



INTERNATIONAL JOURNAL OF LAW,  
GOVERNMENT AND COMMUNICATION  
(IJLGC)

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## FACTORS INFLUENCING CHILDREN'S GADGET ADDICTION: A PARENTAL PERSPECTIVE

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### Article Info:

#### Article history:

Received date: 05.01.2025

Revised date: 18.01.2025

Accepted date: 10.03.2025

Published date: 17.03.2025

#### To cite this document:

Sobri, S. N. M., Norizan, N. I. E., & Zainal Abidin, N. Z. (2025). Factors Influencing Children's Gadget Addiction: A Parental Perspective. *International Journal of Law, Government and Communication*, 10 (39), 189-198.

DOI: 10.35631/IJLGC.1039012

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### Abstract:

This study aimed to investigate the factors influencing gadget addiction from a parent's perspective. Gadgets are devices of an electronic or semi-electronic nature. Commonly seen gadgets include computers, music players, game consoles (e.g., Xbox, PlayStation), and handheld devices such as iOS and Android (e.g., iPod, iPad, Galaxy and Nexus). Children in the present generation are more exposed to gadgets because advanced technology makes it easy to access them. Parental reactions to our children using tablets, be they positive or negative, vary from person to person, and no single solution will fit all parents. Many users already feel that they have crossed the initial threshold, having let their child begin interacting with educational applications, but are still experiencing a feeling of unease stemming from not having the necessary transparency to follow their child's pace or to guide them. This study focused on four factors that influence gadget addiction from a parent's perspective. By applying SPSS techniques in analyzing data, interesting findings have been generated from the study.

### Keywords:

Electronic; Children; Gadget Addiction; Parent's Perspective; Semi-Electronic

## Introduction

The prevalence of technology continues to grow steadily (Ramlan & Tajuddin, 2022). Mobile technology usage is surging globally, with over 5 billion individuals utilizing mobile devices

and smartphones accounting for more than half of this usage (Rosenberg, 2020). Recent studies indicate a substantial rise in internet adoption, especially among Malaysians, with mobile usage and accessibility reaching 97.9% since 2017. Furthermore, the utilization of computers and the internet has climbed to 81.2% and 70.5%, respectively (Abd. Rahim et al., 2021). The shift from traditional to modern methods, influenced by the Covid-19 pandemic, has accelerated the adoption of technology (Ramlan & Tajuddin, 2022). Younger generations, in particular, exhibit a preference for contemporary tech gadgets like smartphones, tablets, and laptops (Kumar & Sherkhane, 2018). The proportion of Malaysians classified as internet users has significantly risen from 80 percent in 2016 to 89.3 percent in 2017 (SKMM, 2017).

Addiction is characterized by an inability to abstain consistently, impaired behavioral control, cravings, diminished recognition of problematic behaviors and relationships, and dysfunctional emotional responses (Strasburger & Donnerstein, 2014). Adolescents are especially vulnerable to technology addiction. With easy access and reliance on technology, the youth generation has become the most susceptible population segment (Kumar & Sherkhane, 2018). This is concerning when young children aged 2-3 are frequently given electronic gadgets like iPads and phones as substitutes for parental supervision (Alif, 2018). The appealing features and apps on these devices can lead children to develop addictions, evident when denied access causes distress. During Covid-19 lockdowns, technology served as a coping mechanism (Uslu, 2022). Consequently, individuals, including youth and remote workers, became increasingly dependent on gadgets, potentially fostering addiction.

Gadget addiction is a global issue affecting Malaysia too. Internet usage significantly increased, with Malaysian internet users rising from 80% in 2016 to 89.3% in 2017. Alarmingly, over 60,000 students aged 12-18 spend at least 4 hours daily on the internet, especially social media (The Sun Daily, 2021). A child constantly using a smartphone, obsessed with online games, showing hostility, restlessness, sleep issues, and neglecting meals indicates gadget addiction (The Sun Daily, 2021). Stressed adolescents often turn to online videos and social media for comfort, lacking effective coping mechanisms (Amitha et al., 2018). This reliance during stress can worsen gadget addiction by using devices as a coping mechanism. Without proper limits, children may excessively use gadgets, negatively impacting health and behavior, increasing hostility and tantrums when separated from devices (Gunuc, 2016; Dini Nurbaeti Zen et al. 2024; Kapahi et al., 2024).

A study by Rizky et al. (2021) highlights children's gadget addiction as a mental health issue influenced by various factors. The research also examined the relationship between preschoolers' gadget addiction levels and their parents' parenting styles. The study found that parents often expose their children to smartphones from infancy, and most children own one by age four. Parents commonly give mobile devices to children for three main reasons: helping with homework (around 70% of the time), keeping them quiet (around 65% of the time), and occupying them before bedtime (approximately 25% of the time) (Rizky et al., 2021). Parents with lower education levels may be unaware of the risks of gadget addiction and see allowing electronics as an easy solution. On the other hand, parents with higher socioeconomic status may not have enough time to engage with their children during technology use actively, granting more freedom to use electronics, which could increase the risk of children's gadget addiction.

## Literature Review

According to Kumar and Sherkhane (2018), the term “gadget” refers to portable electronic devices. The use of gadgets has both benefits and drawbacks. Excessive use of electronics has been associated with various health issues, including eye strain, finger discomfort, backache, neck pain, and sleep disturbances. Depending on the amount of time spent using these devices, negative consequences can include physiological, psychological, social, and emotional effects. The use of technology is increasingly common and advancing rapidly. Technological advancements involve the creation of innovative tools that revolutionize our interactions, work, and survival. Globally, the use of technology is expanding at an unprecedented rate.

Signs of addiction include an inability to consistently refrain from using, impaired behavioral control, cravings, reduced awareness of the negative impact on one’s behavior and relationships, and dysfunctional emotional responses (Strasburger & Donnerstein, 2014). Therefore, it is concerning when toddlers and young children between the ages of two and three are frequently allowed to play with electronic devices like iPads and mobile phones instead of being guided by parents or caregivers (Alif, 2018). This scenario can lead to addiction in children, as these devices offer a wide range of applications and advanced features.

## Over-Dependence

According to the New Straits Times, individuals are concerned about developing an addiction to gadgets because they rely too heavily on technology for communication and information, often ignoring the “real world” around them. It is now common to see groups of teenagers or adults, including families or friends, sitting together without speaking to one another (Bernama, 2019). A survey found that 69 percent of customers said they were dependent on their phones and couldn’t live without them (Dzulkipli, 2022). Additionally, 46.9% of Malaysian students were found to be addicted to smartphones, indicating a growing dependence on these devices in their daily lives (Norbaidurah et al., 2018). The reliance on technology is increasing at an unprecedented rate globally. The Poll conducted on 2,355 U.S adults found that nearly 65% of Americans believe that modern society is overly dependent on technological devices, and 39% do not believe that technology such as GPS, Wi-Fi networks, and mobile phones actually increases productivity (Marketing Charts, 2009).

Recent research shows that nearly two-thirds of Malaysia’s population are addicted to smartphones or other smart gadgets and cannot live without their Samsungs, iPhones, iPads, or other devices (Alwyn, 2018). In Malaysia, internet usage has significantly increased from 76.9% to 88.7% over a 4-year period, with people aged 44 and under accounting for 85.9% of these users (MCMC, 2021). According to the Internet User Survey 2020 by the Malaysian Communications and Multimedia Commission, 88.7% of Malaysians are internet users. The survey also reveals that the percentage of children aged five to 17 using the internet has risen from 18.4% in 2016 to 47.0% in 2020. However, only 34.4% of parents utilize parental control software to ensure their children’s online safety (TSD, 2021). Another report states that 68% of high school students spend two to four hours each day on their mobile phones, while 9% spend the same amount of time in front of a computer and 8% do so on tablets (The Daily Star, 2021). Currently, 81% of adult Americans own a smartphone, and being without one can be extremely inconvenient, especially with the increasing number of online transactions. However, our culture’s reliance on technology raises significant concerns.

### ***Parenting Style***

Smartphones offer a wide range of applications for news, interaction, education, and entertainment purposes, and have become increasingly necessary in daily life (Haug et al., 2015). Children, as well as adults, are frequent users of these modern devices. In Malaysia, teenagers accounted for more than 10% of smartphone consumers, with an adoption rate of 86.9% (Kwon et al., 2013). According to Kwon et al. (2013), smartphone addiction shares similarities with internet addiction and can be classified as a behavioral addiction. It is characterized by excessive or poorly regulated worries, desires, or behaviors related to smartphone use, which lead individuals to neglect other aspects of their lives.

Early parenting has been scientifically linked to various addictive behaviors, including drug dependence, internet dependence, and smartphone addiction (Bae SM, 2015). It has also been found to have significant effects on the parent-child relationship. In terms of smartphone dependency, a more democratic or authoritative parenting style is associated with a lower likelihood of addiction. On the other hand, an authoritarian or overly protective parenting style, as well as permissive or self-reliant personalities, are associated with a higher risk of addiction. According to Arokiasamy (2013), the term “authoritarian parenting style” refers to an overly protective parenting style characterized by rigid restrictions and high expectations. There is no room for exceptions or negotiation when it comes to the rules that children must always follow. Among secondary school students in Kota Bharu, the rate of smartphone addiction is higher (74%) compared to other Malaysian cities. The perception of parents’ nurturing and delegating parenting style is positively correlated with a higher risk of smartphone addiction among secondary school students in Kota Bharu. This study highlights the importance of identifying specific demographics when conducting research to achieve the most valuable results. Additionally, it emphasizes the concerning level of smartphone dependence among young people in our community (Kumcagiz, 2016).

### ***Local Economy***

According to Jacobs (1961), the term “local economy” refers to the economic activity that occurs within a specific geographic area, such as a city, region, or country. This includes the production, distribution, and consumption of goods and services within that area. The local economy can be influenced by various factors, including local policies, natural resources, and the presence of industries and businesses.

The use of technology is more prevalent among well-educated individuals living in developing economies, particularly among young people. The global use of mobile technologies is expanding rapidly, with over 5 billion people worldwide owning mobile devices, and smartphones accounting for more than fifty percent of this connectivity. However, the advancement of mobile technology varies significantly between nations. People in industrialized countries, especially those in developed economies, are more likely to use the internet, social media, and mobile phones, particularly smartphones. For example, the median smartphone ownership rate among 18 developed economies was found to be 76%, while the rate among emerging economies was only 45% (Laura, 2019).

This was further clarified by Joe (2021) by saying that in areas with readily available internet access, individuals may spend more time online, which increases the risk of gadget addiction. People are more likely to purchase technology such as smartphones, tablets, and laptops if they have more disposable income. Conversely, during an economic crisis, individuals may

prioritize purchasing essential items rather than spending money on non-essential items like electronic devices. Lionel Robbins defined economics as the science that studies human behavior in relation to the choices made due to limited resources with alternative uses. In countries with strong economies and higher disposable incomes, consumerism and the desire to acquire the latest gadgets and technology may be more emphasized. This can create a situation where people feel pressured to keep up with current trends and constantly upgrade their devices, contributing to gadget addiction (Youb, 2010).

### ***Device Attraction***

The intelligent millennials of the postmodern era are set to contribute to the advancement of the nation (Haslinda, 2012). Nowadays, it is undeniable that the use of contemporary technology by young adults has a profound impact on their future success, as asserted by Suramhadi (2013). On the flip side, the utilization of contemporary devices such as mobile phones, computers, laptops, smartphones, and internet access among the current generation can be beneficial, as they may enhance psychological maturity and superior reasoning abilities.

According to Shrimali et al. (2016), modern gadgets refer to any technology item or service that is used on a daily basis by individuals, particularly young individuals. This includes mobile phones, computers, laptops, smartphones, the internet, televisions, iPods, pen drives, emails, Facebook, YouTube, Instagram, and Twitter. Consequently, they are now referred to as electronic millennials or the iGeneration. It is true that young adults are easily drawn to such sophisticated technology. Furthermore, the latest technology incorporates touchscreens, providing people with a means of accessing the information they need for their daily lives (Pogue, 2016). The advancement and widespread adoption of information and communication technology (ICT) have successfully brought Malaysia up to par with other industrialized nations worldwide. Recent research suggests that the usage of non-traditional media, particularly among youngsters in metropolitan areas, has increased sources of information (Fatimah, 2016). Examples of such media include the internet, WhatsApp Messenger, Twitter, and short message service (SMS). As a result, the political climate of the nation has changed, leading to the democratization of information, which is now faster and more readily available than traditional media, regardless of time or location. Additionally, the vibrant and highly engaging images that children are exposed to further contribute to their addiction to these devices, whether they are used for gaming, watching videos, or chatting with peers online (Sara, 2023).

### ***The Social Cognitive Theory (SCT)***

The Social Cognitive Theory (SCT), developed by Albert Bandura (1986), is highly suitable for understanding gadget addiction in children. It emphasizes that learning occurs through observation, modelling and reciprocal determinism, where behavior, personal factor and environmental factors influence each other. According to SCT, children learn by observing others, especially role models such as parents, siblings, peers, and media personalities. In the context of gadgets, children often mimic the behavior they see in others, including their parents' or peers' screen time habits. As technology becomes more integrated into daily life, children may adopt similar patterns of excessive gadget use because it has become normalized in their environment. Furthermore, the theory highlights the role of reinforcement in the learning process. Children receive rewards from their gadgets, such as social validation from social media or game achievements. These rewards reinforce the behavior, encouraging children to continue using their devices excessively (Koutroubas & Galanakis, 2022).



## Methodology

In the research study, the researchers are specifically targeting parents as respondents from the population in Taman Lembah Bujang, researchers use a sampling technique called “purposive sampling” or “non-probability sampling.” With purposive sampling, the researchers intentionally select individuals who possess specific characteristics or meet certain criteria that are relevant to research objectives. Researchers choose parents because researchers want to gather insights and perspectives related to parenting experiences, child-rearing practices or any other aspects that are specific to parents in Taman Lembah Bujang. With purposive sampling, the goal is not to obtain a representative sample that can be generalized to the entire population. Instead, the focus is on selecting participants who can provide valuable and in-depth information related to the research.

By using SPSS methods, the research investigates six main objectives as mentioned below;  
RO1 To know the level of gadget addiction among children from parents’ perspectives in Merbok, Kedah.

RO2 To examine the relationship between parenting styles and gadget addiction among children from parents’ perspectives in Merbok, Kedah.

RO3 To examine the relationship between over-dependence and gadget addiction children from parents’ perspectives in Merbok, Kedah

RO4 To examine the relationship between device attraction and gadget addiction among children from parents’ perspectives in Merbok, Kedah.

RO5 To examine the relationship between local economy and gadget addiction among children from parents’ perspectives in Merbok, Kedah.

RO6 To examine the strongest factor, contribute to gadget addiction among children from parents’ perspectives in Merbok, Kedah

## Findings

**Table 1**

Variable	Mean	Standard Deviation	Min	Max	Decision
Gadget Addiction	25.5229/6 =4.254	4.06338	6	30	High

## Relationship Analysis

**Table 2: Pearson Correlation**

Variable		R-Value	P-Value	Decision
Parenting Style →	Gadget Addiction	0.559	.000	H1 is supported
Over-Dependence →	Gadget Addiction	0.769	.000	H2 is supported
Device Attraction →	Gadget Addiction	0.638	.000	H3 is supported
Local Economy →	Gadget Addiction	0.602	.000	H4 is supported

### *The Most Influential Factor*

**Table 3: Multiple Regression Analysis**

Variable	Unstandardized Beta	Standardized Beta	T-Value	P-Value
Parenting Style	0.042	0.041	0.410	0.682 P>0.05 (Not Sig)
<b>Over-Dependence</b>	<b>0.679</b>	0.664	6.245	0.001 P<0.05 (Sig)
Device Attraction	0.161	0.172	1.569	0.120 P>0.05 (Not Sig)
Local Economy	-0.55	-0.057	-0.552	0.582 P>0.05(Not Sig)

### **Findings And Discussion**

In summary of the discussions within this chapter, the research findings suggest that there is a positive correlation between all independent variables and the dependent variable, which is gadget addiction.

**Table 4: Summary of the Main Findings**

Variables	Theory	Impact
Parenting Style	The Social Cognitive Theory (SCT)	How parents interact with their children may affect whether or not the children obey them
Over-Dependence		Over-reliance on gadgets: Parents admit their children rely on the gadgets too much
Device Attraction		Numerous features and attraction on device lead the children engrossed on the gadget
Local Economy		Thriving local economy exhibit higher instances of gadget addiction

Table 4 shown above describes summaries on the main finding of gadget addiction among children. It is asserted from the results that the primary factor contributing to the rise in gadget addiction among children from parents' perspective in Taman Lembah Bujang, Merbok, is over-dependence. In short, the analysis technique employed for examining this study's research objectives is deemed suitable and has effectively yielded the intended results.

This study found that 100% of parents surveyed agreed that most children nowadays are addicted to gadgets. This consensus agreement among parents highlights the widespread recognition of this issue. Furthermore, the research also revealed that an impressive 92.7% of parents surveyed demonstrated an understanding of the factors that contribute to gadget addiction. This high percentage indicates that a significant majority of parents are aware of the various influences and elements that can contribute to this addictive behaviour in children. These findings suggest that parents are increasingly recognizing the impact of excessive gadget use on their children and are knowledgeable about the potential factors that contribute to this addiction.

As parents serve as role models for their children, both positive and negative parenting styles can be seen in their behaviour. This is because young children will often copy what they observe and absorb, especially in their early stages of life. At that age, kids start copying their parents and believe that their behaviour sets the finest example for kids (Arini et al., 2021). In this sense, Siswanto and Lestari (2012) claim that imitation is one of a child's traits. Youngsters enjoy copying the behaviours of grownups. Children may view using gadgets as a normal and desirable behaviour if they witness their parents using screens all the time, whether for work or play (Alif, 2018). Children may wish to emulate their parents and start using technology more frequently as a result of this. It might lead to a dependence on screens for amusement and emotional control if parents utilise technology to distract or amuse their kids. Youngsters who are bored, stressed out or experiencing emotional distress might turn to electronics as a coping mechanism, which increases the chance of addiction (Amitha et al., 2018). Therefore, there is a significant relationship between gadget addiction and parenting styles. Parents should set a good example for their kids by using technology sensibly themselves. By exhibiting sensible screen-related behaviours, like establishing boundaries and switching to other activities.

The study also found that there is a significant relationship between gadget addiction and over-dependence. The  $H_{a1}$  is supported with the  $r$  value is 0.769. According to a study, having a device is a must for them to survive each day. Furthermore, there was a claim that members of Generation Z would not be able to survive without them. Given that Generation Alpha has been surrounded by technology from early childhood, they may get obsessed with electronics as time goes on (Zarina et al., 2022). The excessive usage of technology can lead to addiction and make kids dependent on it (Sarvananthan, 2021). Children's use of gadgets is concerning according to data from the Malaysian Communications and Multimedia Commission (MCMC), 83.2 percent of Internet users are under the age of 17 (MCMC, 2017). Technology is becoming more and more necessary for people. The excessive use of technology by today's youth and adults raises concerns about their intellectual and physical growth (Mowshomi et al., 2023).

Ultimately, it demonstrates that there is a strong correlation between the local economy and the addiction to gadgets. Children who come from urban areas, which is having a parent with a solid economy more relies to gadget because parents can afford to buy for them, additionally, in urban areas, the internet connection also good compared to rural areas. This research emphasises how crucial it is for parents to monitor their kids' usage of technology, even in places with strong economies. In a digital age where devices are more readily available, parents may want more assistance and direction. The implementation of community-wide awareness campaigns and support networks is crucial in enabling parents to successfully supervise their children's gadget use (Suzana, 2020). By understanding this strong relationship, parents and all society can work together to strike a balance, ensuring that children in economically thriving areas develop healthy technology habits while enjoying the benefits of a prosperous local economy.

## Conclusion

In conclusion, this study has succeeded in determining how parents view children's addiction to gadgets. The study's conclusions have important ramifications for directing community-specific interventions on educational programs, especially informing parents about the risks of gadget addiction and providing practical advice for them. With numerous contributing variables and detrimental effects on health and cognitive development, gadget addiction is



becoming a more widespread public concern in Malaysia, particularly among children and teenagers. To address this issue and increase awareness, interventions and education are required. All facets of a nation must appropriately and carefully address the issue. To carefully handle the situation, parents, schools, instructors, businesses, and ministries must collaborate. For a more nuanced interpretation of the findings, future studies should also examine children's viewpoints and employ both quantitative and qualitative methodologies.

### Acknowledgements

The authors would like to acknowledge and extend special gratitude to Universiti Teknologi MARA (UiTM) Cawangan Kedah and Global Academic Excellence (M) Sdn. Bhd., editor and reviewer for approving the publication of this article.

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