## Brain chip implant technology critical thinking sample

Technology, Future



## Introduction

The goal of any form of technology is motivated by the need to create a machine or system that can perform all the duties of a human being, only more self sufficiently. The use of technology is the only way human beings can manage not to work, but continue to progress. Human beings in the most typical case are collectively lazy, and often go to great lengths avoid any real type of work. This is where the development of technology in our society has played a key role in our evolutionary success. The technology we have evolved to use help maintain a more efficient lifestyle, as per the human standard. (Emmanuel 163). Over time, technology has engulfed every aspect of human life. This being true, researchers have found motivation to invent new technologies that not only could make life easier, but also aid us in our not-so-distant future. An example of such a technology is the brain chip implant. In the quest of inventing a perfect machine, technology is now advancing to a new level; creating a brain similar to that of a human being. This is a promising invention that could potentially help people ailing in mental diseases. However, this has sparked much controversy from other researchers in the field. Bio-ethicists such as Berger and Glanzman insist that this is unfit for human consumption as it is likely to incapacitate human beings. Therefore, further research is to be done on the field. The brain chip implant is an incredible invention with a promising future. However, its use and success is hindered by a lot of controversies. While bio ethicists believe that it is harmful for human consumption, there is evidence that it could make a significant improvement in the lifestyles of human beings.

https://assignbuster.com/brain-chip-implant-technology-critical-thinking-sample/

Brain Chip Implants in History; BackgroundThe first research in brain implants began in the year eighteen seventy. Two scientists were able to demonstrate that it was possible to stimulate neurons in the brain. This was done through dogs (Chorover and Deluca 672). This led to extensive research in sensory substitution. Insurmountable progress has been made in recent years. Successes have been seen in the fields of vision and hearing. Equipped with such knowledge, scientists started researching on critical areas of the brain such as learning and memory. This is what led to the proposition of the brain chip implant.

Other chips that exist in the market today aid in the repair of worn out parts of the brain especially after certain illnesses, and strokes. This implant is more advanced and is expected to perform each and every function like a normal human being (Berger and Glanzman 121). It is expected to respond to instructions, or otherwise known as mind control. While this type of technology seems to be a fallacy, one scientist has made it seem real. John Donoghue, the inventor of this technology insists " mind control is already in existence, doing that at any time would be an incredible experience" (as cited in Hogarn 96). For example if a seizure occurs, this implant will enable one to control the seizure by making simple commands. With such advantages, then the controversies surrounding this technology should be addressed. Brain Chip Implant and Ethical Considerations The brain implant has been accused of crossing every ethical aspect. Most scientists insist that the mind control brain chip should not be used. For example, Hogarn insists "it is dehumanizing" (Hogarn 100). A lot of questions emanate from this assertion. For example, the choice of

https://assignbuster.com/brain-chip-implant-technology-critical-thinking-sample/

candidates, how to identify the limits of usage and how the implants will be used for the good of others. Reports in the literature describe the possibility of capable bodies such as the military to misuse people. Gross insists " the stronger governments may use this as a means of oppressing the weaker countries" (" Plugging brains into computers" Gross). However, these are issues that have been previously tackled in the use of other pieces of technology. A simple rule can be made that these chips will only be implanted with written permission from the subject, or if severe illnesses occur.

The future of such a brain implant is bright owing to the fact that truly little training is required. This is especially useful in the various forms of dementia that occur progressively (Christopher, 1093). However, critics magnify the side effects of the implant insisting that it may cause hallucinations, apathy, hyper- sexuality, depression and even compulsive gambling. This is a report compiled from a research done by Christopher (1193). This was espoused from the work of other researchers. Berger and Glanzman did further research on the claims. Their conclusion was that these side effects are mostly temporary (Berger and Glanzman 75). Furthermore, the procedure is reversible. As such, in case a life threatening occurrence happens, then the whole procedure can be dealt with. However, there are drugs and other forms of help that can assist in dealing with most of these side effects like depression. Brain Implants and Security

Security is a major consideration in the controversies put forward against this technology. Apparently, just like any other piece of personalized technology, it has a high propensity of being tracked and attacked by any hacker. This kind of vulnerability to attack raises a significant issue with privacy. The radio frequency identification device used in this case has been under attack for an extremely long time. This has happened since the Second World War in the 1940's (Berger and Glanzman 210). The fact that such a device is wireless compounds to this problem.

This system is not only capable of identifying the location of an object; it can also describe the physical formation of such an object. Such claims can be viewed as both strengths and / or weaknesses. In this case, the identification of a person in such a manner can be used by an enemy to harm. However, such a weakness is also necessary when it comes to emergency cases. For example; if someone is lost or they need urgent help as in the case of most dementias, then they can easily have access to it (" Identifying a person when and if they require help is one of the strengths of such a chip" Christopher n. p). Furthermore, such a chip will be quite helpful in identifying the wrongdoers in the world. This will lower the occurrence of crime. Therefore, when placed in a ledger, the benefits outweigh the weaknesses. Vulnerability

It is argued that relaying all information about a person makes them extremely vulnerable. This is because the attacker has information to work with. However, this can also be a positive thing in the case of the brain chip implant. It should be noted that this implant is fed with all the information of an individual. The detrimental effects of current technology have been clearly stated by Emmanuel (163). There have been cases where the bank accounts of various individuals have been hacked into. This includes bank accounts, emails and even personal data. This information will not be easily

accessible if brain chip implants will be used. In such a case, the individual has to consent before such an occurrence takes place. Brain Chip Implants and the Future

Some trans-humanists, such as Chorover and Deluca see this brain chip implant as part of a next step for humans in progress (Chorover and Deluca 673). On the other hand, bio-conservationists see this as an unnatural act that will lead to the loss of essential human feelings and qualities. Evidence exists to support the claims from both sides. This is a controversy that is ailing this incredible advancement. The areas of major concern are in ethics and security. Ethically, these chips are dehumanizing especially keeping in mind that they cross every border against privacy. The pertinent questions still remain on how people will be able to live their lives privately with such an invention. This can be curbed by requiring a written consent from a person before implanting such a chip in them. The usual legal duties will also apply in this case. For example, information from the person wearing implants will be voluntary, unless in some cases such as mental illnesses.

## **Works Cited**

Berger, Theodore and Dennis Glanzman. Toward Replacement Parts for the Brain: Implantable Biomimetic Electronics as Neural Prostheses. Cambridge: MIT Press, 2005. Print.

Christopher, Mims. A chip that thinks like the brain. Scientific American. 2011, 305(43), 1193-1220. Print.

Chorover, Sly and Ann Deluca. A Sweet New Multiple Electrode for Chronic Single Unit Recording In Moving Animals. Physiology & Behavior 2009, 9 (4):

671-674. Print.

Emmanuel G. Mesthene, "The Role of Technology in Society," Technology and Man's Future, ed. Albert H. Teich. New York: St. Martin's Press, 1977.

Print.

Gross, Michael. "Plugging Brains into Computers." Chemistry World (Royal Society of Chemistry). N. p., n. d. Web. 11 Jun. 2013. http://www.rsc. org/chemistryworld/Issues/2004/September/computers. asp Hogarn, John. The forgotten era of the brain. New York: Scientific American Inc, 2005. Print.