CHALLENGES AND EFFECTS OF TECHNOLOGY IN EMOTIONAL AND PSYCHOLOGICAL DEVELOPMENT OF CHILDREN

Muhammad Talhah Ajmain
Faculty of Social Science and Humanities, Universiti Teknologi Malaysia, Johor.
Corresponding email: muhammadtalhah.j@utm.my

Nur Hajarul Falahi Abdul Halim
Faculty of Built Environment & Survey, Universiti Teknologi Malaysia, Johor.

Nurul Asyikin Ab Rahman
Faculty of Social Science and Humanities, Universiti Teknologi Malaysia, Johor.

Siti Fatimah Mohamad Ayop
School of Professional and Continuing Education, Universiti Teknologi Malaysia, Johor.

M. Djamal
Education Lecturer, Islamic Institute Of Nahdlatul Ulama, Purworejo

Mahmud Nasir
Education Lecturer, Islamic Institute Of Nahdlatul Ulama, Purworejo

Nurjanah
Education Lecturer, Islamic Institute Of Nahdlatul Ulama, Purworejo

Abstract
The development of technology has affected many aspects of life, including psychology and emotions. While technology provides benefits and convenience in everyday life, there are also challenges that need to be considered regarding its influence on children's development. This article explains some of the main challenges faced by children in using technology, especially in terms of psychology and emotions. In addition, this article will highlight the effects that will occur and have occurred on children's emotional and psychological development as a result of excessive and uncontrolled use of technology. The study in this article will use a qualitative methodology of library methods. It was found that the uncontrolled influence of technology on children can negatively impact their ability to

Challenges and Effects Of Technology In Emotional and Psychological Development of Children
Muhammad Talhah Ajmain
regulate emotions, build healthy social relationships, and develop interpersonal communication skills. These factors can affect children's emotional and psychological development in the long run. The article also provides some suggestions and strategies for dealing with these challenges. The importance of the role of parents and educators in supervising and directing children's use of technology is emphasised, as well as the need to create a balance. By understanding the challenges and impact of technology on children's emotional and psychological development, it is hoped that effective measures can be implemented to maintain health and balance in children's lives in this digital age.

**Keywords:** Challenges of Technology, Effects of Technology, Emotional Development of Children, Psychological development of Children

### A. INTRODUCTION

In the era of rapid technology, the development of digital technology has had a significant impact on human life. Notably, the use of technology among children has increased dramatically (Nur Azimah et al., 2021). The challenges arising from the use of technology in children have raised questions about the effects it may have on their emotions and psychology. A recent study by Pierpaolo Limone and Giusi Antonia Toto (2021) has raised concerns about the effects of technology on children's emotional and psychological development.

Children's emotional and psychological development is an important aspect of their lives. Realising the purpose of human life as Khalifah and worship (Ibrahim Bafadhol, 2017), especially in the context of children who need to be educated and shaped at an early age. Thus, it is imperative to provide a deep understanding of the importance of emotional and psychological development. At this age, children are undergoing rapid development in framing their identity and forming a solid foundation for their future growth.

The importance of childhood in the early developmental stage is an important period in shaping the foundation of personality and individual
development (Olivia N. Saracho, 2023). According to Jean Piaget's developmental theory, children at this stage are active in seeking and understanding the world around them through cognitive processes (Aina’ Rasyidah Samsuddin & Hapsah Md Yusof, 2020). They learn through interaction with the environment and people around them (Noraini Ahmad, 2014). Therefore, the importance of this childhood age is important in understanding their emotional and psychological development.

Emotions and psychology play an important role in children's overall development (Vlaicu. C, 2014). Emotions influence the way children interact with the world around them, and help them recognise and manage their own feelings (Naquiah et al., 2018). In addition, psychological factors such as thinking, perception, and behaviour also influence children's development (Aina’ Rasyidah Samsuddin & Hapsah Md Yusof, 2020). Healthy emotional and psychological development is important for the formation of children’s personality and ability to interact with the outside world (Arba’ie & Rafidah, 2011).

However, in the millennial era dominated by technological advances, children face a different atmosphere and new challenges (Idawarna et al., 2022). Increasingly sophisticated and accessible technology has an impact on their emotional and psychological development. For example, excessive use of electronic devices can disrupt social interactions, reduce physical activity, and affect children's sleep (Aina' Rasyidah & Hapsah, 2020; Nur Azimah et al., 2021). In addition, technology misuse can also contribute to an increased risk of mental health problems, such as anxiety and depression in children (Naquiah et al., 2018; Aina' Rasyidah & Hapsah, 2020).

In conclusion, children's emotional and psychological development plays an important role in shaping their identity and well-being (Teh Faradilla & norshita, 2022). In this article, we will discuss the challenges and effects of technology on
children's emotional and psychological development, and its implications for children's well-being. With a deeper understanding of the challenges and effects of technology, we can provide better guidance in ensuring well-being and balanced development for children in this digital age.

B. THE IMPORTANCE OF EMOTIONS AND PSYCHOLOGY TO CHILDREN

Humans are perfect creatures of Allah S.W.T and what distinguishes them from other creatures on this earth is the purification of reason and good mind. Through the mind, human emotions develop along with the circulation of time. Emotions and feelings such as crying, disappointment, sadness, joy and fear are a form of behaviour that is shown, in the life of an individual, in line with the norms of society. At different ages, humans require different psychological needs. The most important stage of human development that needs to be emphasised is at the childhood stage. Santrock, J. W. (2009).

Relatively speaking, children grow up and develop various skills through the environment. Therefore, childhood is an age of play filled with fun and excitement. In ensuring their development is assured, the emotional and psychological aspects are the most important components to be emphasised because emotional development can help influence all the actions, views and activities of children's daily lives (Arba'ie, Nik Rafidah, Nurul Azimah, & Intan Zahariah, 2014). Children who get a good upbringing are able to manage emotions well. According to Zaharah (2016), the ability to manage emotions well can help develop other skills such as cognitive, social, and spiritual skills. According to him again, children are able to respond to different emotions such as joy, fear, sadness, anger and hatred according to the situations and environments they go through. This is agreed by Ab Razak, N.H., & Aziz, A.R. (2020) who found that the emotional and
psychological development of children also affects the ability to communicate and think in daily life.

The development of children's emotions and psychology can be fostered and developed based on the environment provided. Alina Turcule & Cristina Tulbure, (2014) state that the first opportunity to develop elements of children's emotional intelligence is in the early phase of their development and this ability depends on what is shaped and learnt from the existing environment. In fact, the style of parenting plays a very important role and has a major influence on the emotional development of children who are able to shape the characterisation of their self-image. (Nooraini Ahmad, 2002). This is supported by Ab Munir et al. (2016) which states that the authoritarian style of upbringing forms negative emotions while encouraging aggressive and violent behaviour.

According to Danial Goleman, (2013) emotional intelligence plays an important role in a person's success and well-being because emotional intelligence is more important than intellectual intelligence in predicting a person's performance and success in life. According to him again, the level of emotional intelligence of an individual is a major factor in determining the success of an individual, especially in learning. In his book, Emotional Intelligence, Golemen (1995) argues that the brilliance of an individual is dependent on 20% of intellectual intelligence and 80% is dependent on managing emotions effectively. This clearly shows that a good level of "emotional management" is a very emphasised factor in the life of a successful individual (Zainuddin, 2000).

According to Nurul Aini & Siti Marziah (2018), good emotional development can predict future success in relationships, health and quality of life. According to him again, children who have high emotional intelligence achieve high marks, stay longer in school and on the whole make healthier choices.
Teachers also report that students with high emotional intelligence are more cooperative and better leaders in the classroom. In addition, having high emotional intelligence is a better predictor of career success than high intellectual intelligence, which means it is valued by employers looking for candidates who can perfect tasks and get along with others in a collaborative and progressive workplace.

Emotional intelligence is also an important element in influencing a person's level of motivation due to the ability to manage the information of thoughts and feelings and mental abilities when in certain situations. According to Colomeisch & Colomeishi (2014), the relationship between emotional intelligence, self-efficacy and satisfaction in doing an activity influences the value and performance of that activity while honing children's talents and skills towards what they are inclined to do. Therefore, it is important that we pay adequate attention to developing and strengthening emotional intelligence at the childhood developmental stage.

C. CHALLENGES OF TECHNOLOGY DEVELOPMENT IN SOCIETY

Technology is a big part of our life and rapidly changed in a short period. This technological revolution brings a unique set of challenges in society especially in parenting children of today’s generation. In the United States, 96% of households have a television and 94% of children ages 3 to 18 have internet access either through a computer or smartphone (Charles Nechtem Associate, 2021). Meanwhile, Malaysia has not refused to implement the technology in teaching and learning (T&L) due to the covid-19 pandemic in early 2020 (Hasin et al., 2022). The restricted movement during the pandemic causes the T&L to be conducted using virtual methods in schools and higher education and continues until now for some purpose and condition. The development and necessity of technology cannot be denied in this globalized world. Therefore, it is important for us to consider the challenges that we will face in this era.
One of the challenges is the increase of living costs. For example, the internet network in Malaysia has changed from 3G to 4G and 5G through a project managed by Digital Nasional Berhad (DNB) for all digital telecommunications in Malaysia (“Mendepani Cabaran Komunikasi Digital,” 2022). This situation gives a burden on society to stay connected and compatible with the current networking as well as increases the existing cost of living. The application of technology in education has been vigorously implemented during the Covid-19 pandemic. Most of T&L activities in schools and universities have been conducted virtually which encourages each student to have their own electronic device. According to Yahaya & Adnan (2021), the high cost of the internet has affected the students in higher education. This is because some of them lived in low internet coverage areas where the internet plan is expensive compared with the area with better coverage. Besides, some of the students come from low-income families who cannot afford to buy electronic devices like computers or smartphones that are beyond their means (Rohaty, 2003). This situation can not only affect the quality of learning but also mental health and attitude of the students due to various shortcomings and difficulties in attending the virtual classes (Marpuah et al., 2022).

Since technology has become a common thing for communication, it may affect relationships, social skills, health, and well-being, especially for children. According to Taipei Times (Poll Finds 90% of Young Children Use Electronic Gadgets, 2022), more than 90% children from age three to five in Taiwan have their own electronics devices, with average more than two hours screen time per day. This news is becoming a serious concern to the development of the children due to lack of interaction and communication with their parents. Thus, this is one of the challenges in the development of technology for society and parents are responsible to limit their children’s daily screen time by having activities together like play,
Challenges and Effects Of Technology In Emotional and Psychological Development of Children

Muhammad Talhah Ajmain

read and have meals together (Poll Finds 90% of Young Children Use Electronic Gadgets, 2022; Omar & Latip, 2015).

The positive impact and benefits of technology on our society and world is indisputable. However, the negative impact can significantly affect the growth of a country and development of the future generation. Thus, parties like the authorities and society must be prepared to face various challenges of technology on human health and wellbeing.

D. GENERAL EFFECT OF TECHNOLOGY ON CHILDREN.

In general, the use of technology among children can have the effect of various positive and negative aspects in the development of children's psyche. The use of technology can have a variety of positive impacts if used and supervised properly by parents or teachers. However, if it is used excessively and without monitoring, it can invite negative impacts on children, especially in terms of learning, attitude and also mental formation (Christakis, 2009).

Salmah and Malisah (2015) argued that, the development and use of technology as a medium of learning among school students can help students in improving the quality of learning outcomes effectively and thoroughly because it opens opportunities for students to explore learning methods independently with more creativity, innovation and effectiveness. In addition, in the era of globalization towards the progress and effectiveness of learning, teaching aids (ABM) are very significant and synonymous in the use of daily learning by teachers in schools as well as in public and private higher education institutions. According to Ebbeck et al, (2016), software and applications developed by software developers can facilitate the business of college students to understand, and also master the basic concepts of learning because it implements audio, video and kinesthetic elements in the development of the software. This implementation will indirectly enhance
the developmental process of children specifically in fine motor development due to the various elements present in software such as audio and visual (Howard-Jones, 2011).

However, parallel to the development of technological development there are also negative impacts that can contribute to harm to the psyche of children. Among the negative effects that exist in the use of technology even more so without control and excessively is that children will be exposed to the risk of physical development and also health in themselves. Ebbeck et al., (2016) explained that the position, posture, light exposure and interaction of children when using gadgets can interfere with children's health and focus in the long run which can lead to health problems such as obesity, neck pain and back pain.

E. EFFECTS OF TECHNOLOGY ON CHILD PSYCHOLOGY

The impact of technology, not limited to learning and health issues only, is even able to have an impact on the development of emotions and psychology of children more so in the use of social media such as Facebook, Instagram and TikTok applications (K.K Kapoor et al., 2018). According to a study by A. Monica and J.Jing (2022) found that 95% of teenagers have their own mobile phones and 45% of teenagers access a handful of websites online. This makes most of the time will be spent looking at the screen and less doing outdoor activities (L. R., Larson et al., 2019). According to K. Mills et. al (2021) said that the use of social media and online applications such as Facebook and Instagram can affect children's psychology by viewing and comparing their lifestyles with virtual contacts.

Psychological problems among children will not only interfere with psychology but even increase the level of depression of children in life. Systematic studies on psychological development and technology use state that psychological development and depression problems have a very significant relationship. Vidal
et al (2020) stated that the frequency of internet access among children has a tendency to self-harm due to depression and cyberbullying among netizens in cyberspace. A study from the National Health Morbidity Survey shows that 424,000 children are affected by psychological potential due to addiction to accessing the internet which can lead them to psychological development disabilities.

F. EFFECTS OF TECHNOLOGY ON CHILDREN'S EMOTIONS

The impact of technology, not only limited to psychology but also able to impact from the angle of emotion. This is clear when considered from the angle of communication between children and their parents or peers. According to Hashim, N., & Razali, A. (2019), among the forms of good communication between people are the ability to talk and set conditions or rules, provide clear information, provide views and opinions and provide support that builds. The clarity of emotional development in children can help increase motivation and self-confidence among children.

On the other hand, if children are emotionally stunted, this effect can be seen not only from the emotional aspect but children also have the potential to fall into juvenile problems, mental illness, stress, internal conflict, interpersonal problems, suicide, decline in academic achievement, alcohol intake, drug abuse and being emotional towards others which can hinder the development of their identity (Ika Destiana, Ali Salman & Mohd Helmi, 2013). The effect of using technology in daily activities can also affect children's emotions even more so among children under 13 years old. Based on the study of Mat, H., & Zain, A. (2022), stated that 84% of the occurrence of tantrums among children is stemming from the use of gadgets and exposure to technology without control.

Thus, it is important for us to realise and understand the impact of technology use on children's emotional and psychological development.
Appropriate steps need to be taken to ensure a balanced and controlled use of technology to children, as well as to build positive communication and support healthy emotional development to children.

G. CONCLUSION

The development of technology has affected various aspects of life, including psychology and emotions. In the journey of a human being's life, childhood is an important time of development and will affect their lives, especially in the aspects of emotions and psychology. In fact, although technology provides benefits and convenience in life, there are challenges that need to be considered regarding its influence on child development. This article explains some of the challenges faced by children in using technology, especially in the aspects of psychology and emotions. In addition, this article will highlight the effects that occur on children's emotional and psychological development as a result of excessive and uncontrolled use of technology. The article also provides some suggestions and strategies to deal with these challenges. The importance of the role of parents and educators in supervising and directing children's use of technology is emphasised, as well as the need to create a balance. By understanding the challenges and impact of technology on children's emotional and psychological development, it is hoped that effective measures can be implemented to maintain health and balance in children's lives in this digital age.

REFERENCES


Challenges and Effects Of Technology In Emotional and Psychological Development of Children

Muhammad Talhah Ajmain

Aina’ Rasyidah Samsuddin, Hapsah Md Yusof. (2020). Gadget Usage on the Development of Preschool Children. Jurnal Pendidikan Awal Kanak-kanak Kebangsaan (Special Issue), 9, 113-126, ISSN 2289-3032 / eISSN 2550-178X.


---

**Challenges and Effects Of Technology In Emotional and Psychological Development of Children**

*Muhammad Talhah Ajmain*
Challenges and Effects Of Technology In Emotional and Psychological Development of Children

Muhammad Talhah Ajmain
Challenges and Effects Of Technology In Emotional and Psychological Development of Children

Muhammad Talhah Ajmain
Challenges and Effects Of Technology In Emotional and Psychological Development of Children

Muhammad Talhah Ajmain

Kanak-Kanak di Batu Pahat, Johor. Journal of Humanities, Language, Culture and Business (HLCB), 5(16), 1-25. eISSN: 01268147

Taipei Times. (2022, April 1). Study Finds More Than 40% of Taiwanese Students Spend over 4 Hours on Screens Daily. Retrieved from https://www.taipeitimes.com/News/taiwan/archives/2022/04/01/2003775823#:~:text=It%20found%20that%20more%20than,the%20longest%20average%20screen%20time.


