

## PAPER

## Voluntary moral enhancement and the survival-at-any-cost bias

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► Additional material is published online only. To view please visit the journal online (<http://dx.doi.org/10.1136/medethics-2012-100700>).

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Received 27 March 2012  
Revised 17 December 2012  
Accepted 7 January 2013  
Published Online First  
14 February 2013

**ABSTRACT**

I discuss the argument of Persson and Savulescu that moral enhancement ought to accompany cognitive enhancement, as well as briefly addressing critiques of this argument, notably by John Harris. I argue that Harris, who believes that cognitive enhancement is largely sufficient for making us behave more morally, might be disposing too easily of the great quandary of our moral existence: the gap between what we do and what we believe is morally right to do. In that regard, Persson and Savulescu's position has the potential to offer more. However, I question Persson and Savulescu's proposal of compulsory moral enhancement (a conception they used to promote), proposing the alternative of voluntary moral enhancement.

**MORAL ENHANCEMENT AS A COMPANION TO COGNITIVE ENHANCEMENT**

Proponents of cognitive bioenhancement who combine their utilitarianism with a libertarian attitude believe that enhancement increases our freedom for two reasons. First, it augments the options open to people by adding the possible choice of undergoing enhancement. Second, the enhancement itself increases freedom: it enables us to become more successful and hence amplifying the opportunities we obtain throughout our lives.

Nevertheless, even if we accept that enhancement increases freedom, that it 'expresses the human spirit' and that 'to be human is to be better' (p. 531),<sup>1</sup> the question that remains unanswered is whether ordinary people has the moral ability to enhance themselves, above all cognitively. And if they do not have such ability, should they seek a solution in moral bioenhancement?

Douglas<sup>2</sup> considers moral bioenhancement to be permissible. He focuses on motives, defining moral enhancement (ME) as follows:

A person morally enhances herself if she alters herself in a way that may reasonably be expected to result in her having morally better future motives, taken in sum, than she would otherwise have had (p. 229).<sup>2</sup>

Douglas tentatively suggests that examples of ME might include, in some individuals, a reduction of dislike of certain racial groups as well as lessening of impulsive violent aggression. Thus, ME would lead people who choose to undergo it to have better motives than they would otherwise have had (p. 231).<sup>2</sup> Douglas refers to a number of relevant findings: oxytocin has been shown to promote

trust,<sup>1</sup> serotonin (and selective serotonin reuptake inhibitors (SSRIs)) to increase cooperation and reduce aggression,<sup>ii</sup> while methylphenidate (Ritalin) reduces violent belligerence. Furthermore, there may be a biological basis for some personality types that tend to immoral conduct: antisocial personality disorder may have biological underpinnings, and criminality has been related to MAO mutation on the X chromosome when coupled with social deprivation (p. 233).<sup>2</sup> None of these findings show that we already have reliable means of achieving moral bioenhancement, but they do suggest the possibility of further advances.<sup>iii</sup>

The biological underpinnings of morality are also suggested by the finding that identical twins who have been brought up separately exhibit similar responses in 'ultimatum games'. These games feature in economic experiments in which two players have to decide how to divide a sum of money. Player A proposes how to divide this sum between her and Player B. The latter can say 'yes' or turn down the proposal. In the case that Player

<sup>i</sup>For substantiations of oxytocin stimulating trusting behaviour in games of cooperation, see Kosfeld *et al.*<sup>3</sup> and Zak *et al.*<sup>4</sup> For evidence of oxytocin's effects on trusting and additional forms of prosocial behaviour towards others being sensitive to the group membership of these others, see De Dreu.<sup>5,6</sup>

<sup>ii</sup>For an illustrative analysis of the role of the neurotransmitter serotonin, it is always good to take a look at Crockett's experiment.<sup>7</sup> Serotonin turns out to directly alter moral judgement and behaviour through increasing our aversion to personally harming others. Hence, it has the capacity of enhancing us morally. In Crockett's trial, the level of serotonin in healthy volunteers was increased with an SSRI. The effects of this drug on moral judgement were measured in a set of moral 'dilemmas', contrasting utilitarian outcomes (eg, saving five lives) to extremely aversive harmful actions (eg, killing an innocent human being). Individuals whose serotonin levels were increased by the SSRI turned out to be more likely to judge harmful actions as unacceptable, but only in cases in which harms were emotionally laden (p. 17 433).<sup>7</sup> Tse and Bond<sup>8</sup> made subjects participate in the 'dictator game'. In this game, an individual (the 'dictator') divides a sum of money between her and another participant. It turned out that those subjects to whom an SSRI was administered divided the sum more fairly than control subjects. Crockett's findings and the dictator game results have sparked various reactions and follow-up considerations. It is outside the scope of my argument to go into them. For the purposes of this paper, it suffices to suggest that heightened serotonin levels have an impact on the morality of our behaviour.

<sup>iii</sup> For this interpretation of Tom Douglas, see Rakić<sup>9</sup> (p. 118). For a concise review of various forms of moral bioenhancement (with useful references), see Savulescu and Persson.<sup>10</sup>



► <http://dx.doi.org/10.1136/medethics-2013-101423>

**To cite:** Rakić V. *J Med Ethics* 2014;**40**:246–250.

B opts to decline, neither player receives anything. If Player B accepts the proposal, the money is divided according to the proposal. Reactions to 'unfair offers' (anything other than a 50–50 split) vary, but the similarity of the responses in the study on monozygotic twins who have been brought up separately appears to support the hypothesis that genetic variation can affect reactions to 'unfair offers'.<sup>iv</sup>

Persson and Savulescu are also sensitive to the biological underpinnings of morality and are favourably disposed to the possibilities of moral bioenhancement. They argue that ME ought to be included with other types of enhancement in order to reduce the risks of death and disaster:

For if an increasing percentage of us acquires the power to destroy a large number of us, it is enough if very few of us are malevolent or vicious enough to use this power for all of us to run an unacceptable increase of the risk of death and disaster. To eliminate this risk, cognitive enhancement would have to be accompanied by a moral enhancement which extends to *all* of us, since such moral enhancement could reduce malevolence (p. 166).<sup>11</sup>

ME has to be related to our *motivation* to act morally (p. 167).<sup>11</sup> The steady decrease of racism through our evolution Persson and Savulescu forward as an example of ME that is shaped by our motivation: the biological significance of racial dissimilarity to indicate a lack of relationship by marking off strangers from our kin has been gradually becoming less relevant, allowing us to understand the moral incongruity of racism (p. 168).<sup>11</sup> As moral traits are not socially constructed, but have biological underpinnings (p. 168),<sup>11</sup> Persson and Savulescu conclude that cognitive enhancement (CE) is to be kept under control by serious research into the biological basis of our morality. Going one step further than Douglas, they argued that developing and implementing effective and safe forms of ME are our duty, and they ought to be mandatory.

At the very least, the perils of cognitive enhancement require a vigorous research program on understanding the biological underpinnings of moral behavior.....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. That is, safe, effective moral enhancement would be compulsory (p. 174).<sup>11</sup>

In a more recent paper, Persson and Savulescu continue to develop their argument along the same lines.<sup>vii</sup> They diagnosed a mismatch between a limited human moral nature and a globalised, highly sophisticated technology. As the progress of scientific technology has been steadily increasing, the human capacity to cause harm has reached the stage at which life on Earth might be annihilated or *forever* cease to be worthwhile. The authors call this scenario 'ultimate harm' (UH). The source of the problem is that human moral psychology is 'myopic': it has been adapted to life in small, cohesive societies with primitive technology, while it is unprepared for the moral challenges of a technologically advanced global society. Moreover, humans suffer from various biases that incapacitate them to face contemporary moral challenges—for example, they are biased towards

the near future (another symptom of 'moral myopia'), they believe in the appropriateness of 'parochial altruism' (ie, altruism extending only to kin and to people we are personally acquainted with) and the 'act-omission doctrine' (which implies that it is morally less objectionable to omit benefit than to harm) and they are incapable of feeling proportionate sympathy with larger numbers of sufferers. Hence, humans are in need of ME. For a detailed account of the causes and consequences of our moral biases and the need for ME that follows from them, see Persson and Savulescu's *Unfit for the Future*.<sup>13</sup> (But do note that in *Unfit for the Future*, Persson and Savulescu diverge from their earlier position in no longer insisting on making ME compulsory.<sup>vi</sup>)

Fenton<sup>14</sup> and Harris<sup>15</sup> criticise Persson and Savulescu.<sup>11</sup> Fenton claims that if ME is to occur at the level of our biology, non-traditional CE is a requisite. Hence, if scientific research into enhancement is aborted, we will not be able to progress morally to the extent that ensures the survival of humankind. In other words, the argumentation of Persson and Savulescu apparently leads us to a paradoxical predicament: 'scientific progress is both the means of our salvation, as well as the means of our downfall' (p. 148).<sup>14 vii</sup>

Harris also asserts that ME must consist largely of CE, and the latter is not to be delayed in expectation of the former (p. 106).<sup>15</sup> Such a delay would postpone scientific development, as well as impose limitations on our freedom, including the 'freedom to fall'. Moreover, much of the destruction humanity has exposed itself to in its history (or will expose itself to in the future) is not to be attributed to wickedness and can thus be not successfully addressed by ME. It is rather the result of various cognitive shortcomings (eg, prejudices and 'idiocy'). Harris believes that we ought to deal with prejudices by combining rationality and education, while new types of CE will also be helpful in the future (p. 105).<sup>15</sup> He also makes a weighty observation about the gap between how we act and how we believe is right to act:

The space between knowing the good and doing the good is a region entirely inhabited by freedom ... We know how lamentably bad we are at doing what we know we should (p. 104).<sup>15</sup>

Persson and Savulescu argue against Harris in several ways.<sup>17</sup> Where the issue of freedom is concerned, they do it in the following manner. Suppose, they say, that our freedom is compatible with it being fully determined by us acting in accordance with what we believe is right to do. In that case, a proper use of moral bioenhancement techniques will not reduce our freedom. It will simply make us always or almost always act as we believe we ought to act. Suppose, on the other hand, they continue, that we are free only because, by nature, we are not fully determined to do what we believe is right to do. In that case, moral bioenhancement cannot be truly effective, because our freedom in this non-deterministic sense limits its effectiveness. In other words, no matter whether we accept determinism or

<sup>iv</sup>It is, however, open to debate whether an increased rate of rejection of unfair offers in ultimatum games is to be interpreted as an expression of a more developed sense of fairness or possibly of an increased aversion to harming others (as Crockett's findings would suggest).

<sup>v</sup>For a related interpretation of their argument, see Rakić<sup>9</sup> (p. 119).

<sup>vi</sup>Until recently, Persson and Savulescu have been arguing in favour of compulsory moral enhancement (as will be shown below), but in their newly published book *Unfit for the Future*, they do not take a stance on whether ME should be made mandatory. The position promoted in this paper, however, clearly insists upon leaving ME up to our free choice.

<sup>vii</sup>For a response to Fenton's argumentation, see Persson and Savulescu.<sup>16</sup>

indeterminism in the realm of human action, moral bioenhancement will not limit our freedom.<sup>viii</sup>

In fact, Persson and Savulescu appear to argue that moral bioenhancement will not encroach upon our freedom, because we:

- ▶ either lack a completely free will, and moral bioenhancement will thus not make us lose our freedom
- ▶ or have a completely free will that limits the effectiveness of moral bioenhancement.

But they do not take into account the possibility that we can have an entirely free will that does not limit the effectiveness of moral bioenhancement. As a matter of fact, we can be morally enhanced in an effective manner without losing our freedom. 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 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. 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. In other words, voluntary moral enhancement (VME), even if brought about in an effective manner by medication, can make us act more morally while leaving our freedom intact.<sup>ix</sup>

Moreover, 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. As Savulescu and Persson rightly note, that would mean that women, who appear to be, by biological nature, more altruistic and less aggressive than men, are less free than men (p. 409).<sup>x</sup> Hence, ME that increases empathy and consequently altruism in people does not restrict their freedom: people who are morally good (no matter whether they are morally bioenhanced or not) and always try to do the right thing are not less free than the ones who are inclined to fail to do so. Still, by making ME *compulsory*, the state would indeed encroach upon the freedom of its citizens.

### VOLUNTARY MORAL ENHANCEMENT

Building upon the position of Persson and Savulescu, VME concedes that CE ought to be accompanied by ME if we wish to keep the likelihood of the obliteration of worthwhile life on Earth as low as possible. In what follows, I will first accentuate the relevance of the gap between how we act and how we believe we *ought* to act and show why Harris's position might have a difficulty in successfully addressing this gap. Next, I shall provide arguments in favour of VME as an alternative to the initial position of Persson and Savulescu that ME ought to be obligatory. I will also address the issue of whether we should expect a significant number of people to be sufficiently motivated to subject themselves to VME.

As I have argued earlier,<sup>9</sup> the gap between what we do and what we believe is right to do might well be the greatest

predicament of our existence as moral beings. The essential issue is not how to make us understand morality better but how to morally enhance our *actions*. It is motivation rather than cognition that is at the heart of the matter. Hence, the key problem of morality comes down to our motivation to act as we believe we should.

On the other hand, we have seen that Harris's thesis is that prejudices can best be countered by a combination of rationality and education. If these two countermeasures are applied successfully, our comprehension of morality will be enhanced. But the question is to what extent will it morally enhance our actions (in quantity and quality)? Will it make us less 'lamentably bad at doing what we know we should'? Are rationality and education going to have a critical impact on the problem of how to bring our actions in line with our understanding of morality? Since it is difficult to believe that the impact will be even close to decisive, additional means will have to be sought in order to make us *act* more morally (p. 120).<sup>9</sup> In other words, the conception that we will act morally, if we rationally give up on our prejudices, is an idea that might well be prejudiced itself: prejudice about prejudice.

One possible way to enhance the morality of our *actions* would be the administration of medication for ME. Hence, it might be some types of drugs, rather than rationality and education, which can have a favourable bearing on the enhancement of the morality of our conduct. They improve the morality of our deeds and not solely our comprehension of morality. If they have a direct impact on our motivations, they will lead to morally enhanced *behaviour* (p. 121).<sup>9</sup>

Harris is certainly right in claiming that defects in cognition drive some of our immoral behaviour. Garrett Jones observes that smarter groups are generally more patient and more perceptive, traits that are keys to cooperative behaviour (p. 496).<sup>20</sup> If these observations are correct, the implication is that intelligence is one of the drivers of moral behaviour. When we are more intelligent, we cooperate more and are less prone to violent conflict or to secretive actions; hence, we might be less inclined to certain types of immoral behaviour (p. 121–22).<sup>9</sup> Consequently, it is possible that enhanced intelligence might help us act more morally. We can improve our intelligence through better nourishment, healthier surroundings and better schooling in the world's most impoverished countries. In other words, traditional means of CE might indeed be important for ME. But they do not appear to be sufficient for two reasons:

- ▶ morality has certain biological underpinnings, which cannot be affected by traditional means of CE and
- ▶ traditional means of CE do not have a critical impact on us, bridging the gap between how we act and how we think is right to act.

*Ergo*: traditional types of CE, or any other type of CE for that matter, do not appear to be the solution to our immoral *behaviour*. ME is undeniably needed as a supplement to CE. But if ME is to become compulsory, as argued earlier by Persson and Savulescu, our freedom would obviously be restricted. VME, on the other hand, maintains that only voluntary enhancement will leave our autonomy intact. If we wish to diminish the danger of UH by restricting our freedom, we encroach upon a crucial element of our morality. If freedom is essential for our morality (ie, for us acting *intentionally* in a morally appropriate manner), and morality is a key element of us being 'human' (as Persson and Savulescu themselves argue when claiming that it is morality rather than biology that ensures us human status<sup>21</sup>), the implication is that making ME obligatory would deprive us, to some extent, of an important

<sup>viii</sup>For another reply to Harris's position that moral bioenhancement via the direct modulation of emotions would invariably come at an unacceptable cost to our freedom, see Douglas.<sup>18</sup>

<sup>ix</sup>For Harris's reply to Persson and Savulescu's rebuke, see Harris.<sup>19</sup>

part of our human existence. It is critical that we keep our freedom intact. If we fail to do that, we will dispossess ourselves of something that is vital for our human status and will have already embarked upon the path of inflicting serious (if not ultimate) harm upon ourselves. Hence, I argue in favour of voluntary instead of compulsory ME.<sup>x</sup>

We can never fully eliminate the possibility of self-annihilation. Nuclear, biotechnological and other weapons of mass destruction may end up in the hands of one or more deranged individuals who can inflict UH with them. A small number of psychopaths would be sufficient to bring that about. We have to learn to live with the idea that this harm will remain a possibility. Technological developments cannot and should not be reversed, no matter how intensely we fear that life can be extinguished on our planet and no matter how much we would like to eliminate that fear. A growth of the likelihood of UH from 0.05 to 0.1 might not noticeably influence the intensity of our worry, whereas its increase from 0 to 0.05 could horrify us. The reality of this horror is why Persson and Savulescu believe that we have to make sure that CE is accompanied by ME. Nonetheless, the probability of the annihilation of humankind will never be zero. Hence, we can only attempt to keep its likelihood to a minimum. But this attempt should fall short of compulsory ME.

Persson and Savulescu argue that the negative instrumental value of UH is *indefinitely* high because there is no way of telling how much of a net balance of goodness UH prevents, that is, how much of worthwhile life there would have been in the future had it not occurred. Moreover, we might well have overlooked some of the factors that contribute to the risk of UH. This makes it warranted, Persson and Savulescu argue, to demand that we try to minimise UH risk, whatever the expected gain of the alternatives might be—within realistic limits (p. 442).<sup>16</sup>

Indeed, it is impossible to know how much of a net balance of goodness UH prevents, but that does not imply that the instrumental value of UH is indefinitely high. It might as well imply that the negative instrumental value of a specific UH is zero, because it could have been followed right away by another UH. Hence, humanity might not have lost anything after the occurrence of a specific UH.

Furthermore, the very existence of humanity does not have to imply a net balance of goodness. Its existence might at some point imply a net balance of badness. The fact that we will continue to wish to survive (if we will) has to a large extent to do with our biology. Organisms do their best to survive. So do humans. But that does not mean that our survival entails a net balance of goodness. Our self-annihilation might, at some point, amount to the annulment of a net balance of badness (eg, when life on Earth has permanently ceased to be worth living). Then, it would be good for us not to survive. At another point, we might not even have a strong wish anymore to survive. Or we might even wish not to survive. That can be a stage on our evolutionary path at which we have suppressed the biological need to survive or to survive at any cost.

In a recent paper, Persson and Savulescu deal with the issue of freedom in the following manner. They introduce the concept of a ‘God machine’, an entity that preserves our

freedom of limited moral transgression but that prevents us from engaging in excessively nefarious and dangerous moral practices.<sup>10</sup> Hence, the ‘God machine’ safeguards our freedom to some extent, but makes sure that whenever it detects wicked and hazardous intentions in an individual, it intervenes in such a way that she does not wish to realise them anymore. In fact, the ‘God machine’ resembles a sort of ‘enhanced God’: a God that leaves much of our autonomy intact, but prevents us from using it to inflict grave harm upon others or ourselves.

Although the ‘God machine’ might be developed at some point, it is imaginable, if at all, only in a distant future. Savulescu and Persson optimistically picture its existence in 2050 (p. 412).<sup>10</sup> In the much nearer future, however, I believe that it is difficult to envision a more realistic option than VME. The possibility of VME we already have. And more types of ME are to come. Hence, we should pursue the opportunity we have, that is, to morally enhance ourselves on a voluntary basis, accepting the fact that we are not yet up to the task of creating an all-powerful ‘machine’ that will prevent us from developing the most heinous intentions.

The last issue I would like to address here is whether we should expect a significant number of people to be sufficiently motivated to subject themselves to VME. Would many of us be really motivated to embark on that path of enhancement? Are we eager to use medication in order to enhance the morality of our deeds? If we were, why would we prefer to take drugs rather than decide to act more morally without them? Furthermore, will more trust and less aggressiveness help us to be successful in the societies we live in? Might not more empathy subject us for being abused by others (p. 123)?<sup>9</sup>

As all of the above concerns seem well founded, it appears that we might be in need of external stimuli to undergo VME. The state ought not to be excluded here as an actor that can have a role in providing them. It should not compel ME, but it can use a variety of incentives in favour of morally enhanced citizens: tax reductions, schooling allowances for their children, retirement benefits and affirmative action policies that favour them. Such benefits would give morally enhanced individuals various social advantages: advantage in opportunity rather than equality of opportunity (p. 123).<sup>9</sup>

The fact that ME would not be obligatory, in combination with what has been proposed above, ensures us in achieving two essential objectives. First, VME would be encouraged while making sure that morally enhanced individuals are not disadvantaged in relation to the morally unenhanced ones. Second, by treating ME as a matter of choice, our freedom would not be curtailed (p. 124).<sup>9</sup>

When talking about the state as a potential agent that can provide us with external stimuli to undergo ME, it should be noted that voters who have not undergone ME might not vote for a government that is morally wise enough to provide us with these stimuli. It is apparent why this fact led Persson and Savulescu to promote compulsory ME. But I argue that by making ME compulsory, we might deprive humans of an essential element of their human existence, thus in a way getting already into the business of our self-annihilation. Hence, humanity has no other choice than to give up on the imperative to survive at any cost.

## CONCLUSION

CE is not decisive for making us *act* more morally. Those who assert that are plainly wrong. CE is to be accompanied by ME if we wish to improve the morality of our conduct. Hence, research into the possibilities of ME (including moral

<sup>x</sup>An exemption from VME might be convicts who repeat their offences and whose release from prison poses a danger. For example, a repeated child rapist might not be given the option of voluntary ME. The moral enhancement of such a person could be legally imposed on him. That would rightfully take away some of his freedom (as did his imprisonment).

bioenhancement) is certainly needed. It is not sufficient to improve our cognition of moral issues. Our motivation needs to be morally enhanced as well. Only then will we lower the probability of UH. As effective means of moral bioenhancement are being developed, their voluntary adoption is to be encouraged, but not more than that. The implication is that humanity ought to learn to live with the danger of UH and give up on what might well be called its ‘survival-at-any-cost bias’. We should do everything in our power to diminish the probability of UH—but everything short of making moral bioenhancement compulsory. We need to make a choice between preserving freedom as an essential marker of our distinctively human existence and obtaining additional assurances that humanity will survive by making ME obligatory. If we opt for the former, we will safeguard an essential component of our human status. If we opt for the latter, we might possibly feel more confident that humanity will survive, but we do so only at the cost of giving up on a key element of our specifically human existence.

**Acknowledgements** I am indebted to Ingmar Persson and Tom Douglas for the discussions we had and for commenting on a previous version of this paper. The responsibility for the content remains with the author.

**Competing interests** None.

**Provenance and peer review** Not commissioned; externally peer reviewed.

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*J Med Ethics* 2014 40: 246-250 originally published online February 14, 2013

doi: 10.1136/medethics-2012-100700

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