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EDITORIAL NOTE

This is Volume 6 (No. 1) Edition of the *International Journal of Topical Educational Issues* Publication of the Faculty of Education and Extension Services, Usmanu Danfodiyo University Sokoto. The volume has forty three (43) articles from distinguished scholars across the country.

To keep abreast with the changing world and competence in our profession, we need to write and publish our researches and theoretical position papers. The *International Journal of Topical Educational Issues* is an avenue for disseminating such knowledge. Our review of quality papers will be fair, open and efficient. The Editorial Board promised to assess promptly and publish quality research findings and position papers in all areas of education. Volume 6 (No. 2) of this journal will go to press as soon as this volume is out.

Please encourage your colleagues to send articles. To those whose articles appeared in this edition, I say congratulations. Please do not relent in your effort to write and publish. In the academics, as you know, "it is publish or perish".

Thanks.

Prof. M. A. Yusha'u *FMAN, FAAN*
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Relationship between Preschoolers' Digital Technologies Usage and Their Literacy Skills in Kwara State, Nigeria

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Abstract

As technology becomes increasingly integrated into daily life, understanding its impact on early childhood education is crucial. This study looked at the connection between preschoolers' use of digital technology and their literacy skills, employing a descriptive survey design. The study encompassed the entire population of preschool children in Kwara State. 600 children from private and public schools were sampled from using a simple random sampling technique. Participants ranged in age from 4 to 5 years old. Instruments included the Preschoolers' Digital Technologies Usage Rating Scale (PDUERS) and Preschoolers Literacy Skills Rating Scale (PLSRS), with reliability indices of 0.82 and 0.78, respectively. Analyzing data with frequency count, percentage, mean, and Pearson Product Moment Correlation, the study revealed a concerning inadequacy in both digital technology use and literacy among preschoolers. The findings underscored a significant correlation between digital technology use and literacy abilities. Recommendations include providing access to digital devices for literacy development, advocating for the integration of digital tools like computers, televisions, tablets, and picture books in both preschool and home settings.

Keywords: *Digital technologies, Early literacy, Literacy skills, Language, Preschoolers*

Introduction

The emergence of digital technologies has had a profound impact on education, influencing even the most formative years of learning. Education is undergoing a transformation with the influence of technology, facilitating learners in acquiring new skills more rapidly than in previous times. The COVID-19 pandemic has reinforced the integration of digital tools in education. It has necessitated the adoption of online instruction to sustain the educational system, prompting an increased reliance on digital technologies. These digital tools have completely changed the way the school system operates in the post-COVID era.

Parents and caregivers are increasingly opting for digital tools like mobile phones, smartphones, iPads, tablets, and social media to communicate with their children. Simultaneously, a growing number of young children nationwide are actively involved in daily interactions with media and interactive technology. During their early years, children have exposure to a diverse array of technologies, including digital magnifiers, metal detectors, programmed toys, MP3 recorders, video cameras, and notably, computers equipped with the necessary software (D'Agostino, 2016; Paciga &

Donohue, 2017; Hurwitz, 2019). Through these, preschoolers have interaction with digital technologies in their daily lives, from touchscreen gadgets to interactive educational applications. This evolving landscape highlights the pervasive role of technology in early childhood experiences, shaping how children communicate, engage, and explore the world around them (Teichert & Salman, 2022).

The preschool years represent a critical developmental stage, during which children lay the groundwork for language acquisition, cognitive abilities, and socio-emotional skills. Literacy development, a cornerstone of early education, is intricately linked to these foundational skills and serves as a predictor of academic success in later years. Attaining proficient literacy skills is a crucial milestone in the developmental journey of children. Research underscores that a significant number of children are not attaining the requisite literacy proficiency essential to meet the demands they will encounter in school, the workforce, and beyond (Lonigan, et.al). Numerous studies emphasize the adverse outcomes associated with delayed or poor literacy skill acquisition (Iroegbu&Iroegbu, 2018). Children who struggle with literacy development tend to have limited exposure to content knowledge, vocabulary, and other language skills compared to their counterparts who demonstrate good literacy skills early and effectively. It is imperative to dedicate ample attention to nurturing students' literacy skills during the formative years of their lives (Nyamu, 2015). As per the OECD (2012), literacy proficiency at a young age serves as a predictor for the future growth of literacy skills in subsequent development stages.

Vygotsky's socio-cultural theory, focusing on the social and cultural dimensions of learning, holds relevance in understanding the intricate relationship between technology and children's literacy development. Within Vygotsky's Zone of Proximal Development (ZPD), technology serves as a scaffold, offering learning experiences that align with a child's current abilities while providing challenges for growth. The theory underscores the importance of social interaction and collaboration in the learning process. Mediation by knowledgeable adults or peers, a key component of Vygotsky's framework, finds resonance in the guided use of technology to enhance literacy skills. Additionally, Vygotsky's emphasis on cultural tools is reflected in technology's role as a contemporary cultural artifact, influencing how literacy is perceived and practiced. Ultimately, technology-mediated literacy experiences contribute to the internalization of skills within a socio-cultural context, mirroring Vygotsky's principles in the dynamic landscape of digital learning.(Vygotsky, 1978).

Several researches have shown the benefits digital technologies to children's development which may be long-lasting (Roseberry, Hirsh-Pasek&Golinkoff, 2014; Smeets& Bus, 2014; Lancers Army Schools London House-LASLH, 2023). The accessibility of technology for children can contribute to the acquisition of essential life skills such as communication, cooperation, problem-solving, and critical thinking. Roseberry, et.al (2014) state that verbal interactions between adults and children that are mediated by digital tools (like Skype) can also lead to the learning of new languages, while Smeets & Bus (2014) have identified that certain digital resources can help with targeted vocabulary learning. LASLH (2023) reaffirmed the advantages of technology in education by highlighting how it can make instruction more dynamic, creative, and engaging. Research suggests that, when utilized appropriately, technology can play a crucial role in promoting literacy, especially among children (Wohlwend, 2015; Haleem *et al.* 2022).

According to the International Literacy Association (2019), the development of early childhood literacy can benefit from the use of rich, digital resources. In addition to helping young children improve their language and literacy skills, thoughtful, purposeful, and developmentally appropriate use of digital texts and tools can aid them get a deeper knowledge of the forms and functions of digital text in the process of meaning production. The rich routes that children take when interacting with digital technologies in the classroom have also been recorded by researchers like Wohlwend (2010, 2013 & 2015). According to Cvikoet.al. (2013) research, using digital resources in a

meaningful way significantly improved early reading results for children compared to using traditional resources alone. Furthermore, digital technology significantly reduced the linguistic and literacy gaps between children from high-and low-poverty homes (Neuman, Newman, & Dwyer, 2010). Haleem et al. (2022) argued that incorporating technology into the classroom gives pupils a dynamic learning environment that keeps them focused and interested in the material

Further, Judson (2010) looked at increasing technology literacy, and the findings showed a correlation between language arts proficiency and technology literacy improvements. Likewise, Hurwitz's (2019) study, "Reading up on Ready-to-Learn (RTL) media: a meta-analytic review of effects on literacy," showed that children's literacy outcomes, particularly vocabulary and phonological ideas, were positively impacted by exposure to RTL media. Additionally, Mudra (2020) conducted research on how English as a Foreign Language (EFL) teachers and young students saw the advantages and disadvantages of digital literacy. The benefits of digital literacy, according to the respondents, are enhanced speaking, listening, writing, and reading abilities for young students.

Additionally, Nikou and Aavakare's (2021) investigation of the relationship between digital technology and literacy in higher education revealed the intricate relationship between students' and faculty members' use of digital technologies and their literacy abilities. Alakrash and Abdul Razak (2021) looked into how digital technology is used and how digitally literate EFL teachers and students are when it comes to learning and teaching English. The results demonstrated that while teachers used digital technology most for general teaching practises and least for reading skills, students used it most for vocabulary acquisition. Magnusson (2021) also conducted research on the complex relationships that exist between children in Swedish preschool ateliers, digital technology, creative activities, mathematics, and literacy. The findings demonstrated how the children usage of non-digital artifacts and digital technology seemed to ignite, broaden, and change their comprehension of an application for literacy.

While the educational potential of digital tools is widely recognized, concerns persist about the potential drawbacks, including the impact on attention spans, social interactions, and the quality of educational content (Lerner & Barr, 2014; Peas, 2019). So, some continue to view technology as both a threat and a diversion from education. Particularly, as these technologies become integral to preschoolers' experiences, questions and worries over how they affect basic literacy abilities have come to light. ILA (2019) remarked that, though digital technologies are pervasive in homes, schools, and communities, yet opinions and suggestions for their usage in early childhood education are somewhat diverse. There are apprehensions about the potential of digital technology to hinder social development, as it may replace face-to-face interactions. Some scholars argue that certain aspects of digital technology can act as a barrier to cultivating meaningful early literacy experiences for children and can hinder traditional literacy development methods and diminish the quality of interactions between caregivers and young learners (Cook, 2016; Mudra, 2020).

Statement of the Problem

Even while the use of digital technology in preschool has received a lot of attention, there are a lot of conflicting opinions regarding these tools in the early years among families, educators, and policymakers. Digital technologies should have a very small part in early childhood situations, according to certain scholars. They contend that instead of complementing important learning opportunities like hands-on activities or social interaction, the use of digital technologies will eventually replace them (e.g., Campaign for a Commercial-Free Childhood, Alliance for Childhood, & Teachers Resisting Unhealthy Children's Entertainment, 2012; Cordes & Miller, 2000; Miller, 2005). In particular, some researchers are concerned that children's interactions with adults and other children may be hampered by the use of technology, which could stunt the development of language skills that are critical for the development of literacy later in life.

The empirical research on preschoolers' use of digital tools and literacy levels is relatively scarce in the literature. More empirical research is required to shed more light on the concerns and apprehensions people have about the use of digital tools in the classroom. Additionally, the majority of research on preschoolers' technology use and literacy abilities has been done by Western scholars, and most studies have used regional samples. In order to determine whether the findings of previous studies can be applied to preschoolers in Nigeria, and specifically in Kwara State, where this study was conducted; more research into the variables under examination is required. Thus, this study investigated the relationship between the literacy levels of preschoolers and their use of digital technology in Kwara State, Nigeria.

This study posed two inquiries regarding the extent of digital technology usage among preschoolers and the proficiency of their literacy skills. Additionally, a hypothesis was formulated and tested, exploring the substantial correlation between preschoolers' utilization of digital technologies and their literacy levels.

Methodology

Descriptive research design of correlational type was used for this study. According to Noviana and Oktaviani (2022), correlation research design examines the statistical relationship between two or more variables to determine if they are associated or linked in some way. It assesses the degree and direction of this relationship, often using methods like correlation coefficients to quantify the strength of the association. Correlation research does not establish causation but helps identify patterns and connections between variables.

The Population of the study was all Preschoolers in Kwara State. Simple random sampling techniques was used to select a sample of 600 preschoolers which was drawn from thirty (30) primary schools, (fifteen public and fifteen private schools). Two researchers self-constructed instruments were used to gather data in this study. These were titled "Preschoolers' Digital Technologies usage Rating Scale (PDERS) and Preschoolers' Literacy Skills Rating Scale (PLSRS).

Preschoolers' use of digital technology was assessed using the 20-item PDERS measure, which used a four-point Likert scale with the options Always, almost always, occasionally, and not at all. PLSRS concentrated on the literacy abilities of the preschoolers, which were likewise measured using a four-point Likert scale, with scores of 4,3,2,1 for Excellent, Good, Average, and Poor, respectively. For face and content validity, copies of each instrument were distributed to early childhood educators and educational technologists. The test-retest reliability approach was employed to verify the reliability and this yielded reliability indices of 0.82 and 0.78, respectively. In order to obtain approval from the heads of the schools chosen for this study to administer the rating scale on the preschoolers, the researchers obtained a letter of introduction signed by the department head and personally visited those schools. The preschoolers were directly observed by the researchers and research assistants. They were observed and cross-examined according to the instruments, recording their responses on the rating scale. The respondents' data were analysed using descriptive statistics of frequencies, and percentages. Pearson Product Moment Correlation (PPMC) was used to evaluate the single hypothesis that was created, with a significance level of 0.05 for alpha.

Results

Table 1: Level of preschoolers' digital technologies use

S/ N	Statements	Frequent ly	Almost Always	Sometim es	Not At All	Mea n
1	I listen to phonics on video	149(24.8)	117(19.5)	145(24.2)	189(31.5)	2.38
2	I watch cartoons of numbers on video	176(29.3)	125(20.8)	166(27.7)	133(22.2)	2.57
3	I use smart phone to do my homework	41(6.8)	90(15.0)	178(29.7)	291(48.5)	1.80
4	I surf the web to search cartoon	49(8.2)	91(15.2)	162(27.0)	298(49.7)	1.82
5	I listen to rhymes on YouTube	54(9.0)	90(15.0)	176(29.3)	280(46.7)	1.86
6	I use iPod to play number games	61(10.2)	87(14.5)	118(19.7)	334(55.7)	1.79
7	I watch videos about animals on class tv	70(11.7)	85(14.2)	93(15.5)	352(58.7)	1.79
8	I get school work through email	34(5.7)	46(7.7)	70(11.7)	450(75.0)	1.44
9	I use Encarta to search for words	21(3.5)	43(7.2)	107(17.8)	429(71.5)	1.43
10	I read with wide screen board	49(8.2)	77(12.8)	133(22.2)	341(56.8)	1.72
11	I learn arithmetic through excel	35(5.8)	58(9.7)	68(11.3)	439(73.2)	1.48
12	I view pictures on ipod	60(10.0)	108(18.0)	117(19.5)	315(52.5)	1.86
13	I learn animal sounds through television videos	124(20.7)	150(25.0)	194(32.3)	132(22.0)	2.44
14	I play phonics game on tablet	78(13.0)	106(17.7)	129(21.5)	287(47.8)	1.96
15	I play character games on PC tablet	62(10.3)	97(16.2)	110(18.3)	331(55.2)	1.82
16	I watch evening folktales	148(24.7)	168(28.0)	132(22.0)	152(25.3)	2.52
17	I play vocational games on ipod	47(7.8)	83(13.8)	115(19.2)	355(59.2)	1.70
18	I watch animal documentaries on ipod	49(8.2)	96(16.0)	108(18.0)	347(57.8)	1.75
19	I use laptop keyboard to learn my alphabet	53(8.8)	95(15.8)	113(18.8)	339(56.5)	1.77
20	I listen to sing along rhymes on radio	155(25.8)	144(24.0)	208(34.7)	93(15.5)	2.60
Weighted Mean						1.93

Decision: Low: 1.00 – 2.49 High: 2.50 – 4.00

Table 1 shows the level of school preschoolers' digital technologies' use. The respondents did not do the following: I get school work through email (1.44), I use Encarta to search for words (1.43), I learn arithmetic through excel (1.48). The respondents sometimes do the following: I use smartphone

to do my homework (1.80), I surf the web to search cartoon (1.82), I listen to rhymes on YouTube (1.86), I use iPod to play number games (1.79), I watch videos about animals on class tv (1.79), I read with wide screen board (1.72), I view pictures on ipod (1.86), I play phonics game on tablet (1.96), I play phonics game on tablet (1.82), I listen to phonics on video (2.38), I learn animal sounds through television videos (2.44), I play vocational games on ipod (1.70), I watch animal documentaries on ipod (1.75), I use laptop keyboard to learn my alphabet (1.77). The respondents almost always do the following: I watch cartoons of numbers on video (2.57), I watch evening folktales (2.52), I listen to sing along rhymes on radio (2.60). The weighted mean is 1.93 which is a numeric indicator that the level of school preschoolers' digital technologies' use was low.

Table 2: Level of preschoolers' literacy skills

S/N	Statements	Excellent	Good	Average	Poor	Mean
1	Can spell words correctly	150(25.0)	186(31.0)	172(28.7)	92(15.3)	2.66
2	Can identify sounds in words	121(20.2)	179(29.8)	170(28.3)	130(21.7)	2.49
3	Can pronounce words they are not familiar with	57(9.5)	162(27.0)	190(31.7)	191(31.8)	2.14
4	Can repeat words and stress syllables	67(11.2)	151(25.2)	191(31.8)	191(31.8)	2.16
5	Can use new words to form sentences	64(10.7)	109(18.2)	188(31.3)	239(39.8)	2.00
6	Can write through scribbling, dotting, tracing	148(24.7)	157(26.2)	129(21.5)	166(27.7)	2.48
7	Can write on line	36(6.0)	131(21.8)	252(42.0)	181(30.2)	2.04
8	Can draw objects	128(21.8)	223(37.2)	207(34.5)	42(7.0)	2.73
9	Can write alphabet A-Z	204(34.0)	202(33.7)	110(18.3)	84(14.0)	2.88
10	Can draw shapes and name them	133(18.8)	185(30.8)	222(37.0)	80(13.3)	2.55
11	Can play story chain	71(11.8)	146(24.3)	161(26.8)	222(37.0)	2.11
12	Can recast spoken words	101(16.8)	171(28.5)	189(31.5)	139(23.2)	2.39
13	Can respond to questions	148(24.7)	168(28.0)	126(21.0)	158(26.3)	2.51
14	Can respond to his/her name called	189(31.5)	155(25.8)	97(16.2)	159(26.5)	2.62
15	Can detect animal sounds	168(28.0)	186(31.0)	187(31.2)	59(9.8)	2.77
16	Can read alphabet A-Z	93 (15.5)	116(19.3)	152(25.3)	239(39.8)	2.11
17	Can identify names of objects in books	135(22.5)	208(34.7)	173(28.8)	84(14.0)	2.66
18	Can point to words as they read	160(26.7)	205(34.2)	155(25.8)	80(13.3)	2.74
19	Can pronounce and spell words	79(13.2)	162(27.0)	246(41.0)	113(18.8)	2.35

to do my homework (1.80), I surf the web to search cartoon (1.82), I listen to rhymes on YouTube (1.86), I use iPod to play number games (1.79), I watch videos about animals on class tv (1.79), I read with wide screen board (1.72), I view pictures on ipod (1.86), I play phonics game on tablet (1.96), I play phonics game on tablet (1.82), I listen to phonics on video (2.38), I learn animal sounds through television videos (2.44), I play vocational games on ipod (1.70), I watch animal documentaries on ipod (1.75), I use laptop keyboard to learn my alphabet (1.77). The respondents almost always do the following: I watch cartoons of numbers on video (2.57), I watch evening folktales (2.52), I listen to sing along rhymes on radio (2.60). The weighted mean is 1.93 which is a numeric indicator that the level of school preschoolers' digital technologies' use was low.

Table 2: Level of preschoolers' literacy skills

S/N	Statements	Excellent	Good	Average	Poor	Mean
1	Can spell words correctly	150(25.0)	186(31.0)	172(28.7)	92(15.3)	2.66
2	Can identify sounds in words	121(20.2)	179(29.8)	170(28.3)	130(21.7)	2.49
3	Can pronounce words they are not familiar with	57(9.5)	162(27.0)	190(31.7)	191(31.8)	2.14
4	Can repeat words and stress syllables	67(11.2)	151(25.2)	191(31.8)	191(31.8)	2.16
5	Can use new words to form sentences	64(10.7)	109(18.2)	188(31.3)	239(39.8)	2.00
6	Can write through scribbling, dotting, tracing	148(24.7)	157(26.2)	129(21.5)	166(27.7)	2.48
7	Can write on line	36(6.0)	131(21.8)	252(42.0)	181(30.2)	2.04
8	Can draw objects	128(21.8)	223(37.2)	207(34.5)	42(7.0)	2.73
9	Can write alphabet A-Z	204(34.0)	202(33.7)	110(18.3)	84(14.0)	2.88
10	Can draw shapes and name them	133(18.8)	185(30.8)	222(37.0)	80(13.3)	2.55
11	Can play story chain	71(11.8)	146(24.3)	161(26.8)	222(37.0)	2.11
12	Can recast spoken words	101(16.8)	171(28.5)	189(31.5)	139(23.2)	2.39
13	Can respond to questions	148(24.7)	168(28.0)	126(21.0)	158(26.3)	2.51
14	Can respond to his/her name called	189(31.5)	155(25.8)	97(16.2)	159(26.5)	2.62
15	Can detect animal sounds	168(28.0)	186(31.0)	187(31.2)	59(9.8)	2.77
16	Can read alphabet A-Z	93 (15.5)	116(19.3)	152(25.3)	239(39.8)	2.11
17	Can identify names of objects in books	135(22.5)	208(34.7)	173(28.8)	84(14.0)	2.66
18	Can point to words as they read	160(26.7)	205(34.2)	155(25.8)	80(13.3)	2.74
19	Can pronounce and spell words	79(13.2)	162(27.0)	246(41.0)	113(18.8)	2.35

20	Can identify new words and their meaning	47(7.8)	121(20.2)	195(32.5)	237(39.5)	1.96
	Weighted Mean					2.42
Decision: Low: 1.00 – 2.49 High: 2.50 – 4.00						

Table 2 shows the level of preschoolers' literacy skills. The respondents were average in doing the following: Can identify sounds in words (2.49), Can pronounce words they are not familiar with (2.14), Can repeat words and stress syllables (2.16), Can write on line (2.04), Can use new words to form sentences (2.00), Can write through scribbling, dotting, tracing (2.48), Can pronounce and spell words (2.35), Can read alphabet A-Z (2.11), Can identify new words and their meaning (1.96). The respondents were good in doing the following: Can spell words correctly (2.66), Can draw objects (2.73), Can write alphabet A-Z (2.88), Can draw shapes and name them (2.55), Can play story chain (2.11), Can recast spoken words (2.39), Can respond to questions (2.51), Can respond to his/her name called (2.62), Can detect animal sounds (2.77), Can identify names of objects in books (2.66), Can point to words as they read (2.74). The weighted mean is 2.42 which is a numeric indicator that the level of preschoolers' literacy skill was low.

Table 3: Summary of Pearson Product Moment Correlation showing the relationship between preschoolers' use of digital technologies and their literacy skills

Variables	Mean	SD	N	r	Sig.	Decision
Literacy skills	50.04	12.63				Significant
Digital Technologies usage	38.52	13.68	600	.642	.000	

Table 3 shows the relationship between preschoolers' use of digital technologies and their literacy skills. The result indicated that there was positive relationship between preschoolers' digital technologies use and literacy skill ($r = .642$). ($P = 0.000 < 0.05$), the hypothesis is therefore rejected in the light of the result since the significant value is less than 0.05. This implies that there is significant relationship between digital technologies usage and preschoolers' literacy skill.

Discussion of Findings

The results showed that the level of school preschoolers' digital technologies' use was low (weighted mean = 1.93). The finding did not align with the research conducted by Cviko, McKenney, and Voogt (2013), which found that the significant benefits of using digital resources for critical literacy outcomes for young children outweighed the use of traditional materials alone. The finding did not also conform with the observation of Roseberry, Hirsh-Pasek, and Golinkoff (2014) who stated that encouraging the use of digital tools can lead to the learning of new languages. The result was not also in agreement with Smeets & Bus (2014) who identified that certain digital resources can help with targeted vocabulary learning. These researchers have shown that digital technologies utilisation should be encouraged from early years because their benefits in children's learning are enormous and may be long-lasting. Furthermore, Shayna Cook (2016) suggests that one possible explanation for the low use of digital technology among preschoolers is the belief that these tools can impede the development of rich early literacy experiences for kids. In particular, some researchers are concerned that when digital technologies are used in ways that restrict children's social interactions with adults and other children, they may prevent children from developing the language skills that are crucial for the development of literacy later in life. However, Haleem et al. (2022) argued that incorporating technology into the classroom gives students a dynamic learning environment that keeps them focused and interested in the material.

Another finding of the study showed that the literacy level of preschoolers was low (weighted mean = 2.42). The result confirmed that of Landerl & Moll (2010) who reported that around 5%–10% low literacy ability in children as in struggling with reading and writing despite adequate learning opportunities and Iroegbu & Iroegbu (2018), Haile & Mendisu (2023) who confirmed lack of literacy skills and poor reading skills among children. The result was not in alignment with the study of Chen & Kim (2020) who reported enhanced reading comprehension and writing skills among students in these environments. One might assume that preschoolers have limited literacy skills because they used digital technology rarely. It is possible that they would exhibit higher levels of literacy if they had access to and the chance to use digital technologies.

Additionally, the outcome showed a positive correlation ($r = .642$) between the use of digital technology and literacy proficiency. ($P < 0.05 = 0.000$). The finding was in agreement with that of Judson (2010) who investigated improving technology literacy and the results provided evidence of connections between technology literacy gains and language arts skills. A study conducted in 2019 by Hurwitz titled "A meta-analytic review of the effects on literacy of getting a read on Ready To Learn (RTL) media" also supports this idea. The findings showed that children's literacy outcomes, particularly vocabulary and phonological ideas, were positively impacted by exposure to RTL media. Moreover, the research aligned with the findings of Magnusson's (2021) investigation into the complex relationships among digital technology, art, mathematics, literacy, and children in Swedish preschool ateliers. Magnusson's study revealed that children's engagement with digital technology and non-digital artefacts seems to stimulate, broaden, and modify their comprehension and application of literacy. Furthermore, the results validated the research conducted by Nikou and Aavakare (2021) concerning the evaluation of the interaction between digital technology and literacy in higher education and demonstrated the intricate interplay between digital technologies and literacy abilities among university faculty and students. The results, however, were at odds with a study by Alakrash and Abdul Razak (2021), which examined how students used digital technology and how digitally literate they were when learning and teaching English from EFL teachers. This outcome was consistent with the policy statements of some countries that encourage the use of technology, but maintain that digital technologies improve children's learning opportunities when they are carefully chosen and used (Early Childhood Australia, 2018; National Association for the Education of Young Children & the Fred Rogers Centre, 2012; U.S. Department of Education & U.S. Department of Health and Human Services, 2016).

Conclusion

To sum up, this research delved into the relationship between preschoolers' utilization of digital devices and their reading proficiency, revealing a robust positive correlation between the two. Additionally, the study identified lower levels of both literacy and digital technology usage among the preschoolers. The significant correlation observed underscores the importance of implementing interventions to boost digital literacy among preschoolers, emphasizing the strategic integration of digital tools within early education settings.

Recommendations

In light of the findings, the following recommendations are hereby made:

1. teachers and parents should give children access to digital devices that will promote the development of strong literacy skills within and outside schools
2. Schools need to stay up to date on the newest trends and technologies.
3. Technology should be utilised as a tool for learning and play, just like a book, not as a substitute for adult interaction.

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