



6-1-2011

Overcorrecting the Neuroenhancement Discussion

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Recommended Citation

Farah, M. J. (2011). Overcorrecting the Neuroenhancement Discussion. *Addiction*, 106 (6), 1190-. <http://dx.doi.org/10.1111/j.1360-0443.2011.03394.x>

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Keywords

ADHD medications, enhancement, neuroethics

Disciplines

Bioethics and Medical Ethics | Neuroscience and Neurobiology | Neurosciences

To the editor:

Hall and Lucke (2010) pack many important points into their editorial on enhancement use of neuropharmaceuticals, and overall I agree with the authors that more skepticism and caution are needed in discussions of this topic. However, in attempting to counteract some of the exaggeration and hype that has beset this topic, I worry that the editorial encourages readers to dismiss the phenomenon as a minor issue for neuroethics and drug policy.

The authors begin by raising the question “How common is ‘neuroenhancement’?” and correctly point out that good statistics are hard to come by. They conclude that the percentage prevalence among American undergraduates may be single-digit and likely as low as 3%. However, given that there are estimated to be 18 million college students in the US (NCES, 2009), even the low 3% figure implies that over a half million healthy young people are current or recent users in the US alone. Understanding the phenomenon of cognitive enhancement is therefore a significant public health priority.

The authors next turn their skeptical focus to the question of “How enhancing are ‘neuroenhancers’?” A fresh look at this issue is indeed overdue, and I myself have recently concluded that the cognitive benefits of ADHD medications for normal individuals are probably smaller and less reliable than generally assumed in the neuroethics literature on cognitive enhancement (Smith & Farah, in press). This may be due in part to publication and citation biases against null results. Nevertheless, a small effect is not the same as no effect, and in many situations a small edge can be important. Furthermore, users report benefiting from the motivational effects of the medications (e.g., DeSantis, Webb & Noar, 2008). One could of course question the label ‘cognitive enhancement’ if this turns out to be the drugs’ primary benefit. However, it is difficult to separate the question of what seems interesting (motivation) from what can be attended to (cognition).

Hall and Lucke have challenged our field to look beyond the facile treatments of neurocognitive enhancement that can be found in the scholarly as well as popular press. For this I applaud them. However, I would also urge them to be a bit more cautious themselves when questioning the reality of neurocognitive enhancement and its prevalence. This practice involves large numbers of people, whose cognition and motivation are affected in as yet poorly characterized ways, and who are generally engaging in this practice without medical supervision. These are indisputable facts that call for more concern about the problem of cognitive enhancement, not less.

Sincerely,

Martha J. Farah

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