

Exploring the Impacts of Internet and Social Media Exposure on Children: A Survey-Based Analysis

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Abstract

For the reason of the widespread of technologies in daily life, the rising rate of internet and social media usage among children has emerged as an important area of research. The purpose of this study is to enhance our knowledge of the impact of unsupervised internet and social media use on children's development and well-being. Data was collected via an online questionnaire divided into two sections. Section A dealt with demography, while Section B discussed the impact of the internet and social media on children. This study surveyed 36 parents to investigate their children's access to various internet information, its consequences on mental and physical health such as eye strain and sleep difficulties, and implications for academic achievement. According to the findings, unsupervised internet interaction can result in behavioural abnormalities in roughly 70% of cases, academic difficulties in around 30.6%, and health issues in about 58.3%. However, parents are using a variety of strategies to mitigate these risks. The survey reveals that 70% of respondents set limits on their children's gadget usage, while 22.2% utilize parental control software. These findings highlight the importance of taking proactive actions to overcome the issues posed by unsupervised digital interaction and create a safer and more beneficial online environment for children.

Keywords: Children, Online Content, Parental Supervision, Physical Health, Social Media

1. Introduction

The rising rate of internet and social media usage among children has emerged as a crucial subject of investigation, owing to the ubiquitous presence of these technologies in daily existence. From an early age, children are being exposed to a diverse array of online content, which has led to worries regarding the potential consequences of unsupervised internet and social media usage. Studies have demonstrated that this exposure can impact the kinds of content children access, encompassing informative, amusing, and potentially unsuitable things, and it also tests their capacity to assess the reliability of information [1]. Unsupervised online activity increases children's susceptibility to cyberbullying, requiring the creation of strategies to handle online safety hazards [2].

Furthermore, the impact of social media on children's mental health outcomes, specifically in terms of social comparison, is a major worry [3]. There is research indicating that frequent usage of social media might worsen conditions including

anxiety, depression, and self-esteem problems [4], [5]. The excessive usage of mobile phones and wireless gadgets has been associated with detrimental effects on the mental well-being of children, particularly in the aftermath of the COVID-19 pandemic [6]. In addition, there is mounting evidence indicating that unmonitored internet usage might have a detrimental effect on children's attention spans and their capacity to concentrate on educational activities [7].

Integrating social media into educational settings can facilitate the exchange of knowledge and enhance student engagement and academic achievement [8]. Nevertheless, the excessive utilization of digital platforms carries inherent hazards, such as the potential for diversions and a decline in in-person contact [9]. Parental intervention and supervision are essential in reducing these adverse consequences. Research has demonstrated that active parental involvement greatly decreases the potential dangers linked to children's online activities. This highlights the need for parents to take a proactive approach to monitoring and guiding their children's digital lives [10].

Digital media usage has an impact on physical health. Extended periods of using electronic devices have been linked to decreased levels of physical activity, which can have negative effects on general health and well-being [11]. Moreover, the impact of digital technology on children's dietary behaviors and attitudes is noteworthy, particularly considering the influential role of social media in molding lifestyle choices and health consequences [12]. Digital technology's impact on academic performance is also multifaceted. While some studies show that social media can enhance learning by providing new ways for students to interact with course material, others highlight the potential for decreased academic performance due to distractions [13].

Social media's role in social comparison and its effects on children's mental health outcomes is another significant concern. Evidence suggests that frequent social media use can exacerbate issues such as anxiety, depression, and self-esteem [14]. The impact on children's attention spans and their ability to focus on learning tasks is also critical, with studies showing that social media use can negatively affect academic performance [15]. Additionally, the influence of social media on knowledge sharing among students has shown both positive and negative effects, making it a double-edged sword in educational contexts. Understanding these key areas of concern is crucial for developing effective strategies and interventions to mitigate the negative impacts while maximizing the benefits of internet and social media use among children [16].

This research highlights the importance of studying unsupervised exposure to understand the diverse effects on children's development and well-being. The types of content accessed by children; educational, entertaining, and potentially age-inappropriate require scrutiny to assess the implications for their ability to evaluate the credibility of information [17]. Moreover, unsupervised online activity heightens children's vulnerability to cyberbullying and necessitates the development of coping mechanisms to manage online safety risks. This research also aims to fill gaps in knowledge and provide insights that can inform policy and educational practices to ensure a safer and more beneficial digital environment for young users. With a comprehensive approach, this study will explore how

unsupervised exposure to the internet and social media influences children's cognitive, emotional, and social development.

Establishing a comprehensive understanding of these important areas of concern is essential to creating successful methods and treatments that can minimize the adverse effects and maximize the advantages of children's internet and social media usage. The objective of this research is to address information gaps and offer valuable insights that can guide policy-making and instructional approaches, ultimately leading to a safer and more advantageous digital environment for young users. This study aims to enhance our comprehensive understanding of the impact of digital technologies on the younger generation by analyzing the intricate relationships between internet use, social media exposure, and children's well-being. Additionally, it intends to provide insights for authorities on how to promote a balanced digital environment.

2. Literature Review

The growing popularity of the internet and social media use among children has sparked enormous academic and policy attention. This review compiles data from current research into the various effects of internet engagement on young people. Major subjects of focus include internet usage patterns, the benefits and drawbacks of online engagement, and the significance of parental guidance and educational interventions.

a. Internet Use Patterns and Exposure

Children's surfing is prevalent and begins at a young age. According to [18], children in Kosovo use the internet daily, primarily via smartphones and tablets, for social media, entertainment, and education. The study emphasizes age and gender inequality, with older children demonstrating greater autonomy and engaging in more complicated online activities, with boys being more inclined to gaming while girls prefer social networking. These tendencies are consistent with larger trends reported in other contexts, where early exposure to diverse online content has raised concerns regarding children's development and safety [18].

b. Risks and Negative Experiences

Unsupervised internet use increases children's exposure to a variety of problems, including inappropriate content, cyberbullying, and privacy violations. [18] note that, despite the benefits of online access, the internet still carries significant risks, such as internet addiction and exposure to dangerous content. These findings are consistent with previous research demonstrating that unsupervised online engagement can increase vulnerability to cyberbullying and present issues in addressing online safety concerns [2].

Further research has shown that prolonged and unsupervised usage of mobile phones and digital devices harms children's mental health. [6] examine how excessive social media use contributes to disorders such as anxiety and depression, especially in the aftermath of the COVID-19 epidemic. Continuous use of digital screens has also been connected to reduced physical activity and poor effects on overall health and well-being [11].

c. Social Media and Mental Health

The impact of social media on children's mental health is a serious issue. [4], [5] found that regular usage of social media platforms can worsen anxiety, despair, and low self-esteem. The phenomena of social comparison, in which children and teenagers compare their lives to the frequently idealized portrayals seen on social media, can cause severe psychological suffering. [14] emphasize the dual nature of social media's impact, which provides chances for social involvement while also posing threats to mental health.

d. Educational Impacts

While social media can be an effective tool for educational engagement and information sharing, it also carries the risk of distraction and decreased academic performance. [8] investigates how incorporating social media into educational environments improves student engagement and achievement. However, [9] warn that digital platforms have the potential to induce distractions and limit face-to-face interactions which are required for comprehensive learning experiences. The impact of digital technology on children's attention durations and academic focus is significant. [7] address how unsupervised internet use can impair children's capacity to concentrate on educational tasks, reflecting previous research linking digital distractions to poor academic performance.

e. Parental Supervision and Education

Active parental involvement is critical for reducing the risks linked with children's online activity. [10] found that parental monitoring greatly minimizes the risks associated with unsupervised internet use, such as exposure to dangerous information and cyberbullying. This emphasizes the importance of parents taking proactive steps to monitor and guide their children's digital lives. Digital literacy education is another important factor in creating a safe online environment for children. [19] identify enhanced awareness and educational programs to help young people safely traverse the complex nature of the digital world. Such interventions are critical in empowering children to make educated decisions and reducing the negative consequences of internet and social media use [19].

Considering research on the multiple effects of internet and social media use among children, it is clear that unsupervised engagement in digital platforms offers significant dangers to numerous areas of their development and well-being. From concerns about material access and online safety to the influence on mental health and academic performance, research has continually emphasized the challenges of navigating the digital realm. Furthermore, the literature underlines the importance of parental supervision and digital literacy instruction in reducing these hazards and creating a safer online environment for children. Building on the previous research, the current study aims to advance our understanding of how unsupervised internet and social media use affects children's cognitive, emotional, and social development.

On top of that, the primary research question guiding this study is: "How has unsupervised internet and social media use affected children's content access, online safety, social comparisons, and attention span?" This question is highly

relevant and important in today's digital landscape, where children are increasingly exposed to the vast and often unregulated world of the internet and social media. Understanding the impact of unsupervised online exposure is crucial for several reasons. Firstly, it addresses the ability of children to discern factual information from biased or misleading content, which is essential for their cognitive development and critical thinking skills. Secondly, the study explores how children cope with online safety risks when unsupervised, shedding light on the effectiveness of current safety measures and the resilience strategies children develop. Thirdly, the research examines the link between unsupervised social media use and social comparison tendencies, which can significantly influence children's self-esteem and mental health. Lastly, the study investigates the potential negative consequences of unsupervised online activity on academic performance and learning outcomes, including experiences with cyberbullying and its impact on mood and behavior. By addressing these aspects, the research aims to provide a comprehensive understanding of the multifaceted effects of unsupervised internet and social media use on children, guiding future policies and interventions to promote safer and more productive online experiences for children.

3. Methodology

3.1. Survey Design

To gain a deeper understanding of the effects of unmonitored device exposure on children, we have created an extensive questionnaire utilizing Google Forms¹. This survey is tailored for parents and seeks to collect comprehensive information on how children of different age groups engage with electronic devices including smartphones, tablets, computers, and gaming consoles without adult supervision. The survey comprises inquiries on the mean daily utilization, varieties of devices employed, frequency of parental oversight, and the utilization of parental control functionalities. Furthermore, it examines the many categories of content that are accessed, the documented effects on behavior and academic performance, concerns related to physical health, and the tactics employed by parents to regulate the use of electronic devices. This research aims to detect significant trends and impacts of unsupervised gadget exposure by evaluating the replies. The findings will offer helpful insights for parents, educators, and policymakers.

3.2. Sample Population

The survey was conducted among 36 parents from a class in a school located in Kuala Lumpur. The demographic breakdown of the participants includes a diverse range of ages, primarily within the 36-55 age group. The respondents were predominantly parents with children aged 3 to 30 years, with a notable concentration in the 9-18 age range. Gender distribution was approximately equal among the parents. The socio-economic background of the participants varied, representing a mix of middle and upper-middle-class families, reflecting a broad spectrum of perspectives on the impact of social media and internet usage on their children.

¹ <https://docs.google.com/forms/d/e/1FAIpQLSfTe3sxacmgPgnvPLHlucHkygEEwZik4G7jZ--sA5NRLRO7qg/viewform>

3.3. Data Collection

The questionnaire was distributed online to ensure a diverse and representative sample. Participants by respondents is completely voluntary and all information will be kept strictly confidential. The questionnaire incorporated two sections:

- Section A: Demographics Information
- Section B: Questions Regarding the Impact of Internet and Social Media Exposure towards Children

3.4. Expert Review

Two individual experts in the field reviewed the questionnaire to validate it. Each expert carefully examined the questionnaire's form, content, and alignment with the research objectives to guarantee its validity and reliability. Their observations and ideas helped to refine the questionnaire so that it met the quality and effectiveness standards required for data collection in the study.

4. Result

4.1. Section A: Demographics Information

Figure 1 shows that the respondents' age distribution skews older, with the majority lying between the ages of 46 and 55. This group consists of 36 people, representing a sizable proportion of the total respondents. Individuals aged 36 to 45 are the second largest group, accounting for 41.7% of all participants. Furthermore, there is a significant representation of younger adults, with 8.3% of survey participants aged 26 to 35. Respondents over the age of 56 make up a lower but still significant share, accounting for 5.6% of the surveyed population. This complete analysis of age demographics provides vital insights into the composition of the survey participant collection, allowing a nuanced picture of their opinions.

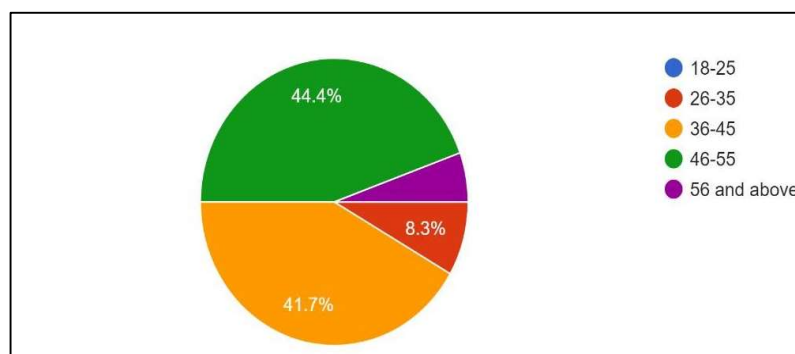


Figure 1: Percentage of Respondents Age Group

Figure 2 illustrates the distribution of total children among respondents, revealing a diverse range of family sizes among the questioned population. The findings show that a sizable proportion of respondents, 36.1%, have four or more children, suggesting larger, possibly more traditional family structures. Following closely after, 27.8% of respondents report having three

children, showing another sizable section with numerous offspring. Meanwhile, 22.2% of respondents had two children, forming a large but slightly smaller population. Finally, 13.9% of respondents report having only one child, which represents a significant yet relatively modest proportion of the questioned population. This variation in family size highlights the complex character of familial experiences and dynamics across the surveyed population.

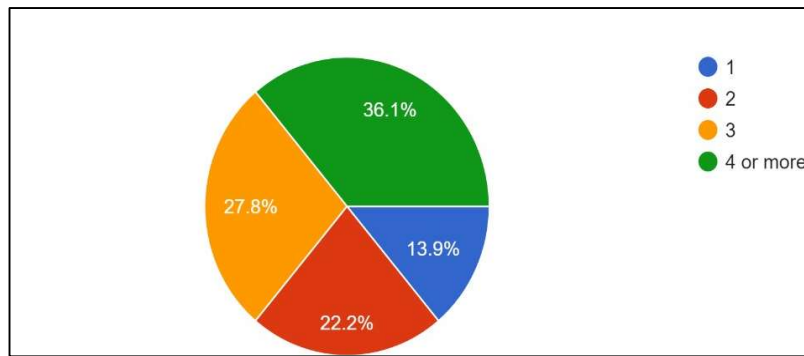


Figure 2: Respondents' Distribution by Number of Children

4.1. Section B: Impact of Internet and Social Media Exposure towards Children

Informatics is playing an increasingly important part in the formation of society and the day-to-day activities of people [20]. Using the results of a survey that was administered to parents regarding their children's online activities and behaviors, the survey results of this study are to investigate how children's interaction with the internet and social media influences their day-to-day functioning.

A significant influence on the children's day-to-day activities is exerted by their engagement with the internet and various forms of social media. Based on the findings of the survey, it was discovered that almost 42.7% of children spend more than four hours per day using electronic devices such as smartphones and tablets where each of these devices brought findings of almost 47.2% and 30.6% respectively. The increased use of digital gadgets is completely transforming how children spend their time, frequently taking the place of more traditional activities like playing outside and interacting with other people in person. Games, videos, movies, social media, and instructional materials are all examples of the types of content that children access online. This finding is consistent with the observations outlined in the article [21]. This demonstrates the wide variety of online activities that children engage in, which have an impact on their learning, amusement, and socialization.

This trend of greater digital usage among youngsters has implications for many aspects of their development. For example, excessive screen usage can influence their cognitive development, social skills, and physical health [22], [23]. Furthermore, the replacement of conventional hobbies with digital pursuits raises worries about sedentary behavior and insufficient exposure to natural areas. Overall,

the large number of children who spend a significant amount of time on electronic devices demonstrates the internet and social media's deep influence on their daily lives. Understanding the mechanisms driving this trend is critical for dealing with the broader consequences for children's well-being and development in the digital era, as highlighted by the survey results.

The survey findings show that unsupervised gadget usage has a significant impact on children's behavioral, physical health, and academic achievement according to their parents. Around 70% of parents observed behavioral changes in their children, including increased irritability, reduced physical activity, and signs of addiction to gadgets. This could be linked to the immersive nature of digital interaction, which frequently causes children to spend extended periods using electronic devices, as seen by the fact that around 42.7% of children spend more than four hours per day on such devices. The prevalence of behavioral changes may also be connected to the substitution of conventional activities for digital interests, as indicated by parents whose children engage in less physical exercise. Physical health issues such as eye strain and sleep disturbances were reported by 58.3% of parents. Regarding academic performance, 30.6% reported that their children's academic performance had declined, while 25% noted improvements. These percentages provide measurable insights into the issues caused by unsupervised gadget usage in children, emphasizing the need for additional study and aggressive actions to ensure a balanced and healthy digital lifestyle for generations to come.

In response to these issues, parents have adopted various strategies to manage their children's gadget usage. The high proportion of parents approximately 70% who impose time limits on device usage demonstrates a widespread understanding of the significance of managing screen time to avoid excessive exposure. This proactive approach implies that parents are aware of the possible negative implications of unlimited gadget use and are taking precautions to mitigate them. In addition, the significant number of parents, 47.2%, who support alternative activities such as outdoor play suggests a conscious effort to balance digital engagement with physical and social activities. This reflects a holistic parenting style that emphasizes the need to keep children engaged in a variety of activities for their overall well-being. Likewise, 22.2% of parents use parental control software, indicating the use of technical solutions to monitor and regulate their children's online activities, suggesting an awareness of the necessity for digital supervision in today's technology-driven world. Despite these attempts, children's diverse emotions, such as cooperation, resistance, or dissatisfaction, indicate that executing these tactics may not always be easy. This variety in reactions highlights the complicated dynamics involved in regulating children's gadget usage, as well as the significance of taking individual preferences and behaviors into account when establishing parental controls.

The results of this study indicate that informatics is having a substantial impact on the development of children as well as on broader societal trends. Because of the dual nature of digital consumption, which offers both educational benefits and possible dangers, it is essential to maintain a balanced and supervised usage that is carefully monitored. It is a reflection of a larger societal movement toward digital reliance that children are becoming more and more dependent on electronic devices. This shift has ramifications for the cognitive and social development of children,

and it can improve children's learning and communication abilities[24]. However, it also poses threats to children's mental and physical health for the same reason. The vast majority of children spend significant amounts of time each day using various forms of digital technology. Even though just 30.6% of parents always monitor their children's online activity, there is a large amount of variation in the level of supervision. Games and movies are the kind of content that are accessed the most frequently 66.1% and 50% respectively, although educational resources are also utilized frequently around 36.1% below social media, 41.7%. These findings highlight the need for continued study and efforts to guarantee that children's use of digital media promotes healthy development and well-being in the digital age.

5. Discussion

The findings from the survey highlight the massive effect of children's internet and social media use in their daily lives. This study is consistent with previous research emphasizing the expanding impact of digital technology on young people's behavior and development. For example, [11], [18] highlight the ubiquity of internet usage among children, notably via smartphones and tablets, for a variety of purposes such as social media, entertainment, and learning. These findings support the survey's finding that children spend a large amount of time on electronic devices especially smartphones and tablets, doing anything from playing games and watching movies to using social media and learning materials.

Furthermore, the survey reveals the negative impacts of unsupervised device use on children's conduct, academic achievement, and physical health, as stated by their parents. This is consistent with the findings of [2], [6], who have highlighted the concerns of prolonged and unsupervised internet use, such as exposure to unsuitable content, cyberbullying, and harmful effects on mental health. The survey results support these concerns by identifying behavioral changes, decreased physical activity, swings in academic performance, and physical health difficulties identified by parents.

In response to these issues, parents have developed a variety of ways to control their children's gadget usage, as indicated by the survey results. The high proportion of parents who impose time limits, encourage alternative activities, and use parental control software demonstrates a deliberate attempt to regulate and minimize the potentially negative impacts of digital technology on children's well-being. This is in line with the findings of [10], [19], who emphasize the necessity of parental monitoring and digital literacy instruction in creating a safe online environment for children.

Ultimately, the survey findings add to the current literature on the complex consequences of internet and social media use in children, emphasizing the importance of making early efforts to address the issues posed by unsupervised digital interaction. The survey adds to our understanding of how unsupervised internet and social media use affects various aspects of children's development, providing valuable insights that can inform future policies and interventions aimed at promoting safer and more productive online experiences for young users.

6. Conclusion

To conclude, the online questionnaire, which aimed to understand the impact of the internet and social media on children, was divided into two parts. Section A collected demographic data on the participants, while Section B investigated how children's internet and social media use impacts their behavior and health. Participation was voluntary and confidential, resulting in a representative sample.

The study indicates significant implications of unsupervised internet and social media use on children, including changes in behavior, fluctuations in academic performance, and physical health issues such as eye strain and sleep difficulties. These impacts are highlighted in the case study. To enhance the safety of their children when using the internet and to foster healthy internet habits, parents need to establish time limits on the use of electronic devices, encourage alternative activities like reading and playing outside, and make use of parental control software. In addition, the act of co-viewing or co-using electronic devices can contribute to a more monitored and participatory experience while browsing the internet.

7. Future Works

To expand on the findings of this study, future research could concentrate on investigating how different types of digital content such as educational, entertainment, and social media impact to children's development. Understanding the differences could lead to better-targeted interventions and educational initiatives that maximize the benefits of digital technology while minimizing the risks. Furthermore, it is important to consider cultural and socioeconomic differences that influence digital consumption patterns and their effects on children.

Parental control technological breakthroughs, such as Artificial Intelligence (AI)-driven content filtering and real-time monitoring, show potential for guaranteeing safer digital experiences for children. Future research could investigate the effectiveness of these tools in creating a secure online environment. Furthermore, examining the links between digital consumption and specific health outcomes, such as anxiety, depression, and obesity, is critical for understanding the long-term repercussions of excessive screen time. Finally, performing policy assessments and developing intervention programs to promote balanced internet usage can help children build better digital habits, particularly throughout important developmental stages. This comprehensive approach will help to integrate digital technologies in a way that improves general well-being and growth.

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