Therapy vs. enhancement

Regarding medical interventions, the distinction is frequently made between therapy and enhancement. Therapy includes those procedures that return an individual to a state of health or back to normality. Enhancedness involves those procedures that increase an individual’s abilities beyond normality.

Why does the distinction matter?

- The distinction is used in healthcare and widely in the medical insurance industry. For example, medical insurance may provide coverage for growth hormone treatment for children with diagnosable hormone deficiency, but not for children whose parents simply want them to be taller.
- A normal heart pumps blood. It is also the view that the medical industry has an obligation to provide therapeutic procedures, but has no such obligation regarding enhancement procedures.
- A stronger moral stance is that there is something morally dubious about enhancement procedures altogether—perhaps even that they are morally prohibited (see Sandel 2004). This stronger stance is more apparent regarding genetic enhancements, especially germ-line procedures.

However intuitive the distinction may seem, it can be subject to pressure. Here I ask two questions.

1. Is there really a sound distinction between therapy and enhancement?
2. Does this distinction (if there is one) correspond to a morally salient divide?

(Obviously, if the answer to the first is “no,” then the second question becomes redundant.)

Is there a distinction between therapy and enhancement?

The intuition behind the distinction: There is a human norm, and if a person deviates from that norm (in a manner that might be judged to be a cost) then any procedure to return him/her to that norm is therapy, whereas if a person is at the norm then any procedure to cause him/her to deviate from that norm (in a manner judged to be a benefit) is an enhancement.

Problem case (from Daniels 2000): 11-year-old Johnny has a growth hormone (GH) deficiency and is predicted to reach a height of 5′3″. 11-year-old Billy is physiologically normal but has very short parents: he is also predicted to reach a height of 5′3″. Both boys will deviate from the norm to the same degree. Moreover, both will suffer the same amount of social prejudice in this “heightist” world. Intuitively, however, to provide Johnny with GH treatment counts as therapy whereas the same procedure for Billy counts as enhancement. (This is certainly how medical insurance companies would see it.)

Not a statistical norm...

Though Johnny and Billy deviate equally from the statistical height norm, it is not the statistical norm with which we are concerned here. If a debilitating viral epidemic swept through the human population, infecting 10% of people, a medical intervention for removing the virus would be considered a therapeutic treatment: it would bring sufferers back to normality. Suppose instead that the virus infected 80% of people, such that carrying the virus became statistically normal. We wouldn’t change our minds and classify the intervention as a kind of enhancement; we would continue to insist that the procedure “brings sufferers back to normality.” But what sense can be made of this non-statistical kind of normality?

Not a socially constructed norm...

Certain norms (e.g., fashion) are human constructions that reflect collective values. Some have argued that selecting something healthy merely signals a kind of approval (Foucault 2006). Since values vary from culture to culture, and over time, this implies that what counts as healthy or diseased will likewise vary. (This: relative to 1950s USA, homosexuality really was a disease, but if ceased to be so around the 1960s.) Perhaps what counts as a normal human (relative to a culture) also simply reflects the contingent values of that culture. Assuming that a man’s being 5′3″ deviates from such a norm, then this theory cannot accommodate the intuition that GH treatment for Johnny is therapy but for Billy is enhancement. Moreover, even if a given culture decided that Johnny’s shortness is unnatural in a way that Billy’s is not, another culture would be free to decide that Billy’s shortness is unnatural and Johnny’s is not.

More plausibly, a Darwinian norm...

Darwinian theory promises a way of understanding “normality” in a non-statistical manner (see Pagdnneau 1994, Weisbaden 1999, Schwartz 2005). The teleological talk that evolutionary theory permits allows one to say things like the following:

- The heart is supposed to pump blood.
- The heart ought to pump blood.
- A good heart pumps blood well.
- A normal heart pumps blood.

These are not statistical claims. Rather, they reflect the fact that the human heart was selected for its capacity to pump blood. The blood-pumping capacity explains why hearts exist (Millikan 1984). (By comparison, the heart’s distinctive be-dump-be-dump sound was not selected for and plays no role in explaining why hearts exist; A normal human, according to this view, is one whose adaptations are functioning properly. (See Boon 1973.)

In the case of Johnny and Billy, it can be claimed that a GH deficiency is something one is not supposed to have, in the sense that humans have complex adaptations devoted to maintaining GH levels. The same cannot be claimed of someone’s appearing at the lower end of the height distribution curve. Although Johnny and Billy deviate equally from the statistical height norm, the latter does not contravene any Darwinian height norm. This supports the intuition that GH treatment for Johnny counts as therapy but for Billy counts as enhancement.

Challenge for the Darwinian account

Many traits exhibit marked variation in response to environmental factors. For example, genetically identical corn plants will differ in height depending on the temperature of the growing season (Sober 1994). This relation between genotype, phenotype, and environment is graphed using the norm of reaction. Lying behind a Darwinian understanding of normality is the assumption that some environmental factors count as “interfering forces” in the phenotypic expression of the organism. An overly hot or overly cold growing season—both of which stunt corn’s growth—count as disturbing the corn’s proper growing mechanisms.

Evolutionary psychologists Cosmides and Tooby write that “the species-specific-standards and psychological architecture [is that which] is visible in all humans raised in normal environments” (1992: 78).

Critical attention thus moves from the idea of a “normal human” to the idea of a “normal human environment.” Can any sense be made of this non-statistical idea of a normal environment?

Evolutionary psychologists maintain that the natural environment is one that resembles the environment of evolutionary adaptedness (EEA)—roughly, Pleistocene Africa. This is the environment to which human traits are adapted. (Although many human traits emerged prior to this time, they still had to earn their keep, evolutionarily—speaking, through the Pleistocene.)

Of course, there has always been variation among humans, some of which is not merely accidental but functional. It is no accident that human cognition and behavior is so plastic, in many ways it has been selected to be so.

Arguably, this is due to the fact that a central component of our ancestors’ EEA was so unpredictable: namely, their social world. This observation forces a distinction between (roughly) anatomical traits and psychological traits (Buller 2005). Many human anatomical traits deal with aspects of the environment that are incredibly stable: the composition of the atmosphere, the strength of Earth’s gravitational pull, etc. By contrast, many human psychological traits have evolved to deal with aspects of the environment that are purposive, strategizing, manipulative, and potentially exploitative—that is, our fellow humans. Thus, speaking of e.g. “the normal human lung” may make sense in a way that speaking of “the normal level of human abrutt” doesn’t.

It follows that the therapy/enhancement distinction may be applicable to some human traits and not to others.

Artificial functions do not entail reasons that are independent of a person’s prior interests. A wire coat hanger may be designed to hang clothes, but a person does nothing wrong if she chooses to bend the hanger into a hook to retrieve her keys from the drain. This would not be an instance of there being two competing reason-conflicting functions—one of which outweighs the other. Rather, given the person’s interests, the proper function of the coat hanger—what the hanger is “supposed to do,” what a “normal” coat hanger does—carries no weight in her deliberations whatsoever. Why should evolutionary functions be different?

It has been claimed, e.g., that the large gluteus maximus muscles of humans evolved to augment our ancestors’ ability to throw objects (Bingham 2000). Assume this is true. But suppose you just happen to dislike throwing things (perhaps you were traumalized by a baseball pitcher as a child) and you make a decision never to throw anything. Are you doing anything wrong? Are you transgressing against a norm laid down by nature? One might be tempted to answer in the positive if one has a background assumption that letting a natural bodily function go unexploited is likely to lead to ill health or unhappiness. But in this case it would be the ill health or unhappiness that made the decision wrong, not the failure to implement a function per se.

Conclusion:

Darwinian theory may be able to make limited sense of the idea of an objective “norm” for humans, but there is nothing independently good about conforming to this norm. Thus any therapy/enhancement distinction based on such a norm will not correspond to a morally salient division.

References

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