

Impact of technology on kids essay

[Family](#), [Children](#)



Impact of Technology on Kids

‘ Instructor’s Name’

‘ Subject’

For some years now, questions have been posed regarding the impact of digital technology on the emotional and cognitive development of young children. More recently, these questions, which so far referred only to preschoolers and older kids, have also extended to infants and toddlers because of the extensive digital exposure they are experiencing. Every new technology introduced in the past decade or so has altered the daily routine of the kids and has sparked both excitement and concern among parents and educators.

Babies started watching television long before the year 1997, but this year carries importance because this was the year when Baby Einstein, the first baby video was released. This video and the similar ones that followed its trail contributed to a massive explosion of television programs and other digital products aimed at toddlers. The past few years have witnessed a surge in the usage of digital technology by kids, some as young as 1- 2 years of age. Many DVDs and other digital products, for children aged between 12 months and 18 months, are aggressively promoted in the market.

The effect of technology on children has both benefits and drawbacks.

Technology not just impacts the thinking pattern of the children, but because the brains of young children are still in the developmental process, continuous exposure to digital technology is reorganizing their brains in various ways than in prior generations. Researches show that, overuse of technology leads to the pruning and restructuring of the frontal cortex of the

brain and thus affecting its function of impulse control.

Smith says that, the combination of the impulse driven nature of the social networking sites and the vulnerable emotional development of young children, can be combustible. Today children have instant access to data, and in some cases they access information much more than they actually need. Eighty percent of children in America, between the age group of 13 and 17, had access to an internet connection, according to a survey conducted by the Corporation for Public broadcasting in the year 2002.

In the past decade, screen media (TV, computer, cell phone, etc.,) have become widely available, and even young children have access to mobile phones. The American Academy of Pediatrics (AAP) discourages the practice of increasing digital exposure to young children and urges the parents to regulate the number of hours a child is watching TV. In addition to this, AAP also advises parents that children should be enthused to indulge in other activities such as outdoor playing and social interaction.

Digital media is a large part in today's children lives, and there is an urgent need to put in place systems that would aid the growth and development of the child, but at the same time offer social protection and health protection. Some experts also argue that the benefits offered by Digital media outweigh its negative consequences. Computing technology has proven to be very useful in education and training young children. Introducing digital technology in primary grades have proven to offer many benefits such as cost benefits, increased time on task, better interaction and higher motivational levels.

All the baby digital products aim at educating the child, in an entertaining

way that obtains the child's attention. The media industry informs the parents that they train the young minds to identify themes such as colors, shapes, language, etc. They insist that the digital media can help a child in a huge way in its brain development. However, many authoritative sources on pediatric studies stress on the fact that, the child brain growth is very rapid during the initial three years and this period, which is termed as the 'sensitive period', has a profound impact on the overall development of the child. Thus, parents have to be very careful on nurturing their child during this period, which cannot be duplicated later. They should make the correct choices during these years of child growth, as these choices have a huge impact in the long-term outcome of the child's development process.

Apart from affecting the brain development, over exposure to digital technology is also believed to cause many harms such as social harm, social media addiction, visual problems, obesity, physical impairments, mental disorders and musculoskeletal disorder. While video games have been believed to promote visual scanning and hand-eye coordination, they also have harmful effects such as inculcating violent behaviors in young children. Research shows that, 12% of young boys and 8% of young girls playing video games at a young age exhibit symptoms of addiction and pathological behaviors. Technology overuse may also result in sensory over-reactivity and long term exposure to electromagnetic radiation may cause brain tumor.

In the 21st century, where the digital technology has invaded all aspects of life, it is imperative that the child be computer literate. The impact of the internet in today's world is unprecedented, and depriving computer literacy

to children may affect their educational prospects. 85% of jobs in today's employment market require some sort of technological skills and thus, one cannot take the digital media out of a child's life completely. However, considering the adverse effects it has on the child's development and personality, some parental control is definitely needed to regulate the digital exposure a child is subjected to, on this internet age.

Purpose of the Proposed Study

The purpose of this study is to analyze the current literature available on this subject and draw insights and interpretations into the impact of digital technology on kids. It aims to examine the ways and extent of technology's impact on young children and suggest some effective solutions to regulate the digital exposure experienced by kids.

Potential data sources:

The data for this research will be collected from both primary and secondary sources. The secondary sources include existing materials on this subject like academic books, published articles, surveys and statistics. The primary data will be collected through, structured questionnaire-based interviews and informal interactions with a selected sample. The sample selected includes parents, teachers and peer groups, of children belonging to the age group of 2- 8 years. Informal interactions may also be conducted with the kids themselves, to gauge their perception on technology use. The participants will be chosen so that a sample is obtained, which is as representative as it can be, by including people from different educational backgrounds, socio-economic backgrounds, and geographic locations. The questions in the

questionnaire will be explained in detail to the participants during the survey, and extra questions may also be posed, to obtain a comprehensive view of the topic in hand.

Possible Hypotheses

H1: Digital Technology has an adverse effect on the social skills and personality development of kids.

H2: Digital Technology is an integral part of the modern day life and has many beneficial influences on the cognitive abilities of the young children.

Potential Definition of all Variables:

H1: Digital Technology has an adverse effect on the social skills and personality development of kids.

Independent Variable:

Ownership of technology: Ownership of technology refers to the level of access, the kids have to technology. The research aims to measure the social skills of two different sets of children – children having access to digital media and children who have limited/no access to digital media. The term ‘digital divide’ denotes to the perceived gap, between the knowledge levels of children who own and have access to digital media and those who do not. The ownership of digital products depends on, the economic status of the parents and the school. It also depends on the attitudes of the parents towards their children’s usage of internet.

Dependent Variable:

Social Skills: Social skills are those behaviors that enable the kids, to interact with others in a way that elicit positive responses and avoid eliciting

negative responses. The research tries to measure the changes in the children's social ability, caused by use/non-use of digital media. While some faction of society celebrate social media of having helped children to overcome shyness and interact better with people, others have blamed digital technology of impeding the social development of a child and creating an environment of social isolation.

Potential research questions

- What is the level of child's ownership of technology?
- How has the digital exposure affected the kid's personality and interaction with others?

H2: Digital Technology is an integral part of the modern day life and has many beneficial influences on the cognitive abilities of the young children.

Independent Variable:

Home/School Practices: This variable denotes the practices that are followed in the child's home/school, pertaining to digital technology use. While some schools and parents encourage children to use technology others restrict. The interactions between people and interactions between people and their environments, influence learning, and thus kids learn and develop in collaboration with peers both in school and home. Kids differ in the amount of digital exposure they experience, and the ways in which they use digital tools. This variation, while depending on many factors, mainly is dependent on the micro system in which a child lives, like the family and school environment.

Dependent Variable:

Child Cognitive Development: Child cognitive development refers to the building of the entire cognitive processes, including remembering, problem solving, and decision-making in children. If the children exhibit increased skills, attitudes, interest, performance, or thought process, then use of digital technology in educational practice and entertainment, could be deemed as beneficial.

Potential research questions

- Do the family/school practices encourage the child's encounters with digital technology?
- How has the exposure/non-exposure of digital technologies affected the child's cognitive abilities?

Tools used to Measure the Variables:

SPSS: Statistical Package for the Social Sciences or SPSS as it is popularly known is a type of software that helps researchers, to conduct statistical analysis, documentation, and information management. Owned by IBM, this software enables predictive analysis and problem solving.

MANOVA: Multiple Analysis Of Variance (MANOVA) is a method, which helps the researchers in comparing results of tests conducted on groups that have multivariate means.

Regression Analysis: It is a statistical method used to compare different variables and helps in defining the relationship between a dependent variable and independent variable.

NVivo: It is a software package, which enables researchers to analyze

qualitative data, and is particularly useful while conducting in-depth analysis of large volumes of rich text based data.

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