

Tolerance of Gadget Use in Children as a Preventive Measure for Nomophobia

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Abstract:

Rapid developments in the field of science and technology have given birth to the phenomenon of "nomophobia", where people feel anxious and afraid if they cannot access their mobile phones. This also has an impact on children, where excessive use of gadgets can trigger negative behavior patterns and consumptive traits. In childhood, the brain develops rapidly and becomes the foundation for future activities and quality of life. Excessive use of gadgets in children can interfere with brain development and trigger behavioral changes. This study, with a qualitative method, examines the tolerance of gadget use in children as a preventive effort for nomophobia. From 20 child samples, it was found that four children were not addicted to gadgets and had good sleep quality, two children were not addicted to gadgets with poor sleep quality, two children were addicted to gadgets with poor sleep quality, and one child was addicted to gadgets with very poor sleep quality. These findings suggest that excessive use of gadgets can have a negative impact on children's sleep quality. Therefore, it is important for parents to limit the use of gadgets in children and encourage other activities that are more beneficial to their development.

Keywords: Nomophobia, Gadget, Children's Time.

1. Introduction

The advancement of the times in the field of technology in the 21st century is developing very rapidly. Various kinds of inventions that aim to facilitate the space and scope of human movement are created one by one every year. This proves that human thinking and behavior patterns have progressed and developed very rapidly. The increase in his inventions became more and more sophisticated, of course, it could not be separated from the previous inventors. The perfection of these phones is becoming more and more abundant in this modern era. Starting from the emergence of coin phones, mobile phones (HP), until now people are more familiar with the term gadgets (Nurhaeda, 2018). Technological developments have resulted in new technological devices that can facilitate human activities or better known as mobile phones. With the advantages of a mobile phone or smartphone, users become anxious or afraid if they cannot access a mobile phone or known as nomophobia. Nomophobia tends to occur in Generation Z teenagers because they live in a digital era with rapidly evolving technology. Technology has become a part of their lives. Whatever they do is mostly related to cyberspace, so they are too busy with their mobile phone or smartphone devices (Sari et al., 2020).

Gadgets have features on offer and often children get used to it quickly. However, the continuous use of gadgets will have a negative impact on children's behavior patterns in their daily lives. In this digital era, gadgets are like a double-edged sword for children. On the one hand, gadgets offer many educational and entertainment features that can help children's development. On the other hand, excessive use of gadgets can have a negative impact on children's behavior patterns and development, especially during the golden age. The golden age, the first five years of life, is a golden age in which a child's brain develops rapidly. During this time, children respond and quickly learn new things by exploring the surrounding environment. However, excessive use of gadgets can hinder the child's natural exploration and interaction process with his environment. This has the potential to interfere with children's brain, physical, social, and emotional development.

Therefore, it is important for parents to provide limits and control over the use of gadgets in children. Parents need to accompany their children when using gadgets and make sure they use them for educational

and age-appropriate content. In addition, parents need to provide time and space for children to do other more useful activities, such as playing, exercising, socializing with peers, and interacting with nature. Thus, parents can help children make optimal use of their golden age and maximize their potential to grow and develop into healthy and happy individuals.

The golden age, the first five years of life, is a crucial period for a child's development. During this time, the child's brain develops rapidly, opening a window of opportunity to cultivate a wide variety of intelligences, abilities, talents, and characters. Development in this golden age greatly determines the future of children, both in terms of physical, cognitive, language, socio-emotional, spiritual, to character and personality. Therefore, it is important for parents to provide optimal stimulation and nurturing during this time. However, in this digital era, gadgets are like double-edged knives. On the one hand, gadgets can be a tool for children's learning and self-development. On the other hand, excessive use of gadgets can have negative impacts, one of which is nomophobia, which is excessive anxiety and fear when not being able to access gadgets.

Parents need to be wise in using gadgets for their children. Gadgets can be used as faith-based learning materials, such as Murrotal, short letters, and prayer lessons. However, parents also need to instill a tolerant attitude towards the use of gadgets and limit the time of use to avoid nomophobia. Gadgets are not a substitute for direct interaction and stimulation from parents. Parents need to provide time and space for children to do other activities that are more beneficial, such as playing, exercising, socializing, and interacting with nature. Parents can help children make optimal use of their golden age and maximize their potential to grow and develop into healthy, intelligent, and well-character individuals.

Nomophobia, the anxiety that arises when not being able to access a mobile phone, has become an increasingly worrying phenomenon. Surveys show that the prevalence of Nomophobia is increasing rapidly, from 53% in 2008 to 66% today. Research shows that the age groups most susceptible to Nomophobia are adolescents (18-24 years) and young adults (25-34 years). In Indonesia, the number of people with Nomophobia in the age range of 18-24 years increased from 75% in 2013 to 84% in 2014. The emergence of Nomophobia was first identified in the UK in 2008. This disorder is categorized as a modern disorder that arises due to excessive reliance on virtual communication devices such as mobile phones.

Nomophobia is characterized by anxiety and discomfort when not being able to get a signal, running out of battery, forgetting to pick up the phone, or not receiving calls, text messages, or email notifications within a certain period of time. Nomophobia can negatively impact an individual's mental and social health. Excessive anxiety and dependence on mobile phones can interfere with daily activities, interfere with sleep quality, and hinder social interaction. For individuals, it is important to manage the use of mobile phones wisely and avoid over-dependence. Parents and educators also need to provide education and assistance to children and adolescents to avoid Nomophobia and be able to use technology responsibly.

Nomophobia, excessive anxiety when not being able to use a smartphone, is a serious concern for teenagers in this digital era. Dependence on smartphones triggers uncontrollable anxiety and worry if they cannot access social media, the main communication platform for teenagers today. The lack of understanding of the ideal use of smartphones in teens causes them to often be tempted to use them outside of their proper time, including when studying. This of course has a negative impact on their academic achievement because focus is fragmented and concentration is disturbed. The impact of nomophobia on adolescents is not only on academic achievement, but also on their personality. Teenagers who are addicted to smartphones tend to become apathetic and have a low sense of concern for the surrounding environment. They focus more on the virtual world and ignore interactions in the real world. Excessive smartphone use also changes the behavior and activity patterns of adolescents. They are more interested in spending time in the virtual world than in the real world, and prefer to communicate through social media rather than face-to-face.

Nomophobia, the excessive anxiety of not being able to use a smartphone, has become a common phenomenon in this digital age. Some characteristics and driving factors of nomophobia. Characteristics of Nomophobia include excessive cell phone use, anxiety and nervousness, checking the phone continuously, lack of social interaction, and excessive spending. Meanwhile, the driving factors for nomophobia are the needs of modern humans, technological developments, social media, FOMO (Fear of Missing Out), and personality. Nomophobia can negatively impact mental and physical health, as well as interfere with daily life. It is important to increase a person's awareness regarding the dangers of nomophobia and manage the use of mobile phones wisely.

People with nomophobia have a tendency to use mobile phones regularly and spend a lot of time playing with mobile phones. They feel anxious and nervous when they lose it or when the phone is not nearby. This

habit encourages them to constantly look at the phone screen to check if there are incoming messages or calls. As a result, face-to-face social interaction becomes reduced and stress arises. They prefer to communicate via mobile phones rather than meeting others in person. This can also result in excessive spending on mobile phone use.

Various factors can cause nomophobia, one of which is the need for modern humans. In the past, before technology developed rapidly, humans did not really need the facilities on mobile phones. However, the development of the times has made mobile phones an important tool in human life. The need to stay connected with others is becoming more and more urgent. Coupled with the emergence of social media, Indonesia has become one of the countries with the most active social network users in the world. Social media has changed the way mass media communicates with its users to be more effective. People no longer have to read newspapers or visit news sites to find out the latest information.

Excessive use of mobile phones can have a negative impact on the physical and mental health of its users. Joshi (2013) mentioned some of these impacts, such as an increased risk of cancer, lower sperm count, high risk of accidents, pain in the shoulders, neck, and head due to poor posture when staring at a mobile phone screen for a long time. In addition, Kurnia (2014) also explained several psychological and social impacts, such as lack of focus on social interaction, and hallucinations with notifications. Data shows that the use of gadgets and social networks in Indonesia continues to increase. In 2018, there were 133 million users, 2019 (150 million), 2020 (175.4 million), 2021 (200 million), and 2022 (205 million). This shows that the potential negative impact of excessive mobile phone use is also getting higher.

Therefore, it is important to use your phone wisely and not overdo it. Limit the time you spend using your phone, maintain your posture while using it, and get enough physical activity to maintain your physical and mental health. In Indonesia, the symptoms of nomophobia have become a common phenomenon. On public transportation or shopping malls, it's easy to find people glued to their smartphones, don't care about their surroundings, and only focus on the screen. The view that having a large following on social media or constantly connecting with the virtual world is an achievement needs to be straightened out. Addiction to anything, including gadgets, is detrimental to oneself and others. This phenomenon of nomophobia requires attention from various parties, including religion. In Islam, maintaining social relationships and interacting with others directly is recommended. Gadget addiction can inhibit such interactions and cause negative impacts on personal and social life.

2. Research Methods

This study aims to investigate the form and impact of gadget use in early childhood by combining two perspectives: phenomenology and Islam. The phenomenological approach focuses on understanding the individual's social actions, experiences, meanings, and consciousness. In this study, researchers will unravel how early childhood uses gadgets, the meaning they give to their use, and how Islam views this phenomenon. The research method used is qualitative, which allows researchers to dig into information in depth and gain a rich understanding of gadget use in early childhood.

The data collection process involves various techniques, such as interviews, observations, literature studies and documentation. In interviews: Researchers will conduct in-depth interviews with children, parents, teachers, and related experts to gain a comprehensive understanding of gadget use in early childhood. In observation: Researchers will observe children's behavior when using gadgets in various places, such as at home, school, and playgrounds. In literature studies: Researchers will examine various literature related to gadget use in early childhood, including previous research, scientific articles, and books. In the documentation: The researcher will collect documents relevant to the research, such as gadget usage statistics, gadget usage guidelines, and school rules related to gadget use.

The data collected will then be analyzed inductively to find emerging themes and patterns. The results of the study are expected to make a significant contribution to understanding the complexity of gadget use in early childhood from a phenomenological and Islamic perspective, as well as provide recommendations for a wiser and more responsible use of gadgets in early childhood.

3. Results and Discussion

Based on the introduction and identification of the problem, this study focuses on the tolerance of gadget use in early childhood as an effort to prevent the impact of nomophobia from an Islamic point of view. The research question to be answered is how the use of gadgets affects early childhood, and what efforts parents

can make to prevent nomophobia in children. Tolerance in this study is interpreted as an attitude of respecting and understanding children's habits in using gadgets, without imposing rigid rules. Islam's view of tolerance is based on the principle of *tasamuh*, which is easy to forgive and respect differences (Rosyidi, 2019).

Gadget is a term that comes from the English language, which means a small electronic device that has a special function. In Indonesian, gadgets are referred to as "gadgets". One of the things that distinguishes gadgets from other electronic devices is the element of "novelty". This means that from day to day gadgets always appear by presenting the most advanced technology that makes human life more practical. Gadgets are devices related to current technological developments. Which includes gadgets such as: tablets, smartphones, notebooks, and so on (Nugroho, 2013).

In the opinion of parents, excessive use of gadgets in children will have a negative impact because it can reduce concentration and increase children's dependence to be able to do various things that should be able to do on their own. Another impact is the increasing openness of internet access in gadgets that display everything that should not be seen by children yet. Many children begin to become addicted to gadgets and forget to socialize with the surrounding environment which has a great impact on their psychological development, especially self-confidence, as well as on physical development in children (Okitasari, 2021).

Electromagnetic radiation from gadgets is indeed invisible, and the effects are not directly visible. For this reason, parents must be wise in supervising and selecting the game tools that children use when playing. The habit of children playing gadgets today is undeniable, but it's a good idea not to always play, or at least limit the time spent playing gadgets, for the reasons of the radiation above. Actually, play is the main activity of children that appear from infancy. This activity is important for the cognitive, social, and general personality development of children. Children can also begin to understand the relationship between themselves and their social environment through play activities, learning to get along and understanding the rules or procedures of socializing. However, currently children spend more time playing gadgets than playing with their peers, resulting in individualistic and egocentric traits, as well as a lack of sensitivity to the surrounding environment. Therefore, parents must always accompany their children and give them a few minutes when the child is going to play gadgets (Iswidharmanjaya, 2014).

The use of gadgets in early childhood in Indonesia has various impacts, both positive and negative. One of the positive impacts is in the field of education. Here are some examples, namely: 1) Facilitating the learning process: Gadgets can be a source of information and learning media that are easily accessible to children. Children can quickly and easily search for information to do schoolwork and learn various subject matter. 2) Expanding the network of friends: Gadgets with their social media allow children to connect with their friends easily, even with friends who live outside the area. This can help children socialize and build friendships. 3) Facilitate communication: Gadgets allow children to communicate with others easily and quickly, either through text messages, voice calls, or video calls. This can help children maintain relationships with family and loved ones, especially for children who live far away from family. 4) Train creativity: Many educational apps and games on gadgets can stimulate children's creativity. Children can learn to play music, draw, write stories, and various other creative activities using gadgets.

In addition to the positive impacts, the use of gadgets in early childhood in Indonesia also has several negative impacts, including: 1) Health problems: Long-term exposure to radiation from gadgets can be harmful to children's health, especially in children under the age of 12. Excessive radiation can increase the risk of cancer and other health problems. 2) Disrupting children's development: Excessive use of gadgets can hinder children's physical, social, and emotional development. Children who spend too much time in front of a gadget screen tend to be less active, have difficulty socializing, and easily experience anxiety. 3) Vulnerability to crime: Uncontrolled use of gadgets can harm children from online crimes, such as cyberbullying, fraud, and pornographic content.

Negative influence on children's behavior: The ease of access to information on the internet can introduce children to content that is not appropriate for their age. This can have a negative effect on children's behavior, such as being irritable, aggressive, and having a consumptive mindset. To minimize the negative impact of gadgets, parents need to play an active role in guiding and supervising children when using gadgets. Parents also need to create clear time limits for the use of gadgets and choose content that is appropriate for the child's age. Gadgets are a tool, not a substitute for interaction and stimulation provided by parents and the surrounding environment. Parents need to set a good example in the use of gadgets and invite children to do other activities that are more useful, such as playing, exercising, and socializing.

Nomophobia, short for "No Mobile Phone Phobia", is a modern fear that was newly discovered in Indonesia in 2012. This phenomenon describes an individual's fear of not being connected to gadgets or the internet. The increasingly widespread use of gadgets in all walks of life, from children to adults, has changed the way humans interact with the world. This communication technology affects the perception of reality, interaction with space and time, and of course the way of communicating. The behavior of individuals who experience nomophobia is different from those who only use gadgets as a regular means of communication. A person with severe nomophobia can be seen from several indicators, such as the length of use of gadgets, excessive internet quota use, having many gadgets, and the habit of carrying a charger. These behaviors indicate an individual's excessive dependence on gadgets and can have negative consequences for their mental and physical health.

Reading the Qur'an is a noble practice that is recommended by Allah SWT and brings double rewards for those who do it, even though they do not understand its meaning and meaning. In this digital era, the ease of reading the Qur'an through gadgets has become an alternative for Muslims. Reading the Qur'an on gadgets has advantages, such as ease of access and the availability of various supporting features. However, parents need to provide guidance and supervision to their children so that the use of gadgets remains directed and does not cause negative impacts.

This research was conducted at Insan Mulia Purwokerto Kindergarten by involving 20 students as respondents. Here are some of the key findings:

1. Age of Respondents: The age of the most respondents was 6 years old (13 students), while the age of 5 years had the lowest percentage (7 students).
2. Gender of Respondents: The majority of respondents were male (11 people), while female 9 people.
3. Gadget Use: 14 respondents (70%) admitted to being addicted to gadgets, while 6 respondents (30%) were not addicted.
4. Sleep Quality: 12 respondents (60%) had poor sleep quality, while 8 respondents (40%) had good sleep quality.
5. The Relationship between Gadget Use and Sleep Quality:
 - 4 respondents who were not addicted to gadgets had good sleep quality.
 - 2 respondents who were not addicted to gadgets had poor sleep quality.
 - 8 respondents who were addicted to gadgets had good sleep quality.
 - 10 respondents who are addicted to gadgets have poor sleep quality baik.

These findings suggest that there is a relationship between excessive gadget use and poor sleep quality in early childhood. It is a concern for parents and educators to limit the use of gadgets in children and improve their sleep quality. This research still has limitations, such as a small sample size and only focuses on one kindergarten. Further research with a larger and more diverse sample is needed to get a more comprehensive picture of the relationship between gadget use and sleep quality in early childhood.

This study found a significant relationship between gadget use and sleep quality of Insan Mulia Kindergarten students. This is evidenced by data that shows that 4 students who are not addicted to gadgets have good sleep quality, 2 students who are not addicted to gadgets have poor sleep quality, 4 students who are addicted to gadgets have good sleep quality, and 12 students who are addicted to gadgets have poor sleep quality.

The data shows that the majority of students who are addicted to gadgets have poor sleep quality. This is in line with research by Moulin & Chung (2017) which found that 72% of young children sleep with smartphones or tablets in their beds. This phenomenon can be explained by lifestyle theory. Gadgets have become an inseparable part of daily life, including for children. Exposure to blue light from gadget screens can interfere with the production of melatonin, a hormone that regulates sleep, causing difficulty falling asleep and decreased sleep quality. As Allah SWT said in the Qur'an Surah Ar-Ruum verse 23 and Surah An-Naba verse 9, sleep is a basic human need to relieve fatigue and maintain health. Therefore, it is important for parents and educators to pay attention to the use of gadgets in children and make clear rules to limit the time spent using gadgets, especially before bedtime.

This research makes an important contribution in understanding the relationship between gadget use and sleep quality in early childhood. These findings could serve as a basis for further research and the development of effective interventions to help children get quality sleep and optimal health. Playing gadgets excessively or relying on gadgets is not good for early childhood health. This can interfere with sleep quality,

inhibit physical and mental development, and increase the risk of various diseases. Therefore, the role of parents is very important in regulating children's bedtime so that their rest is not disturbed by gadgets. Parents need to make clear rules about the use of gadgets, such as limiting the time of use and prohibiting the use of gadgets before bedtime.

4. Conclusion

This study found a significant relationship between gadget use and sleep quality in Insan Mulia Kindergarten students. This is evidenced by data that shows that 4 students who are not addicted to gadgets have good sleep quality, 2 students who are not addicted to gadgets have poor sleep quality, 4 students who are addicted to gadgets have good sleep quality, and 12 students who are addicted to gadgets have poor sleep quality. The data shows that the majority of students who are addicted to gadgets have poor sleep quality. This is in line with other research that shows that exposure to blue light from gadget screens can interfere with the production of melatonin, a hormone that regulates sleep, causing difficulty falling asleep and decreased sleep quality. Therefore, it is important for parents and educators to pay attention to the use of gadgets in children and make clear rules to limit the time spent using gadgets, especially before bedtime. This research makes an important contribution in understanding the relationship between gadget use and sleep quality in early childhood. These findings could serve as a basis for further research and the development of effective interventions to help children get quality sleep and optimal health.

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