

Health and technology - A survey

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ABSTRACT

Introduction: Technology today has adverse effects on health due to prolonged hours of exposure to blue light and radiation. Working or watching screens for long hours can affect the eyes, brain, nervous system, and spinal cord. **Materials and Methods:** A online survey was done on a random population of 98 people. Questionnaires were circulated regarding health issues due to the usage of gadgets and opinions on the effect of gadgets. **Results:** It was shown that 78.6% think that technology is affecting thinking capacity and reasoning skills. 44.7% have issues with vision due to prolonged usage of gadgets. 41.8% have faced headaches and other physiological problems due to long hours in front of screens. **Conclusion:** Reading, referring books, libraries, interactions among social groups, using gadgets if only necessary, engaging in outdoor games and physical activities, and involving in hobbies can control or limit the usage of gadgets.

KEY WORDS: Health, Technology, Gadget

INTRODUCTION

Technology can have a huge impact on mental and physical wellbeing.^[1] Being overly connected can cause psychological issues such as distraction, narcissism, expectation of instant gratification, and even depression.^[2] Besides affecting users' mental health, the use of technology can also have negative effects on physical health causing vision problems, having loss, and neck strain.^[3] However, they are steps that can be taken to help alleviate these health issues.^[4] An iDisorder is when a person exhibits signs and symptoms of a psychiatric disorder in which the person has an obsessive need to check for text message. A desperate desire to constantly update Facebook status or a near-addiction to phone games are all manifestations of gadget addiction.^[5] Excessive screen time causes eye strain, blurred vision, and dry eyes. Pew Center for Internet and American Life survey, 2009, revealed that internet pulls people away from local connections and interactions such as meeting in public places. Pew survey provides a strong evidence against a sense of social isolation.^[6] Suggestions for healthy use of technology include

a tech break, having a better-placed desk chair and better lighting can improve your physical and emotional well-being.^[7] Internet-addicted youth tends to have reduced gray matter and white matter in key areas of the brain which reduces their "goal-directed behavior."^[5-7] Thus technology can have a large impact on user's mental and physical health. Being overly connected can cause psychological issues such as distraction, narcissism, expectation of instant gratification, and even depression. Beside affecting users' mental health, use of technology can also have negative repercussions on physical health causing vision problems, hearing loss, and neck strain. Fortunately, there are steps that can be taken to help alleviate these health issues.^[8-11] To make a note on the positive side of technology is, even if technology has impacted our health in some negative ways, it has also provided some incredible positive opportunities and revolutions for the long-term improvement of our health.^[12-14] The aim of this survey is to create an awareness on the overuse of gadgets and its health effects.

MATERIALS AND METHODS

An online survey was done on a random population of about 120 people, of which 98 were responded. It included questionnaires regarding their usage of

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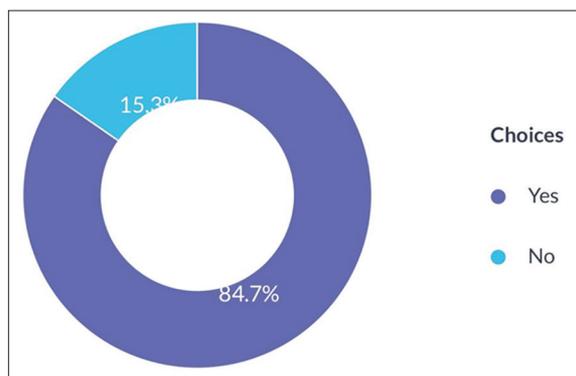


Figure 1: People’s opinion on radiation and its bad effect on life span

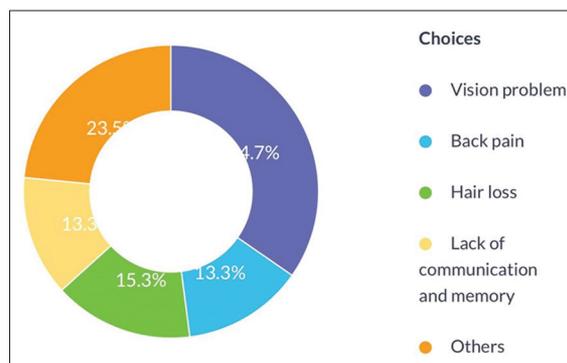


Figure 3: Physiological issues due to usage of gadgets

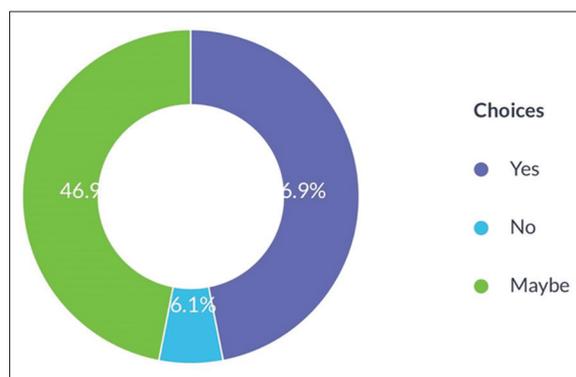


Figure 2: Technology breaking human and nature bond

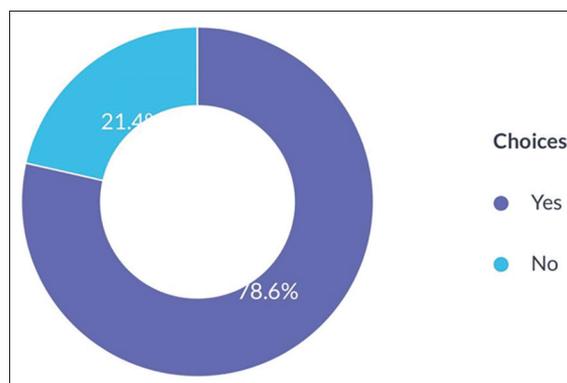


Figure 4: Technology affecting thinking capacity and reasoning skills

phone or computers and It included questionnaires to assess their usage of phone or computers , changes in their health or sleep cycle due to overuse of gadgets. The people will be suggested to use limited hours of gadgets a day and their health will be observed if there was any physiological problem.

RESULTS

Figure 1 shows that 84.7% of people think that the life span of humans is reducing due to the radiation emitted by electronic devices. Figure 2 shows that 46.9% of the people think that technology is breaking the bond between humans and nature causing health issues. Figures 3 and 4 shows that 34.7% of the people suffer from vision problems due to the usage of gadgets such as mobiles and computers. 78.6% of people think that technology is affecting the thinking capacity and reasoning skills.

DISCUSSION

The blue light and radiation emitted by gadgets have known to cause adverse effects on human health such as disrupting sleep cycle, vision problems, hair loss, back pain, and other physiological issues.^[9,10]

About 49% of the population are <20 years of age. 34.7% of the population face vision problems and

15.3% of the population face hair loss. 41.8% of the population get frequent headaches due to long hours of screening. 78.6% of the population feel that technology affects the thinking capacity. 77.6% of the population feel that technology is both a boon and bane. 84.7% of the population feels that technology is reducing the lifespan of humans due to the radiation emitted. 54.1% of the population feel that technology has severe effects on human lives. 46% of the population who took survey feel that overuse of technology breaks the bond between humans and nature and thus leads to health complications. 81.6% of the people feel that technology is affecting the learning and thinking capacity. 89.8% of the people think that humans gain immense knowledge with the use of technology. A study on the harmful effects of gadgets on health by Neha Ghosh shows the harmful effects on health and shows similar results.^[8] Attitude of children on the use of gadgets on academics by BVM Anirudh shows that 67% of the children lack reasoning skills and learning abilities due to the usage of gadgets.^[11] Another study on technology destroying the quality of human interaction by the bottom line publications shows that 89.9% of the population lost human interactions and social meetings due to gadgets.^[13] A study on technology changing relation with nature by Adrienne Matei shows that 78.8% of population lost their interaction with nature and exploring natural ways of spending their leisure time.^[14]

CONCLUSION

The advancement in technology is a major factor without which life would not be possible today. As we are aware of the physiological health issues due to prolonged screening and other gadget related works, some limitation opinions are suggested as to limit the usage. These control factors can help reduce the physiological impact of technology on human health. Reading/referring books/libraries, interactions among social groups, using gadgets only necessary, engaging in outdoor games and physical activities, and involving in hobbies can control or limit the usage of gadgets.

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