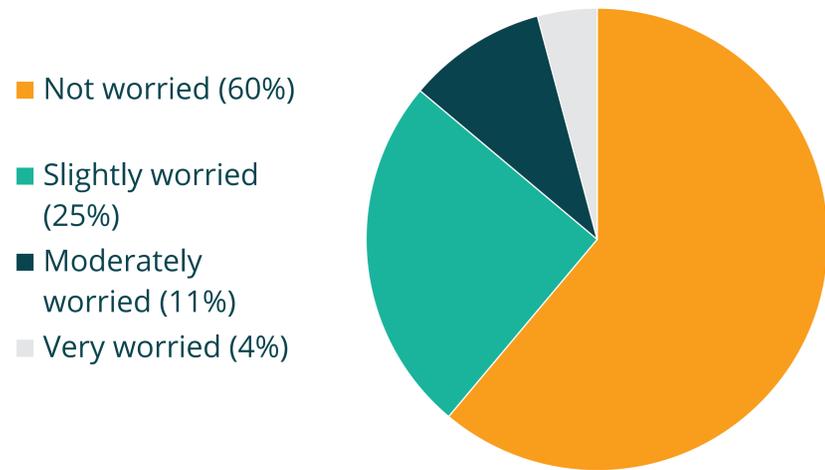


Citizens shaping the future of neurotechnology: A survey to assess perceptions

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Are you worried about the rise of neurotechnology?

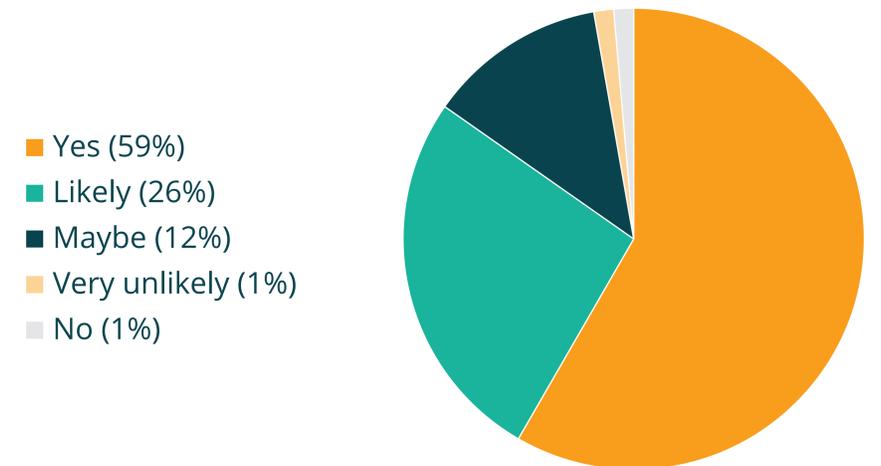


INTRODUCTION: Neurotechnology is defined as technology that fundamentally advances our understanding of, and ability to interact with, the nervous system. Following the explosion in public interest in neurotechnology over the past five years, the Wyss Center - a non-profit organization that accelerates the development of neurotechnology for human clinical benefit - seeks to understand public perceptions and attitudes toward these types of technologies so that we can address concerns, encourage public participation and adapt our strategy for neurotechnology development.

Neurotechnology can be:

- Implanted so that it is in direct contact with the brain or nerves
- Slipped under the skin
- Worn externally
- Used to record from or modulate neural circuits

Would you have an electrode placed in your brain if you were paralyzed and it could help you move?



RESULTS

Study suggests cautious acceptance of neurotech.

Only **4%** of people said they were **very worried**.

85% said that they **would**, or would be likely to, have an electrode implanted in their brain if it could **help them move**.

90% said that neurotechnology should **definitely** be used to help **people with nervous system disorders**.

33% said that neurotechnology should **definitely** be used to help **healthy people**.

75% said that they wanted their **opinions** to **influence** future **decisions** on neurotech.

We found no association between attitude and occupation (neuro-related / non-neuro jobs), age or country.

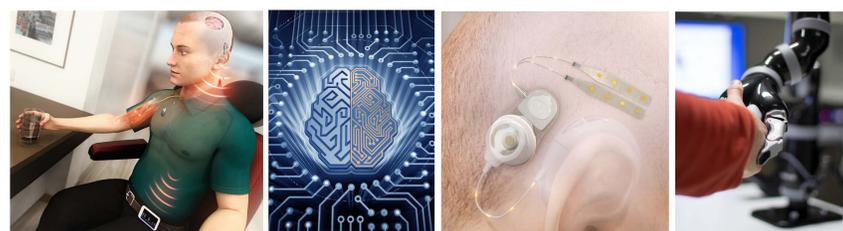
N=75, Ages=18-65+, Countries=17

METHOD: We asked 75 people about their perceptions of neurotechnology. The survey is still open! Take part and help shape the future of neurotechnology: www.surveymonkey.com/r/WyssCenter



CONCLUSIONS

While these preliminary results suggest that people are broadly accepting of neurotechnology, it is nevertheless an area that raises ethical questions. Almost three quarters of respondents want their opinions to influence the future of neurotechnology – a clear call for consultation. Organizations involved in the area should strive for a transparent dialogue with society and ensure balanced, un-hyped, information is readily available for all.



CITIZEN COMMENTS: "I'm not worried because if carefully designed and regulated (as all consumer/medical electronic devices), it should be safe for the users."

"Neurotech should be used only to cure disease or to improve the lives of patients."

"I'm more excited than worried."

"The benefits significantly outweigh the potential risks in my opinion."

"Neurotechnology could definitely help people with neurological diseases, which is not worrisome. But it could also be used to make augmented humans, which is much more debatable ethically."

"As voluntary neurotechnological procedures would likely be very expensive, this could lead to gaps in 'abilities' between income classes."

"I am not really sure about the ability of humanity to use neurotechnology only for good."

"The only worry I have is that the 'wrong' people may misuse this evolution."

"Neurotech: OK if the non-healthy do not surpass the healthy."