PRAGMATIC HEALTH ETHICS RESEARCH UNIT

IRCM MONTREAL CLINICAL RESEARCH INSTITUTE
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WHAT IS THE IMPACT OF BRAIN-COMPUTER INTERFACES ON PERSONHOOD?

Researchers and healthcare professionals are currently developing new devices under the category of brain-computer interfaces (BCIs). Current applications are both medical or assistive (e.g., for communication) and non-medical (e.g., for gaming) and may affect the users' ability to be a person (i.e. "personhood") in positive or negative ways.

Reference: Matthew Sample et al. 2019. "Brain-Computer Interfaces and Personhood: Interdisciplinary Deliberations on Neural Technology." Journal of Neural Engineering. https://doi.org/10.1088/1741-2552/ab39cd

WHO SHOULD READ THIS?

This report is intended for multiple audiences, including people who develop BCIs (e.g., engineers), people who study BCIs (e.g., philosophers and social scientists), policy makers, and advocacy organizations who deal with assistive technology or healthcare.

WHAT IS IT ABOUT?

Research on BCIs tends to either praise the technology because it "restores" function for disabled users or, at the opposite extreme, label the technology as a potential threat to the user's well-being. Both possibilities can be understood in terms of effects on personhood.

WHAT DID THE RESEARCHERS DO?

A meeting entitled "BCIs and Personhood: A Deliberative Workshop" was held in May 2018. Participants from multiple academic disciplines, as well as representatives from advocacy organizations and potential users, deliberated about ways to design and govern the technology. This resulted in three categories of recommendations.

WHAT DID THE RESEARCHERS FIND?

First, BCIs should be designed to support users' personhood, for example, enabling communication within meaningful relationships. Second, legal and political institutions must be adapted to better support and protect individuals who use BCIs. Finally, rhetoric used in BCI research and promotion must not stigmatize disability.

WHAT NOW?

Anyone working on BCIs should monitor how their activities impact the meaning and enactment of personhood. Furthermore, policy guidance is needed on how to better enable user personhood, to protect legal and political personhood, and to avoid exclusionary and stigmatizing effects of technology.

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