Impact of Technology on Childhood Development and Social Skill

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ABSTRACT

The primary objective of the study is to understand how digital technology affects young childhood development, with a specific focus on social skills. The swift adoption of digital technology in everyday life significantly influences children's development, particularly in education, social interaction, and emotional well-being. This paper delves into the various effects of technology on childhood development, focusing on social skills, educational success, and ethical issues. The analysis also emphasizes the critical role of educational institutions and parental guidance in navigating the balance between technology's benefits and risks. This research is crucial for shaping cultural standards, educational policies, and ethical frameworks to ensure that technology serves as an enabler for, rather than a hindrance to, children's healthy development. By understanding these impacts, the concerned person can work toward fostering a socially responsible digital environment that supports children's safety, well-being, and holistic growth.

Key Words: Technical development, Childhood development, social skill, Education

1. Introduction

The impact of digital technology on children is significant and wide-ranging, as it has become an essential component of contemporary living. Children are exposed to computers, cell phones, tablets, and other digital gadgets at an early age, providing them with a plethora of knowledge and amusement. "The sense of the fast-changing times in which "we" all seem to live appears to have been both caused and impacted by the introduction of digital media into early education" (Gibbons 2016). The introduction of digital media into early education is undoubtedly linked to the fast rate of change that defines modern society. The mutually beneficial association between digital media and early education accelerates the pace of transformation, influencing not only our educational journey but also our understanding and engagement with the surrounding environment.

What is Digital Technology?

Digital technology is electronic devices, tools, systems, and resources used by each individual to process or store data as well as perform many other functions to improve one's productivity and efficiency in daily functions of life. "The possibilities of convergence and integration that digital technology offers have led to it to dominate technical developments in media and communications" (Charlie Ger). He noted that digital technology connects and integrates, making it the main force behind the development of media and communications, changing how we interact, share information, and spread culture through which it in turn our social relationships within our environment.

What is Childhood Development:

Childhood development starts from the time infancy period through which certain changes take place. These changes may result in a physical change, emotional change, or psychological. The changes in a child are impacted by the different experiences and practices. As one grows and develops social skills such as how an individual interacts and builds relationships is very important. This social skill in today's generation of technology has a very high impact on it.

This study will help to understand better how technological development has had an impact on the development of childhood.It will determine how children's daily lives are shaped by technology, and how this affects their relationships and overall wellness. With technology becoming more and more ingrained in society, children are exposed to it at an early age, which has a profound impact on their education, socialization, and emotional health. This topic is crucial because it addresses the balance between technology's educational benefits and the risks of excessive screen time, online safety, and reduced physical activity. To ensure that technology promotes rather than hinders children's development, this research is essential for shaping cultural standards, educational regulations, and parental guidance.

2. Development of social skills in childhood

The development of social skills in childhood is an important aspect of every individual. The first tradition emphasizes "behavioral assessment," which involves defining social skills and developing methods to evaluate the accuracy of these behavioral concepts (Peter K. Smith and Craig H. Hart, 2002). Childhood is the age when one learns which gives an imprint in one life that will carry out throughout the rest life of an individual. The development of social skills is influenced by various factors such as family, friends, neighbours, or educational settings apart from the technological era. Antonius H. N. Cillessen and Amy D. Bellmore, 2002 mentioned in their book that "Competent play with peers, successful integration into peer groups, effective emotion regulation, and conflict resolution not only rely on children's behavioral abilities but also demand strong interpersonal perception skills".

3. Impact of technology on childhood

Technology has profoundly been an influential factor in child development which has both positive as well as negative impacts. "As children mature, their understanding and importance of similarity become evident in the more abstract ways they think about friendship" (K.H. Rubin, H.S. Ross). However, in some cases access to technological usage or misuse results in loss/lack of social skills. "Lack of social skills in children results in loneliness, followed by mental and behavioral issues, challenges in interactions with parents, teachers, and peers, and difficulties in adjusting to school" (Maryam Maleki, Abbas Mardani, Mojtaba Vaismoradi 2019). As Harry McGurk has rightly cited how social skills are shaped from birth, individuals must adapt to group living and cultural selection, developing social relationships within expanding circles while assimilating cultural norms and navigating the sanctions for deviations, which together shape their growth and societal integration.

4. Childhood development with technology in education

With technology becoming more and more ingrained in society, children are exposed to it at an early age, which has a profound impact on their education, socialization, and emotional health. From the research of (Courtney K. Blackwell, 2014) he indicates that in their model, support for children's learning from technology and attitudes toward children's technology use were found to be significant factors, suggesting their importance in influencing confidence, attitudes, and technology use among participants. Also, the educational institution plays a significant role in children's development by meeting up with their peer groups.

A study by Chrystalla Mouza, 2013 has also mentioned that technology use in primary education led to improved student motivation, enhanced learning across various subjects, facilitated social interaction, and boosted student confidence, with teacher professional development and administrative support identified as crucial factors for success, thereby offering valuable insights for schools and districts seeking to integrate technology effectively. Northwestern University School of Communication has also conducted research on the attitudes of the teachers towards the implication of technology which as a result shows that "their overall attitudes toward technology learning are favorable or neutral perspectives" (Sarah Pila, M.A., Courtney K. Blackwell, Ph.D., Alexis R. Lauricella, Ph.D., Ellen Wartella, Ph.D, 2019).

5. Impact of technology on social skill development

Every organization in society has been getting more dependent on technology so as the children on various developmental aspects of life skills social skills are one of the major skills in the developmental process. Ennis-Cole, D.L. (2015) has described in his research article that technology tools offer assistance in organization, visual instruction delivery, communication facilitation, maintaining consistent presentations with minimal distractions, providing prompt feedback and structure, fostering positive behavior, and enabling social interaction opportunities which are some of the crucial values for social skill development. Douglas B. Downey and Benjamin G. Gibbs have also stated that they didn't find evidence of teachers or parents noticing a decrease in recent cohorts' face-to-face social skills, even after considering different factors, questioning the belief that technology leads to declining social skills, although frequent online gaming and social networking are linked to lower social skills. Another study done by, (Sariyatun; Suryani, Nunuk; Sutimin, Leo Agung; Abidin, Nur Fatah; Akmal, Atqo) with practical experiments has also cited that "the group utilizing digital learning materials demonstrates higher average levels of student social skills compared to the control group, suggesting that digital learning materials are more effective in enhancing student social skills than traditional printed textbooks".

From the extensive literature review research made by Zomer, R. Nancy (2014) the fact that 94% of study results report a positive impact from technology emphasizes its benefits in learning, communication, and social interaction, but this overwhelming positivity also calls for a closer look at potential risks like screen addiction and reduced face-to-face interaction, underscoring the need for a comprehensive analysis to fully understand technology's impact. Through the mentioned citations from various article research, we can understand that the impact of technology on social development is in favor of a positive change. Also, the implementation of technological resources for educational purposes plays a crucial role in the achievement of children in academic learning. Moreover, social development in the childhood stage is greatly influenced by factors like academic achievement which boosts confidence and gives impact to their social circle.

6. Ethical and safety concerns

Today's technological advancements offer both benefits and risks for children, with positive outcomes including enhanced empathy and acceptance, while negative aspects may involve aggressive behavior and risky conduct. B. Kenwright has stated that "in the digital era, organizations and individuals must meet ethical and professional obligations by blending creativity with diligence, ensuring decision-making, ethics, and critical thinking are integral to development, while forecasting future impacts, transparently assessing possible outcomes, and addressing any arising issues with openness and accountability". Prioritizing children's rights to safety and care regarding technology is crucial, as highlighted in the study "exploring children's acquisition of technology skills and their responses to media influences, emphasizing the importance of adaptive technology skills for child protection and responsible digital engagement"(https://www.iejee.com/index.php/IEJEE/article/view/184). The challenge posed by the expanding digitization trend to core public values, emphasizes the necessity for stakeholders to comprehensively understand and address ethical issues, particularly in areas beyond privacy and data protection, including discrimination, autonomy, human dignity, and power imbalances, to foster the development of a socially and ethically responsible digital society (Royakkers, L., Timmer, J., Kool, L).

7. Discussions

Through the research we have identified and understand how digital technology impacts children's development, particularly focusing on education, social skills, and ethical concerns. We found that technology can significantly enhance educational outcomes, with digital tools leading to improved learning, motivation, and social interaction. Research by Courtney K. Blackwell and Chrystalla Mouza shows that technology integration in education can boost student confidence and learning when accompanied by supportive teachers and administration. However, there's also evidence that technology can have mixed effects on children's social skills. While tools like visual aids and communication platforms can foster social interaction, excessive use of online gaming and social networking might correlate with a decline in face-to-face social skills, as noted by Downey and Gibbs.

As children engage more with digital technology, they face risks related to online safety, privacy, and digital citizenship. Studies by Royakkers and others has shown the need for a socially responsible approach to technology, advocating for adaptive skills to protect children from harmful influences. These findings suggest that while technology has the potential to support children's development, a balanced approach is crucial to ensure it doesn't hinder their well-being. To navigate these challenges, educators, parents, and policymakers must work together to foster a digital environment that supports children's growth and holistic development.

8. Conclusion

The study indicates that although digital technology can boost children's education and social development, it also presents risks like reduced physical activity, online safety threats, and possible decreases in direct social interactions. To address these risks and foster positive impacts, schools, parents, and policymakers need to work together to ensure technology supports rather than detracts from children's overall development and well-being.

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