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Community Perspectives on Gadget Addiction Among School Students in Muar, Johor

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Abstract

The awareness of gadget addiction among school students has to be taken into consideration as it could affect the mental and physical health that lead to the negative outcome like stress, anxiety and so on. The encouragement towards proactive efforts have to be taken accountable to address this issue thereby taking educational initiatives and collaborative efforts between parents and teachers could take place so that it will not get more serious. This study aims to discover the community's perspectives on the gadget addiction among school students at Muar, Johor. Adopting a descriptive quantitative research design. For this research, it involved 80 participants so the research employed Roscoe' methodology as it is a convenient method for small and medium scale studies and suitable to achieve the objectives of the research and employed Cronbach's Alpha method. Both methods conducted both reliability and descriptive analyses. The results indicate a high level of awareness on gadget addiction among school students, with a mean score of 4.17, suggesting excellent knowledge levels. The reliability analysis demonstrated excellent internal consistency, yielding a Cronbach's alpha of 0.960. These findings suggest that communities have very thoughtful knowledge about the gadget addiction among school students in Muar, Johor but on the other hand there there is still have to be the effort to curb this issue like through educational initiatives and collaborative efforts.

INTRODUCTION

As the country is moving forward towards globalization, the rapid development of modern technologies has significantly affected the modern development of the society which makes it easier to carry out daily activities (Diyora, 2024; Erlita et al., 2023). Technology is an important tool that can facilitate activities of human life which include gadgets which are electronic devices that are small and have special functions (Kurniawati & Sutharjana, 2023). Gadget refers to the electronic devices with advanced technological innovations that allow users to seek information and also serve as a communication tool efficiently (Ismail et al., 2023). Smartphones, laptops, computers and tablets are a variety of gadgets. In addition, Kurniawati & Sutharjana (2023) stated that gadgets have made

progress in each model and its features in order to make it more effective and functional that can be used easily. Gadgets have become a staple item of possession for every person of all ages, not just ranging from a working adult but also used by children (Erlita et al., 2023; Kurniawati & Sutharjana, 2023). Additionally, gadgets can easily be owned by anyone as they are widely available and the price range also vary, while some gadgets are also commonly sold at affordable prices (Surat et al., 2021). As gadgets can be easily obtained because of their affordable price, it has become a factor that drives parents to ensure their children possess the device.

The advances of digital devices are no longer bound by time or place which make it easier to access the digital media which make it easier for the children to use them anywhere, anytime, wandering on social media, surfing the Internet, and playing video games (Ding & Li, 2023). Internet, social media, and gaming are the other factors that drive the addiction towards gadgets. According to the Ding & Li (2023) the minds of the young children are premature and vulnerable, which make the young children tend to become addicted to playing mobile phones, video games, and social media, causing the phenomenon of digital addiction. Furthermore, Bakar et al., (2025) also stated that the excessive use of gadgets caused a phenomenon of gadget addiction that happens to anyone against age and has caused negative influence to the physiological, physical, and emotional factors. Aside from that, the use of internet and gadgets has specifically been increased especially after the integration of the technology in the schools' education system during the Covid-19 pandemic as it becomes the common means of learning, communication, and also to convey information (Bakar et al., 2025). This is because during the Covid-19 pandemic, online learning has become a primary method of learning for every student, which has caused a need for every student to possess gadgets in order to attend the online class. Additionally, an increased usage of the internet has caused addiction to the gadget itself. The use of gadgets has exceeded the needs for education and moving on as an entertainment tool for the students.

Many research conducted by researchers has shown that digital addiction has caused concern toward the mental and physical health of the students because of its excessive usage. In the study conducted by Mabaroh & Sugianti (2021) the result of the study has shown that among the psychological effects of gadget addiction, poor sleep was the highest effect that students have which resulted in 69% of female students and 3% male students suffering it caused by the gadget addiction. Additionally, study by Fu et al., (2022) concluded that the prevalence of Internet addiction among adolescents was 29.6% and the prevalence of depression, anxiety, and stress among adolescents were 64.8%, 78%, and 51.4%, respectively. Ultimately, the use of gadgets among students has been a concerning issue. According to Prof Dr Nora Mat Zin, a consultant psychiatrist associate, has stated that the excessive use of gadgets has massively increased which also increased the screen time among the children since the Covid-19 pandemic (Wei, 2021). Especially when gadgets have served as the means of parenting which parents allow their children to use gadgets to distract them, or to keep them occupied, often without proper monitoring and controlling their screentime. This habit has further led to the early dependency on gadget itself especially among children.

The gadget addiction has become a serious matter as recent studies has also revealed that there is an unhealthy amount of gadget usage by the Malaysian youth ultimately up to or more than eight hours a day of screen time usage (Tong, 2024). Additionally, Yusuf et al., (2024) stated that instead of using the digital skills that students have to enhance their academic performance, they tend to use the technology for socializing and entertainment. Other than that, a survey conducted by The Malaysian Communications and Multimedia Commission (MCMC) found that 11.7% of internet users are online for more than 18 hours daily, which out of the 11.7% of users, 16% of them are aged 20-years-old and below (Dzulqarnain, 2023). Aside from the unhealthy use of gadgets, Devi & Yunus (2025) reported that there is an increasing disturbing behavior among the children which is caused by the gadget dependency or overuse of gadgets that affect their social and emotional. From these past studies, it has been revealed that children especially have spent a long time on gadgets which ultimately led to the gadget addiction. This shows that the use of gadgets has become a worrying issue that needs to be controlled. Therefore, this study is conducted in order to discover the community’s perspectives on the gadget addiction among school students at Muar, Johor.

LITERATURE REVIEW

As technology has become an everyday aspect of life, screen time has broadened beyond leisure and enjoyment to include work, education, and social interaction. While screen time offers various benefits, such as immediate access to information, there is rising worry about its possible effects on health and well-being. The term "screen time" has become increasingly popular, referring to the amount of time an individual spends in front of a screen, which includes devices such as smartphones, computers, televisions, and tablets. (Mohd Saat et al., 2024). Television viewing and video game playing appear to be the activities most negatively connected with academic achievement, especially among teens. Previous research has indicated that playing video games is inversely connected with emotional and social health, prompting psychological and behavioral issues that may have implications for overall academic success. (Renau et al., 2019)

Gadget addiction can be understood as a form of psychological dependence on digital devices such as smartphones, tablets, and computers, marked by compulsive use and diminished self-control despite awareness of adverse consequences. Pan et al. (2023) frame gadget addiction within the broader category of behavioral addictions, aligning it conceptually with internet addiction and digital game disorder. Their work emphasizes that gadget addiction is fundamentally driven by self-regulatory deficits, particularly imbalances in self-control and time orientation. Individuals with higher levels of gadget addiction tend to favor immediate rewards derived from gadget use over long-term goals, leading to persistent and excessive engagement with digital devices even when such behavior disrupts daily functioning and well-being. This conceptualization highlights gadget addiction as a psychological condition rooted in impaired self-control rather than merely excessive technology exposure. Supporting this conceptual framework, Olson et al. (2022) provide empirical evidence demonstrating that smartphone addiction is a widespread and escalating global phenomenon. Through a meta-analysis involving 33,831 participants across 24 countries, their findings reveal particularly severe levels of smartphone addiction in countries such as China, Saudi Arabia, and Malaysia. The prevalence patterns identified by Olson et al. (2022) reinforce Pan et al. 's (2023) argument by illustrating that self control related behavioral addiction to gadgets is not isolated but occurs at a significant population level, underscoring the growing relevance of gadget addiction as a global behavioral concern.

Depression and academic related anxiety partly or partially explain how smartphone addiction leads to poor academic performance such as emotional discomfort impairs focus, motivation, and study self-regulation. In China, a recent study discovered that the frequency of mobile phone addiction among Chinese college students was 36.6%. This imbalance contributes to persistent engagement with digital devices, even when such behavior interferes with daily functioning, academic responsibilities, or psychological well-being. Mei et. al (2022) also stated that physical problems (palpitations, nausea, and asphyxia), psychological issues (anxiety symptoms, depressive symptoms, loneliness, social anxiety, impaired concentration, and sad or hopeless), and sleep issues (sleep quality, latency, disturbances, duration, and dysfunctions) were all strongly linked to severe mobile phone addiction where most of people who frequently use or check their gadget more than 4 hours experience effects above . Based on study by Ge et. al (2023) , gadget addiction tendencies are more likely to happen towards people with depression and anxiety as they have a hard time with negative keeping in touch with the real world as they struggle with negative emotion. So, the internet helps them get assurance and seek relief which motivates them to use them virtually.

In addition, another element that would lead to negative impact on gadget addiction towards academic achievement is poor sleep. A compulsive engagement with gadgets such as social media and gaming often leads to bedtime procrastination, where they tend to delay sleep. In a cross-sectional study of 1043 young individuals in London between the ages of 18 and 30, 68.7% of them had both poor sleep and smartphone addiction, indicating a common issue. Both physical and mental health can be impacted by not enough sleep. Anxiety, sadness, and suicidal thoughts are all made more likely by poor sleep. Long-term musculoskeletal conditions like cervical disc degeneration or inflammation of the hand joints, as well as chronic conditions like hypertension, obesity, type-2 diabetes mellitus, cardiovascular disease, neurodegeneration, and dementia, can be brought on by poor or insufficient sleep, all of this cons have a direct impact on learning engagement and academic performance (He Leow et al., 2023). This bad effect supported by Mohd Saat et al., (2024) claims that poor sleep quality can have a bad impact on many aspects of a person's life, lowering their overall quality of life. A recent study of teens discovered a moderate link between screen usage and both low academic performance and decreased sleep quality. The study found that weekday screen use among adolescents aged 9 to 10 was linked to poor sleep quality, duration, and academic performance.

Besides, various studies consistently indicate that gadget addiction among school students is closely related with reduced concentration, where it would affect learning and academic engagement. To illustrate, a study by Wilmer, Sherman, and Chein (2017) states that excessive smartphone usage could disrupt attention and weaken the ability to stay focused on cognitively demanding tasks, as constant notifications and repeatedly checking interrupt attentional processes. Gadget addiction clearly decreases core cognitive processes that are reinforced by more recent empirical work indicating that smartphone addiction among adolescents is significantly associated with low cognitive functioning, as well as reduced concentration which contributes to lower academic engagement and performance. As a whole, these studies highlighted that when gadget use becomes addictive, students may struggle to maintain focus during learning activities, focussing on the importance of understanding how communities perceive gadget addiction and its influence on students' concentration in school (Mendez et al., 2024).

Other than that, less productivity and holistic development are also consequences of gadget addiction. To strengthen it, a research by Nur Inayah Rauf et al. (2024) highlights that "fear of missing out" (FoMo) often leads students to prioritize screen time over academic responsibilities, leading to a significant decline in time management and focus. This was supported by Riche Siska Wati & Surya Jatmika (2025), who argue the brain's cognitive capacity can be overloaded due to excessive gadget use, making it difficult for students to engage in deep learning or keep concentrating on complex tasks. Furthermore, in another research proving that smartphone addiction negatively

impacts academic performance in tertiary students, where higher levels of gadget addiction are associated with poor academic engagement (Chan et al., 2021). Local studies have also argued that excessive smartphone use among Malaysian students correlates with increased risk of addiction and disruptive attitude, where it can undermine academic performance. Recent research has shown a direct correlation between gadget addiction and poor academic performance, with addiction levels significantly associated with poorer sleep quality, and affects the productive study time and cognitive functioning.

In conclusion, gadget addiction has become a significant factor negatively affecting student's academic performance, cognitive functioning, and overall well-being. Excessive consumption of digital devices often brought by FoMo, poor self-regulation, and the pursuit of immediate rewards, disrupts attention, focus, and time management. This compulsive usage not only reduces productivity and holistic development but also contributes to mental health issues such as anxiety and depression, and physical problems including poor sleep quality. Malaysian studies further verify that high levels of smartphone use among students are related with addictive behaviours and poor academic engagement. Collectively, the research highlights the urgent need for awareness, self-regulation strategies, and interventions to mitigate the impact of gadget addiction on students' learning and health. Overall, gadget addiction can lack learning motivation and affect academic results.

METHODOLOGY

This study was conducted in Muar, Johor to explore public opinions on gadget addiction among students. A descriptive quantitative research design was chosen for this study because it allows the collection of numerical data and helps describe general patterns and trends in public perceptions related to the study. The sample size consisted of 80 respondents from the general public in the city of Muar, and this number was determined using Roscoe's method. This is because Roscoe's method is considered suitable for small to medium scale studies and also fits well with the scope of this research. Data were collected using a structured questionnaire that includes questions on respondent's demographic backgrounds and especially their opinions on the causes, impacts, and seriousness of gadget addiction among students. Not only that, but a Likert also-scale format was used because it helps respondents express their level of agreement clearly and ensures consistency in responses. The data were analysed using the Statistical Package for the Social Sciences (SPSS). SPSS was chosen because it allows descriptive statistical methods such as frequency, mean, and standard deviation to be applied. This is since these statistical tools are effective in summarising the response patterns, measuring the spread of data and also providing a clearer understanding of public views regarding gadget addiction among students. In addition, a reliability test using Cronbach's Alpha was conducted to assess the internal consistency of the questionnaire items, which helps ensure that the instrument that measures used in the study was reliable for evaluating public opinions on gadget addiction among students.

RESULT AND DISCUSSION

Profile of Respondents

Table 1.0 shows the profile of respondents who participated in this study which offers insights into the community's perspectives on gadget addiction among school students in Muar. A total of 80 respondents were involved and most of them owned their own gadget. The gender distribution indicated a predominance of female respondents (62.5%, n=50), while male respondents accounted for 37.5% (n=30). Most respondents were single (70%, n=56), followed by married individuals (30.0%, n=24). In occupation, students represent the largest group (40.0%, n=32), followed by private sector employees (26.3%, n=21), civil servants (20.0%, n=16), and respondents from other sector occupations (13.7%, n=11). The race composition was predominantly Malay with (87.5%, n= 70), with smaller representations from Chinese (7.5%, n= 6) and Indian (5.0%, n= 4). These findings indicate that the study gathered perspectives from predominantly adult, gadget-owning populations from the Muar community. This suggests that the respondents are well-positioned to provide insights into the patterns and implications of gadget addiction among school students.

TABLE 1.0
PROFILE OF RESPONDENTS (N=80)

Profile	Category	Frequency	Percentage (%)
Gender	Male	30	37.5
	Female	50	62.5
Marital Status	Single	56	70.0
	Married	24	30.0

Occupation	Student	32	40.0
	Private Sector Employee	21	26.3
	Civil Servant	16	20.0
	Others	11	13.7
Races	Malay	70	87.5
	Chinese	6	7.5
	Indian	4	5.0
Gadget Ownership	Yes	80	100.0

Cronbach's alpha is a commonly used statistic to assess the reliability of a scale, reflecting the consistency and stability of its items. According to Pallant (2016), a Cronbach's alpha value of 0.60 or higher denotes acceptable reliability, whereas values below 0.60 indicate poor reliability. Specifically, values between 0.60 and 0.80 are considered moderately acceptable, while those between 0.80 and 1.00 are classified as excellent (Pallant, 2016). In this study, shown in table 1.1, the Cronbach's alpha for all of 10 variables listed to measure community perspectives on gadget addiction among school students is 0.943. This score demonstrates excellent reliability, indicating that the scale items are consistent and dependable for capturing respondent's perspective on gadget addiction among school students in Muar.

Table 1.1
RELIABILITY TEST

Variable	Number of Items	Cronbach's Alpha	Reliability Assumed
Community perspectives on gadget addiction among school students	10	0.943	Excellent

Mean and Standard Deviation

The analysis of the mean and standard deviation offers deeper insight into the community's perspectives on gadget addiction among school students in Muar. Using a five-point Likert Scale (1= strongly disagree, 2= disagree, 3= moderate, 4= agree, and 5= strongly agree), respondents were asked to rate their views on the seriousness, impacts, and community involvement related to gadget addiction. The result gathered shows that mean score is 4.17, followed by standard deviation of 0.830, which indicated a high level of awareness and concern among respondents. These findings suggest that while the community recognises the negative effect of gadget addiction, there is a need for greeter educational initiatives and collaborative efforts to promote the responsible gadget use among students in Muar to prevent gadget addiction issue getting serious..

Table 1.2
LEVEL OF MEAN SCORE RANGE

Mean Score Range	Level
1.00 – 2.33	Low
2.34 – 3.57	Medium
3.58 – 5.00	High

Table 1.3

MEAN AND STANDARD DEVIATION

Variable	Mean	Standard Deviation	N
Community perspectives on gadget addiction among school students	4.17	0.830	80

CONCLUSION

This study provides valuable insights about the community perspectives on gadget addiction among school students in Muar, Johor. The reliability of the research instrument was high, as indicated by Cronbach's alpha coefficient of 0.943 lending strong confidence to the accuracy and consistency of the results. The mean score of 4.17 and a standard deviation of 0.830 further suggest that respondents hold a high level of awareness and concern among the community. The occurrence of gadget addiction among the school students has to be addressed. The awareness of gadget addiction needs to be extended further considering that our community has a high level of awareness regarding this issue so it is a good time to make an effort towards this problem so that the frequency of involvement from various communities will be increased in order to prevent this issue effectively. Educational initiatives can be implemented by having the role of the teacher to educate the students about safe phone use instead of imposing severe prohibitions. It can be through assigned tasks that promote real-world exploration instead of conducted solely online. Not just that, the teachers could conduct awareness sessions in the school to draw attention to the consequences of student mobile addiction and in the meantime, collaboration with the parents can be the best move to ensure that the initiatives can give an impact towards the students even when they are at home. The collaboration with parents plays a role by keeping an eye on the behavioral shifts and declines in performance for their children so it could show that the collaboration between home and school could ensure the students eventually acquire self-control (Blog Lead, 2025).

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