**Table S2: Full item wording - Potential concerns regarding BCIs.**

| # | Full Wording |
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| A | **Enabling New Forms of Hacking** - Malicious persons, companies, or governments may target BCIs to harm the user (e.g. stealing confidential information against the person's will or disrupting the BCI device's intended function). |
| B | **Seriousness of Device Failure** - Some BCI users may be placed in uniquely difficult situations if their BCI malfunctions or breaks; (e.g. a completely paralyzed person may suddenly lose the ability to communicate or a person in a wheelchair may lose control over where they are going). |
| C | **Causing Unintended Side Effects** - It is not yet known if there are long term psychological or biological side effects of BCI use; (e.g. the user's brain may change in ways that are unpredictable or irreversible). |
| D | **Risking Surgical Complications** - For BCI devices that require surgery, there is always a risk of medical harm; (e.g. the surgery may lead to bleeding or infection and the user's brain tissue could be damaged by the device). |
| E | **Enabling Access to Private Data** - BCIs may provide unprecedented access to things that are normally private and record them (e.g. personality characteristics, medical status, feelings, or intended movements). |
| F | **Making Responsibility Unclear** - It is currently unclear if and when BCI users will be held responsible for his or her actions; (e.g. if a BCI user accidentally causes harm while using their device, the user might be blamed for negligent action or instead the BCI manufacturer might be blamed for a dangerous device). |
| G | **Limited Availability** - It is possible that BCI devices will not be available to everyone who wants one (e.g. because the devices are too expensive for people to afford or because the devices are only provided to people with certain medical conditions and not for other |
| H | **Inadequate Consent** - Individuals who might benefit from a BCI, e.g. persons who have trouble communicating or who have "locked-in syndrome" (complete paralysis), may lack the communication or decision-making ability required to understand and consent to the use of a BCI device. |
| I | **Affecting the Legal System** - BCI use might have significant consequence in law; (e.g. courts might use recorded brain information as a form of evidence or brain information may be used to contradict the testimony of defendants). |
| J | **Decreasing Autonomy** - BCIs could reduce the user's ability to autonomously determine his or her own behavior; (e.g. a BCI user must share control with a machine, which could influence the user's choices or the user's movements). |

## Brain-Computer Interfaces, Inclusive Innovation, and the Promise of Restoration

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| **K** | **Media Hype and Inaccuracy** - Inaccurate media coverage may create challenges for ethical BCI research; (e.g. researchers may have to actively correct misleading news stories, and potential BCI users will have to be informed that they may have been misled about the state of BCI technology). |
| **L** | **Limited Evidence of Risk or Benefit** - Currently, we cannot fully weigh the risks and benefits of BCI devices because there is insufficient evidence; (e.g. most people have not used a BCI and there are few studies about the consequences of BCI use). |
| **M** | **Changing the Self** - Using a BCI might lead to noticeable changes in one's personality and self-understanding, (e.g. by successfully removing symptoms of illness or through unexpected psychological side effects). |
| **N** | **Involving Desperate Users** - Since BCIs are a last resort for some individuals, they may be desperate try a BCI despite its risks; (e.g. a person with partial paralysis may feel that they have no other choice but to undergo dangerous surgery to feel again, or a person with complete paralysis may have to give up some mental privacy in order to |
| **O** | **Unrealistic Expectations** - Potential BCI users might expect unrealistic results from the technology; (e.g. someone using a BCI for medical reasons may want their doctor to promise a clear improvement in quality of life or to provide a failproof device, though neither is guaranteed with current BCI technology). |
| **P** | **Losing Humanity** - BCI users may seem to lose their humanity (e.g. by giving up some control over their action to a machine or by drastically altering themselves such that they no longer seem to be a person). |
| **Q** | **Redefining Humanity** - BCIs could lead us to change the very idea of humanity (e.g. the definition of human could be expanded to include new types of technologically-assisted humans or the definition of human might be modified to describe humans as hybrid human-machine creatures). |
| **R** | **Changing Social Identity** - Persons who choose to use a BCI might find themselves being treated differently by family, friends, and strangers (e.g. family might act as if the BCI user has become a new person or, similarly, strangers may notice the BCI device before anything else about the user). |
| **S** | **Generating Incidental Findings** - During experimental BCI use, researchers may accidently discover negative things about a BCI user (e.g. a hidden illness or troubling psychological symptoms) which forces the researcher to decide whether or not to tell the BCI user the bad news. |
| **T** | **Increasing Stigmatization** - BCI devices may increase the stigma of disability; (e.g. some persons with disabilities may feel pressured to change their body with a BCI or, similarly, BCIs may make disability more noticeable to other people). |

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|---|---|
| **U** | **Doubting Authenticity** - A BCI user may wonder “is this really me?” (e.g. after being implanted with a device that helps them to communicate with others or when using a device that helps them to move a previously paralyzed limb). |
| **V** | **Requiring a Demanding Training Period** - The need for practice and training may be an obstacle to using BCIs effectively; (e.g. some users may not have the energy to spend many hours learning to use the device or may feel frustrated that they have not improved with many hours of practice). |
| **W** | **Becoming Cyborgs** - BCI users might seem to be a mix of machine and person (e.g. if they use a BCI to help them think or if the users’ rely on BCI-controlled prostheses instead of biological arms or legs). |
| **X** | **Defining Normality** - Designing BCIs may involve the difficult task of defining “normal”; (e.g. researchers may need to decide what counts as a normal arm movement or, similarly, a BCI may be used to help people think or feel “normally”). |
| **Y** | **Enabling Unfair Enhancement** - BCI devices may give the user an unfair advantage over non-users, providing superior skills or abilities (e.g. quicker reaction time, improved ability to work, or increased strength in athletic performance). |
| **Z** | **Promoting Medical Model of Disability** - Some BCIs are designed to treat disability as an illness; (e.g. many BCIs are medical devices and try to reduce disability by changing the bodies or capabilities of individuals who may not consider themselves to be ill). |

***Notes:*** Response options for the “concern” items ranged from “not concerning” (0) to “extremely concerning” (9).