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| RESEARCH ARTICLE

Extent of Electronic Gadget Addiction and Reading Skills of Grade One Learners

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| ABSTRACT
This study aimed to examine how gadget addiction affects the reading skills of Grade One learners. The study population consisted of Grade One learners aged 6 to 8, with 42% being female and 58% male. An analysis of the parents' educational attainment showed that 2% of the mothers had master's units, while 18% of the mothers and 8% of the fathers were college graduates. Additionally, 16% of the mothers and 24% of the fathers had some college education, and 58% of the mothers and 40% of the fathers were high school graduates. Regarding family size, 50% of the learners had 1-2 siblings, and 38% had 3-4 siblings, while 58% of the families had a combined monthly income of ₱10,000 or below. The study found that the learners exhibited a moderate level of gadget addiction. In terms of reading skills, 78% of the learners were classified as outstanding, 16% as very satisfactory, 25% as satisfactory, and only 4% as poor. A statistical analysis of the relationship between gadget addiction and reading skills revealed a negligible negative correlation, with a value of -0.066, indicating that increased gadget use had a minimal impact on reading proficiency. The results suggest that while gadget addiction exists, it does not significantly hinder the reading development of Grade One learners, but continued monitoring and interventions are recommended.

| KEYWORDS
Early Childhood Education, Addiction to Gadget Use, Reading Development.

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1. Introduction

Reading development plays a vital role in early childhood education, laying the groundwork for academic achievement and lifelong learning (Mullis et al., 2019). Foundational literacy skills such as phonemic awareness, vocabulary development, and reading comprehension are strong indicators of future academic success (Lonigan, 2020). The rapid growth of digital technologies has introduced new patterns of media consumption among children, significantly increasing gadget use even in young learners as early as five years old (Neumann & Neumann, 2020). By the time children reach Grade One, many are already adept at using gadgets like smartphones and tablets, often for both educational and recreational purposes (Ihmeideh, 2022).

The surge in gadget use among children has raised concerns about its impact on their cognitive and social development, especially in early learners (Mendoza et al., 2021). Extended and unsupervised use of digital devices has been linked to developmental delays, particularly in language acquisition and literacy (Shah et al., 2020). Excessive screen time can contribute to what is now referred to as gadget addiction, characterized by compulsive or excessive reliance on devices for entertainment or distraction (Domoff et al., 2020). This form of addiction can hinder learning by reducing engagement with traditional literacy practices like reading books (Ko et al., 2021).

Common signs of gadget addiction in young children include extended screen time, emotional dependence on devices, and using gadgets as the primary source of entertainment or stress relief (Pontes et al., 2021). Children exhibiting these behaviors often struggle to transition between digital and print-based learning environments, which may slow their reading development (Chiu et

al., 2020). Research shows that children with higher levels of gadget addiction may display lower reading fluency, comprehension, and vocabulary growth compared to their peers with more balanced media exposure (O'Connor et al., 2021). As such, gadget addiction poses a significant obstacle for educators working to foster early literacy skills in Grade One learners (Fumoto et al., 2021).

Developing strong reading skills in the early years is critical not only for immediate academic performance but also for long-term educational outcomes (Strasser & Tröster, 2021). Studies indicate that children who develop early literacy skills perform better across a range of subjects in later grades, including mathematics and science (Cain & Parrila, 2022). Literacy is the foundation for knowledge acquisition across all academic areas, and reading challenges in early childhood often lead to ongoing academic difficulties (Silva et al., 2022; Suson, 2019). Early reading intervention is thus essential for long-term success (Cunningham & Zibulsky, 2021).

Given these trends, there is a growing need to strike a balance between technology use and traditional literacy development in early learners (Livingstone et al., 2021). While digital devices can offer educational benefits, such as interactive apps that promote learning, overreliance on them can undermine crucial reading skills (Zhao et al., 2022). Both teachers and parents must implement strategies that ensure children engage with printed books and other traditional literacy activities in addition to digital content (Baron, 2021). Finding this balance is essential for fostering well-rounded literacy development in the digital age (Plowman & McPake, 2021).

Research into the relationship between gadget addiction and reading development can provide valuable insights for educators, parents, and policymakers (Ihmeideh, 2022). Understanding how gadget addiction affects literacy skills could lead to the development of interventions aimed at reducing screen time and enhancing reading outcomes (Yilmaz et al., 2023). Moreover, this research contributes to the broader discourse on the role of digital media in early childhood education, offering a basis for future studies and policy recommendations (Livingstone & Blum-Ross, 2020).

This study has two primary objectives: (1) to determine the prevalence of gadget addiction among Grade One learners, and (2) to explore the correlation between gadget addiction and key aspects of reading development, such as fluency, comprehension, and vocabulary. Examining these relationships, the study aims to provide actionable recommendations for educators on managing gadget use to optimize literacy outcomes. The research will also investigate how factors like socioeconomic status and parental involvement may influence the interaction between gadget use and reading development.

Future research should focus on longitudinal studies to better understand the long-term effects of gadget use on literacy development Additionally, experimental studies are needed to test the effectiveness of interventions, such as limiting screen time or integrating digital literacy into traditional reading instruction. Addressing these gaps will enable a deeper understanding of how to combine technology and traditional literacy practices in a way that supports early reading development.

2. Methodology

This study utilized a quantitative descriptive correlational research approach to systematically examine the level of gadget addiction and its effects on learners' reading skills. This methodology facilitates objective measurement and statistical analysis of variable relationships, making it well-suited for the study's aims. Through quantitative data, the research seeks to identify patterns, trends, and correlations, offering empirical insights into the influence of gadget addiction on reading skills. According to Creswell (2014), a descriptive correlational design is valuable for capturing an accurate view of current conditions and assessing variable relationships without altering the study environment. This approach's strength lies in its ability to gather data from a wide sample, allowing for generalization of findings to similar contexts and populations. A survey questionnaire was used to gather quantitative data, ensuring the study's objectivity and reproducibility. The data collected underwent statistical analysis to evaluate the direction and strength of the relationship between gadget addiction and reading skills. This detailed analytical process provides a strong basis for making conclusions about the effects of gadget addiction on children's reading abilities. By closely analyzing these connections, the study contributes to the existing academic literature while offering practical insights for educators, policymakers, and curriculum developers working to enhance early literacy outcomes.

3. Results and Discussion

Table 1 presents the distribution of Grade I learners across different age groups and gender of Grade I learner participated. The table indicates that there is a limited representation of learners in the 8 and above age bracket with one female, constituting 2 % and two males, constituting 4% in this category. Moving to the 7 years old, which has the greatest number of participants with sixteen females, constituting 32% and nineteen males, constituting 38% of the respondents. On the age bracket of six years old with four females, constituting 8% and nine males, constituting 18% of the respondents.

Table 1. Age and Gender of the Respondents

Age (in years)	Female		Male		Total	
	f	%	f	%	f	%
8 and above	1	2.00	1	2.00	2	4.00
7	16	32.00	19	38.00	35	70.00
6	4	8.00	9	18.00	15	30.00
Total	21	42.00	29	58.00	50	100.00

Table 2 presents the educational attainment of the parents of Grade One learners. Among the mothers, the majority (58%) are high school graduates, followed by 18% who have attended college but did not graduate, and 16% who completed high school. A small percentage of mothers (2%) are college graduates, while an additional 2% completed elementary education. Another 2% have no formal education. For the fathers, 40% are high school graduates, followed by 24% who attended but did not finish high school. Only 8% have some college-level education, while 18% completed elementary education. Notably, 10% of fathers reported having no formal education. These results suggest that the educational attainment of most parents, particularly the fathers, is concentrated around the high school level, with a significant portion not advancing beyond elementary education. This relatively low level of formal education may have implications for the learners' home environments and the support they receive in their academic development, including reading skills.

Table 2. Parents' Highest Educational Attainment

Educational Attainment	Mother		Father	
	f	%	f	%
College Graduate	1	2.00	0	0.00
College Level	9	18.00	4	8.00
High School Graduate	8	16.00	12	24.00
High School Level	29	58.00	20	40.00
Elementary Graduate	1	2.00	0	0.00
Elementary Level	1	2.00	9	18.00
No formal Education	1	2.00	5	10.00
Total	50	100.00	50	100.00

Table 3. Extent of the child's addiction towards gadgets' use

Indicators	WM	Verbal Description
It is hard for my child to stop using screen media	2.94	Moderate
Screen media is the only thing that seems to motivate my child	2.24	Low
Screen media is all that my child seems to think about	2.50	Low
My child's screen media use interferes with family activities	3.38	Moderate
My child's screen media use causes problems for the family	2.96	Moderate
My child becomes frustrated when he/she cannot use screen media	2.82	Moderate
The amount of time my child wants to use screen media keeps increasing	2.42	Low
My child sneaks using screen media	2.98	Moderate
When my child has had a bad day, screen media seems to be the only thing that helps him/her feel better	2.42	Low
Aggregate Weighted Mean	2.74	Moderate

Table 3 shows the extent of Grade One learners' addiction to gadget use based on various indicators. The aggregate weighted mean (WM) of 2.74 indicates that the overall level of gadget addiction among the children is moderate. Specific indicators such as "It is hard for my child to stop using screen media" (WM = 2.94), "My child's screen media use interferes with family activities" (WM = 3.38), and "My child sneaks using screen media" (WM = 2.98) all fall within the moderate category. Other indicators, like "Screen media is all that my child seems to think about" (WM = 2.50) and "When my child has had a bad day, screen media seems to be the only thing that helps him/her feel better" (WM = 2.42), are rated low. The highest level of concern comes from screen

media interfering with family activities, while other behaviors related to motivation and dependence on screen media show lower levels of concern.

These results suggest that while gadget use among learners is noticeable, it has not yet reached alarming levels of addiction. However, the moderate levels of interference in family activities and the child's frustration when denied screen time could signal early warning signs of developing dependencies. The implications are significant for both parents and educators, as early intervention may be needed to prevent further escalation of gadget addiction. Introducing strategies such as setting screen time limits, promoting alternative activities, and enhancing parental involvement could help in managing and balancing gadget use to prevent its negative impact on children's cognitive and emotional development, particularly their reading skills.

Table 4. Level of Reading Skills of the Learners

Reading Skills	Range of Scores	f	%
Outstanding	16-20	39	78.00
Very Satisfactory	11-15	8	16.00
Satisfactory	6-10	1	2.00
Poor	0-5	2	4.00
Total		50	100.00

Table 4 presents the reading skills levels of Grade One learners based on their performance scores. The majority of the learners (78%) are classified as having outstanding reading skills, with scores ranging from 16 to 20. Another 16% of learners achieved a very satisfactory level, scoring between 11 and 15. Only 2% of the learners fall within the satisfactory range, with scores from 6 to 10, while 4% of the learners are categorized as having poor reading skills, scoring between 0 and 5. These findings indicate that a large portion of the learners demonstrate strong reading proficiency, with over three-quarters achieving outstanding levels. However, the presence of a small percentage of learners with poor or satisfactory reading skills suggests that interventions may be necessary for these children. The implication is that while the overall reading performance is promising, targeted support should be provided to those struggling with reading. Educators could implement individualized reading programs and additional learning resources for these learners to ensure that they do not fall behind. Moreover, the correlation between gadget uses and reading skills may need to be further examined to address any potential barriers to literacy development among these learners.

Table 5. Test of relationship between the gadget addiction and reading skills of the learners

Variables	r-value	Strength of Correlation	p - value	Decision	Remarks
Gadget Addiction and Reading Skills	-0.066	Negligible Negative	0.648	Do not reject Ho	Not Significant

*significant at $p<0.05$ (two-tailed)

Table 5 presents the results of the test examining the relationship between gadget addiction and the reading skills of Grade One learners. The *r*-value of -0.066 indicates a negligible negative correlation between gadget addiction and reading skills, meaning that as gadget addiction slightly increases, reading skills tend to decrease, but the strength of this relationship is very weak. Additionally, the *p*-value of 0.648 is well above the significance threshold of 0.05, leading to the decision to "do not reject the null hypothesis (Ho)." This means that the relationship between gadget addiction and reading skills is not statistically significant in this study. The implications of these findings suggest that, in this case, gadget addiction does not have a significant impact on the reading skills of the learners. While there is a weak negative trend, it is not strong enough to draw concrete conclusions about the effects of gadget use on literacy development. This could mean that other factors, such as parental involvement, teaching strategies, or socioeconomic conditions, might play a more substantial role in influencing reading skills. Nonetheless, it remains important for educators and parents to monitor children's gadget usage to prevent potential negative effects on other aspects of development, even if the impact on reading skills is not significant in this study. Further research with a larger sample size or more refined variables may provide additional insights into this relationship.

4. Conclusion

The findings showed that while gadget use among Grade One learners at Tayud Elementary School is moderately prevalent, it does not significantly impact their reading skills. The data show that a majority of learners, despite moderate gadget addiction,

performed exceptionally well in reading, with 78% achieving an outstanding level of reading proficiency. The negligible negative correlation between gadget addiction and reading skills, as indicated by the *r*-value of -0.066 and the non-significant *p*-value of 0.648, suggests that other factors, such as parental involvement, teaching strategies, and educational support, may play a more crucial role in influencing literacy development. Thus, while it remains essential to monitor and manage gadget use among young learners, this study suggests that it is not a primary determinant of their reading abilities in this particular context. Further research could explore additional variables to better understand the dynamics affecting reading development.

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