

The Effect of Watching Mobile Clips on Vision for Children and Adults

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Abstract

The current study aims to what is the technology used for children and adults currently, the effect of watching cell phone clips on vision for children and adults, the percentage of damage caused to the eyes as a result of excessive use of the mobile phone at night for children and adults, a questionnaire was prepared via Google Drive and distributed to the population aged 25-55 years, men and women in city of mecca , Taif and Riyadh. As for the questionnaire, it was distributed via the social networking program (WhatsApp). 600 questionnaires were distributed, 585 responses were obtained via email to the principal researcher. it concluded that it causes fatigue, exhaustion, sleep disturbance, and cancer.

Keywords: the effect, of watching cell phone clips, on vision, among children and adults.

1. Introduction

Globalization has changed our lives and one of the ways in which it is changing our lives, every day, is how we communicate; thanks to advancements in Information and Communication Technologies (ICT). One of the ICT's which is seeing rapid advancement is Mobile Phone. Mobile phone is popular since the late 1990s (1) and today, with 7 billion mobile connections worldwide and unique mobile subscriptions of over 3.5 billion (2), they are very popular with young people and are commonplace in our educational institutions. These phones are no more just voice communication tools. Functions like short message service (SMS) or texting have become global phenomenon. Not many of us keep wallet photos of loved ones. Now we save photos in our mobile phones, and view them on a touch of the screen. Mobile phones have

become an almost essential part of daily life since their rapid growth in popularity in the late 1990s, (3). Children are more vulnerable to electromagnetic waves because their skull bones are thinner and they will be exposed for a longer duration as they grow old. During fetal development and early childhood, there are embryonic and adult stem cells which are more sensitive to electromagnetic waves (4, 5, 6). In 2011, Volkow et al conducted a study taking PET scan of the brain while the person was talking on mobile held up to the ear. High rates of glucose consumption were noticed by the part of the brain close to the mobile phone as compared to the rest of the brain (7). This spike in brain activity due to electromagnetic waves from the cell phone may permanently alter brain function (8,9). Children's brain is still developing and many neurological connections are being formed over time and this exposure may delete synaptic connections hence it's an area of great concern (7). An ipsilateral acoustic neuroma and glioma of the brain after 10-year use of mobile phone was also reported⁸. An increase in the incidence of childhood brain tumors has been reported in United Kingdom, United States, Japan and Australia (5). Research from Sweden, Denmark, UK, Finland and Germany in 2009 suggested that if timely interventions were not taken, especially in children and teenagers, incidence of primary brain tumors will increase (10, 11). It has been reported as a community health problem. In adolescents (12, 13).

2. Material and Methods:

The study began in (the cities of Mecca, Taif and Riyadh in the Kingdom of Saudi Arabia), and the study ended with writing the data collection in August 2024. The researcher used descriptive analysis, an approach that uses quantitative or qualitative description of the social phenomenon (the effect of watching cell phone clips on vision among children and adults). The independent variable (the percentage of vision in children and adults) and the dependent variable (the percentage of damage to the eyes of children and adults after watching cell phone clips). This type of study is characterized by analysis, reason, objectivity, and reality. It is also concerned with individuals and societies, as it studies the variables and their impact on the health of the individual, society, and the consumer, and the spread of diseases and their relationship. For demographic variables such as age, gender, nationality, and marital status. Status and occupation (14), and use the Excel 2010 Office suite pie chart to sort the results (15). The questionnaire is a wonderful and useful tool for collecting a huge amount of data, but the researchers were not able to conduct personal interviews with the participants in the online survey, the questionnaire was only answered electronically, the questionnaire consists of ten questions, all of which are closed-ended.

3. Results and discussion:

The percentage of approval to participate in the questionnaire was 100%, and with regard to the ages of the participants, male and female, their percentage was as follows: From the ages of 25-55 years, their percentage was equal, 33.3%. As for gender, they were 100% male, and as for the nationality of the participants, male and female, their percentage was 100%. And educational status. It was as follows: holders of a master's degree were 33.3%, and holders of a university

degree were 66.7%, and their professions were government employees, whether men or women. As for their responses to the questionnaire questions, they were as follows:

The first question: Exposure to blue light and rays issued by electrical appliances may cause many harms to eyesight? The second question: Most of the rays emitted by mobile phones are absorbed by the retina, passing through the lens and cornea, causing damage to the retinal cells and causing macular degeneration in the long term, which causes serious vision problems? The same answer to the previous question, yes 100%. The third question: After reducing the eye's ability to see long-range, or what is known as short-sightedness, one of the most prominent harms of the mobile phone to the eyes, especially in children, as the harm of blue light is greater for children because their eyes work to absorb light. more blue? Yes 66.7%, No 0%, and I don't know 33.3%. Question Four: Does using mobile phones for long hours without rest increase the chance of many vision problems, such as cataracts or cataracts? Yes 66.7% and no 33.3%. Question five: May it lead to cancer in the optical tissue? The same answer as before: 66.7% and 33.3%. Question Six: The rate of eye blinking decreases if a portable phone is used without the person noticing it, which leads to fatigue and redness of the eyes, blurred vision, and the occurrence of severe dryness or what is known as eye syndrome? Yes 100%. Question Seven: Although there are no studies proving that cell phones cause brain cancer, caution is required in reducing their use and being careful to follow prevention tips because there are no long-term studies proving the opposite? Yes 66.7%, No 0%, and I don't know 33.3%. Question eight: Pain and spasm in the back and neck muscles? Yes 100%. Question 9: In addition to the damage caused by the mobile phone to the eyes as a result of blue light, there may also be damage to the brain cells. However, are the brain cells caused by the radio frequency energy used in the mobile phones? Yes 66.7%, No 0%, and I don't know 33.3%. Last question: May it also lead to sleep disturbance, especially if using the phone before going to sleep? Yes 100%.

Table.1: the effect of watching cell phone clips at night on vision among children and adults according to the opinions of participants in a questionnaire

The effect of watching cell phone clips on vision among children and adults	Yes	No	I don't know
Use mobile phone, may lead to cancer of the optic tissue	66.7%	33.3%	0%
The rate of blinking of the eyes decreases if the handheld is used without the person noticing it, which leads to fatigue and redness of the eyes, blurred vision, and the occurrence of severe dryness or what is known as eye syndrome	100%	0%	0%
Although there are no studies proving that cell phones cause brain cancer, caution is required in reducing their use and being careful to follow prevention tips because there are no long-term studies proving the opposite	66.7%	0%	33.3%
Pain and spasm in the back and neck muscles?	100%	0%	0%

There is a study in the Gulf region in the Sultanate of Oman conducted (16)by Najam Siddiqui and others entitled (the Prevalence of Mobile Phone Use in the School Going Children in North Al Batinah Region of Oman: A Cross Sectional Study) and showed that 81% of primary section students watch videos and more than 87% play games. Lower self-esteem and loneliness lead to excessive smartphone use and smartphone gaming were associated with addiction. Majority of the male students keep their mobile phones either in their trouser pocket or if wearing Omani dress, in the side pocket. It is reported that keeping the mobile phone in trouser pocket throughout life may cause erectile dysfunction and infertility due to low sperm count. Female students either keep it in their bag or in their hand. Carrying it in their bra has been linked to breast cancer development. When they are at home, majority of the male students keep their phones on the

side table or inside the cupboard. Majority of the female students keep their phones with them on the bed or under the pillow when they sleep. Keeping the mobile under the pillow may expose the head and brain region to electromagnetic waves throughout night which may have adverse health effects.

4. Conclusion:

Use mobile phone, may lead to cancer of the optic tissue 66.7%,the rate of blinking of the eyes decreases if the handheld is used without the person noticing it, which leads to fatigue and redness of the eyes, blurred vision, and the occurrence of severe dryness or what is known as eye syndrome 100%.Although there are no studies proving that cell phones cause brain cancer, caution is required in reducing their use and being careful to follow prevention tips because there are no long-term studies proving the opposite 66.7%.Pain and spasm in the back and neck muscles? 100%.it concluded that it causes fatigue, exhaustion, sleep disturbance, and cancer, which is the same as the results of the study by Najam Siddiqui et al.

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