to offenders as a restorative justice activity. However, if used alongside current activities in this vein (such as

\textsuperscript{218} Criminal Justice Act 2003, s 209
\textsuperscript{219} Ibid, s 212
\textsuperscript{220} So then if the offender refused to comply, he would be sent to prison.
\textsuperscript{222} Offenders Rehabilitation Act 2014, s 15(3)(8)(b) – also Criminal Justice Act 2003, s 200A(8)(b) (as amended)
\textsuperscript{223} Offenders Rehabilitation Act 2014, s 15(3)(8)(a) – also Criminal Justice Act 2003, s 200A(8)(a) (as amended)
\textsuperscript{224} Offenders Rehabilitation Act 2014, s 15(3)(8)(c) – also Criminal Justice Act 2003, s 200A(8)(c) (as amended)
talking with the victim about the offense), then such enhancement would probably improve the impact of the activity on the offender and greatly assist in his rehabilitation.

Even with all this in mind, there could still be a question raised as to whether moral bioenhancement interventions could be used in this manner at all, given their very nature.\textsuperscript{225} Compulsory treatment of a prisoner with capacity would be unlawful\textsuperscript{226} unless done within the parameters of the Mental Health Act and further, compulsory use of a behaviour-affecting intervention (where it is not medically indicated) as part of a programme of rehabilitation would certainly be difficult to defend morally.\textsuperscript{227} As noted above, I will not (for the most part) be considering the European Convention on Human Rights in this section, however one might anticipate an argument that use of moral enhancement on offenders, including as part of their rehabilitation, could violate article 3: “No one shall be subjected to torture or to inhuman or degrading treatment or punishment”.\textsuperscript{228} An interesting analogy could perhaps be drawn here with force-feeding of prisoners; while this could be said to constitute a legitimate medical intervention in some instances, it could still be found to be in breach of article 3. For instance, in the case of \textit{Nevmerzhitsky v Ukraine}:\textsuperscript{229}

\textsuperscript{225} That is, that they would alter the behaviour of the enhanced individual (or at least would increase the likelihood of his choosing to behave more morally).
\textsuperscript{226} It could be argued here that we do not level such a claim against drug rehabilitation and alcohol treatment requirements, however there can be two rebuttals made to this: first, while rehabilitation is an important aspect of these requirements (as would be the case with moral bioenhancement requirements), there is also a medical need in play (as continued drug and alcohol abuse may then lead to the death of the offender). Second, as will be explored in more detail in Chapter Five, there could be a concern that people might consider moral bioenhancement interventions to impact upon fundamental aspects of their identity, which then informs their discomfort in pursuing the interventions; while it would not be impossible to assume that some people who are dependent on drugs or alcohol consider that dependency to be part of their identity, it does seem far less likely.
\textsuperscript{227} See Chapter Two (section 2.2).
\textsuperscript{228} Convention for the Protection of Human Rights and Fundamental Freedoms (European Convention on Human Rights, as amended) (ECHR) art 3 – emphasis mine.
\textsuperscript{229} \textit{Nevmerzhitsky v Ukraine} App no 54825/00 (ECHR, 5 April 2005)
98. In the instant case, the Court finds that the force-feeding of the applicant, without any medical justification having been shown by the Government, using the equipment foreseen in the decree, but resisted by the applicant, constituted treatment of such a severe character warranting the characterisation of torture.

99. In the light of the above, the Court considers that there has been a violation of Article 3 of the Convention. Therefore, even with regards to an intervention which could be considered to be life-saving, implementation of the procedure could still be considered to be in breach of article 3 of the European Convention on Human Rights unless strict safeguards are met.

Medically-Indicated Moral Bioenhancement in the Context of Criminal Justice

Returning to considering moral bioenhancement interventions as a treatment, it could be the case that persons in whom moral bioenhancement interventions would be medically indicated may be unlikely to seek out the treatment themselves. As such persons may be unlikely to approach medical professionals about this matter of their own free will, it could instead be the case that many of the patients who would undergo such treatment would do so having being ordered or advised to see the

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230 Ibid.
231 Which moral bioenhancement could not, at least not with the same immediacy of preventing starvation through the use of force-feeding.
232 Perhaps for the very same reasons as those persons in whom the intervention would not constitute a treatment, but who we would still be inclined to argue should have it in order to improve their moral (or rather immoral) behaviour. I briefly note these reasons in Chapter One (section 1.1).
233 In Chapter Six, I note that this could in turn raise concerns regarding medicalisation when discussing the use of moral bioenhancement interventions as medically indicated, especially where this then leads to discussions of ‘new’ disorders to better-justify the use of the intervention. See Chapter Six (section 6.2.7); also Schermer, M (2007) ‘The Dynamics of the Treatment-Enhancement Distinction: ADHD as a Case Study’, *Philosophica*; Vol. 79; pp.25-37.
relevant specialists. For instance, people who come before a judge having committed some crime – be it minor or severe – may then find themselves assessed as having exhibited behaviour symptomatic of MDD and perhaps diagnosed with the disorder. In such cases, the judge could take this information into account in his sentencing decisions and may then order the patient to undergo moral bioenhancement interventions as treatment for the disorder.

The law as it stands now already allows for offenders to be ordered to undergo treatment for a mental disorder as part of sentencing for criminal behaviour; I will briefly consider three such allowances: Hospital Order, Treatment Requirements, and Hybrid Order.

*Hospital Order*

Section 37 of the Mental Health Act 1983 (as amended) states:

> Where a person is convicted before the Crown Court of an offence punishable with imprisonment other than an offence the sentence for which is fixed by law, or is convicted by a magistrates’ court of an offence punishable on summary conviction with imprisonment, and the conditions mentioned in subsection (2) below are satisfied, the court may by order authorise his admission to and detention in such hospital as may be specified in the order…

The conditions that need to be met to allow the court to issue such an order are that, based on the evidence of two registered medical practitioners, the court is satisfied

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234 Mental Health Act 1983, s 37(1) (as amended)
that the offender is suffering from a mental disorder, and that that disorder is “of a nature or degree which makes it appropriate for him to be detained in a hospital for medical treatment and appropriate medical treatment is available for him”.235 And finally, the court – having taken into account the nature of the offence and the offender’s history – must be satisfied that this method is the most suitable for dealing with this case.

_Treatment Requirement_

In accordance with section 207 of the Criminal Justice Act 2003, a court may decide to place a mental health treatment requirement onto an offender as part of a community order or suspended sentence order.236 The treatment requirement itself can only be applied where a doctor approved by the Mental Health Act provides evidence that the “mental condition of the offender… is such as requires and may be susceptible to treatment, but… is not such as to warrant the making of a hospital order or guardianship order within the meaning of that Act.”237

The mental health treatment requirement is, according to guidance: “intended for the sentencing of offenders convicted of an offence(s) which is below the threshold for a custodial sentence and who have a mental health problem which does not require secure in-patient treatment.”238 A particularly interesting aspect of a treatment requirement is that, unlike hospital orders, the offender must have “expressed his

235 Ibid, s 37(2) (as amended)
237 Criminal Justice Act 2003, s 207(3)(a)
willingness to comply” with the requirements laid out by the court, in order to permit the court to attach the requirement to a relevant order. If the offender gives his consent to the requirement and then later refuses to cooperate with the treatment, the responsible officer assigned to the offender must first give him a warning, but may then take further action against the offender if he continues in his refusal to comply with the requirements in his order. In this instance, it could be argued that this is not an account of compulsory use of moral bioenhancement as the offender in question must consent to the requirements of the order (including the use of the interventions); however, following this initial consent to the use of moral biomedical enhancement, the offender faces consequences for non-compliance with the order, and so therefore the programme could be considered to be latterly compulsory in this manner.

Hybrid Orders

If the circumstances are such that the requirements to allow the court to authorise a hospital order for the offender are satisfied, the judge may instead choose to impose a hybrid order: where once it has been determined that the offender no longer requires inpatient treatment, rather than releasing him into the community, the offender may then be transferred to prison to serve out the remainder of his sentence (if there is time remaining) or may come to a parole board if the minimum term has come to pass during his stay in hospital. An example of such an order can be found in the sentencing of the offender in the case of R v Jenkin (2012).

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239 Criminal Justice Act 2003, s 207(3)(c)
240 Mental Health Act 1983, s 45A
Commentary

It would be difficult to say which of the options above would be preferred by judges in cases where the offender has been diagnosed with Moral Deficiency Disorder. Treatment requirements could perhaps be seen as preferable to hospital orders as their semi-voluntary nature seems to be a less severe approach to dealing with those offenders suffering from MDD, especially if used in cases involving less serious crimes. In cases involving particularly serious offences, meanwhile, it could be that the judge may be moved to hand down a hybrid order, to ensure that the offender could be seen as serving his time even once his treatment is completed. Given that MDD is unlikely to be said to impact on responsibility in any real way, this could perhaps be preferable as it would provide a more punitive sentence (which in turn should placate the need of the public to ‘see justice done’) but that would still ensure that the offender received treatment for his mental disorder.

It is not clear what duration a course of moral bioenhancement interventions would be likely to have, and this in turn could have implications for hospital orders. In this case, if moral bioenhancement would involve a shorter-term course of interventions then it is possible that hospital orders would not be used in cases of MDD as they would perhaps be considered too lenient a sentence for more serious crimes. That being said, it could instead be the case that the course would be longer term, or perhaps even life-long; in this instance, we may have to rely on those diagnosed with the disorder voluntarily self-administering the treatment once the intervention has

242 Although it is important to note that questions over the legal and moral responsibility of psychopaths (who, as noted in Chapter Six, may be candidates for medically-indicated moral bioenhancement) for their actions is a matter of debate in the literature. See Glannon, W (2008) Moral Responsibility and the Psychopath’, Neuroethics; Vol. 1(3); pp.158-166 and Morse, SJ (2008) ‘Psychopathy and Criminal Responsibility’, Neuroethics; Vol. 1(3); pp.205–212.
taken effect before we could allow their hospital stay to come to an end and release them into society (in the case of hospital orders). But this is unlikely to prove an exact science and there may also be a risk of offenders feigning this behaviour in order to secure an early release.

2.3.4 Conclusion

In this section, I have explored the legal implications for compulsory moral bioenhancement under English and Welsh law, both in terms of universal and targeted programmes of the endeavour. While I noted that compulsory use of medically-indicated moral bioenhancement interventions would be permitted under existing mental health legislation, the law as it stands would not permit universal programmes of compulsory moral bioenhancement (medically indicated or not). This then provides further support for the case against the use of universal programmes of compulsory moral bioenhancement.
2.4 Chapter Conclusion

In this chapter, I have explored the ethical and legal implications of universal and (therefore) compulsory programmes of moral bioenhancement and have demonstrated not only that such a universal approach would be ethically problematic, but also that it would be impermissible under current English law.\(^{243}\) As I noted at the start of this chapter, the argument from ultimate harm is inextricably linked to the use of a universal approach to moral enhancement.\(^{244}\) Further, in order to pursue a universal approach to moral enhancement, a compulsory programme of the intervention would be required as it would be foolish to assume that we could achieve universal coverage solely on the strength of volunteers.\(^{245}\) Therefore, the view of the argument from ultimate harm as a compelling reason for people to undergo moral enhancement can be brought into question. For although avoiding ultimate harm remains a reasonable goal, the use of moral enhancement for this purpose is, as noted, inextricably linked to a universal (and therefore compulsory) approach\(^{246}\) to the endeavour, which would not be ethically or legally acceptable.

Moral bioenhancement interventions could still be seen as desirable given the hopes of avoiding harm generally (and indeed ultimate harm specifically), but the

\(^{243}\) Although of course laws in other jurisdictions might differ and so compulsory approaches to moral bioenhancement might be legally permissible in some other countries. However, even in these instances the ethical concerns would still remain.

\(^{244}\) See section 2.2. See also Harris, J (2012) 'Moral Progress and Moral Enhancement', *Bioethics*; Vol. 27(5); pp.285-290.

\(^{245}\) And of course, as Persson and Savulescu note, many of those who we feel ought to undergo moral bioenhancement interventions “are least likely to be inclined to use them” (p.174 Persson, I & Savulescu, J (2008) ‘The perils of cognitive enhancement and the urgent imperative to enhance the moral character of humanity’, *Journal of Applied Philosophy*; Vol. 25(3); pp.162–177).

\(^{246}\) Harris (Harris, J (2012) 'Moral Progress and Moral Enhancement', *Bioethics*; Vol. 27(5); pp.285-290) also makes the case that the lack of success in the universalisation of the polio vaccination programme provides evidence of the *practical* impossibility of universal moral bioenhancement. However (as noted above) one could argue that such an approach could perhaps be practically possible in a country which had the requisite infrastructure, such as England and the UK (I specify England in particular due to the use of English law in this thesis). Therefore, it was important to demonstrate the legal and ethical issues with such an endeavour.
arguments in this chapter demonstrate that any programme of the endeavour would have to be voluntary in nature. And so then the question is raised: how can we encourage people to voluntarily undergo moral bioenhancement interventions? In the following chapter, I will outline the papers contained in this thesis which will aim to answer this question with reference to three possible motivators: money, health, and duty.

\[247\] Or indeed financial incentives more generally.
Chapter Three

The Research Questions

3.1 Introduction

In the previous chapter, I demonstrated that universal\textsuperscript{248} accounts of moral bioenhancement would be ethically and legally problematic. Given that the argument from ultimate harm (which could be considered a particularly strong argument in favour of moral bioenhancement) is inextricably linked to the use of a universal approach to moral bioenhancement, one could be moved to ask how we could encourage people to volunteer to undergo the intervention without compulsory measures, and without reference to the argument from ultimate harm (given the issues that then arise from that argument). As noted previously, it is this question that this thesis seeks to answer through consideration of three key motivators: money,\textsuperscript{249} health, and duty.\textsuperscript{250}

In this section, I will give detailed summaries of the three papers which will form the body of this thesis and which will deal with the three motivators in turn; I will also briefly explore some philosophical and ethical questions raised by the motivators.

\textsuperscript{248} And therefore compulsory.
\textsuperscript{249} Or indeed financial incentives more generally.
\textsuperscript{250} My reasoning behind the choice of these motivators is detailed in Chapter One (section 1.1).
3.2 The Papers

3.2.1. Money (Paper One)

In his 2014 article, Vojin Rakić suggests that financial incentives could be employed as a means to encourage participation in voluntary moral bioenhancement. He acknowledges that it is unlikely that many people will volunteer themselves to undergo such interventions and so he suggests that the state could incentivise participation in moral bioenhancement programmes by offering things such as “tax reductions, schooling allowances for their children, retirement benefits and affirmative action policies that favour them” to those that volunteer.

The use of financial incentives to encourage participation is not entirely uncommon, indeed the 2004 National Worksite Health Promotion Survey recorded that 26% of workplaces (that responded to the survey) had used financial incentives to encourage participation in workplace health promotion programmes. Further, it seems that the popularity of this method is not without good reason, Kane and colleagues’ 2004 review of 47 studies that involved the use of economic incentives to encourage participation in preventive health programmes found that “Overall, the studies

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252 P.4 ibid.
255 Both simple (which include ‘one-off’ and short-term interventions such as immunisations) and complex (which involve longer term programmes and interventions, such as smoking cessation and maintaining weight loss).
achieved a positive result 73% of the time (74% for simple and 72% for complex).”

However, although these figures suggest that the use of financial incentives offers a promising approach to encouraging participation (at least in certain programmes), evidence suggests that the use of such incentives is effective only in the short term. As Finkelstein and colleagues note:

> Although a variety of research supports the effectiveness of financial incentives, some evidence suggests that the benefits may be short-lived.

> Results from a recent meta-analysis showed no significant effect of the use of financial incentives on weight loss or maintenance at 12 months and 18 months...

Therefore, one could reasonably raise the concern that if moral bioenhancement were to be a long-term intervention, then financial incentives would be unlikely to prove effective overall. This being said, if the intervention would in fact be short-term then it seems that financial incentives could provide a strong option as a means to encouraging participation in programmes of moral bioenhancement.

However, regardless of their practical success (or lack thereof, depending on the duration of the intervention), the use of incentives can raise ethical questions and concerns; one such concern regards whether the use of incentives could be considered to be coercive. For instance, in 2007 NICE recommended financial

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256 P.329 ibid.
incentives to promote adherence to methadone drug regimens,\textsuperscript{258} this prompted a debate regarding the ethical aspects of such an approach. Joanne Shaw wrote in response to the proposal: “If health professionals are willing to take on a coercive role, and society is prepared to pay a hefty price, which includes considerable loss of personal dignity and privacy, the practical problems can be overcome.”\textsuperscript{259} Her concern with the proposal was that she considered it to be coercive in nature (“by carrot rather than the stick, but coercion none the less.”\textsuperscript{260}) and that it would therefore undermine “the basis for informed agreement about the best treatment for the individual, which should be at the heart of healthcare.”\textsuperscript{261}

However, Jonny Pugh disagreed that incentivising adherence in this way could be considered coercion, contrasting it with the hypothetical example of a doctor refusing a patient any pain medication unless he consents to an operation to which he has already refused. Pugh writes:

   The coercion is understood to invalidate the patient’s consent, because the physician has subjugated the patient’s will to their own by unduly reducing their patient’s options in order to achieve the outcome that the physician believes is best...\textsuperscript{262}

On the other hand, he notes, offering an incentive will normally allow “for the recipient of an offer to maintain their status quo situation simply by refusing the

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\textsuperscript{260} P.233 ibid.
\textsuperscript{261} Ibid.
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offer." Therefore the threat removes options from the patient, whilst the offer (of incentives) adds options. Clearly then, we could argue from this that threats undermine the autonomy of the recipient, whereas the incentives do not. Rather, the “financial incentive just makes one of the options more appealing than it was.”

A more in-depth exploration of this issue can be found in Chapter Five, and I demonstrate further in that work that there are other concerns, unique to moral bioenhancement, which could render the use of financial incentives for such a purpose ineffective at best, or at worst, could even result in moral outcry.

Detailed Summary of Paper One

This paper explores the use of financial incentives as a possible motivator to encourage people to undergo moral bioenhancement. A suggestion that the state make use of financial incentives for such a purpose is put forward by Vojin Rakić, who writes that the state could offer morally enhanced individuals “tax reductions, schooling allowances for their children, retirement benefits and affirmative action policies that favour them”. He believes that the use of such ‘external stimuli’ will encourage participation in voluntary programmes of moral enhancement with which people might otherwise be disinclined to engage. In paper one I consider whether this proposal could fall foul of questions regarding coercion or justice – issues which one might typically associate with the use of financial incentives generally – before

263 Ibid.
264 Ibid.
considering whether the proposal would truly be viable within the context of programmes of moral bioenhancement in particular.

I consider concerns that the use of financial incentives, such as those suggested by Rakić, could prove coercive. I note that while coercive threats present a clear case of coercion as it is typically understood, incentives such as those proposed by Rakić would seem to present an offer rather than a threat, and there is a large amount of debate in the literature as to whether offers can indeed coerce. I consider instead whether the use of financial incentives to encourage the use of moral bioenhancement could be said to constitute an undue inducement. However, I acknowledge that whether an inducement could been said to be ‘undue’ will depend principally on the value that each person attaches to what is being offered as an incentive; therefore, it is unclear that financial incentives such as those suggested by Rakić could be objectively considered to exert undue influence. I note as well research that suggests that (contrary perhaps to popular perception) the use of financial incentives might not have implications for social justice, as they do not necessarily lead to a greater uptake in socioeconomically disadvantaged communities. As such, this concern might not arise for our purposes either.

I turn at this point to consider whether the use of financial incentives to encourage participation in programmes of moral bioenhancement would prove to be a viable approach and find that it would in fact fall foul of the phenomenon of taboo trade-offs, and so could elicit responses ranging from public indifference to moral outcry.

McGraw and Tetlock define taboo trade-offs as being those that “entail comparisons of the relative importance of secular values (such as money, time, and convenience)
with sacred values that are supposed to be infinitely significant.”

To put it into shorter, simpler terms: taboo trade-offs involve trying to put a price on something we would consider priceless. Further, Parke et al note that the use of financial incentives could be said to “represent an attempt to put a price on something that many feel ought to be priceless” depending on what exactly it is that they aim to incentivise.

At this juncture, I introduce empirical research undertaken by Riis and colleagues which demonstrates that people consider traits such as empathy and kindness (traits which we would expect to be impacted upon by moral bioenhancement interventions) to be fundamental to their identities and, as a result, are extremely reluctant to enhance them. Given then that these traits are considered fundamental to many, it would not be unreasonable to make the case that they would be seen as ‘priceless’ to those people. Therefore, any attempt to put a price on these traits – such as by offering financial incentives to encourage their enhancement – could then be seen as an attempt to put a price on something that many feel ought to be priceless: a taboo trade-off.

I then argue that a better approach to promoting moral bioenhancement interventions would be instead to reframe these interventions as ‘enablements’, and to eliminate the use of financial incentives altogether.


3.2.2. Health (Paper Two)\textsuperscript{271}

In paper two, I explore an idea that has been put forward by writers such as Agar\textsuperscript{272} and Casal\textsuperscript{273} that moral bioenhancement interventions could constitute a treatment rather than solely an enhancement; that they could (as I put it in my own article) be considered to be medically indicated in certain circumstances. In her 2013 article, Casal suggests that we could define the goals of moral enhancement in terms of a satiable requirement, such as reducing crime or even “elimination of wrongdoing”\textsuperscript{274} and then makes the case that if we are to take this view, then this would no longer be a case of moral enhancement but rather of “moral therapy”.\textsuperscript{275} She explains that this is because the use of the endeavour towards such a goal “aims at eliminating pathologies or shortfalls from an appropriate threshold of compliance. This option will involve correcting those individuals with a deficit of empathy or an excess of aggression…”\textsuperscript{276}

Casal’s point is extremely interesting, but one could be led to ask whether moral bioenhancement interventions could indeed be considered as treatments\textsuperscript{277} rather than solely as enhancements. First, it would perhaps be prudent to clarify what is meant by the term ‘treatment’. Daniels defines treatment as “services or interventions meant to prevent or cure (or otherwise ameliorate) conditions that we

\begin{footnotes}
\item[271] In this thesis, this paper is followed by a chapter which explores some of the regulatory challenges raised by the conclusions and assertions of the paper.
\item[274] P.2 ibid.
\item[275] Ibid.
\item[276] Ibid.
\item[277] I use the terms treatment and therapy interchangeably in this context.
\end{footnotes}
view as diseases.” So then in order to answer the question as to whether moral bioenhancement interventions could, in certain contexts, be considered medically indicated, one would have to demonstrate that there existed something – some disease or disorder – for which moral bioenhancement interventions would provide a treatment. However, as Resnik notes, there is no single, agreed-upon definition of health from which we can straightforwardly derive our understanding of ‘disease’. This issue is particularly prominent in defining mental illness and disorder, where even diagnostic manuals such as DSM IV and DSM-5 precede their own working definitions with disclaimers. The latter concedes: “no definition can capture all aspects of all disorders in the range contained in DSM-5”. The issues in defining physical health (from which we can then derive our understanding of disease) and in defining mental disorder are explored in more detail in paper two.

If we were to put this issue to one side for now, and argue (as I shall in paper two) that there is indeed something, some disorder or illness that moral bioenhancement interventions could treat (and so could be considered medically indicated in that instance), then that leads us to questions regarding justifications for implementing treatment. Consent could be considered one such justification, as Casal believes that the use of the intervention as a treatment would garner greater support than the idea of a moral bioenhancement and increase the likelihood of people consenting to such an intervention. As she puts it:

282 P.20 ibid.
283 Chapter Six (section 6.2.3).
…if we see moral compliance as a benefit, and lacking empathy or becoming a criminal as personal misfortunes, those who need biotherapy to become as good as others also have a complaint if biotherapy is denied to them, thereby depriving them of what others have.284

Indeed, as noted in Chapter One, research by Cabrera and colleagues indicates that lay persons seem more comfortable with the use of interventions that aim at bringing people to a given norm,285 rather than ones that enhance them beyond it.286 However, as I demonstrated in the Legal Context of the previous chapter,287 defining such interventions as treatments may in fact lead to a loss of consent in certain circumstances. For while the law fiercely protects the rights of patients to refuse treatments for physical disorders,288 the matter is less clear for those who refuse treatment for mental disorders. Frustratingly, there is little clarity289 (or even agreement290) as to what classifies something as a mental, rather than a physical, disorder. However, due to the reasons that I explain in detail in this paper, I assert that any disorder for which moral bioenhancement would be considered a treatment would be mental in nature, and so could be open to legal restrictions on consent in certain circumstances.

287 Chapter Two (section 2.3).
288 That is, as long as the person in question is competent.
289 As I noted in the Legal Context of the previous chapter (Chapter Two; section 2.3.3).
Detailed Summary of Paper Two

This paper considers the question as to whether moral bioenhancement interventions could be considered medically indicated in certain circumstances. This is in part inspired by comments of Paula Casal, who claimed that the use of moral enhancement interventions with the aim of eliminating wrongdoing was in fact an example of therapy rather than of enhancement. I found this to be an interesting idea and so in paper two I seek to explore whether such an idea could stand when subjected to definitions used in mental health care today. In short, I aim to find whether the claim that moral bioenhancement interventions could be considered as treatments could indeed work in a medical setting.

After clarifying what I mean when I speak of moral bioenhancement and also what I mean when I speak of empathy, I go on to discuss working definitions of treatment, disease, and disorder. As noted above, Daniels defines treatment as “services or interventions meant to prevent or cure (or otherwise ameliorate) conditions that we view as diseases.” So then, I argue, for moral bioenhancement interventions to be considered treatments, there needs to be something – some disorder or disease – which the intervention itself can ameliorate. However defining health and (from that) disease is not necessarily straightforward, as Resnik famously noted. This issue is especially prominent in the context of mental health and mental disorders – I note that the Mental Health Act offers an extremely broad and

292 A somewhat similar argument has been made elsewhere in the literature – see Agar, N (2015) ‘Moral Bioenhancement is Dangerous’, Journal of Medical Ethics; Vol. 41(4); pp.343-345.
293 The accounts I use in this paper are the same as those explained in Chapter Four of this thesis.
vague definition of mental disorder, namely: “any disorder or disability of the mind.” Further, even definitions in the Diagnostic and Statistical Manual of Mental Disorders (DSM) are preceded by disclaimers, noting (in the case of DSM-5) that “no definition can capture all aspects of all disorders in the range contained in DSM-5.”

However, even with this disclaimer in mind, the DSM-5 does still offer a definition of mental disorder, on which I focus on the first part in particular:

A mental disorder is a syndrome characterised by clinically significant disturbance in an individual’s cognition, emotion regulation, or behaviour that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning.

From this, I then question whether a deficit of empathy could be considered pathological; I argue that it can. Given the neurological basis of empathy, a deficit of empathy could indeed be demonstrative of (as the DSM-5 puts it) “a dysfunction in the psychological, biological, or developmental processes underlying mental functioning.” I note as well that a deficit of empathy could impact upon moral decision making and, in turn, behaviour; therefore fulfilling the two criteria listed

296 Mental Health Act 2007, s 1(2)
298 Ibid.
above for defining a mental disorder. As a result, I argue, it does seem that a deficit of empathy could indeed be considered pathological under the definition of mental disorder that is provided by DSM-5.

As a deficit of empathy would logically be treatable by increased levels of empathy (and as moral bioenhancement interventions would involve increasing levels of empathy in the person that undertakes them), then any condition characterised by such a deficiency could be a candidate for treatment through moral bioenhancement techniques. Therefore, to answer the titular question: it does indeed seem that moral bioenhancement interventions could indeed be considered medically indicated (in certain circumstances).

I then briefly consider two conditions that could be possible candidates for treatment with the use of moral bioenhancement interventions: Psychopathy and (the fictionalised) Moral Deficiency Disorder. Regarding psychopathy, I note that it is a condition that is typically understood to have a pathological deficit of empathy at its core. This view is not without its critics, although research from Blair suggests that the more typically-taken view may be the more accurate. If indeed the view that a deficit of empathy is the central aspect of the condition is correct, then in this instance it seems we could argue that moral bioenhancement interventions could be considered a treatment in the case of psychopathy.

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* Differences; Vol. 19(5); pp.741–752 (as noted in Chapter Four in this thesis (section 4.2.2), and explored in Chapter Six (section 6.2.5)).


Given the debate over whether empathy is or is not the true issue in psychopathy, I then turn instead to discuss the fictional condition of Moral Deficiency Disorder (or MDD). MDD would serve as shorthand or umbrella term for those people who have a deficit of empathy and whose moral reasoning and action would benefit from having their levels of empathy increased. Psychopaths might indeed fall within this category. I then consider some issues which emerge from discussion of such a disorder as MDD, in particular issues surrounding diagnosis and provision of treatment.

I note that it would seem reasonable to aim to diagnose children who are suspected of having MDD as their behaviour is often monitored and so we can identify those whose behaviour suggests a deficit of empathy. Further, it seems sensible to try to deal with such a condition early in the hopes of reducing (or indeed perhaps even removing) the risk of harm to others in the future. However, I note that an attempt to diagnose children with a deficit of empathy will be problematic: practically, due to the nature of emotional child development (and indeed child development in general), and ethically, as one could argue that the label provided by an MDD diagnosis could be considered rather stigmatising (and so a childhood diagnosis would involve conferring a stigmatising label at an early age). Given these issues, I suggest that it might be better to simply monitor children whose behaviour suggests a deficit of empathy in the hope of being able to offer treatment at a later point should these symptoms persist.

305 Through schooling and parental supervision.
306 And perhaps also an argument can be made for the child’s best interests if their behaviour is affecting their schooling (for instance, making them more likely to face expulsion) – however, this argument is not made until Chapter Seven (section 7.2.3), which follows this paper in the thesis.
I suggest then that we could perhaps turn our attention instead to diagnosis of adult offenders if their behaviour has been symptomatic of MDD; however I note as well that there could be concerns here regarding coercion, even where the offender’s consent appears to be freely given. Further, there could be concerns that even when presented with such a diagnosis, offenders (and indeed non-offenders) could be reluctant to undergo moral bioenhancement interventions, even if this would be medically indicated in their case.

I go on to note that this introduction of a new disorder based on the availability of new treatment (in this case, moral bioenhancement interventions) could perhaps be an instance of medicalisation. I then define the term ‘medicalisation’ before questioning whether Moral Deficiency Disorder could in fact be considered an instance of medicalisation for social control, and concede that there are grounds to such an accusation. In short, MDD might not be considered to be a burden by those that have the condition and so treatment in this case might indeed be for the benefit of society at large rather than straightforwardly for the patient.

Finally, I briefly note some of the consequences that could arise as a result of considering moral bioenhancement interventions to be medically indicated in certain circumstances, such as regulation, consent, and the question of when it is appropriate to treat.

308 That is not to say that there would be no benefits for the treated individual as well, but this does not alter the fact that they may not feel harmed by the condition in the first place, and so might be less inclined to seek treatment for themselves.
309 Which is explored in the chapter that follows this paper (Chapter Seven).
3.2.3. Duty (Paper Three)

In the third paper (Chapter Eight), I consider whether we could be said to have a
duty to undergo moral bioenhancement, for if we could indeed be said to have such a
duty, this might then encourage people to participate in programmes of the
endeavour.\textsuperscript{310} I explore this idea within the context of Kantian ethics, considering
whether moral bioenhancement interventions might be permitted under such an
account in the first instance and from there, asking whether there could indeed be a
duty to undergo moral bioenhancement.

It would be prudent to first clarify what it is meant by the term ‘Kantian ethics’, as
its meaning may not be immediately clear because the term can be used broadly. It
can include everything from Kant’s actual writings right through to arguments and
positions that are \textit{generally} in line with his work, be this in terms of similarities in
structure, principles, or even simply favouring act-centred (rather than results-
centred) moral theories. As O’Neill puts it: “The specific understanding of Kantian
ethics varies very much from context to context.”\textsuperscript{311}

We can see this in action in works by, for example, O’Neill, Jensen, and Ohreen and
Petry. O’Neill\textsuperscript{312} uses the Formulation of Humanity and the concept of maxims to
deal with moral quandaries in times of famine. Meanwhile Jensen\textsuperscript{313} uses his own
version of Kant’s account of universalizability (or the Categorical Imperative) to
argue against genetic modification for positional advantage (as it cannot be

\textsuperscript{310} As noted in Chapter One, there is evidence to suggest that people are motivated by duty in at least
some instances (see Galais, C & Blais, A (2016) ‘Beyond rationalization: Voting out of duty or
\textsuperscript{311} O’Neill, O (1993) ‘Kantian Ethics’ In Singer, P (Ed.) \textit{A Companion to Ethics}; Blackwell
\textsuperscript{312} O’Neill, O (1980) ‘Kantian approaches to some famine problems’ In Regan, T (Ed.) \textit{Matters of
Life and Death}; Temple University Press: USA.
\textsuperscript{313} Jensen, D (2011) ‘A Kantian Argument Against Comparatively Advantageous Genetic
Modification’, \textit{Journal of Medical Ethics}; Vol. 37(8); pp.479-482.
universalised). However while this principle is certainly Kantian, he notes that his version differs greatly to Kant’s in its application, as his refers to reasons to act, rather than as a means to determine the morality of the act in question. And finally, Ohreen and Petry\(^{314}\) use the concept of imperfect duties to consider the responsibilities of corporations to do charitable works, noting that a wide scope in choosing how to go about fulfilling a duty does not mean that there is therefore a choice as to whether to fulfil said-duty at all.

O’Neill also cites political philosophy heavyweights Nozick and (in particular) Rawls as having a Kantian approach, noting that while Kant and Rawls share principles, they each apply them differently.\(^{315}\) Indeed, Rawls himself, in *A Theory of Justice*, writes that the “original position may be viewed, then, as a procedural interpretation of Kant’s conception of autonomy and the categorical imperative.”\(^{316}\) O’Neill notes further that other Kantian writers depart even further from Kant’s writings, sometimes going so far as to work with ideologies that are totally incompatible with his.

In this paper I do not take liberties quite like these, rather I work from positions broadly in line with Kant’s writings, and refer to those writings directly where appropriate. I take particular interest in his writings on the role of emotion in morality and how they changed in his later works. I also consider Kantian concerns regarding bodily integrity and impact of the body on the mind and finally, I explore the duty to strive for moral perfection, questioning whether that duty could lead us to argue for another: a duty to undergo moral bioenhancement.


Detailed Summary of Paper Three

In paper three, I take a Kantian ethics approach to the question as to whether there could be a duty to undergo moral bioenhancement interventions. In order to do this, I first explore the role of emotions in morality according to Kantian ethics and note that while it is typically considered that Kant held that there could be no place for emotion in that domain, his later works in fact suggest that his view on the matter eventually shifted, allowing a place for sympathy in morality. I note that sympathy may indeed constitute a reference to empathy, as empathy is of course a very modern concept and further that definitions of empathy can overlap with our modern understanding of sympathy, or indeed even incorporate it.

I explain that in later writings, Kant states that we should ‘cultivate our sympathetic feelings’, exposing ourselves to emotive stimuli so that we can learn to temper and control the sympathy that we feel in response. I note further that it is, however, unclear exactly what role is played by sympathy (even where Kantian ethics allows for it) – for instance, De Lourdes Borges argues that its role is motivational, Baron however claims that its role is to help us to determine how best to fulfil our duties, and Denis meanwhile believes that it is a combination of the two. In any case, regardless of the exact role that it plays, there does seem to be a place for sympathy in Kantian ethics after all. I argue further that even if we were to dismiss

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317 As I will note in Chapter Four (section 4.1).
Kant’s change of heart and to reject that sympathy could have any direct role in morality, there could still be an argument to be made for there being a place for moral bioenhancement by emotional modulation in such an account regardless. This is because so-called counter-moral emotions such as aggression, which can cloud moral judgement, can in fact be tempered by empathy.

However, there are concerns that the cultivation of emotions such as sympathy beyond a certain point could overwhelm the capacity for moral reasoning. This concern is represented in the literature on moral bioenhancement by writers such as Sparrow and Harris, but it is unclear that moral bioenhancement interventions would have such an effect. Further (as many writers note) we do not consider people who are naturally very sympathetic or empathetic as being less able to engage in moral reasoning. Also, Baron notes that in Kant’s own writings he claims that we can only truly be overwhelmed by an emotion or desire if we have chosen to allow that emotion or desire to overwhelm us. Indeed, it could again be argued that moral bioenhancement by emotional modulation could in fact leave us better able to engage in moral reasoning by tempering those emotions that could get in the way.

It could then be argued, contrary perhaps to popular assumptions, that moral bioenhancement by emotional modulation might not be straightforwardly ruled out.

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326 As noted as well in the Ethical Context section in Chapter Two (section 2.2.5).
by Kantian ethics after all. This being said, however, Kant refers to emotional modulation by more traditional means (exposure to emotive stimuli) rather than the pharmaceutical methods with which we are concerned. It is important to note of course, that there may be some people for whom such traditional means may yield no results, and so moral bioenhancement might be their best (or even only) hope of improving themselves morally.

Nevertheless, this talk of artificial (specifically pharmaceutical) means could lead us to question whether the use of such interventions would contravene the Kantian stance on bodily integrity. I note that as necessarily embodied persons, we have a vested interest in what happens to that body and further, that Kant wrote that the mind must ensure that the body does not alter the state of the mind, and so must exercise control of the body to prevent this. However, this concern was already explored in this paper with respect to the impact of moral bioenhancement on moral reasoning, and its claims were found to be flawed.

I note that another concern that could be raised here regards identity, for if we are indeed embodied persons as Kant suggests then one could feasibly argue that something which acts upon the body and then has effects on the mind (even if those effects would not necessarily impair reason) could be considered a threat to identity. This concern has been raised elsewhere in the literature on moral bioenhancement.

However, Korsgaard writes that when taking a Kantian perspective, such

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331 For instance: those in whom moral bioenhancement interventions would be medically indicated; see Chapter Six (Carter, S (2016) 'Could Moral Enhancement Interventions be Medically Indicated?’, Health Care Analysis; doi: 10.1007/s10728-016-0320-8).


interventions do not pose a threat to personal identity as long as the intervention is freely chosen by the agent, and so is not forced upon him by law or medicine.

Kant asserted that the motive of self-preservation could provide justification for certain bodily interventions which might otherwise have been considered impermissible;\(^{334}\) I suggest that this reasoning could be extended to moral bioenhancement interventions. I illustrate this claim by reference to the example of a man whose excessive aggression frequently causes him to find himself in dangerous situations such getting into bar fights. This man acknowledges that if he weren’t so aggressive, he wouldn’t find himself in such situations, and further that there is a risk that he may die in one such fight. But he finds his aggression overtakes him and so he finds himself in these situations over and over again. Here, I argue, we can see an instance where moral bioenhancement might be undertaken in the pursuit of self-preservation.

Finally, having shown that there is a role for certain emotions (such as sympathy/empathy), and that moral bioenhancement interventions would not necessarily pose an issue for bodily integrity, I turn to question whether a claim could be made that there is a duty to undergo moral bioenhancement.

I explore first the question as to whether the endeavour could aid us in our duty to strive for moral perfection. First, I defend this duty in more general terms (as it is a duty to self, which is not an uncontroversial concept), and then note that according to Wood,\(^{335}\) the duty to strive for moral perfection involves being able to avoid being mindlessly steered by emotions and inclinations, but also cultivating those that


actually help us in behaving morally. Given what I have already discussed regarding moral bioenhancement, it seems that the intervention would indeed help us in our duty to strive for moral perfection. This duty is one that is imperfect, meaning that while its end (of moral perfection) is fixed, actions to promote that end are not specified, leaving the route to lead to that end open to the agent’s discretion. In short, we have a choice in how we pursue the end of moral perfection; the use of moral bioenhancement interventions could be one such choice.

Given that moral bioenhancement could help us to fulfil this duty to strive for moral perfection, I then question whether this could mean that there is a duty to undergo the intervention. I note that for something to be considered a duty based on its ability to help us to fulfil another duty, it would have to provide the single best way to fulfil that duty, and it is not clear that moral bioenhancement would be the best way to fulfil the duty to strive for moral perfection. Indeed it would help us, but it does not follow that everything that helps us to fulfil a duty is itself a duty.\(^{336}\)

This being said, I argue that there could in fact be an exception here in the case of those agents who might be otherwise unable to fulfil the duty to strive for moral perfection – for instance, those persons in whom moral bioenhancement interventions would be medically indicated. I argue that moral bioenhancement interventions would in their case constitute the best (perhaps even only) method to fulfil their duty to strive for moral perfection, and so the endeavour could be considered a duty for these people.

In sum, there may be a role for moral bioenhancement by modulation of emotion even in the typically cognitive-centred approach to morality that is presented by

Kantian ethics and, for some small number of persons, undergoing moral bioenhancement could indeed be considered a duty (although for the majority of persons, such a claim could not be made).
Chapter Four

An Introduction to Empathy

In this section, I will briefly explore some important questions relating to the notion of empathy in order to offer a point of reference for the thesis. Empathy is important for our purposes as this thesis will principally focus on the account of moral bioenhancement put forward by Persson and Savulescu, which involves increasing levels of positive moral emotions such as empathy in the enhanced individual.337,338

This chapter will aim to clarify what is meant by the term ‘empathy’,339 to explain why the concept is important within the context of moral action (by reference to studies which provide evidence for its ability to motivate altruistic action), and to explore some of the pitfalls of increased empathy as well as the research which demonstrates its malleable and complex nature.

4.1 What is Empathy?

As I will note in paper three (Chapter Eight), the concept of empathy is one that is relatively modern, only coming into being at the start of the nineteenth century,

338 I note this account in more detail in Chapter One (section 1.2).
339 At least within the context of this thesis.
when it was offered as a translation for the German psychological concept of

*Einfühlung* (or “feeling-in”). As Wispé explains:

> The concept we know today as empathy began as *Einfühlung* in late-nineteenth-century German aesthetics and was translated as empathy in early twentieth-century American experimental psychology.  

In its earliest form, the term empathy was used in a very different way to what it is today, then referring to a projection of imagined feelings. As Lanzoni writes:

> To have empathy, in the early 1900s, was to enliven an object, or to project one’s own imagined feelings onto the world. Some of the earliest psychology experiments on empathy focused on “kinaesthetic empathy,” a bodily feeling or movement that produced a sense of merging with an object. One subject imagining a bunch of grapes felt “a cool, juicy feeling all over.”

Before long, the concept of empathy as we recognise it today came into use in the field of psychology, however disagreements among researchers and theorists continue regarding the definition of the term. As Hodges and Klein note: “There are almost as many definitions of empathy as there are researchers who have studied the topic.” For the purposes of this thesis, I will focus my attention principally on the

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342 Ibid.

definition of empathy which is presented by Persson and Savulescu and Simon Baron-Cohen.\textsuperscript{344}

Persson and Savulescu define empathy as “a capacity to imagine vividly what it would be like to be another, to think, perceive, and feel as they do”.\textsuperscript{345} They argue that empathy itself has no motivational component, rather that empathy in this sense is simply a component of altruism (which itself, Persson and Savulescu state, has the motivational component of sympathetic concern for the feelings and well-being of others\textsuperscript{346}). However, Persson and Savulescu note later that the term could also be used in an extended sense, “such that empathy includes sympathy or a concern for the well-being of others, not merely imagining what the experiential state of another is like”.\textsuperscript{347} It is in this extended sense that the term is used by Baron-Cohen, whose definition of empathy progresses in a similar way to that of Persson and Savulescu (as they themselves note\textsuperscript{348}). Baron-Cohen begins his definition of empathy by stating that:

\begin{quote}
Empathy occurs when we suspend our single-minded focus of attention, and instead adopt a double-minded focus of attention.
\end{quote}

‘Single-minded’ attention means we are thinking only about our own mind, our current thoughts or perceptions. ‘Double-minded’ attention means we are keeping in mind someone else's mind, at the very same time…. When

\textsuperscript{344} Please note that a similarly phrased description of these accounts is used in Chapter Six (section 6.2.2), which is also published as Carter, S (2016) ‘Could Moral Enhancement Interventions be Medically Indicated?’, Health Care Analysis; doi: 10.1007/s10728-016-0320-8.
\textsuperscript{346} This understanding of ‘altruism’ is in part echoed by the psychology literature explored later in this section, where the term is typically defined in relation to selfless instances of helping behaviour.
\textsuperscript{347} P.116 ibid.
\textsuperscript{348} Ibid
empathy is switched off, we think only about our own interests. When empathy is switched on, we focus on other people’s interests too.\textsuperscript{349}

Baron-Cohen then goes on to extend his definition of empathy:

\begin{quote}
Empathy is our ability to identify what someone else is thinking or feeling, and to respond to their thoughts and feelings with an appropriate emotion.
\end{quote}

This suggests there are at least two stages in empathy: recognition and response. Both are needed, since if you have the former without the latter you haven’t empathised at all… Empathy therefore requires not only that you can identify another person’s feelings and thoughts, but that you respond to these with an appropriate emotion too.\textsuperscript{350}

It is in this second part of Baron-Cohen’s definition that the motivational component of empathy becomes apparent – and it is this extended definition,\textsuperscript{351} nodded to by Persson and Savulescu and explicitly defined by Baron-Cohen, that will serve as the working definition of empathy throughout this thesis.

My reasons for using this account are two-fold: The first reason is that this extended definition of empathy is one that is widely used throughout the literature.\textsuperscript{352} The second and perhaps most pertinent reason is that as I will be principally working with reference to the account and definition of moral bioenhancement that is put forward by Persson and Savulescu, it would be prudent for me to also refer to the

\textsuperscript{349} P.10 Baron-Cohen, S (2012) Zero Degrees of Empathy; Penguin: UK.
\textsuperscript{350} P.11 ibid.
\textsuperscript{351} Understanding empathy in this extended sense is not without its critics, in particular Coplan (see Coplan, A (2011) ‘Will the Real Empathy Please Stand Up? A Case for a Narrow Conceptualization’, Southern Journal of Philosophy; Vol. 49; pp.40-65); however this extended account of empathy is widely used in the literature in any case (as Coplan acknowledges).
\textsuperscript{352} As noted in ibid.
4.2 Why Is Empathy Important?

As noted in the section above, the extended definition of empathy offered by Persson and Savulescu and Simon Baron-Cohen contains a motivational component. This motivational component is perhaps that which makes empathy such a significant moral emotion, one that is important within the context of moral action and, therefore, a vital part of emotion-centred moral bioenhancement as described by Persson and Savulescu. That empathy can motivate people to perform altruistic actions (to ‘help’) is something for which evidence has been found in psychology, as I shall demonstrate by reference to two fascinating studies on the matter. Further, a study by Blair seems to demonstrate as well a role for empathy in moral reasoning; I shall briefly note this study as well.353

4.2.1 Moral Motivation

In 1975 Dennis Krebs conducted a study to investigate the relationship between empathy and altruism; he found that the subjects “who experienced the strongest

353 A more detailed account of the study can be found in this thesis in Chapter Six (published elsewhere as Carter, S (2016) ’Could Moral Enhancement Interventions be Medically Indicated?’, Health Care Analysis; doi: 10.1007/s10728-016-0320-8); also a brief account is given in Chapter Two (section 2.1).
empathic reactions towards another were most willing to help him, even though it meant jeopardising their own welfare.”

In this study, sixty participants were divided into 4 groups: high affect – similar, high affect-dissimilar, low affect-similar, and low affect-dissimilar. The ‘similar’ and ‘dissimilar’ conditions referred to the subject’s perceived similarity to the performer that they observed. The high affect and low affect conditions referred to the instructions received by the subjects; those in the high affect group were under the impression that the result of a roulette spin indicated either a win for the performer (were the ball to land on an even number) or that the performer would receive an electric shock (were the ball to land on an odd number). However, those in the low affect group were under the impression that the result of a roulette spin indicated either that the performer had to perform a mental calculation (even number) or a physical reaction test (odd number). The psychophysiological reactions of subjects in all groups were measured in order to gauge empathic reactions throughout; the test subjects were also given a post-test interview and questionnaire in order to self report their feelings and reactions to the experiment.

In order to test altruism, a ‘bonus’ round was introduced at the end of the previously-described conditioning rounds (but before the post-test interview and questionnaire). Subjects heard the experimenter tell the performer that there would be one more spin of the wheel, and that he would either win anything between nothing and $2 if the ball were to land on an even number, or he would receive a shock that would range from either barely perceptible through to maximally painful, were it to land on an

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355 As the subjects were primed to consider the performer to be either similar or dissimilar by way of a personality test done previously and also by way of a staged conversation between the performer and the experimenter, which the subject observed.
odd number. He was also informed that the amount to be won and the intensity of the
shock would be decided by an outside individual (though the odds of winning would
remain 50:50). The experimenter then spoke to the subjects via intercom,\textsuperscript{356} telling
them to open the envelope near them; the envelope contained $2 in small change and
a set of instructions. It was explained that while the win/lose result would be
determined by the spin of the roulette wheel, the subject would decide both the
amount won and pain received by the performer ahead of time. Further, they were
advised that they themselves had a chance to win money or receive an electric shock
as a result of their decision and that the more favourable they made the conditions
for the performer, the less favourable the conditions would be for themselves.

They were asked to select one of a choice of 21 pairs of outcomes, from “maximally
altruistic” (wherein the performer receives the entire $2 and escapes all shock, as the
subject receives no money and receives 100\% of the maximally painful shock),
decreasing incrementally down to maximally selfish (wherein the performer receives
no money and receives the maximally painful shock, while the subject receives all $2
and no shock). The eleventh alternative was an option between the two extremes, in
this option neither the subject nor performer would win any money, but also neither
would receive a shock. Subjects were told that their decision would remain
anonymous. After this, the subjects were then given a post-test interview and
questionnaire, which aimed to “[supply] a check on all experimental
manipulations”,\textsuperscript{357} to gauge the extent to which the subjects identified with the
performer, and also to rate their affective experience throughout.

\textsuperscript{356} Each subject would have been under the impression that they were being addressed individually.
\textsuperscript{357} P.1138 ibid.
It was expected that the subjects in the high affect–similar group would identify the most with the performer (and so would empathise most with him) and that they would then be more likely to help him. The first two of these assumptions was confirmed by both the subjective reporting (by way of the post-test interview and questionnaire), and was also indicated through the subjects’ psychophysiological reactions to the experiment (as the high affect–similar group had the strongest responses to the experiment of all four groups). As Krebs explains: “The results suggest that perception of similarity increases the disposition to imagine how one would feel in another’s place and that the disposition mediates vicariously experienced emotional arousal.”

With regards to the impact of this empathic emotion on altruism, as noted above, Krebs found that those subjects who had experienced the strongest empathic reactions towards the performer (those in the high affect–similar group) were most willing to help him, even at the risk of personal harm. As Krebs notes:

As expected, subjects in the high-similar group behaved most altruistically. They received an altruism score of 14.0, compared with scores of 9.6 for subjects in the high-dissimilar, 10.0 for subjects in the low-similar group, and 8.7 for subjects in the low-dissimilar group.

The results of Krebs’ study seem to indicate that those people who experience strong empathic emotions towards another person are more likely to help that person, even if it means a risk to their own welfare. However, Coke and colleagues argued that while Krebs’ study demonstrates correlation between empathic emotion and

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358 P.1143 ibid.
359 Ibid.
altruism, it does not provide evidence of a causal relation. It is this causal relation that they hoped to prove through their own research, as I shall now explain.

Coke and colleagues aimed to build on the idea that both emotional and cognitive processes may interact with empathy. They explained that they wanted to:

propose a two-stage model of empathic mediation of helping: (a) Taking the perspective of a person in need tends to increase one’s empathic emotional response; (b) empathic emotion in turn increases motivation to see that person’s need reduced. Since helping is often the most effective way to see the other’s need reduced, this motivation should increase the likelihood that one will help.\(^{361}\)

They note that while there is considerable evidence\(^ {362}\) in the literature to support the first stage of their two-stage account (that perspective taking tends to increase empathic emotional response), evidence in support of the second stage – that empathic emotion increases motivation to help – is “more tenuous” (noting, as mentioned above, that Krebs’ 1975 study only served to demonstrate a correlation between empathic emotion and helping and not a causal link). They note as well that in other studies which explore motivation to help it is not clear that the motivating emotion is indeed empathy, as in “face-to-face” emergencies many non-empathic emotions (such as shock, fear, etc.) may be experienced and may move the agent to action. As a result, Coke and colleagues tried to minimise the likelihood of these non-empathic emotions being roused in their experiments by using taped recordings rather than a face-to-face emergency.

\(^{361}\) P.753 ibid.
\(^{362}\) See ibid.
In Experiment 1, subjects listened to a newscast of the tragic story of a girl named Katie Banks; before listening to the newscast, half of the subjects were instructed to try to imagine how Katie felt about her situation (the imagine condition) while the other half were instructed to observe the broadcasting techniques used in the piece (the observe condition). Further, before listening to the tape, the subjects were “given a capsule in the context of another experiment. Half of the subjects were told that the capsule would relax them (relax condition); the others were told that it would arouse them (arouse condition).” Subjects were therefore put into four groups: imagine-relax, imagine-arouse, observe-relax, and observe-arouse.

Regarding the imagine condition, the authors explain that as “perspective taking enhances empathic emotional response, subjects in the imagine conditions should be more vicariously aroused by the newscast than subjects in the observe condition.” However, those subjects in the imagine-arouse group should already have an alternative explanation as to the origin of such arousal: the capsule; whilst those in the imagine-relax group would not only experience vicarious arousal of empathic emotion, but also “attribute that arousal correctly to Katie’s plight” rather than to the capsule. As a result, the authors predicted that subjects in the imagine-relax group would be more likely to help Katie than subjects in any of the other groups (they did not anticipate any difference among the remaining three groups’ willingness to help).

The authors found that the “subjects’ helping behaviour conformed fairly closely to the predicted pattern”. More help was offered in the observe-relax group than was

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363 P.754 ibid.
364 Ibid.
365 Ibid.
366 P.756 ibid.
expected, but this principally due to two subjects in particular (one who had not followed the instructions correctly and had engaged in perspective taking whilst listening to the newscast, and another who had had a recent experience which affected her response). If the results of these two subjects are excluded, then the mean result for willingness to help in that group drops to a similar level to that of the means in the arousal groups.

So the results of Experiment 1 do then demonstrate that increased empathic emotion increases the likelihood of helping, and so therefore provides evidence for the two-stage model of empathic mediation of helping as proposed by the authors. The authors also note that the results also demonstrate, rather interestingly, that “perspective taking did not affect helping directly. Rather it increased vicarious arousal, and when this arousal was correctly labelled as a response to the victim’s distress, it increased helping.”

In Experiment 2, authors introduced a “false feedback of arousal paradigm”: subjects listened to a taped broadcast whilst connected to a galvanic skin response (GSR) monitor, the real-time readings for which they themselves could observe. However, unbeknownst to the subjects, the GSR monitors were rigged to display either an increased response (high-arousal condition) or a decreased response (low-arousal condition). The intention being that the subject would see the rigged response on their GSR monitor and assume that it was an accurate representation of their own responses to the broadcast (a later questionnaire confirmed that the

367 P.757 ibid.
368 P.754 ibid.
subjects had considered the GSR readings to be rather accurate.\(^{369}\) As the authors note:

It was predicted that (a) subjects in the high-arousal condition would perceive themselves to be experiencing more empathy than subjects in the low-arousal condition and that (b) the greater empathy experienced by subjects in the high-arousal condition would lead to more helping.\(^{370}\)

Throughout the broadcast, all subjects were instructed to engage in perspective taking by trying to imagine the feelings of the person in the broadcast. Following this exercise, subjects were then given a questionnaire to assess their emotional state while listening to the broadcast.

The questionnaire consisted of 23 adjectives describing emotional states; subjects were to indicate the degree to which they had experienced each emotion... Included in the list were two sets of adjectives, one designed to provide an index of empathic concern and one to provide an index of personal distress.\(^{371}\)

Following this, each subject was then given a letter asking to help the person in the broadcast; the subject could indicate how much time (if any) they would like to volunteer, followed by a final questionnaire in which subjects were asked to indicate the level of empathic concern experienced throughout the broadcast and also how accurate they found the GSR monitor. As expected, subjects in the high-arousal condition indicated that they had experienced greater levels of empathic concern than those in the low-arousal condition. Again, as had been predicted by the authors,

\(^{369}\) The mean for both groups was 0.80.

\(^{370}\) P.758 ibid.

\(^{371}\) P.759 ibid.
the subjects in the high-arousal group offered more help than those in the low-arousal group, and offered to give up more of their time (67.2 minutes to the low-arousal group’s 24.3 minutes).

With regards to the results of the first questionnaire, the authors also found that “the empathic concern index was a significant predictor of helping... Subjects who indicated that they felt more empathic while listening to the appeal offered more help to the graduate student [mentioned in the broadcast]”.\textsuperscript{372} Further, the results of the first questionnaire indicated that neither condition had a significant impact on the personal distress index; this suggests that the increased helping offered by subjects in the high-arousal group was not the result of those subjects interpreting their arousal as personal distress (and so offering to help to alleviate their own distress).

As the authors summarise: “the results of Experiment 2 not only provided a generalised replication of Experiment 1, they also provided explicit evidence that empathic concern, and not personal distress or some other emotion, was mediating helping”.\textsuperscript{373,374} So then Experiments 1 and 2 seem to provide evidence for the second stage of the Coke and colleagues’ two-stage model of the empathic mediation of helping: that empathic emotion increases the motivation for an agent to help a person in need.

Interestingly, the first experiment performed by the authors also seems to offer some argument against the use of a cognitive-centred account of moral bioenhancement, for as they noted: “Eliminating perceived empathic emotion eliminated the effect of

\textsuperscript{372} P.761 ibid.
\textsuperscript{373} P.762 ibid.
\textsuperscript{374} Although the authors note as well that this is not to say that personal distress or other emotional states would not mediate helping in other situations.
perspective taking on helping”. However, that is not to deny that there is a role for cognition when it is taken alongside emotion, but it still seems as though it is the emotion which takes precedence in motivating action: “Cognitive perspective taking affects helping because it increases one’s empathic emotional response. Increased empathic emotion, in turn, increases helping.”

Given the experiments noted above, the evidence in favour of the motivational power of empathy seems quite clear. That it can motivate an agent to help in situations where a person is in need – and that it can do so in the absence of any personal distress to the agent, and even where there could be a risk of harm to the agent – is no small feat, and is certainly something that could prove important given the aims of moral bioenhancement generally.

This being said, it is important to note that in all three of the experiments described here, subjects were not made aware that there would be an opportunity to help in advance of the experiment, rather they were only made aware of this at the points mentioned in the respective studies (for Krebs’ experiment: at the start of the ‘bonus’ round, and for Coke and colleagues’ study: as part of the post-test assessments (the questionnaires and letter)). That the subjects were previously unaware of the opportunity to help could be an important factor to note, as I will explain later.

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375 P.763 ibid.
376 Ibid.
377 See section 4.3.2.
4.2.2 Moral Reasoning

Adshead writes that “[e]mpathy is relevant to moral reasoning and makes explicit the role of personal emotional experience in moral decision making”, a position which seems to be supported by a fascinating study by Blair.

In the study, Blair tested young children (of preschool age) to determine whether they could distinguish between social conventions (such as the proper place to wear outdoor clothing) and moral rules (such as not harming others). Blair found that children were able to distinguish between the two and that they considered moral transgressions to be more serious than those against social conventions. Further, when asked why moral rules should not be broken, the children made reference to the well-being of others, whereas when asked the same regarding social conventions, they simply made reference to “the rules”.

When Blair repeated this test with incarcerated psychopaths – a condition characterised by a deficit of empathy – he found that the psychopaths did not consider transgressions of moral rules to be more serious than those of social rules – indeed they seemed to consider them to be on a par. They also did not seem to consider the welfare of others when asked why moral rules should not be broken, instead making reference to “the rules” (and offering the same response when asked why social conventions should not be broken).

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379 The study that I describe here is briefly noted in Chapter Two (section 2.1) and also in Chapter Six (section 6.2.5).
380 See Lockwood, PL, Bird, G, Bridge, M, & Viding, E (2013) ‘Dissecting empathy: high levels of psychopathic and autistic traits are characterized by difficulties in different social information processing domains’, Frontiers in Human Neuroscience; doi: 10.3389/fnhum.2013.00760. Although this view is not entirely without its critics; I explore this in Chapter Six (section 6.2.5).
The fact that the psychopaths, unlike the children and those in control groups, did not make reference to the welfare of others in their reasoning, and in turn seemed unable to distinguish between moral and social conventions, seems to suggest that empathy (which psychopaths are said to lack) could indeed be at the heart of moral reasoning here.

4.3 The Pitfalls of Increased Empathy

Given that, as demonstrated above, empathy can motivate an agent to help others in need, and further that there is also evidence to suggest that empathy can also put a brake on aggression, it seems then that an increase in empathy could be considered a positive notion; however, this might not necessarily be the case. Given the evidence to suggest the risk of ‘empathy burnout’ and also the empathy avoidance tactics that people feel compelled to take in certain circumstances, empathy is perhaps not so straightforwardly positive, as I shall now explain.

4.3.1 Empathy Burnout

The phenomenon of ‘empathy burnout’, which can be caused by frequent exposure to emotionally-demanding situations, has been increasingly documented since the

382 This issue is explored further in Chapter Seven (section 7.2.2).
1990s - as Young notes: “Symptoms include lowered ability to feel empathy and sympathy, increased anger and anxiety, and more absenteeism (...). Various studies link these symptoms with an indifferent attitude to patients, depersonalisation and poorer care.”

Discussion of empathy burnout is most commonly found within the context of care-giving careers, such as nursing and hospice work for instance, however all persons are susceptible to this phenomenon. Further, this phenomenon could be considered harmful to those affected by it; indeed, not only could there clearly be a case made for psychological distress in these instances, but also there could also be a case made for physical manifestations of empathy burnout as a cause for concern. As Babbel notes:

The helpers' symptoms, frequently unnoticed, may range from psychological issues such as dissociation, anger, anxiety, sleep disturbances, nightmares, to feeling powerless. However, professionals may also experience physical symptoms such as nausea, headaches, general constriction, bodily temperature changes, dizziness, fainting spells, and impaired hearing. All are important warning signals for the caregiver that need to be addressed or otherwise might lead to health issues or burnout.

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385 Ibid.
Therefore empathy can have an unpleasant and undesirable effect on an agent’s mental and perhaps even physical wellbeing if it is experienced to such an extent (be it through extended duration, great intensity, or a combination of the two) that it leads to empathy burnout.

4.3.2 Empathy Avoidance

Empathy can be a costly emotion, the phenomenon of empathy burnout demonstrates this quite clearly, and it can also be deemed costly in terms of its potential effects on more mundane matters such as time and money when empathic emotions have moved us to help those in need.

In the previous section, I explained (by reference to studies on the matter) that empathy can motivate an agent to perform altruistic actions, but I stated as well that it was important to note that in the experiments described, the subjects had not been made aware of the opportunity to help in advance of the experiment (and therefore prior to the emotive experience). This is important because there is evidence to suggest that if people are made aware of an opportunity to help in advance of an emotive experience to encourage helping, then (depending on the costs involved in helping) this knowledge may move people to engage in avoiding emotive stimuli. Shaw, Baston and Todd conducted a study to demonstrate that in such circumstances, agents will typically be motivated to avoid empathy. They explain that they expected the study to show that

empathy avoidance [will] occur when, before a potentially empathy-arousing exposure to a person in need, (a) one is aware that there will be an
opportunity to help and (b) helping is costly yet something someone believes one might undertake if motivated.  

In their experiment, participants would be given a choice of hearing one of two versions of an appeal for help from a homeless man: a low-impact version and a high-impact version. The low-impact version of the appeal was “described as objective, leading listeners to remain calm, and not arousing empathy”, whilst the high-impact version was described as “emotional, leading listeners to imagine how the man felt, and arousing empathy”. The experimenters also created two kinds of ‘opportunities to help’ the homeless man: high cost and low cost. As they explain:

The low-cost opportunity was described as requiring only 1 hr, no personal contact with the homeless man, and no possibility of further commitment; the high-cost opportunity was described as requiring an initial commitment of 5-6 hr one-on-one with the homeless man, plus the possibility of further commitment.

The 48 participants were split into three groups: One group (unaware/high cost) was not made aware of either opportunity to help until after they had chosen an appeal and listened to it, at which point they were offered the high-cost opportunity to help. Another group (aware/low cost) was made aware of the low-cost opportunity to help (but not the high-cost version) in advance of choosing which appeal to hear. Finally, the remaining group (aware/high cost) was made aware of the high-cost opportunity to help (but not the low-cost version) in advance of choosing which appeal to hear.

391 Ibid.
392 Ibid.
393 P.881 ibid.
The study found that “[f]ewer subjects chose the empathy-inducing version in the aware/high-cost condition (women .25; men .38) than in either the unaware/high-cost condition (women .63; men .75) or the aware/low-cost condition (women .75; men .63).”  

This lends credence to the hypothesis of the study, as the authors note, the “subjects’ version choices clearly conformed to the pattern that would be expected if being aware of a high-cost opportunity to help aroused motivation to avoid empathy.”

Hodges and Klein agree with this conclusion and write that the study “demonstrates that people use exposure control when they think the cost of feeling empathy may be too high.”

They explain further that “[e]xposure control may be one of the most effective strategies for minimizing the amount of empathy felt. The simplest way not to be affected by a stimulus is to avoid being exposed to it in the first place.”

The fact that agents, when given the opportunity to do so, would opt to avoid exposure to empathy-inducing stimuli suggests that while empathy might be considered a positive for society in general, and certainly for those who are in need, it is not so clear that it could be considered to be as positive an experience for the agent herself. This concern is echoed throughout this thesis, both in reference to the use of moral bioenhancement interventions generally, and also with regards to the question as to whether a deficit of empathy could be considered harmful to the individual concerned.

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394 P.882 ibid.
395 Ibid.
397 Pp.443-444 ibid.
398 See Chapter Six (especially sections 6.2.6 and 6.2.7).
However, Hodges and Klein do make the case that empathy may prove a positive emotion for those that experience it, even if only by way of avoiding negative social consequences. As they explain:

However, there are personal costs to eschewing empathy that might outweigh the costs of the empathy itself. People may display empathy in order to be held in high regard by other people or to avoid being branded as “selfish”. To the extent to which people internalise social standards and the judgement of others, behaving in an empathetic way may become part of their moral code, adherence to which may bring them pleasure.399

4.4 Malleable Empathy

In this final part of the chapter, I outline some research which demonstrates the malleable nature of empathy, providing evidence that it can be affected by seemingly innocuous things such as our perception of others, video games, and even the popular painkiller Paracetamol. Further, I note that research has demonstrated that empathy can be impacted upon by an agent’s perception of their own power, which could in turn have implications for people in positions of power over others.

The malleable nature of empathy is important to note for two reasons: First, it strengthens the argument that alteration of empathy is not something that is out of the realms of possibility. Even if we do not yet have the technology or knowledge required to produce moral bioenhancement interventions which would increase

levels of empathy, the research noted in this section suggests that this could possibly be achieved in the future (however distant that future might be). This adds greater potency to the need to discuss the ethical and legal implications of moral bioenhancement interventions before the advent of such technology. Second, the research further demonstrates not only the malleability of empathy, but also its complexity. That it can be impacted upon by how powerful a person perceives themselves to be, by how fair they consider another person, and even by the drugs that they take for minor aches and pains, serves to demonstrate that empathy is not a simple and straightforward concept. While this will not been explored in detail in this thesis, it is something that is important to acknowledge.

Perceived Fairness

Evidence suggests that empathic responses to the suffering of others can be impacted upon by perceived fairness. The study by Singer et al involved subjects playing an economic game with a confederate, wherein the latter either played the game fairly or unfairly. After this, fMRI was used to monitor the brain activity of the subjects as they observed the confederate receiving painful stimuli. Participants of both sexes displayed “empathy-related activation in pain-related areas” when observing ‘fair’ confederates in pain. However, when observing ‘unfair’ confederates in pain, these

400 And of related matters such as voluntary programmes of the endeavour.
401 This is principally due to the hypothetical point of departure of this thesis; see Chapter One (section 1.1).
403 Ibid.
empathic responses were significantly reduced in male subjects, and slightly reduced in female subjects.\textsuperscript{404}

\section*{Power}

Studies by Galinsky and colleagues\textsuperscript{405} demonstrate an inverse link between power and perspective-taking.\textsuperscript{406} They found that increasing a person’s sense of power by way of a primer (which involved the subject reflecting on an experience where they had power over others) led that person to exhibit less ability to engage in perspective-taking than those participants who had been primed to feel less powerful, as well as control subjects. The authors note that those subjects primed to feel more powerful were less likely to “spontaneously adopt another person’s visual perspective, less likely to take into account that another person did not possess their privileged knowledge, and less accurate in detecting the emotional states of other people.”\textsuperscript{407} They note further that this inverse link between high power and perspective-taking was demonstrated regardless of whether participants were asked to be accurate (in identifying facial expressions) or if the perspective taking was spontaneous (in drawing an ‘E’ on their own forehead\textsuperscript{408}). The authors asserted that

\textsuperscript{404} Further, the authors also recorded an increased activation in the reward-related areas of the brain in male participants observing ‘unfair’ confederates in pain, suggesting a fulfilled desire for revenge; such a reaction was not observed in female participants. However, the authors acknowledged that the experimental design may have favoured men in its focus on punishment as psychical threat as opposed to other, non-violent forms of punishment.


\textsuperscript{406} As noted above, perspective taking is incorporated in the extended definition of empathy offered by Baron-Cohen (see also Baron-Cohen, S (2012) \textit{Zero Degrees of Empathy}; Penguin: UK).


\textsuperscript{408} Subjects were asked to draw an ‘E’ on their own forehead; those who had received a high power primer tended to write the E from their own perspective, making the letter illegible to outside viewers. However, those who had received a low power primer drew an E which was legible to outside viewers. Authors explained that this indicated spontaneous perspective-taking on the part of the low-power group, and a lack thereof in the case of the high-power group. See ibid.
the results of their experiments “support the prediction that power is associated with decreased accuracy in emotion detection and suggest an additional consequence of diminished perspective taking: greater difficulty in experiencing empathy.”

While the authors note that they suspect that the relationship is not invariant, it could perhaps be argued that these findings, taken alongside the conclusions of Chapter Six (that a deficit of empathy can be considered pathological), could lead to the suggestion that a deficit of empathy could even be considered an occupational hazard or illness in certain powerful positions.

Painkillers

A study by Mischkowski and colleagues demonstrates that the popular painkiller acetaminophen (more commonly known as Paracetamol) can reduce empathic reactions to the pain of others. As the authors explain:

...these findings suggest that the physical painkiller acetaminophen reduces empathy for pain and provide a new perspective on the neurochemical bases of empathy. Because empathy regulates prosocial and antisocial behaviour, these drug induced reductions in empathy raise concerns about the broader social side effects of acetaminophen, which is taken by almost a quarter of US adults each week.
The authors raise the concern that “[b]ased on the drug-induced reductions in empathy seen here, acetaminophen, and potentially other analgesics, might interfere with social processes that are critical for the promotion of social bonds and social order.”\textsuperscript{413} The findings of this study of course also demonstrate that pharmacology can impact on levels of empathy in an individual, at least negatively. This could of course be considered encouraging evidence in terms of the feasibility of the eventual creation of pharmaceutical moral bioenhancement interventions.\textsuperscript{414}

**Video Games and Virtual Reality**

Research by Harrington and O’Connell\textsuperscript{415} suggests that there is a positive relationship between so-called ‘prosocial video games’ (games in which the player character engages in helping behaviour and cooperates with others) and measures of empathy in children. As they write:

> Prosocial video game use was positively associated with the tendency to maintain positive affective relationships, cooperation and sharing as well as empathy. This association remained significant after controlling for gender, age, school type (disadvantaged/non-disadvantaged), socioeconomic status, weekly game play and violent video game use.\textsuperscript{416}

Further, research currently in progress at Stanford University suggests that, when used in certain ways, virtual reality technology seems to be capable of encouraging

\textsuperscript{413} P.1351 ibid.  
\textsuperscript{414} Further, these findings also have implications for how we understand the neurological and neurochemical basis of empathy. As the authors note: “Although some research implicates a role of oxytocin in empathy (...) there are no documented effects of acetaminophen on oxytocin. Thus, it remains unclear which neurotransmitter system is involved in the effects of acetaminophen.” (Ibid.)  
\textsuperscript{416} P.650 ibid.
helping behaviour through its ability to aid people in engaging in perspective-taking.\textsuperscript{417,418}

4.5 Conclusion

Empathy is a relatively modern concept, but one that is difficult to define absolutely and objectively; for the purposes of this thesis, however, I will work with the extended account of empathy that is offered by Persson and Savulescu and Baron-Cohen: that empathy involves, as Baron-Cohen puts it: “not only that you can identify another person’s feelings and thoughts, but that you respond to these with an appropriate emotion too.”\textsuperscript{419}

Empathy includes a motivational component, empirical evidence for which can be found in psychological studies, two of which I have explored here. Krebs demonstrated there to be at least a correlative connection between empathic emotion and helping as his experiments demonstrated that subjects who felt more empathetic towards the performer in the study were more inclined to help him, even at the risk of their own welfare.\textsuperscript{420} Meanwhile, over the course of two experiments, Coke and colleagues demonstrated a causal link between empathic feeling and willingness to help through their use of “misattribution of arousal” and “false feedback of arousal”

\textsuperscript{419} P.11 Baron-Cohen, S (2012) Zero Degrees of Empathy; Penguin: UK.
techniques. Subjects in the experiments were more likely to offer help if they felt that the empathic emotions that they were experiencing could be attributed to the stimuli rather than an artificial source, and were more likely to offer help if they were under the impression (by way of a rigged GSR monitor) that they were experiencing greater empathic reactions than was (likely to be) the case.

Further, although empathy can be considered a positive emotion – especially considering its motivational influence on altruistic action – the emotion can at times be considered to be a negative (or even, in extreme cases, a harm) for those who experience it. This is in evidence through the phenomenon of ‘empathy burnout’ (especially in members of the caring profession) and in the fact that people will opt to avoid emotive stimuli if they feel that the cost of helping in that situation will be too high. This feeds in to a concern, which is echoed throughout this thesis, that people will not be inclined to undergo moral enhancement, for increasing empathy can be seen as a costly enterprise, either emotionally or by way of its impact on commodities such as (for example) time and money.

Finally, I noted a small number of studies which illustrate the malleability of empathy and demonstrate that it can be affected by seemingly innocuous things, including perceptions of fairness and power, and indeed pharmacology (which could be a promising conclusion for scientists hoping to research into the

422 Although it is unclear whether this could have further implications for moral bioenhancement interventions themselves.
technology to produce moral bioenhancement interventions). This part demonstrated the complexity of empathy, as well as demonstrating that the idea of altering levels of empathy is not one out that is of the realms of possibility.
Chapter Five

Paper One: Putting a Price on Empathy: Against Incentivising Moral Enhancement

5.1 Abstract:

Concerns that people would be disinclined to voluntarily undergo moral enhancement have led to suggestions that an incentivised programme should be introduced to encourage participation. This paper argues that, while such measures do not necessarily result in coercion or undue inducement (issues with which one may typically associate the use of incentives in general), the use of incentives for this purpose may present a taboo trade-off. This is due to empirical research suggesting that those characteristics likely to be affected by moral enhancement are often perceived as fundamental to the self; therefore, any attempt to put a price on such traits would likely be deemed morally unacceptable by those who hold this view. A better approach to address the possible lack of participation may be to instead invest in alternative marketing strategies and remove incentives altogether.

5.2 Putting a Price on Empathy: Against Incentivising Moral Enhancement

The debate about moral bioenhancement began with Persson and Savulescu’s claim that scientific progress accelerated by cognitive enhancement would lead to possession of a level of power with which our under-evolved moral psyche would be unable to cope, leading us to an instance of ultimate harm.

They asserted that the only solution to avoid such a disaster would be to take up a programme of compulsory moral enhancement alongside cognitive enhancement. Recently, however, Rakić has argued that the possibility of self-annihilation, of such instances of ultimate harm, can never be eliminated even with the use of compulsory moral enhancement. Instead, Rakić states that we can only aim at keeping the likelihood of ultimate harm at a minimum (rather than eradicating the risk altogether), which he notes seems insufficient to justify the use of compulsory moral enhancement. Instead, he proposes a programme of voluntary moral enhancement that would be incentivised in order to encourage participation.

This article aims to develop the debate by exploring the idea of incentivising programmes of voluntary moral enhancement. I will demonstrate that, while it is unclear that areas of concern more typically raised in response to incentives (such as

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427 Please note: in preparing this chapter for the thesis, some minor edits have been made to the original (published) version so as to improve readability. These are principally grammatical in nature and none of the content or arguments made here differ from the published version, which can be found in the Appendix (from page 262 of this thesis).

428 Hereafter bioenhancement is referred to simply as ‘enhancement’.


430 Ibid.

coercion and social justice) are necessarily relevant in this instance, public attitudes relating to the characteristics likely to be affected by moral enhancement suggest that any proposal to incentivise moral enhancement could be met by, at best, public indifference to the idea and at worst, moral outrage.\textsuperscript{432}

It is beyond the scope of this paper to engage directly with the ongoing debates surrounding moral enhancement generally; my concern here is with the more specific area of the ethics and efficacy of incentivised programmes of moral enhancement. This article seeks to demonstrate that, regardless of one’s view of moral enhancement itself, any plan to incentivise a voluntary programme of the endeavour would prove both practically and ethically problematic.

**5.2.1 The Argument for Incentives**

One problem in particular becomes immediately obvious when considering any programme of voluntary moral enhancement: namely, it seems reasonable to assume that very few people would be likely to volunteer themselves to undergo the intervention. This could be because most people would not see the point of undergoing moral enhancement as they would not consider themselves to need it. Relatedly, people who might be seen to most need the intervention could be the least likely to volunteer.\textsuperscript{433} As Persson and Savulescu note:


\textsuperscript{433} Some possible reasons for this may be that people may not realise that they are morally deficient, or it may even be the case that they do realise this but are either indifferent to the fact, or even enjoy this aspect of their personality and so do not wish to change (this could be the case with career criminals, for example, or perhaps even some powerful businessmen; see Wasserman, D (2014) ‘When bad people do good things: will moral enhancement make the world a better place?’, *Journal of Medical Ethics*; Vol. 40(6); pp.374-375).
If safe moral enhancements are ever developed, there are strong reasons to believe that their use should be obligatory, like education or fluoride in the water, since those who should take them are least likely to be inclined to use them.\textsuperscript{434}

This view is strengthened by the findings of Riis et al.,\textsuperscript{435} which I discuss in more detail below. In his 2014 paper, Rakić notes that this could be considered a genuine concern when considering the possible viability of a voluntary programme of moral enhancement, recognising a further argument that undergoing such an intervention could even prove problematic for those that do choose to have it as their enhanced levels of empathy may leave them open to manipulation by the unenhanced. As a solution, he suggests that “external stimuli” in the form of incentives should be offered in order to encourage people to undergo the moral enhancements\textsuperscript{436} and to lessen the risk of experiencing more difficulties in life as a result. Suggesting the state as a provider, he proposes the following incentives: “tax reductions, schooling allowances for their children, retirement benefits and affirmative action policies that favour them”.\textsuperscript{437}

However, the use of incentives in the context of moral enhancement raises concerns about coercion and justice, and indeed questions as to whether people would be inclined to enhance those traits likely to be affected by the endeavour to begin with. I will consider each of these matters in turn.

\textsuperscript{436} An idea also suggested by Tonkens in Tonkens, R (2015) ‘My child will never initiate Ultimate Harm: an argument against moral enhancement’, Journal of Medical Ethics; Vol. 41(3); pp.245-251.
5.2.2 Coercion and Justice

One concern that could be raised relates to the impact that incentivising moral enhancement could have on voluntariness: Could the voluntary aspect be lost with the inclusion of incentives? In short, could the offer of financial incentives prove coercive?

While there is currently no programme in place that is directly analogous to the incentivisation of enhancement interventions, programmes of incentivising participation in research, adherence to drug regimens, and implementation of healthier lifestyles could provide some insight into questions surrounding the ethics of using financial incentives in such a manner. However, while they are similar enough to hypothetical incentivised moral enhancement programmes to provide a reasonable point of reference for this discussion due to their potential to contribute to public good (especially in the case of the first of the three), the inevitable differences between these should not be entirely dismissed. For instance, participation in research could involve greater risk to one’s health than taking enhancers that have already been regulated for public use and the implementation of a healthier lifestyle could be done without reliance on interventions such as pills or injections. So in the absence of an alternative programme that would be directly

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438 While not all of the incentives suggested by Rakić are financial in nature, due to space constraints this paper will focus on financial incentives in particular.
442 It would be prudent to note that in this paper I will be focusing my attention only on the question as to whether financial incentives could prove coercive for free persons (that is, those that are not incarcerated) in particular. There are of course various other demographics that would be affected in different ways by such proposals, but I do not have the space to discuss this in the depth that such a discussion would warrant.
analogous with incentivised moral enhancement, these are the best possible reference points for this discussion, but one should keep in mind these relevant differences throughout the discussion that follows.

Coercive threats would present a clearer case of coercion as it is typically understood; where options are removed, this is an obvious example of a coercive tactic. However, incentives would seem to present an offer rather than a threat. As McMillan notes:

> Threats attempt to remove options by making at least one of them undesirable and therefore sit naturally alongside the idea of coercion, which also implies that choices are rendered involuntary... Offers, on the other hand, tend to create options that otherwise would not exist.

Nevertheless there is some controversy as to whether offers can indeed be considered to be coercive under certain circumstances. Shaw, for example, certainly believed that some offers could constitute coercion; when responding to a proposal from NICE which recommended financial incentives to promote adherence to methadone drug regimens, she expressed concern that the proposal was coercive in nature. As she put it: “by carrot rather than the stick, but coercion none the less.” This view is seconded by Wiseman and Selgelid. Referencing Rakić’s suggestion directly, Selgelid notes:

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444 P.4 ibid.
Rakić suggests the possibility of incentivising moral enhancement, but he
fails to acknowledge that this might detract from freedom to refrain from
taking incentivised action – just as the threat of being told you will be shot if
you don’t do something detracts from the freedom not to do it. The greater
the costs of not doing something, the less free we are to do otherwise.
Forgone rewards count as costs.\textsuperscript{449}

Wertheimer and Miller, however, disagree: “The claim that the offer of financial
payments can actually constitute a coercive offer in a manner that undermines
informed consent is both false and incoherent, because genuine offers cannot
coeerce.”\textsuperscript{450} They do assert that sometimes an offer can affect the decision-making
process of an agent, but that this does not make the offer coercive, rather this may
make it an instance of undue inducement. That an inducement could be considered
undue is not an inherent feature of that inducement itself, rather whether it is
considered as such will depend on the agent’s response to that inducement. As
Wertheimer and Miller note:

An offer is not problematic if it is genuinely too good to refuse. It is
problematic if it seems to be too good to be refused and would be refused if
the agent’s judgement were not blinded or clouded or impaired.\textsuperscript{451}

This idea is echoed by Tishler and Bartholomae,\textsuperscript{452} who assert that whether a
financial incentive is considered undue will vary from person to person depending on

\textsuperscript{448} Selgelid, MJ (2014) ‘Freedom and moral enhancement’, Journal of Medical Ethics; Vol. 40(4);
pp.215-216.
\textsuperscript{449} P.216 ibid.
\textsuperscript{450} P.389 Wertheimer, A & Miller, F (2008) ‘Payment for research participation: a coercive offer?’,
Journal of Medical Ethics; Vol. 34(5); pp.389-392.
\textsuperscript{451} P.391 ibid.
the value that each person attaches to money and the strength that they perceive a financial incentive to have. Therefore, it is unclear that a financial incentive could be objectively considered to exert undue influence.

With this in mind, it seems reasonable to raise concerns of social justice: that people from socioeconomically disadvantaged backgrounds could be considered more at risk of being affected by undue inducements. As Permuth-Wey and Borenstein note: “financial remuneration may be more attractive to economically disadvantaged populations.”

Some empirical research however suggests that concerns of this nature may be misplaced; Halpern et al found that with regard to willingness to participate in clinical trials – while neither the poorer nor the wealthier group were immune from the lure of financial incentives – wealthier people were far more likely to be enticed by increased levels of pay (and therefore more willing to participate) than those from a more economically disadvantaged background.

However, it is not clear whether these findings represent a state of affairs throughout society as a whole, nor does it seem to be the most commonly taken view. For example, Macklin writes of a medical school in an area with a large number of “urban poor [which] has a policy of not advertising or attempting to recruit subjects [for research] from the poor section of town.” Further, that there is “a general

453 P.281 ibid.
455 This was demonstrated by willingness-to-participate statistics of 37% (rich) vs. 20% (poor) after an increase in the financial incentives offered.
456 More research would likely be required to ascertain this.
suspicion of efforts to solicit subjects from among community residents because of the fear that monetary payments will serve as an undue inducement.”

While their findings are controversial, the research by Halpern et al nonetheless indicates further that the question as to whether using incentives to encourage moral enhancement could be considered a form of coercion, or an undue inducement, is not one that can be straightforwardly or objectively answered. However, that does not mean that the matter can be dismissed entirely – these concerns indicate that caution is necessary when constructing policies involving financial incentives.

If the possible implications of incentivisation in relation to coercion and justice are unclear, other possibilities raise more important reasons to doubt the benefits of incentivisation. Thus, I turn now to the more pressing concern that could be raised against incentivised accounts of moral enhancement: taboo trade-offs and fundamental traits.

5.2.3 Taboo Trade-Offs and Fundamental Traits

My main argument against incentivising programmes of moral enhancement comes from the phenomenon of taboo trade-offs (a concept that I shall define in more detail shortly) and the findings of Riis et al that people appear unwilling to enhance those traits that they perceive to be fundamental to the self. Taken together, it seems that such a proposal for incentivised voluntary moral enhancement would be met with public indifference at best and public outcry at worst – as I shall now explain.

458 Ibid.
Parke et al noted in a study regarding public attitudes to policies incentivising healthy behaviour: “incentives may represent an attempt to put a price on something that many feel ought to be priceless.” But what would this ‘priceless’ something be in the case of voluntary moral enhancement? An answer to this could be provided by Riis et al and their studies on personal identity and enhancement, and in particular their findings relating to the attitudes of people regarding those traits perhaps most likely to be affected by moral enhancement: empathy and kindness. I shall come back to this in more detail shortly, but first I shall briefly explain what is meant by the term ‘taboo trade-off’.

McGraw and Tetlock define taboo trade-offs as being those that “entail comparisons of the relative importance of secular values (e.g. money, time, and convenience) with sacred values that are supposed to be infinitely significant.” Taboo trade-offs are often spoken of with reference to Fiske’s theory of the four relational modes: the four types of relationships that help people to navigate and organise most social interactions and even attitudes. The four types are: Communal Sharing (people put in what they can and take as they need - found in communities of any size), Equality Matching (usually found in friendships, where tit-for-tat reciprocity of favours is commonplace), Authority Ranking (e.g. army ranking systems), and Market Pricing

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that which underlies capitalism and essentially enables us to put a price on those things on which we put a price).  

In this context, taboo trade-offs are those which occur when norms from one model are brought into another, especially when those norms are of the Market Pricing domain.  

As Shiell et al note:

If a comparison across normative boundaries is attempted, as might be the case when one tries to assign a monetary value to friendship or loyalty or health for example, then one undermines the very thing that one is attempting to value. In this view, one cannot be a true friend if one is willing to value one’s friendship in monetary terms.

McGraw et al note that research indicates that typical responses to taboo trade-offs tend to be rather strong, with common reactions including moral cleansing and moral outrage.

It is not clear that the relationship models would be entirely helpful in the context of incentivised voluntary moral enhancement, but the principle in itself could be clearly seen to be applicable. As already noted above, Parke et al adopted the term for a similar purpose when they stated that incentives can at times appear to be an attempt

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463 A detailed account of these relational models can be found in Fiske, AP & Tetlock, PE (1997) ‘Taboo Trade-offs: Reactions to Transactions that Transgress the Spheres of Justice’, Political Psychology; Vol. 18(2); pp.255-297.


to put a price on something that could be considered priceless. As I have already mentioned, the findings of Riis et al suggest that the very traits likely to be affected by moral enhancement may be considered fundamental to the self – and therefore priceless. I will give a brief account of these findings before explaining their connection to the phenomenon of taboo trade-offs, and then finally considering possible counterarguments that could be raised against this position.

Research by Riis et al demonstrated “that healthy young people are more reluctant to enhance traits that are believed to be fundamental aspects of their self-identities than traits that are believed to be less fundamental.” Riis and colleagues constructed a study wherein participants were given a list of 19 traits and were asked to rate how relevant each one was to self-identity; participants were then asked to indicate whether they would be willing to enhance each trait. The results of two of the traits listed in the study are of particular significance for our purposes: Empathy and kindness. These were regarded as being the most fundamental to self-identity out of the 19 traits listed with only 13% and 9% (respectively) of the participants willing to enhance these traits – the lowest figures for the entire study.

For this reason it is possible that Rakić’s proposal of incentivised moral enhancement presents an example of a taboo trade-off. For if it is indeed the case that people consider traits such as empathy and kindness – which of course would likely be affected with the use of moral enhancement – to be fundamental to their personal identity to such an extent that it makes them unwilling to enhance those

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468 1.38 and 1.39 respectively.
traits, then it would not be an illogical assumption that people would be inclined to consider these traits priceless. Therefore, an offer of financial incentives to encourage people to undergo moral enhancement – of those traits that Riis et al’s research suggests that people consider most fundamental – could be a clear case of “an attempt to put a price on something that many feel ought to be priceless”, a taboo trade-off.

One counterpoint could be raised at this juncture: that those participants (and indeed those who share this view) who believe there to be fundamental, unchanging aspects of the self are mistaken. However, this counterpoint does not stand in this context. For whether these people are right or wrong in their assumption that there are traits that are fundamental to the self, the fact is that they do have this assumption and it is going to influence their decision when considering voluntary moral enhancement.

A further counterpoint could be taken from another study by Riis et al reported in the same paper as the findings above. The study in question suggests that people seemed to consider enhancing traits that they regard as fundamental to their personal identity to be far more acceptable if the interventions were reframed and marketed as being an ‘enablement’ rather than an enhancement (perhaps appealing to a notion of unlocking potential). Illustrating this with a real-life example, Riis et al note:

In this light, it is interesting to consider the case of Paxil, an antidepressant sold by GlaxoSmithKline. Paxil has used the tagline “Paxil gets you back to


One view that would take such a position is offered by Glover in Glover, J (1991) I: Philosophy and Psychology of Personal Identity; Penguin Books Ltd: London.

It could be argued that counselling prior to enhancement would allow peoples’ fears on this matter to be allayed, however this assumes that people would be willing to engage with the matter in that depth – unlikely given that, as noted above, reactions to taboo trade-offs typically involve moral outrage (see McGraw, AP, Schwartz, JA, & Tetlock, PE (2012) ‘From the Commercial to the Communal: Reframing Taboo Trade-offs in Religious and Pharmaceutical Marketing’, Journal of Consumer Research; Vol. 39(1); pp.157-173).
being you” on its Web site. This tagline can, appropriately, ease the concerns of clinically depressed and anxious individuals who are considering taking this potentially helpful medication. At the same time, our research suggests that it could also increase the inclination of non-clinical individuals to seek a Paxil prescription for self-improvement purposes.472

With this in mind, one could argue that Riis and colleagues’ findings regarding unwillingness to enhance fundamental traits need not prove too problematic for incentivised programmes of moral enhancement – so long as those programmes were reframed as ‘enablements’ rather than enhancements. However, while such a marketing strategy may allay concerns of losing one’s identity, there are two reasons to doubt whether such tactics would prove sufficient in the case of moral enhancement.

First of all, it is not entirely clear that such a marketing approach would work in the context of moral enhancement. The ‘fundamental’ trait that was used in the study by Riis et al was that of Social Comfort (defined as the “Tendency to feel comfortable when meeting new people”473) – a trait which people had deemed to be rather less fundamental to the self than empathy or kindness474 and, correspondingly, which people were far more willing to enhance than those that we would associate with moral enhancement.475

Secondly, even if this marketing approach (of reframing enhancement as ‘enablement’) could work in this context and was implemented, given the financial

473 P.498 ibid.
474 Social comfort had an ‘identity index’ score of 0.71 as opposed to 1.38 for empathy and 1.39 for kindness.
475 26% as opposed to 13% for empathy and 9% for kindness.
incentives on offer it could perhaps be a concern that people might become suspicious – if it’s so good for me, why are they offering me so much? What’s the catch? Studies indicate that people are aware that higher incentives indicate higher risk in clinical trials.\(^{476}\) It is not a great leap to assume that these suspicions and this kind of thinking could be relevant and applicable to incentivised voluntary moral enhancement, especially when it is being pitched as something that is a benefit to the enhanced (or rather, ‘enabled’) person specifically.

It could be argued that if the incentives themselves were to be removed from an account of voluntary moral enhancement, and instead the focus was shifted to employing the ‘enablement’ angle in advertising the intervention, that this would side-step the issues noted above. To merely offer a different marketing strategy such as the ‘enablement’ approach\(^{477}\) and remove the incentivisation aspect would simply leave us with a better-promoted version of ordinary voluntary moral enhancement. A prospect that seems to be far more uncontroversial than that of incentivised voluntary moral enhancement, which poses a significant cause for concern.

5.2.4 Conclusion

Given concerns that people would not otherwise be inclined to undergo moral enhancement voluntarily, incentives do at first appear to be a necessary addition to any proposed programme of the endeavour. However, while they do not necessarily result in coercion or undue inducement (which one may typically associate with the

\(^{477}\) Assuming that the enablement approach could be made to work in this context, and further that no advertising ethics (e.g. exaggerating to the point of lying – therefore threatening informed consent) would be breached in this.
use of incentives in general), the use of incentives in the context of moral enhancement raises unique concerns, possibly leading to moral outrage in their attempt to entice people to alter characteristics that many consider fundamental to their identities.

Instead, a better approach to address the possible lack of participation would perhaps be to invest in improved marketing strategies (such as the ‘enablement’ reframing tactic mentioned above) and reject incentives for moral enhancement altogether.
Chapter Six

Paper Two: Could Moral Enhancement Interventions be Medically Indicated?

6.1 Abstract:

This paper explores the position that moral enhancement interventions could be medically indicated (and so considered therapeutic) in cases where they provide a remedy for a lack of empathy, when such a deficit is considered pathological. In order to argue this claim, the question as to whether a deficit of empathy could be considered to be pathological is examined, taking into account the difficulty of defining illness and disorder generally, and especially in the case of mental health. Following this, Psychopathy and a fictionalised mental disorder (Moral Deficiency Disorder) are explored with a view to consider moral enhancement techniques as possible treatments for both conditions. At this juncture, having asserted and defended the position that moral enhancement interventions could, under certain circumstances, be considered medically indicated, this paper then goes on to briefly explore some of the consequences of this assertion. First, it is acknowledged that this broadening of diagnostic criteria in light of new interventions could fall foul of claims of medicalisation. It is then briefly noted that considering moral enhancement technologies to be akin to therapies in certain circumstances could lead to ethical and legal consequences and questions, such as those regarding regulation, access, and even consent.

6.2 Could Moral Enhancement Interventions be Medically Indicated? 479

6.2.1 Introduction

In her 2013 paper, Paula Casal suggests that we could define the goals of moral enhancement interventions in terms of a satiable requirement, such as reducing crime or even “elimination of wrongdoing”, 480 and then makes the case that if we are to take this view then, in this context, this would be akin to a case of moral therapy. She explains that this is because the use of the endeavour towards such a goal “aims at eliminating pathologies or shortfalls from an appropriate threshold of compliance. This option will involve correcting those individuals with a deficit of empathy or an excess of aggression…” 481

Casal makes an interesting point, although one which in turn raises the question as to whether moral enhancement interventions could be regarded as therapeutic, rather than merely enhancing, in certain circumstances. In this paper, I will consider the idea that moral enhancement interventions could be medically indicated (as a treatment) in a more general sense than that suggested by Casal, and explore whether it could perhaps work in a more medical setting. 482

Please note: in preparing this chapter for the thesis, some minor edits have been made to the original (published) version so as to improve readability. These are principally grammatical in nature and none of the content or arguments made here differ from the published version, which can be found in the Appendix (from page 262 of this thesis).


Ibid.

To clarify: I will be using the terms ‘enhancement’ and ‘therapy’/’treatment’ as shorthand for bioenhancement, biotherapy, and bio-treatment.
The question as to whether moral enhancement techniques could be medically indicated (and so therapeutic) is one that is important to consider as it could have far-reaching consequences. Regarding an intervention as a treatment or therapy in certain circumstances will raise new questions for that treatment regarding, for instance, its regulation, people’s access to it, as well as questions regarding consent, and when it is appropriate to offer the treatment. I will address these in a little more detail later in the paper.

The main objective of this paper is to attempt to answer the question of whether ‘moral enhancement interventions could be medically indicated’, and in consideration of this question, I briefly explore some of those consequences noted above. In order to answer the central question, I will first outline what is meant by the term ‘moral enhancement’ for our purposes, and also by the term ‘empathy’ as this is what would most likely be addressed in moral enhancement interventions. From there, I will raise the question as to whether a deficit of empathy could be considered pathological, offering two possible cases for reference: Psychopathy, and the fictionalised disorder of Moral Deficiency Disorder. Thereafter I will note questions regarding medicalisation that could be raised at this juncture, before returning to the central question (whether moral enhancement interventions could be medically indicated) and commenting on the possible consequences and questions that could arise.

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483 I will use the terms treatment and therapy interchangeably in this context.
484 It is not the purpose of this paper to dwell on these issues; however it is important to acknowledge the consequences of considering moral enhancement interventions as therapeutic (within certain contexts).
6.2.2 Defining Moral Enhancement and Empathy

It would perhaps be prudent to clarify now what is meant by the term ‘moral enhancement’ for our purposes, as there are of course numerous accounts which offer suggestions as to what the endeavour could involve. Some of the most prominent voices in this discussion are Harris,\(^ {486}\) who favours a cognition-centred approach to moral enhancement, Persson and Savulescu\(^ {487}\) who argue that the endeavour involves an increase in levels of empathy, and Douglas,\(^ {488}\) who argues that moral enhancement interventions are those which would attenuate counter-moral emotions. In this paper, I will use the account of moral enhancement offered by Persson and Savulescu: that moral enhancement inventions are those which increase levels of empathy.

If moral enhancement involves increasing levels of empathy, as Persson and Savulescu suggest, then it would be reasonable to assume that a deficit of empathy would be the thing that moral therapy interventions would address. I will return to this assertion in the sections that follow, but first, given the discussion at hand it would be prudent to question what is meant when we speak of empathy. Perhaps surprisingly, this question is not as easily answered as one might expect, for as Hodges and Klein note: “There are almost as many definitions of empathy as there are researchers who have studied the topic.”\(^ {489}\) Due to space constraints, I will focus

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\(^ {489}\) P.438 Hodges, SD & Klein, KJK (2001) ‘Regulating the costs of empathy: the price of being human’, *Journal of Socio-Economics*; Vol. 30(5); pp.437-452.
my attention principally on the definition of empathy presented by Persson and Savulescu and Simon Baron-Cohen.\textsuperscript{490}

Persson and Savulescu define empathy as “a capacity to imagine vividly what it would be like to be another, to think, perceive, and feel as they do”,\textsuperscript{491} as such – they argue – it has no motivational component. Rather, empathy in this sense is simply a component of altruism, which in turn has the motivational component of sympathetic concern for the feelings and well-being of others. But Persson and Savulescu note later that the term could also be used in an extended sense, “such that empathy includes sympathy or a concern for the well-being of others, not merely imagining what the experiential state of another is like”.\textsuperscript{492}

They note further that it is in this extended sense that the term is used by Baron Cohen, whose definition of empathy progresses in a similar way to that of Persson and Savulescu. Baron-Cohen begins his definition of empathy by stating that:

\begin{quote}
Empathy occurs when we suspend our single-minded focus of attention, and instead adopt a double-minded focus of attention.
\end{quote}

‘Single-minded’ attention means we are thinking only about our own mind, our current thoughts or perceptions. ‘Double-minded’ attention means we are keeping in mind someone else’s mind, at the very same time…. When empathy is switched off, we think only about our own interests. When empathy is switched on, we focus on other people’s interests too.\textsuperscript{493}

\textsuperscript{490} In this thesis this definition has also been described in Chapter Four (section 4.1); see pages 100-101 of this thesis.
\textsuperscript{492} P.116 ibid.
\textsuperscript{493} P.10 Baron-Cohen, S (2012) Zero Degrees of Empathy; Penguin: UK.
Baron-Cohen then goes on to extend his definition of empathy:

*Empathy is our ability to identify what someone else is thinking or feeling, and to respond to their thoughts and feelings with an appropriate emotion.*

This suggests there are at least two stages in empathy: recognition and response. Both are needed, since if you have the former without the latter you haven’t empathised at all… Empathy therefore requires not only that you can identify another person’s feelings and thoughts, but that you respond to these with an appropriate emotion too.494

It is in this second part of Baron-Cohen’s definition that the motivational component of empathy becomes apparent – and it is this extended definition,495 nodded to by Persson and Savulescu, and explicitly defined by Baron-Cohen, that will serve as the working definition of empathy for this paper.

Persson and Savulescu argue further496 that moral enhancement is required in order to prevent mankind from bringing about an instance of ultimate harm; as they put it: “a heightened moral sensitivity is necessary to reverse this descent of humanity down a spiral of ever-increasing existential risks.”497 For this reason then, the endeavour could be said to be beneficial for all concerned. Further, even if considered in less dramatic terms, the benefits of living in a society which has been

494 P.11 ibid.
495 Understanding empathy in this extended sense is not without its critics, in particular Coplan (see Coplan, A (2011) ‘Will the Real Empathy Please Stand Up? A Case for a Narrow Conceptualization’, *Southern Journal of Philosophy*; Vol. 49; pp.40-65); however this extended account of empathy is widely used in the literature in any case (as Coplan acknowledges).
morally enhanced could quite easily be imagined, for as Karim Jebari notes:

“empathetic people avoid harming others, are more willing to cooperate with strangers, and are more willing to benefit others”.

It is important to note that unlike in the cases of other enhancements (of, for example, cognition, memory, strength, etc.), moral enhancement interventions do not immediately appear to confer benefits to the enhanced individual directly. If one is a part of a morally-enhanced society then the benefits of the endeavour are clear, but on an individual level they may not be so apparent. This is particularly problematic for our purposes as those for whom moral enhancement interventions may be considered medically indicated might be disinclined to undergo the treatment as they could be unlikely to see a benefit for themselves in doing so, especially if they already consider their deficit of empathy to be an advantage in their day-to-day lives. This assertion could in part be argued from common sense: if a person’s life is made easier by their reduced experience of empathy, then they might not see an enhancement of that trait to be a sensible course of action. This point is alluded to by Kevin Dutton, who found that many surgeons scored highly on tests used to identify psychopaths; he noted:

The most important thing when you’re conducting a dangerous operation, a risky operation, is you’ve got to be very cool under pressure, you’ve got to be focused. You can’t have too much empathy for the person that you’re operating on, because you wouldn’t be able to conduct that operation.

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499 As quoted in p.374 Wasserman, D (2014) ‘When bad people do good things: will moral enhancement make the world a better place?’, Journal of Medical Ethics; Vol. 40(6); pp.374-375.
It would not then be a great leap to imagine that those whose lack of empathy benefits their (for example) career in business, medicine, finance, or indeed crime might be less-than-enthusiastic with the idea of having their levels of empathy increased and risking losing that edge. Further, writers such as Baron-Cohen\textsuperscript{500} and Hodges & Klein\textsuperscript{501} have noted that maintaining even slightly above-average levels of empathy can prove emotionally costly and exhausting, and so perhaps this fact might make moral therapy again appear a less-than-desirable option to those who we might consider to need it.

So then, if a deficit of empathy can be seen as pathological (and so moral enhancement interventions could be medically indicated in such instances),\textsuperscript{502} much would centre on whether people with that disorder considered themselves as being harmed by having it – and so therefore whether treatment would be seen as a benefit or a burden.

Casal believes that people would consider moral therapy to be a benefit; as she puts it:

…if we see moral compliance as a benefit, and lacking empathy or becoming a criminal as personal misfortunes, those who need biotherapy to become as good as others also have a complaint if biotherapy is denied to them, thereby depriving them of what others have. There are thus also egalitarian arguments in support of moral biotherapy…\textsuperscript{503}

\textsuperscript{500} Baron-Cohen, S (2012) Zero Degrees of Empathy; Penguin: UK.
\textsuperscript{501} Hodges, SD & Klein, KJK (2001) ‘Regulating the costs of empathy: the price of being human’, *Journal of Socio-Economics*; Vol. 30(5); pp.437-452.
\textsuperscript{502} As I shall argue in the sections to follow.
\textsuperscript{503} P.3 Casal, P (2013) ‘On not taking men as they are: reflections on moral bioenhancement’, *Journal of Medical Ethics*; Vol. 41(4); pp.340-342.
This being said, it is not entirely clear how people would feel about their lack of empathy and, in turn, moral therapy. It could be that Casal is correct and that therapy would be seen as beneficial by the person that we would consider in need of it; or indeed it could be the case that those with lower levels of empathy would see any attempt to correct that as a burden, something which they would much rather avoid.\(^{504}\)

However, there could perhaps be claims made that treatment could still benefit such people directly, in addition to the indirect advantages already mentioned. This is because, if an increased level of empathy were to lead to a reduction in wrongdoing (as would of course be a desired (if not expected) outcome), then this in turn would mean that the person in whom the endeavour was medically indicated would be less likely to engage in activities that could result in consequences that would be undesirable for her in particular. This could involve being subject to legal retributivism tactics such as fines, community service, or jail time, or indeed (perhaps more sinesterly) becoming the victim of consequences outside of the law (for instance, gang–related violence, bar fights, assault, etc.).\(^{505}\) And so while the advantages of accepting moral enhancement interventions as treatment might not be immediately clear to the individual in whom it may be medically indicated, it is not the case that the endeavour would be without benefit for her.

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\(^{504}\) Further, there could also be concerns regarding a loss of identity; I do not have the space to discuss this issue here, however I have explored this in some detail previously (see Carter, S (2015) 'Putting a price on empathy: against incentivising moral enhancement', Journal of Medical Ethics; Vol. 41(10); pp.825–829).

\(^{505}\) Of course this is not to say that people without a deficit of empathy never find themselves in such situations, however it is reasonable to assume that aggressive people, and those who participate in criminal acts, are more likely to encounter such consequences with much more frequency than less aggressive people who do not.
6.2.3 Defining Treatment, Disease, and Disorder

Before asking whether moral enhancement interventions could be considered treatments (in those circumstances where it would be medically indicated), it would perhaps be prudent to first clarify what is meant by the term ‘treatment’. Daniels defines treatment as “services or interventions meant to prevent or cure (or otherwise ameliorate) conditions that we view as diseases.”\(^{506,507}\) So then in order to answer the question as to whether moral enhancement techniques could, in certain contexts, be considered therapeutic, one would have to demonstrate that there existed something – some disease or disorder – for which moral enhancement interventions would be considered a treatment; a matter I will return to later. However, as Resnik\(^{508}\) notes, there is no single, agreed-upon definition of health from which we can derive our understanding of ‘disease’. He explains that there are two basic approaches to the definition of health: the value-neutral (descriptive) approach, and the value-laden (normative) approach.

The value neutral approach considers health to be an empirical, descriptive concept which is based on factual information about human biology and normal human functioning. Arguably the best-known, most influential account of this approach to health comes from Boorse,\(^{509}\) who asserted that in this context the term ‘normal’ referred to that which is species-typical: those traits that are statistically typical for members of that species to have.\(^{510}\) So then as Resnik explains: “a human with

\(^{507}\) This in turn could raise the question of what we could consider to be a disease; I shall consider this in a short while.
\(^{510}\) It is prudent to note that one could argue that even Boorse’s account involves some normative judgement, as departure from species-typical functioning is considered undesirable; however, this is
healthy lungs has specific respiratory capacities that are normal in our species… A human who lacks these capacities, such as someone with cystic fibrosis or emphysema, has a disease.”

Meanwhile, the value-laden approach bases concepts of health and disease on societal, cultural, and even moral norms; so then a person that falls within such norms is considered healthy, whereas another person who does not is considered diseased. So then, as Resnik notes, a person who “deviates from species-typical functions could be considered healthy in a society that views that deviation as healthy.”

So it is not necessarily clear as to what constitutes health – nor, in turn, a disease – even in the realms of physical health; and it is unlikely to be much clearer when considering cases of mental health. This is thrown into sharp focus when we consider that there is little clarity or even agreement with regards to what constitutes a mental (as opposed to physical) disorder.

In English law the answer to this question remains unclear: the only definition of mental disorder offered in the Mental Health Act (2007) is extremely wide, defining it simply as meaning “any disorder or disability of the mind.”

Even the Diagnostic and Statistical Manual of Mental Disorders (DSM), which provides standard criteria for the classification of mental disorders, precedes its own description by admitting that no definition of ‘mental disorder’ adequately

beside the point for our purposes. (I am grateful to the anonymous reviewer for bringing this to my attention).


512 P.367 ibid.


514 Mental Health Act 2007, s 1(2)
encapsulates the complexity of concept. This is particularly clearly noted in DSM-IV:

Although this manual provides a classification of mental disorders, it must be admitted that no definition adequately specifies precise boundaries for the concept of mental disorder… Mental disorders have… been defined by a variety of concepts (e.g. distress, dyscontrol, disadvantage, disability, inflexibility, irrationality, syndromal pattern, etiology, and statistical deviation). Each is a useful indicator for a mental disorder, but none is equivalent to the concept, and different situations call for different definitions.\(^{515}\)

This is echoed in the most recent edition of the text, DSM-5, which states that “no definition can capture all aspects of all disorders in the range contained in DSM-5”.\(^{516}\) Despite this, both DSM-IV and DSM-5 do still offer an attempt at a definition of mental disorder, with the aforementioned disclaimers in mind:

A mental disorder is a syndrome characterised by clinically significant disturbance in an individual’s cognition, emotion regulation, or behaviour that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning. Mental disorders are usually associated with significant distress or disability in social, occupational, or other important activities. An expectable or culturally approved response to a common stressor or loss, such as the death of a loved one, is not a

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mental disorder. Socially deviant behaviour (e.g. political, religious, or sexual) and conflicts that are primarily between the individual and society are not mental disorders unless the deviance or conflict results from a dysfunction in the individual as described above.\textsuperscript{517}

\section*{6.2.4 Could a Deficiency of Empathy be Pathological?}

So with the DSM-5 definition in mind, \textit{could} a lack of empathy be considered a case of mental disorder? Perhaps so – given the neurological basis of empathy\textsuperscript{518} it could be argued that a deficit of empathy could be demonstrative of “a dysfunction in the psychological, biological, or developmental processes underlying mental functioning”.\textsuperscript{519} Further, this deficit of empathy could affect moral decision-making\textsuperscript{520} and in turn behaviour – fulfilling two of the key criteria listed above for defining a mental disorder.

As a deficit of empathy could be considered a mental disorder under this definition – and as a deficit of empathy would most likely be treatable by increased levels of empathy – then we could consider any condition characterised by such a deficiency to be a candidate for treatment through moral enhancement techniques. So then, in such instances, moral enhancement interventions could indeed be medically indicated.

\textsuperscript{517} Ibid.
\textsuperscript{520} This assertion is explored in more detail in the section on psychopathy (section 6.2.5).
When considering whether such a condition could exist, one well-established disorder comes to mind: psychopathy; however the position that empathy lies at the core of this disorder is one that is somewhat disputed.\textsuperscript{521} Nevertheless a condition characterised by a lack of empathy – that moral enhancement techniques could treat – could indeed exist, but is not currently classified among existing mental disorders.\textsuperscript{522}

Later in this paper I will consider a hypothetical new condition: Moral Deficiency Disorder. This disorder would be characterised by a deficit of empathy and would principally be diagnosed in those individuals whose capacity for moral reasoning and action would benefit significantly from an increased level of empathy – that is, those for whom moral enhancement interventions would be medically indicated and considered a treatment.

In the sections that follow, I will consider these possible candidates for treatment by moral enhancement techniques – Psychopathy and Moral Deficiency Disorder – in turn.

6.2.5 Psychopathy

Lockwood et al note that: “Psychopathy is a disorder characterized by a lack of empathy, shallow affect, and manipulation of others for own gain”.\textsuperscript{523} On this view of psychopathy as a condition with a lack of empathy at its very core, it would make

\textsuperscript{522} This is noted as well by Simon Baron-Cohen (see pp.107-110 Baron-Cohen, S (2012) \textit{Zero Degrees of Empathy}; Penguin: UK).
sense to put forward moral enhancement interventions as a treatment (thus making it an instance of moral therapy). For if an increase in the levels of empathy in a psychopathic individual would cure that psychopathy, or at the very least temper the symptoms thereof, it then seems reasonable to consider the endeavour to have a therapeutic effect in this instance. However, the position that empathy is at the core of psychopathy is not without its critics.

One such critic is Maibom, who argues that the way that empathy is measured is flawed, with heavy reliance on self-reporting which is open to issues such as social desirability and stereotyping. For example, Maibom notes that studies have shown that women who are aware of being observed tend to score as having higher levels of empathy than in studies where they are unaware of being observed (in these cases, women and men demonstrate equal levels of empathy).\(^{524}\) Glenn and colleagues note as well that the issues surrounding the use of self-report methods are compounded by the fact that psychopaths tend towards dishonesty.\(^{525}\) Given our “blunt tools” for measuring empathy, Maibom asserts: “This means that there is little support for theories linking psychopathic immorality directly to emotions that are usually regarded to be moral emotions, such as empathy and sympathy.”\(^ {526}\)

A study by Blair,\(^ {527}\) however, suggests that there is something missing in psychopathic moral decision-making and that thing does seem to be, if not empathy, then certainly something closely related. Blair tested preschool children to see whether they could distinguish between social conventions (e.g. wearing outdoor


clothes indoors) and moral rules (e.g. hitting another pupil); he found that the children saw moral transgressions as more serious than social ones. Further, when asked to explain why an action was wrong, children said “those are the rules” in regards to social conventions, but when speaking of moral rules the children made reference to the wellbeing of others. Finally, when asked whether they would consider an action to be acceptable if their teacher (or other authority figure) had permitted it, the children agreed that the acceptability of social conventions could be altered in this way, but disagreed that this could be the case in the instance of moral rules.

Blair then repeated the study but this time with incarcerated psychopaths (using an equivalent number of incarcerated nonpsychopaths as a control). Blair found that, unlike the children, the psychopaths did not consider moral transgressions to be more serious than those against social conventions (or vice versa). Also, when asked to explain why an action was wrong the psychopaths made reference to “the rules” for both moral and social transgressions and did not seem to consider the welfare of others in their reasoning. These findings have since been replicated with a larger number of respondents.

That the psychopaths did not make reference to the welfare of others in their reasoning does then seem to suggest that empathy may indeed be at the heart of their condition. As Adshead puts it: “Psychopaths demonstrate failure/lapses in moral reasoning when they harm others; psychopaths have emotional deficits; ergo

528 Although, interestingly, the psychopaths did seem to consider both social conventions and moral rules to be authority-independent; that is that even if a figure of authority were to permit that action, it would still in actuality be wrong to perform it – although Blair seemed to dismiss this as the psychopathic inmates hoping to show that they had reformed and “learned the rules” rather than an actual assertion of belief.
emotional deficits are relevant to failures in moral reasoning.”530 But is that deficient emotion empathy? It is noted531 that psychopaths also have a dramatically reduced experience of fear compared to non-psychopaths; this is certainly something which could go some way to explain their reduced sensitivity to the threat of punishment for wrongdoing532 (especially if the act in question involves a reward), but it seems less clear that this could be the missing factor in their inability to reason morally. As Adshead notes: “Empathy is relevant to moral reasoning and makes explicit the role of personal emotional experience in moral decision making.”533

I do not have the space to question and consider the role played by this deficit of fear in the psychopaths’ inability to reason morally in the depth that it deserves, but this does at least demonstrate that the view that empathy is at the heart of this condition is not without its critics and questions. Consequently the idea that moral enhancement techniques could be used to treat psychopaths might well be supported by many, but it would not be uncontroversial, and given the controversy surrounding the role of empathy in psychopathy, it may be worth putting the issue to one side for now. It is therefore necessary to explore whether there could be an alternative approach to the matter at hand.

6.2.6 Moral Deficiency Disorder

Imagine that we were to identify a group of individuals whose capacity for moral reasoning and action would benefit significantly from an increased level of empathy; such people could be said to suffer from – to give it a name – Moral Deficiency Disorder (or MDD), for which, moral enhancement techniques could clearly be considered appropriate treatment. Yet this hypothetical proposal is not without its problems.

First, it is not clear how we would identify those individuals who would be considered as suffering from MDD. At present, the typical method used to identify levels of empathy is by using fMRI to identify activity in specific areas of the brain. As Adshead notes: “Measures of empathy have been developed, and the neural basis of empathy is thought to involve a complex set of neural networks involving the limbic system, hippocampus, and orbital frontal cortex.” But scanning the brains of an entire populace seems an excessive (as well as costly) undertaking, so the question could be raised: when would it be appropriate to test for MDD?

As noted earlier in the paper, a diagnosis for a mental disorder characterised by a lack of empathy would likely be reliant on those with such a deficiency displaying certain behaviours as a result of that deficit. So then it may be the case that one might consider focusing our attention on providing moral enhancement techniques as treatment for those who show a deficiency of empathy. And as it seems a sensible course of action to deal with the condition early so as to hopefully reduce (or indeed remove) the risk of harm to others in the future, a case could therefore be made for turning our attention to children whose behaviour is symptomatic of a deficit of

534 Ibid.
empathy. However, targeting of children in this manner is problematic, as it isn’t clear whether a certain child will retain this deficiency into adulthood, or whether she will simply grow out of it. As Kathryn Seifert notes: “Some of the traits seen in a psychopath – such as lack of empathy, little or no social respect, and disregard for moral boundaries – are the same traits seen during infancy and very early childhood.”

So diagnosing MDD in children would be an inexact science and would likely cause serious issues as regards informed consent, given that we would likely be unable to tell whether the child’s empathy deficiency is a marker for a long-term condition, or simply a sign of the child developing at a slightly different rate. Further, the concern could be raised that the label provided by an MDD diagnosis could be considered rather stigmatising; this is particularly problematic in the context of childhood diagnosis of MDD, as this would be conferring a stigmatising label at an early age.

This is not necessarily to say that children exhibiting behaviour symptomatic of MDD should be ignored unless that behaviour continues into adulthood, but it is important to note those practical and ethical issues involved in treating minors in such a situation. Perhaps the best that we could do in such a situation would be to monitor the children in question in the hope of being able to offer treatment at a later stage should the symptoms of MDD persist into their adult years.

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536 I will concede that this assertion does seem to contradict the findings of Blair noted above. Unfortunately I do not have the space to explore this issue further, but I would still be inclined to argue that diagnosing children with MDD would most likely be an inexact science due to the nature of childhood development more generally.

537 I am grateful to the anonymous reviewer for bringing this point to my attention.

538 If we were to find a genetic marker which indicated a lack or deficit of empathy, then this could go a long way to assisting us in diagnosing MDD in both children and adults; however it is beyond the scope of this paper to explore this idea (and its related ethical concerns) in sufficient depth.
Unfortunately, treating adults with an empathy deficiency would be fraught with practical and ethical problems as well. First of all, as noted at the start of this section, it would be impractical to attempt to scan the brains of all adults in a given populace in the hope of locating those with a deficit of empathy, and so we would have to target particular persons in order to use this method efficiently. Following the above discussion, the clearest group of candidates would of course be those people who exhibited behaviour indicative of a deficit of empathy throughout their childhoods and who continue to do so into adulthood. Another group of candidates could perhaps be offenders; there may of course be some overlap between this group and those whose behaviour in childhood (continuing into adulthood) indicates a deficit of empathy.

Such targeting raises issues of its own – in the case of offenders, for instance, there may be concerns regarding coercion, even if their consent seems to be freely given.\(^{539}\) Furthermore, it is not entirely clear that people with MDD would be inclined to undergo moral enhancement interventions in any instance, despite the benefits that it might provide.\(^{540}\) This is not to say that offenders, and indeed adults generally, identified as having MDD would invariably refuse to undergo moral enhancement interventions as treatment, but it is important to acknowledge that the voluntary uptake of that treatment might not be very high.\(^{541}\)

While it is therefore unclear that a targeted approach would prove effective in either diagnosing MDD or providing moral enhancement interventions as therapies to those

\(^{539}\) This issue is explored in some detail in McMillan, J (2014) ‘The kindest cut? Surgical castration, sex offenders and coercive offers’, *Journal of Medical Ethics*; Vol. 40(9); pp.583–590.

\(^{540}\) As noted in the section on defining moral enhancement and empathy (section 6.2.2).

\(^{541}\) I explore this briefly in Carter, S (2015) ‘Putting a price on empathy: against incentivising moral enhancement’, *Journal of Medical Ethics*; Vol. 41(10); pp.825–829.
that have it, this does not diminish the fact that moral enhancement technologies could, in principle, constitute a treatment for such a condition.

This widening and shifting of medical definitions to allow for a wider range of diagnoses – based on new information or, as in this case, new possible treatments – could perhaps be an instance of medicalisation. As Peter Conrad writes:

> Virtually any human difference is susceptible to being considered a form of pathology, a diagnosable disorder, and subject to medical intervention. As Nancy Press notes, “Medicalisation pathologises what might otherwise be considered as simply variations in normal human functioning.”

In the section that follows, I will explain what is meant by medicalisation, and also briefly consider whether the introduction of something such as Moral Deficiency Disorder would constitute a use of medicalisation for social control.

### 6.2.7 Medicalisation

Conrad defines medicalisation as consisting of “defining a problem in medical terms, using medical language to describe a problem, adopting a medical framework to understand a problem, or using a medical intervention to “treat” it.”

Medicalisation can also involve the widening of diagnostic criteria for already-

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established illnesses or disorder, in turn increasing the number of diagnoses for that condition.  

Schermer notes that an important factor in the process of medicalisation is the availability of treatment (or at least relevant medication). Discussing her research into ADHD, she writes:

Interestingly, one of the most important reasons our respondents gave for considering ADHD a disorder was the fact that there was medication for it:

“Well, because there is medication for it so, yes, then I think you really have something. Because you would not take medication for nothing,” said one respondent. Having a disorder legitimised the use of medication (‘you would not use it for nothing’) but at the same time, medication itself functions as a proof for the existence of a disorder.

She notes further that this circular reasoning is also found in experts: “a positive reaction to a trial of psycho-stimulant medication is often considered to be confirmation of the diagnosis… If a trait or function can be improved, it must have been defective before, this type of reasoning suggests.”

This way of thinking could clearly be attributed to the use of moral enhancement interventions as treatments for Moral Deficiency Disorder. That is, there is a medication (moral enhancement interventions) that can improve a function

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546 Pp.33-34 ibid.
(empathy-based moral reasoning/action) therefore “it must have been defective before”.547

One could therefore be concerned that medicalisation is linked to the pharmaceutical industry. For instance, reporting a conversation with Bob Hare – inventor of the Psychopathy Checklist diagnostic tool (wherein a score of 30+ prompts a diagnosis of psychopathy) – journalist Jon Ronson notes the psychiatrist’s concern that the diagnostic goalposts would change if a treatment for psychopathy were discovered:

‘Sure,’ Bob said, ‘over-labelling occurs. But it’s being perpetrated by the drug companies. Just wait and see what happens when they develop a drug for psychopathy. The threshold’s going to go down, to twenty-five, twenty…’548

The view that medicalisation is linked to the pharmaceutical industry is not, however, one that is shared universally; Conrad seems particularly sceptical of this view. He notes that:

…in virtually all studies where they were considered, the corporate players in medicalisation were deemed secondary to professionals, patient movements, or other claim-makers. By and large, the pharmaceutical and insurance industries were not central to the analyses.549

Rather, he asserts that there are many areas from which medicalisation can emerge – but focuses on an area which seems particularly relevant for our purposes: medicalisation of deviance to provide medical social control.

547 Ibid.
A rather extreme example of medicalisation for the purposes of social control that comes to mind is Drapetomania⁵⁵⁰ – the mental illness that a slave was said to have if she had a tendency to try to escape from her master. This is a clear example of the use of medical definitions as a tool for maintaining society in a certain way. Given that no such extreme⁵⁵¹ examples remain, one could be forgiven for thinking that medicalisation for social control was no longer an issue. However, Bolton notes that we can still see the use of medicalisation – particularly in the domain of psychology – as a means of social control, especially in those cases where the patient is reluctantly brought to the attention of medical professionals as opposed to having presented himself freely. As he puts it:

Focus on the individual best fits the traditional doctor-patient model in physical medicine: a patient in distress presents themself and seeks treatment. The other kind of case, in which an individual is brought by others, the reluctant patient with no complaints of their own, is a more problematic fit with the medical model, apparently suiting more the construal of psychiatry as a form of social control.⁵⁵²

There is an attempt to defend against the use of classifications of disorder (specifically those of a psychological nature) for the purposes of social control in DSM-5:

“Socially deviant behaviour (e.g. political, religious, or sexual) and conflicts that are primarily between the individual and society are not mental disorders

⁵⁵¹ Although it is doubtful this was considered as such when it was in common usage.
unless the deviance or conflict results from a dysfunction in the individual as described above.»

Whilst this does seem to protect against wildly specific mental illnesses such as Drapetomania being invented solely as a means of social control, it could, however, perhaps still leave us open to more complicated questions. To illustrate this, I will briefly consider whether Moral Deficiency Disorder could be considered an example of medicalisation for the purposes of social control.

Moral Deficiency Disorder (or MDD) is characterised by a deficit of a specific emotion – empathy – that can impact on behaviour and also moral decision-making (an area of cognition). As such, it could be considered a mental disorder under the DSM-5 definition, regardless of its impact on society. But, as already noted, for those who have the disorder, MDD might prove not to be a burden or problem in their lives as a whole; indeed it might actually help those with the disorder to live the life that they want, unburdened by concern for others. So even if we do consider MDD to be a legitimate mental disorder, there is a chance that treatment would more likely be pursued for the benefit of society than for the benefit of the person with the disorder. If such an assertion is correct, this would of course raise important questions regarding the acceptability of such a practice; not least due to the implications that this could have for autonomy and consent. However, as already noted in an earlier section, there are benefits, both direct and indirect, to be gained from the intervention, so the concern may in fact be unfounded. Unfortunately I do not have the space here to consider this in the depth that it deserves, but it is worth

acknowledging that using moral enhancement interventions as therapy could open the door to considerable criticism.

6.2.8 Consequences of Moral Enhancement Interventions as Therapy

To return to the focus of this paper, it therefore seems that moral enhancement interventions could be medically indicated. I have demonstrated that a deficit of empathy could be considered pathological, and, further, as moral enhancement interventions would increase levels of empathy, it is reasonable to suggest that these interventions would, in such instances, constitute a therapy or treatment.

Therefore the question could be raised as to what consequences would arise if moral enhancement interventions were medically indicated, and so considered therapeutic. As answering this new question is not the purpose of this paper, I will consider it only briefly, but it is still a very relevant question given the assertion above.

As noted at the start of this paper, considering moral enhancement interventions as treatments could raise questions regarding concerns such as regulation, access, consent, and even when to intervene. Regulation would become an issue here, as treatments would most likely be regulated differently to enhancements when the latter comes into public use more readily.\footnote{Jackson, E (2012) \textit{Law and the Regulation of Medicines}; Hart Publishing Ltd: Oxford.} A related issue is that of access to moral enhancement or indeed therapy interventions. If moral enhancement interventions were to be considered therapeutic under certain circumstances, access to those interventions (as therapies) could be dramatically altered; for instance, it might be readily available as a therapy but not as an enhancement. An example of such a
policy in action can be seen in case of Ritalin (methylphenidate). Ritalin is prescribed as a treatment for ADHD but is considered an illegal substance (a class B drug)\textsuperscript{555} for those without the condition who wish to take it as an enhancement to aid concentration.\textsuperscript{556}

The psychological nature of the disorders which moral enhancement interventions would most likely treat means that questions regarding consent could be raised in considering moral enhancement interventions as therapeutic, as mental health treatment is, of course, the only context within which otherwise competent adults can be treated without their consent under certain circumstances.\textsuperscript{557}

And finally, as noted above, there will of course be the need to raise questions with regards to when it is appropriate to intervene with moral therapy: during childhood, when questions regarding development and informed consent come to the fore, or perhaps for adults with low empathy? Or is intervention more appropriate in the case of offenders? But here as well there are problems regarding free consent and indeed the fact that people may simply be uninterested in undergoing moral enhancement techniques, even if, in their case, they would be therapeutic.

\textbf{6.2.9 Conclusion}

I have explored how a lack of empathy could be considered pathological and so something that would treat this deficiency – in this case, moral enhancement


\textsuperscript{556}This issue was explored in a report by BBC News in 2008 (see Koole, D (2008) ‘The Ritalin express’ in BBC News. Internet WWW page at URL: http://news.bbc.co.uk/1/hi/7684963.stm (accessed 08/08/2015).

\textsuperscript{557}Mental Health Act 1983, s 63
techniques — could indeed be considered medically indicated, and so a treatment. This assertion, however, raises a number of ethical concerns — as we have seen. Questions regarding the medicalisation of morality (by way of medical social control) come to the fore, as do other concerns regarding regulation and consent among others.

Considering moral enhancement interventions as medically indicated (and therefore therapeutic) in some instances therefore opens up the field to many other questions and areas of debate. It was not my intention to consider these questions and issues in this paper, but given that I have shown that moral enhancement interventions could be medically indicated,⁵⁵⁸ there is now space in the literature for these areas to be explored in this new context.

⁵⁵⁸ As was my intention in this paper.
Chapter Seven

The Regulatory Implications of Medically-Indicated Moral Bioenhancement

7.1 Introduction

In the previous chapter, I demonstrated that moral bioenhancement interventions could be considered medically indicated (and so a treatment) under certain circumstances. In this chapter, I will consider some of the regulatory challenges that will arise from this conclusion, including those that may affect prescribing doctors. 559

This chapter will be divided into two sections: regulatory challenges and challenges for prescribing doctors. In the first section, I will first briefly note the routes to classifying a pharmaceutical product as a medicine, making the case that moral bioenhancement interventions would be considered to be a medicine under such a system. Following this, I will consider the categorisations of medicine, arguing that moral bioenhancement interventions would fall into the category known as P, meaning that they would be available without prescription from a pharmacist. I will then briefly note the process by which funding decisions are made regarding available treatments on the NHS, before exploring how this may affect the availability of the intervention in question. In the second section, I will explore the

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559 As noted in Chapter One of this thesis, I am approaching these discussions from a hypothetical point of departure wherein I assume that the interventions in question have already been perfected ready for public consumption. See footnote 19 in Chapter One (section 1.1); I also expand on this further below.
challenges faced by doctors prescribing these hypothetical interventions, in particular
the use of off-label prescribing and its legal implications. Although (as I have already noted) I will argue that moral bioenhancement interventions would fall into category P, it is still important to discuss the prescription of the intervention by doctors as many medicines available without prescription are often prescribed by doctors, even in the case of medicines available in general retail outlets, such as Paracetamol.560

7.2 Regulatory Challenges

7.2.1 Classifying Medicines

The question as to whether pharmaceutical moral bioenhancement interventions could be considered to fall under the classification of medicine is one that can be quite simply answered. To do so, we must first consider the legal definition of medicine; Jackson explains:

‘Medicinal products’ are defined in the Codified Pharmaceutical Directive, as amended, as follows:

(a) Any substance or combination of substances presented as having properties for treating or preventing disease in human beings; or

(b) Any substance or combination of substances which may be used in or administered to human beings either with a view to restoring,

correcting or modifying physiological functions by exerting a pharmacological, immunological or metabolic action, or to making a medical diagnosis.\textsuperscript{561}

Jackson notes that this definition provides us with two routes for classifying something as a medicine: presentation and function. Therefore, if “a product is marketed for the prevention of a disease, or if it is used for diagnostic purposes, or to alter physiological function, it is a medicinal product”,\textsuperscript{562} regardless of its actual efficacy. This measure is put in place to protect consumers from useless, as well as dangerous, products. As a result moral bioenhancement interventions would be considered to be a medicinal product, solely on the claims made in its marketing, regardless of whether or not those claims are substantiated.

Further, Jackson notes that the “second route to classification as a medicine refers to the action of the product. Here it is enough that the product contains active ingredients which are known to have physiological effect.”\textsuperscript{563} As a result, even if moral bioenhancement interventions were not marketed as having any active effects on the person taking them, they would still be considered a medicine on the grounds of their contents, were those contents to contain active ingredients. Therefore, moral bioenhancement interventions would be considered to be a medicine, even if no claims are made about the benefits, power, and effects of the intervention, because they would contain active ingredients (in order to cause the intervention to result in higher levels of empathy).

\textsuperscript{562} Ibid.
\textsuperscript{563} P.7 ibid.
7.2.2 Categorisation of Medicines

In order to obtain the approval of a licensing authority for a marketing authorisation, any proposed moral bioenhancement intervention will go through clinical trials in order to demonstrate its efficacy, to demonstrate that it is safe for consumption, and finally that it is, put simply, of a good quality. Once the intervention has received its marketing authorisation, it will receive a classification, placing it into one of the following categories: POM (prescription-only medicine), P (medicines which can be bought without prescription but only from a pharmacist), and finally GSL (‘general sale list’: medicines which can be sold by ordinary retailers – e.g. Paracetamol).\(^{564}\)

In order to determine which category moral bioenhancement interventions would fall into, it would be prudent to consider the factors that are taken into account in classifying a product as a prescription-only medicine. Jackson identifies these factors:

The factors which should be taken into account when deciding whether a medicine should be prescription-only are whether the medicine:

- is likely to present a direct or indirect danger to human health, even when used correctly, if used without the supervision of a doctor or dentist; or
- is frequently and to a very wide extent used incorrectly, and as a result is likely to present a direct or indirect danger to human health; or
- contains substances or preparations of substances of which the activity requires, or the side effects require, further investigation;

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\(^{564}\) P.92 ibid.
• is normally prescribed by a doctor or dentist for parenteral administration
  [that is, intravenously or by injection];

• is likely, if incorrectly used, to present a substantial risk of medicinal
  abuse, lead to addiction or be used for illegal purposes.\footnote{565}

Given the speculative nature of discussions regarding moral bioenhancement
interventions, it would be impossible to know (with any certainty) which of these
classifications the intervention would fall under. As I noted in the introduction,\footnote{566}
this thesis involves engagement in a thought experiment whereby it is assumed that
moral bioenhancement interventions would have no medical side effects, and that
they will have been tested thoroughly at this juncture.\footnote{567} This assertion could then
lead to the assumption that the first three factors listed would not be grounds for
concern in considering whether moral bioenhancement interventions should be
considered as prescription-only, rather than something which could be purchased
from a pharmacist. However, this might not be so clear-cut, especially with regards
to the first two factors (regarding risk to human health); I will return to this in a
moment. With regards to the fourth factor regarding the method of administration, it
is of course unclear how the intervention would be administered however for the
sake of simplicity, let us assume that it would not have to be taken parenterally.

Returning to my earlier remark, the assumption that the intervention would have no
side effects may seem to suggest that the first two factors (noted above) in deciding
the classification of the medicine – that it would present a direct or indirect danger to
human health – will have been satisfied. However, this is not necessarily the case,

\footnote{565}{P.92 ibid.}
\footnote{566}{See footnote 19 in Chapter One (section 1.1).}
\footnote{567}{Including, for the sake of argument, the component parts of the intervention product.}
for even if the intervention were assumed to be free of side effects in terms of its
effects on the body and/or interactions with other medicines, the intended effect of
the endeavour (to increase levels of empathy within the agent taking it) could itself
have undesirable consequences. These consequences could cause concern relating to
the first two factors listed above, which one might argue could then open up the
possibility that the intervention could be considered for a prescription-only
classification.

These factors of course state that should an intervention pose “a direct or indirect
danger to human health, even when used correctly, if used without the supervision of
a doctor or dentist” or should it be “frequently and to a very wide extent used
incorrectly, and as a result is likely to present a direct or indirect danger to human
health”, then that intervention should be considered for a prescription-only
classification. So could an increase of empathy present a direct or indirect danger to
human health? The idea may at first glance appear peculiar, however a phenomenon
known as ‘empathy burnout’ has been increasingly documented since the
1990s. As Young notes: “Symptoms include lowered ability to feel empathy and
sympathy, increased anger and anxiety, and more absenteeism (...). Various studies
link these symptoms with an indifferent attitude to patients, depersonalisation and
poorer care.”

569 Which is discussed as well in Chapter Four (section 4.3.1).
570 As noted in Young, E (2016) ‘How sharing other people’s feelings can make you sick’ in New
Scientist. Internet WWW page at URL: https://www.newscientist.com/article/mg23030732-900-how-
sharing-other-peoples-feelings-can-make-you-sick/ (accessed 07/06/2016).
571 Ibid.
Discussion of empathy burnout is most commonly found within the context of caregiving careers, for example in nursing\textsuperscript{572} and hospice work\textsuperscript{573} however all persons are susceptible to this phenomenon. This is evidenced by research by Singer and colleagues who found that observation of a loved one in pain led to a specific neural reaction.\textsuperscript{574} As Young describes:

> When they gave the volunteers a painful electrical shock, this elicited activity in brain regions known to respond to physical pain and also in regions tuned to emotional pain. But when volunteers saw their loved one get a shock, no activity registered in their physical pain centres – while the emotion regions lit up like fireworks. Notable among these was the anterior insula, where a lot of the coordination between brain and body takes place.\textsuperscript{575}

Further, this reaction is not restricted to reacting to the suffering of loved ones. This assertion is of course backed up by the more obvious examples of cases of empathy burnout in those in caring professions, however evidence suggests that this can also be experienced by lay persons outside of such professions as well.\textsuperscript{576}

So while there is evidence that empathy burnout exists both in those who are in caring professions and in those who are not, would this then constitute a risk of harm to the sufferer of this state in particular? Clearly there could be a case made for


psychological distress in these instances, but there could also be a case made for physical manifestations of empathy burnout as a cause for concern. As Babbel notes:

The helpers' symptoms, frequently unnoticed, may range from psychological issues such as dissociation, anger, anxiety, sleep disturbances, nightmares, to feeling powerless. However, professionals may also experience physical symptoms such as nausea, headaches, general constriction, bodily temperature changes, dizziness, fainting spells, and impaired hearing. All are important warning signals for the caregiver that need to be addressed or otherwise might lead to health issues or burnout.577

It seems then that an increase in empathy could indeed pose an indirect risk to human health if that increase in turn leads to a heightened risk of experiencing empathy burnout. However, this leads us then to consider the following questions: first, what is the likelihood that people taking moral bioenhancement interventions will experience such side effects to the extent that their mental or physical health is put at risk? And second, is this possible side effect serious enough to constitute grounds to classify the intervention as a prescription-only medicine?

The first is a difficult question to answer as it could be argued that most people would be unlikely to find themselves in positions where they would experience empathy with such intensity (or for such an extended duration) that they suffer from burnout as a result. A given person’s risk of such an experience will depend on his or her personal circumstances: for example, whether they work in a caring profession or in another field which involves prolonged exposure to emotive stimuli, or whether

they typically experience such stimuli in their day-to-day lives outside of work (for instance, if they are a carer for an ill family member, or if they volunteer with vulnerable individuals). It could be argued that not all individuals have such experience (or at least not with any regularity), which could then suggest that the risk of empathy burnout (as a result of the increased levels of empathy brought about by the intervention) would not be an issue for a large number of users.

That the possible side effect of ‘empathy burnout’ might be relatively uncommon is not on its own sufficient grounds to allow us to claim that it is not a serious enough side effect to classify the intervention as prescription-only, rather we must consider its seriousness independently of how many people it might affect. That being said, even taken on its own, empathy burnout does not appear to be a serious enough side effect to warrant classifying moral bioenhancement interventions as prescription-only. It would be an unfortunate consequence for anyone who finds themselves to suffer from it, and indeed some of the consequences of the burnout can prove counter-intuitive to the aims of the intervention in the first place, as Young noted above, but this alone would not necessarily prove to be enough to warrant such a strong classification for the medicine, especially given the that the nature of the side effect is one that is very context-dependent. It could be argued further that empathy burnout would not in fact affect those persons in whom the use of moral bioenhancement interventions would be medically indicated, as the purpose of the intervention in their case is to bring their levels of empathy to a baseline amount. As such, it is possible that their empathy would not be heightened to such a degree that

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578 Specifically that empathy burnout can lead to increased anger (possibly including related behaviour) and even to a decrease in empathy and sympathy – see Young, E (2016) ‘How sharing other people’s feelings can make you sick’ in New Scientist. Internet WWW page at URL: https://www.newscientist.com/article/mg23030732-900-how-sharing-other-peoples-feelings-can-make-you-sick/ (accessed 07/06/2016).
it would increase the risk of suffering empathy burnout; rather this risk would be one more associated with the use of the intervention as an enhancement. However, as I note below, the use of moral bioenhancement interventions as enhancements-proper would most probably be considered to be off-label. The off-label use of any product is typically untested and carries the risk of side effects, but these do not affect the licensing or categorising of the product in question (as by its very nature, off-label use is separate to what the drug in question is to be used for). ⁵⁷⁹ In sum, it would be difficult to say with great accuracy whether or not empathy burnout would constitute a serious enough side effect for the purposes of classification, however for the reasons noted here I am inclined to argue that it would not, especially in the case of those for whom the intervention would be medically indicated.

Finally, we come to final factor listed: the question as to whether there could be a risk of medicinal abuse, addiction, or that the product could be “used for illegal purposes”. ⁵⁸⁰ As we are of course speculating about a hypothetical drug, there is no way to know if the intervention in question would be addictive or open to abuse. Even if we were to assume that it posed no such risk, we are still left with the question as to whether it could be used for illegal purposes. Of course this first raises the question as to what this would involve in any instance, and certainly what it could involve in the case of the moral bioenhancement intervention in particular. One example that comes to mind of illegal use of medicines in general terms is the use of cough medicine in the United States in the production of methamphetamines. In the case of the moral bioenhancement intervention, without knowing what


substances the drug would contain, it would be impossible to know if it could be repurposed for such a use. If we put this to one side for now, another illegal purpose for which the intervention could be used might in fact relate to the use of the intervention as an enhancement-proper (as opposed to a treatment). For example, in 2016, tennis star Maria Sharapova received a two-year ban from the sport after testing positive for meldonium – which she claimed to take for a medical condition – as the substance is now classed as a banned substance (and so its use is considered to be an instance of doping). Further, medical records released by hackers following the 2016 Olympics revealed that the gold medal-winning gymnast Simone Biles is permitted to take methylphenidate (Ritalin) as a treatment for ADHD (from which she suffers). Methylphenidate is a banned substance, listed under the World Anti-Doping Association (WADA) Prohibited Drug List, however Biles was approved for a Therapeutic Use Exemption (TUE), which permits the use of banned substances on medical grounds. In a statement released on social media website Twitter, USA Gymnastics clarified:

In keeping with official protocols of the U.S. Anti-Doping Association and WADA, Biles submitted and was approved for a therapeutic-use exemption (TUE), the proper paperwork for any medications that an athlete takes for an illness or condition that requires the use of a medication included on the WADA Prohibited Drug List, for prescribed medication(s) she takes. By

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virtue of the TUE, Biles has not broken any drug-testing regulations, including at the Olympic Games in Rio.\textsuperscript{585}

In these examples, the use of the drugs in question is illegal because they are used by some athletes to gain a competitive edge – as a result, their use is seen as cheating, as giving the competitor in question an unearned advantage. Would this hold true for moral bioenhancement interventions? Perhaps not, for unless the intervention would give additional benefits unrelated to its impact on empathy (for instance enhancement of traits that would prove useful in competitive areas such as sports or even education\textsuperscript{586}), it seems unlikely that use of the intervention could be seen as providing an unearned advantage (and in doing so, being “used for illegal purposes”). However, it could be that this dismissal is short-sighted. Just as steroids and the like could be used to gain an edge in sporting competitions, could a moral bioenhancement intervention (when used as an enhancement) give a similar edge to people hoping to gain awards and recognition for charitable acts, such as the Nobel Peace Prize? This is a difficult question to answer, but perhaps would prove to be an interesting one. It is beyond the scope of this chapter to explore this particular thought in much detail, but even if the intervention could indeed be used in pursuit of such ends, this need not necessarily prove a serious enough instance of use “for illegal purposes” to warrant classification of moral bioenhancement interventions as prescription-only (or POM).

Given the hypothetical standpoint that this thesis holds, that the moral bioenhancement intervention would be without medical side effects (and the


assumption that it would not contain component parts that could be used in the manufacture of illegal substances), it seems that the intervention would receive the classification P (that it can be obtained through a pharmacist without prescription) rather than POM (prescription-only medicine). I acknowledged that there could be grounds for concern: most notably the risk of empathy burnout and also the possibility that the intervention could be used to gain an unearned advantage (albeit in an extremely specific area); however these do not seem to be sufficiently serious concerns to warrant classification of the endeavour as POM rather than P.

7.2.3 Funding of Medicines on the NHS

Decision-making as regards to which treatments and interventions will be funded by the NHS is partially devolved in the UK. The principal body for this purpose in England and Wales is The National Institute for Health and Care Excellence (NICE), which licences treatments for use within the NHS. Wales retains a very similar body (The All Wales Medicines Strategy Group (AWMSG)); however it is closely linked to NICE and defers to its decisions.587 Meanwhile Scotland and Northern Ireland have separate processes and bodies, such as Healthcare Improvement Scotland (HIS, which incorporates other bodies such as the Scottish Medicines Consortium (SMC)) and the Department of Health, Social Services and Public Safety (HPSS) in Northern Ireland (which is linked to NICE but not bound by it).588 As noted in Chapter


This thesis will focus on English law and processes, and so this section will focus on the role of NICE (as opposed to these related devolved systems) in NHS funding decisions.

NICE performs technology appraisals, which Brazier and Cave describe as “assessments of the effectiveness of (mainly) new technologies, such as medicines, procedures and diagnostics. These assessments oblige the NHS to fund the recommended treatments and medicines.” These appraisals are currently made with reference to a measure known as ‘quality-adjusted life year’ (QALY), and in particular with regards to the cost per QALY. A year of optimal health is worth one QALY, a year of less-than-perfect health is worth less than one (e.g. 0.7), while death is worth 0 QALYs. Brazier and Cave note that “A calculation is made based on the estimated QALYs a person will have following a particular procedure or treatment and the likely cost per QALY. QALYs have equal value, regardless of the nature of the problem they are designed to treat.”

However, the use of QALYs is not without its critics, and the use of the measure within the context of mental health is noted to be particularly problematic. As Chisholm and colleagues note: “Whilst the rationale and underlying principles of the utility measurement approach are sound, the generic QALY as it is currently

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589 Section 2.3.  
591 There are also health states that have negative scores as they are considered worse than death; see Phillips, C (2009) ‘What is a QALY?’ in What Is...? Series. Retrieved from: http://www.vhpharmsci.com/decisionmaking/Therapeutic_Decision_Making/Advanced_files/What%20is%20a%20QALY.pdf (accessed 26/01/2016).  
constructed represents an insensitive measure of the outcomes of mental health care.” This of course has implications therefore for moral bioenhancement interventions in the context of medical treatment, because (as noted in the previous chapter) they would be used to treat a mental disorder (or indeed a series of mental disorders) such as Moral Deficiency Disorder (MDD), and so would fall under the remit of mental health care.

In this context in particular, it occurs to me that QALYs pose an interesting concern: namely, if a person with a particular mental disorder (such as MDD or psychopathy) does not consider himself to be harmed by having that condition, then could QALYs actually provide any information on the value of a treatment for that disorder? For it could be argued that the patient will not experience any reduction in suffering if he was not suffering to begin with. This concern of course could be linked to neurodiversity movements, which argue that: “neurological differences like autism and ADHD are the result of normal, natural variation in the human genome”, and further that rather than trying to treat people with these atypical (as opposed to abnormal) traits, society should instead aim to accommodate them. It is beyond the scope of this chapter to explore this idea in the detail that it deserves, however it is an interesting thought to note.

Regardless of its issues, QALY is nonetheless the principle measure used by NICE to explore cost-effectiveness of emerging technologies, and so will be factored quite

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598 Further, I was unable to locate any academic writing echoing this concern. I return to this issue briefly in Chapter Nine (section 9.2.2 – although in that chapter I do not make specific reference to QALYs).
strongly into any decision made by the body into what treatments to recommend for funding on the NHS. Given this, moral bioenhancement interventions would have to demonstrate cost-effectiveness in order to be approved and recommended for funding. If we were to assume that the intervention would be cheap to produce and distribute, then it could indeed be considered to be a cost-effective course of treatment for those patients with MDD – especially if no alternative treatment is available. As a result, the intervention could be made available on the NHS via prescription if required to treat a patient with MDD, despite its availability in pharmacies. 599

In Chapter Six, I noted the issues with the use of moral bioenhancement interventions in treating offenders with MDD, and also in treating (and indeed diagnosing) children with the disorder as well. Would the availability of the intervention on the NHS have an impact on provision of treatment in these groups?

Offenders

In the Legal Context section of Chapter Two, 600 I noted the various ways in which moral bioenhancement interventions, when considered as a treatment, could come into criminal law, in particular: hospital orders, treatment requirements, and hybrid orders. Therefore, the availability of certain medicines on the NHS can interact with criminal law; however the compelling nature of the first and third of the orders listed rely on the powers of the Mental Health Act – and, as noted in the Legal Context section, it is unclear whether MDD would be considered to be a serious enough

599 To reiterate, many medicines that are available without prescriptions (both from pharmacies and even from general sale stores) are offered on the NHS as doctors can give prescriptions for items such as Paracetamol, even though the medicine is readily available in supermarkets.
600 Section 2.3.
mental disorder to warrant compulsory treatment under the Act, even following
criminal action by the patient. Rather, it could be the case that, once diagnosed, the
offending patient is prescribed the intervention as a treatment, but in this case it
would still be conditional on the consent of the patient as to whether or not the
medicine was taken. Even then (as noted previously), there could be concerns raised
about the ability of the patient to properly consent to such treatment while
incarcerated. 601

Children

In the case of children, the largest point of concern is (as I have explained
previously) the difficulty in accurately diagnosing mental disorders in childhood due
both the nature of child development in general, and of childhood empathy in
particular. 602 This of course then feeds into concerns regarding informed consent
(due to the difficulty in providing an accurate diagnosis at a young age) as well as
more typical questions surrounding issues with minors consenting to medical
treatment generally. Further, concerns could be raised that diagnosis of a mental
disorder, especially where diagnosis involves identifying low levels of empathy,
could have a stigmatising effect and so diagnosis in childhood could result in the
child in question receiving a stigmatising label at a young age. 603

Journal of Medical Ethics; Vol. 40(9); pp.583-590.

602 As I noted in Chapter Six (section 6.2.6); see also Seifert, K (2012) ‘Can a child be a
psychopath? in Psychology Today. Internet WWW page at URL:
https://www.psychologytoday.com/blog/stop-the-cycle/201206/can-child-be-psychopath (accessed
15/05/2015).

603 I note this in Chapter Six (section 6.2.6); see also Walker, JS, Coleman, D, Lee, J, Squire, PN,
and Friesen, BJ (2008) ‘Children's stigmatization of childhood depression and ADHD: magnitude and
demographic variation in a national sample’, Journal of the American Academy of Child and
Adolescent Psychiatry; Vol. 47(8); pp.912-920.
Would the availability of moral bioenhancement interventions on the NHS (as a treatment for MDD) impact on its provision in children? Again, it is difficult to say, and the issues noted above would of course remain. However, one might raise the perhaps cynical concern that the decision to fund the treatment on the NHS might legitimise diagnosis of MDD in general,\(^{604}\) which might in turn have a trickle-down effect to diagnosis in children, especially given concerns that issues in childhood behaviour can lead to more serious issues in adult behaviour,\(^{605}\) or simply given the desire to protect the education of the child by preventing poor (or indeed violent) behaviour which could result in expulsion.\(^{606}\) This concern becomes particularly important when it is noted that doctors are often more likely to offer medication for some mental disorders than other forms of therapy, as the drugs are typically cheaper and easier to administer.\(^{607}\) And so a diagnosis of MDD in a child with behaviour indicative of the disorder would allow a doctor to prescribe the moral bioenhancement intervention to the child as a treatment, providing an easier means of dealing with the behaviour in question – meanwhile the availability of that treatment on the NHS would give the disorder (and certainly its treatment) more legitimacy. On the face of it, this might sound fairly innocuous, however I have already mentioned the concern that the diagnosis of MDD at a young age might prove to be erroneous and so this could therefore lead to possible psychological impacts on the child in question (due to the stigma that could be attached to the


MDD diagnosis),\textsuperscript{608} as well as financial impacts on the NHS budget.\textsuperscript{609} Of course, the alternative possibility is that the availability of the intervention on the NHS might have no discernible impact on diagnoses of MDD – in general or in the case of children. However, it would still be important to note that this could be a consequence of NHS provision due in no small part to the perceived legitimacy given to the intervention by the decision to fund it, coupled with the desire to save money (and so defer to the cheaper and easier option of medication), in addition to the general lay desire to nip troublesome behaviour in the bud.

### 7.3 Challenges for Prescribing Doctors

The classification of moral bioenhancement interventions as part of category P rather than POM\textsuperscript{610} may protect doctors in some way from the legal issues surrounding off-label use of the intervention, especially when we consider that use of the intervention as an enhancement rather than a treatment would most likely be considered to be ‘off-label’, as it involves use of the intervention outside of the purpose for which it was registered (that is, as a treatment).

That the use of the intervention as an enhancement would be considered ‘off-label’ holds true regardless of the categorisation of the product, however it could be said to


\textsuperscript{609} For instance, it is estimated that up to $500 is spent annually in the US on medication to treat ADHD in people who have in fact been wrongly-diagnosed with the disorder. See Thomas, R, Mitchell, GK, Batsra, L (2013) ‘Attention-deficit/hyperactivity disorder: are we helping or harming?’, British Medical Journal; doi: 10.1136/bmj.f6172.

\textsuperscript{610} Assuming that it is safe to do so.
be particularly legally problematic for prescribing doctors if the product is
categorised as POM. This is because knowingly prescribing a prescription-only
medicine to someone that the doctor knows to have no medical need (at least in
terms of the drugs intended purpose) is a legally risky area. As Jackson notes
“doctors should only issue off-label prescriptions if they have reasonable grounds for
believing that the medicine is an appropriate response to the patient’s condition.” 611
Jackson notes as well that simply acceding to patient demand would be unlikely to
qualify as a legitimate reason to prescribe the medicine off-label. Further, the
decision to prescribe a medicinal product for off-label use can have serious legal
consequences for the doctor in question if the patient suffers harm as a result:

If a patient is injured as a result of an off-label prescription, it would be
possible for her to bring an action in negligence against her doctor. Hence the
question for the court would be: would a reasonable doctor have prescribed
this medicine to this patient? 612

In addition to the legal concerns that could be raised by off-label prescribing, there
could be said to be safety concerns as well, as clinical trials for a certain medicine
would be unlikely to have taken into account safety and efficacy within the context
of off-label use. Jackson notes that one could argue that if the pharmaceutical
company was aware that a certain intervention could be widely used off-label, it
should then be duty-bound to “carry out clinical trials in order to publish proof of
efficacy for the off-label use, rather than profiting from prescriptions which are
grounded only in anecdotal evidence.” 613 However the rise of online pharmacies
means that proper regulation off-label use is impossible in any case and, also, “it is

612 Ibid.
613 P.259 Ibid.
difficult to see how a medicine’s enhancement potential could be relevant to a decision to license it as a treatment for an established condition.” Further, in the case of moral bioenhancement interventions in particular, one could imagine that off-label use of the intervention as an enhancement would not be hugely common for reasons given throughout this thesis. Therefore, pharmaceutical companies might not consider research into off-label use of moral bioenhancement interventions to be an effective use of time and funds that could be spent researching further into the effects of the intervention when used as intended (as a treatment).

While these legal implications are clear in the case of a product categorised as POM, that is not to say that other interventions listed as P or GSL are without such legal consequence, rather their availability elsewhere provides doctors with more options than to offer their patient a prescription for the intervention for off-label purposes, perhaps reducing their own risk of legal repercussions. However, if a doctor does still decide to offer a patient a prescription for an intervention categorised as P or GSL for off-label use, then they would still risk legal or professional consequences. Further, pharmacists prescribing medicines for off-label use are also subject to “the professional codes and ethics of their statutory bodies; and the prescribing policies of their employers”, and so could perhaps find themselves at risk of disciplinary procedures (for instance), if not legal repercussions.

7.4 Conclusion

614 Ibid.
615 See Chapter One (section 1.1) and Chapter Five (particularly section 5.2.3).
In this chapter, I have considered some of the regulatory challenges that might be faced by moral bioenhancement interventions when considered as a treatment, having demonstrated that they can be considered to be medically indicated (in certain circumstances) in the previous chapter. I noted that, given claims made regarding the intervention and the fact that it would almost certainly contain active ingredients, the intervention would therefore be considered to be a medicine. Further, I explored the factors taken into account in categorising a given medicine as prescription-only and noted that, despite possible concerns regarding the risk of empathy burnout and a (perhaps rather small) possibility that the product could be used to gain an unearned advantage in certain (quite specific) areas, the likelihood was that moral bioenhancement interventions would be categorised as P: available from pharmacies without a prescription.  

I then explained that, given the lack of alternative methods of treating MDD, it is likely that moral bioenhancement interventions would be made available on the NHS (especially if they were also proved to be relatively cheap to provide). I noted that while this perhaps would not impact on the provision of the medicine to adult offenders with MDD, there could be concerns raised that the legitimising effect of its provision could lead to an increase in diagnoses, including in children (however, this is by no means a certainty).

Finally, I then noted that the classification of the intervention as P rather than prescription-only (POM) would by and large protect doctors from the legal risks involved in off-label prescribing as the individual who intends to take the intervention in this manner can acquire it elsewhere without a prescription. However,

617 Although admittedly, this conclusion was reached due to the fact that this thesis operates from a hypothetical point of departure wherein moral bioenhancement interventions have no medical side effects and are already thoroughly tested and ready for consumption (see footnote 19 of this thesis).
although doctors would be significantly less likely to face legal issues in this instance due to the classification of the intervention, any decision to prescribe the intervention regardless would still put doctors at risk of legal repercussions. Further, more general concerns regarding off-label use (such as safety, efficacy, and regulation) still remain, regardless of the legal risks.
8.1 Abstract:

It seems, at first glance, that a Kantian ethics approach to moral enhancement would tend towards the position that there could be no place for emotional modulation in any understanding of the endeavour, owing to the typically understood view that Kantian ethics does not allow any role for emotion in morality as a whole. It seems then that any account of moral bioenhancement which places emotion at its centre would therefore be rejected.

However, this paper argues that this assumption is in fact incorrect: That given later writings by Kant on the role of sympathy, and also taking into account other concerns in Kantian ethics (such as bodily integrity), it may in fact be the case that Kantian ethics would allow for an account of moral bioenhancement through emotional modulation, and that in some (rare) cases such an intervention might even be considered to be a duty.
8.2 A Kantian Ethics Approach to Moral Bioenhancement

8.2.1 Introduction

While moral bioenhancement is a contemporary field, Kantian ethics has a contribution to make to this emerging debate because of the Kantian duty to strive for moral perfection. A more in-depth explanation of the term can be found below but, in short, moral perfection\(^{619}\) involves not only the ability to avoid being steered mindlessly by emotions and inclinations, but also cultivating those inclinations that aid us in behaving morally. The second part of this definition can certainly been seen as having particular relevance for moral bioenhancement, especially when discussing the emotion-centred approach to the endeavour, as not only does it seem to acknowledge a role for emotions in Kantian morality,\(^{620}\) it also presents a duty that moral bioenhancement could help agents to fulfil. For this reason I argue that Kantian ethics can enrich the debate about moral bioenhancement and in this article, I will explore and develop this idea.

There has been a long-standing debate between cognitivists and non-cognitivists as to whether morality is, at its core, a cognitive or emotional enterprise. One instance where this conflict is clearly represented is in the works of Kant (1724–1804) and Hume (1711–1776). Hume of course wrote that “reason alone can never produce any action, or give rise to volition”,\(^{621}\) and that it is emotion, not reason, which moves us

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\(^{620}\) A topic which is explored in more depth in this paper.

to action. Meanwhile Kant, however, disagreed and instead spoke of the importance of rationality in morality: of its role both in evaluation of actions and duties and even in terms of motivation. As Denis and Wilson note: “Regarding moral motivation: It is a central feature of Kant’s ethics that pure reason can be practical—that reason can “of itself, independently of anything empirical, determine the will” (CPrR 5: 42).”

This debate continues to this day, and its discussion seems to have been further-fuelled by the debate on moral bioenhancement as writers such as Douglas and Persson and Savulescu argue in favour of emotional modulation as a method of enhancing a person’s morality (the former arguing in favour of attenuating ‘non-moral emotions’ and the latter arguing in favour of amplifying emotions such as empathy), whilst John Harris argues that the rational nature of morality means that to consider such a method to be moral enhancement would be nonsensical and so it would make more sense to speak of cognitive enhancement as moral enhancement.

Given the above, it might, at first glance, seem that a Kantian approach to moral enhancement would tend towards the position offered by Harris: that there could be no place for emotional modulation in any understanding of moral enhancement, as there could be no role for emotion in morality. However, I will argue that this assumption is in fact incorrect: that given later writings by Kant on the role of sympathy, and also taking into account other concerns in Kantian ethics (such as bodily integrity), it may in fact be the case that Kantian ethics could allow for an

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623 I will use the terms ‘enhancement’ and ‘bioenhancement’ as interchangeable unless otherwise stated.
626 Harris, J (2012) ‘Ethics is for Bad Guys!’ Putting the ‘Moral’ into Moral Enhancement’, Bioethics; Vol. 27(3); pp.169-173.
account of moral bioenhancement through emotional modulation, and that in some cases it might even be considered to be a duty.

In order to assert this position, I will explore various important Kantian concepts and arguments. As noted above, Kantian ethics is famously very focused on the rational basis of morality, and Kant is generally regarded as having taken the view that the emotions can be a hindrance to morality, rather than something to be encouraged or enhanced. In short, it might be thought that he believed emotions to have no role in morality. However, I will note that Kant’s views on the role of emotions in morality shifted in later works, allowing a place in ethics for sympathy in particular; I will then consider this new possible role for emotion in morality within the context of moral bioenhancement. This being said, the use of biomedical interventions towards this end could be considered to be morally distinct from the more traditional methods of amplifying moral emotions that were proposed by Kant (namely exposing oneself to emotive stimuli), and so, taking into account Kant’s assertion that we are necessarily embodied persons, at this juncture I will take some time to consider concerns that could be raised here regarding the possible impact of moral bioenhancement on the body, the mind, and even on identity, I will consider as well the Kantian argument of self-preservation in the context of moral bioenhancement. Finally, I will then come to consider whether there could be said to be a duty to undergo moral bioenhancement, a question which will be explored with regards to the Kantian duty to strive for moral perfection. A more detailed explanation is found later in this paper, but in brief, moral perfection for Kant involves cultivation of

627 It is this emotion-centred account of moral bioenhancement that will be the focal point of this paper, in particular the account offered by Persson and Savulescu (that moral bioenhancement would involve amplification of empathy). As such, any mention of moral bioenhancement from this point onwards, unless otherwise stated, will be in reference to this account.

628 Which, as I will note, may in fact be a reference to what we today call empathy.

629 At least in certain circumstances.
those inclinations that aid us in behaving morally, but further requires that we also avoid being steered mindlessly by emotions and inclinations.\textsuperscript{630} Kant regarded the duty to strive for moral perfection as imperfect in nature,\textsuperscript{631} this means that while the ends of the duty are set, its means are not and so we as agents are given free rein in how we act to accomplish those ends. This is in contrast to perfect duties where both the ends and the means of a duty are set and so agents are instructed in how to fulfil the duty in question.\textsuperscript{632}

\textbf{8.2.2 The Role of Emotions}

It is typically considered that a Kantian account of ethics would not allow for any moral emotion – enhanced or otherwise.\textsuperscript{633} However, as I have mentioned,\textsuperscript{634} the views of Kant himself on this matter shifted in later works, allowing a place for sympathy in his moral theory and leaving us open to question whether there could be room for moral bioenhancement in Kantian ethics.

It would be prudent to clarify that, while Kant speaks of sympathy in his writing, this is not to say that this would not also constitute a reference to empathy as well. Much of this is due to the era in which Kant lived, for the term ‘empathy’ only came into being at the start of the twentieth century, having been used as a translation for the German psychological concept of \textit{Einfühlung} (or “feeling-in”, which itself came into

\textsuperscript{631} P.200 Moran, KA (2012) \textit{Community and Progress in Kant’s Moral Philosophy}; Catholic University of America Press: USA.
\textsuperscript{632} Again, a more detailed explanation of this distinction is found later in this paper.
\textsuperscript{633} As noted below. See also Baron, MW (1995) \textit{Kantian Ethics Almost Without Apology}; Cornell University Press: New York.
\textsuperscript{634} And as I explain in greater detail below.
usage in the late nineteenth-century). In addition to the matter of timing, it is important to note that definitions of empathy (while they can be rather varied) can often overlap with our modern understanding of sympathy, as Wispé notes: “To complicate matters, however, a number of other terms – sympathy, role taking, perspective taking, and so on – may or may not, refer to similar, or identical, psychological processes [as empathy].” Further, some writers suggest that empathy could even encapsulate sympathy as part of its own definition. It is beyond the scope of this paper to delve too deeply into the relationship between empathy and sympathy, but it is important to note that while much of the language around moral bioenhancement (by emotional modulation) speaks of empathy, this is not at all at odds with the sympathy of which Kant speaks – indeed they may very well, both in principle and practice, be one and the same.

Returning to the matter at hand, perhaps the best known reading of Kant’s views of emotions in morality is that which he espouses in his early writings; in *Groundwork on the Metaphysics of Morals* Kant seems to make his opinion of the worth of inclinations quite plain:

Inclinations themselves, as sources of needs, are so far from having an absolute value to make them desirable for their own sake that it must rather

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be the universal wish of every rational being to be wholly free from them. (G 428)\footnote{639}

Reading this, it seems that any question regarding the view that Kant might have taken of moral bioenhancement would be very quickly and easily answered. Moral enhancement by way of augmentation of those qualities on which Kant placed no value, and indeed spoke of all rational beings having a “wish… to be wholly free from them”, seems to be something with which Kant would take great issue.

But this is not necessarily the case, for, as De Lourdes Borges notes: “in the \textit{Doctrine of Virtue}, Kant explicitly states that we should use sympathy as an incentive to benevolent actions when the sole respect for moral law is not sufficient.”\footnote{640} And due to its new-found usefulness, Kant even goes so far as to say that we should cultivate sympathetic tendencies. As Baron notes:

\begin{quote}
In a passage from the \textit{Doctrine of Virtue}…, Kant says that we are to cultivate our sympathetic feelings, and he suggests that we can do so by, for example, seeking out “places where the poor who lack the most basic necessities are to be found” (\textit{MM} 457).\footnote{641}
\end{quote}

The purpose of such an exercise would be to expose ourselves to emotions such as sympathy – which will likely be aroused at seeing pitiful and sad sights such as those that Kant describes – so that we might learn how to temper and control them at will and as necessary. Offering an interesting analogy, De Lourdes Borges explains:

Just as a medical student should be desensitized to blood before beginning to practice surgery, we should make our natural sympathetic emotions arise in order to be capable of controlling and using them on appropriate occasions.\textsuperscript{642}

Indeed, it could be argued Kant had previously made some subtle reference to the idea of cultivating sympathy in morality through his views on man’s duties to animals in his Lectures on Ethics. As Kant wrote:

So if a man has his dog shot, because he can no longer earn a living for him, he is by no means in breach of any duty to the dog, since the latter is incapable of judgement, but he thereby damages the kindly and humane qualities in himself, which he ought to exercise in virtue of his duties to mankind. Lest he extinguish such qualities, he must already practice a similar kindness towards animals; for a person who already displays such cruelty to animals is no less hardened towards men.\textsuperscript{643}

However it is not entirely clear what role is played by sympathy. Some, like De Lourdes\textsuperscript{644} argue that its role is motivational, while Baron\textsuperscript{645} suggests that it is more to do with helping us to determine how best to fulfil our duties; Denis\textsuperscript{646} seems to consider it to be a combination of the two. In any case, regardless of whose interpretation as to the role of moral emotion in Kantian ethics is correct, there does seem to be a role for sympathy in Kantian ethics after all.

\hspace{1cm}\textsuperscript{643} P.212 Kant, I (2001) ‘Of Duties to Animals and Spirits’ In Heath, P & Schneewind, JB (Eds.) Lectures on Ethics; Cambridge University Press: USA.
\hspace{1cm}\textsuperscript{644} Ibid.
\hspace{1cm}\textsuperscript{646} Denis, L (1997) ‘Kant’s Ethics and Duties to Oneself’, Pacific Philosophical Quarterly; Vol. 78(4); pp.321–348.
Even if we were to dismiss Kant’s change of heart, to dismiss any direct role that sympathy could be said to have in a Kantian approach to morality, moral enhancement via emotional modulation could perhaps still prove useful in such an account. Kantian ethics does of course put reasoning at the heart of its moral theory, but there are times when certain emotions can become obstacles to moral reasoning and can cloud moral judgement. The emotions in question here are those which Douglas refers to as ‘counter-moral emotions’, offering racial bias/aversion and aggression as examples of these. As he explains:

One example of a counter-moral emotion might be a strong aversion to certain racial groups. Such an aversion would, I think, be an uncontroversial example of a bad motive. It might also interfere with what would otherwise be good motives. It might, for example, lead to a kind of subconscious bias in a person who is attempting to weigh up the claims of competing individuals as part of some reasoning process. Alternatively, it might limit the extent to which a person is able to feel sympathy for a member of the racial group in question. Moreover, as with racial aversion, aggression could also interfere with good motives. It might, for example, cloud a person’s mind in such a way that reasoning becomes difficult and the moral emotions are unlikely to be experienced.

Douglas offers an account of moral enhancement which differs from that which we associate with Persson and Savulescu, as rather than increasing levels of moral emotion within an individual, Douglas’ approach would instead involve attenuation of counter-moral emotions, such as those identified above. Douglas’ account of

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648 P.231 ibid.
moral enhancement is therefore a clear example of where the endeavour could align with commonly-accepted elements of Kantian ethics through its attenuation of counter-moral emotions to allow for greater capacity for moral reasoning. However, there could perhaps be some room for accounts of moral enhancement such as that of Persson and Savulescu (and perhaps even Kant’s later approach of cultivation of certain emotions) as emotions such as empathy have also been shown to attenuate aggression.

So then it seems as though there are grounds for us to say that moral bioenhancement through emotional modulation could in fact be permitted (or at the very least, not outright rejected) under a Kantian approach to ethics. However, there are arguments that could be raised here surrounding the fact that there could be a distinction made between more traditional approaches to moral enhancement (such as Kant’s cultivation of sympathy through exposure to emotive stimuli), and biomedical means proposed under accounts of moral bioenhancement which could perhaps be considered artificial. For instance, there are concerns that cultivation of emotions such as sympathy beyond a certain point could lead to an overwhelming of the capacity for moral reasoning – as Denis writes: “All that Kantian morality can reasonably demand – and all that Kant thinks it demands – is that we not allow emotions to replace or hinder rational judgements.” De Lourdes Borges also notes that rationality remains at the centre of Kant’s moral theory, even with this new role for sympathetic inclinations. As she writes:

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649 Which, as I have noted above, is linked to sympathy.
651 A concern on which I shall expand in the following section.
The pathological emotions don’t enable us to know when and where to apply moral principles, rather this is decided by the duty of humanity, which rationally figures out in which cases we should activate our natural sympathy and in which we should prevent it from arising. Pathological feelings, according to Kant, will be always blind to decide the right action in the right context… 653

The concern that emotions “will always be blind to decide the right action in the right context” is echoed in moral enhancement literature. For instance, Robert Sparrow notes that, as morality and moral behaviour are context-dependent, an automatic, visceral reaction to a moral dilemma or stimulus might not in fact lead to the correct moral action – even if the action is motivated by positive moral emotions. As Sparrow writes: “It would be a good drug, indeed, that made us feel love only for what is worthy of love and brave only in the service of a just cause.” 654 Harris seconds this, asserting that no one can rely on their ‘moral nose’ and using it as further proof of the need for rationality in morality. As he puts it:

To believe that emotions can deliver answers to moral dilemmas or generate moral judgements is like believing that the gut is an organ of thought, or one that can answer complex, combined theoretical and empirical, questions... Ethical judgements cannot, literally cannot, be felt. There is no sense organ for such a feeling. 655

This then further affirms the need for rationality and reason to remain at the centre of moral theory, and so even where a role for emotions such as sympathy in morality is acknowledged (as Kant himself even seemed to do), it can never be considered to play one that supersedes the role of reason.

So then, in cultivating our sympathetic inclinations we should take care to avoid cultivating them to the extent that they become overwhelming and so risk impairing agency and our ability to reason morally. But what would this mean for moral bioenhancement? Would augmentation of emotions such as sympathy by biomedical means (as opposed to the less dramatic means proposed above by Kant) lead to cultivation of these emotions at the cost of the ability to reason? Harris has voiced such concerns; arguing that adopting an emotional modulation approach to moral bioenhancement would put our capacity to reason about the moral situations in which we find ourselves at risk (and taking our freedom to do wrongly away along with it). As he puts it: “Emotional modulation is unlikely to leave us free to do what our intellect tells us is right if feelings of repugnance or emotional aversion are too strong to be routinely overridden.”

However, it is not exactly clear that moral bioenhancement would have such a potent effect as to interrupt moral reason in the manner that Harris suggests. Indeed, where a person does demonstrate naturally (comparatively) high levels of empathy and sympathy, we do not consider them to be less able to engage in moral reasoning than their less-sympathetic counterparts (a case made by many writers, such as DeGrazia, Rakic and Persson and Savulescu).

656 P.301 Harris, J (2012) ‘What It’s Like to Be Good’, Cambridge Quarterly of Healthcare Ethics; Vol. 21(3); pp.293-305.
Further, speaking in reference to Kant’s own writings, Baron asserts that, for Kant, we can only truly be overwhelmed by an emotion or desire if we have chosen to allow that emotion or desire to overwhelm us. She calls “the view that Kant believes that we are passive with respect to our feelings” an error, stating that:

…central to Kant’s theory of agency is this thesis: “an incentive can determine the will to an action only so far as the individual has incorporated it into his maxim” (R 24/19). In other words, a desire does not simply overcome me; I act as the desire directs me, I do so because I decide to do so.

And indeed, as noted above, it could be argued further that moral bioenhancement might actually aid our ability to reason morally by tempering those counter-moral emotions that might otherwise hamper our capacity to do so.

It therefore seems that, perhaps contrary to expectation, moral enhancement would not be necessarily be prima facie dismissed or ruled out in Kantian ethics after all. However, Kant speaks of cultivating sympathy in a manner that we might associate with more traditional forms of moral enhancement (that is, as opposed to moral bioenhancement) in his suggestion that we seek out “places where the poor who lack the most basic necessities are to be found”. But it is less clear that this promotion would extend to moral bioenhancement; a much more controversial notion than traditional moral enhancement even in general discussion. In this context, it could be

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661 Ibid.
662 Which typically involves things such as moral education and raising awareness of moral issues.
663 As quoted in ibid.
the case that bioenhancement of sympathy is considered artificial, and so it would be
better for the agent to cultivate the emotion in the more traditional manner suggested
by Kant. But this need not necessarily be the case, and indeed there may be some
people on whom more traditional means of moral enhancement might have no
effect, meaning that moral bioenhancement would be their best (or even only) real
hope of improving themselves morally. However the idea of introducing ‘artificial’
means to morally enhance agents neatly brings us to another relevant concern for
Kantian ethicists: bodily integrity.

8.2.3 Mind, Body, and Moral Bioenhancement

Kant strongly asserted that, as persons, we are necessarily embodied:

Our life is entirely conditioned by our body, so that we cannot conceive of a
life not mediated by the body and we cannot make use of our freedom except
through the body.\(^{665}\)

As embodied persons, we therefore have a particularly vested interest in what
happens to that body; for instance, we cannot do anything degrading lest we lose our
worth as persons. But it isn’t necessarily clear what would qualify as a degrading act
(and it is certainly unclear whether moral bioenhancement would count as such). As
Chadwick puts it:

\(^{664}\) I offer a more detailed account of this concern in Chapter Six through my discussion of medically-
indicated moral bioenhancement interventions. See also Carter, S (2016) ‘Could Moral Enhancement

\(^{665}\) As quoted in p.131 Chadwick, RF (1989) ‘The Market for Bodily Parts: Kant and Duties to
Oneself’, \textit{Journal of Applied Philosophy}; Vol. 6(2); pp.129-140.
[Kant’s] emphasis is thus on the preservation of human worth, and he depends on a notion of certain acts as intrinsically degrading. If we indulge in them we lose our worth. This view… is open to the objection that there is widespread disagreement as to what counts as degrading.\(^\text{666}\)

However, Kant wrote that the mind must ensure that the body doesn’t alter the state of the mind, that it must exercise control over the body to prevent this.

The body must first be disciplined, because in it there are *principia* by which the mind is affected, and through which the body alters the state of the mind. The mind must therefore take care to exercise an autocracy over the body, so that it cannot alter the state of the mind.\(^\text{667}\)

This extract was most likely written with appetites and desires in mind, but there is perhaps some room for application for our purposes. Such an example would be the concern noted above, that undergoing moral bioenhancement could make us unable to think. Further, Harris argues that such an intervention could even remove our freedom to do wrong (which he refers to (echoing Milton’s *Paradise Lost*) as our ‘freedom to fall’\(^\text{668}\)).\(^\text{669}\) But as already noted, this would not necessarily be the case, moral bioenhancement interventions might not remove the freedom to fall, and indeed they might be something that simply quietens the mind of intrusive thoughts of an aggressive nature, better enabling us to reason. Or it could be that moral enhancement to strengthen or increase our levels of moral emotions such as

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\(^\text{666}\) P.130 ibid.


\(^\text{669}\) There is some dispute as to whether this is a freedom worth protecting, but Harris insists that it is, writing: “Without the freedom to fall, good cannot be a choice; and freedom disappears and along with it virtue. There is no virtue in doing what you must.” (P.104 ibid).
sympathy would, as Marcia Baron suggests, in turn improve our ability to assess how best to help those in need.

Another concern that could be raised is that of identity; for if we are, as Kant suggests, necessarily embodied persons, then it could be argued that something which acts upon the body and that could thereafter have some effect on the mind (even if that effect would not necessarily impair reason), could be considered a threat to identity. Again, such a concern has been previously raised in the literature on both human and moral bioenhancement, as research by Riis et al demonstrated “that healthy young people are more reluctant to enhance traits that are believed to be fundamental aspects of their self-identities than traits that are believed to be less fundamental.”

The most fundamental of the traits in question being those perhaps most likely to be affected by moral bioenhancement: empathy and kindness. As I have summarised elsewhere:

Riis and colleagues constructed a study where participants were given a list of 19 traits and were asked to rate how relevant each one was to self-identity; participants were then asked to indicate whether they would be willing to enhance each trait. The results of two of the traits listed in the study are of particular significance for our purposes: empathy and kindness. These were regarded as being the most fundamental to self-identity out of the 19 traits listed with only 13% and 9% (respectively) of the participants willing to enhance these traits—the lowest figures for the entire study.


So then moral bioenhancement could perhaps be seen as a threat to identity, at least by some. However, it is not clear that this would necessarily be the case, especially if taking a more Kantian perspective – although only when the intervention is freely chosen by the agent, and so not forced upon him by law or medicine. As Korsgaard explains:

If I can overcome my cowardice by surgery or medication rather than habituation I might prefer to take this less arduous route. So long as an authentic good will is behind my desire for greater courage, and authentic courage is the result, the mechanism should not matter. But for the Kantian it does matter who is initiating the use of the mechanism. Where I change myself, the sort of continuity needed for identity may be preserved, even if I become very different. Where I am changed by wholly external forces, it is not.672

In any case, despite the concerns already noted, there could still be room to allow for moral bioenhancement regardless under certain circumstances, as the motive of self-preservation could, for Kant, provide justification for certain bodily interventions which might otherwise have been considered impermissible.673 So I could, for example, amputate a foot that was becoming gangrenous in order to save my life. This exception could also allow moral bioenhancement: Imagine a man whose excessive aggression frequently causes him to find himself in dangerous situations; getting into bar fights and the like. He knows that if he weren’t so aggressive, he

673 See Chadwick, RF (1989) ’The Market for Bodily Parts: Kant and Duties to Oneself’, *Journal of Applied Philosophy*; Vol. 6(2); pp.129-140.
wouldn’t find himself in these situations\textsuperscript{674} and that there is always a risk that he won’t come out of the next fight alive. But his aggression overtakes him, he cannot control it, and he finds himself in these situations again and again. Such an example also echoes the Kantian concept of a mental disorder of the affects, where intensity of feeling overpowers the ability to reflect. As Frierson writes:

\begin{quote}
One might murder someone out of rage, but one’s power of choice is not involved... Acting or failing to act due to affect is morally similar to acting or failing to act when one is asleep. In both cases one is morally unconscious, so to speak, rather than morally corrupt.\textsuperscript{675}
\end{quote}

Surely then, this would be an example where moral bioenhancement could be used in the name of self-preservation. In attenuating his aggression\textsuperscript{676} the man in question finds that he no longer throws himself into these dangerous situations, no longer provokes fights, and so on. And, as a result, the risk to his life is greatly reduced. Moral bioenhancement has been used to secure his self-preservation.

However, this seems to suggest that moral bioenhancement could only be justified under very specific circumstances, perhaps only for those people for whom it might be considered medically indicated.\textsuperscript{677} This could indeed be the case, if we accept the concerns relating to bodily integrity as noted above then moral bioenhancement seems to be only acceptable in instances of self-preservation. However it is not clear that these concerns are founded: I have already noted that augmented moral emotions

\textsuperscript{674} This is not to say that only excessively aggressive people find themselves in these situations, but it does seem reasonable to assume that persons with an excess of aggression would be more likely to find themselves in such situations with far more regularity than those without.
\textsuperscript{676} As noted above, empathy can also temper aggression, so emotional augmentation by moral bioenhancement would also qualify here in addition to the account of the endeavour offered by Douglas.
(or tempered counter-moral emotions) would be unlikely to impair, and that it could in fact aid, our moral reasoning. Further, as regards the question of the impact of identity, it might be the case that the respondents in the research by Riis and colleagues were simply mistaken, and that moral bioenhancement would have no real or fundamental impact on their identities, especially if (as Korsgaard argued) the enhancement intervention was freely-chosen.

8.2.4 Moral Bioenhancement and Duty

It seems from our discussion so far that moral enhancement interventions could aid us in behaving morally and possibly in becoming more moral persons. From this it seems that perhaps moral enhancement could therefore help us to fulfil certain Kantian duties where particular importance is placed on behaving morally and on being a moral person, such as the duty of moral perfection. But could this be the case? And if indeed moral enhancement would help us to fulfil such a duty, then could this in turn mean that there is a duty to undergo the intervention?

The duty to strive for moral perfection is a duty to self, a concept that is not entirely uncontroversial. I will explain and defend this concept briefly before discussing the duty to strive for moral perfection (and its relation to moral enhancement interventions) in particular. As Denis explains, duties to self

…comprise a varied collection of commands and prohibitions. They prohibit willing (determining oneself to action) on maxims (subjective to practical principles) corresponding to the vices of suicide, sexual self-degradation,
gluttony and drunkenness, lying, avarice, and servility. These duties also require having the goals of moral and natural perfection.678

The idea of having a set of duties to oneself is not without its critics, many of whom cite the (supposed) other-facing nature of morality. As Denis notes: “Proponents of this view often presuppose that we naturally look out for our own well-being, so morality’s purpose is to get us to care about the well-being of others.”679

Kantian ethics is of course other-regarding, due in no small part to the second categorical imperative: the Formula of Humanity. This formulation can be described in simple terms as the duty to ensure that we never treat others as a means to an end, only ever as an end in themselves. While Kantian ethics is other-regarding, however, it is not solely other-regarding, and it is this same formulation that also lays the path for self-regarding duties. For Kant expresses the formula of humanity in the following manner: “Act so that you treat humanity, whether in your own person or in the person of another, always at the same time as an end, and never only as a means.”680 So here we can clearly see that the formula is also self-regarding (as indicated by my emphasis above) as well as other-regarding. Further, just as others are rational creatures deserving of dignity, so too are we. Denis notes that “no being with dignity has greater value than any other being with dignity.”681 So then, as I have dignity, I have equal value with other people who have dignity as well. This lays the grounding for duties to self in general, and so the duty to strive for moral perfection as well.

679 P.322 ibid.
680 As quoted in p.324 ibid – emphasis mine.
681 P.325 ibid.
Having established the legitimacy of duties to self, such as the duty to strive for moral perfection, both for Kant and in more general terms, it is important to clarify what the duty to strive for moral perfection itself actually involves (and from there assess whether moral enhancement interventions could be said to help us to fulfil it). Allen Wood asserts that moral perfection “includes not only the inner strength that makes us immune to affects but also the cultivation of inclinations which add to the strength of our good maxims.” So then, according to Wood, moral perfection involves being able to avoid being steered mindlessly by emotions and inclinations, but also involves cultivating those inclinations that actually aid us in behaving morally. This view seems to be seconded by Denis, who writes:

The virtuous Kantian agent blocks affects from hindering her deliberation.
She refuses to let her passions or inclinations determine her will. Yet she does not think that emotions as such are contrary to morality: she distinguishes healthy susceptibility to feelings – which can aid her in recognizing morally salient aspects of situations – from the tendency to indulge indiscriminately in her feelings to no practical purpose.

As already discussed above, moral enhancement would most likely increase levels of those moral emotions (such as sympathy) which Kant asserts that we should cultivate, and which Wood notes as a component of moral perfection. Further, the intervention could even help us to temper less helpful affects, such as aggression, and so prevent them from impairing our ability to reason morally. Therefore, it

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seems that moral enhancement interventions could indeed help us to strive for moral perfection – and so would aid us in fulfilling the duty to do so.

Further, the duty to strive for moral perfection is an imperfect duty; in short, this means that while the end (of moral perfection) remains fixed, the actions to promote that end are not specified. As Moran explains:

According to Kant, duties of wide obligation – like imperfect duties – are “duties that prescribe the maxims of actions, not the actions themselves” or that leave “playroom for free choice in following the law”. 684

These are in contrast to perfect duties, which prohibit maxims of action such as (for example) lying and suicide and unlike imperfect duties, they permit “no exception in the interest of inclination.”685 So then, as the duty to strive for moral perfection is an imperfect duty, we have free choice in what action we take to pursue it; moral bioenhancement could be one such choice.

It therefore seems that moral enhancement may indeed help us to fulfil the imperfect duty to strive for moral perfection. But is this enough to qualify moral enhancement as a duty in its own right? Surely to be considered as such, moral enhancement would, as noted below, have to be the best way to fulfil this duty to strive for moral perfection – and it is not necessarily clear that it is. Rather, it is much more likely to be the case that moral enhancement is “simply one way among many to fulfil our duty of moral perfection”. 686,687 This position is backed up separately by

687 This comment was made in reference to the role of friendship in Kantian ethics, however the argument still stands.
Brassington, who – in referencing the writings of Harris regarding a duty to enhance⁶⁸⁸ (that is, human enhancement more generally rather than moral enhancement) – writes: “…even if we do have a duty to make the world a better place, it does not follow that everything that makes the world a better place is a duty.”⁶⁸⁹ Similarly then, even if we do have a duty to strive for moral perfection, it does not necessarily follow that everything that helps us towards this goal is itself a duty.

However, might there be an exception here in the case of people who may otherwise be incapable of fulfilling the duty of moral perfection? In this instance, could moral enhancement perhaps be considered the best possible way to fulfil the duty in question, and so a duty in its own right? Perhaps there is room to suggest that there could be a duty to undergo moral enhancement, even if only in the case of those who otherwise could not fulfil their duties or pursue the end of moral perfection (however small a group that might be). In such instances, the maxim could be universalised that: *any persons whose inability to fulfil their duty of moral perfection is rooted in a condition⁶⁹⁰ that could be remedied by moral enhancement interventions, should undergo moral enhancement.*

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⁶⁹⁰ Such as a deficit of empathy.
8.2.5 Conclusion

Perhaps contrary to what might otherwise be assumed at first glance, and maybe even at odds with the polarisation of the rational and emotional approaches to morality (which Kant seemed to embody in his conflict with Hume), moral bioenhancement by emotional modulation could in fact be permissible under a Kantian approach to ethics. With the role of emotions such as sympathy in morality acknowledged by Kant himself, and the recognition that there are people whose emotional make-up is such that they are otherwise unable to behave morally unless provided with an opportunity to enhance their levels of empathy, a place for moral bioenhancement in Kantian ethics becomes more and more apparent. Further, although this endeavour would be unlikely to be considered as such for the vast majority of moral agents, for a small number of people, undergoing moral bioenhancement could even amount to a duty.
Chapter Nine

Conclusion

9.1 Introduction

When I first applied to undertake this work, I had originally submitted a research proposal to write a thesis which explored the ethical implications of undertaking a universal approach to moral bioenhancement. At the time, Harris\(^{691}\) had written his practical argument against Persson and Savulescu’s argument from ultimate harm (noting that such an account required a universal approach to moral enhancement but that this approach would be impossible in practical terms), but nothing had been said regarding the ethical implications of such an approach (or even of any attempt to undertake it). Timing meant that I took a gap year before coming to begin my studies and I returned to academia to find that in that year a large amount of literature on the topic that I had hoped to explore had been published. As I read through the outputs that had been published during this time, it occurred to me that while I still could find some way to stay true to my original plan, I was now far more interested in what all of this meant for moral bioenhancement in a broader sense. Of course, Harris had already noted that universal moral enhancement would most likely prove a practical impossibility, but now writers had made it clear that the endeavour was also ethically problematic, meaning that even in areas where universal moral enhancement \textit{could} be implemented,\(^{692}\) that no attempt to do so should be made.

\begin{footnotes}
\item[692] Such as in the UK, for example, and other areas with the necessary infrastructure (or the ability to implement such infrastructure) – as I note in Chapter Two (section 2.2.2).
\end{footnotes}
As I noted throughout the early chapters, this led me to the conclusion that the argument from ultimate harm was fatally flawed. In itself, the argument offers a reason as to why moral enhancement is important, but given its inextricable link to universal (and therefore compulsory) moral bioenhancement and the issues that this raises, the argument from ultimate harm no longer works as a reason for people to undergo moral bioenhancement. It remains a reason for moral enhancement to be seen as a (broadly) positive endeavour, but ultimate harm cannot be prevented without the use of a universal approach to the intervention which, as I demonstrated in Chapter Two, is both ethically and legally problematic.

It occurred to me that with the argument from ultimate harm put to one side, a new reason that could serve to encourage people to undergo moral bioenhancement would be required. The argument from ultimate harm, and indeed the lay desire to avoid significant harm, served to demonstrate the desirability of the endeavour, but as I note at the start of this thesis, we would be hard-pressed to imagine that many people would be inclined to volunteer themselves for the intervention. Those persons that would be considered to be most in need moral bioenhancement (people who are perhaps violent, who typically act immorally and with no regard for the well being of others), may well be those that are least likely to volunteer themselves for the intervention. Further, in the case of most persons, it would perhaps seem that people would generally be disinclined to undergo moral bioenhancement as they

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simply would not consider themselves to be in need of it, given that they themselves
do not commit violent crimes or act in grossly immoral ways.695

So the question is then raised: how could we encourage people to undergo moral
bioenhancement? As noted, this endeavour remains something that is broadly
desirable to have on a societal level, but is much harder to consider as something that
is desirable on an individual basis.696 So how could we encourage participation in
what is essentially a broadly altruistic endeavour? People would of course need some
motivation in order to encourage them to participate, and three possible motivators
presented clear options for consideration for this end: money, health, and duty.
Papers regarding the first two of these had already been published on this topic when
I came to begin my research; Rakić:697 had suggested that the state could offer
financial incentives to encourage people to undergo moral bioenhancement,
meanwhile Casal698 had written that moral bioenhancement interventions could be
seen as therapeutic in some circumstances. These assertions inspired papers one and
two (Chapters Five and Six of this thesis).

It is a reasonable assertion that financial incentives could encourage people to
participate in a given activity, indeed (as noted previously699) there is evidence to

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695 Or that where they do act immorally, they commit immoral acts that are (or at least that could be)
considered to be minor – such as telling white lies, not correcting incorrect change when in their
favour, and so on.
696 While there are arguments to be made in favour of being a morally enhanced individual in a
society of other morally enhanced individuals (such as low crime, people being more altruistic, etc.),
the fact remains that in itself moral bioenhancement does not seem to be directly beneficial to the
enhanced individual. This is especially clear when it is contrasted with interventions such as cognitive
enhancement or memory enhancement, for example (although the benefits of the former have been
contested in recent works; see Krutzinna, J (2016) ‘Can a Welfarist Approach be Used to Justify a
Moral Duty to Cognitively Enhance Children’?, Bioethics; Vol. 30(7); pp.528–535).
Medical Ethics; Vol. 40(4); pp.246-250.
698 Casal, P (2013) ‘On not taking men as they are: reflections on moral bioenhancement’, Journal of
Medical Ethics; Vol. 41(4); pp.340-342.
699 See Chapters One and Three (sections 1.1 and 3.2.1).
support this; but could moral bioenhancement be different? The idea that such incentives could be used for our purposes seemed odd to me for reasons that I could not define. Paper one was, in part, an attempt to explore and to understand this unease. A more detailed summary can be found below, but in short I found that while the use of such incentives would not necessarily constitute coercion, their use could however be considered a taboo trade-off. As a result I suggested instead that the financial incentives be abandoned and that the concerns regarding people’s unwillingness to enhance be dealt with by reframing the interventions as ‘enablements’.

Casal made an interesting argument: that the use of moral bioenhancement interventions could be considered therapeutic in some instances. I was curious as to whether such an assertion could hold true when subjected to definitions used in mental health literature, and so I brought the DSM-5 into this emerging discussion in order to try to determine whether moral bioenhancement interventions could indeed be considered medically indicated in certain circumstances. I found that under the DSM-5 definition of mental disorder, a deficit of empathy could be considered pathological and so the use of moral bioenhancement interventions – which would increase levels of empathy and therefore mitigate such a deficiency – would be considered medically indicated in this instance. I also discussed a possible shorthand umbrella term for conditions characterised by this deficit: Moral Deficiency Disorder (or MDD), for which moral bioenhancement interventions would serve as a

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701 Section 9.2.1.


703 And also Agar (Agar, N (2015) ‘Moral Bioenhancement is Dangerous’, Journal of Medical Ethics; Vol. 41(4); pp.343-345), although I was not aware of his work on this topic at the time of preparing paper two.
treatment. This paper was followed by a chapter which explored some of the regulatory questions which would result from this conclusion, including what this would mean for prescribing doctors when providing the intervention to people for whom it would not be medically indicated.

In the case of the third motivator, duty, nothing had been written as to whether there could be a duty to undergo moral bioenhancement. Harris had previously written to argue in favour of a duty to undergo human enhancement in general, but again little had been said in this context with reference to moral enhancement. I sought to fill this gap in the literature and did so with reference to Kantian ethics. I argued (contrary to some popular assumptions) that based on Kant’s later writings, there could be an argument made for a role for emotions in his famously rationalist approach to morality. Given that moral bioenhancement interventions would not necessarily be ruled out under a Kantian approach to ethics, I questioned whether there could be a duty to undergo moral bioenhancement interventions. I concluded that there could only be said to be such a duty if the agent in question would be unable to fulfil his moral obligations (such as the duty to strive for moral perfection) without the endeavour. I noted that this would not be the case for most people and so they would not have such a duty, but some—such as those in whom moral bioenhancement interventions would be medically indicated—could find themselves unable to fulfil their duty to strive for moral perfection without the intervention; these people would therefore have a duty to undergo moral bioenhancement.

704 As noted in Chapter One (section 1.1), Pustovrh and McCollister-Pirc have written briefly on the question as to whether there could be a duty to undergo moral bioenhancement, however their account was vague and non-committal in its conclusion, whereas I provided an answer to this question (within the context of Kantian ethics) – see also Pustovrh, T & McCollister-Pirc, M (2016) ‘Moral Enhancement by Technological Means: Possible, Permissible, a Duty?’, Interdisciplinary Description of Complex Systems; Vol. 14(4); pp.344-352.

Below, I will summarise the papers in more detail, note their contribution to the literature, and note questions and issues raised by their findings which were not explored in the papers themselves. Following this, I will note how the papers are connected before finally discussing the conclusions of the thesis itself.

9.2 The Papers

9.2.1 Paper One: Putting a Price on Empathy: Against Incentivising Moral Enhancement

In paper one\textsuperscript{706} (Chapter Five) I considered the idea of money as a motivator, exploring the suggestion by Vojin Rakić\textsuperscript{707} that financial incentives could be used to encourage people to undergo moral bioenhancement. The conclusions of paper one, however, state that the use of money (and financial incentives generally) as a motivator for our purposes would most likely prove ineffective, and could even result in moral outrage. Instead, an alternative approach of reframing the intervention as an ‘enablement’ (rather than as an enhancement) and removing the incentives all together would, I argue, prove a far more viable option.


Summary of Paper One

I began this paper by briefly exploring what was perhaps the more obvious argument against the use of such a motivator: coercion.\(^{708}\) I noted that it would be difficult to say in absolute terms whether the use of such incentives could be considered coercive as there is no consensus as to whether or not offers can indeed coerce.\(^{709}\) It could instead be argued that offering financial incentives could constitute a case of undue inducement, however this is something that would be impossible to objectively determine as the very nature of undue inducements is extremely subjective; what would be an undue inducement for one person might not be for another.\(^{710}\)

Given then that it is extremely difficult to determine whether or not the use of incentives for our purposes could be considered coercive or to be an undue inducement, I then turned to my core argument in this paper against the use of incentivised moral bioenhancement: fundamental traits and taboo trade-offs. I explained that taboo trade-offs can, in their simplest form, be defined as describing those instances where an attempt is made to put a price on something that people generally consider to be priceless, and that Parke et al\(^{711}\) argue that this can extend to the use of incentives.

The question could then of course be raised as to what exactly would be considered ‘priceless’ in the context of moral bioenhancement; I argued that an answer to this

\(^{708}\) A topic that I also briefly explored in Chapter Three (section 3.2.2).

\(^{709}\) Of course, this issue becomes particularly prominent in the case of offenders (see McMillan, J (2014) ‘The kindest cut? Surgical castration, sex offenders and coercive offers’, *Journal of Medical Ethics*; Vol. 40(9); pp.583–590), however this discussion is beyond the scope of this particular paper and so is put to one side (although I do explore this issue in more detail in paper two).


can be provided by Riis and colleagues\textsuperscript{712} and their findings regarding public perceptions of enhancement and fundamental traits. In short, Riis and colleagues found that people are less willing to enhance traits that they consider to be fundamental to the self. Two of the traits which were explored are particularly relevant to moral bioenhancement: empathy and kindness; these two traits were considered by respondents to be the most fundamental to the self, and were also the two traits that respondents were least willing to enhance. Therefore, I argued, it is clear to see that offering money\textsuperscript{713} to undergo moral bioenhancement to a person who considers empathy and kindness to be fundamental traits could be considered an example of a taboo trade-off. For offering someone money to enhance something that they consider to be a fundamental part of their identity would surely be an example of, as Parke et al put it, an “attempt to put a price on something that many feel ought to be priceless”.\textsuperscript{714}

I noted that a counterpoint could be made here: that the people who believe that there are fundamental traits or aspects of the self are simply incorrect. However, I argued that even if this criticism is founded, it simply does not matter. The fact is that some people do have this perception and even if they are incorrect, that view will nevertheless inform their decision as to whether or not to undergo moral bioenhancement interventions. I argued that a different approach could be taken instead, noting that Riis et al’s research indicated that people would be more positively inclined to enhancement interventions if they were reframed as


\textsuperscript{713} Or indeed financial incentives generally.

‘enablements’\(^\text{715}\) rather than as enhancements. However, assuming that this reframing technique would prove effective for our purposes, I argued that the inclusion of financial incentives could still present a problem as it could inspire suspicion in those to whom it is offered. As I noted in the paper:

> Second, even if this marketing approach (of reframing enhancement as ‘enablement’) could work in this context and was implemented, given the financial incentives on offer it could perhaps be a concern that people might become suspicious— *if it’s so good for me, why are they offering me so much? What’s the catch?*\(^\text{716}\)

I argued that a simple resolution to this issue is open to us: remove the incentives. To promote these interventions as ‘enablements’ (rather than enhancements) and to remove the incentives could remove the negative connotations associated with ‘enhancing’ fundamental traits and could diminish both the risk of creating a taboo trade-off and of raising suspicions in those to whom it is advertised as an enablement.

**Contribution to the Literature**

Most replies to, and citations of, Rakić’s paper have not addressed the questions raised by his suggestion that financial incentives could be used to encourage participation in programmes of moral bioenhancement; one that did address his suggestion raised only the concern that the use of financial incentives could prove

\(^{715}\) Because it seems less threatening to the notion of identity as it evokes thoughts regarding fulfilling potential rather than actively surpassing one’s natural capacity for the trait in question. This is something that I did not fully clarify in the paper, though I do explain it in more detail below.

\(^{716}\) Pp.139-140 of this thesis; Chapter Five (section 5.2.3). Also p.828 Carter, S (2015) *Putting a price on empathy: against incentivising moral enhancement*, *Journal of Medical Ethics*; Vol. 41(10); pp.825–829.
coercive, but said nothing beyond that, or regarding the possible efficacy of this approach. Therefore, my paper was the first to explore reasons as to why this *prima facie* reasonable idea might in fact prove ineffective, or even result in moral outrage. Further, this paper also provides the first instance of an exploration of Taboo Trade-offs within the context of moral enhancement.

Further Issues

In this part, I will note some questions that could be (or indeed have been) raised in response to paper one; I have identified three in particular.

Why is enablement considered to be more acceptable than enhancement?

As Riis and colleagues note, reframing an intervention as an ‘enablement’ appears less threatening to identity than enhancement; this could be because ‘enablement’ seems to appeal to a notion of fulfilling potential, rather than of surpassing one’s own natural ability or capacity. As they write: “In the enhancement condition, the tagline suggested that taking the drug would enhance people’s true selves. In the enablement condition, the tagline suggested that taking the drug would enable people to realize their true selves.” They then later hypothesised:

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718 And also within the context of human enhancement in general, however the traits likely to be affected in this context were not considered to be as fundamental to self identity as empathy and kindness according to the aforementioned research by Riis and colleagues, and so incentivisation in these instances might therefore be less likely to be considered as examples of taboo trade-offs.

719 At least for those people who are concerned about the impact that enhancement interventions could have on identity.

...if people are less willing to take a drug to enhance [for example] social comfort... precisely because so doing imposes a greater threat to the self, then an enablement tagline that minimizes this threat to the self should increase participants’ willingness to take the social comfort drug and thereby reduce the difference in their relative preference for the concentration drug.\textsuperscript{721}

The experiment that Riis and colleagues then conducted seemed to confirm this hypothesis.

This question was not something that I explored in the paper in any great depth, but it occurred to me after publication that it was an important question to consider. Since writing the paper I have developed the work by including this (more detailed) clarification when presenting and discussing this paper; however I feel it prudent to note it here and to reiterate that this is not fully clarified in the original paper.

\textit{Why do people consider these traits to be fundamental?}

It would be difficult to respond to this as this question was not discussed in the original research paper\textsuperscript{722} and so any attempt to answer would be mere speculation. People may have their own unique reasons for this opinion, or people’s reasons could in fact follow a common theme, but unfortunately we simply do not know. This could have been a follow-on question or area of research for Riis and colleagues, but they did not pursue it; perhaps it could serve as a new area of empirical research in the future.

\textsuperscript{721} P.504 \textit{i}bid – emphasis mine.  
\textsuperscript{722} \textit{i}bid.
Financial incentives would probably work for at least some people, why then rule this out for everyone?

When presenting this paper, I note the common reaction to taboo trade-offs and will then often illustrate it with a small joke:

It has been noted that people will even respond to proposed taboo trade-offs with moral outrage.... Now, if you have ever offered your grandmother money to babysit, then you might have some idea of what I mean!\(^\text{723}\)

But, as my colleague recently asked: what about those grandmothers that would take payment for babysitting? Because there will be some; indeed there will always be people who will do something for financial gain – even things that other people would consider to be a taboo trade-off.

Further, there will be some people who do not consider empathy and kindness to be fundamental traits and who therefore would not see the offer of financial incentives to encourage moral bioenhancement to constitute a taboo trade-off; these people may well be encouraged to undertake the endeavour if offered such incentives to do so. Therefore, the use of financial incentives would not necessarily fail entirely. However, the concern could be raised here that if financial incentives were being offered to encourage the participation of persons who would not see the offer as a taboo trade-off, the offer of these incentives could still be seen as a taboo trade-off in others, and could even cause moral outrage in that group. Therefore, while it is not necessarily the case that the use of financial incentives would invariably be considered a taboo trade-off and so would necessarily fail, I am still inclined to argue

that this practice would nevertheless prove ineffective overall as it would alienate some members of the public.

9.2.2 Paper Two: Could Moral Enhancement Interventions be Medically Indicated?

Paper two724 (Chapter Six) relates to the ‘health’ motivator mentioned in the introductory chapters and explores whether moral bioenhancement interventions could be brought into the medical context. Unlike papers one and three, paper two does not explicitly make an argument regarding whether or not the motivator explored (health) could provide a reason for people to undergo moral bioenhancement interventions. Instead, the purpose of this paper was to demonstrate that the intervention can be considered medically indicated and so can be explored within the context of health. Therefore the paper does not necessarily provide a definitive answer as to whether these findings could then lead us to consider health to be a motivator for our purposes. As such, this is something that I will discuss in this chapter, concluding that health is in fact unlikely to provide much motivation to undergo moral bioenhancement interventions, and in fact could even dissuade those in whom the endeavour would not be medically indicated.

Summary of Paper Two

Given the account of moral enhancement with which I have been working throughout this thesis,\(^{725}\) I noted that the endeavour would involve an intervention which would result in an increase in levels of empathy within the agent who takes it. Therefore, it seems reasonable that a deficit of empathy could be considered something which could be mitigated by moral bioenhancement interventions. I then demonstrated, through reference to the DSM-5 definition of mental disorder, that a deficit of empathy could in fact be considered pathological and therefore the use of interventions (such as moral bioenhancement) to resolve this deficit could be considered medically indicated. I then considered two possible candidates for treatment in this context: Psychopathy and Moral Deficiency Disorder.

Psychopathy is typically described as being characterised by a deficit of empathy,\(^{726}\) however this position is not without its critics,\(^{727,728}\) and so given this controversy, I turned instead to discuss Moral Deficiency Disorder (or ‘MDD’). MDD is a shorthand, umbrella term that I created to describe those persons with a deficit of empathy whose moral reasoning and behaviour would benefit from having their level of empathy increased.\(^{729}\)

\(^{725}\) That is, the account put forward by Persson and Savulescu; see Chapter One (section 1.2) for more details.


\(^{728}\) Although research by Blair (Blair, RJ (1995) ‘A cognitive developmental approach to mortality: investigating the psychopath’, Cognition; Vol. 57(1); pp.1-29) suggests that the typical view is perhaps the more accurate.

\(^{729}\) This could therefore include psychopaths as well as persons who might not meet the criteria for a diagnosis of psychopathy but who otherwise have a deficit of empathy which impacts on their moral behaviour and reasoning.
I noted that it could, however, be difficult to identify persons with MDD and so diagnosis would have to be targeted. I explained that while it would seem reasonable to focus on diagnosis in children,\textsuperscript{730} that given the nature of emotional development in children, and of childhood development in general, it would be inadvisable to diagnose MDD at such a young age. Further, doing so could also cause issues for informed consent\textsuperscript{731} and could lead to stigmatisation of diagnosed children in early life. Instead I argued that it would be better to simply monitor those children who exhibit behaviour symptomatic of MDD and revisit them in adulthood if these symptomatic behaviours persist.

I then considered an alternative group that could be explored in pursuing diagnoses of MDD: adult offenders. I noted however that targeting offenders, even those that are diagnosed as having the disorder, could lead to serious questions surrounding coercion, especially if the offenders were offered more lenient sentencing or early release in exchange for undertaking moral bioenhancement interventions to treat the disorder.\textsuperscript{732}

Further, there could be an issue universal to all groups of persons with MDD: that people simply might not be interested in taking moral bioenhancement interventions, even if they would be medically indicated in their case.\textsuperscript{733} This being said, regardless of the issues in diagnosis, targeting, and in encouraging people to undergo moral bioenhancement interventions (even as a treatment), the fact remains that moral bioenhancement interventions would still be considered medically indicated in these instances.

\textsuperscript{730} As their behaviour is always monitored (by parents, teachers, or other caregivers); further it would be desirable to deal with the issues that could be caused by a deficit of empathy at an early stage.

\textsuperscript{731} Especially as diagnosis at a young age might prove to be an inexact science.


\textsuperscript{733} I return to this concern below.
I also explored questions surrounding medicalisation given that an important factor in medicalisation is the availability of treatment or relevant medication, something that could be seen to be particularly relevant here.\textsuperscript{734} I noted as well that medicalisation can be used as a form of social control and then asked whether MDD could fall foul of such an accusation. Certainly it is a disorder, however it might not be considered to be a burden by those that have it and so treatment in this instance might be considered to be for the benefit of society rather than for the patient. As such, it seems that a claim could perhaps be made that MDD could constitute an instance of medicalisation for social control. However, it could be argued that there are benefits for the patient when treating MDD,\textsuperscript{735} and so it may be that these concerns are unfounded.

**Contribution to the Literature**

This paper provides a more grounded approach to the idea that moral bioenhancement interventions could be considered therapeutic in some instances through its use of the DSM-5 as a definitional tool. It has also been cited in two academic articles (by Shook\textsuperscript{736} and Focquaert\textsuperscript{737}) and was also cited in an online piece in the Washington Post.\textsuperscript{738} The idea that moral enhancement interventions


\textsuperscript{735} For instance, indirectly benefitting from a more peaceful society brought about through widespread use of the intervention (as noted in Chapter Six) and indeed self-preservation (as noted in Chapter Eight).

\textsuperscript{736} Shook, JR (2016) ‘My Brain Made Me Moral: Moral Performance Enhancement for Realists’, *Neuroethics*; Vol. 9(3); pp.199–211.

\textsuperscript{737} Focquaert, F (2016) ‘Moral Bio-Enhancement for Offenders with Mental Disorders’, *International Journal of Emergency Mental Health and Human Resilience*; Vol. 18(3); pp.1-2. Please note: while I was able to access this paper in October 2016, as of late February 2017 I have been unable to locate this article online (although the author does still list this piece on her Research Gate account).

\textsuperscript{738} Hughes, JJ (2016) ‘Soon we’ll use science to make people more moral’ in *The Washington Post*. Internet WWW page at URL: https://www.washingtonpost.com/news/in-theory/wp/2016/05/19/soon-
could be medically indicated is not in itself an original position (indeed as I note above, this paper was inspired by this argument being made by Casal\textsuperscript{739}), however the approach that I have used here is unique.

Further Issues

One question that has been raised since the publication of the paper regards whether or not something can truly be considered to be a pathology if the patient does not consider themselves to be harmed by it. I briefly alluded to this argument in the chapter that followed paper two (Chapter Seven\textsuperscript{740}), but did not expand upon it. However, the fact that these individuals might not feel harmed by their condition does not necessarily mean that the condition in question therefore ceases to be a pathology. Take anorexia for example, here is a clear instance where some sufferers might not consider themselves to be harmed by their condition and so actively reject treatment, but we would be wrong to suggest that this meant that anorexia therefore could not be considered as pathological in their case. At this juncture it could be argued that this counter-example does not work, for if left untreated anorexia can cause a variety of health issues and can even lead to the death of the sufferer,\textsuperscript{741} whereas it does not seem that the same could be said for MDD.\textsuperscript{742} This is a fair point, but it could be countered that, as I noted in paper three (Chapter Eight), a person

\textsuperscript{740} Section 7.2.3.
\textsuperscript{742} Also, it is not necessarily the case that something must be life-threatening in order to be considered a pathology; I expand on this below.
suffering from a deficit of empathy could, as a result of that deficit, regularly find themselves in dangerous situations that could eventually lead to their death. This being said, one could argue that this would not necessarily be the case for all sufferers of MDD, and so again, anorexia might not be a perfect counter-example. However, even if we were to put the example from anorexia to one side, one could still consider other instances where we might argue that a person could be considered to have a pathology, even if he does not feel harmed or burdened by having the condition in question. For example, NHS Choices note of people experiencing auditory hallucinations:

The experience is usually very distressing, but it's not always negative. Some people who hear voices are able to live with them and get used to them, or may consider them a part of their life. Again, we would still be inclined to say that these individuals have a pathology, even if they “consider [the voices] a part of their life” and do not feel harmed by having them.

This being said, even if the fact that a person with MDD does not consider himself harmed by his condition does not then impact on the pathological status of that disorder, an important question is still raised here. As I have noted many times throughout this thesis, those persons who we might consider most in need of moral bioenhancement interventions could be disinclined to take them; it seems reasonable as well that this disinclination could continue even where those persons are diagnosed with some disorder for which moral bioenhancement interventions would

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743 See Chapter Eight (section 8.2.3).
745 Or indeed any other condition for which moral bioenhancement interventions would be medically indicated.
serve as a treatment. This is a serious concern for our purposes as this suggests that although moral bioenhancement interventions can indeed be considered medically indicated in certain circumstances, this conclusion might not then encourage people to undergo the endeavour. I will return to this concern in more detail below.\textsuperscript{746}

9.2.3 Paper Three: A Kantian Ethics Approach the Moral Bioenhancement

Paper three\textsuperscript{747} (Chapter Eight) discusses whether an argument could be made that there is a duty to undergo moral bioenhancement (which could then constitute a reason to undergo moral bioenhancement interventions), and so refers to the ‘duty’ motivator mentioned in the introductory chapters. I approached this question from a Kantian ethics perspective and concluded that there could not be said to be a duty to undergo moral bioenhancement interventions for most people. However in the case of agents who otherwise would be unable to fulfil their moral obligations (in particular their duty to strive for moral perfection), it could be said that these people would indeed have a duty to undergo the endeavour.

As noted in more detail below, this conclusion overlaps with the conclusions of paper two, as those persons who would be unable to fulfil their moral obligations without the use of moral bioenhancement interventions (and who therefore have a duty to undergo the endeavour), could be said to be the same persons as those in whom the intervention would be medically indicated.\textsuperscript{748} As I write in the paper:

\textsuperscript{746} See section 9.4.
\textsuperscript{747} Which is forthcoming in \textit{Bioethics}.
\textsuperscript{748} Or, at the very least, that there would be significant overlap.
...the maxim could be universalised that: any persons whose inability to fulfil their duty of moral perfection is rooted in a condition [fn: Such as a deficit of empathy] that could be remedied by moral enhancement interventions, should undergo moral enhancement.\textsuperscript{749}

Summary of Paper Three

I began this paper by exploring the role of emotions in the Kantian approach to morality. It is typically held that the Kantian view of morality is one that would exclude emotion; however I noted that Kant’s later writings in fact allow a place for sympathy\textsuperscript{750} in morality. As Baron notes:

In a passage from the \textit{Doctrine of Virtue}…, Kant says that we are to cultivate our sympathetic feelings, and he suggests that we can do so by, for example, seeking out “places where the poor who lack the most basic necessities are to be found” (\textit{MM} 457).\textsuperscript{751}

From there, I noted that there are concerns that the cultivation of emotions such as sympathy could risk overwhelming the agent in question’s capacity for moral reasoning (a concern also raised in the literature on moral bioenhancement). However, I argued that, not only it is unclear that the interventions would have such an effect, but also that we do not view persons who are naturally very empathetic (or sympathetic) as being less able to reason morally than their less-empathetic peers. I noted as well that the Kantian author Baron identified a flaw in the argument that

\textsuperscript{749} P.215 of this thesis; Chapter Eight (section 8.2.4).
\textsuperscript{750} Which, as I have noted, could also have referred to that which we term as empathy today, and is therefore still relevant for our purposes.
emotions can impact on moral reasoning from within the writings of Kant himself, as he claims that we can only be overwhelmed by an emotion if we have chosen to allow that emotion to overwhelm us.\textsuperscript{752} It could be argued further that moral bioenhancement by emotional modulation could in fact leave us better able to engage in moral reasoning by tempering certain emotions that might otherwise get in the way of rational thought – such as aggression, for example.

I then explored the issues that could be raised by the use of moral bioenhancement interventions from a Kantian ethics perspective, in particular concerns regarding bodily integrity and, relatedly, a possible impact on identity. Kant stated not only that we are necessarily embodied persons (and, as such, we have a vested interest in what happens to that body), but also that the mind must ensure that the body does not alter the state of the mind. However, this concern is essentially a rephrasing of the argument that moral bioenhancement interventions could leave us unable to properly engage in reason, which was already explored in this paper and found to be flawed. Another concern that could be raised here regards identity for as we are necessarily embodied persons,\textsuperscript{753} then something which would have an effect on the body and in turn the mind could be said to pose a risk to an agent’s identity. However Korsgaard\textsuperscript{754} writes that under a Kantian approach, even enhancement interventions would not pose a threat to personal identity as long as the intervention in question had been freely chosen by the agent. Finally, Kant also wrote that certain bodily interventions which might otherwise have been considered impermissible could be

\textsuperscript{752} Ibid.
\textsuperscript{753} According to Kant.
justified by an appeal to self-preservation.\textsuperscript{755} I made the case that this argument could be extended to moral bioenhancement interventions and illustrated this assertion with the example of the aggressive man who would require such an intervention to prevent him from getting into fights which might one day lead to his death.

I then considered whether there could be said to be a duty to undergo moral bioenhancement, exploring this question with reference to the imperfect duty to strive for moral perfection. I argued that moral bioenhancement interventions would help an agent to fulfil this duty and then asked whether this would then mean that there is therefore a duty to undergo the endeavour. I argued that it would not, because for something to be considered a duty based on its ability to aid us in fulfilling another duty, it would have to provide the best possible way to fulfil that duty\textsuperscript{756} – and it is not clear that moral bioenhancement would be the best way to fulfil the duty to strive for moral perfection. However, a case could still be made for a duty to undergo moral bioenhancement in the case of certain individuals – namely those who without the intervention would be unable to fulfil their duty to strive for moral perfection.\textsuperscript{757}

\textsuperscript{756} As noted by Brassington in Brassington, I (2010) ‘Enhancing Evolution and Enhancing Evolution’, Bioethics; Vol. 24(8); pp.395-402.
\textsuperscript{757} There could perhaps be overlap here with those people in whom the intervention would be medically indicated; thus connecting papers two and three, as I note above and explore in more detail below.
Contribution to the Literature

While there have been work written on the idea of a duty to enhance when speaking of physical and cognitive enhancements, there has been nothing of the sort written in reference to moral bioenhancement. I sought to fill this gap in the literature and did so with reference to Kantian ethics. This paper also tackles certain assumptions regarding Kantian ethics and moral bioenhancement which have not been previously explored, namely the assumption that a Kantian ethics approach would necessarily prohibit the use of emotion-modulating moral bioenhancement interventions.

9.3 The Papers Taken Together

While the papers are united by the broader theme of the thesis – reasons to undergo moral bioenhancement – looking back, the papers are also connected by a theme that only emerged later: moral bioenhancement as a medically-indicated intervention. While this is quite clearly the theme and purpose of paper two taken by itself, it also connects paper two to papers one and three.

Paper one ended with the suggestion that, given the findings of the paper, it would be reasonable to suggest ‘reframing’ moral bioenhancement interventions as

759 At least nothing that aims to establish whether there could indeed be such a duty (although a more vague and non-committal account is offered by Pustovrh and McCollister-Pirc; see Pustovrh, T & McCollister-Pirc, M (2016) ‘Moral Enhancement by Technological Means: Possible, Permissible, a Duty?’, Interdisciplinary Description of Complex Systems; Vol. 14(4); pp.344-352.)
‘enablements’ rather than ‘enhancements’ in promoting the endeavour.\textsuperscript{760,761} With the introduction of the notion of medically-indicated moral bioenhancement interventions, we can see an instance where talk of ‘enablements’ can come to the fore and be seen as truly applicable.

Paper three, meanwhile, makes direct reference to paper two in citing the latter’s findings regarding the fact that a deficit of empathy could be considered pathological and so the use of moral bioenhancement interventions could be medically indicated in this instance. This was important in paper three as it made the case not only that the use of moral bioenhancement interventions could be more easily justified in this context from a Kantian perspective, but also that while there are insufficient grounds for claiming that there is a duty to undergo the intervention for most persons, there would however be a duty for those people in whom the endeavour would constitute a treatment.\textsuperscript{762}

9.4. ‘The Problem’ Now

In reference to the ‘health’ motivator, paper two demonstrated that a deficit of empathy could be considered pathological, and so the use of moral bioenhancement interventions in order to temper that deficit would be medically indicated in that instance. As noted above, this key conclusion of paper two acts almost as a centre

\textsuperscript{760} In addition to avoiding the use of financial incentives in this context.

\textsuperscript{761} As Riis et al demonstrated that interventions promoted as ‘enablements’ tended to fare better with people’s perceptions than when the same interventions were promoted as ‘enhancements’ (see Riis, J, Simmons, JP, & Goodwin, GP (2008) ‘Preference for Enhancement Pharmaceuticals: The Reluctance to Enhance Fundamental Traits’, \textit{Journal of Consumer Research}; Vol. 35; pp.495–508).

\textsuperscript{762} As these people would most likely be those who otherwise would be unable to fulfil the duty to strive for moral perfection.
for the thesis – it relates to the other papers, overlaps with their conclusions (especially in the case of paper three), and provides us with what seems to be our strongest option for encouraging people to undergo moral bioenhancement of all the motivators discussed.

In paper one, in reference to the ‘money’ motivator, I demonstrated that even if general ethical concerns surrounding the use of financial incentives were put to one side, their use within the context of moral bioenhancement would constitute a taboo trade-off and would therefore be met with indifference or even moral outrage from the public.763 This then ruled out the use of financial incentives as a possible means to encourage people to undergo moral bioenhancement – and so the ‘money’ motivator is cast to one side.

Further, in paper three I argued that appealing to a duty to undergo moral bioenhancement works only in the case of those people who otherwise would be unable to fulfil the duty to strive for moral perfection – these people may well be the same as those in whom moral bioenhancement interventions would be medically indicated. Therefore the ‘duty’ motivator only works in certain instances (and these instances may overlap with those relating to medicinal use of moral bioenhancement).

However, while paper two demonstrates that the intervention can be discussed in the context of health, it is not clear that it has therefore provided us with a particularly effective motivator. As noted throughout this thesis, people who we might consider to have a general need to undergo moral bioenhancement might not be inclined to have the intervention; this could hold true as well for people in whom there might be

763 Though as I have noted, this reaction might not be universal.
a diagnosed *medical* need to undergo the endeavour. This might not be the case for all people that fall into this category, but just as some people do not feel inclined to seek treatment for other conditions which they do not consider to be a burden, this may hold true as well for moral bioenhancement interventions, even where medically indicated.

At this juncture, one could of course appeal to the conclusions of paper three and suggest that as there would be a duty to undergo moral bioenhancement interventions for those in whom it is medically indicated, this duty could instead motivate those people (who were otherwise unmoved by their diagnosis) to undergo the intervention. However, there is the perhaps somewhat cynical (though still, I would argue, reasonable) concern that where moral bioenhancement is medically indicated in someone, it could be the case that the individual in question simply will not be moved by the argument that they have a duty to undergo that intervention. Of course this will not necessarily be the case for all persons, but it is important to note that some people simply will not be moved by such a duty.

A further concern that could be raised in relation to the conclusions of paper two is what this might mean for those persons in whom moral bioenhancement interventions would *not* be medically indicated. Could it be the case that these people would be disinclined to use the interventions as enhancements once they have been brought into the medical domain? In the introductory chapters I mentioned that research by Cabrera and colleagues demonstrate that lay people are sensitive to the

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764 That is, if they would otherwise be unable to fulfil their duty to strive for moral perfection.
765 This being said, it is not the case that this issue is one that is entirely unique to the duty to undergo moral bioenhancement interventions, however it is something that is important to note nonetheless.
766 See Chapters One and Three (sections 1.1 and 3.2.2).
distinction between using interventions to bring people up to a given baseline and using them to push people beyond that point. It could then be the case that the medicalisation of moral bioenhancement interventions could cause some to feel uncomfortable with the idea of using the technology for non-medical purposes. It could be countered here that people do use some medicines for non-medical reasons, including for enhancement purposes. A clear example here is that of the ADHD drug Ritalin; while it is a medication for a recognised disorder, it is occasionally (illegally) used by persons who have no medical need as a cognitive enhancer to boost performance at work or in exams. However, in the case of cognitive enhancement it is clear to see that there is a direct benefit to the user, whereas (as I have explained previously), the benefits of moral bioenhancement interventions for the enhanced are generally indirect, and so people might not be so inclined to seek out this intervention as they might others which would offer them more direct benefits.

Another concern that could be raised here regards the stigma that Moral Deficiency Disorder could carry. This could be an issue for our purposes because if the disorder is indeed stigmatised, then people might be disinclined to use the intervention for non-medical reasons due to its connection to the disorder. Further, the medicalisation of the endeavour could move an agent’s reasons for disinclination from “I’m not so immoral that I require enhancement” to “I’m not suffering from a mental disorder”. While this shift in reasoning might not be impossible to resolve,

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768 Although this is sometimes illegal (see Chapters Six and Seven (sections 6.2.8 and 7.2.2) for the discussion on the regulation of Ritalin as an example of this) – I also note this briefly below.  
769 Although this assertion is not entirely uncontroversial; see Krutzinna, J (2016) ‘Can a Welfarist Approach be Used to Justify a Moral Duty to Cognitively Enhance Children?’, Bioethics; Vol. 30(7); pp.528–535.  
771 As noted in Chapter Six (section 6.2.6).
given again the stigma often attached to mental health problems, it does seem reasonable that people might therefore be less inclined to pursue the intervention as a result.

In sum, paper one demonstrates that the ‘money’ motivator will likely prove ineffective for the most part due to the risk of creating a taboo trade-off with the offer of financial incentives to undergo moral bioenhancement. Paper two demonstrates that the intervention can be brought into the context of health, but this does not necessarily mean that people will be more inclined to undergo the intervention as a result. Some people in whom the intervention would be medically indicated might not feel harmed by having the condition and so might not be moved to seek treatment and, further, it could be the case that people in whom the condition is not medically indicated might be disinclined to pursue moral bioenhancement interventions due to the medicalisation of the endeavour. Finally, paper three asserts that there can be a duty to undergo moral bioenhancement, but only for certain persons. For most people there is no such duty, and even for those people in whom there is a duty, they might not be moved by it.

It seems then that of the three motivators that I have explored in this thesis – money, health, and duty – none offer an entirely effective motivator to encourage people to undergo moral bioenhancement interventions. The strongest argument of the three comes from the conclusions of paper two (and arguably their relation to the conclusions of paper three). However, as noted above, this might not in fact

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772 Again, this will probably include persons in whom the intervention would also be medically indicated.
encourage uptake of moral bioenhancement interventions,\textsuperscript{773} and may even discourage participation in those in whom the endeavour would not be medically indicated, especially given the stigma attached to mental illness, which, through association, could in turn stigmatise the use of moral bioenhancement interventions, even where they are not medically indicated.\textsuperscript{774}

The conclusions of paper two could of course offer us a more legitimate basis on which to implement compulsory programmes of moral bioenhancement interventions, as the assertion that these interventions could be medically indicated in the context of mental health means that the Mental Health Act 1983 would then become relevant for our purposes, as noted in the Legal Context section of Chapter Two.\textsuperscript{775} However, this thesis was principally concerned with encouraging the voluntary uptake of moral bioenhancement interventions, and so while the conclusions of this paper lead to a (legally-speaking) legitimate basis for compulsory interventions in some persons, this was not the aim of this work.

It seems then that there is still no convincing\textsuperscript{776} argument or motivator that can be offered to people to encourage them to volunteer to undergo moral bioenhancement interventions. There is perhaps something to be said for use of the enablement approach from paper one, but in terms of the motivators discussed here, it seems that none could prove entirely effective for our purposes. This being said, however, it would surely be a fool’s errand to seek some motivator that would motivate all

\textsuperscript{773} Or at least not an increase in uptake.
\textsuperscript{774} This is not to say that all those for whom the intervention would be a treatment would be disinclined to take it, nor that all those in whom it would not be medically indicated would be disinclined to pursue the intervention as an enhancement. However, it is important to note that the conclusions of paper two would, in the end, be unlikely to lead us to an overall increase in participation in programmes of moral bioenhancement interventions.
\textsuperscript{775} Section 2.3 (particularly section 2.3.3).
\textsuperscript{776} While the medicalised nature of the endeavour might prove a convincing argument generally, it may not be convincing for the agent in question when considering whether to undergo moral bioenhancement interventions, which is the principal concern here.
persons in all instances; indeed it is unclear that such a motivator could even exist. Further, it is important to note that the motivators explored in this thesis would still motivate at least some people to undergo moral bioenhancement interventions.

9.5. Concluding Remarks

The introductory chapters of this thesis demonstrated that even where practically possible, universal and (therefore) compulsory programmes of moral bioenhancement are ethically and legally problematic. As such, a voluntary approach to the endeavour would be required. However, unlike other enhancements, moral bioenhancement is something that does not seem to directly benefit the enhanced individual. Therefore, if we were to consider the intervention as something that is generally good to have (and it seems, certainly on a societal level, that such a case can be made), then a method of encouraging participation in programmes of the endeavour will be needed. This thesis has attempted to identify that method by appealing to the motivators of money, health, and duty.

As explained above, it seems that none of these motivators would prove to be particularly effective in increasing uptake of moral bioenhancement interventions. However, it is unlikely that any completely effective motivator, something that could motivate all persons all of the time, could be found for any cause, let alone something such as moral bioenhancement, which would be a typically altruistic
endeavour and which (given the research by Riis and colleagues\textsuperscript{777}) we know could prove controversial with some members of the public.

An exploration of motivators not considered here could provide further avenues of research, however it could simply be the case that moral bioenhancement, however positive a concept it might be,\textsuperscript{778} simply should not be incentivised or perhaps even promoted in the way that we might for other health initiatives.\textsuperscript{779} The concerns raised by Riis and colleagues\textsuperscript{780} (and explored further in paper one) regarding possible public reactions to interventions which would impact on ‘fundamental’ traits (such as empathy) should be taken into account when considering any proposal to encourage participation in programmes of emotion-centred moral bioenhancement. Further, discussions of medically-indicated moral bioenhancement interventions must be carefully handled in order to manage the reactions of those in whom the interventions would not serve as a treatment, in the hopes of avoiding stigmatisation and of (therefore) ensuring that people would not be dissuaded from undergoing moral bioenhancement interventions due to its connection with MDD in particular, or with mental health generally.

The conclusions of paper two of course offer more legal legitimacy to discussions of compulsory programmes of the endeavour for people in whom moral bioenhancement interventions would be medically indicated.\textsuperscript{781} As regards voluntary moral bioenhancement, however, it might simply be the case that we ought to avoid


\textsuperscript{778} An assertion which itself is not uncontroversial, as noted in the Ethical Context section of the thesis; see Chapter Two (section 2.2).

\textsuperscript{779} Such as through public health campaigns, the use of posters, notices during advertisement breaks on the television, and so on.


\textsuperscript{781} Although ethical concerns on this issue of course remain.
incentives and advertise the availability of the endeavour as it is; to make people aware of its existence\textsuperscript{782} and its advantages to society in the hopes that people participate of their own accord. However, as noted throughout this thesis, this might well mean that the intervention is simply ignored by most people, including those that we might consider most in need of the endeavour – whether that need is medical or not.

Through its exploration of these motivators and issues, this thesis has provided a detailed analysis of the feasibility of voluntary programmes of moral bioenhancement. The conclusions of the papers, and the resulting conclusion of the thesis, demonstrate that encouraging participation in programmes of moral bioenhancement will not be a straightforward task, but they also provide insight into things that will be important to note in advance of the advent of such an intervention and (especially) of attempts to promote it. This thesis has demonstrated issues that had not previously been considered,\textsuperscript{783} answered questions that had not previously been resolved,\textsuperscript{784} and confirmed assumptions that had been previously made in the literature.\textsuperscript{785}

Even given the challenges involved in encouraging participation in a voluntary programme of the endeavour, and the issues identified with regards to the three motivators that I have explored, a voluntary approach – for all its flaws – remains far more ethically and legally palatable than compulsory approaches to moral bioenhancement. Therefore, if moral bioenhancement does come to pass, and emerges as an effective way of avoiding harmful behaviour, issues and questions

\textsuperscript{782} That is of course when it comes into existence.
\textsuperscript{783} The impact of taboo trade-offs on incentivised programmes of voluntary moral enhancement (paper one; Chapter Five).
\textsuperscript{784} Whether there could be a duty to undergo moral bioenhancement (paper three; Chapter Eight).
\textsuperscript{785} That moral bioenhancement interventions can be medically indicated (paper two; Chapter Six).
surrounding methods to promote its use will be extremely important to consider, and could inform policy on the matter for those seeking to encourage the endeavour.

However, more research is needed in this field; in particular, more knowledge is required as to the precise nature of moral bioenhancement interventions. For if it later transpires that the intervention in question does not put those that take it at risk – either with regards to side effects or empathy burnout\textsuperscript{786} - and if it is found that the intervention would in fact provide direct benefits for those people, then ethical concerns regarding methods to encourage voluntary use of the intervention will need to be balanced in response to such information. Indeed, if the benefits for the individual – and of course for society – are great enough, then this could perhaps result in stronger calls in favour of compulsory interventions, especially where medically indicated.\textsuperscript{787}

\textsuperscript{786} A concept explored in Chapters Four and Seven (sections 4.3.1 and 7.2.2 respectively).
\textsuperscript{787} In a similar vein, it could be that future research demonstrates that empathy-modifying interventions would lead to serious side-effects, or to other, unforeseen negative consequences; in this instance, such side effects or consequences could lead us to conclude that the arguments in favour of moral bioenhancement would be insufficient to justify \textit{voluntary} use, perhaps even where that use would be medically indicated.
Bibliography


Agar, N (2015) 'Moral Bioenhancement is Dangerous', Journal of Medical Ethics; Vol. 41(4); pp.343-345.


Harris, J (1987) ‘QALYfying the Value of Life’, Journal of Medical Ethics; Vol. 13(3); pp.117-123.


Harris, J (2012) ‘Ethics is for Bad Guys!’ Putting the ‘Moral’ into Moral Enhancement’, Bioethics; Vol. 27(3); pp.169-173.


Kant, I (2001) ‘Of Duties in Regard to the Body Itself’ In Heath, P & Schneewind, JB (Eds.) Lectures on Ethics; Cambridge University Press: USA.


Krutzinna, J (2016) ‘Can a Welfarist Approach be Used to Justify a Moral Duty to Cognitively Enhance Children?’, *Bioethics*; Vol. 30(7); pp.528–535.


Ronson, J (2011) The Psychopath Test; Picador: UK.


Shaw, L, Baston, D, & Todd, M (1994) ‘Empathy Avoidance: Forestalling Feeling for Another in Order to Escape the Motivational Consequences’, *Journal of Personality and Social Psychology*; Vol. 67(5); pp.879-887.


Tonkens, R (2015) “‘My child will never initiate Ultimate Harm’: an argument against moral enhancement’, *Journal of Medical Ethics*; Vol. 41(3); pp.245-251.


Wasserman, D (2014) ‘When bad people do good things: will moral enhancement make the world a better place?’, *Journal of Medical Ethics*; Vol. 40(6); pp.374-375.


Appendix:

Published Papers


PAPER

Putting a price on empathy: against incentivising moral enhancement

Sarah Carter

ABSTRACT

Concerns that people would be disinclined to voluntarily undergo moral enhancement have led to suggestions that an incentivised programme should be introduced to encourage participation. This paper argues that, while such measures do not necessarily result in coercion or undue inducement (issues with which one may typically associate the use of incentives in general), the use of incentives for this purpose may present a taboo trade-off. This is due to empirical research suggesting that those characteristics likely to be affected by moral enhancement are often perceived as fundamental to the self; therefore, any attempt to put a price on such traits would likely be deemed morally unacceptable by those who hold this view. A better approach to address the possible lack of participation may be to instead invest in alternative marketing strategies and remove incentives altogether.

The debate about moral bioenhancement\(^1\) began with Persson and Savulescu’s\(^1\) claim that scientific progress accelerated by cognitive enhancement would lead to possession of a level of power with which our under-evolved moral psyche would be unable to cope, leading us to an instance of ultimate harm.

They asserted that the only solution to avoid such a disaster would be to take up a programme of compulsory moral enhancement alongside cognitive enhancement.\(^1\) Recently, however, Rakic\(^2\) has argued that the possibility of self-annihilation, of such instances of ultimate harm, can never be eliminated even with the use of compulsory moral enhancement. Instead, Rakic states that we can only aim at keeping the likelihood of ultimate harm at a minimum (rather than eradicating the risk altogether), which he notes seems insufficient to justify the use of compulsory moral enhancement. Instead, he proposes a programme of voluntary moral enhancement that would be incentivised in order to encourage participation.

This article aims to develop the debate by exploring the idea of incentivising programmes of voluntary moral enhancement. I will demonstrate that, while it is unclear that areas of concern more typically raised in response to incentives (such as coercion and social justice) are necessarily relevant in this instance, public attitudes relating to the characteristics likely to be affected by moral enhancement\(^3\) suggest that any proposal to incentivise moral enhancement could be met by, at best, public indifference to the idea and at worst, moral outrage.

It is beyond the scope of this paper to engage directly with the ongoing debates surrounding moral enhancement generally; my concern here is with the more specific area of the ethics and efficacy of incentivised programmes of moral enhancement. This article seeks to demonstrate that, regardless of one’s view of moral enhancement itself, any plan to incentivise a voluntary programme of the endeavour would prove both practically and ethically problematic.

THE ARGUMENT FOR INCENTIVES

One problem in particular becomes immediately obvious when considering any programme of voluntary moral enhancement: namely, it seems reasonable to assume that very few people would be likely to volunteer themselves to undergo the intervention. This could be because most people would not see the point of undergoing moral enhancement as they would not consider themselves to need it. Relatedly, people who might be seen to most need the intervention could be the least likely to volunteer.\(^4\) As Persson and Savulescu note:

> If safe moral enhancements are ever developed, there are strong reasons to believe that their use should be obligatory, like education or fluoride in the water, since those who should take them are least likely to be inclined to use them.\(^1\)

This view is strengthened by the findings of Riis et al,\(^3\) which I discuss in more detail below. In his 2014 paper, Rakic notes that this could be considered a genuine concern when considering the possible viability of a voluntary programme of moral enhancement, recognising a further argument that undergoing such an intervention could even prove problematic for those who do choose to have it as their enhanced levels of empathy may lead them open to manipulation by the unenhanced. As a

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\(^{1}\)Hereafter bioenhancement is referred to simply as ‘enhancement’.

\(^{2}\)As reported in ref. 3.

\(^{3}\)Some possible reasons for this may be that people may not realise that they are morally deficient, or it may even be the case that they do realise this but are either indifferent to the fact, or even enjoy this aspect of their personality and so do not wish to change (this could be the case with career criminals, eg, or perhaps even some powerful businessmen (see ref. 4)).
solution, he suggests that ‘external stimuli’ in the form of incentives should be offered in order to encourage people to undergo the moral enhancements and to lessen the risk of experiencing more difficulties in life as a result. Suggesting the state as a provider, he proposes the following incentives: “tax reductions, schooling allowances for their children, retirement benefits and affirmative action policies that favour them”.2

However, the use of incentives in the context of moral enhancement raises concerns about coercion and justice, and indeed questions as to whether people would be inclined to enhance those traits likely to be affected by the endeavour to begin with. I will consider each of these matters in turn.

**COERCION AND JUSTICE**

One concern that could be raised relates to the impact that incentivising moral enhancement could have on voluntariness: could the voluntary aspect be lost with the inclusion of incentives? In short, could the offer of financial incentives prove coercive?

While there is currently no programme in place that is directly analogous to the incentivisation of enhancement interventions, programmes of incentivising participation in research, adherence to drug regimens1 and implementation of healthier lifestyles2 could provide some insight into questions surrounding the ethics of using financial incentives in such a manner.3 However, while they are similar enough to hypothetical incentivised moral enhancement programmes to provide a reasonable point of reference for this discussion due to their potential to contribute to public good (especially in the case of the first of the three), the inevitable differences between these should not be entirely dismissed. For instance, participation in research could involve greater risk to one’s health than taking enhancers that have already been regulated for public use. The implementation of a healthier lifestyle could be done without reliance on interventions such as pills or injections. So, in the absence of an alternative programme that would be directly analogous with incentivised moral enhancement, these are the best possible reference points for this discussion, but one should keep in mind these relevant differences throughout the discussion that follows.

Coercive threats would present a clearer case of coercion as it is typically understood: where options are removed, as this is an obvious example of a coercive tactic.4 However, incentives would seem to present an offer rather than a threat. As McMillan notes:

> Threats attempt to remove options by making at least one of them undesirable and therefore sit naturally alongside the idea of coercion, which also implies that choices are rendered involuntary. Offers, on the other hand, tend to create options that otherwise would not exist.5

Nevertheless, there is some controversy as to whether offers can indeed be considered to be coercive under certain circumstances. Shaw, for example, certainly believed that some offers could constitute coercion; when responding to a proposal from NICE which recommended financial incentives to promote adherence to methadone drug regimens,6 she expressed concern that the proposal was coercive in nature. As she puts it: “by carrot rather than the stick, but coercion none the less.”7 This view is seconded by Wiseman8 and Selgelid.9 Referencing Rakic’s suggestion directly, Selgelid notes:

> Rakic suggests the possibility of incentivising moral enhancement, but he fails to acknowledge that this might detract from freedom to refrain from taking incentivised action—just as the threat of being told you will be shot if you don’t do something detracts from the freedom not to do it. The greater the costs of not doing something, the less free we are to do otherwise. Forgone rewards count as costs.10

Wertheimer and Miller, however, disagree: “The claim that the offer of financial payments can actually constitute a coercive offer in a manner that undermines informed consent is both false and incoherent, because genuine offers cannot coerce.”11

They do assert that sometimes an offer can affect the decision-making process of an agent, but that this does not make the offer coercive, rather this may make it an instance of undue inducement. That an inducement could be considered undue is not an inherent feature of that inducement itself, rather whether it is considered as such will depend on the agent’s response to that inducement. As Wertheimer and Miller note:

> An offer is not problematic if it is genuinely too good to refuse. It is problematic if it seems to be too good to be refused and would be refused if the agent’s judgement were not blinded or clouded or impaired.12

This idea is echoed by Tishler and Bartholomae,13 who assert that whether a financial incentive is considered undue will vary from person to person depending on the value that each person attaches to money and the strength that they perceive a financial incentive to have. Therefore, it is unclear that a financial incentive could be objectively considered to exert undue influence.

With this in mind, it seems reasonable to raise concerns of social justice: that people from socioeconomically disadvantaged backgrounds could be considered more at risk of being affected by undue inducements. As Permuth-Wey and Borenstein note: “financial remuneration may be more attractive to economically disadvantaged populations.”14 Some empirical research, however, suggests that concerns of this nature may be misplaced; Halpern et al15 found that with regard to willingness to participate in clinical trials—while neither the poorer nor the wealthier group were immune from the lure of financial incentives—wealthier people were far more likely to be enticed by increased levels of pay (and therefore more willing to participate) than those from a more economically disadvantaged background.16

However, it is not clear whether these findings represent a state of affairs throughout society as a whole, nor does it seem to be the most commonly taken view. For example, Macklin writes of a medical school in an area with a large number of “urban poor [which] has a policy of not advertising or attempting to recruit subjects [for research] from the poor section of

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1An idea also suggested by Tonkens in ref. 5.

2While not all of the incentives suggested by Rakic are financial in nature, due to space constraints this paper will focus on financial incentives in particular.

3It would be prudent to note that in this paper I will be focusing my attention only on the question as to whether financial incentives could prove coercive for free persons (i.e., those who are not incarcerated) in particular. There are, of course, various other demographics that would be affected in different ways by such proposals, but I do not have the space to discuss this in depth that such a discussion would warrant.

9As cited in ref. 14.

10This was demonstrated by willingness-to-participate statistics of 37% (rich) versus 20% (poor) after an increase in the financial incentives offered.

11More research would likely be required to ascertain this.
While their findings are controversial, the research by Halpern et al nonetheless indicates further that the question as to whether using incentives to encourage moral enhancement could be considered a form of coercion, or an undue inducement, is not one that can be straightforwardly or objectively answered. However, that does not mean that the matter can be dismissed entirely—these concerns indicate that caution is necessary when constructing policies involving financial incentives.

If the possible implications of incentivisation in relation to coercion and justice are unclear, other possibilities raise more important reasons to doubt the benefits of incentivisation. Thus, I turn now to the more pressing concern that could be raised against incentivised accounts of moral enhancement: taboo trade-offs and fundamental traits.

**Taboo Trade-Offs and Fundamental Traits**

My main argument against incentivising programmes of moral enhancement comes from the phenomenon of taboo trade-offs (a concept that I shall define in more detail shortly) and the findings of Riis et al that people appear unwilling to enhance those traits that they perceive to be fundamental to the self. Taken together, it seems that such a proposal for incentivised voluntary moral enhancement would be met with public indifference at best and public outcry at worst—as I shall now explain.

Parke et al noted in a study regarding public attitudes to policies incentivising healthy behaviour: “incentives may represent an attempt to put a price on something that many feel ought to be priceless.” But what would this ‘priceless’ something be in the case of voluntary moral enhancement? An answer to this could be provided by Riis et al and their studies on personal identity and enhancement, and in particular their findings relating to the attitudes of people regarding those traits perhaps most likely to be affected by moral enhancement: empathy and kindness. I shall come back to this in more detail shortly, but first I shall briefly explain what is meant by the term ‘taboo trade-off’.

McGraw, Schwartz and Tetlock define taboo trade-offs as being those that “entail comparisons of the relative importance of secular values (eg, money, time, and convenience) with sacred values that are supposed to be infinitely significant.” Taboo trade-offs are often spoken of with reference to Fiske’s theory of the four relational modes: the four types of relationships that help people to navigate and organise most social interactions and even attitudes. The four types are: Communal Sharing (people put in what they can and take as they need—found in communities of any size), Equality Matching (usually found in friendships, where tit-for-tat reciprocity of favours is commonplace), Authority Ranking (eg, army ranking systems) and Market Pricing (that which underlies capitalism and essentially enables us to put a price on those things on which we put a price).

In this context, taboo trade-offs are those which occur when certain norms from one model are brought into another, especially when those norms are of the Market Pricing domain. As Shiell et al note:

If a comparison across normative boundaries is attempted, as might be the case when one tries to assign a monetary value to friendship or loyalty or health for example, then one undermines the very thing that one is attempting to value. In this view, one cannot be a true friend if one is willing to value one’s friendship in monetary terms.

McGraw et al note that research indicates that typical responses to taboo trade-offs tend to be rather strong, with common reactions including moral cleansing and moral outrage. It is not clear that the relationship models would be entirely helpful in the context of incentivised voluntary moral enhancement, but the principle in itself could be clearly seen to be applicable. As already noted above, Parke et al adopted the term for a similar purpose when they stated that incentives can at times appear to be an attempt to put a price on something that could be considered priceless. As I have already mentioned, the findings of Riis et al suggest that the very traits likely to be affected by moral enhancement may be considered fundamental to the self—and therefore priceless. I will give a brief account of these findings before explaining their connection to the phenomenon of taboo trade-offs, and then finally considering possible counterarguments that could be raised against this position.

Research by Riis et al demonstrated “that healthy young people are more reluctant to enhance traits that are believed to be fundamental aspects of their self-identities than traits that are believed to be less fundamental.” Riis and colleagues constructed a study where participants were given a list of 19 traits and were asked to rate how relevant each one was to self-identity; participants were then asked to indicate whether they would be willing to enhance each trait. The results of two of the traits listed in the study are of particular significance for our purposes: empathy and kindness. These were regarded as being the most fundamental to self-identity out of the 19 traits listed with only 13% and 9% (respectively) of the participants willing to enhance these traits—the lowest figures for the entire study.

For this reason, it is possible that Rakic’s proposal of incentivised moral enhancement presents an example of a taboo trade-off. For if it is indeed the case that people consider traits such as empathy and kindness—which of course would likely be affected with the use of moral enhancement—to be fundamental to their personal identity, to such an extent that it makes them unwilling to enhance those traits, then it would not be an illogical assumption that people would be inclined to consider these traits priceless. Therefore, an offer of financial incentives to encourage people to undergo moral enhancement—of those traits that Riis et al’s research suggests that people consider most fundamental—could be a clear case of “an attempt to put a price on something that many feel ought to be priceless”

One counterpoint could be raised at this juncture: that those participants (and indeed those who share this view) who believe there to be fundamental, unchanging aspects of the self are mistaken. However, this counterpoint does not stand in this context. For whether these people are right or wrong in their belief that there are fundamental traits that they are unwilling to enhance, it seems that much more research is required before any definitive view can be formed on this matter.

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*This is evidenced throughout the studies detailed in ref. 17.

*1.38 and 1.39, respectively.

*One view that would take such a position is offered by Glover in ref. 20.

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assumption that there are traits that are fundamental to the self. The fact is that they do have this assumption and it is going to influence their decision when considering voluntary moral enhancement.\footnote{It could be argued that counselling prior to enhancement would allow peoples’ fears on this matter to be allayed; however, this assumes that people would be willing to engage with the matter in that depth—unlike given that, as noted above, reactions to taboo trade-offs typically involve moral outrage.\footnote{Social comfort had an ‘identity index’ score of 0.71 as opposed to 1.38 for empathy and 1.39 for kindness.\footnote{26% as opposed to 13% for empathy and 9% for kindness.}}}

A further counterpoint could be taken from another study by Riis et al reported in the same paper as the findings above. The study in question suggests that people seemed to consider enhancing traits that they regard as fundamental to their personal identity to be far more acceptable if the interventions were reframed and marketed as being an ‘enablement’ rather than an enhancement (perhaps appealing to a notion of unlocking potential). Illustrating this with a real-life example, Riis et al note:

In this light, it is interesting to consider the case of Paxil, an anti-depressant sold by GlaxoSmithKline. Paxil has used the tagline “Paxil gets you back to being you” on its Web site. This tagline can, appropriately, ease the concerns of clinically depressed and anxious individuals who are considering taking this potentially helpful medication. At the same time, our research suggests that it could also increase the inclination of non-clinical individuals to seek a Paxil prescription for self-improvement purposes.\footnote{Assuming that the enablement approach could be made to work in this context, and further that no advertising ethics (eg, exaggerating to the point of lying—therefore threatening informed consent) would be breached in this.}

With this in mind, one could argue that Riis and colleagues’ findings regarding unwillingness to enhance fundamental traits need not prove too problematic for incentivised programmes of moral enhancement—so long as those programmes were reframed as ‘enablements’ rather than enhancements. However, while such a marketing strategy may allay concerns of losing one’s identity, there are two reasons to doubt whether such tactics would prove sufficient in the case of moral enhancement.

First of all, it is not entirely clear that such a marketing approach would work in the context of moral enhancement. The ‘fundamental’ trait that was used in the study by Riis et al\footnote{Riis J, Simmons JP, Goodwin GP. Preference for enhancement pharmaceuticals: the reluctance to enhance fundamental traits. J Consum Res 2005;31:395–508.} was that of Social Comfort (defined as the “Tendency to feel comfortable when meeting new people”)—a trait which people had seemed to be rather less fundamental to the self than empathy or kindness\footnote{Social comfort had an ‘identity index’ score of 0.71 as opposed to 1.38 for empathy and 1.39 for kindness.\footnote{26% as opposed to 13% for empathy and 9% for kindness.}} and, correspondingly, which people were far more willing to enhance than those that we would associate with moral enhancement.\footnote{Assuming that the enablement approach could be made to work in this context, and further that no advertising ethics (eg, exaggerating to the point of lying—therefore threatening informed consent) would be breached in this.}

Second, even if this marketing approach (of reframing enhancement as ‘enablement’) could work in this context and was implemented, given the financial incentives on offer it could perhaps be a concern that people might become suspicious—if it’s so good for me, why are they offering me so much? What’s the catch?\footnote{It could be argued that counselling prior to enhancement would allow peoples’ fears on this matter to be allayed; however, this assumes that people would be willing to engage with the matter in that depth—unlike given that, as noted above, reactions to taboo trade-offs typically involve moral outrage.\footnote{Social comfort had an ‘identity index’ score of 0.71 as opposed to 1.38 for empathy and 1.39 for kindness.\footnote{26% as opposed to 13% for empathy and 9% for kindness.}}}

Studies indicate that people are aware that higher incentives indicate higher risk in clinical trials.\footnote{Fearon P, Adlakha P. Financial incentives to encourage healthy behaviour: an analysis of UK media coverage. Health Expect 2011;16(3):292–304.} It is not a great leap to assume that these suspicions and this kind of thinking could be relevant and applicable to incentivised voluntary moral enhancement, especially when it is being pitched as something that is a benefit to the enhanced (or rather, ‘enabled’) person specifically.

It could be argued that if the incentives themselves were to be removed from an account of voluntary moral enhancement, and instead the focus was shifted to employing the ‘enablement’ angle in advertising the intervention, that this would sidestep the issues noted above. To merely offer a different marketing strategy such as the ‘enablement’ approach\footnote{Assuming that the enablement approach could be made to work in this context, and further that no advertising ethics (eg, exaggerating to the point of lying—therefore threatening informed consent) would be breached in this.} and remove the incentivisation aspect would simply leave us with a better-promoted version of ordinary voluntary moral enhancement. A prospect that seems to be far more uncontroversial than that of incentivised voluntary moral enhancement, which poses a significant cause for concern.

**CONCLUSION**

Given concerns that people would not otherwise be inclined to undergo moral enhancement voluntarily, incentives do at first appear to be a necessary addition to any proposed programme of the endeavour. However, while they do not necessarily result in coercion or undue inducement (which one may typically associate with the use of incentives in general), the use of incentives in the context of moral enhancement raises unique concerns, possibly leading to moral outrage in their attempt to entice people to alter characteristics that many consider fundamental to their identities.

Instead, a better approach to address the possible lack of participation would perhaps be to invest in improved marketing strategies (such as the ‘enablement’ reframing tactic mentioned above) and reject incentives for moral enhancement altogether.

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Putting a price on empathy: against incentivising moral enhancement

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Could Moral Enhancement Interventions be Medically Indicated?

Sarah Carter

Abstract This paper explores the position that moral enhancement interventions could be medically indicated (and so considered therapeutic) in cases where they provide a remedy for a lack of empathy, when such a deficit is considered pathological. In order to argue this claim, the question as to whether a deficit of empathy could be considered to be pathological is examined, taking into account the difficulty of defining illness and disorder generally, and especially in the case of mental health. Following this, Psychopathy and a fictionalised mental disorder (Moral Deficiency Disorder) are explored with a view to consider moral enhancement techniques as possible treatments for both conditions. At this juncture, having asserted and defended the position that moral enhancement interventions could, under certain circumstances, be considered medically indicated, this paper then goes on to briefly explore some of the consequences of this assertion. First, it is acknowledged that this broadening of diagnostic criteria in light of new interventions could fall foul of claims of medicalisation. It is then briefly noted that considering moral enhancement technologies to be akin to therapies in certain circumstances could lead to ethical and legal consequences and questions, such as those regarding regulation, access, and even consent.

Keywords Moral enhancement · Bioethics · Neuroethics · Moral therapy · Empathy · Enhancement

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Introduction

In her 2013 paper, Casal [9, p. 2] suggests that we could define the goals of moral enhancement interventions in terms of a satiable requirement, such as reducing crime or even “elimination of wrongdoing”, and then makes the case that if we are to take this view then, in this context, this would be akin to a case of moral therapy. She explains that this is because the use of the endeavour towards such a goal “aims at eliminating pathologies or shortfalls from an appropriate threshold of compliance. This option will involve correcting those individuals with a deficit of empathy or an excess of aggression…” [9, p. 2].

Casal makes an interesting point, although one which in turn raises the question as to whether moral enhancement interventions could be regarded as therapeutic, rather than merely enhancing, in certain circumstances. In this paper, I will consider the idea that moral enhancement interventions could be medically indicated (as a treatment) in a more general sense than that suggested by Casal, and explore whether it could perhaps work in a more medical setting.¹

The question as to whether moral enhancement techniques could be medically indicated (and so therapeutic) is one that is important to consider as it could have far-reaching consequences. Regarding an intervention as a treatment or therapy in certain circumstances will raise new questions for that treatment regarding, for instance, its regulation, people’s access to it, as well as questions regarding consent, and when it is appropriate to offer the treatment.² I will address these in a little more detail later in the paper.³

The main objective of this paper is to attempt to answer the question of whether ‘moral enhancement interventions could be medically indicated’, and in consideration of this question, I briefly explore some of those consequences noted above. In order to answer the central question, I will first outline what is meant by the term ‘moral enhancement’ for our purposes, and also by the term ‘empathy’ as this is what would most likely be addressed in moral enhancement interventions [30]. From there, I will raise the question as to whether a deficit of empathy could be considered pathological, offering two possible cases for reference: Psychopathy, and the fictionalised disorder of Moral Deficiency Disorder. Thereafter I will note questions regarding medicalisation that could be raised as this juncture, before returning to the central question (whether moral enhancement interventions could be medically indicated) and commenting on the possible consequences and questions that could arise.

¹ To clarify: I will be using the terms ‘enhancement’ and ‘therapy’/‘treatment’ as shorthand for bioenhancement, biotherapy, and bio-treatment.
² I will use the terms treatment and therapy interchangeably in this context.
³ It is not the purpose of this paper to dwell on these issues; however it is important to acknowledge the consequences of considering moral enhancement interventions as therapeutic (within certain contexts).
Defining Moral Enhancement and Empathy

It would perhaps be prudent to clarify now what is meant by the term ‘moral enhancement’ for our purposes, as there are of course numerous accounts which offer suggestions as to what the endeavour could involve. Some of the most prominent voices in this discussion are Harris [17], who favours a cognition-centred approach to moral enhancement, Persson and Savulescu [30] who argue that the endeavour involves an increase in levels of empathy, and Douglas [14], who argues that moral enhancement interventions are those which would attenuate counter-moral emotions. In this paper, I will use the account of moral enhancement offered by Persson and Savulescu: that moral enhancement inventions are those which increase levels of empathy.

If moral enhancement involves increasing levels of empathy, as Persson and Savulescu suggest, then it would be reasonable to assume that a deficit of empathy would be the thing that moral therapy interventions would address. I will return to this assertion in the sections that follow, but first, given the discussion at hand it would be prudent to question what is meant when we speak of empathy. Perhaps surprisingly, this question is not as easily answered as one might expect, for as Hodges and Klein note: “There are almost as many definitions of empathy as there are researchers who have studied the topic” [18, p. 438]. Due to space constraints, I will focus my attention principally on the definition of empathy presented by Persson and Savulescu and Simon Baron-Cohen.

Persson and Savulescu define empathy as “a capacity to imagine vividly what it would be like to be another, to think, perceive, and feel as they do” [30, p. 111], as such—they argue—it has no motivational component. Rather, empathy in this sense is simply a component of altruism, which in turn has the motivational component of sympathetic concern for the feelings and well-being of others. But Persson and Savulescu note later that the term could also be used in an extended sense, “such that empathy includes sympathy or a concern for the well-being of others, not merely imagining what the experiential state of another is like” [30, p. 116].

They note further that it is in this extended sense that the term is used by Baron Cohen, whose definition of empathy progresses in a similar way to that of Persson and Savulescu. Baron-Cohen begins his definition of empathy by stating that:

Empathy occurs when we suspend our single-minded focus of attention, and instead adopt a double-minded focus of attention. ‘Single-minded’ attention means we are thinking only about our own mind, our current thoughts or perceptions. ‘Double-minded’ attention means we are keeping in mind someone else’s mind, at the very same time…. When empathy is switched off, we think only about our own interests. When empathy is switched on, we focus on other people’s interests too [3, p. 10].

Baron-Cohen then goes on to extend his definition of empathy:

Empathy is our ability to identify what someone else is thinking or feeling, and to respond to their thoughts and feelings with an appropriate emotion.
This suggests there are at least two stages in empathy: recognition and response. Both are needed, since if you have the former without the latter you haven’t empathised at all… Empathy therefore requires not only that you can identify another person’s feelings and thoughts, but that you respond to these with an appropriate emotion too [3, p. 11].

It is in this second part of Baron-Cohen’s definition that the motivational component of empathy becomes apparent—and it is this extended definition, nodded to by Persson and Savulescu and explicitly defined by Baron-Cohen, that will serve as the working definition of empathy for this paper.

Persson and Savulescu [30] argue further that moral enhancement is required in order to prevent mankind from bringing about an instance of ultimate harm; as they put it: “a heightened moral sensitivity is necessary to reverse this descent of humanity down a spiral of ever-increasing existential risks” [29, p. 666]. For this reason then, the endeavour could be said to be beneficial for all concerned. Further, even if considered in less dramatic terms, the benefits of living in a society which has been morally enhanced could quite easily be imagined, for as Jebari [20] notes: “empathetic people avoid harming others, are more willing to cooperate with strangers, and are more willing to benefit others”.

It is important to note that unlike in the cases other enhancements of, for example, cognition, memory, strength, etc., moral enhancement interventions do not immediately appear to confer benefits to the enhanced individual directly. If one is a part of a morally enhanced society then the benefits of the endeavour are clear, but on an individual level they may not be so apparent. This is particularly problematic for our purposes as those for whom moral enhancement interventions may be considered medically indicated might be disinclined to undergo the treatment as they could be unlikely to see a benefit for themselves in doing so, especially if they already consider their deficit of empathy to be an advantage in their day-to-day lives. This assertion could in part be argued from common sense: if a person’s life is made easier by their reduced experience of empathy, then they might not see an enhancement of that trait to be a sensible course of action. This point is alluded to by Kevin Dutton, who found that many surgeons scored highly on tests used to identify psychopaths; he noted:

The most important thing when you’re conducting a dangerous operation, a risky operation, is you’ve got to be very cool under pressure, you’ve got to be focused. You can’t have too much empathy for the person that you’re operating on, because you wouldn’t be able to conduct that operation [35, p. 374].

It would not then be a great leap to imagine that those whose lack of empathy benefits their (for example) career in business, medicine, finance, or indeed crime might be less-than-enthusiastic about the idea of having their levels of empathy increased and risking losing that edge. Further, writers such as Baron-Cohen [3] and

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4 Understanding empathy in this extended sense is not without its critics, in particular Coplan [12]; however this extended account of empathy is widely used in the literature in any case (as Coplan acknowledges).
Hodges and Klein [18] have noted that maintaining even slightly above-average levels of empathy can prove emotionally costly and exhausting, and so perhaps this fact might make moral therapy again appear a less-than-desirable option to those who we might consider to need it.

So then, if a deficit of empathy can be seen as pathological (and so moral enhancement interventions could be medically indicated in such instances), much would centre on whether people with that disorder considered themselves as being harmed by having it—and so therefore whether treatment would be seen as a benefit or a burden.

Casal believes that people would consider moral therapy to be a benefit; as she puts it:

…if we see moral compliance as a benefit, and lacking empathy or becoming a criminal as personal misfortunes, those who need biotherapy to become as good as others also have a complaint if biotherapy is denied to them, thereby depriving them of what others have. There are thus also egalitarian arguments in support of moral biotherapy… [9, p. 3].

This being said, it is not entirely clear how people would feel about their lack of empathy and, in turn, moral therapy. It could be that Casal is correct and that therapy would be seen as beneficial by the person that we would consider in need of it; or indeed it could be the case that those with lower levels of empathy would see any attempt to correct that as a burden, something which they would much rather avoid.

However, there could perhaps be claims made that treatment could still benefit such people directly, in addition to the indirect advantages already mentioned. This is because, if an increased level of empathy were to lead to a reduction in wrongdoing (as would of course be a desired (if not expected) outcome), then this in turn would mean that the person in whom the endeavour was medically indicated would be less likely to engage in activities that could result in consequences that would be undesirable for her in particular. This could involve being subject to legal retributivism tactics such as fines, community service, or jail time, or indeed (perhaps more sinisterly) becoming the victim of consequences outside of the law (for instance, gang related-violence, bar fights, assault, etc.). And so while the advantages of accepting moral enhancement interventions as treatment might not be immediately clear to the individual in whom it may be medically indicated, it is not the case that the endeavour would be without benefit for her.

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5 As I shall argue in the sections to follow.

6 Further, there could also be concerns regarding a loss of identity; I do not have the space to discuss this issue here, however I have explored this in some detail previously [8].

7 Of course this is not to say that people without a deficit of empathy never find themselves in such situations, however it is reasonable to assume that aggressive people, and those who participate in criminal acts, are more likely to encounter such consequences with much more frequency than less aggressive people who do not.
Defining Treatment, Disease and Disorder

Before asking whether moral enhancement interventions could be considered treatments (in those circumstances where they would be medically indicated), it would perhaps be prudent to first clarify what is meant by the term ‘treatment’. Daniels defines treatment as “services or interventions meant to prevent or cure (or otherwise ameliorate) conditions that we view as diseases” [13, p. 309]. So then in order to answer the question as to whether moral enhancement techniques could, in certain contexts, be considered therapeutic, one would have to demonstrate that there existed something—some disease or disorder—for which moral enhancement interventions would be considered a treatment; a matter I will return to later. However, as Resnik [31] notes, there is no single, agreed-upon definition of health from which we can derive our understanding of ‘disease’. He explains that there are two basic approaches to the definition of health: the value-neutral (descriptive) approach, and the value-laden (normative) approach.

The value neutral approach considers health to be an empirical, descriptive concept which is based on factual information about human biology and normal human functioning. Arguably the best-known, most influential account of this approach to health comes from Boorse [7], who asserted that in this context the term ‘normal’ referred to species-typical: those traits that are statistically typical for members of that species to have. So then as Resnik explains: “a human with healthy lungs has specific respiratory capacities that are normal in our species... A human who lacks these capacities, such as someone with cystic fibrosis or emphysema, has a disease” [31, p. 366].

Meanwhile, the value-laden approach bases concepts of health and disease on societal, cultural, and even moral norms; so then a person that falls within such norms is considered healthy, whereas another person who does not is considered diseased. So then, as Resnik [31, p. 367] notes, a person who “deviates from species-typical functions could be considered healthy in a society that views that deviation as healthy”.

So it is not necessarily clear as to what constitutes health—nor, in turn, a disease—even in the realms of physical health; and it is unlikely to be much clearer when considering cases of mental health. This is thrown into sharp focus when we consider that there is little clarity or even agreement [28] with regards to what constitutes a mental (as opposed to physical) disorder.

In English law the answer to this question remains unclear: the only definition of mental disorder offered in the Mental Health Act is extremely wide, defining it simply as meaning “any disorder or disability of the mind” [26].

Even the Diagnostic and Statistical Manual of Mental Disorders (DSM), which provides standard criteria for the classification of mental disorders, precedes its own

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8 This in turn could raise the question of what we could consider to be a disease; I shall consider this in a short while.

9 It is prudent to note that one could argue that even Boorse’s account involves some normative judgement, as departure from species typical functioning is considered undesirable; however, this is beside the point for our purposes. (I am grateful to the anonymous reviewer for bringing this to my attention).
description by admitting that no definition of ‘mental disorder’ adequately encapsulates the complexity of the concept. This is particularly clearly noted in DSM-IV:

Although this manual provides a classification of mental disorders, it must be admitted that no definition adequately specifies precise boundaries for the concept of mental disorder... Mental disorders have... been defined by a variety of concepts (e.g. distress, dyscontrol, disadvantage, disability, inflexibility, irrationality, syndromal pattern, etiology, and statistical deviation). Each is a useful indicator for a mental disorder, but none is equivalent to the concept, and different situations call for different definitions [as cited in 6, p. 165].

This is echoed in the most recent edition of the text, DSM-5, which states that “no definition can capture all aspects of all disorders in the range contained in DSM-5” [2, p. 20]. Despite this, both DSM-IV and DSM-5 do still offer an attempt at a definition of mental disorder, with the aforementioned disclaimers in mind:

A mental disorder is a syndrome characterised by clinically significant disturbance in an individual’s cognition, emotion regulation, or behaviour that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning. Mental disorders are usually associated with significant distress or disability in social, occupational, or other important activities. An expectable or culturally approved response to a common stressor or loss, such as the death of a loved one, is not a mental disorder. Socially deviant behaviour (e.g. political, religious, or sexual) and conflicts that are primarily between the individual and society are not mental disorders unless the deviance or conflict results from a dysfunction in the individual as described above [2, p. 20].

Could a Deficiency of Empathy be Pathological?

So with the DSM-5 definition in mind, could a lack of empathy be considered a case of mental disorder? Perhaps so—given the neurological basis of empathy [27] it could be argued that a deficit of empathy could be demonstrative of “a dysfunction in the psychological, biological, or developmental processes underlying mental functioning” [2, p. 20]. Further, this deficit of empathy could affect moral decision-making and in turn behaviour—fulfilling two of the key criteria listed above for defining a mental disorder.

As a deficit of empathy could be considered a mental disorder under this definition—and as a deficit of empathy would most likely be treatable by increased levels of empathy—then we could consider any condition characterised by such a deficiency to be a candidate for treatment through moral enhancement techniques.

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10 This assertion is explored in more detail in the section on psychopathy.
So then, in such instances, moral enhancement interventions could indeed be medically indicated.

When considering whether such a condition could exist, one well-established disorder comes to mind: psychopathy; however the position that empathy lies at the core of this disorder is one that is somewhat disputed [23]. Nevertheless a condition characterised by a lack of empathy—that moral enhancement techniques could treat—could indeed exist, but is not currently classified among existing mental disorders.11

Later in this paper I will consider a hypothetical new condition: Moral Deficiency Disorder. This disorder would be characterised by a deficit of empathy and would principally be diagnosed in those individuals whose capacity for moral reasoning and action would benefit significantly from an increased level of empathy—that is, those for whom moral enhancement interventions would be medically indicated and considered a treatment.

In the sections that follow, I will consider these possible candidates for treatment by moral enhancement techniques—psychopathy and Moral Deficiency Disorder—in turn.

**Psychopathy**

Lockwood et al. [22, p. 1] note that: “Psychopathy is a disorder characterized by a lack of empathy, shallow affect, and manipulation of others for own gain”.

On this view of psychopathy as a condition with a lack of empathy at its very core, it would make sense to put forward moral enhancement interventions as a treatment (thus making it an instance of moral therapy). For if an increase in the levels of empathy in a psychopathic individual would cure that psychopathy, or at the very least temper the symptoms thereof, it then seems reasonable to consider the endeavour to have a therapeutic effect in this instance. However, the position that empathy is at the core of psychopathy is not without its critics.

One such critic is Maibom, who argues that the way that empathy is measured is flawed, with heavy reliance on self-reporting which is open to issues such as social desirability and stereotyping. For example, Maibom [23] notes that studies have shown that women who are aware of being observed tend to score as having higher levels of empathy than in studies where they are unaware of being observed (in these cases, women and men demonstrate equal levels of empathy). Glenn et al. [15] note as well that the issues surrounding the use of self-report methods are compounded by the fact that psychopaths tend towards dishonesty. Given our “blunt tools” for measuring empathy, Maibom [23, pp. 98–99] asserts: “This means that there is little support for theories linking psychopathic immorality directly to emotions that are usually regarded to be moral emotions, such as empathy and sympathy”.

A study by Blair [4], however, suggests that there is something missing in psychopathic moral decision-making and that thing does seem to be, if not empathy,

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11 This is noted as well by Simon Baron-Cohen [3, pp. 107–110].
then certainly something closely related. Blair tested preschool children to see whether they could distinguish between social conventions (e.g. wearing outdoor clothes indoors) and moral rules (e.g. hitting another pupil); he found that the children saw moral transgressions as more serious than social ones. Further, when asked to explain why an action was wrong, children said “those are the rules” in regards to social conventions, but when speaking of moral rules the children made reference to the wellbeing of others. Finally, when asked whether they would consider an action to be acceptable if their teacher (or other authority figure) had permitted it, the children agreed that the acceptability of social conventions could be altered in this way, but disagreed that this could be the case in the instance of moral rules.

Blair then repeated the study but this time with incarcerated psychopaths (using an equivalent number of incarcerated nonpsychopaths as a control). Blair found that, unlike the children, the psychopaths did not consider moral transgressions to be more serious than those against social conventions (or vice versa). Also, when asked to explain why an action was wrong the psychopaths made reference to “the rules” for both moral and social transgressions and did not seem to consider the welfare of others in their reasoning. These findings have since been replicated with a larger number of respondents.

That the psychopaths did not make reference to the welfare of others in their reasoning does then seem to suggest that empathy may indeed be at the heart of their condition. As Adshead puts it: “Psychopaths demonstrate failure/lapses in moral reasoning when they harm others; psychopaths have emotional deficits; ergo emotional deficits are relevant to failures in moral reasoning” [1, p. 119]. But is that deficient emotion empathy? It is noted [1, 23] that psychopaths also have a dramatically reduced experience of fear compared to non-psychopaths; this is certainly something which could go some way to explain their reduced sensitivity to the threat of punishment for wrongdoing [15] (especially if the act in question involves a reward), but it seems less clear that this could be the missing factor in their inability to reason morally. As Adshead notes: “Empathy is relevant to moral reasoning and makes explicit the role of personal emotional experience in moral decision making” [1, p. 120].

I do not have the space to question and consider the role played by this deficit of fear in the psychopaths’ inability to reason morally in the depth that it deserves, but this does at least demonstrate that the view that empathy is at the heart of this condition is not without its critics and questions. Consequently the idea that moral enhancement techniques could be used to treat psychopaths might well be supported by many, but it would not be uncontroversial, and given the controversy surrounding the role of empathy in psychopathy, it may be worth putting the issue to one side for now. It is therefore necessary to explore whether there could be an alternative approach to the matter at hand.

Although, interestingly, the psychopaths did seem to consider both social conventions and moral rules to be authority-independent; that is that even if a figure of authority were to permit that action, it would still in actuality be wrong to perform it—although Blair seemed to dismiss this as the psychopathic inmates hoping to show that they had reformed and “learned the rules” rather than an actual assertion of belief.
Moral Deficiency Disorder

Imagine that we were to identify a group of individuals whose capacity for moral reasoning and action would benefit significantly from an increased level of empathy; such people could be said to suffer from—to give it a name—Moral Deficiency Disorder (or MDD), for which, moral enhancement techniques could clearly be considered appropriate treatment. Yet this hypothetical proposal is not without its problems.

First, it is not clear how we would identify those individuals who would be considered as suffering from MDD. At present, the typical method used to identify levels of empathy is by using fMRI to identify activity in specific areas of the brain. As Adshead notes: “Measures of empathy have been developed, and the neural basis of empathy is thought to involve a complex set of neural networks involving the limbic system, hippocampus, and orbital frontal cortex” [1, p. 120]. But scanning the brains of an entire populace seems an excessive (as well as costly) undertaking, so the question could be raised: when would it be appropriate to test for MDD?

As noted earlier in the paper, a diagnosis for a mental disorder characterised by a lack of empathy would likely be reliant on those with such a deficiency displaying certain behaviours as a result of that deficit. So then it may be the case that one might consider focusing our attention on providing moral enhancement techniques as treatment for those who show a deficiency of empathy. And as it seems a sensible course of action to deal with the condition early so as to hopefully reduce (or indeed remove) the risk of harm to others in the future, a case could therefore be made for turning our attention to children whose behaviour is symptomatic of a deficit of empathy. However, targeting children in this manner is problematic, as it isn’t clear whether a certain child will retain this deficiency into adulthood, or whether she will simply grow out of it. As Seifert [34] notes: “Some of the traits seen in a psychopath—such as lack of empathy, little or no social respect, and disregard for moral boundaries—are the same traits seen during infancy and very early childhood”.13 So diagnosing MDD in children would be an inexact science and would likely cause serious issues as regards informed consent, given that we would likely be unable to tell whether the child’s empathy deficiency is a marker for a long-term condition, or simply a sign of the child developing at a slightly different rate. Further, the concern could be raised that the label provided by an MDD diagnosis could be considered rather stigmatising; this is particularly problematic in the context of childhood diagnoses of MDD, as this would be conferring a stigmatising label at an early age.14

This is not necessarily to say that children exhibiting behaviour symptomatic of MDD should be ignored unless that behaviour continues into adulthood, but it is important to note those practical and ethical issues involved in treating minors in

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13 I will concede that this assertion does seem to contradict the findings of Blair noted above. Unfortunately I do not have the space to explore this issue further, but I would still be inclined to argue that diagnosing children with MDD would most likely be an inexact science due to the nature of childhood development more generally.

14 I am grateful to the anonymous reviewer for bringing this point to my attention.
such a situation. Perhaps the best that we could do in such cases would be to monitor
the children in question in the hope of being able to offer treatment at a later stage
should the symptoms of MDD persist into their adult years.\textsuperscript{15}

Unfortunately, treating adults with an empathy deficiency would be fraught with
practical and ethical problems as well. First of all, as noted at the start of this
section, it would be impractical to attempt to scan the brains of all adults in a given
populace in the hope of locating those with a deficit of empathy, and so we would
have to target particular persons in order to use this method efficiently. Following
the above discussion, the clearest group of candidates would of course be those
people who exhibited behaviour indicative of a deficit of empathy throughout their
childhoods and who continue to do so into adulthood. Another group of candidates
could perhaps be offenders; there may of course be some overlap between this group
and those whose behaviour in childhood (continuing into adulthood) indicates a
deficit of empathy.

Such targeting raises issues of its own—in the case of offenders, for instance,
there may be concerns regarding coercion, even if their consent seems to be freely
given.\textsuperscript{16} Furthermore, it is not entirely clear that people with MDD would be
inclined to undergo moral enhancement interventions in any instance, despite the
benefits that it might provide.\textsuperscript{17} This is not to say that offenders, and indeed adults
generally, identified as having MDD would invariably refuse to undergo moral
enhancement interventions as treatment, but it is important to acknowledge that the
voluntary uptake of that treatment might not be very high.\textsuperscript{18}

While it is therefore unclear that a targeted approach would prove effective in
either diagnosing MDD or providing moral enhancement interventions as therapies
to those that have it, this does not diminish the fact that moral enhancement
technologies could, in principle, constitute a treatment for such a condition.

This widening and shifting of medical definitions to allow for a wider range of
diagnoses—based on new information or, as in this case, new possible treatments –
could perhaps be an instance of medicalisation. As Peter Conrad writes:

Virtually any human difference is susceptible to being considered a form of
pathology, a diagnosable disorder, and subject to medical intervention. As
Nancy Press notes, “Medicalisation pathologises what might otherwise be
considered as simply variations in normal human functioning” [11, p. 148].

In the section that follows, I will explain what is meant by medicalisation, and
also briefly consider whether the introduction of something such as Moral
Deficiency Disorder would constitute an instance of medicalisation for social
control.

\textsuperscript{15} If we were to find a genetic marker which indicated a lack or deficit of empathy, then this could go a
long way to assisting us in diagnosing MDD in both children and adults; however it is beyond the scope
of this paper to explore this idea (and its related ethical concerns) in sufficient depth.

\textsuperscript{16} This issue is explored in some detail in [24].

\textsuperscript{17} As noted in the section on defining moral enhancement and empathy.

\textsuperscript{18} I explore this briefly in [8].
Medicalisation

Conrad [10, p. 211] defines medicalisation as consisting of “defining a problem in medical terms, using medical language to describe a problem, adopting a medical framework to understand a problem, or using a medical intervention to “treat” it”. Medicalisation can also involve the widening of diagnostic criteria for already-established illnesses or disorders, in turn increasing the number of diagnoses for that condition [11].

Schermer notes that an important factor in the process of medicalisation is the availability of treatment (or at least relevant medication). Discussing her research into ADHD, she writes:

Interestingly, one of the most important reasons our respondents gave for considering ADHD a disorder was the fact that there was medication for it: “Well, because there is medication for it so, yes, then I think you really have something. Because you would not take medication for nothing,” said one respondent. Having a disorder legitimised the use of medication (‘you would not use it for nothing’) but at the same time, medication itself functions as a proof for the existence of a disorder [33, p. 33].

She notes further that this circular reasoning is also found in experts: “a positive reaction to a trial of psycho-stimulant medication is often considered to be confirmation of the diagnosis… If a trait or function can be improved, it must have been defective before, this type of reasoning suggests” [33, p. 33–34].

This way of thinking could clearly be attributed to the use of moral enhancement interventions as treatments for Moral Deficiency Disorder. That is, there is a medication (moral enhancement interventions) that can improve a function (empathy-based moral reasoning/action) therefore “it must have been defective before”.

One could therefore be concerned that medicalisation is linked to the pharmaceutical industry. For instance, reporting a conversation with Bob Hare—inventor of the Psychopathy Checklist diagnostic tool (wherein a score of 30+ prompts a diagnosis of psychopathy)—journalist Jon Ronson notes the psychiatrist’s concern that the diagnostic goalposts would change if a treatment for psychopathy were discovered:

‘Sure,’ Bob said, ‘over-labelling occurs. But it’s being perpetrated by the drug companies. Just wait and see what happens when they develop a drug for psychopathy. The threshold’s going to go down, to twenty-five, twenty…’ [32, p. 283].

The view that medicalisation is linked to the pharmaceutical industry is not, however, one that is shared universally; Conrad seems particularly sceptical of this view. He notes that:

…in virtually all studies where they were considered, the corporate players in medicalisation were deemed secondary to professionals, patient movements,
or other claim-makers. By and large, the pharmaceutical and insurance industries were not central to the analyses [11, p. 10].

Rather, he asserts that there are many areas from which medicalisation can emerge—but focuses on an area which seems particularly relevant for our purposes: medicalisation of deviance to provide medical social control.

A rather extreme example of medicalisation for the purposes of social control that comes to mind is Drapetomania [36]—the mental illness that a slave was said to have if she had a tendency to try to escape from her master. This is a clear example of the use of medical definitions as a tool for maintaining society in a certain way. Given that no such extreme19 examples remain, one could be forgiven for thinking that medicalisation for social control was no longer an issue. However, Bolton notes that we can still see the use of medicalisation—particularly in the domain of psychology—as a means of social control, especially in those cases where the patient is reluctantly brought to the attention of medical professionals as opposed to having presented himself freely. As he puts it:

Focus on the individual best fits the traditional doctor-patient model in physical medicine: a patient in distress presents themself and seeks treatment. The other kind of case, in which an individual is brought by others, the reluctant patient with no complaints of their own, is a more problematic fit with the medical model, apparently suiting more the construal of psychiatry as a form of social control [6, p. 229].

There is an attempt to defend against the use of classifications of disorder (specifically those of a psychological nature) for the purposes of social control in DSM-5:

“Socially deviant behaviour (e.g. political, religious, or sexual) and conflicts that are primarily between the individual and society are not mental disorders unless the deviance or conflict results from a dysfunction in the individual as described above” [2, p. 20].

Whilst this does seem to protect against wildly specific mental illnesses such as Drapetomania being invented solely as a means of social control, it could, however, perhaps still leave us open to more complicated questions. To illustrate this, I will briefly consider whether Moral Deficiency Disorder could be considered an example of medicalisation for the purposes of social control.

Moral Deficiency Disorder (or MDD) is characterised by a deficit of a specific emotion—empathy—that can impact on behaviour and also moral decision-making (an area of cognition). As such, it could be considered a mental disorder under the DSM-5 definition, regardless of its impact on society. But, as already noted, for those who have the disorder, MDD might prove not to be a burden or problem in their lives as a whole; indeed it might actually help those with the disorder to live the life that they want, unburdened by concern for others. So even if we do consider MDD to be a legitimate mental disorder, there is a chance that treatment would

19 Although it is doubtful this was considered as such when it was in common usage.
more likely be pursued for the benefit of society than for the benefit of the person with the disorder. If such an assertion is correct, this would of course raise important questions regarding the acceptability of such a practice; not least due to the implications that this could have for autonomy and consent. However, as already noted in an earlier section, there are benefits, both direct and indirect, to be gained from the intervention, so the concern may in fact be unfounded. Unfortunately I do not have the space here to consider this in the depth that it deserves, but it is worth acknowledging that using moral enhancement interventions as therapy could open the door to considerable criticism.

Consequences of Moral Enhancement Interventions as Therapy

To return to the focus of this paper, it therefore seems that moral enhancement interventions could be medically indicated. I have demonstrated that a deficit of empathy could be considered pathological, and, further, as moral enhancement interventions would increase levels of empathy, it is reasonable to suggest that these interventions would, in such instances, constitute a therapy or treatment.

Therefore the question could be raised as to what consequences would arise if moral enhancement interventions were medically indicated, and so considered therapeutic. As answering this new question is not the purpose of this paper, I will consider it only briefly, but it is still a very relevant question given the assertion above.

As noted at the start of this paper, considering moral enhancement interventions as treatments could raise questions regarding concerns such as regulation, access, consent, and even when to intervene. Regulation would become an issue here, as treatments would most likely be regulated differently to enhancements when the latter comes into public use more readily [19]. A related issue is that of access to moral enhancement or indeed therapy interventions. If moral enhancement interventions were to be considered therapeutic under certain circumstances, access to those interventions (as therapies) could be dramatically altered; for instance, it might be readily available as a therapy but not as an enhancement. An example of such a policy in action can be seen in case of Ritalin (methylphenidate). Ritalin is prescribed as a treatment for ADHD but is considered an illegal substance (a class B drug) [16] for those without the condition who wish to take it as an enhancement to aid concentration.

The psychological nature of the disorders which moral enhancement interventions would most likely treat means that questions regarding consent could be raised in considering moral enhancement interventions as therapeutic, as mental health treatment is, of course, the only context within which otherwise competent adults can be treated without their consent under certain circumstances [25].

And finally, as noted above, there will of course be the need to raise questions with regards to when it is appropriate to intervene with moral therapy: during childhood, when questions regarding development and informed consent come to

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20 This issue was explored in a report by BBC News in 2008 [21].
the fore, or perhaps for adults with low empathy? Or is intervention more appropriate in the case of offenders? But here as well there are problems regarding free consent and indeed the fact that people may simply be uninterested in undergoing moral enhancement techniques, even if, in their case, they would be therapeutic.

**Conclusion**

I have explored how a lack of empathy could be considered pathological and so something that would treat this deficiency—in this case, moral enhancement techniques—could indeed be considered medically indicated, and so a treatment. This assertion, however, raises a number of ethical concerns—as we have seen. Questions regarding the medicalisation of morality (by way of medical social control) come to the fore, as do other concerns regarding regulation and consent among others.

Considering moral enhancement interventions as medically indicated (and therefore therapeutic) in some instances therefore opens up the field to many other questions and areas of debate. It was not my intention to consider these questions and issues in this paper, but given that I have shown that moral enhancement interventions could be medically indicated, there is now space in the literature for these areas to be explored in this new context.

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**References**


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21 As was my intention in this paper.