The US public perspective on what should influence neuroenhancement policies

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**Background**

- Some individuals are using drugs or devices to try to enhance cognitive and social-affective functioning.
- Institutions (e.g., universities) are therefore making decisions on whether to allow neuroenhancement.
- Whether institutions should consider potential societal effects of neuroenhancement (e.g., worsening inequality), besides risks and benefits to users in these decisions is unclear.
- We examined how several potential individual and societal effects of neuroenhancements affect the public’s support for institutions to allow or restrict neuroenhancements.

**Methods**

**Survey tool**
- Discrete choice experiment developed based on the literature
- 6 enhancement characteristics and a range of 2-4 realistic levels for each characteristic
- Scenarios created using a fractional factorial design
- Per scenario, respondents were asked which of two hypothetical prescription pills they most supported as being allowed based on the pills effects and the regulator
- Pilot tested through 21 cognitive interviews, 217 Amazon Mechanical Turk respondents

**Participants and data collection**
- Constructed representative sample of the US adult public in 2022 (required sample size: n=900)
- Participants (n=927) resembled the adult U.S. population in several demographic characteristics

**Analysis**
- Multinomial logit models

**Secondary findings**

- Participants weighted risks to users (p<0.0001), societal wellbeing (p=0.03), and justice (p=0.0001) differently depending on which institution regulates neuroenhancers
- E.g., if neuroenhancers worsened inequalities, this reduced participants’ support for allowing them more for governments than for employers (OR=0.50 p=0.0002), doctors (OR=0.46 p=0.002), or universities (OR=0.51 p=0.01)

**Implications**

When presented with both individual and societal considerations, the public supports governments and other institutions making policy decisions about neuroenhancers based on risks and benefits for users, as well as, but to a lesser extent, effects on equality and societal wellbeing

These findings should inform future policy discussions

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