Week 10
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Greely et al. make the argument that cognitive enhancing drugs are no different than education, nutrition, and sleep. They argue that we should begin a research program looking at the efficacy and side effects of these drugs. Specifically, they ask that we look at whether there are specific circumstances (soldiers, surgeons, enhanced learning, etc) where cognitive enhancement may provide a particularly large societal gain at low individual cost. They debunk a number of moral 'problems' with the use of cognitive enhancement, including that it isn't 'natural' and that it may not be 'fair'. The question these arguments and suggest that realistically new cognitive enhancing drugs are no different than caffeine or sleep and that we should look at them in the same light.

Hamliton et al. review the current state of TMS and tDCS for cognitive self-enhancement. TMS is a clinical therapy for depression and shows promise in other domains, while tDCS is unproven but shows potential applicability for learning, emotion regulation, perception, and depression. Both TMS and tDCS come with a safety risk and completely unknown long-term side effects. Despite these issues, their low cost and portability make them increasingly accessible (especially tDCS) to non-research uses.

I think the most interesting aspect of this debate is the intuitive resistance to the drugs that doesn't seem to be as present for the electrical stimulation. From reading about depression I understand that this is also the case for therapies in that domain, where there is a major stigma against using drugs. The electrical stimulation literature that Hamilton review has very little of this stigma, they discuss risk and relevance but they don't go into much detail at all about how electrical stimulation is perceived by the public. I find this distinction pretty interesting, and I wonder how it will play out as the debate becomes more open and these technologies mature. My guess is that the drug stigma comes from our history with drug use/abuse, but these new technologies don't come with any baggage. Should be interesting to see what happens!