NYU Grossman School of Medicine

DIVISION OF MEDICAL ETHICS
HIGH SCHOOL BIOETHICS PROJECT

Psychopharmacology and the Self

Introduction

The development of psychotropic drugs has stimulated a renewed interest in questions about what constitutes the "self" and one's personality. Does an authentic, static, and incorrigible self exist? Do antidepressants alter, enhance, or corrupt the authentic self? Is cognitive enhancement possible and desirable, and if so, is it ethical? These are not new questions, although the philosophical underpinnings of such questions are now better informed by cognitive science. In this module, such questions will guide an exploration of the impact psychotropic drugs have had on our understanding of the self. Students will critically examine the ethical dimensions of so-called lifestyle drugs that make people "better than well." A careful examination of the use of stimulants such as Ritalin and Adderall—drugs often used in schools and colleges as study aids—will be particularly relevant to future (undergraduate) students.

After completing this lesson plan, students will be able to:

1. Articulate a definition of the "self" that has been informed by philosophical perspectives
2. Critically consider how certain prescription medications (psychopharmacology) interact with the "self"
3. Generate ethical arguments for or against the use of drugs for

neuroenhancement

Procedures and Activities

This unit uses a student-centered and interactive approach to teaching, to allow for a maximum degree of student participation. Each activity is marked as an individual, partner, or group activity, or as a teacher-directed class discussion. The following terms are used to designate the different types of activities:

- Individual Activity
- Partner Activity
- Group Activity
- Teacher-Directed Class Discussion

Part 1: Conception of the Self

A. Introductory Questions

Individual Activity

Students should answer the following questions individually, prior to the start of the unit. The purpose of the activity is to get the student's individual thoughts before being presented with any information in the unit, so teachers should avoid answering too many questions about terminology that is used. Teachers may want to have some discussion with partners or as a class.

1. How do you define "self" (personality)? What contributes to your concept of self?
2. Can/does the "self" change over time? Or is the "self" constant and unchanging throughout your whole life?
3. Does each individual have absolute rights over their "self"?

B. Philosophical Conceptions of Self

Teacher-Directed Class Discussion

The purpose of this activity is to provide students with a philosophical foundation and overview of how prominent philosophers have considered the "self." After students have come up with their own definitions and ideas of what constitutes the self, teachers should review these philosophical conceptions, highlighting their similarities and differences. (Specifically highlighting differences in unity vs. commonwealth, connection to body vs. independence, and change vs. immutability will be especially helpful for students later in the unit.)

John Locke considered personal identity (or the self) to be founded on consciousness (memory), and not on the substance of either the soul or the body. Locke considered humans as being born as blank slates, with knowledge being formed from experiences and the perceptions of the senses.

Hume compares the soul to a commonwealth, which retains its identity not by virtue of some enduring core substance but by being composed of many different, related, and yet constantly changing elements. This can also be thought of as a 'bundle' of related perceptions; our idea of the self is simply the idea of this "bundle."

Buddha, similar to Hume, attacked all attempts to conceive of a fixed self while stating that the view "I have no self" is also mistaken. Buddha argued that the attachment to a permanent self in this ever-changing world is a cause of suffering and a barrier to liberation

Descartes stated a human being is essentially a 'thinking thing," and the self is identical to a soul. Despite the many physical and psychological changes one undergoes over the course of a lifetime, one remains the same person or self because one remains identical to one's soul. The "self" is not dependent on any physical thing.

Aristotle, *following* **Plato**, defined the soul as the core essence of a being, but argued against its having a separate existence. For instance, if a knife had a soul, the act of cutting would be that soul, because "cutting" is the essence of what it is to be a knife. The soul is not an occupant of the body but an activity of the body

and cannot be immortal.

Avicenna wrote his famous "Floating Man" thought experiment, which tells its readers to imagine themselves suspended in the air, isolated from all sensations, which includes no sensory contact with even their own bodies. He argues that one would still have self-consciousness and thus concludes that the idea of the self is not logically dependent on any physical thing.

Student Questions:

1. Which of these conceptions, or combination of conceptions, best fits your idea of the "self"? Why?
2. Did your ideas about the "self" change at all based on these philosophers' perspectives? If so, how?

C. What Changes the Self?

Individual or Group Activity

In this exercise, students will consider different activities that constitute both minor changes (changing hair color) and major changes (becoming addicted to illegal drugs) in a person's life and determine whether they consider these to alter the "self." This activity follows in line with previous activity as each student continues to develop his or her own definition of self. Students should complete the chart individually and then discuss with a group. Following the activity, students should be given time to reflect on their questions from Part A and make any changes to their own thoughts that have resulted from the activity.

Which, if any, of the following do you think is a change in the "self"?

Event	Yes, this is a change to the self because...	No, this is not a change to the self because...
Dyeing your hair a new color		

Event	Yes, this is a change to the self because...	No, this is not a change to the self because...
Getting a tattoo		
Getting cosmetic surgery (nose job, breast enhancement)		
Completing an advanced degree		
Being diagnosed with a mental illness		
Taking a prescription medication to treat high blood pressure		
Taking a prescription medication to treat depression		
Becoming intoxicated at a party		
Becoming addicted to illegal drugs		
Becoming paralyzed in a car accident		

D. A Closer Look at Biological Mechanisms?

Teacher-Directed Class Discussion

It is likely that the prior activity will spur a discussion of the difference between altering the physical body and altering chemicals in the brain. At this point in the unit, students should take a closer look at the biological effect that drugs have on the brain. This may include activation of prior knowledge and a review of prior course material. A particularly useful website to review drug impact on the brain is:

https://thebrain.mcgill.ca/flash/i/i_03/i_03_m/i_03_m_par/i_03_m_par_amphetamine.html#drogues

The "Brain from Top to the Bottom" in the left hand corner offers various descriptions of brain activity and has explanation settings from Beginner to Advanced.

E. Case Study

Group Activity

In this activity, students will read an excerpt from Listening to Prozac and answer follow-up questions. The purpose of this reading is to consider if the use of Prozac has uncovered Tess's true self, altered herself, or suppressed her true self and provided her with a drug-created personality.

The Case of Tess: Excerpts from pages 18–20 of Listening to Prozac, by Peter D. Kramer

Tess is an adult woman who first came to Dr. Kramer for treatment of depression, from which her mother also suffers. Dr. Kramer started Tess on imipramine, but later changed her prescription to Prozac. After months of treatment, all signs of depression were gone, and Tess was taken off all medication.

Part A

An indication of the power of medication to reshape a person's identity is contained in the sentence Tess used when, eight months after first stopping Prozac, she telephoned me to ask whether she might resume the medication. She said, 'I am not myself.'

> I found this statement remarkable. After all, Tess had existed in one mental state for twenty or thirty years; she then briefly felt different on medication. Now that the old mental state was threatening to re-emerge—the one she had experienced almost all her adult life—her response was "I am not myself." But who had she been all those years if not herself? Had medication somehow removed a false self and replaced it with a true one? Might Tess, absent the invention of the modern antidepressant, have lived her whole life—a successful life, perhaps, by external standards—and never been herself?
>
> Suddenly those intimate and consistent traits are not-me, they are alien, they are defect, they are illness—so that a certain habit of mind and body that links a person to his relatives and ancestors from generation to generation is now 'other'. Tess had come to understand herself—the person she had been for so many years—to be mildly ill.

On imipramine, no longer depressed but still inhibited and subdued, Tess felt 'myself again.' But while on Prozac, she underwent a redefinition of self. Off Prozac, when she again became inhibited and subdued—perhaps the identical sensations she had experienced on imipramine—she now felt 'not myself'. Prozac redefined Tess's understanding of what was essential to her and what was intrusive and pathological.

Questions: (primarily from paragraph 2)

1. When do you think Tess was her true self? (Before she went on medication? On imipramine? On Prozac?)
2. Did medication alter Tess's self or uncover a true self that had been suppressed her whole life?
3. Do you think it's possible that some people require medication to manifest their true self? If so, are these people "ill" when they are not on medication?

Optional Activity:

Group Activity

Students can take on the role of a particular philosopher and answer the above questions from that perspective. This can be done briefly from the information provided above or be extended to include additional research conducted by students into the perspective of a philosopher.

Part B

Beyond the effect on individual patients, Tess's redefinition of self-led me to fantasize about a culture in which this biologically driven sort of self-understanding becomes widespread. Certain dispositions now considered awkward or endearing, depending on taste, might be seen as ailments and pitied and, where possible, corrected. Tastes and judgments regarding personality styles do change. The romantic, decadent stance of Goethe's young Werther and Chateaubriand's Rene we now see as merely immature, overly depressive, perhaps in need of treatment. Might we not, in a culture where overseriousness is a medically correctable flaw, lose our taste for the melancholic or brooding artists—Schubert,

or even Mozart in many of his moods?

Questions:

1. Does everyone have an absolute right to alter their own "self"?
2. How do we draw a line between accepting normal variation in personalities and labeling some people as "ill"?
3. Who decides what "illness" is and who should be treated? (An individual? A physician?)

The conclusion of Part I should leave students considering what constitutes illness that should be corrected, and who gets to decide about the treatment. Part II of this unit will transition from considering illnesses that can be treated to neuroenhancement, where the goal is explicitly to enhance natural ability.

Part 2: Neuroenhancement

In Part II, students will consider the ethical dilemma of using drugs to enhance one's natural abilities. Moving beyond treatment of illness, how should society handle the increasing use of pharmaceuticals to enhance, or make individuals "better than well."

Neuroenhancement: Any of several techniques or systems intended to enhance the ability to think either by use of prosthetics or by use of electrical or chemical stimulation.

Part 1: Changing societal values from 1993 to 2008

Group Activity

Students should read the two perspectives, only 15 years apart, and briefly discuss how (or if) they represent a change in societal values. These passages will inform the debate in Part 2 about the use of ADHD drugs by college students.

Excerpts from pages 273–274 of Listening to Prozac, by Peter D. Kramer, 1993

The possibility of chemical "enhancement" of a variety of psychological traits—social ease, flexibility, mental agility, affective stability—could be similarly coercive. In the science-fiction horror-story version of the interplay of drug and

culture, a boss says, “Why such a long face? Can’t you take a MoodStim before work?” A family doctor warns the widow, “If you won’t try AntiGrief, we’ll have to consider hospitalization.” And a parent urges the pediatrician to put a socially anxious child on AntiWallflower Compound. (Parents tend to want their children to be leaders—but how does a troop of monkeys or a classroom of children function when every member has high levels of serotonin?) Only slightly less nightmarish is the prospect of free choice under pressure. There is always a Prozac-taking hyperthymic waiting to do your job, so, if you want to compete, you had better take Prozac, too. Either way, a socially desirable drug turns from boon to bane because it subjects healthy people to demands that they chemically alter their temperament.

Such an outcome would clearly be bad, but it also seems unlikely, not least because of our society’s aversion to prescribed medication—our “pharmacological Calvinism.” Pharmacological Calvinism was coined by Gerald Klerman; he it as “a general distrust of drugs used for nontherapeutic purposes and a conviction that if a drug ‘makes you feel good, it must be morally bad.’”

Like all new technologies, cognitive enhancement can be used well or poorly. We should welcome new methods of improving our brain function. In a world in which human workspans and lifespans are increasing, cognitive enhancement tools—including the pharmacological—will be increasingly useful for improved quality of life and extended work productivity, as well as to stave off normal and pathological age-related cognitive declines. Safe and effective cognitive enhancers will benefit both the individual and society.

Part 2: Debate/Discussion

Group Activity and Teacher-Directed Class Discussion

Students will engage in an ethical debate about the use of stimulants (Adderall, Ritalin, etc.) on college campuses to enhance performance. One or both of the following can be used as preparation for the debate.

Option A: CBS 60 minutes video

- 60 Minutes Video at 16:
- 20 to 28 minutes http:// www.cbsnews.com/video/watch/?

id=6430977n&tag=cbsnewsMainColumnArea.2

- Katie Couric sits down with college students to discuss the use of Adderall on college campuses for the purpose of improving grades. Researchers and scientists are also interviewed to discuss side effects. Individual segments of the video are also available on YouTube.

Option B: Case Study

- Student's Little Helper: 2009 Regional Ethics Bowl Case, Association for Practical and Professional Ethics
- Prepared by: Rhiannon Dodds Funke, Chair Editing Board: Brenda Dillard, Adam Potthast
- Case Writers: Susanna Flavia Boxall, Edward Carr, Sarah Carr, Raquel Diaz-Sprague, Deni Elliott, Michael Brian Funke, Connie Price
- Accessed at: http://ethics.iit.edu/eb/2009%20Regional%20Cases.pdf

Case #5: Students' Little Helper

Sara, a college junior, had watched others in her dorm pound their way through all-night paper writing sessions, jobs, and parties with the help of Ritalin, Adderall, and other drugs designed to keep them awake and focused. Some of the students had been diagnosed with ADHD and had been on the drugs for years.1 Others bought them at street prices from students who were happy to share their prescriptions. Although an estimated 7% of students enrolled in US universities have used cognitive enhancement drugs, with up to 25% of students on some campuses reporting their use,2 Sara believed that true success was the outcome of hard work and living a balanced life. She was sure that no drug could substitute for that. Her grades, when compared to those using the drugs, showed that her theory had merit. She had better grades than anyone she knew who was using cognitive enhancement drugs.

But now she had a dilemma. Sara was preparing for the LSAT and had always had problems staying focused for those hours-long tests. Sara's mother, who was herself a lawyer, suggested that Sara talk to their family doctor about a prescription for Provigil. Her mother used Provigil sparingly, only when she was litigating tough cases and had to be sharp over long hours in the courtroom.3 The doctor,

who had known Sara all her life, wanted to help Sara fulfill her lifelong dream of getting into a top law school and knew that Sara had under-performed on standardized tests in the past. Sara had the grades to get into a top school, but it was questionable if she would have the LSAT scores that she needed. The doctor occasionally did "off-label" prescribing of Provigil when she thought it was appropriate. Sara left the doctor's office with a prescription for 4 100 mg tablets of Provigil, more than she would ever need, and with reassurance that the drug, taken as prescribed, would not harm her.

Before going to her next LSAT prep course session, Sara took the drug. She moved along through the practice test, feeling focused and confident. "This is actually fun," she thought and realized that she wasn't experiencing the fatigue that normally hits at the start of the third test segment. Sara's score was significantly higher than it had been on past tests. She was ready for the LSAT.

That evening, she enthusiastically told two friends, Barbara and Nancy, about her experience. "Isn't using that drug cheating," Barbara wondered, "like athletes who use steroids?" She argued that only enhancements available to everyone— like caffeine—should be allowed to be used. Nancy pointed out that not everyone could afford to take a LSAT prep course, and maybe the cognitive enhancement drug offered the same kind of boost. Nancy asked Sara if she could have one of the Provigil tablets that Sara would not be using.

Debate exercise:
In groups, students should prepare pro and con sides of the argument to be presented in class. Teachers should note some potential issues to be addressed, including:

- Coercion to take the drugs as the "norm" is reset
- Access and the potential benefit to those with monetary resources
- Potential long-term effects on one's health
- The redefinition of the self and the loss of one's true self

Debate statement: Neuroenhancement will provide unfair advantages to some and is therefore unethical.

Extra debate exercise:
In their book "Unfit for the Future," Ingmar Persson and Julian Savulescu argue that humans have radically changed their living conditions while their psychology has remained fundamentally the same, leaving humanity incapable of dealing with the climate crisis and possible nuclear annihilation. "Moral enhancement," in which humans' morality is improved by artificial means, is required to cope with the moral problems precipitated by these situations.

Debate statement: Moral enhancement is both necessary and permissible for humanity to survive.

Helpful guidelines on conducting classroom debate can be found at http://www.csun.edu/~dgw61315/debformats.html

Conclusion

Teachers should have students return to their original questions:

- How do you define "self" (personality)? What contributes to your concept of self?
- Can/does the "self" change over time? Or, is the "self" constant and unchanging throughout your whole life?
- Does each individual have absolute rights over their "self"?

Based on the activities of the unit, have their answers changed? (For example, if you have absolute rights over your "self", should neuroenhancement drugs be regulated?)

References

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