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INFLUENCE OF DIGITAL RESOURCES ON DEVELOPMENT OF BASIC LITERACY SKILLS AMONG PRESCHOOLERS IN ENUGU STATE, NIGERIA

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Abstract

The study adopted an ex post facto research design to determine the influence of digital resources on the development of basic literacy skills among preschoolers in Enugu state. Four research questions and four null hypotheses guided the study. The population of the study was all the registered preschool children in Enugu State. The sample for the study was 195 preschoolers selected through multi stage sampling procedure. Data for the study was collected using four researcher designed instruments titled: test of acquisition of alphabet recognition skills (TAARS); test of acquisition of print motivation skill (TAPMS); test of acquisition of phonemic awareness skill (TAPAS); and test of acquisition of vocabulary skills (TAVS). The fifth instrument titled: Extent of Preschoolers' Exposure to Digital Resources (EPEDR) was also designed and utilized by the researcher as preliminary study for the purpose of grouping the preschoolers into high, moderate and low exposure to digital resources. The instruments were validated by specialists in Childhood Education, Measurement and Evaluation and Language Education all from University of Nigeria, Nsukka. The internal consistency reliability index of 0.84, 0.79, 0.89 and 0.80 were obtained for TAARS, TAPMS, TAPAS, and TAVS respectively using KR 20 formular. Data collected were analyzed using mean and standard deviation to answer the research questions and Analysis of Variance Statistics (ANOVA) to test the null hypotheses. Post hoc tests were further carried out to determine the direction of the significant differences. The findings of the study revealed among others that moderate exposure of preschoolers to digital resources engendered their performance in all the four aspects of basic literacy skills tested. It was concluded that moderate exposure to digital resources improves basic literacy skills development of preschoolers. On the basis of that, the researchers recommended that developmentally appropriate digital resources should be provided for preschoolers with parents and other significant adults being available to moderate what preschoolers do with digital resources.

Key words: Basic literacy; Digital resources; Preschoolers

Introduction

Poor reading habit among learners and students at all levels of education is becoming an issue for global concern. Young children appear to have lost interest in reading printed materials. It is a common saying that reading can only be fun and entertaining if the reader has gotten acquainted with the necessary skills for reading. Since learning generally and reading in particular is continuous, sequential and a progressive process, there is need for children to develop basic literacy skills also known as pre-reading skills during the early years of life. Basic literacy or pre-reading relates to the act of getting ready to read. Gretchen (2010) defined basic literacy skills as the fundamental or foundational experiences that prepare children for conventional reading necessary in primary school. In other words, pre-reading skills encompass everything a child knows about reading and writing before the child actually begins to read and write.

They are far more than just knowledge of the ABCs. Caitrin (2014) explained basic literacy or pre-reading skills to include alphabetic knowledge, print motivation, phonemic awareness, and vocabulary. More succinctly, Cedar Mill Community Libraries Association (C. M. C. L. A.) (2019), identified pre-reading skills to include: print motivation (loving books); vocabulary development (knowing words); narrative skills (telling stories); phonological awareness (hearing sounds); print awareness (seeing sounds); and letter knowledge (knowing ABCs). In this study however, basic literacy also known as pre-reading skills included the four major skills thus: alphabetic knowledge; print motivation skill; phonemic awareness skill; and vocabulary development.

Alphabetic knowledge relates to the ability to recognize letters of the alphabet by names, shapes and sound as well as upper and lower case letters. Considering the importance of alphabetic knowledge in literacy skills development, Castles, et al (2013) posited that alphabet recognition can predict conventional reading in later years to a great extent. Print motivation on the other hand relates to the act of loving books. According to Caitrin, (2014), preschoolers demonstrate this skill when they show mastery of the following: how to handle books; understanding the difference between letters and words; understanding that reading moves from left to right and from top to the bottom of the page. Another basic literacy skill which is phonemic awareness relates to ability of learners to segment speech into individual sounds and blend sounds to form words. This is usually demonstrated by the children's ability to spell, and read unfamiliar words and become aware of syllabus, phonemes and rhymes. Finally, vocabulary development describes the amount of words a child has mastered. This is manifested in the children's ability to name common objects and things

in their environment. These skills are highly interrelated such that a deficit in one often results in difficulty mastering the others.

Basic literacy skills are often seen as the foundation upon which all other aspects of learning are hinged especially at later years. According to Commonwealth of Australia (C.A., 2015), children's early language and communication development predict their later success in literacy and academic learning which has implications for their social, vocational and educational opportunities. Any effort to prepare learners for eventual reading in school should be comprehensive enough to cater for the different aspects of basic literacy. There is no single process of developing these skills in children. Parents and caregivers ought to incorporate pre-reading activities in the children's everyday experiences. The Noyes Library Foundations (NLF, 2015) identified several ways of helping children develop the necessary skills for reading. As a follow up, Segal-Walters (2019) articulated the strategies to include: expanding children's vocabulary by teaching them how to describe the world around them; fostering a love of books by introducing children to books early in life, so they can associate them with positive emotions and get more interested; ensuring that there are plenty of print materials in the baby's field of vision; teaching the ABC's starting with the letters in their names; playing with sounds; and presenting narratives.

Developing pre-reading skills involves active participation of all the stake holders in child development especially the parents and the caregivers. However parents have greater roles to play as the first teachers of young children right from birth. Unfortunately the extent to which parents concretize these interactions with children after birth is becoming a source of worry to childhood educators and researchers. Ngwoke and Ngwoke (2017) observed that the contemporary changes in family psychodynamics where many parents especially mothers engage in employments and businesses which make them to have many hours of work outside home is drastically affecting parent-child interactions in Nigeria and elsewhere. A parent in this study is taken to mean any adult who takes charge of parenting or bringing up a child in a family. It includes biological as well as adoptive parents.

Parents can contribute to their children's development in two ways, thus through transfer of their genetic endowment to their children for biological parents or through home environment and quality interactions for all categories of parents. However, the emphasis here is on quality, safe, nurturing, interactive, and responsive as well as child friendly home environments. This may be a positive step to improving whatever traits a child has inherited from the parents especially as regards language development especially during the preschool years. Preschoolers are children within

infancy and early childhood stage of human development. According to the Federal Republic of Nigeria (FRN, 2014,) they are offered early child care development and education for 0-4 years and pre-primary education for children aged 5 year plus. They are below the formal school age which is six years in Nigeria. However this study focused on Preschoolers aged five years plus and who are being taken care of in pre-primary education centres in Enugu State, Nigeria.

Preschoolers are naturally energetic, active, and playful; have unstable emotion and short attention span. Thus the emphasis by Montessori (2012), emphasized the concept of prepared environment for young children. Learning especially development of basic literacy skills is more effective when the environment is interactive and developmentally appropriate. For instance, children learn about objects and people when they see them, handle and ask questions about them. Preschoolers also develop pre-reading skills when they observe parents and other familiar people around them talk. Often the children imitate them by lip-reading along as parents read and with that they learn the voice signature of their family members and other significant people around them.

Unfortunately, in many modern homes, preschool children lack opportunity for quality interactions with people and objects by modern parents' busy schedules, and over reliance on external help in child rearing. This has pushed some parents especially mothers to send their primary school aged children into schools with boarding facilities. In such families, pre-school children are at greater risk as they rarely have play mates to learn from. Also, some basic family chores like food processing; laundry services; and basic farm operations, which hitherto provide opportunity for quality parent-child interactions, are constantly, being taken over by technological inventions. Even basic family time and leisure activities and interactions like meal time, story time, bedtime, and others have all been affected in one way or the other by modern technology. Technologies are not completely deleterious if properly applied but can be hazardous if not properly guided especially with young children; as they can limit interpersonal relationships which are necessary for the growing child. Of all the technological breakthroughs, this study is focused on digital resources and development of early literacy skills.

The term digitization implies the act of converting conventional information into a form that can be understood, processed and utilized by machines (technology). It can be in form of computers, telecommunications, and other storage devices. Digital resources therefore, can be seen as encompassing all electronic tools, systems, and devices that can generate; store or process data. Common among them include social media, online games, video games, television sets, mobile phones, and other multimedia devices. According to Discombe (2016), digital technology is

developing fast and is affecting almost every facet of human activities such as basic family chores, business including bank transactions. It's now rare to find an electronic device or piece of machinery that doesn't incorporate digital technology in some ways.. Accordingly, Palmer, cited in Mustafaoglu, Zireck, Yasack and Ozdincler (2018) noted that just like television, computers have become an essential part of children's life. Goodman (2019), also observed that digital resources have a lot of merits if properly utilized which include: social connectivity; communication speeds; portability, remote and unlimited access, user friendliness/ better user interface with machines, cost effectiveness, versatile working; learning opportunities; automation; information storage; editing; accurate duplication; entertainment; news; warfare; and many more. Use of developmentally appropriate digital technology therefore can help preschoolers grow and learn, especially when families and early childhood educators play an active role. In line with that, Korat and Segal-Doris (2016), observed that electronic books have features which are engaging, motivating and may serve as a booster to young children's literacy skills development.

In many families, common digital resources like television, computer games and mobile phones are provided for children just to keep them busy and relieve the parents of the encumbrances of child rearing. In such situation, the long hours preschoolers spend on computer games for instance may not border any one so long as the child is not disturbing. According to Rosen, Lim, Felt, Carrier, Cheever, Lara-Ruiz, & Rokkum, (2014)..), development of early literacy skills by children demands quality interactions between children and adults as well as with peers in an interactive environment. Toyama (2011) earlier observed that no matter how advanced or sophisticated digital resources can be, they can never substitute for quality parent-child interaction and healthy environment in the life of preschoolers and development of basic literacy. As a follow up, Goodman also posited that digital resources can cause data insecurity; promote crime and terrorism; increase privacy concerns; promote social disconnect; deteriorate reading habit/skills; deteriorate writing skills; over-reliance on gadgets; addiction; second-hand living; health challenges (cancer, eye sight problems, bone malformation) among others.

From the foregoing, the problem may not centre on the nature of the digital resources but on the extent of preschoolers' exposure which can be high, moderate or low. According Ngwoke, (2011), these classifications represent an average daily exposure of 3 hours and above; 1-2 hours; and less than 1 hour respectively. In view of the above, the present researchers are worried about the influence of exposure of preschoolers to a wide array of digital resources by parents and caregivers in Enugu State. In Enugu State, due to the parents' busy schedule and security threats in the society,

mothers often prefer to lock children inside with computer games or so called children' television programmes and other devices rather than allowing children freedom of playing with peers outside the purview of the parents. Even in some developed countries like USA, evidence abounds of over exposure of young children to electronic screens (Rideout, Vandewater & Wartella, 2003). With the ongoing advancement in the production and over exposure of young children to digital resources, there is need to study the influence these modern digital resources may be having on preschoolers' development of basic literacy skills in Nigeria.

Statement of the Problem

Poor reading skill among learners especially in developing countries is becoming an issue for global concern. Some researchers have attributed the issue to lack of skills. Such skills that will equip children for effective reading can only be guaranteed if preschoolers have developed the basic literacy skills prior to their entry into formal education setting. The home especially the parents have a great role to perform in developing basic literacy skills in children through quality parent-child interactions. Unfortunately, the busy schedule of many parents is making them rely heavily on modern digital resources in completing most household chores and minimizing the children demand for attention. This practice is robbing young children off the opportunity for quality interactions in the home which are necessary for basic literacy skills development. Also with the security threat of kidnapping, child abuse and molestation by familiar persons, young children are becoming more and more engaged and engaged with digital resources to keep them indoors. With the current advancement in the production of digital resources, there may not be an end to what children can be exposed to. Although digital resources can have some positive impact on children development and learning, it has been established that digital resources cannot replace quality human interaction in development of basic literacy skills by preschool children no matter how sophisticated. With the upsurge of parents especially mothers into the labour market to make ends meet, lack of quality human interactions with children may continue to be on the increase. It is therefore necessary to find out how these digital resources provided for young children without censoring are influencing the various aspects of child development, the problem of this study put in question form is: what is the influence of digital resources on preschoolers' development of basic literacy skills?

The following research questions and hypotheses guided the study

What is the influence of digital resources on preschoolers' development of:

- 1 Alphabet recognition skill?
- 2 Print motivation skill?

- 3 Phonemic awareness skill?
- 4 Vocabulary skills?

There is no significant influence of digital resources on preschoolers' development of:

1. Alphabet recognition skills.
2. Print motivation skills.
3. Phonemic awareness skills.
4. Vocabulary skills.

Method

The study adopted an ex post facto research design and was carried out with preschoolers in preschool centers in Enugu State, Nigeria. The population of the study was all the registered preschool children in Enugu State. Sampling was done through multistage sampling procedure. Five out of the 17 local government education authorities in Enugu State were selected using simple random sampling technique of picking without replacement in the first stage. In the second stage, the researchers used the same sampling technique to select only two schools (one public and one private) from each Local government education authority giving a total of 10 schools. In the third stage only one intact class was used in each of the selected schools giving a total sample size of 198. The study was limited to influence of digital resources on preschooler's development of alphabet recognition skills, print motivation skills, phonemic awareness skills, and vocabulary skills.

Data for the study was collected using two researcher designed instruments titled: Extent of Preschoolers' Exposure to Digital Resources (EPEDR) and a Test of Basic Literacy Skill Development (TBLSD) with four sections where each section addressed one research question as follows: test of acquisition of alphabet recognition skills (TAARS); test of acquisition of print motivation skill (TAPMS); test of acquisition of phonemic awareness skill (TAPAS); and test of acquisition of vocabulary skills (TAVS). Each cluster had ten items dichotomously scored with a maximum score of 20 for each test. EPEDR had response option as Very often (4); Often (3); Sometimes (2) and Never (1) with a decision rule based on average daily exposure as follows: High: 3 hours and above; Moderate: 1 -2 hours; and low: less than 1 hour. The instruments were validated by specialists in Childhood Education, Measurement and Evaluation and Language Education all from University of Nigeria, Nsukka. The internal consistency reliability index of 0.84, 0.79, 0.89 and 0.80 were obtained for TAARS, TAPMS, TAPAS, and TAVS respectively using KR 20 formula. Data collected were analyzed using mean and standard deviation to answer the research

questions and Analysis of Variance Statistics (ANOVA) to test the null hypotheses post hoc test were further carried to determine the direction of the significant difference.

RESULTS

Table 1: Mean scores and standard deviations of the highly, moderately and lowly exposed preschoolers on TAARS

	N	Mean	Std. Deviation
High	105	15.60	.49
Moderate	60	18.67	.48
Low	31	14.00	1.10
Total	196	16.29	1.80

Data in Table 1 reveals that moderately exposed preschoolers had the highest mean score with $X = 18.67$, SD 0.48, followed by the highly exposed group with $X = 15.60$; SD = 0.49 while the lowly exposed group had the least mean score of $X = 14.00$; SD = 1.10. The results suggest that there were differences in the alphabet recognition skills among the three groups of preschoolers under study as measured by TAARS. The variability among the scores is low as the scores clustered around the mean score with the SD ranging from 0.48 – 1.10

Table 2: Summary of one way analysis of variance (ANOVA) on the influence of exposure to digital resources (EDR) on Preschoolers acquisition of alphabet recognition skills (AARS)

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	551.467	2	275.73	714.00	.00
Within Groups	74.533	193	.39		
Total	626.000	195			

Data in Table 2 shows the calculated value of $F(2, 193) = 714.00$; $P = 0.00$. With the exact probability level of 0.00 which is lower than the 0.05 level of significance, the result indicate that there is a significant difference in the alphabet recognition skills among the three groups of preschoolers under study as measured by TAARS. Therefore, the null hypothesis of no significant difference among the groups is hereby rejected.

Table 3: Result of the *Sheffe* test of the mean scores of highly, moderately and lowly exposed preschoolers on TAARS

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.
High	Moderate	-3.07*	.10	.00
	Low	1.60*	.13	.00
Moderate	High	3.07*	.10	.00
	Low	4.67*	.14	.00
Low	High	-1.60*	.13	.00
	Moderate	-4.67*	.14	.00

*. The mean difference is significant at the 0.05 level.

Data in Table 3 reveals that highly exposed preschoolers had a mean difference of -3.01 relative to the moderately exposed group and 1.60 relative to the lowly exposed group. The mean differences were significant at 0.05 probability level. The analysis indicates that the extent of exposure of preschoolers to digital resources explained the source of the significant differences in the mean TAARS scores favoring the groups in the following ascending order: lowly exposed (14.00) < highly exposed (15.60) < moderately exposed (18.67).

Table 4: Mean scores and standard deviations of the highly, moderately and lowly exposed preschoolers on TAPMS

	N	Mean	Std. Deviation
High	105	11.80	.63
Moderate	60	17.90	.77
Low	31	8.06	.73
Total	196	13.08	3.54

Data in Table 4 reveals that moderately exposed preschoolers had the highest mean score with $X = 17.90$, $SD 0.77$, while the highly exposed group had higher mean score with $X = 11.80$; $SD = 0.63$ when compared to the lowly exposed group with $X = 8.06$; $SD = 0.73$. The results suggest that there were differences in the print motivation skills among the three groups of preschoolers under study as measured by TAPMS. The standard deviation ranged between 0.63 and 3.54. The variability among the scores is low as the scores clustered around the mean score.

Table 5: Summary of one way analysis of variance (ANOVA) on the influence of exposure to digital resources (EDR) on Preschoolers acquisition of print motivation skills (APMS)

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2345.781	2	1172.89	2458.62	.00
Within Groups	92.071	193	.477		
Total	2437.852	195			

Data in Table 5 shows the calculated value of $F(2, 193) = 2458.62$; $P = 0.00$. With the exact probability level of 0.00 which is lower than the 0.05 level of significance, the result indicate that there is a significant difference in the print motivation skills among the three groups of preschoolers under study as measured by TAPMS. Therefore, the null hypothesis of no significant difference among the groups is hereby rejected.

Table 6: Result of the *Sheffe* test of the mean scores of highly, moderately and lowly exposed preschoolers on TAPMS

Dependent Variable: Print Motivation

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.
High	Moderate	-6.10*	.11	.00
	Low	3.74*	.14	.00
Moderate	High	6.10*	.11	.00
	Low	9.84*	.15	.00
Low	High	-3.74*	.14	.00
	Moderate	-9.84*	.15	.00

Data in Table 6 reveals that highly exposed preschoolers had a mean difference of -6.10 relative to the moderately exposed group and 3.74 relative to the lowly exposed group. The mean differences were significant at 0.05 probability level. The analysis indicates that the extent of exposure of preschoolers to digital resources explained the source of the significant differences in the mean TAPMS scores favoring the groups in the following ascending order: lowly exposed (14.00) < highly exposed (15.60) < moderately exposed (18.67).

Table 7: Mean scores and standard deviations of the highly, moderately and lowly exposed preschoolers on TAPMS

Phonemic Awareness

	N	Mean	Std. Deviation
High	105	11.80	.63
Moderate	60	19.02	.89
Low	31	9.90	.83
Total	196	13.71	3.67

Data in Table 7 reveals that moderately exposed preschoolers had the highest mean score with $X = 19.02$, $SD = 0.89$, while the highly exposed group had higher mean score with $X = 11.80$; $SD = 0.63$ when compared to the lowly exposed group with $X = 9.90$; $SD = 0.83$. The results suggest that there

were differences in the phonemic awareness skills among the three groups of preschoolers under study as measured by TAPAS. The standard deviation ranged between 0.63 and 0.89. The variability among the scores is low as the scores clustered around the mean score.

Table 8: Table 5: Summary of one way analysis of variance (ANOVA) on the influence of exposure to digital resources (EDR) on preschoolers acquisition of phonemic awareness skills (AP AS)

Phonemic Awareness					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2521.930	2	1260.9	2243.15	.000
Within Groups	108.493	193	.562		
Total	2630.423	195			

Data in Table 8 shows the calculated value of $F(2, 193) = 2243.00$; $P = 0.00$. With the exact probability level of 0.00 which is lower than the 0.05 level of significance, the result indicate that there is a significant difference in the phonemic awareness skills among the three groups of preschoolers under study as measured by TAPAS. Therefore, the null hypothesis of no significant difference among the groups is hereby rejected.

Table 9: Result of the Sheffe test of the mean scores of highly, moderately and lowly exposed preschoolers on TAPAS

Dependent Variable: Phonemic Awareness					
(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	
High	Moderate	-7.22*	.12	.00	
	Low	1.90*	.15	.00	
Moderate	High	7.22*	.12	.00	
	Low	9.11*	.17	.00	
Low	High	-1.90*	.15	.00	
	Moderate	-9.11*	.17	.00	

*. The mean difference is significant at the 0.05 level.

Data in Table 9 reveals that highly exposed preschoolers had a mean difference of -7.22 relative to the moderately exposed group and 1.90 relative to the lowly exposed group.

The mean differences were significant at 0.05 probability level. The analysis indicates that the extent of exposure of preschoolers to digital resources explained the source of the significant differences in the mean TAPAS scores favoring the groups in the following ascending order: lowly exposed (14.00) < highly exposed (15.60) < moderately exposed (18.67).

Table 10: Mean scores and standard deviations of the highly, moderately and lowly exposed preschoolers on TAVS

Vocabulary Development			
	N	Mean	Std. Deviation
High	105	9.91	.82
Moderate	60	16.92	1.11
Low	31	9.90	.83
Total	196	12.06	3.36

Data in Table 10 reveals that moderately exposed preschoolers had the highest mean score with $X = 16.92$, $SD 1.11$, while the highly exposed group had higher mean score with $X = 9.91$; $SD = 0.82$ when compared to the lowly exposed group with $X = 9.90$; $SD = 0.83$. The results suggest that there were differences in the vocabulary development among the three groups of preschoolers under study as measured by TVDS. The standard deviation ranged between 0.82 and 1.11. The variability among the scores is low as the scores clustered around the mean score.

Table 11: Summary of one way analysis of variance (ANOVA) on the influence of exposure to digital resources (EDR) on preschoolers Acquisition of vocabulary skills (AVS)

Vocabulary Development					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2042.861	2	1021.431	1205.566	.000
Within Groups	163.522	193	.847		
Total	2206.383	195			

Data in Table 11 shows the calculated value of $F(2, 193) = 1205$; $P = 0.00$. With the exact probability level of 0.00 which is lower than the 0.05 level of significance, the result indicates that there is a significant difference in the vocabulary development skills among the three groups of preschoolers under study as measured by TVDS. Therefore, the null hypothesis of no significant difference among the groups is hereby rejected.

Table 12: Result of the *Sheffe* test of the mean scores of highly, moderately and lowly exposed preschoolers on TAVS

Dependent Variable: Vocabulary Development

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.
High	Moderate	-7.00*	.15	.00
	Low	.011	.19	1.00
Moderate	High	7.00*	.15	.00
	Low	7.01*	.20	.00
Low	High	-.016	.18	1.11
	Moderate	-7.0*	.20	.00

*. The mean difference is significant at the 0.05 level.

Data in Table 12 reveals that highly exposed preschoolers had a mean difference of -7.00 relative to the moderately exposed group and 0.011 relative to the lowly exposed group.

The mean differences were significant at 0.05 probability level. The analysis indicates that the extent of exposure of preschoolers to digital resources explained the source of the significant differences in the mean TVDS scores favoring the groups in the following ascending order: lowly exposed (14.00) < highly exposed (15.60) < moderately exposed (18.67).

Discussions

It has been shown in this study that exposure to digital resources significantly influenced the performance of the three groups of preschoolers in tests of alphabet recognition, print motivation, phonemic awareness and vocabulary development. Specifically, the findings revealed that preschoolers who were moderately exposed to digital resources outperformed their counter parts that had high and low exposures. The finding is in line with Korat and Segal-Doris (2016), who observed that digital resources have features which are engaging, motivating and may serve as a booster to young children’s literacy skills development if done with moderation.

Also, the finding indicated that between the highly and lowly exposed groups, the highly exposed outperformed the lowly exposed group. This finding supports Discombe (2016), who advocated exposing young children to digital technology because digital technology is developing fast and is affecting almost every facet of human activities. However, the finding did not agree with Toyama (2011) who observed that no matter how advanced or sophisticated digital resources can be, they can never substitute for quality parent-child interaction and healthy environment in the life of preschoolers and development of basic literacy. Also, this finding did not support Goodman (2019) who stated that over exposure to digital resources can cause deterioration in children’s reading and writing skills. This finding may be explained by the fact that a child who has very low exposure or no exposure to digital resources may be said to be living in the dark ages in a technology driven and

ever changing society. In other words, it may be easier to redirect a child with high exposure than to manage a child with little or no exposure in a world that is technology driven.

Conclusions

Following the findings of this study, it is concluded that exposing preschoolers to digital resources improves their development of basic literacy skills. It is further concluded that to get the best out of digital resources, children's exposure to the digital resources should be moderated by parents and/or other significant adults around the child. Finally, since technology is penetrating all aspects of human life, growing children must key into it to be able to function effectively and contribute to the development and sustenance of the society.

Recommendations

On the basis of the findings of this study, the researchers made the following recommendations:

1. Developmentally appropriate digital resources should be provided for preschool children by parents and caregivers.
2. Preschoolers' exposure to digital resources should be moderated by significant adults.
3. Digital resources should be provided and utilized in preschool centres to aid learning.
4. Workshops should be organized for parents and caregivers on the need for moderating preschoolers' exposure to digital resources.

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