

**Why IOM Should Consider Broaching “Enhancement Concerns”
In the Context of Non-Invasive Brain Stimulation
(Erik Parens, 3/3/15)**

First, I will clear some conceptual brush—i.e., will say what *enhancement* means and try to remove some potential sources of confusion that can arise when we talk about enhancement.

Second, I will identify 4 *ethical concerns*—from “inauthenticity” to “inequality”—that arise in the context of using, for enhancement, technologies like non-invasive brain stimulation devices (NIBSDs). It is not news that our responses to ethical concerns like the ones I’ll very briefly discuss—concerns regarding what we might call “non-physical harms”—hinge on our understanding of contestable concepts like, say, the nature of human beings.

Finally, I will grant that because our responses to those ethical concerns will hinge on such contestable concepts, it can be difficult to know what to do with them in a policy context. *And* I will suggest that, in spite of that inevitable difficulty, because our responses to those ethical concerns have ramifications for our pursuit of health and well-being, the IOM is uniquely well situated to facilitate a future, sustained conversation about those concerns.

First, to the conceptual brush clearing: 6 quick points.

1. Since 90s, *enhancement* has been defined in contrast to *treatment*; whereas tx. “restores” human functioning, enhancement goes “beyond” it.
 - NIBS to treat depression is one thing;
 - NIBS to make people feel “better than well” is another.
2. While it can make sense to say that we are using a technology for *the purpose of* “enhancement,” it rarely makes sense to speak of *enhancement technologies*.
 - We just saw: *same* technology can be used for “tx.” or “enhancement.”
3. There is *no bright line* “**in nature**” between treatment and enhancement.
 - E.g., no bright line between normal & enhanced cognition/mood.
4. There is *no bright line* “**in ethics**” between tx and enhancement.
 - I.e., it doesn’t follow from the fact that an intervention is “beyond treatment” that it is “beyond the ethical pale.”
 - *And*, in spite of the distinction’s fuzziness, we may sometimes benefit from using it.
 - e.g., if we want to say what goes into a basic package of medical care, or what children should be protected from.

5. *No bright line “in ethics” between “medical technologies” & “social technologies.”*
- Which, again, doesn’t mean the distinction is useless: different kinds of technologies *do* have different modes of operation and *do* emphasize different values.
 - “Medical” technologies (using, e.g., chemicals, electricity, magnetism) work directly on the **brain** *to change the mind*.
 - They do *not* require an individual’s *effort*.
 - They exploit the fact that human beings *are* **objects**
 - They emphasize, among others, the *value of efficiency*.
 - “Social” technologies (using, e.g., words, exercise, meditation) work on the **mind** *to change the brain*.
 - Such technologies *do* require an individual’s *effort*.
 - They exploit the fact that human beings *are* **subjects**.
 - They emphasize, among others, the *value of engagement*.
6. Finally, nobody is against “true” enhancement.
- When people say they’re against enhancement, they mean they’re against an intervention that purports to deliver a benefit but that in fact delivers a (non-physical) harm.
 - They aren’t against an intervention because it *is* an enhancement, but because it *isn’t* a “true” enhancement.
 - Huxley’s Soma is the great example.

The most interesting ethical concerns in the context of enhancement are not about truth in advertising:

- Tho selling snake oil is ethically bad.

Nor are they about the **physical harms**.

- Tho making people sick is bad and really important to talk about.

The most interesting ethical concerns regard what I started off by calling **non-physical harms**.

- They can occur even if the technology is safe and effective.
- These concerns are that a given technology might do harm, not to our bodies, but to our selves, to us *as* human beings.

- These concerns hinge on what we think it means to be a human being—and what we think is entailed by being a human being well. They hinge on what we think human flourishing is.

So—finally!—what sorts of ethical concerns about “non-physical harms” can arise in the context of using NIBSDs for “enhancement”?

1. “Inauthenticity”
 - The concern is that we will become separated from how we are or how the world is.
 - Imagine someone who is distressed by the oppression she sees in her society and she decides to seek an “intervention” to get over her distress.
 - Imagine someone who is distressed about her partner’s promiscuity who decides she want an “intervention” to get over her distress.
2. “Complicity with suspect norms”
 - The concern is that these techs will help us to live up to norms that don’t warrant our respect.
 - Imagine someone who wants to improve her concentration *solely* so that she can make more money.
3. “Mechanization”
 - The concern is that these technologies will make us think of ourselves ever more as machines/objects that need fixing and ever less as persons/subjects who need engagement.
 - Imagine an inattentive child in an overcrowded classroom being required to get some neuromodulation to focus.
 - Beyond concern about coercion: concern that we are treating that child as an object, not a subject.
4. “Exacerbating inequality”
 - Those who already have advantages able to purchase still more.
 - On top of special schools, neighborhoods, access, etc., some also get access to special NIBS-based “enhancements.”
 - Notice:
 - Insofar as social inequality doesn’t bloody anybody’s nose, it is a **non-physical** harm. And reasonable people can have disagreements about how much social inequality is acceptable.
 - But as everyone in this room knows, social inequality is bad for the health of societies, especially for the health of those at the bottom. Inequality might not bloody anybody’s nose, but

chronic stress can decrease the efficiency with which blood courses through our circulatory systems, and thus is a **physical harm**.

So, yes, the ethical concerns about enhancement hinge on contestable ideas. But at least that last concern, the one regarding inequality, is directly relevant to health, however narrowly or broadly we define health. And the other three concerns I mentioned, (inauthenticity, complicity, and mechanization) are relevant to the broad sort of conception of health that I would argue we should embrace.

- Thinking through those concerns about physical and non-physical harms associated with NIBS for enhancement would require highly cross-disciplinary conversation, among clinicians, epidemiologists, health psychologists and sociologists, welfare economists, bioethicists, philosophers, et al.
- Such a conversation is exactly the sort that I think IOM could facilitate in a sustained way in the more distant future. For today, though, I very much look forward the conversation that we'll have in this session.